

THE FUTURE OF CITIES

THE ZONE OF EXCHANGE

URBANISM NEXT CONFERENCE | MAY 7-9, 2019

“From street to building, the Zone of Exchange is where **people interact with the built environment** and **each other**. With impending shifts to mobility, this public realm is ripe for disruption and we will be discussing what is possible when three specialists consider **an outcome that works for everyone**.



Brent Mather

Design Principal

Gensler

Ben Holland

Senior Associate



Paul de Konkoly Thege

Operations Manager



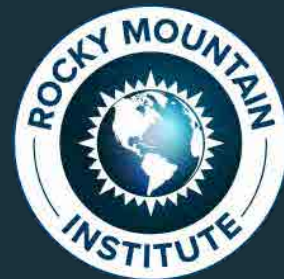
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Experimentation at the Interface of Urban Design and New Mobility

Environmental, Health, and Equity Implications for Cities



Urbanism Next
May 9th, 2019



Mobility of the Future



**MOBILITY AS
A SERVICE...**

**THAT'S ELECTRIC
AND AUTONOMOUS...**

**IN CITIES DESIGNED TO
SHAPE AND ENABLE IT.**



RMI transforms global energy use to create a clean, prosperous, and secure low-carbon future.

Mobility-Oriented Development:

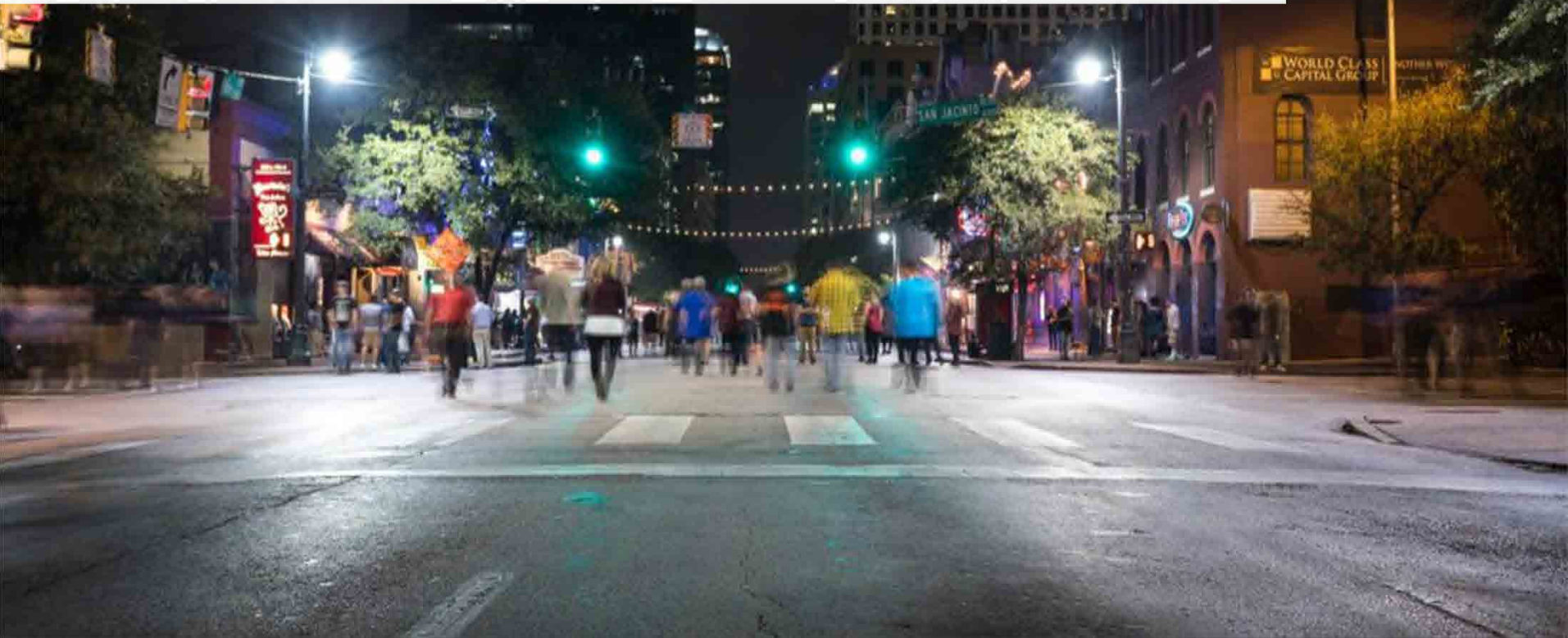
Moving toward cities designed to shape and enable new mobility



Source: Lyft, Nelson Nygaard

Pilots

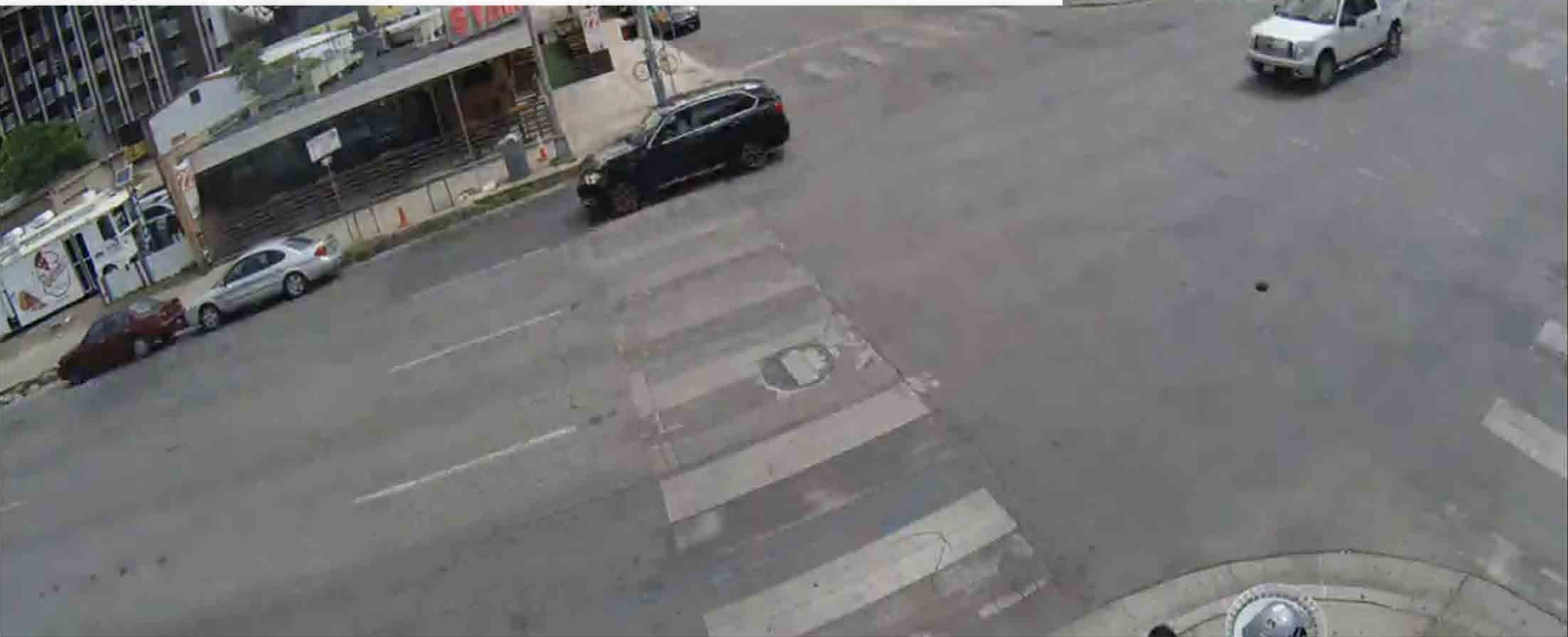
Experimentation at the interface of mobility and urban design



11:30:33 AM

Curb Access Pilot

Repurposing curbside parking for mobility service loading

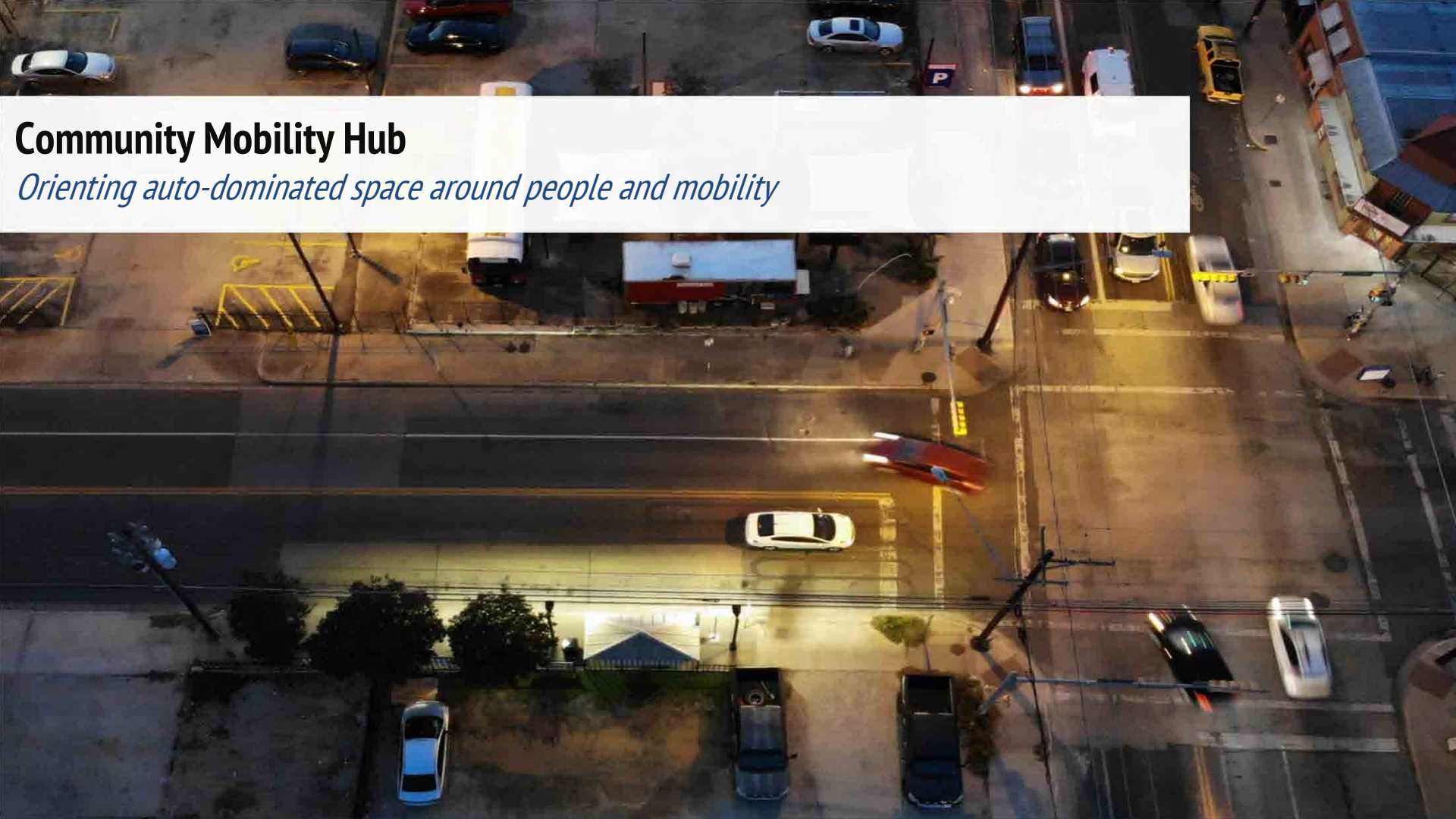




Curb Access Pilot

Tracking use via sensors



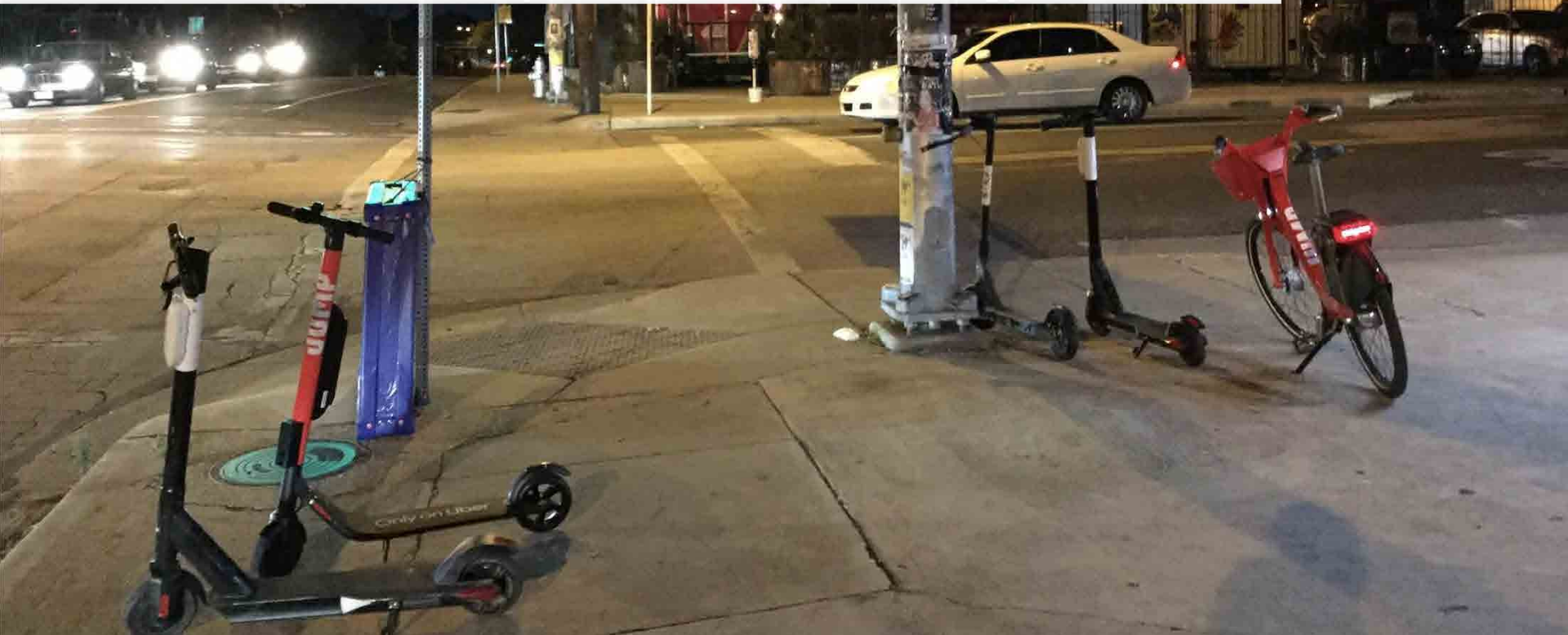


Community Mobility Hub

Orienting auto-dominated space around people and mobility

Community Mobility Hub

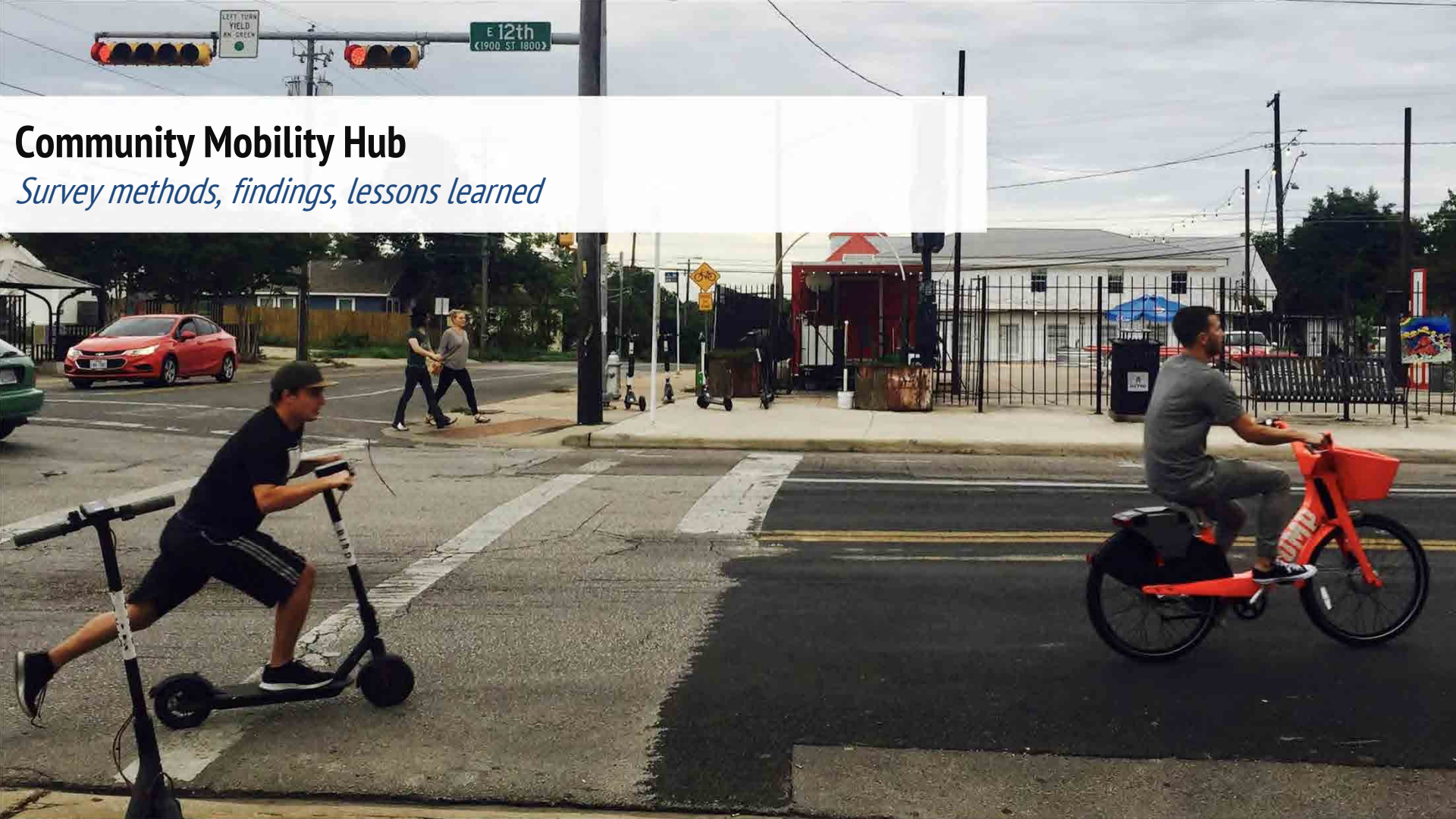
Implementation: mobility



Community Mobility Hub

Implementation: placemaking





Community Mobility Hub

Survey methods, findings, lessons learned

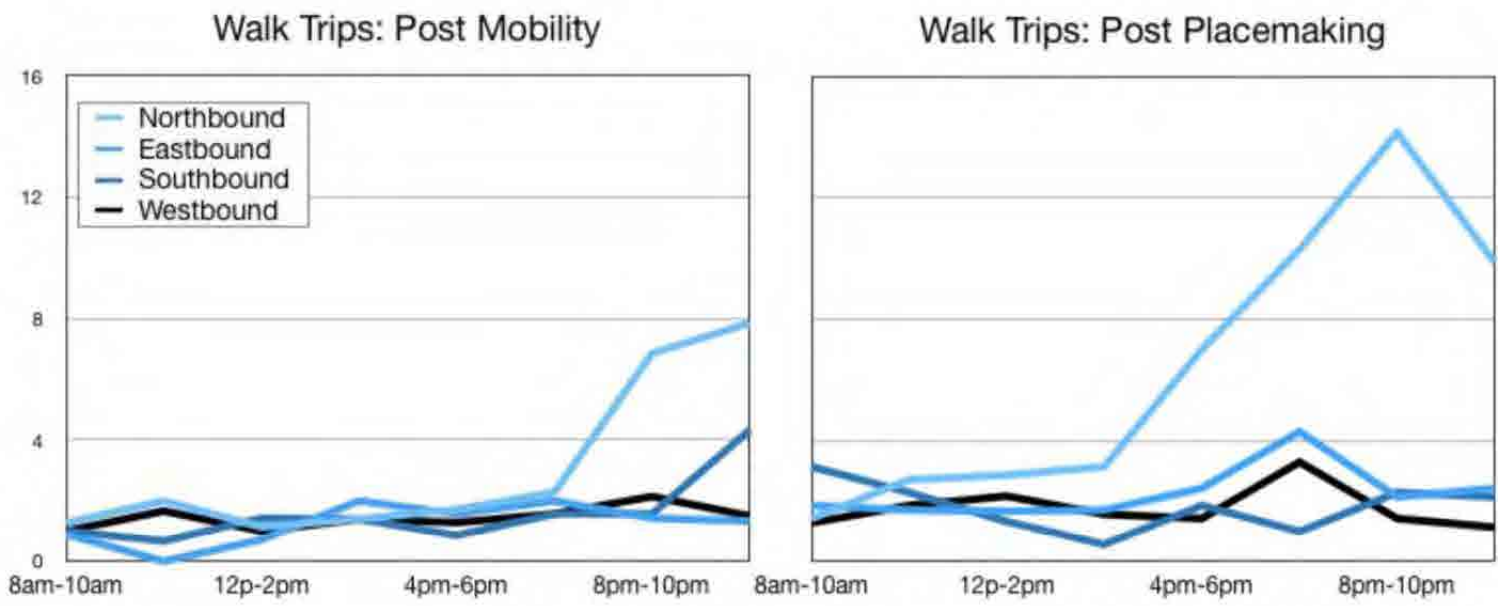
Community Mobility Hub

Camera observation methods, findings, lessons learned



Community Mobility Hub

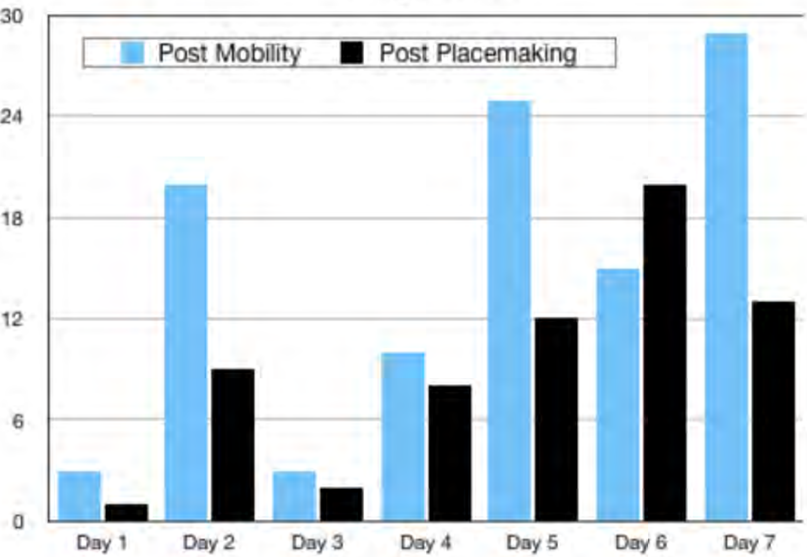
Walk trips: camera observation data example



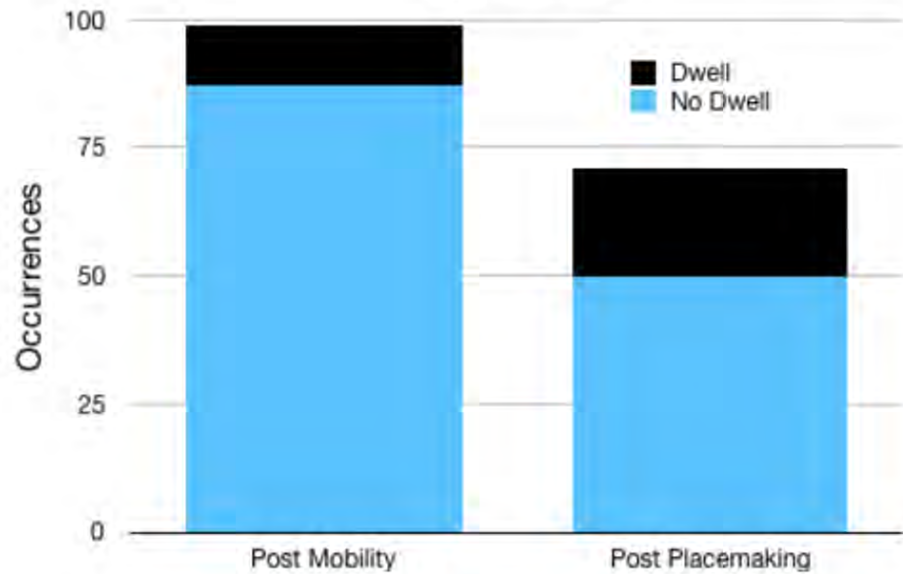
Community Mobility Hub

Visits and dwell-time: camera observation data example

Daily Visits



Dwell Time



Transforming global energy use to create a clean,
prosperous, and secure low-carbon future



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260 million

CARS, MOTORCYCLES AND BUSES IN THE U.S.

**The automobile as we know it
– gasoline- and diesel-engine
powered – will be largely
obsolete by 2030.**

“ **Transportation & Logistics**
Statista, 2015

“ **Why Cars as We Know Them May Disappear by 2050**
Fiscal Times, 2015

The average car in the
U.S. is not utilized

95%

OF THE TIME

5%

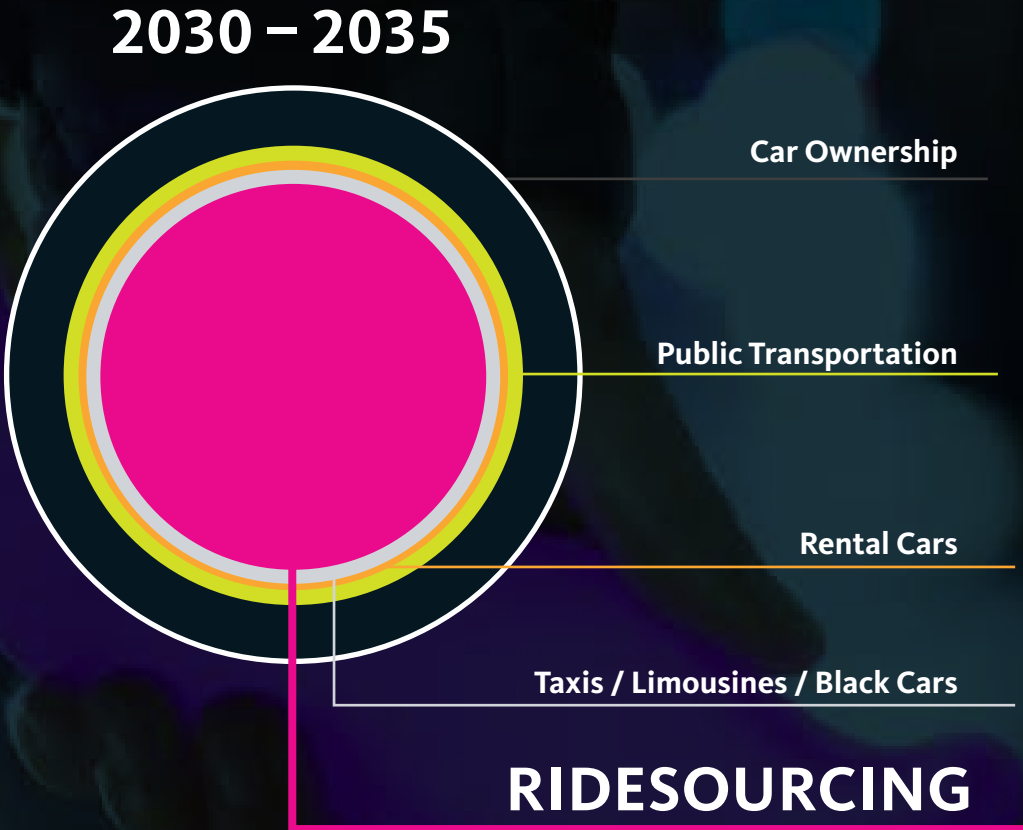
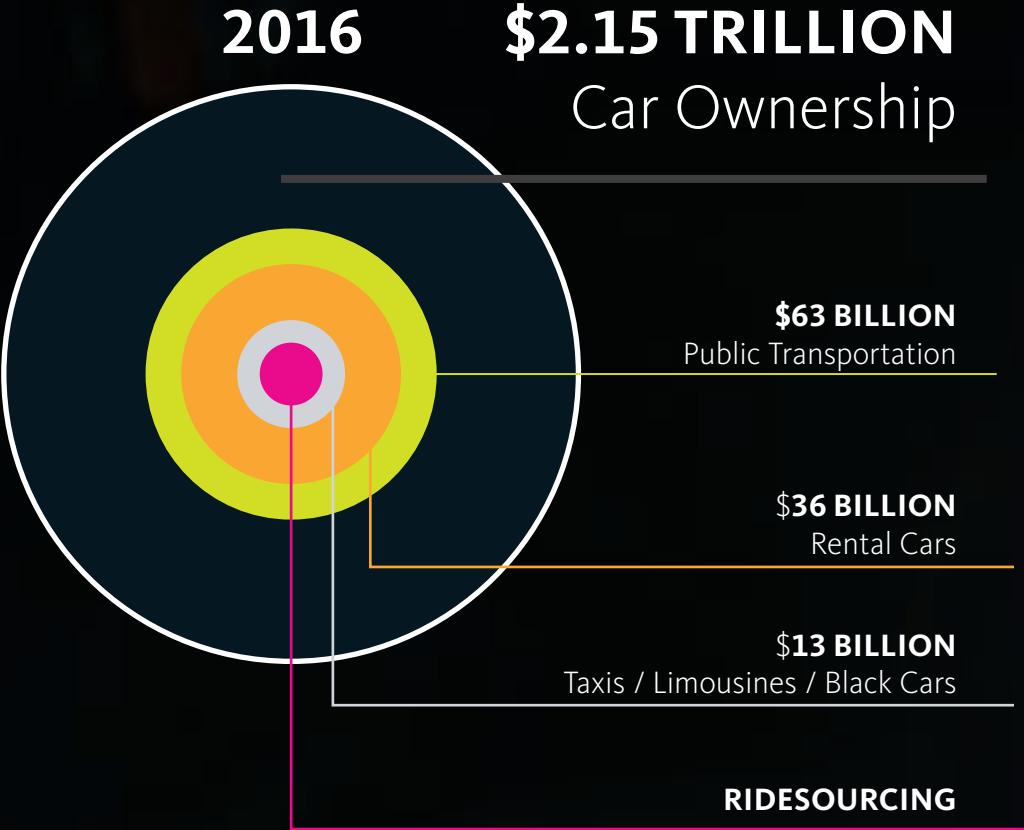
UTILIZATION

“

“Today's Cars Are Parked 95% of the Time”

Fortune, 2016

© Gensler 2019



Bureau of Labor Statistics, IBIS World, U.S. Department of Commerce, U.S. Census Bureau and Morgan Stanley Research

The driverless car will lend unprecedented mobility—including the youth, elderly, and blind—providing on-demand travel with a fraction of the cars currently on the road.



“The Road Ahead: Driverless Vehicles, Cities and Architecture”
Architectural Record



A stylized illustration of a road with several cars. In the foreground, a dark blue car is on the left, and a purple car is on the right. Further back, a blue car is visible on the right. The background features green hills and several evergreen trees. The road has dashed white lines.

Driverless cars close
driving distances,
increasing road capacity.

The gains will be huge.



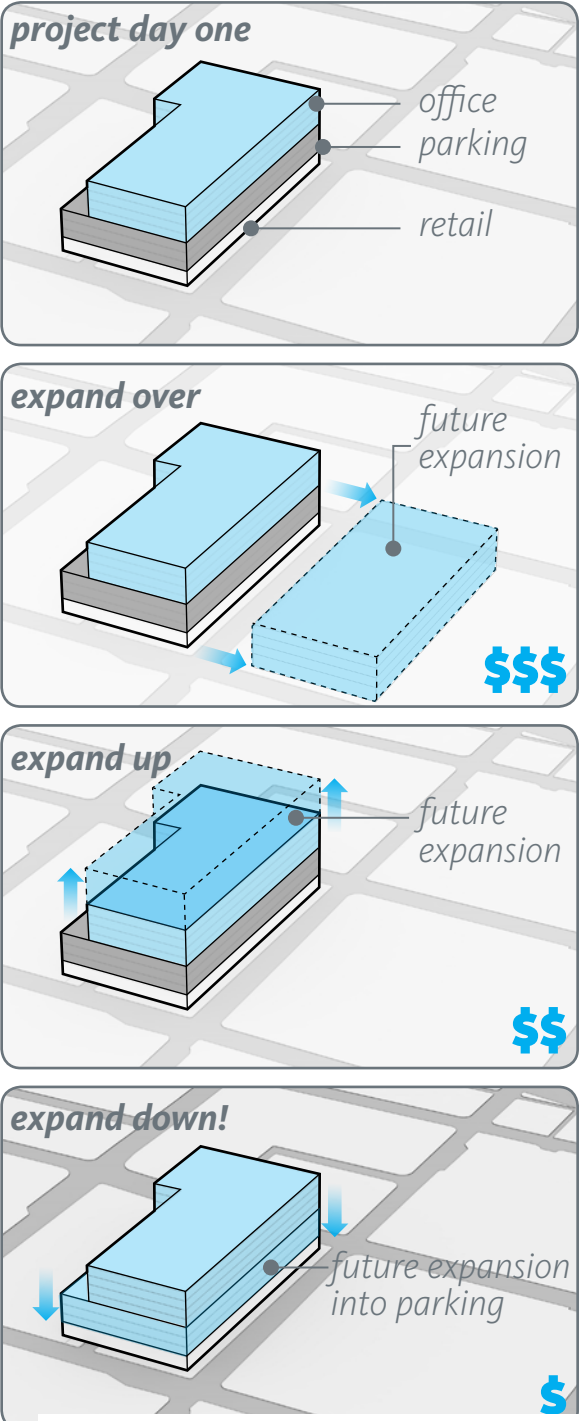
“The Road Ahead: Driverless Vehicles, Cities and Architecture”
Architectural Record



84.51° CENTRE | CINCINNATI, OH

FUTURE FLEXIBLE PARKING STRATEGIES

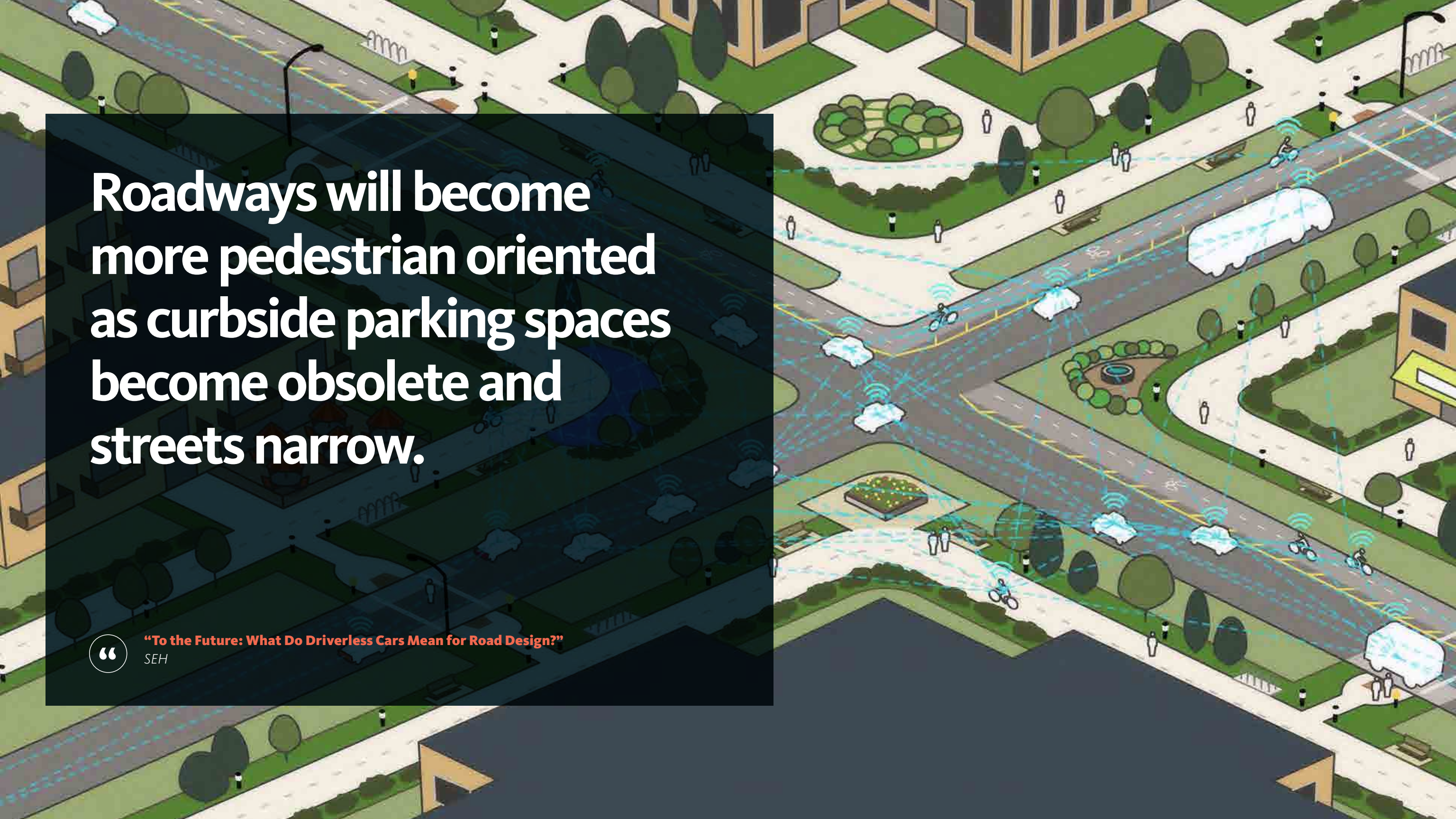
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FUTURE FLEXIBLE PARKING STRATEGIES



84.51° CENTRE | CINCINNATI, OH

An isometric illustration of a city street intersection. The scene shows a multi-lane road with a central green median. Several white autonomous vehicles are visible, each emitting blue, cone-shaped sensor waves (LiDAR) to detect their surroundings. Pedestrians are walking on wide sidewalks, and a few bicycles are also present. The street is lined with modern buildings, trees, and streetlights. The overall design is clean and futuristic, emphasizing a pedestrian-oriented urban environment.

Roadways will become
more pedestrian oriented
as curbside parking spaces
become obsolete and
streets narrow.



“To the Future: What Do Driverless Cars Mean for Road Design?”

SEH

There's an incredible
opportunity to **take
our streets back.**



**The finest places
in the world are
cities with entire
networks of car-free
streets, known as
pedestrian cities.**

10 MOST WALKABLE CITIES

- | | | | |
|----------|-------------------|-----------|---------------------|
| 1 | COPENHAGEN | 6 | VANCOUVER |
| 2 | FLORENCE | 7 | BUENOS AIRES |
| 3 | NEW YORK | 8 | DUBROVNIK |
| 4 | MARRAKECH | 9 | MELBOURNE |
| 5 | PARIS | 10 | BOSTON |

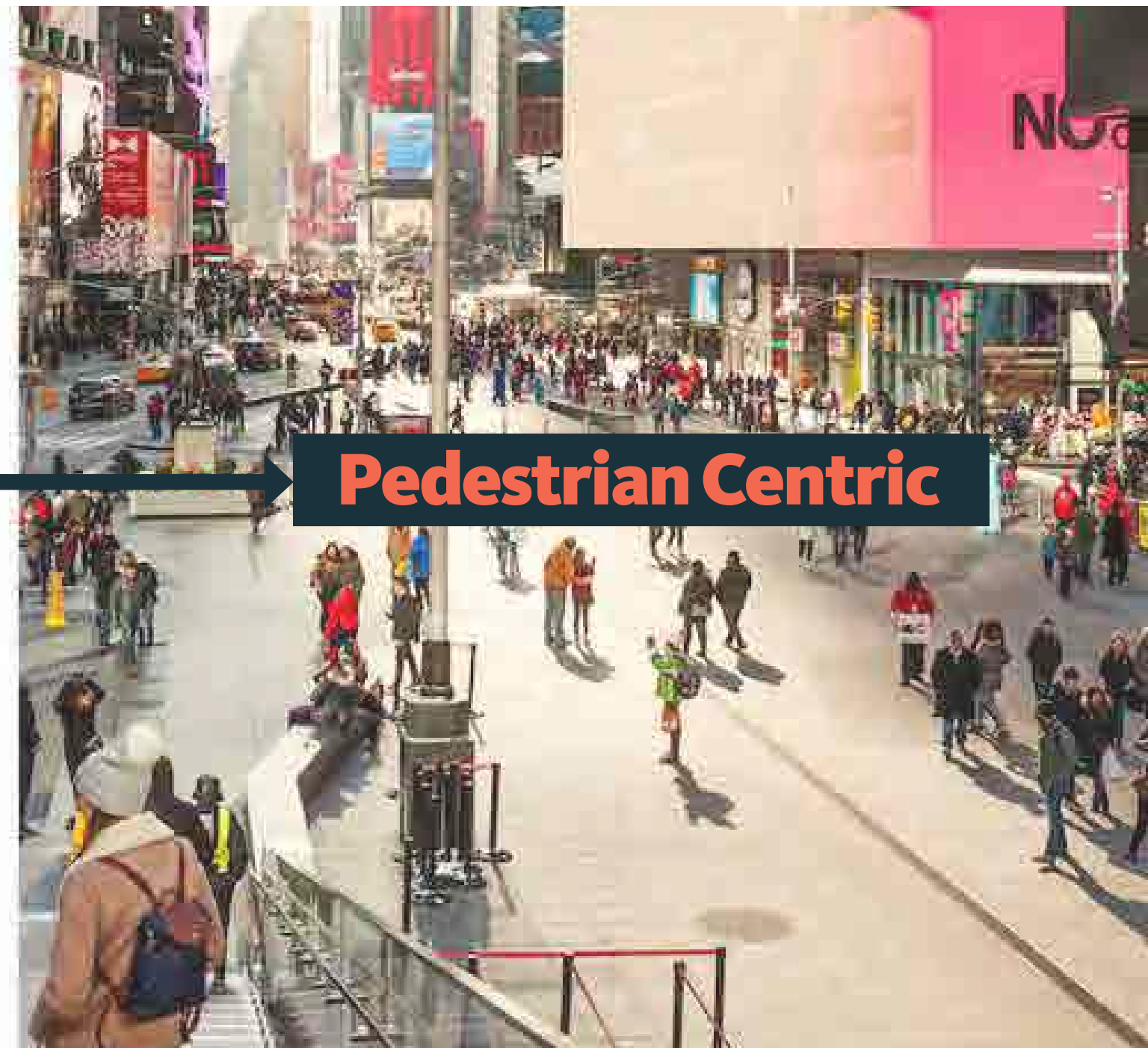


Pedestrian City
New Urbanism



"The 10 Most Walkable Cities in the World"
The Culture Trip, 2017



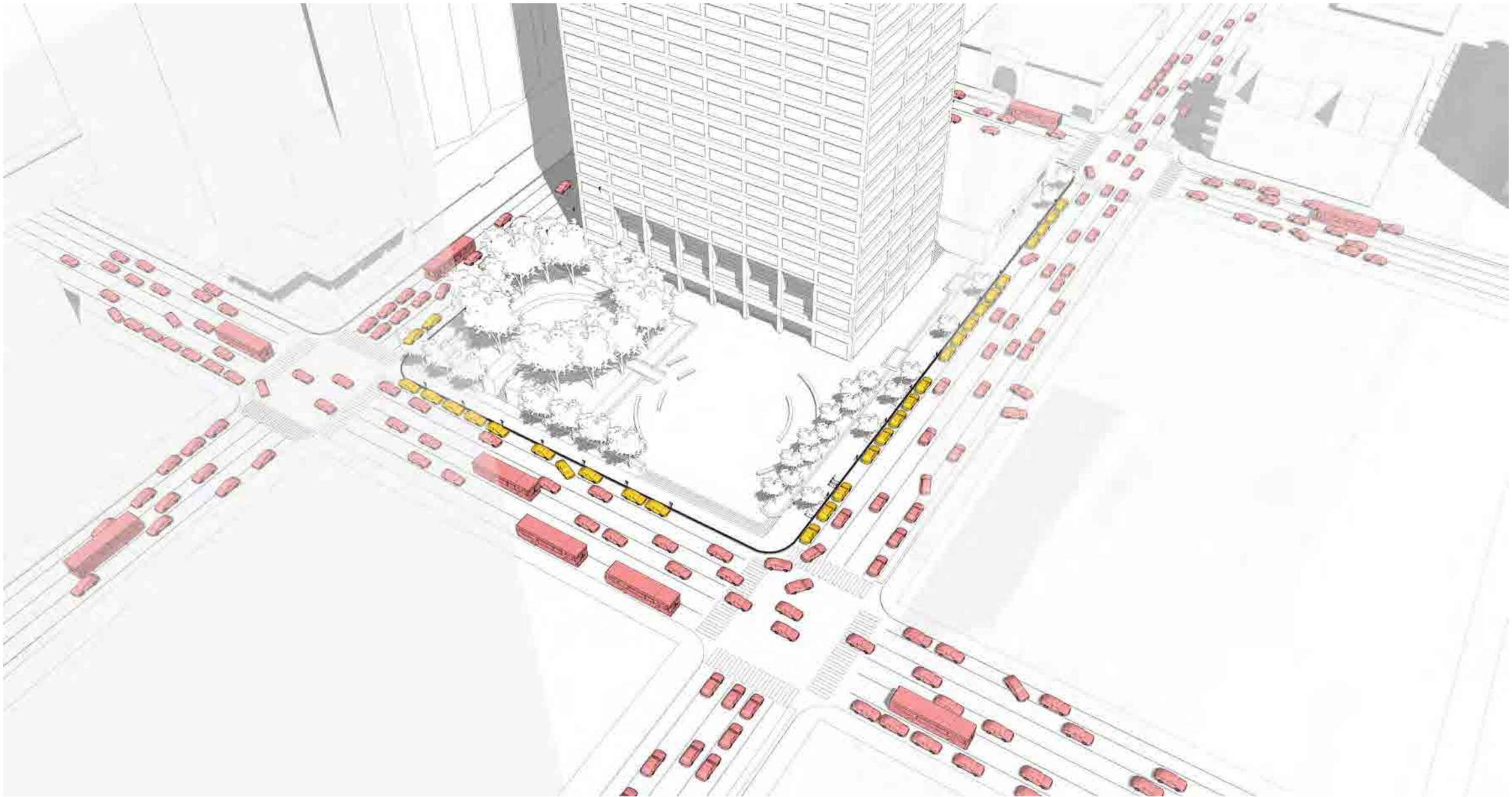


CASE STUDY

1225 17th St, Denver

CASE STUDY: 1225 17TH STREET, DENVER

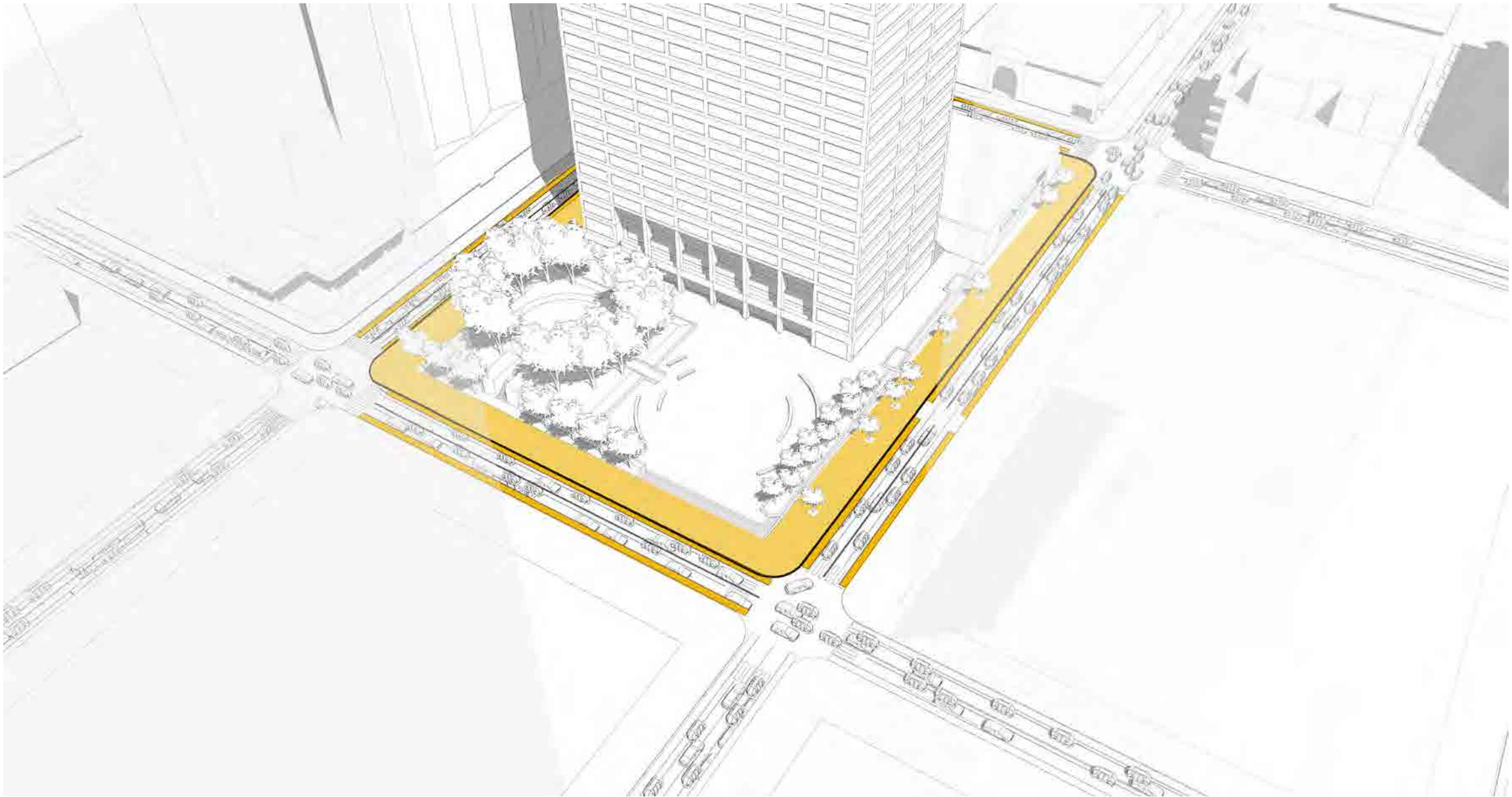




Today's Typical City Block

CASE STUDY: 1225 17TH STREET, DENVER

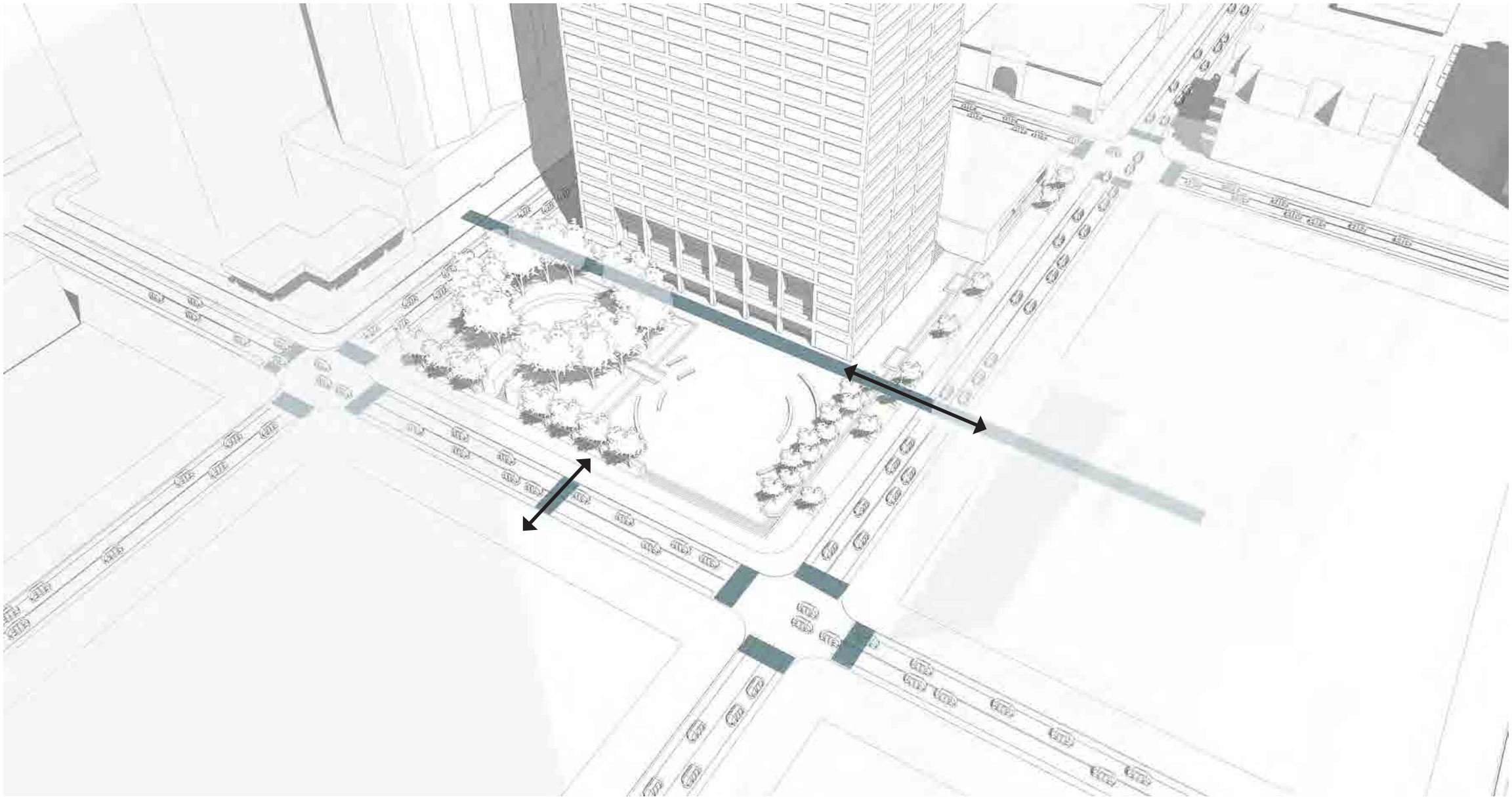
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Transition Away From Curbside Parking

CASE STUDY: 1225 17TH STREET, DENVER

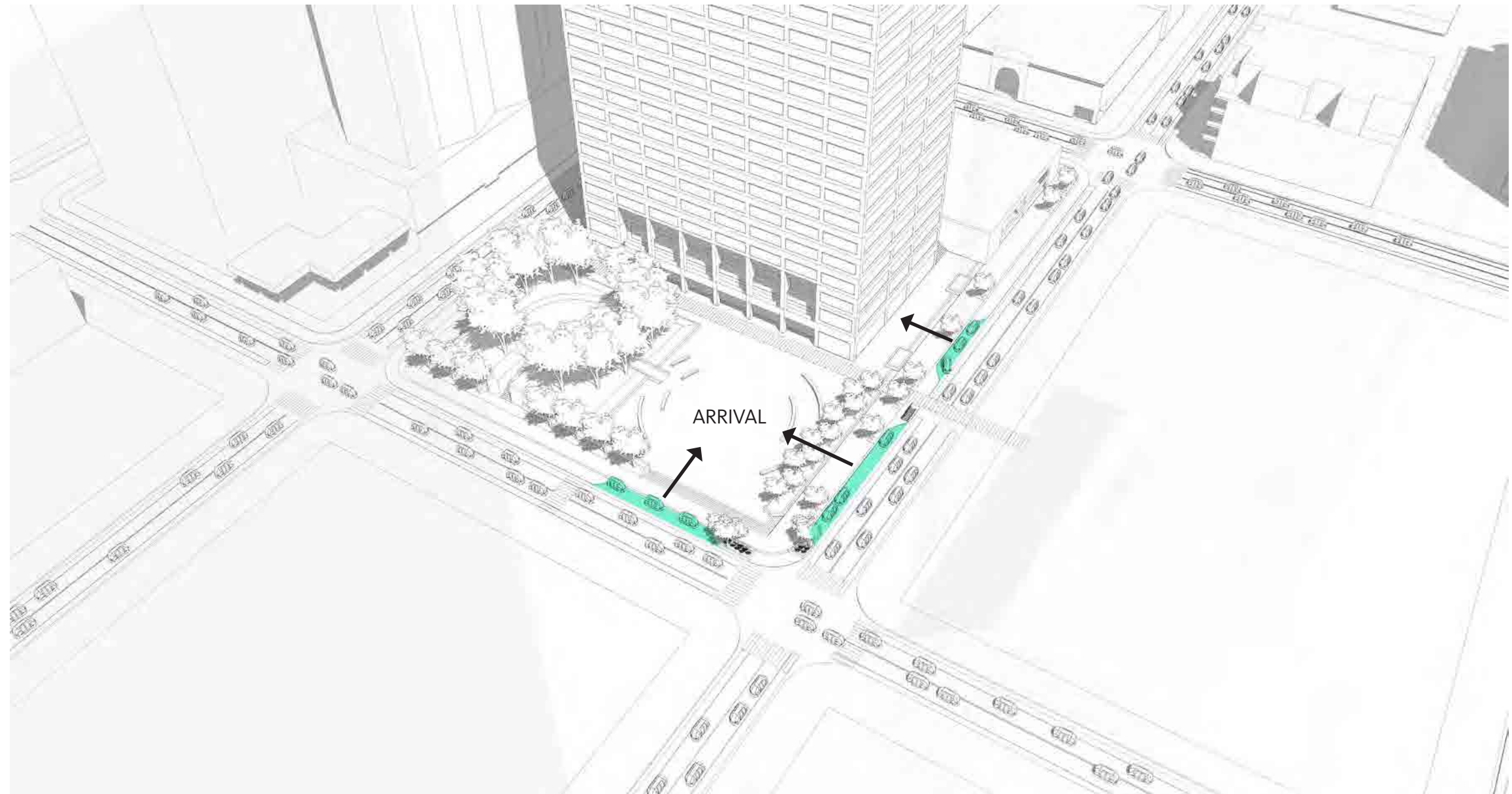
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Increased Pedestrian Connectivity

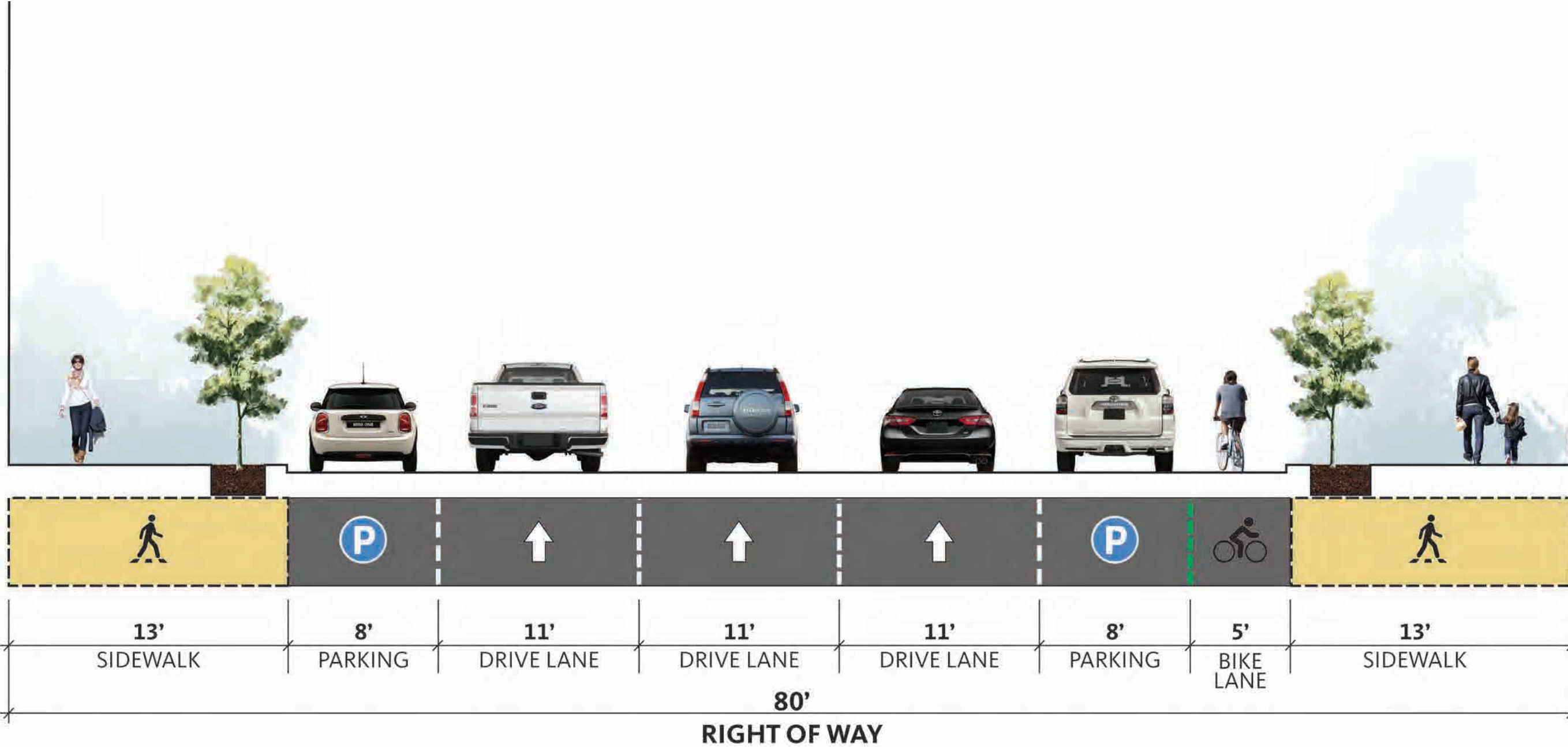
CASE STUDY: 1225 17TH STREET, DENVER

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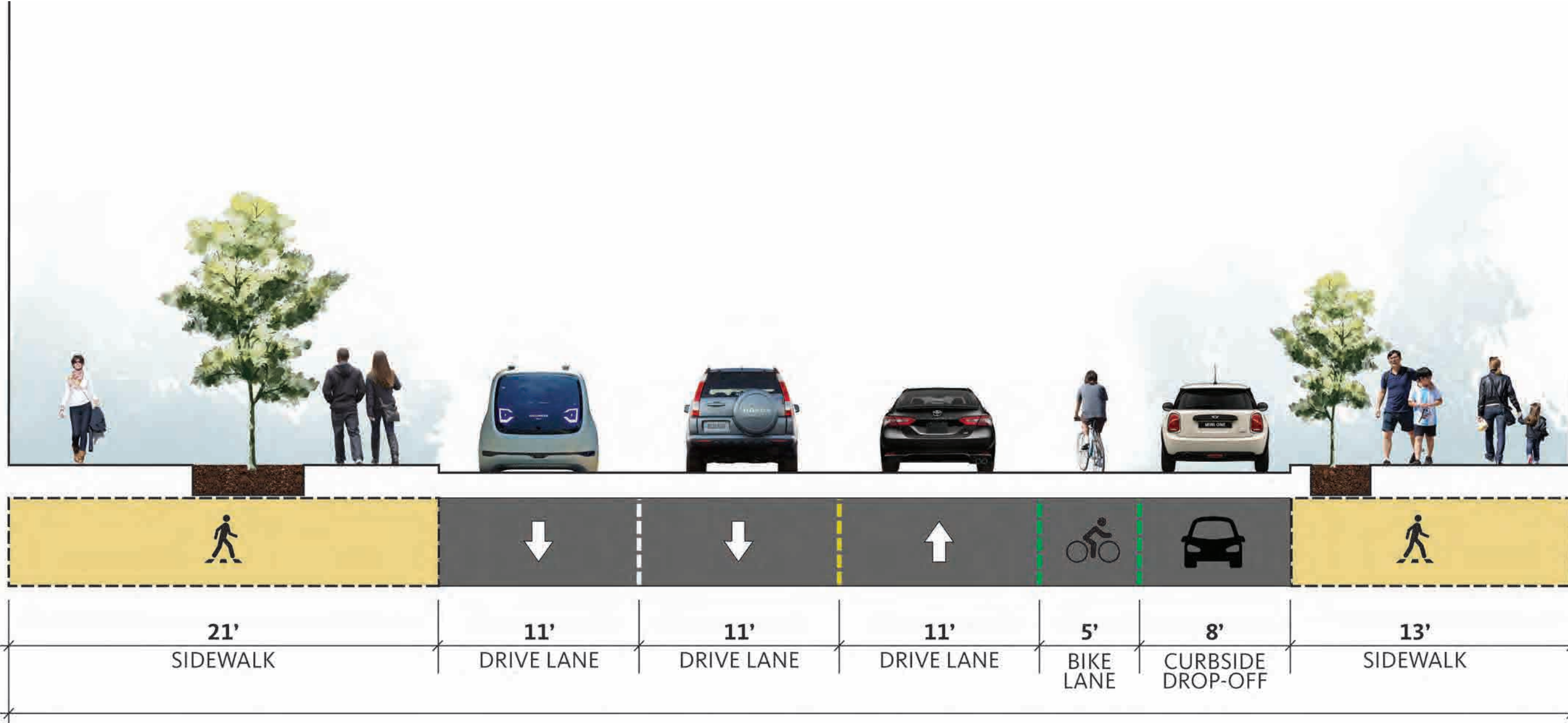


Curbside Parking to Drop-off

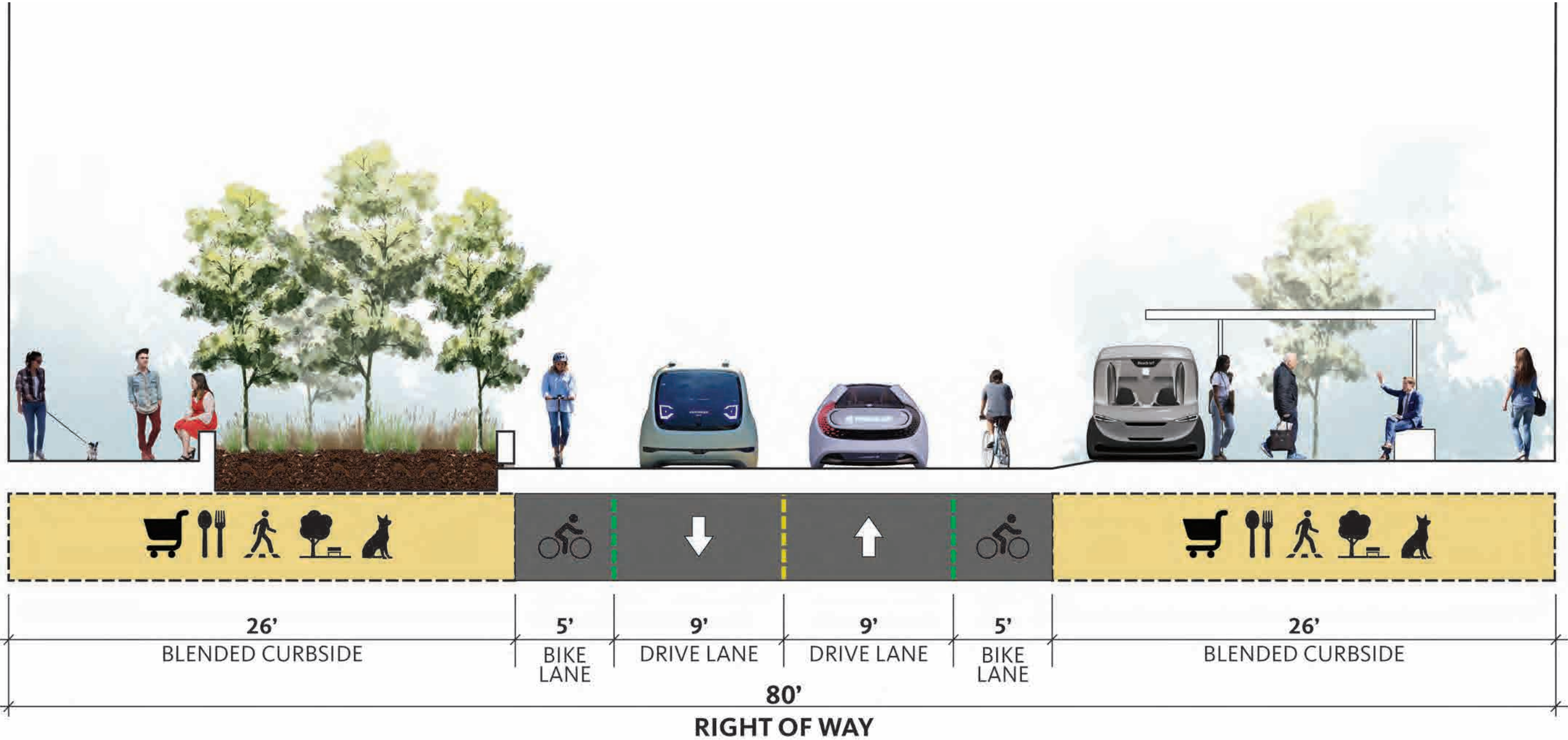
TODAY'S RIGHT OF WAY



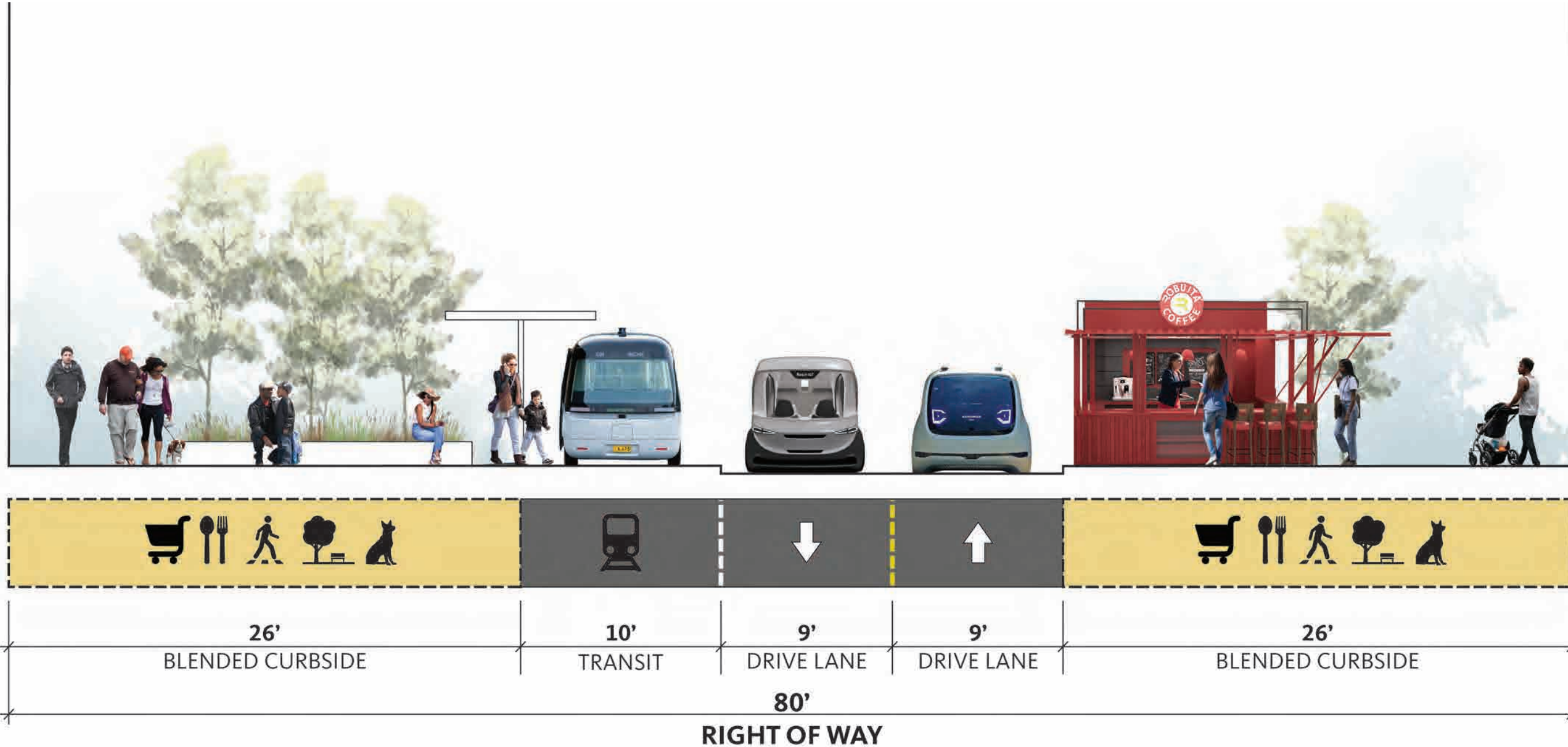
TOMORROW'S RIGHT OF WAY



THE ZONE OF EXCHANGE FUTURE



THE ZONE OF EXCHANGE FUTURE

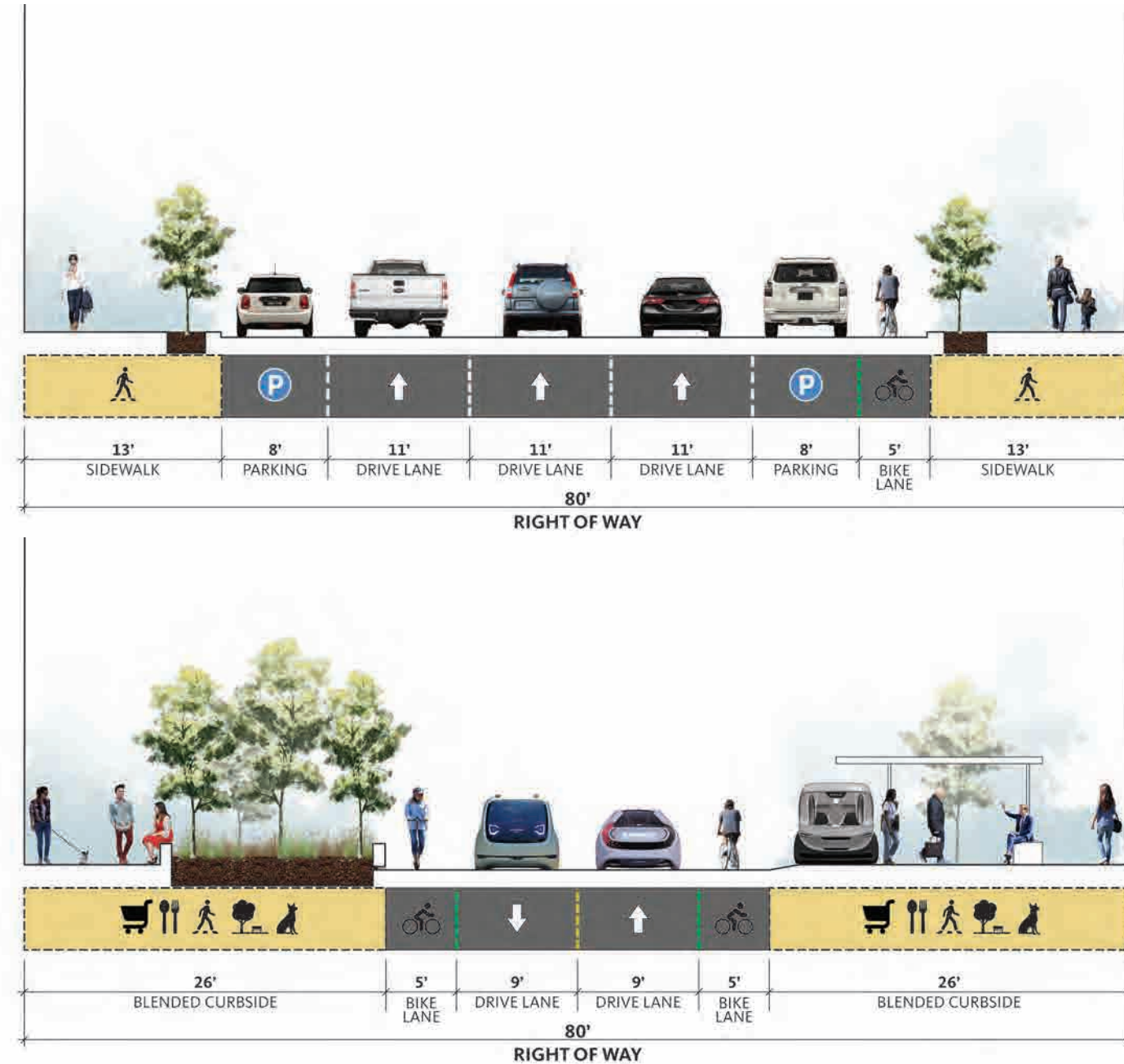


EVOLUTION TO THE ZONE OF EXCHANGE

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Today

- Car-centric
- Engineered for through-put
- Trees and walkable streets are a low priority



The Future

- Activation-centric
- Engineered for the human experience
- Trees and walkable streets are equal priority



Existing Condition



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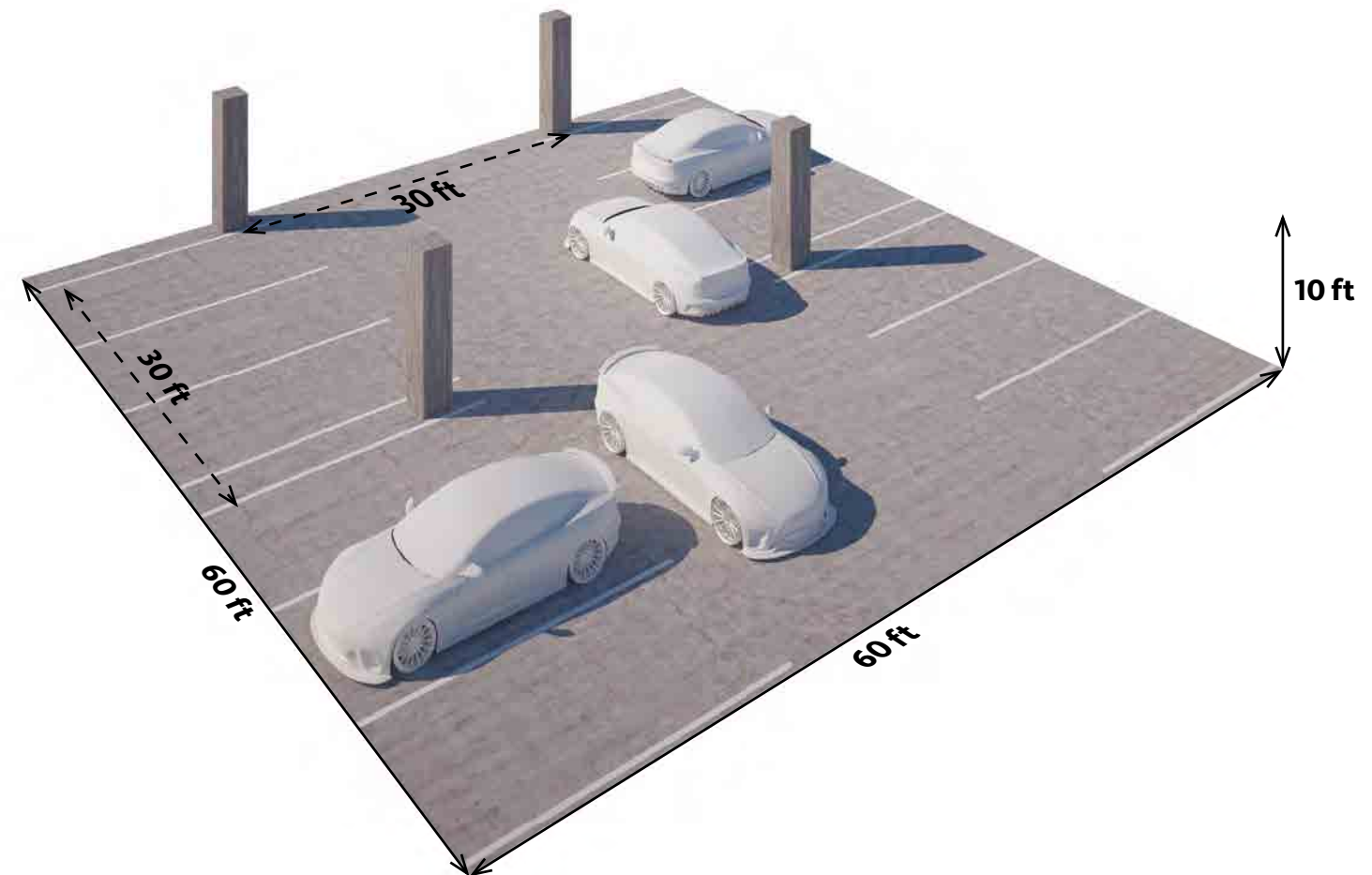
Future Zone of Exchange



What are the **Impacts** of the **Autonomous** **Vehicles** on **Real Estate**?

BASIC INGREDIENT

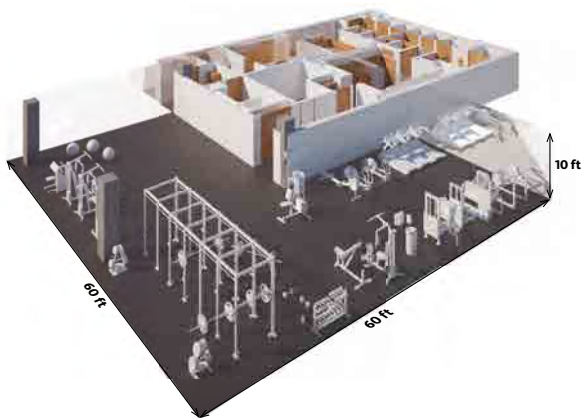
Parking / Program Module



ADAPTIVE REUSE OF PARKING TYPOLOGIES

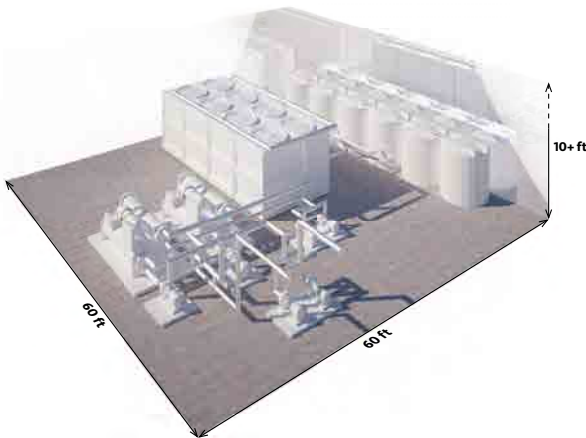
REVAMP EXISTING AMENITIES.

Fitness Center



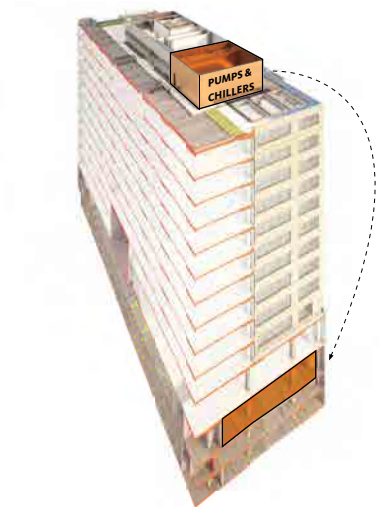
SUSTAINABLE MAKEOVER OF BUILDING SYSTEMS

Ice Thermal Storage



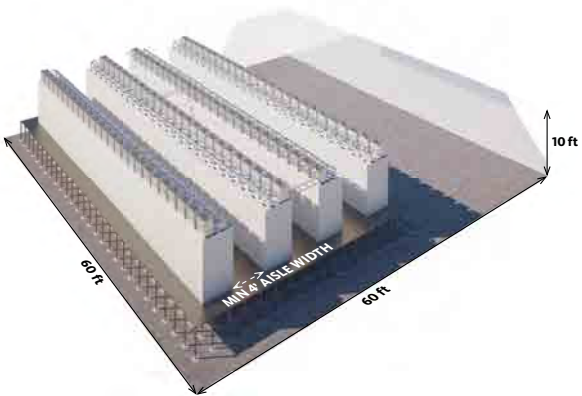
RESHUFFLE & RE-PRIORITIZE
REAL ESTATE WITHIN.

Relocation of MEP Equipment



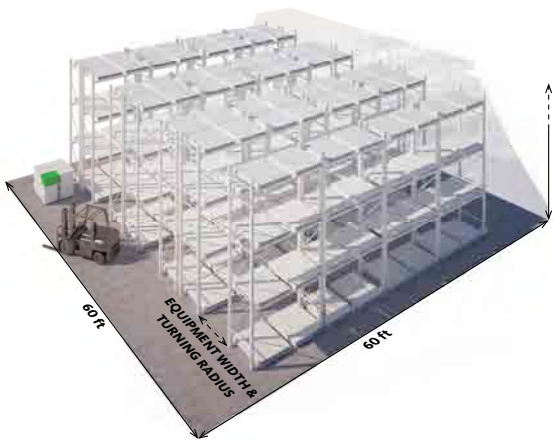
BRING IN NEW BUSINESSES.

Co-location Data Center



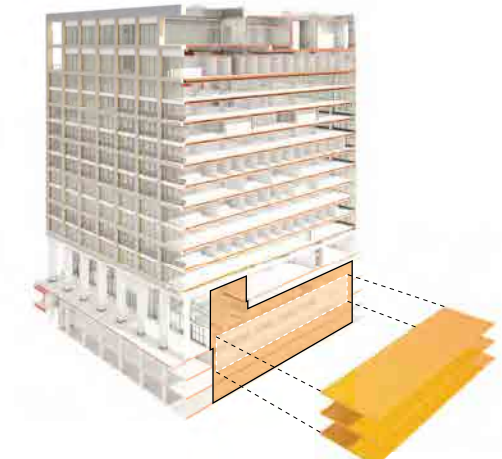
BRING IN NEW BUSINESSES.

App-based Self-storage



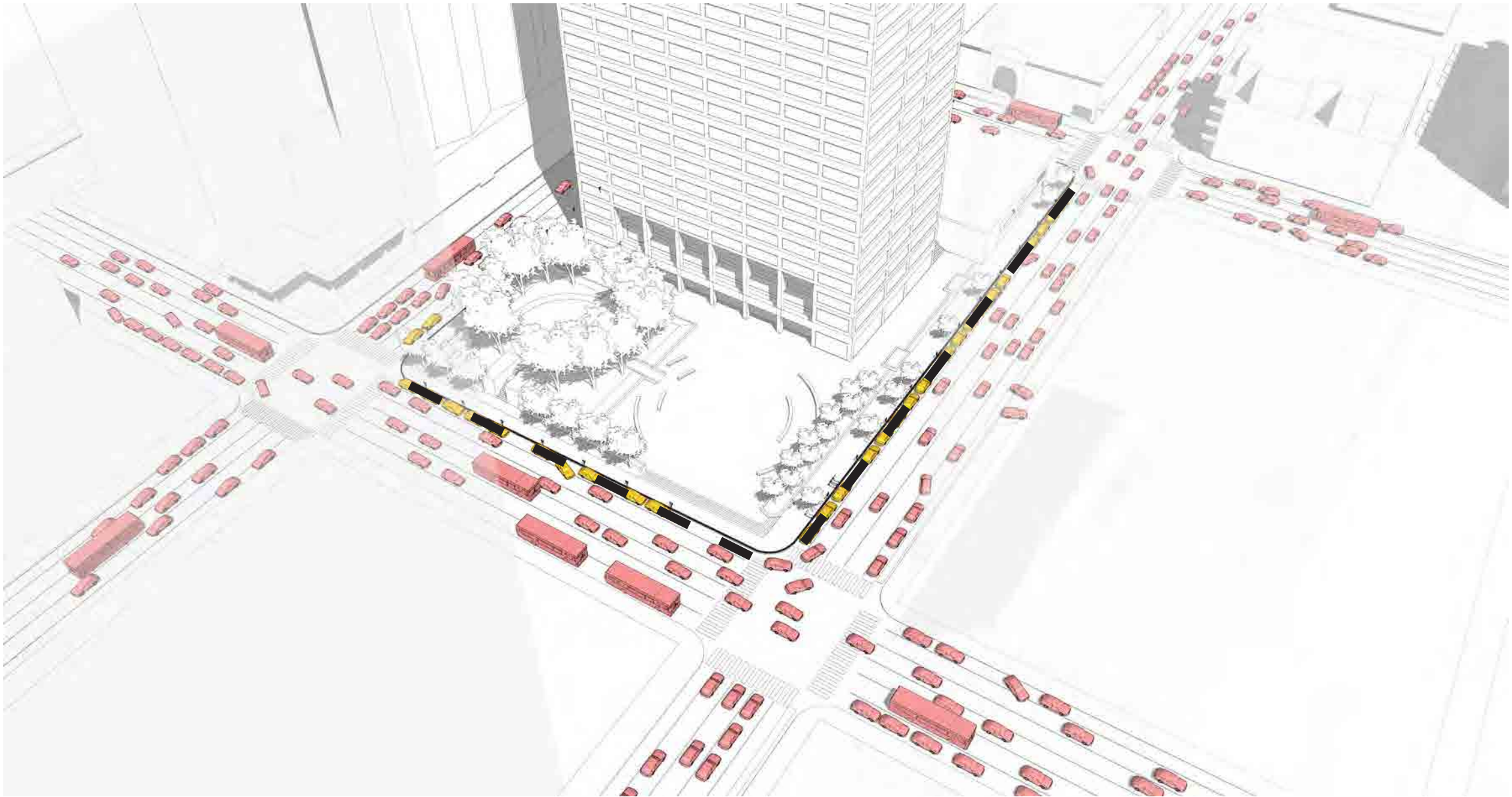
EXTEND ABOVE-GRADE PROGRAM TO
BELOW-GRADE SPACES.

Below-Grade Atrium

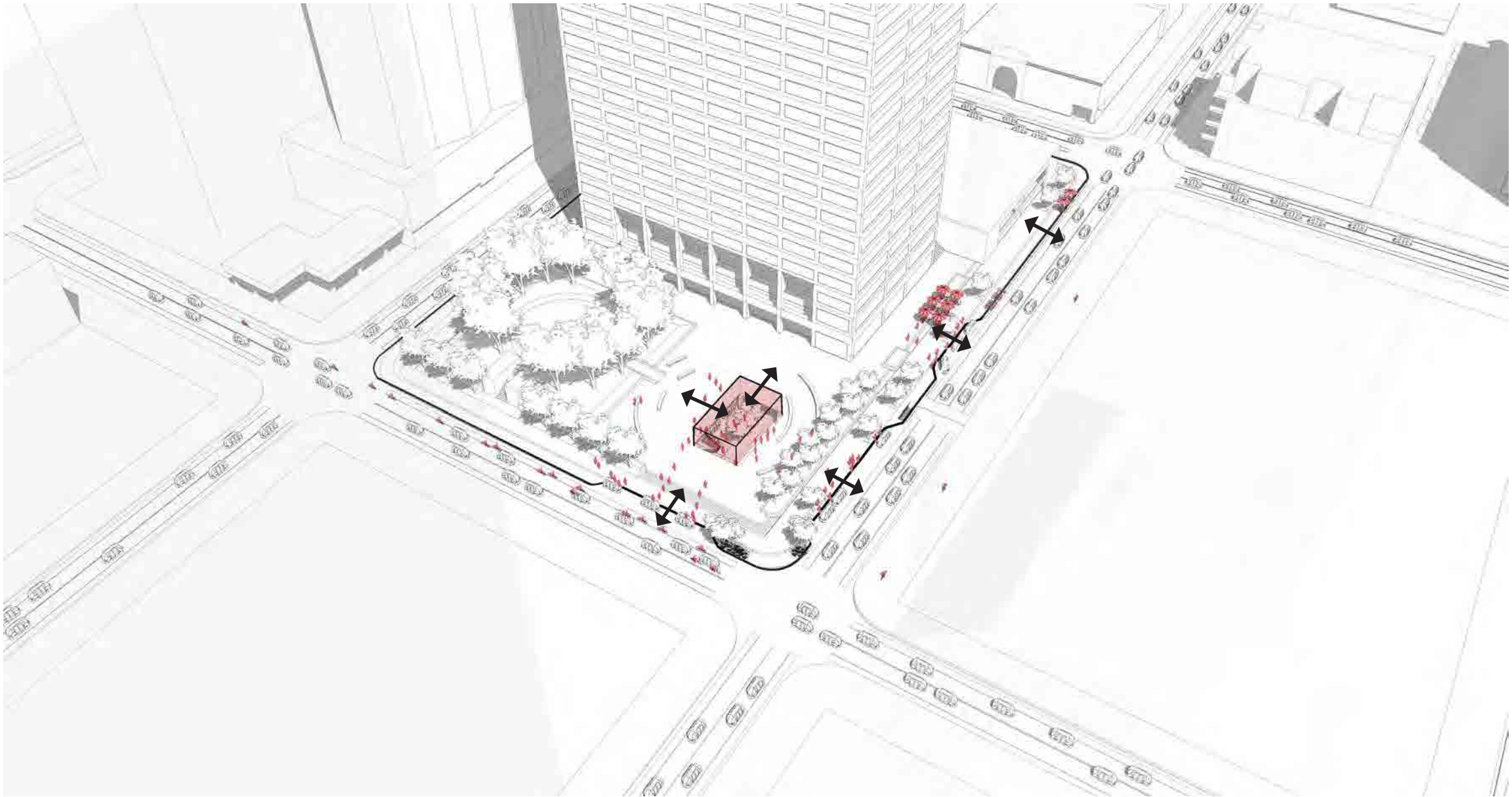


CASE STUDY: 1225 17TH STREET, DENVER

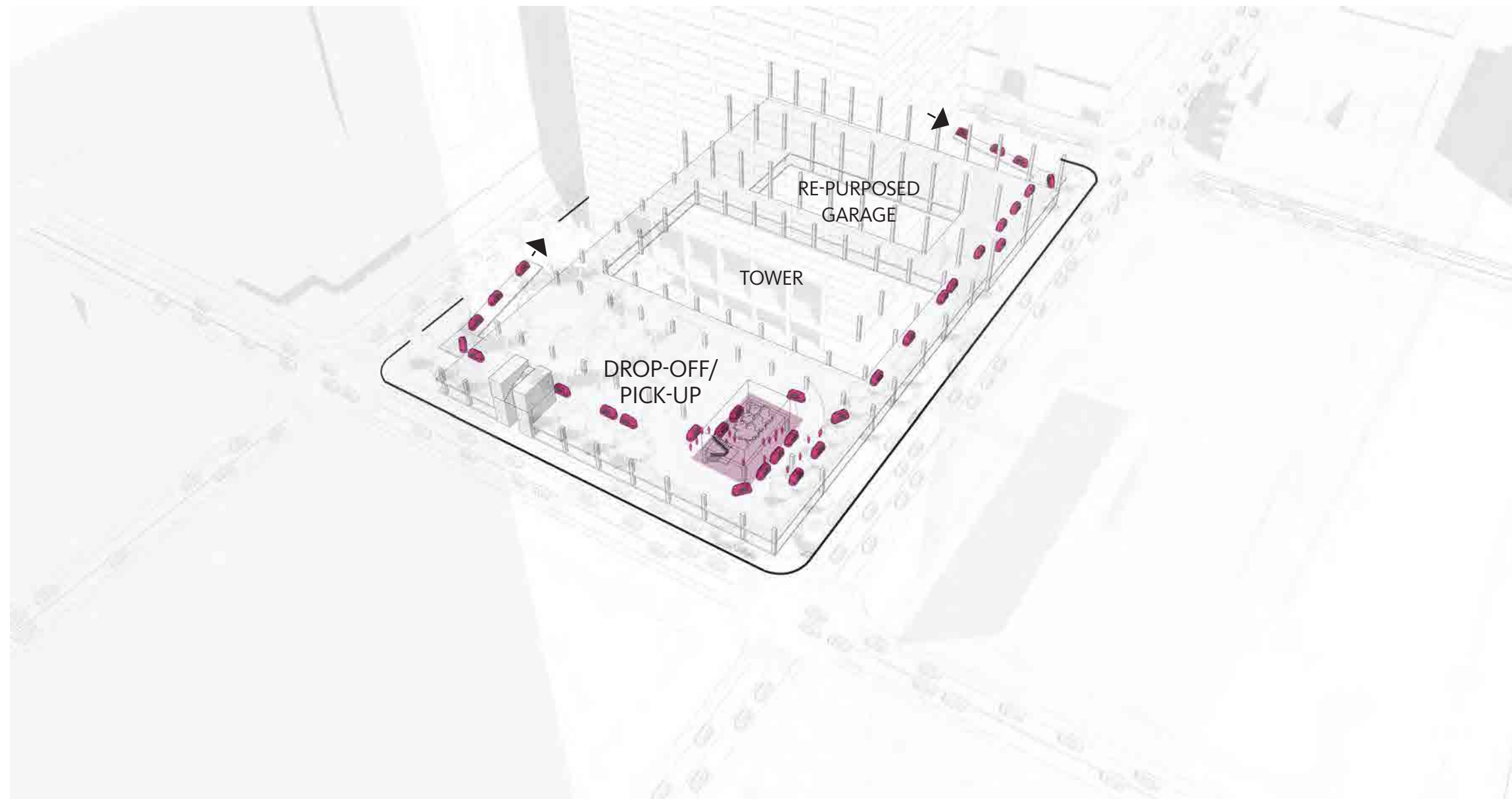
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Today's Parking Paradigm = Through-Put & Barriers



Zone of Exchange = Urban Porosity



The New Arrival/Departure Paradigm



Existing Condition



Future Zone of Exchange



“IF I HAD ASKED PEOPLE
WHAT THEY WANTED,
THEY WOULD HAVE SAID:
FASTER HORSES...”

Henry Ford