

URBANISM NEXT



MISSION

Urbanism Next is a leading source for information about the **potential impacts of emerging technologies** — autonomous vehicles, E-commerce and the sharing economy — on city development, form, and design and the implications for **equity, health, the economy, the environment, and governance**.

WHAT WE DO

Advances in technology such as the advent of autonomous vehicles (AVs), the rise of E-commerce, and the proliferation of the sharing economy are having profound effects not only on how we live, move, and spend our time in cities, but also increasingly on urban form and development itself. The University of Oregon's Urbanism Next Center focuses on the ramifications of these changes. Researchers are working with leaders from the public, private, and academic sectors across North America and Europe to better understand the secondary impacts of emerging technologies on cities and ensure that governments from the local to federal level have the information they need to make informed decisions that improve equity and health outcomes, as well as help achieve community goals related to the economy and the environment.

GOALS & STRATEGIES

1. CONDUCT RESEARCH

- Research the secondary impacts of emerging technologies
- Develop research agendas with public and private sector partners
- Research and analyze the range of options to address secondary impacts to maximize benefits and minimize negative impacts

2. CREATE A NATIONAL NETWORK

- Connect with national, statewide, and regional experts on research, funding, and outreach on the impacts of emerging technologies
- Convene network members at conferences and other events
- Provide value to network partners

3. COMMUNICATE WHAT WE KNOW

- Conduct outreach events to present research at the local, state, and national level
- Distribute information online and through academic and professional print outlets
- Build awareness of issues among professionals, researchers, decision-makers, and the public

4. INFORM DECISION MAKING

- Analyze policy options
- Present research and policy options to decision-makers
- Convene pertinent policy making entities
- Participate in policy discussions

URBANISM NEXT | FRAMEWORK

SECONDARY IMPACTS

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?



PARKS & 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



METROPOLITAN FOOTPRINT

When proximity to workplaces and goods/services is no longer holding people in cities, what will happen to their already sprawling footprints?



STREET DESIGN

As cities make plans for future expansions, changes to their street network, the inclusion of various modes/complete streets, and overall street design – what should they be considering when they include thinking about AVs and E-commerce?



TRANSIT-ORIENTED DEVELOPMENT

Will AVs help the transportation system with completing the “last mile” or will the proliferation of AV usage devastate the idea of transit-oriented development?



RESILIENCY

How do we ensure that redevelopment makes communities resilient to natural hazards?



PLACE/IDENTITY

When shopping and transportation can be acquired anywhere, what happens to business districts, shopping districts and neighborhoods?

TRANSPORTATION



WALKING

How will we see interactions between pedestrians and AVs? What happens to pedestrians when they are displaced by simply strolling streets?



BIKING

Will the mix of modes be frowned upon? What happens if it is such a mix of modes? AV efficiency in urban areas ban bikes work? Can bikes work for delivery?



PARKING

What happens to parking utilization when AVs are used? Will parking automatically overtake AVs? Will parking shift with the AVs?



VEHICLES

One of the questions is: how do we manage models of individual ownership? Will AVs show VMT? Will AVs be fleets or owned?



TRANSIT

Already, transit ridership has declined approximately 50% because of AV companies. What happens to transit when AVs are deployed?

TRANSPORTATION

How will we regulate the interaction between AVs and vehicles? What happens when AVs can stop AVs from stepping into the lane?

How will the mix of modes change upon because of AVs? Will there be a limitation to AVs? Will some modes be replaced? How will AVs change around curbside pickup and dropoff?

How will AVs change if parking spaces drop dramatically over a short period? How quickly will AVs meet requirements for AVs?

What are the biggest challenges? Preliminary findings: Individual AVs will increase in number. Will AVs be used individually?

How will transit ridership decline if AVs are used? Will AVs be used for transit when AVs are deployed?

REAL ESTATE



LAND VALUE
A reduction in demand for parking will open up between 10% and 20% of land for redevelopment. How will this impact land value and project feasibility?



PROJECT FEASIBILITY
Development will likely get more risky as market conditions related to parking demand and commercial and retail viability change. How do we reduce risk?



BUZZ/VITALITY
What will draw people to places in the future? How important will entertainment factor in to where people want to congregate? How do we create "buzz"?



QUALITY
If location in relation to other areas of the city is no longer a strong factor in housing/commercial building location, will quality of design become more relevant in attracting and keeping people in cities/neighborhoods?

IMPLICATIONS FOR ...

EQUITY

How will the impacts of emerging technologies impact vulnerable and low income populations? What opportunities are there to improve services and reduce inequities?

HEALTH

Preliminary research finds that people are replacing walking, biking, and transit trips with rideshare services. If this trend continues and is exacerbated by AVs, what will the impact be on our health? What are the impacts of E-commerce on health?

ENVIRONMENT

How can we take advantage of emerging technologies to improve sustainability and environmental outcomes? Can we reduce GHG emissions? Can we improve stormwater treatment?

ECONOMY

Up to 4 million people drive for a living. What happens to their jobs with the deployment of AVs? Brick-and-mortar stores are closing as shoppers go online. How will emerging technologies disrupt the economy?

GOVERNANCE

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

RESPONSE

WHAT SHOULD WE DO?

Given the possible range of secondary impacts of emerging technologies on land use, urban design, transportation, and real estate, and 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?

NATIONAL NETWORK

No one has all the answers, but we need to be asking the right questions to make sure we are solving the right problems. Urbanism Next is bringing together a truly interdisciplinary group of people representing planning, architecture, engineering, urban design and public administration from the private, public, and academic sectors who play a critical role in the future of our cities. This network is dealing with the impacts of technology right now and planning for the impacts to come. From being a test site for AV's, to adopting regulations related to short-term rentals, to communities that have experienced shuttered malls, **members of the Urbanism Next National Network understand the breadth and depth of the change that technology is creating**, or is likely to create, in the future.

The Urbanism Next National Network works together to conduct and share research, as well as collaborate on presentations and events. In an effort to share the knowledge and expertise of the Network, **Urbanism Next organized a national conference in Portland, OR from March 5-7, 2018.** The Conference is a partnership with the Oregon Chapters of the American Planning Association, the American Institute of Architects, the American Society of Landscape Architects, and the Urban Land Institute to build a national network of thought leaders from the private sector, public sector, and academia to address these topics. We also conduct other statewide, regional, and local events. To find out more, go to urbanismnext.com.

CONTACTS

NICO LARCO, AIA

Center Director
Professor –
Department of Architecture
Co-Founder/Co-Director –
Sustainable Cities Initiative
University of Oregon

e | nlarco@uoregon.edu
p | 503.412.3732

BECKY STECKLER, AICP

Program Manager –
Urbanism Next
Sustainable Cities Initiative
University of Oregon

e | beckys@uoregon.edu
p | 503.412.3729

REBECCA LEWIS, PHD

Research Director –
Sustainable Cities Initiative
University of Oregon
Assistant Professor –
Department of Planning,
Public Policy and
Management

e | rlewis9@uoregon.edu
p | 541.346.4432

WEBSITE: **URBANISMNEXT.COM**