

A large, solid red silhouette of a car, viewed from the side, facing right. The car has a prominent roof rack or sensor array on top. The text 'HOK AUTONOMOUS FUTURES' is overlaid in white on the side of the car.

# HOK AUTONOMOUS FUTURES

# CURRENT JOB GROWTH REINFORCING EXISTING DEVELOPMENT PATTERNS



Plan  
BayArea  
2040

DRAFT PLAN  
March 2017



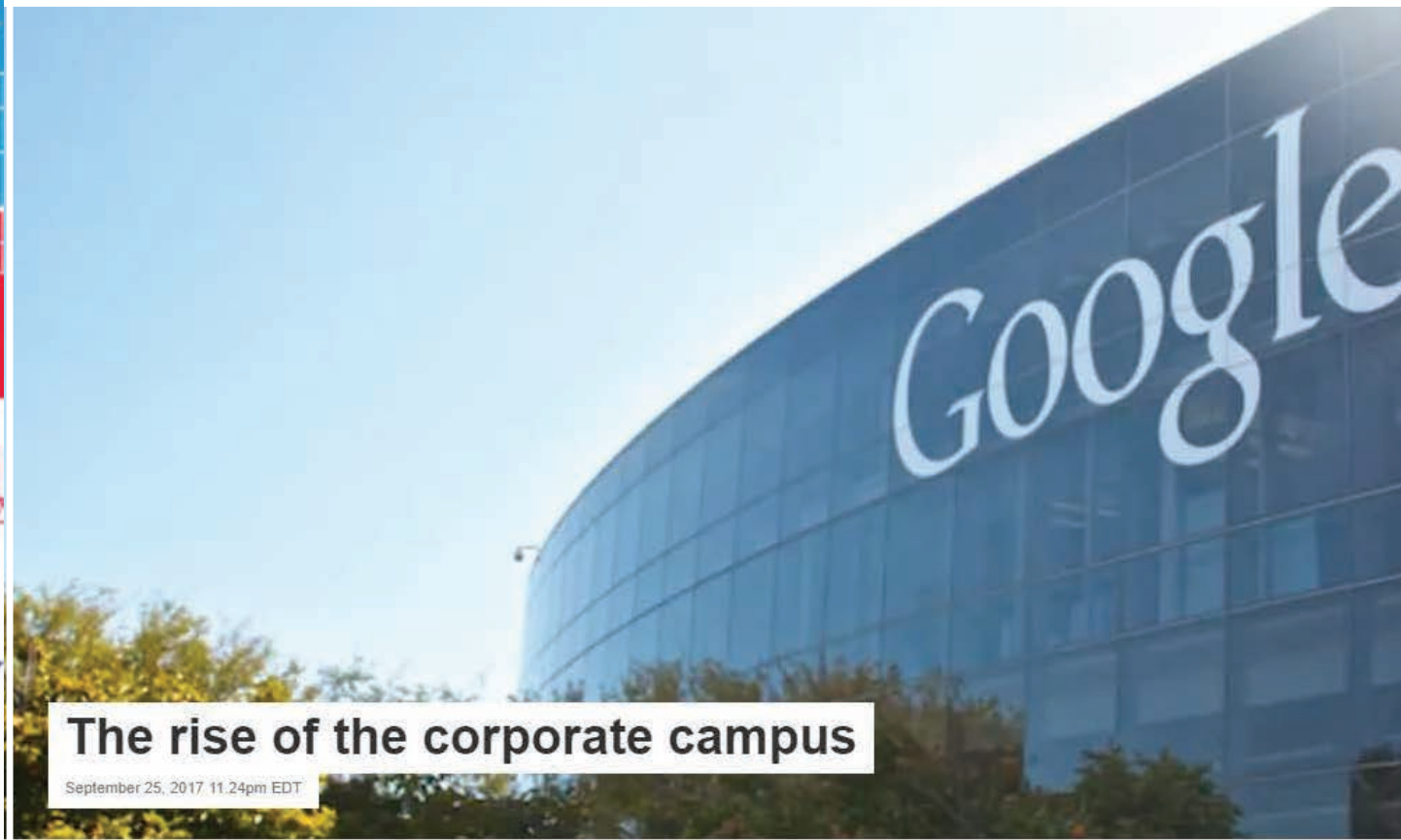
METROPOLITAN  
TRANSPORTATION  
COMMISSION



Association  
of Bay Area  
Governments

The rise of the corporate campus

September 25, 2017 11:24pm EDT



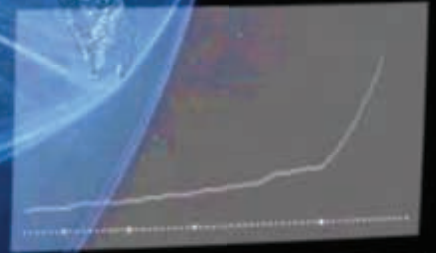


## NITROGEN FLUX

FOREIGN DIRECT INVESTMENT  
GLOBAL NITROGEN MOVEMENT  
WORLD CAPITAL

# FOOTPRINT

1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010



**2.4 BILLION  
MORE PEOPLE  
BY  
2050**



# TODAY



# 2050



FIVE MILLION  
PEOPLE  
A MONTH  
MIGRATE TO  
CITIES









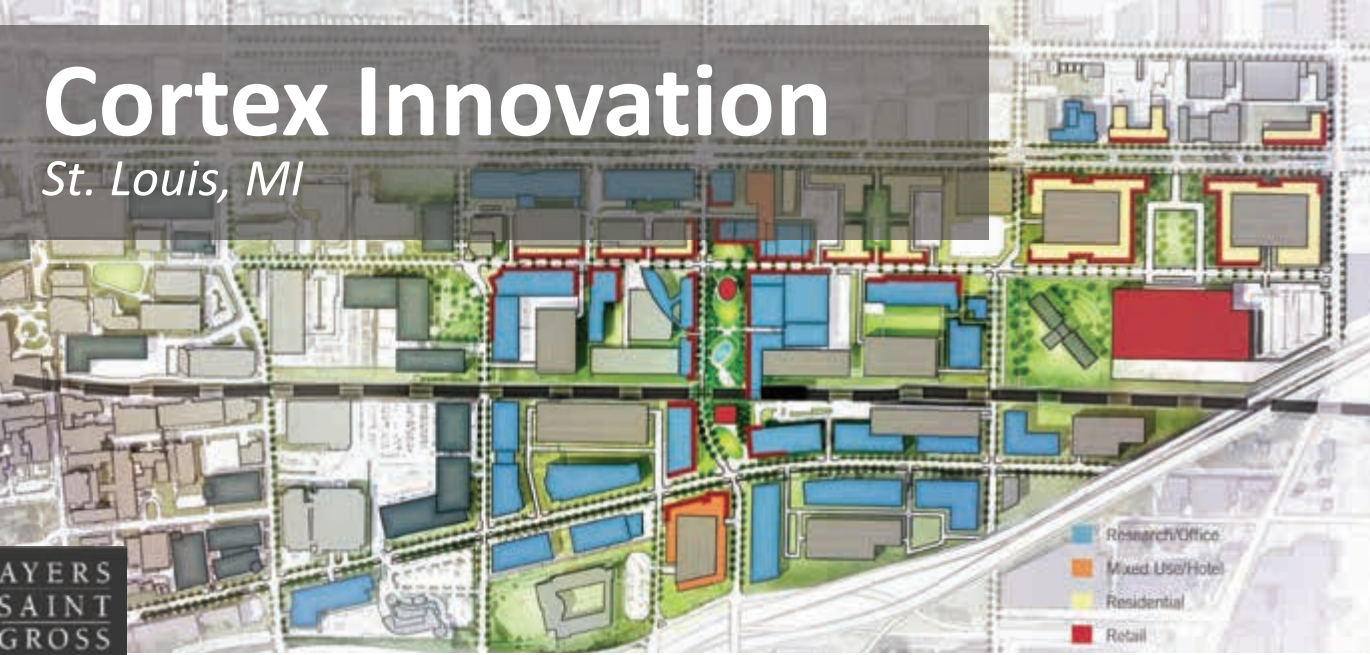
# WHY FOCUS ON PEOPLE

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# Cortex Innovation

St. Louis, MI



AYERS  
SAINT  
GROSS

# Kendall Square

Cambridge, MA



h+k



cbt

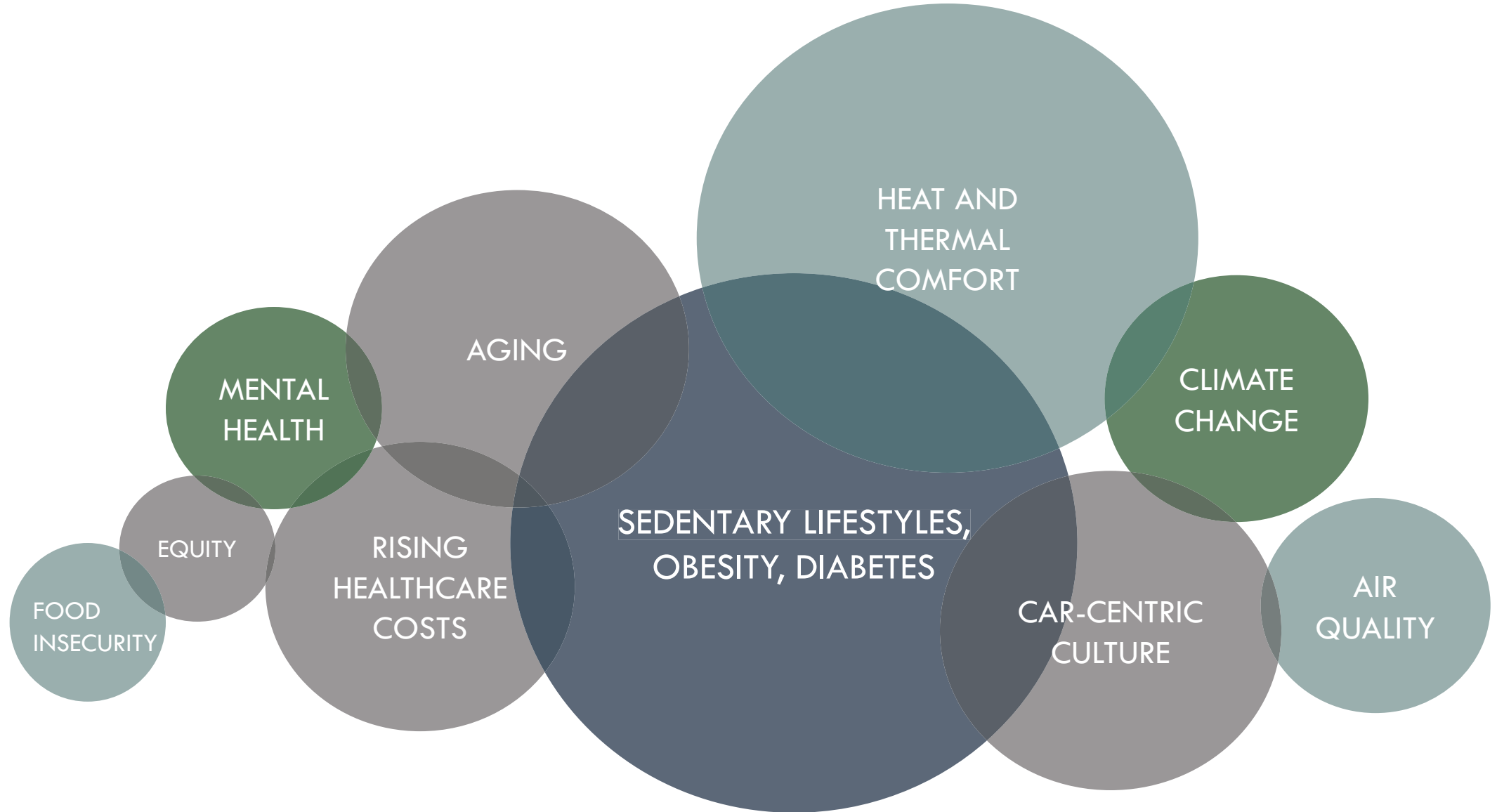


# Infrastructure for Health

A group of people, including adults and children, are walking on a sidewalk next to a road. In the foreground, two women are walking away from the camera. Further down the sidewalk, a woman is pushing a stroller with two children. The road has several cars, including a white sedan and a dark SUV. The background shows trees and a clear sky.

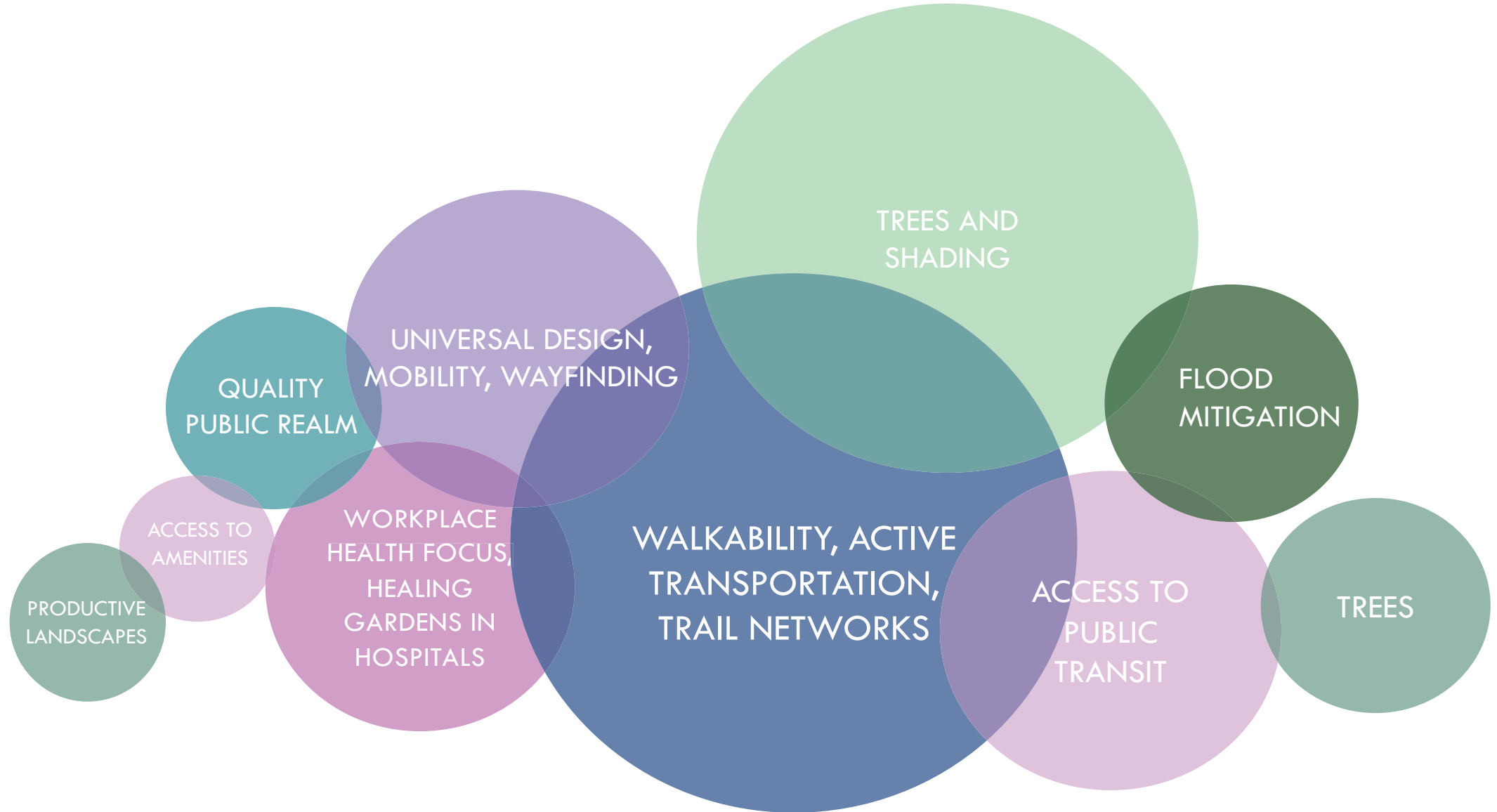
*“the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life.”* (WHO, 2017)

# HEALTH IS DECLINING

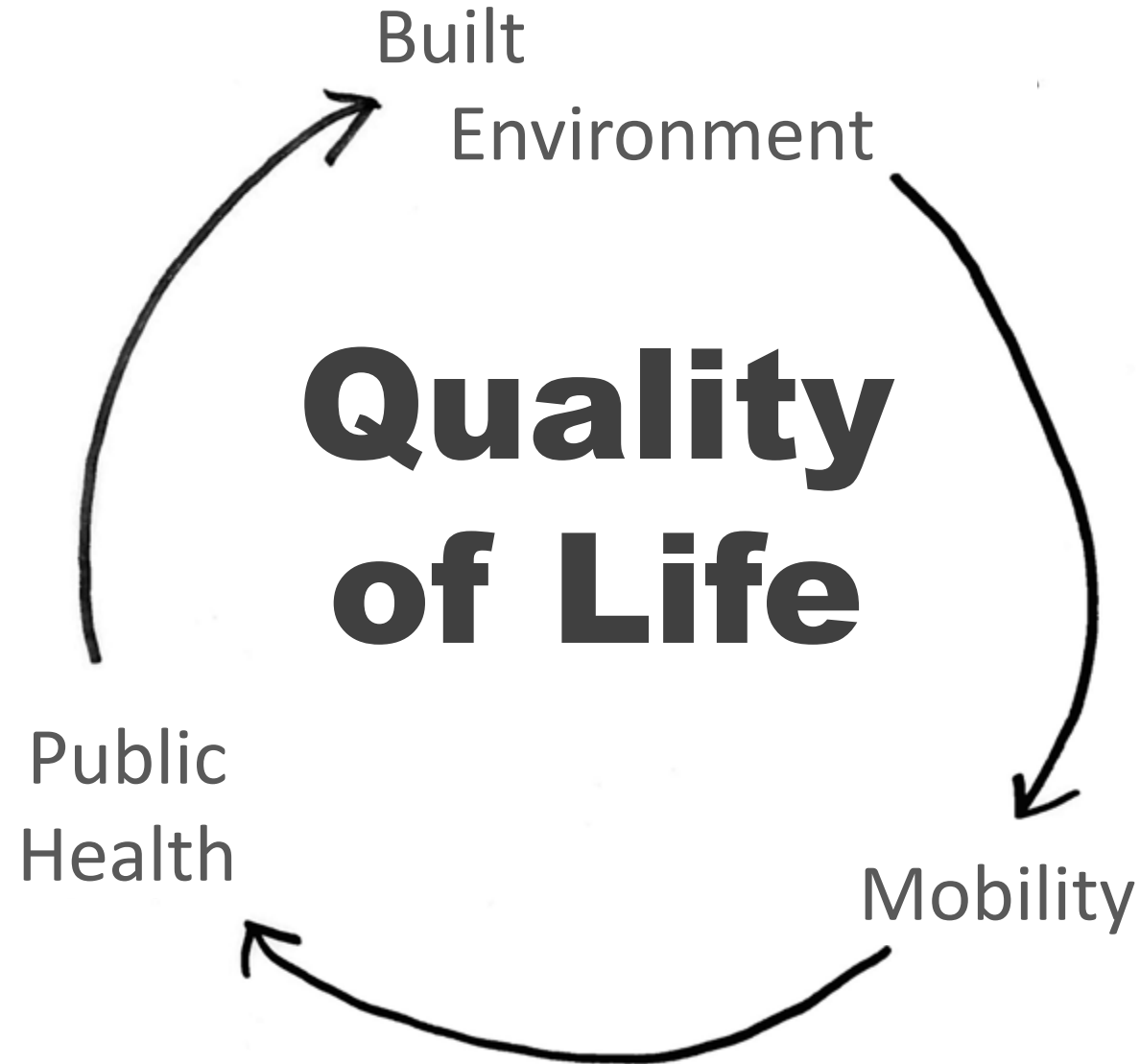




# DESIGN RESPONSES



# AV Implementation





# Selling an Urban Vision

Mixed Use  
Walkable  
Activity  
Destinations

Amenities  
Open Space  
Community

Culture  
Events

**AUTONOMY**

Multi-  
Generational  
Aging  
Millennial

Economic  
Growth  
Innovation  
Freedom

Access  
Connectivity  
Equity

Lifestyle  
Convenience  
Ease

# Shared Public Space







What is the  
**Workplace of the  
future?**





Googleplex, Mountain View, CA



MIT Media Lab, Cambridge, MA



Amazon, South Lake Union, WA

What do these places have in common?



Stanford University, Palo Alto, CA



Facebook, Menlo Park, CA





Googleplex, Mountain View, CA



MIT Media Lab, Cambridge, MA



Amazon, South Lake Union, WA

A diversity of opportunities for **connection** and **collaboration**.  
For **renewal** and **focus**. For **lifelong learning**.



Stanford University, Palo Alto, CA



Facebook, Menlo Park, CA





# AUTONOMOUS VEHICLE





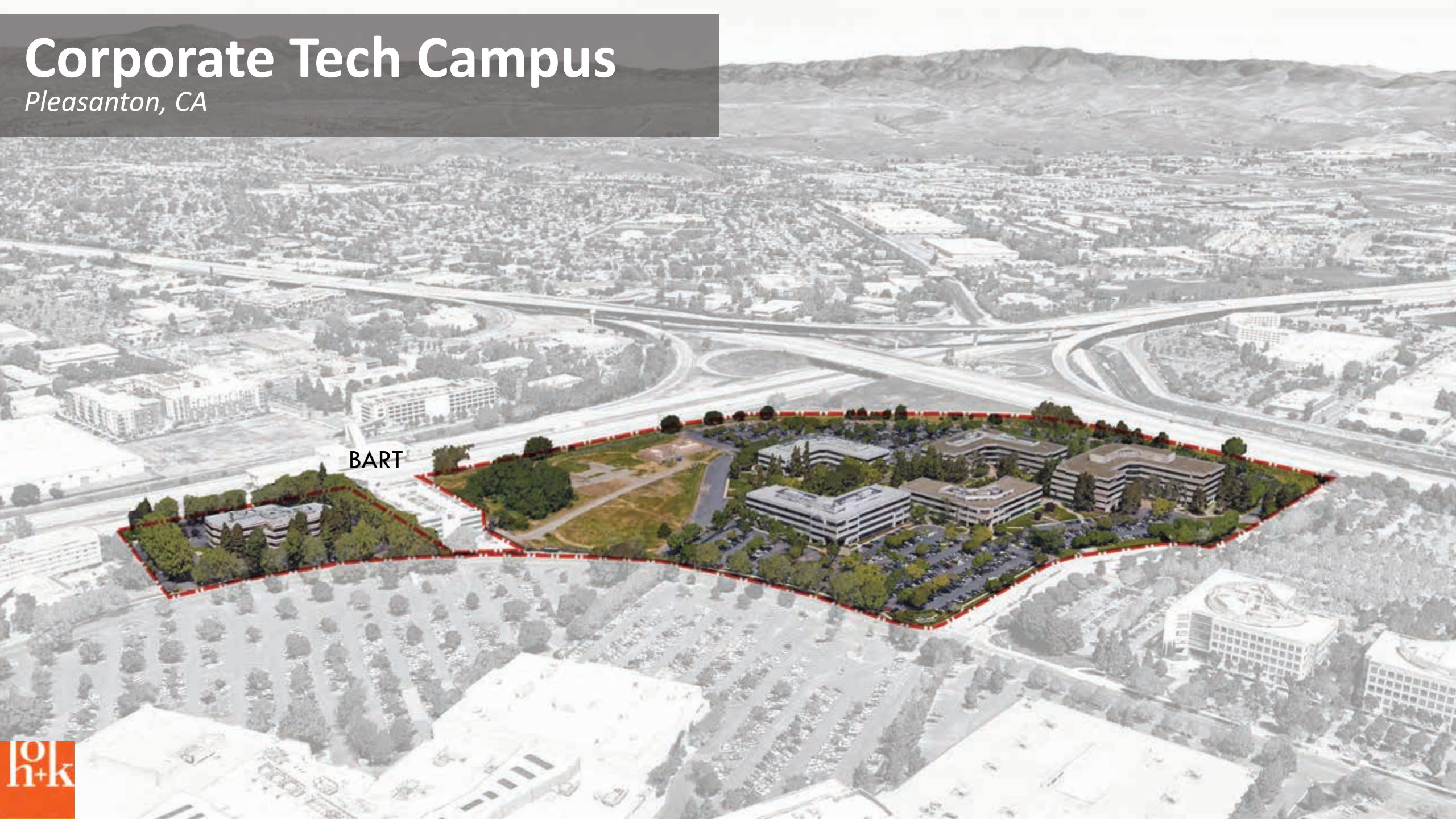
“ **The future is already here,**  
*it's just not very evenly*  
*distributed.* ”

- William Gibson



# Corporate Tech Campus

*Pleasanton, CA*



BART



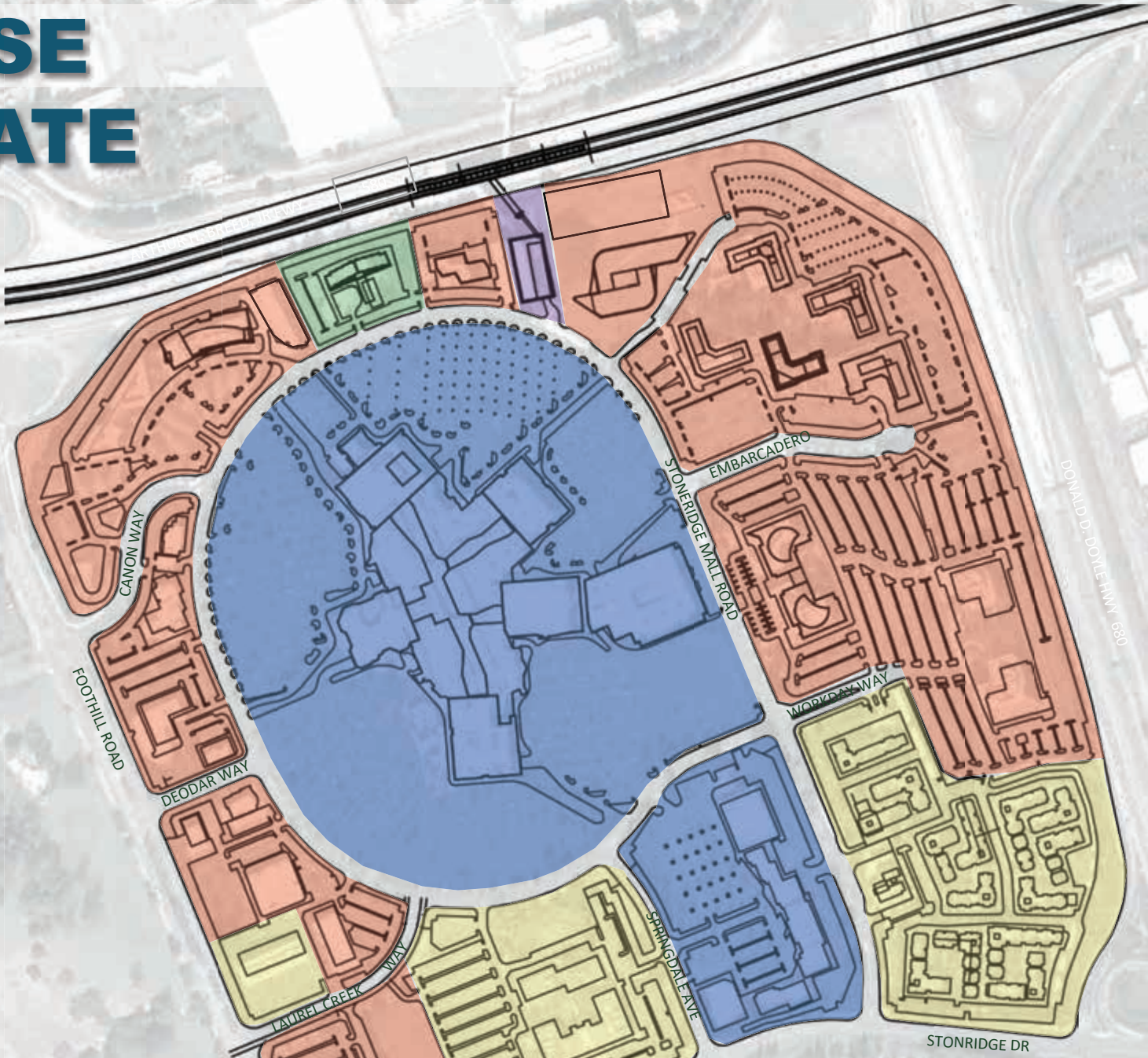


PROJECT SITE

PLEASANTON, CA



# MIXED USE CORPORATE CAMPUS



- Transport
- Healthcare
- Office
- Retail
- Hospitality
- Residential





# EXISTING BUILDINGS





6000 STONERIDGE MALL ROAD

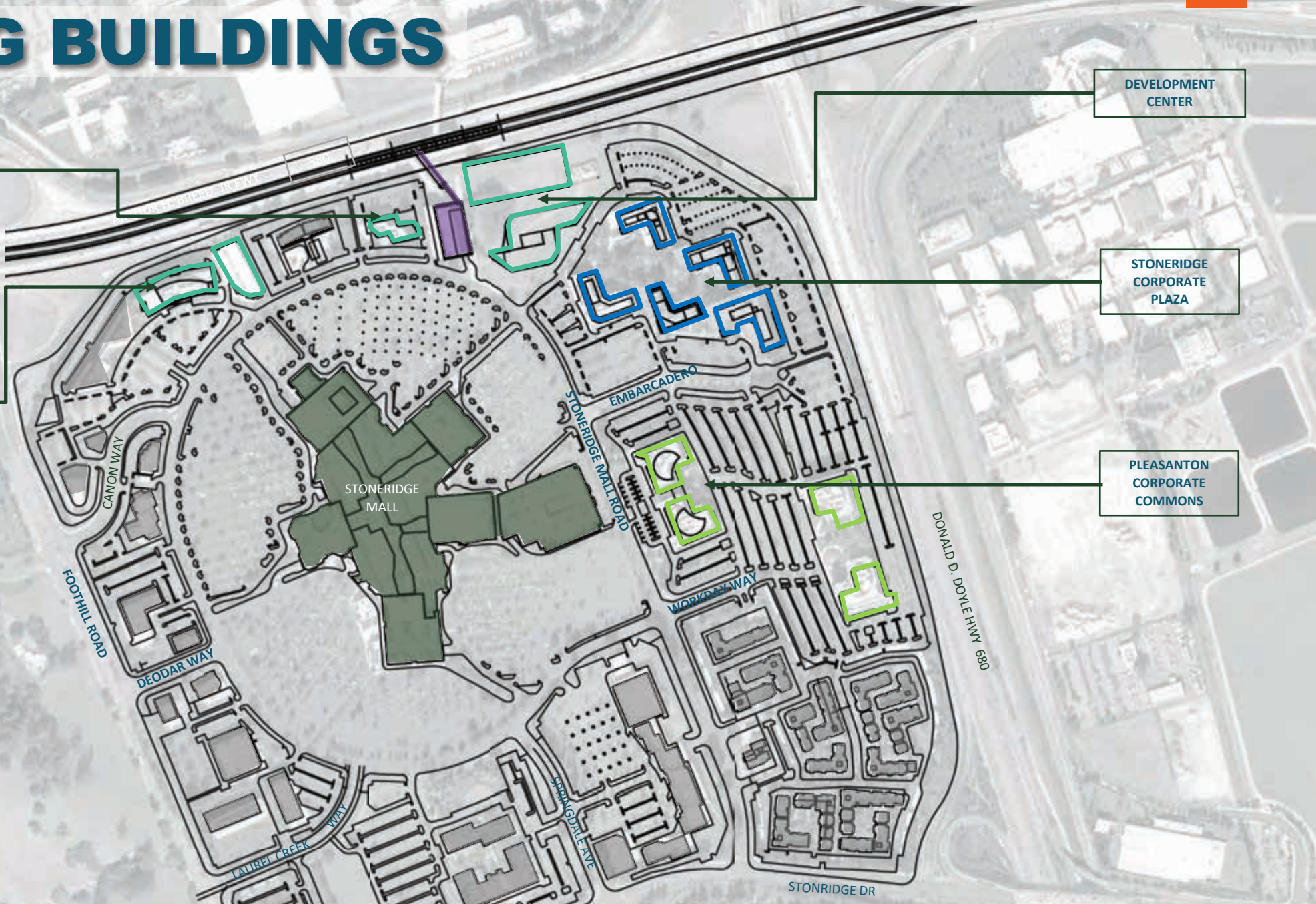
5928 STONERIDGE MALL ROAD

DEVELOPMENT CENTER

STONERIDGE CORPORATE PLAZA

PLEASANTON CORPORATE COMMONS

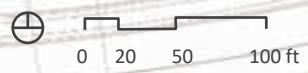
-  Pleasanton Corp. Commons
-  Office Assets
-  Stoneridge Corporate Plaza
-  Stoneridge Mall





# APPROVED CITY CIRCULATION PLAN

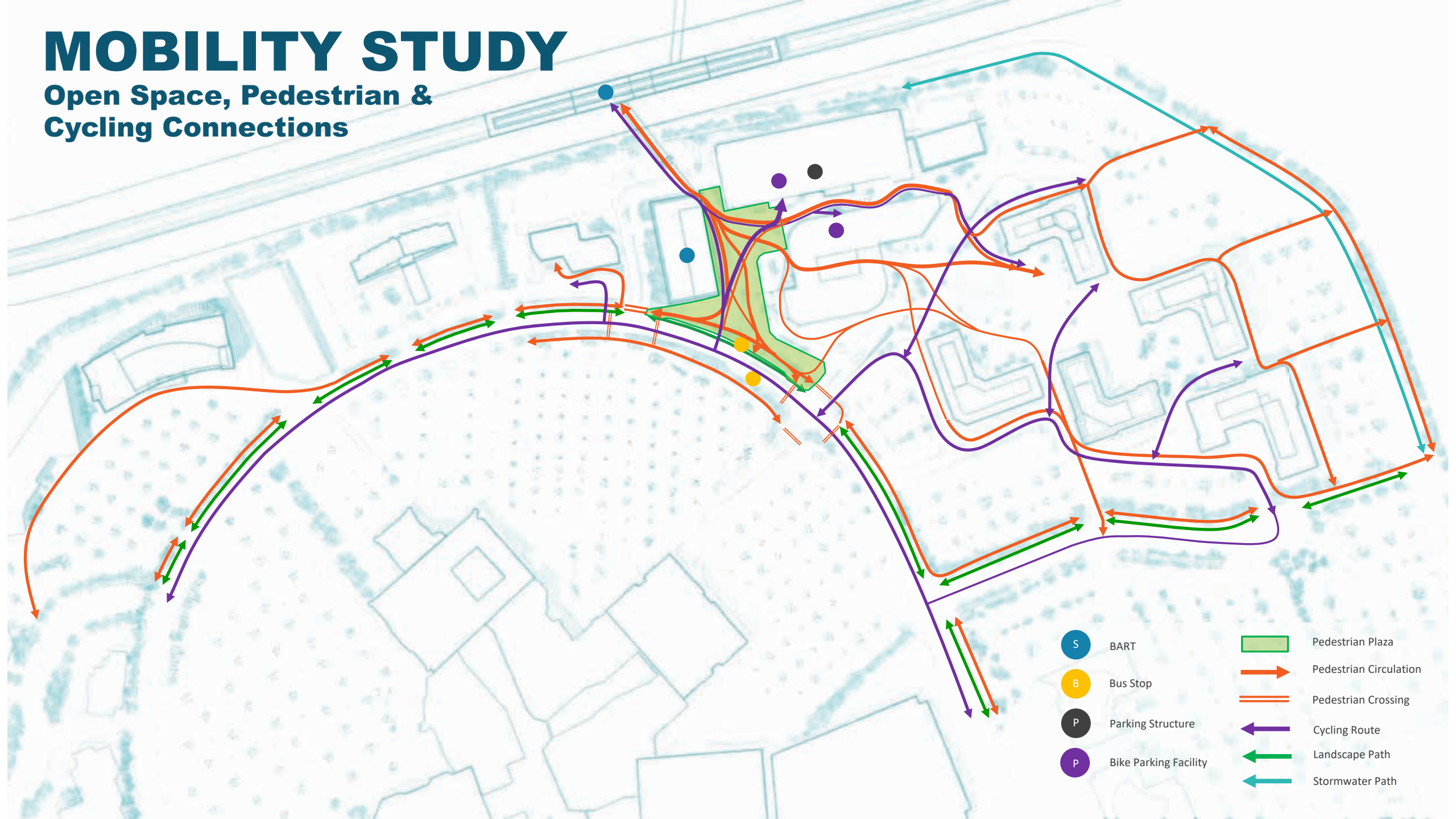
- BART Station
- Bus Stop
- Parking structure
- Cycling route
- Pedestrian path
- Vehicular traffic





# MOBILITY STUDY

Open Space, Pedestrian & Cycling Connections



- |   |                       |  |                        |
|---|-----------------------|--|------------------------|
| S | BART                  |  | Pedestrian Plaza       |
| B | Bus Stop              |  | Pedestrian Circulation |
| P | Parking Structure     |  | Pedestrian Crossing    |
| P | Bike Parking Facility |  | Cycling Route          |
|   |                       |  | Landscape Path         |
|   |                       |  | Stormwater Path        |



MOVEMENT



ACTIVITY CENTERS



PUBLIC / PRIVATE



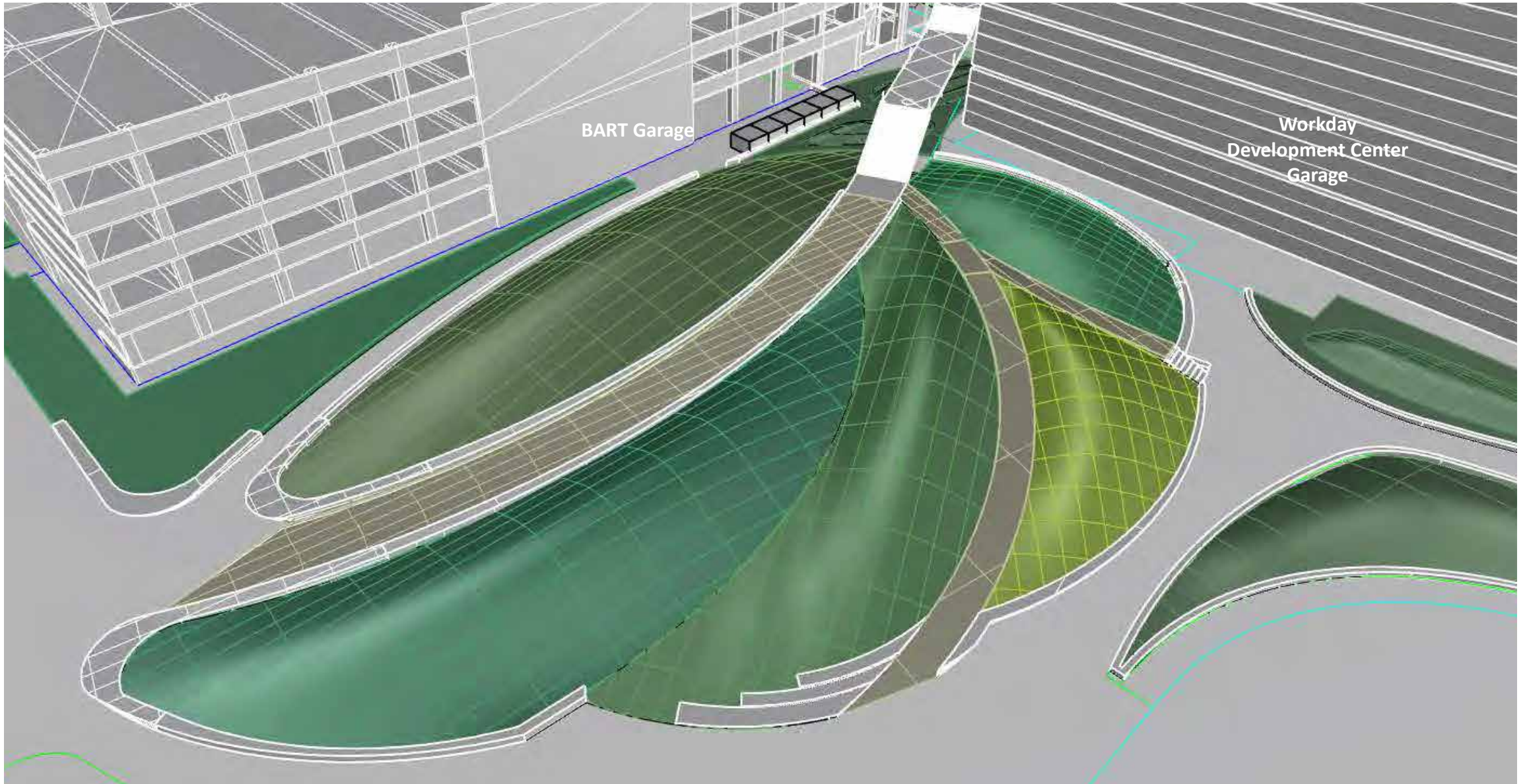


## Landscape Design | Context

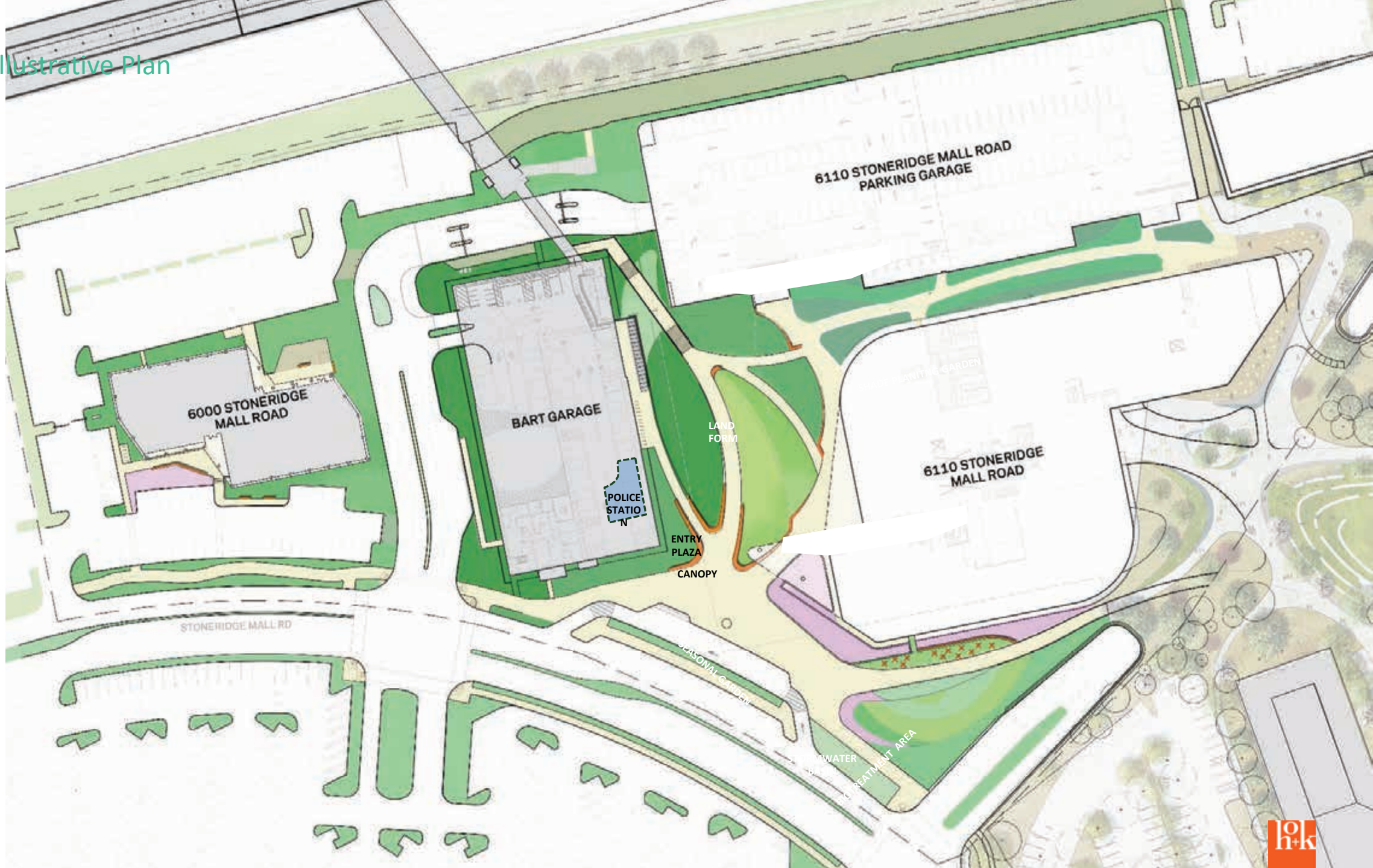




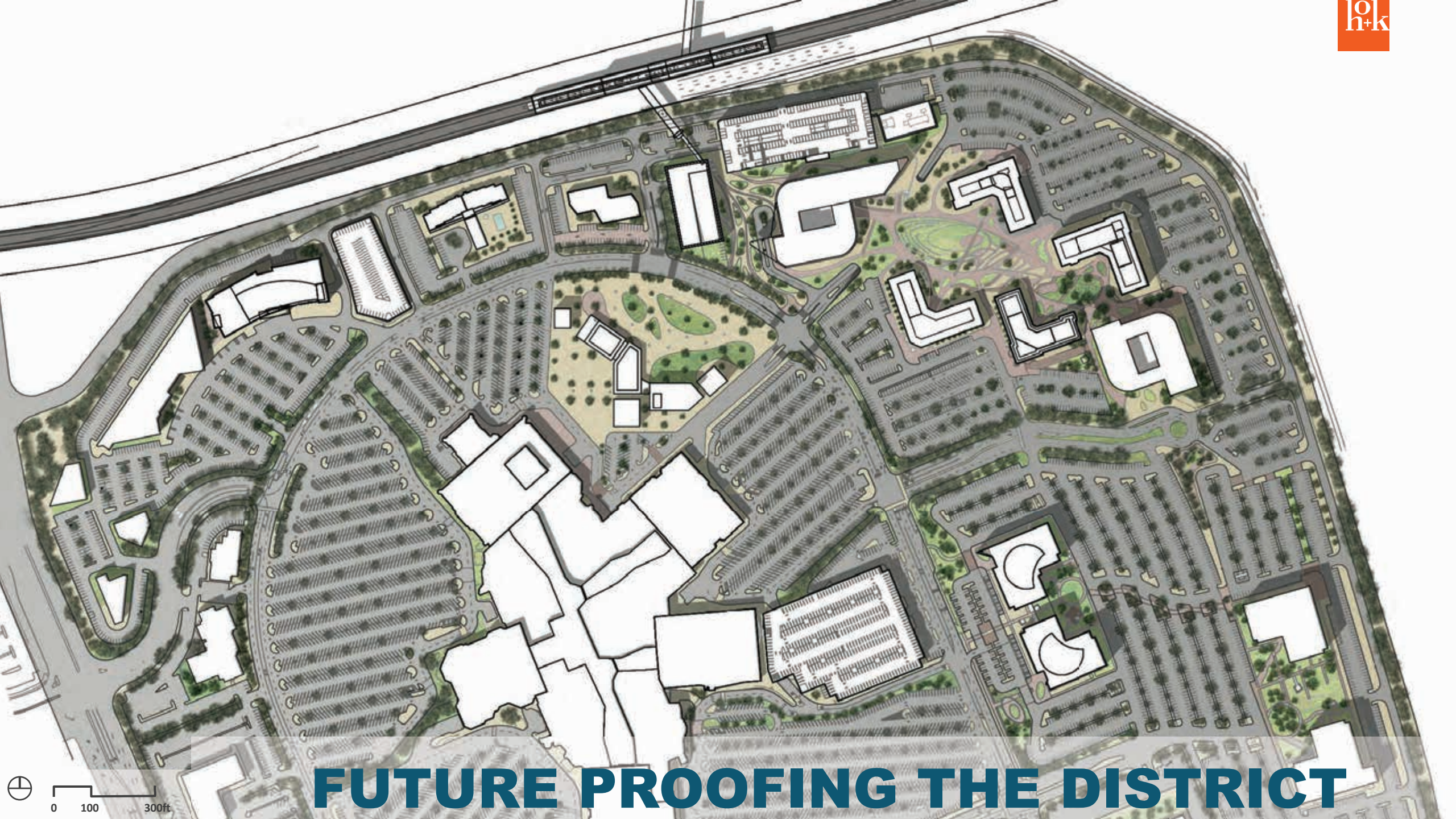
## Landscape Design | Landforms with Seatwalls











# FUTURE PROOFING THE DISTRICT



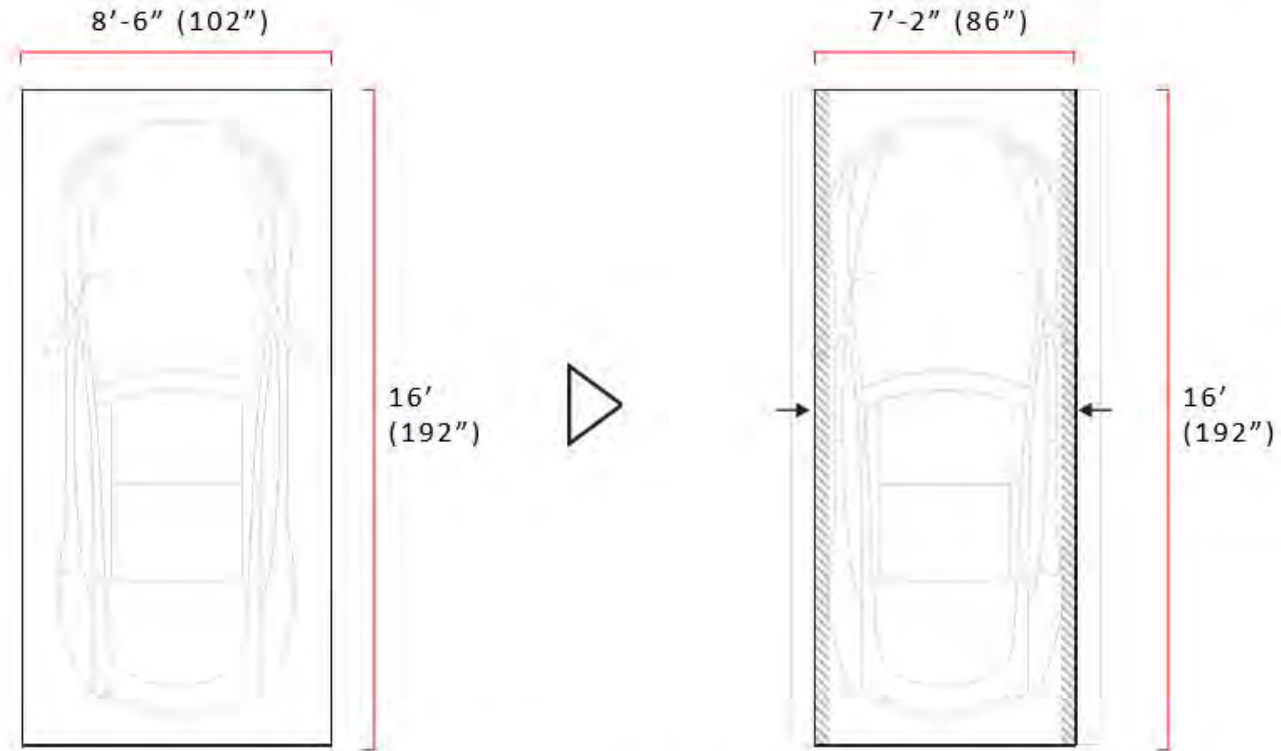




# Increased Storage Efficiency

TRADITIONAL

AUTONOMOUS



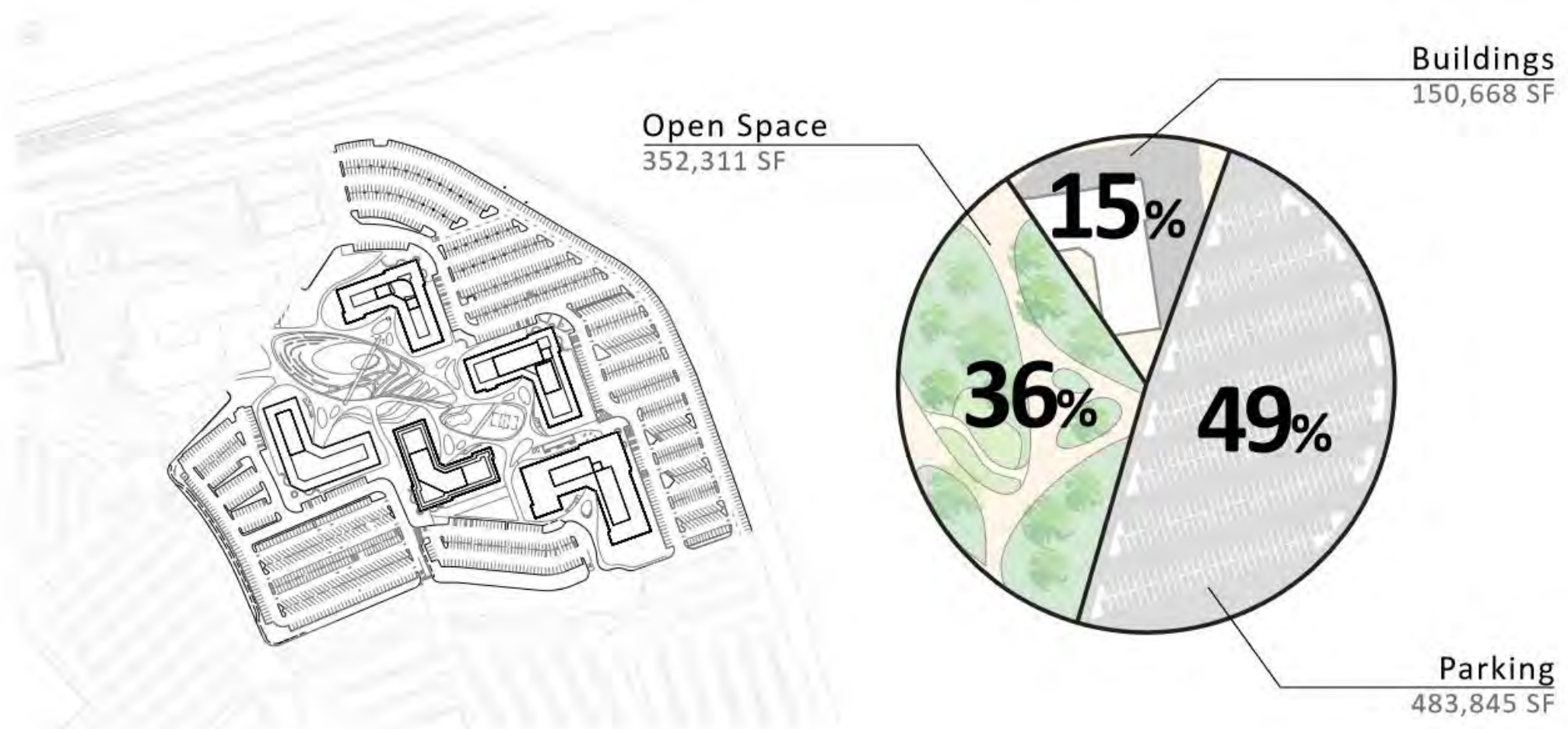
**15%** reduction in each parking space

With autonomous vehicles needing as little as 4" on either side of the parking strip, there can be up to 21 square foot reduction in each parking space.



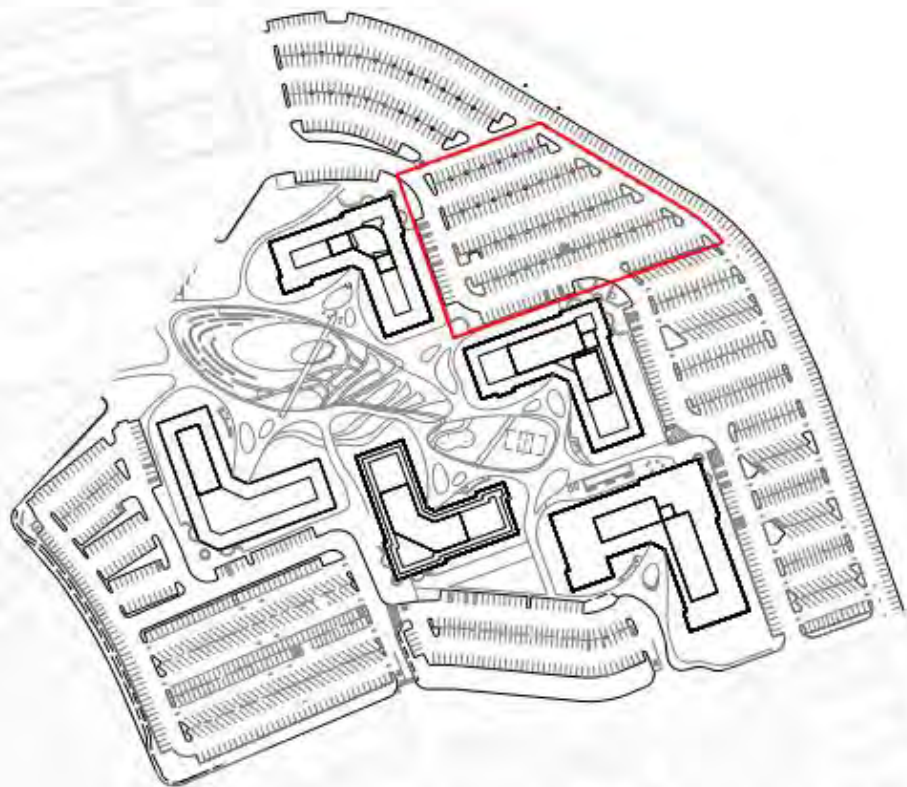
# Over Parked

## TYPICAL SITE USAGE





# Over Parked



## Parking Test

Existing lot size : 91539 SF

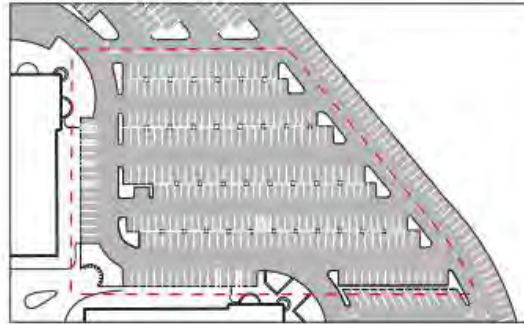
Parking count : 273 spaces



# Over Parked

## PARKING SCENARIOS

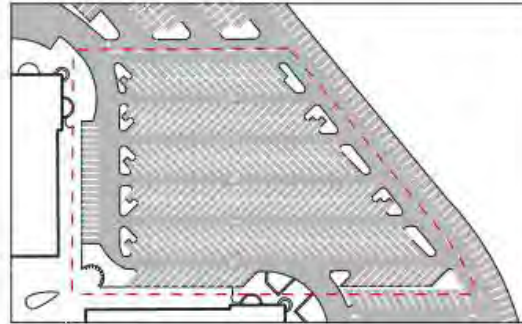
Existing lot



273 spaces

Scenario 1:

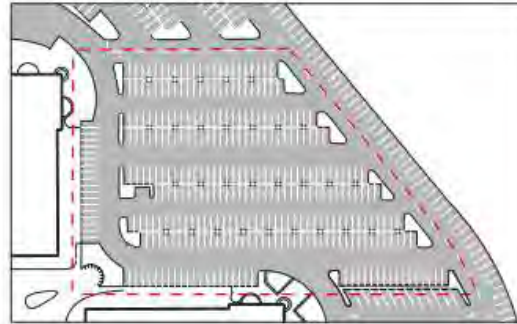
Privately owned autonomous vehicle lot



285 spaces  
(104%)

Scenario 2:

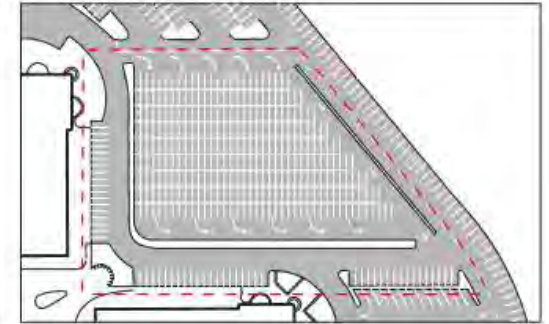
Privately owned autonomous vehicle lot



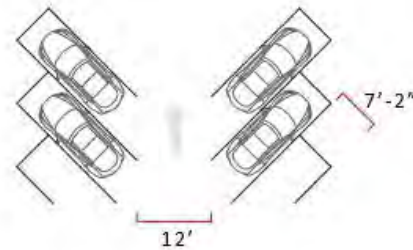
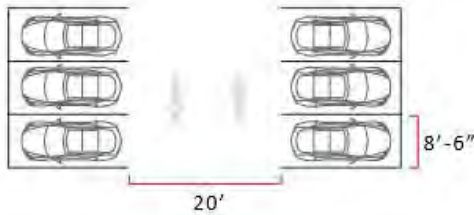
327 spaces  
(120%)

Scenario 3:

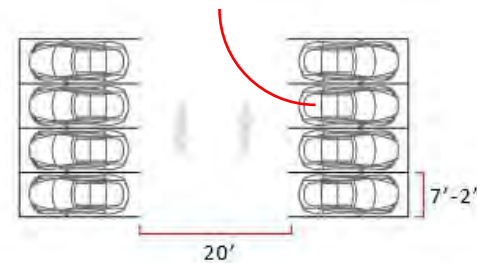
Shared autonomous vehicle lot



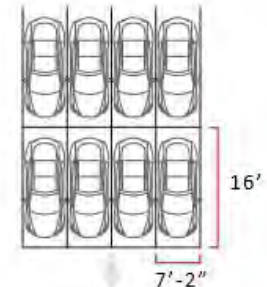
343 spaces  
(126%)



Narrower lot spaces +  
one way drive aisles



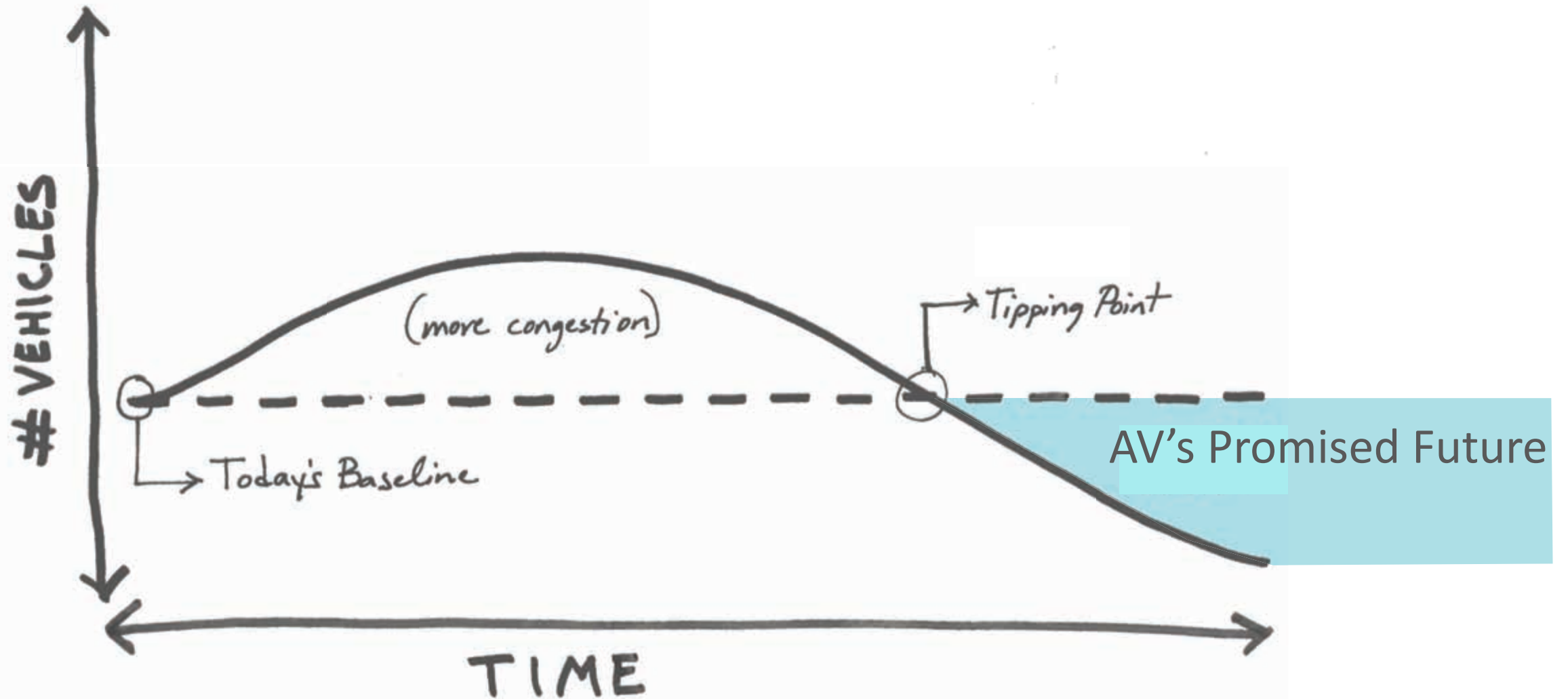
Existing lot layout +  
narrower lot spaces



Front to back parking



# AV Implementation

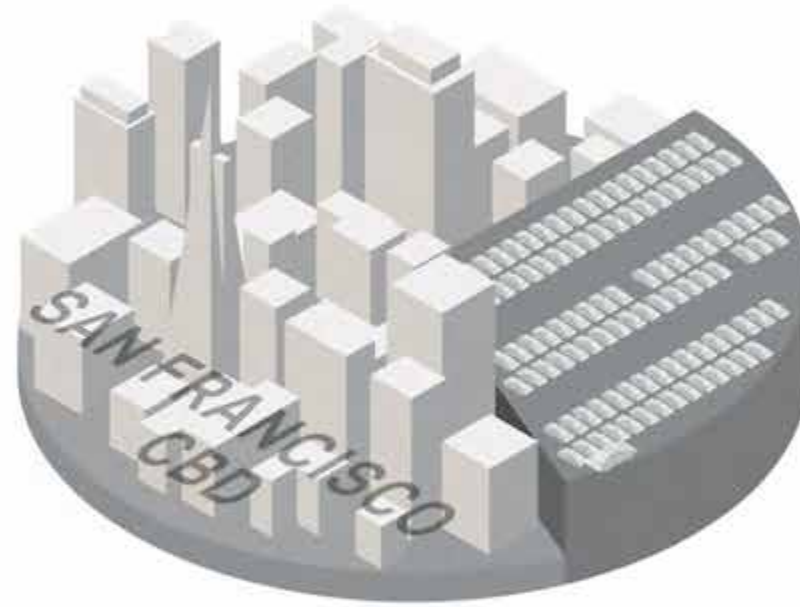




# TODAY

EXISTING CONDITIONS

**122** HECTARES  
ARE DEVOTED TO  
SURFACE PARKING



122 HA = \$2,231,000,000 Land Value

At 12.0 FAR = \$78,758,000,000 Building Value



FROM **122** HECTARES  
DEVOTED TO SURFACE PARKING :

**23%** (**28** HECTARES) OF LAND CAN BE RECLAIMED

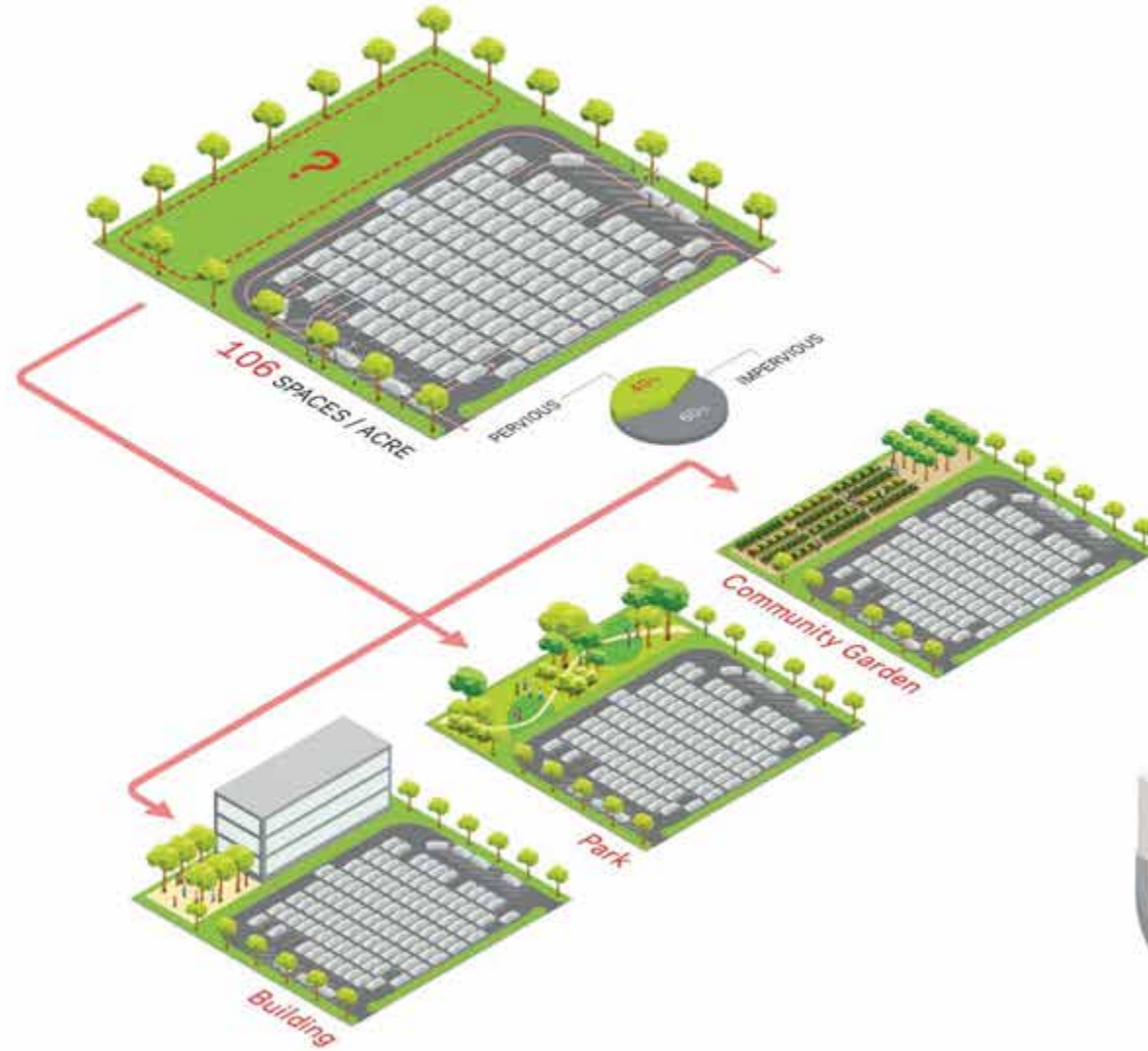


# FUTURE CONDITIONS

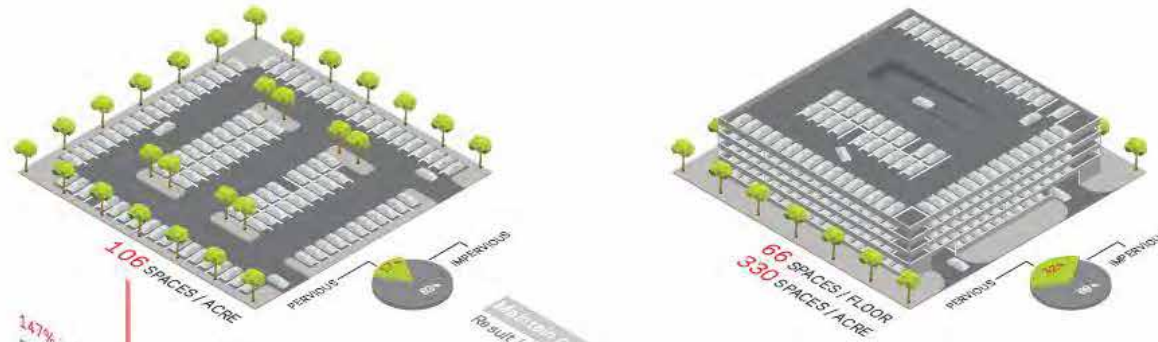
AUTONOMOUS VEHICULAR PARKING

FROM 122 HECTARES  
DEVOTED TO SURFACE PARKING

23% (28 HECTARES)  
OF LAND CAN BE RECLAIMED



BASELINE  
EXISTING PARKING SCHEMES



14.7% increased parking capacity

Multilevel parking capacity Result in 0.4 acres of open land

FUTURE CONDITIONS  
AUTONOMOUS VEHICULAR PARKING



FROM 122 HECTARES  
DEVOTED TO SURFACE PARKING :

23% (28 HECTARES) OF LAND CAN BE RECLAIMED



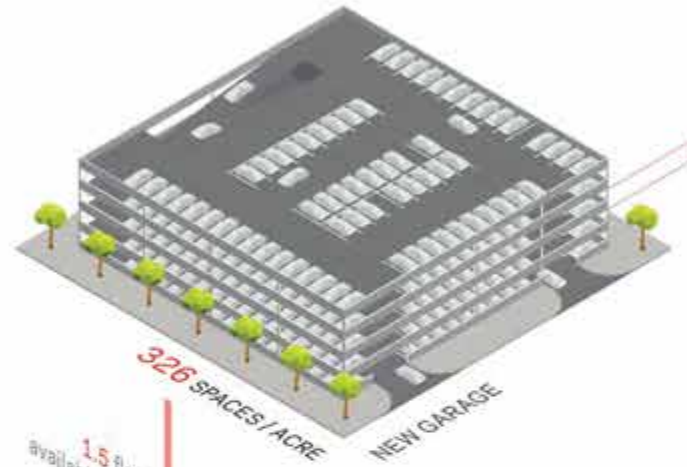


WHAT IS THE FUTURE OF PARKING GARAGE WE ARE BUILDING TODAY ?

HOW DO WE PREPARE FOR 2030 ?

## PLANNING AHEAD

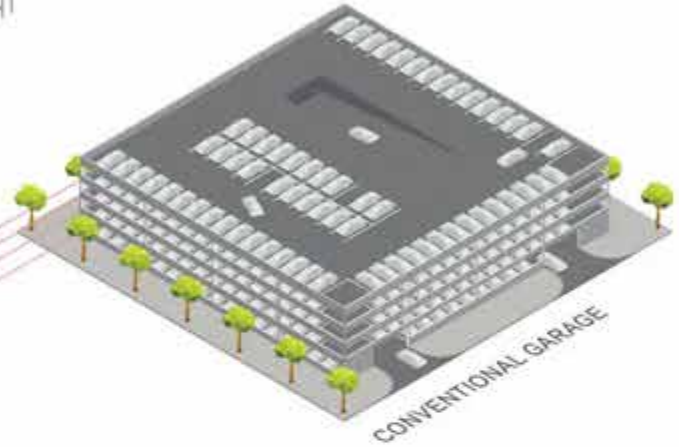
GARAGES BUILT FOR FUTURE MODIFICATION



11.5' FLOOR HEIGHT (ALL LEVELS)

VS.

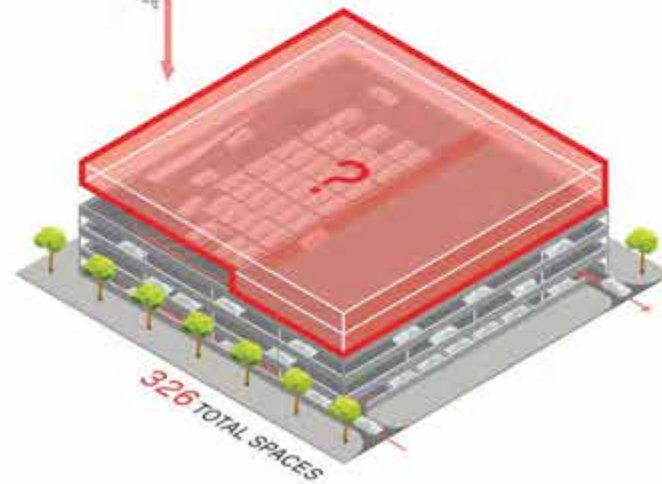
9' UPPER LEVELS  
11.5' LEVEL 1



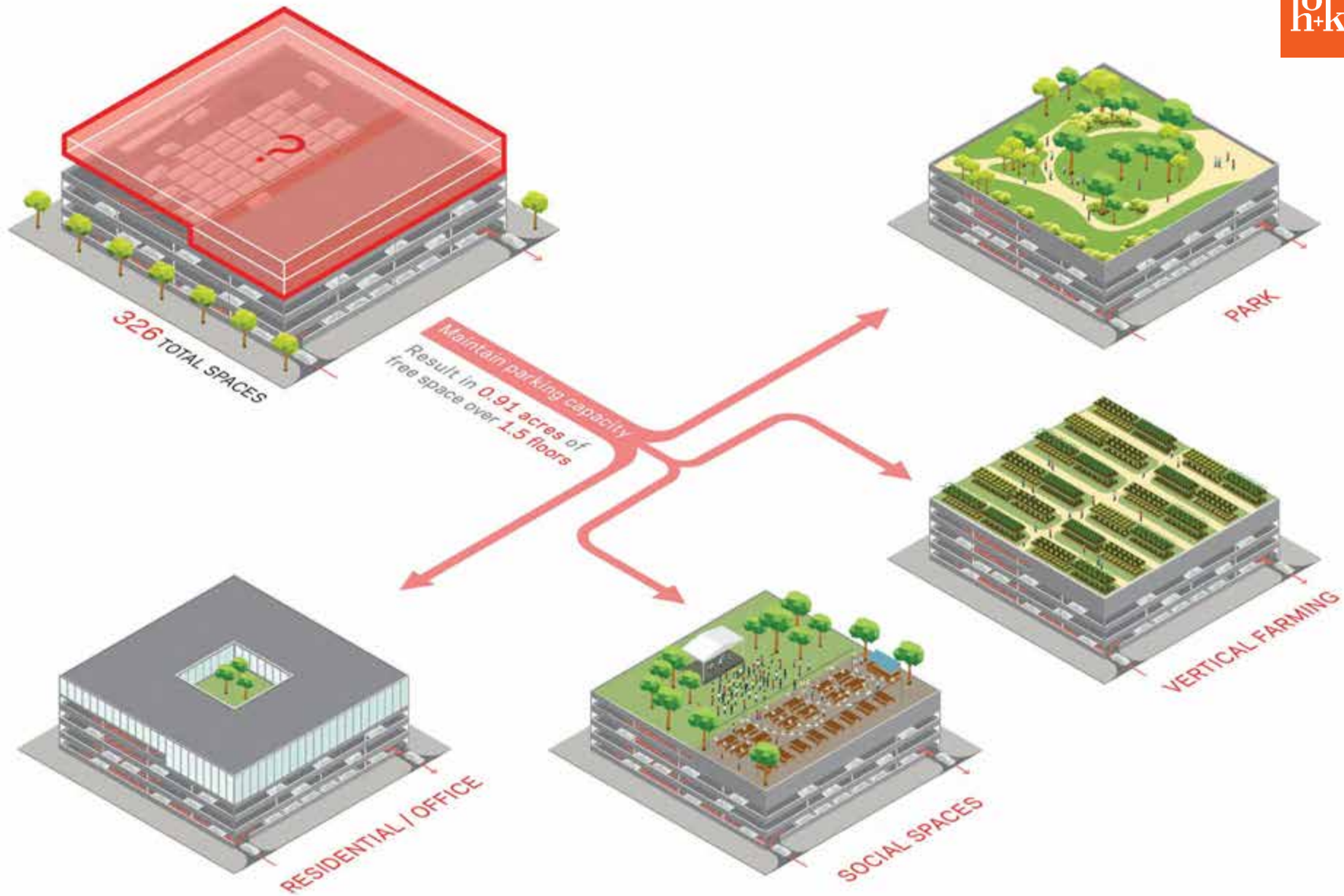
1.5 floors available for use

## FUTURE CONDITIONS

AUTONOMOUS VEHICULAR PARKING









# THE RETURN OF GREAT STREETS







What should you be  
**considering?**

Staying the same  
is **NOT** an option.





**Are you asking the  
right question?**

A large, solid red silhouette of a car, viewed from the side, facing right. The car has a boxy, classic design with a prominent roof rack or sensor array on top. The text 'HOK AUTONOMOUS FUTURES' is overlaid in white on the side of the car.

# HOK AUTONOMOUS FUTURES