URBANISM NEXT 2019

NICO LARCO

URBANISM NEXT CENTER DIRECTOR
SCI CO-DIRECTOR
PROFESSOR OF ARCHITECTURE AND URBAN DESIGN
UNIVERSITY OF OREGON
@NICOLARCO
URBANISM NEXT.

(Why)
NEW MOBILITY DEPLOYMENT - USA

New Mobility Services

- TriMet
- Sound Transit
- BART
- LA Metro
- MNN
- CTA
- MTA
- VIA
- Van
- Chariot
- UberPool
- TransLoc
- LYFT LINE
- Uber
- Lyft
- Waymo
- Wingz
- Zipcar
- Car2Go
- ReachNow
- Maven
- Turo
- Jump
- Lime
- Motivate
- Mobike
- Pace
- Gotcha
- Bird
- Jump
- Lime
- Scoot
- Spin
- Skip
- Lyft
- Scooters
(In 2018)

4.2 BILLION TNC TRIPS IN US.
36% of people
51% of millennials
19% in rural areas

(In 2018) Pew, 2019
36 MILLION DOCKED BIKESHARE TRIPS IN US.

(In 2018) NACTO, 2019
(In 2018) NACTO, 2019

38+ MILLION E-SCOOTER TRIPS IN US.
NEW MOBILITY SERVICES AND MAAS

New Mobility Services

Unified
Simple
Seamless

User Experience

MaaS Platform

New Mobility Services MaaS Platform User Experience
WHO CONTROLS THE TRANSPORTATION SYSTEM?
MOBILITY AS A SERVICE (MAAS)

Private Subscription

TNC

Public Transit
VERTICALLY INTEGRATED MAAS?

- UBER
- uberPOOL
- JUMP
- LYFT LINE
- motivate
- lyft SCOOTERS
- SPIN

#urbnext2019  |  @urbanismnext
www.urbanismnext.com
RISE OF E-COMMERCE

The Rise of E-Commerce in the United States
E-Commerce sales as a percentage of total retail sales in the United States*

- Total retail sales 2018: $5,315b
- E-commerce sales 2018: $514b

Source: U.S. Census Bureau

*not seasonally adjusted

@StatistaCharts
RISE OF E-COMMERCE

JANUARY 10, 2017

E-COMMERCE: BRICK-AND-MORTAR SLIDE CONTINUES – 12% DROP IN STORE TRIPS THIS PAST HOLIDAY

A recent article in the Wall Street Journal documents the continued rise of e-commerce coupled with the inevitable slide of brick-and-mortar stores. A few key numbers:

- Overall, online holiday sales increased by 11% over the previous year while brick-and-mortar sales increased only 2.7%.
- JC Penney brick-and-mortar sales dropped by nearly 1% while its online sales grew by double digits.
- Amazon was the clear leader in online sales with 38% of all online revenue.

RetailNext
Monthly Report for Physical Retail (Y/Y)

<table>
<thead>
<tr>
<th></th>
<th>Sales</th>
<th>Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov 2017</td>
<td>-9.0%</td>
<td>-7.7%</td>
</tr>
<tr>
<td>Nov 2018</td>
<td>-4.1%</td>
<td>-8.3%</td>
</tr>
</tbody>
</table>

U.S. Retail Stores’ Planned Closings Already Exceed 2018 Total

The New York Times
APRIL, 2019
FIRST AND SECOND ORDER IMPACTS
## URBANISM NEXT FRAMEWORK

### LAND USE

**Retail/Commercial/Office/Industrial (Employment Uses)**
- How will the changing nature of travel, employment and shopping impact retail, commercial, and industrial districts?

**Housing**
- What are the opportunities to increase housing through infill? Will people choose to locate in cities? Or move farther out in the suburbs?

**Park & Open Space**
- How do we protect open space under the pressure to expand cities? What opportunities are there to reclaim parking lots for parks?

### URBAN DESIGN

**Metro Footprint**
- When priority is to walkplaces and goods/services is no longer holding people in cities, what will happen to their already shrinking footprints?

**Street Design**
- As cities make plans for future expansions, crossing the street, network, the inclusion of various modes complete streets, and overall street design—what should they be considering?

**Centers and Corridors**
- Will we support transit to strengthen current nodes and corridors, or will they lead to more dispersed with continuous low-density development?

**Densification**
- How and where will AVs and new mobility increase or decrease development density?

### TRANSPORTATION

**Walking**
- How will we regulate the interactions between pedestrians and vehicles? How will this affect pedestrian safety?

**Biking**
- How can we ensure that people choose walking or biking over driving in urban spaces?

** transit**
- What is the future of public transit in the age of AVs?

**PARKING URBAN PAIN?**
- How will reduced need for parking impact urban space?

### REAL ESTATE

**Land Value**
- How will the demand for parking change the value of land for redevelopments? How will AVs change the real estate market?

**Project Feasibility**
- How will new developments incorporate AV technology and infrastructure?

**Buss/ Vitality**
- How will the introduction of AVs affect public transport and connectivity?

**Quality**
- How will AVs affect the quality of life in urban environments?

### MULTIPLE IMPACTS

- **Retail/Commercial/Office/Industrial (Employment Uses)**
- **Housing**
- **Park & Open Space**

### EQUITY
- How will the impacts of emerging technologies impact vulnerable and low-income populations?

### HEALTH
- Preliminary research finds that people are replacing walking, biking, and transit trips with road-based services. If this trend continues, is exacerbated by AVs, what will be the impact on our health?

### ENVIRONMENT
- How can we take advantage of emerging technologies to improve sustainability and environmental outcomes?

### ECONOMY
- Up to 6 million people die for a living. What happens to their jobs with the deployment of AVs? How do we ensure that everyone can access these jobs?

### GOVERNANCE
- Emerging technologies will disrupt revenues for cities, counties, and states. How do we provide a good level of service and support thriving communities?

### RESPONSE

- **What Should We Do?**
  - Given the possible range of multi-level impacts of emerging technologies on land use, urban design, transportation, and real estate, the implications on equity, the economy, and the environment, how should governments, companies, and institutions respond to maximize the benefits and minimize the risks?
  - How do policies, programs, and infrastructure investments need to adapt and change?
AVs AND MaaS ARE NOT TRANSPORTATION ISSUES
E-COMMERCE IS NOT A RETAIL ISSUE
CITIES THAT THINK AHEAD, STAY AHEAD
PRINCIPLES AND PRIORITIES
ANTICIPATE, PLAN, ADAPT

Shared Electric Scooters
Permit Application

I. Shared Electric Scooter Pilot Period

The Portland Bureau of Transportation (PBOT) is planning a 120-day pilot for the regulation of Shared Electric Scooters (herein referred to as “Shared Scooters”) beginning in the summer of 2018 (“the Pilot Period”). The Pilot Period will help the City determine whether Shared Scooters can support the City’s policy goals to: reduce private motor vehicle use and congestion; prevent fatalities and injuries on the transportation system; expand access for underserved communities; and reduce air pollution, including climate pollution. Through public engagement and program evaluation, City officials will determine whether and under what circumstances Shared Scooters will be permitted to continue operating in the public Right-of-Way after the Pilot Period.

The operation of a Shared Scooter is a privilege, not a right, and requires a valid, current Shared Scooter permit issued by the City. Currently, the City only intends to provide permits to companies for the Pilot Period. Therefore, the City will only be providing permits valid from July 23, 2018 to November 20, 2018. Following the pilot period, the Bureau of Transportation may update this permit. Companies must certify to the City of Portland that all Shared Scooters have met all applicable certifications and operating requirements.

For the duration of the Pilot Period, the Director of PBOT may issue multiple, independent permits for a maximum of 2,500 total Shared Scooters. The Director will determine the number of permitted scooters per Permittee. Permittees must: deploy Shared Scooters within two-weeks of permit issuance; make available a minimum of 100 Shared Scooters at deployment and a maximum of 200 Shared Scooters for the first week of
URBANISM NEXT — UNIVERSITY OF OREGON

- Multidisciplinary Research
- Projects
- National Network
- urbanismnext.uoregon.edu
- urbanismnext.com
- NEXUS
UO URBANISM NEXT FACULTY

Rebecca Lewis, PPPM
Heather Brinton, Law
Anne Brown, PPPM
Ben Clark, PPPM
Donna Davis, Journalism
Andrew DeVigal, Journalism
Grant Jacobsen, PPPM
Regina Lawrence, Journalism

Izabel Loinaz, Business
Roberta Mann, Law
Nicole Ngo, PPPM
Gordon Sayre, English
Marc Schlossberg, PPPM
Josh Skov, Business
Lina Stepik, LERC
Yizhao Yang, PPPM
CONFERENCE STEERING COMMITTEE

Taryn Sabia, American Institute of Architects, Regional and Urban Design Committee
Robert Hoffman, AIA, American Institute of Architects Oregon/Portland
Dave Otte, AIA, LEED AP, NCARB, American Institute of Architects Oregon/Portland
David Rouse, FAICP, ASLA, American Planning Association
Denny Egner, FAICP, Oregon Chapter of the American Planning Association
Aaron Ray, AICP, Oregon Chapter of the American Planning Association
Lucy Joyce, ASLA American Society of Landscape Architects
Jean Senechal Biggs, ASLA, American Society of Landscape Architects
Jamie Hendrickson, LEED AP, American Society of Landscape Architects Oregon
Andreas Stavropoulos, ASLA, American Society of Landscape Architects Oregon
Noel Johnson, Urban Land Institute Northwest
Bryce Payne, Urban Land Institute Northwest
Brian Vanneman, Urban Land Institute Northwest