One of the key challenges cities face is understanding the range of areas that are being affected or will be affected by emerging technologies, and how these areas are related. The Urbanism Next Framework organizes impacts based on five key areas—land use, urban design, building design, transportation, and real estate—and relates those to the implications they have on equity, health and safety, the environment, and the economy. It then considers what we should do to ensure that emerging technologies help communities achieve their goals.

### Forces of Change

<table>
<thead>
<tr>
<th>New Mobility / AVs</th>
<th>E-Commerce / Urban Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility as a Service</td>
<td></td>
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</tbody>
</table>

#### First Order Impacts

- Change parking demand
- Change in vehicle miles traveled
- Change in congestion
- Change in ease of travel
- Shift in modes
- Competition for the right-of-way
- Change in goods & meal delivery
- Shifting nature of freight
- Change in demand for warehousing space
- Reduction of brick-and-mortar stores
- Increasing interest in experiential retail
Will AVs deliver on the promise of making roads safer? Preliminary research finds that people are replacing walking, biking, and transit trips with ridehail services. If this trend continues and is exacerbated by AVs, how will public health outcomes be affected?

Emerging technologies are changing how people and goods move. Public sector staff are working on developing policy responses that reflect the values of their communities. Emerging technologies will also disrupt revenues for cities, counties, and states. How do we provide a high level of service and support thriving communities at the same time?

The forces of change and multi-level impacts are already changing the built environment. E-scooters and bikeshare systems are creating new champions for protected bike lanes. Cities are designating parking for e-scooters. Cities are also removing parking and replacing it with pick-up and drop-off space for TNCs and deliveries. Developers are rethinking parking and redesigning buildings to orient them to the street (as opposed to parking lots) and incorporating more space for deliveries.

Up to five 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 impact local, state, and national economies?

How will the impacts of emerging technologies affect vulnerable and low-income populations? What opportunities are there to improve services, reduce inequities, and ensure that new mobility services are available to everyone?

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

The advent of emerging technologies and their subsequent multi-level impacts on land use, urban design, building design, transportation, and real estate are evolving. Academic, public, and private sector organizations should continue to study and research how these changes are impacting communities to inform the decision-making process.

Given the current pace of change, community members are not always aware of new mobility technologies, where they are being deployed, and who is making decisions. Some cities that are contemplating new services, such as first-time deployment of e-scooters or autonomous vehicle pilot projects, have met resistance. City staff will need to find new and innovative ways to talk about these services with their residents.

Equity
How will the impacts of emerging technologies affect vulnerable and low-income populations? What opportunities are there to improve services, reduce inequities, and ensure that new mobility services are available to everyone?

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

Economy
Up to five 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 impact local, state, and national economies?

Governance
Emerging technologies are changing how people and goods move. Public sector staff are working on developing policy responses that reflect the values of their communities. Emerging technologies will also disrupt revenues for cities, counties, and states. How do we provide a high level of service and support thriving communities at the same time?

Design
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Research
The advent of emerging technologies and their subsequent multi-level impacts on land use, urban design, building design, transportation, and real estate are evolving. Academic, public, and private sector organizations should continue to study and research how these changes are impacting communities to inform the decision-making process.

Education & Outreach
Given the current pace of change, community members are not always aware of new mobility technologies, where they are being deployed, and who is making decisions. Some cities that are contemplating new services, such as first-time deployment of e-scooters or autonomous vehicle pilot projects, have met resistance. City staff will need to find new and innovative ways to talk about these services with their residents.