



THE FUTURE OF PARKING

Lisa Nisenson, WGI

THIS PRESENTATION



HOW TO PLAN FOR TECHNOLOGY

GAME CHANGER: E-COMMERCE

GAME CHANGER:
AUTOMATED TECHNOLOGIES

PUTTING IT ALL TOGETHER

PLANNING FOR UNCERTAINTY

SCENARIO PLANNING
Exploring “what-ifs” &
alternative futures

The future of
parking ... is...

TECHNOLOGY FORESIGHT
Anticipating likely evolution &
market adoption for tech



PLANNING FOR UNCERTAINTY

STRATEGIC PLANNING
Roadmaps of action with
metrics & contingencies

The future of
parking ... is...

PILOT PROJECTS



FORCES OF CHANGE



NEAR TERM: COVID-19



NEAR TERM:
SHARED-USE &
MICROMOBILITY

FORCES OF CHANGE



NEAR TERM: COVID-19



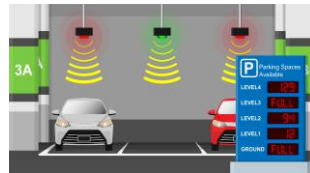
MID-TERM: SELF-PARK



NEAR TERM:
SHARED-USE &
MICROMOBILITY



MID-TERM:
WORK FROM HOME



EVOLVING: PARKING TECHNOLOGIES



EVOLVING: CLIMATE CHANGE



EVOLVING: E-COMMERCE

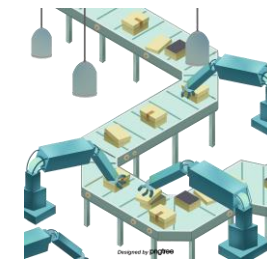
FORCES OF CHANGE



NEAR TERM: COVID-19



MID-TERM: SELF-PARK



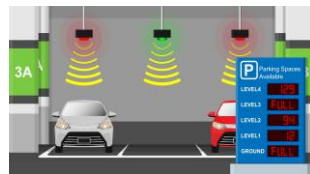
LONG TERM:
JOB
AUTOMATION



NEAR TERM:
SHARED-USE &
MICROMOBILITY



MID-TERM:
WORK FROM HOME



EVOLVING: PARKING TECHNOLOGIES



LONG TERM:
FLEET
AUTOMATION



EVOLVING: CLIMATE CHANGE



EVOLVING: E-COMMERCE



LONG TERM:
DELIVERY
DRONES

SCENARIO PLANNING & PARKING

WORK FROM HOME HIGH

AUTOMATION SLOW

AUTOMATION FAST

WORK FROM HOME LOW

SCENARIO PLANNING & PARKING

WORK FROM HOME HIGH

COMMUNITY CENTERS
Employees seek gathering &
co-workspaces

HI TECH SUBURBS

AUTOMATION SLOW

AUTOMATION FAST

RETURN TO THE PAST
We go back to pre-COVID
travel & parking

TECH METRO

WORK FROM HOME LOW

SCENARIO PLANNING & PARKING

WORK FROM HOME HIGH

COMMUNITY CENTERS
Employees seek gathering & co-workspaces

HI TECH SUBURBS

What to Model?
% WFH
Industry specific
Congestion & volume
Parking utilization
Commercial real estate

AUTOMATION SLOW

AUTOMATION FAST

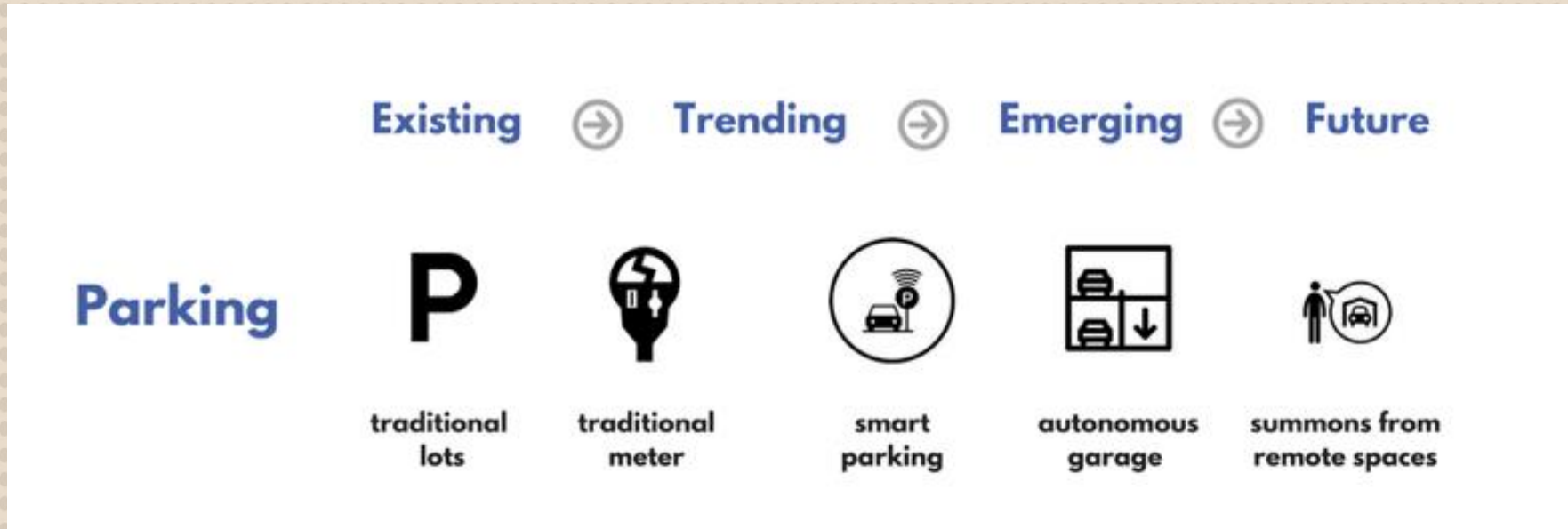
RETURN TO THE PAST
We go back to pre-COVID travel & parking

TECH METRO

What to Model?
% cars with auto-park
Fleet mix statistics
Market adoption rates
Pilot results

WORK FROM HOME LOW

TECHNOLOGY FORESIGHT



TECHNOLOGY FORESIGHT

Existing → Trending → Emerging → Future

Cars



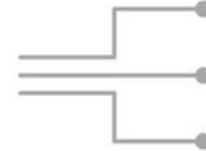
owned



electric



carshare



point-to point
round trip
amenity fleets



owned



fleet

Shuttle



private



employer



on-demand
microtransit



driverless
with
operator



driverless
without
operator

Parking



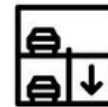
traditional
lots & meters



electric
charging



smart
parking



autonomous
garage

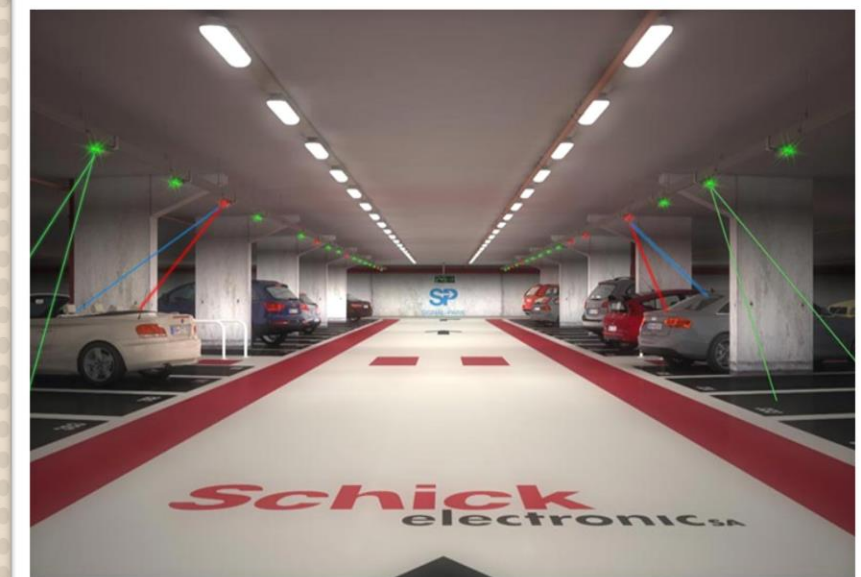
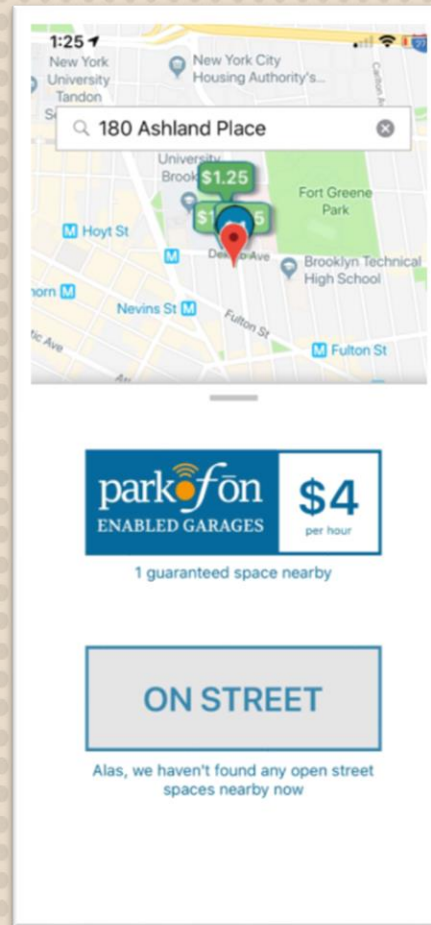
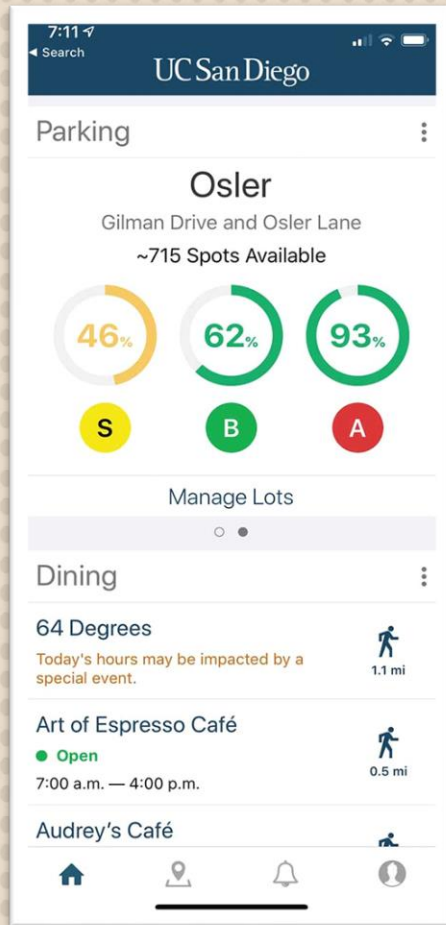


summons from
remote spaces

TECHNOLOGY FORESIGHT

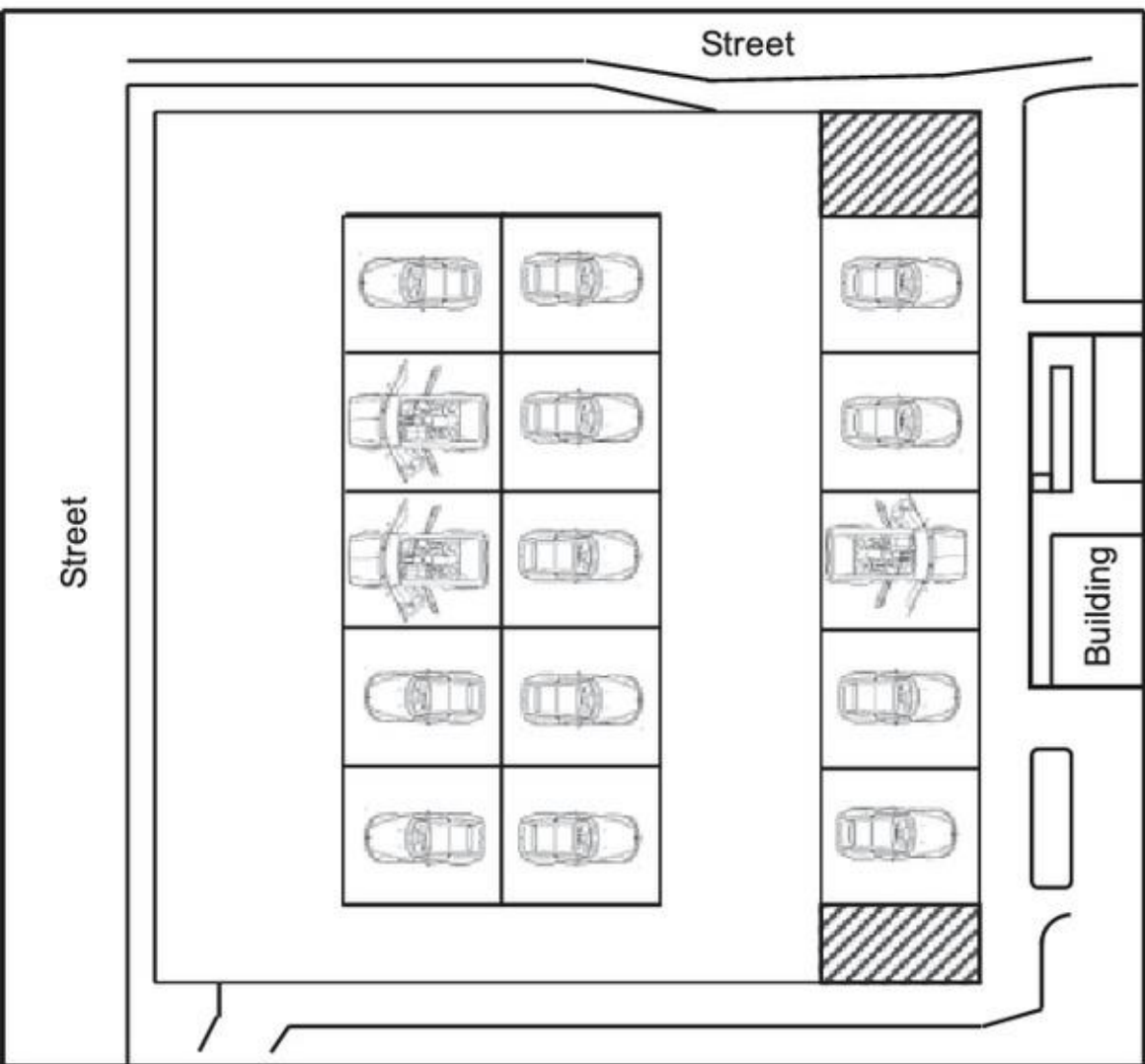


EVOLVING TECHNOLOGIES

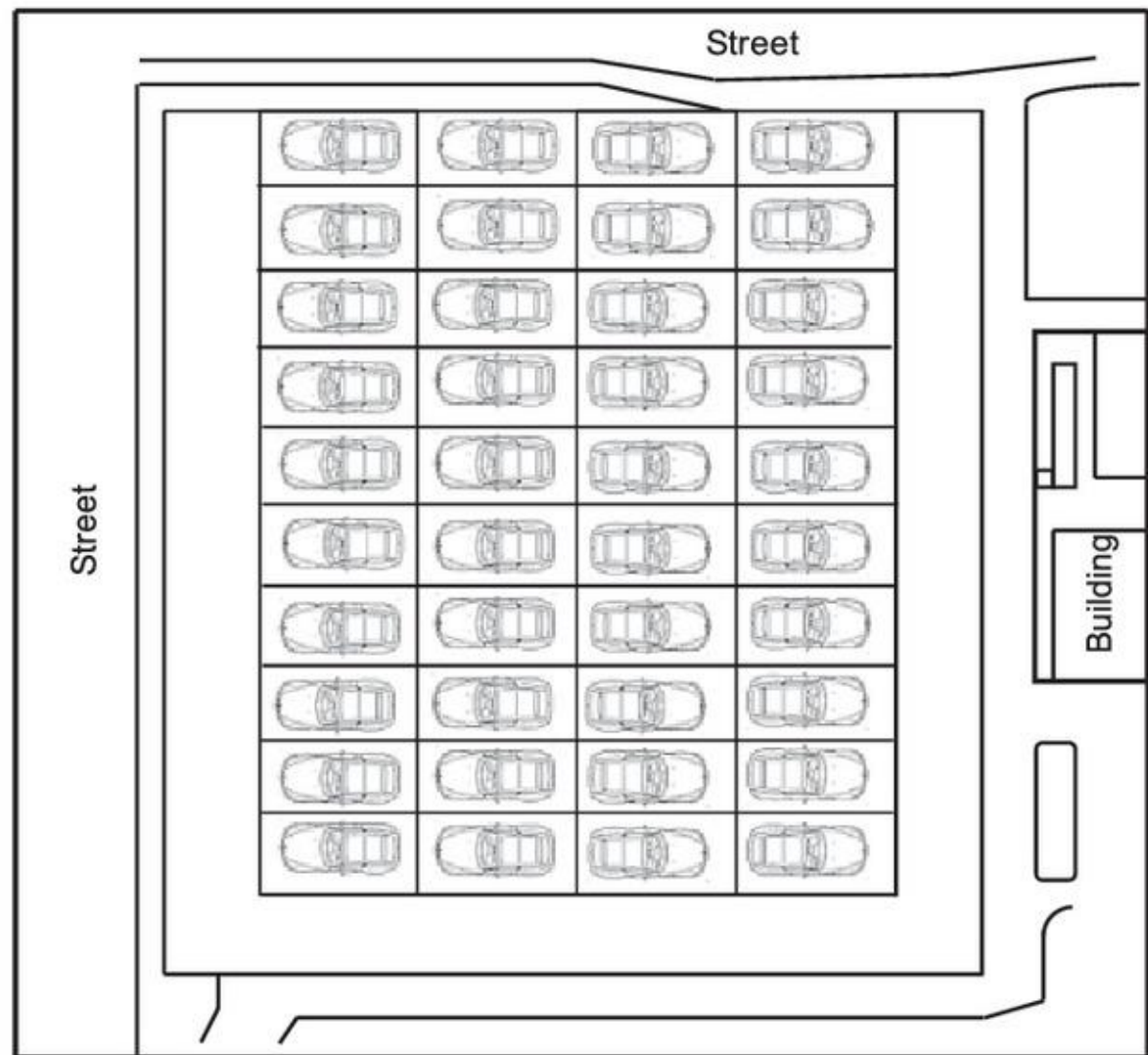


GAME CHANGER – SELF PARKING CARS

Conventional car-parks



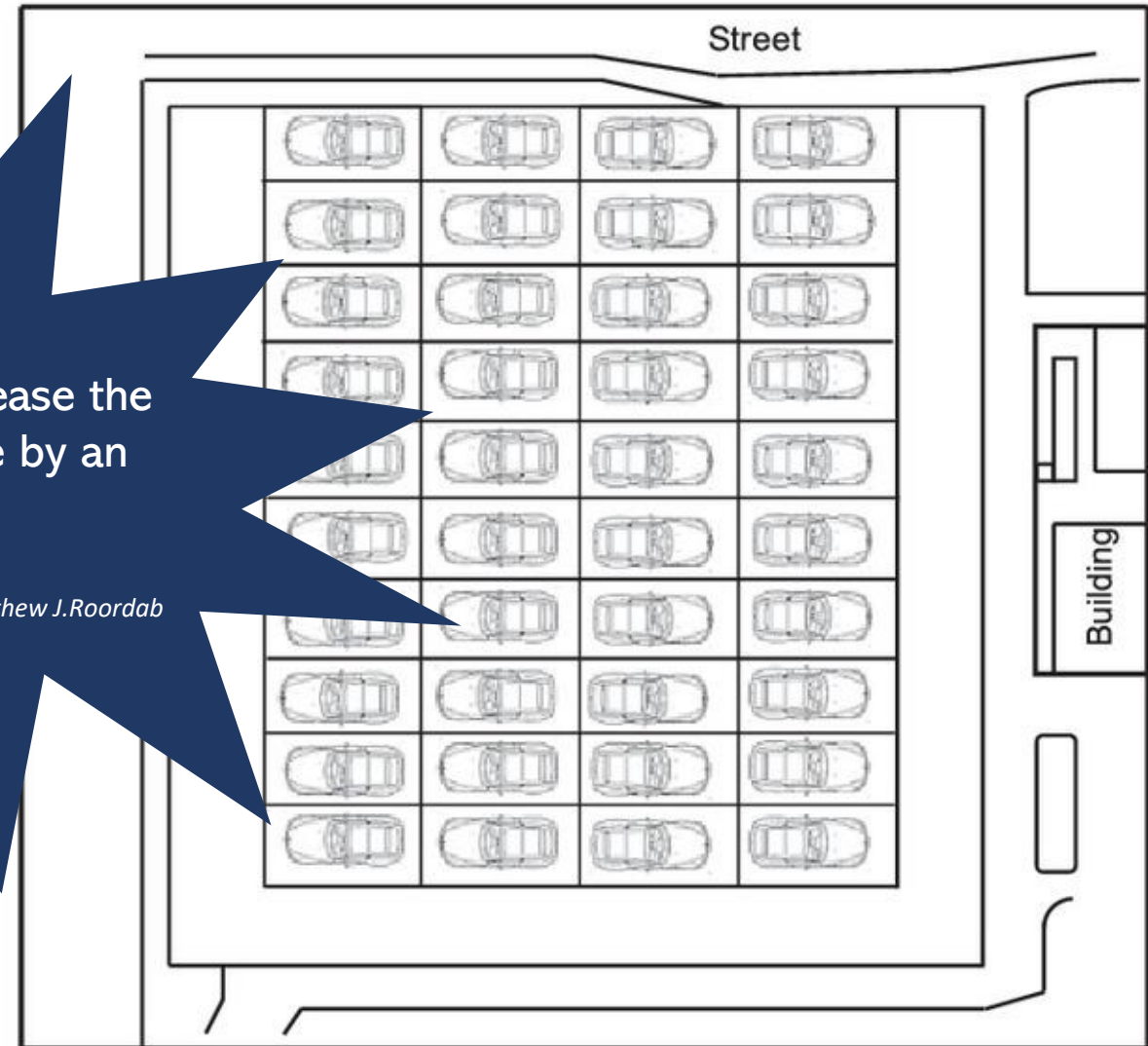
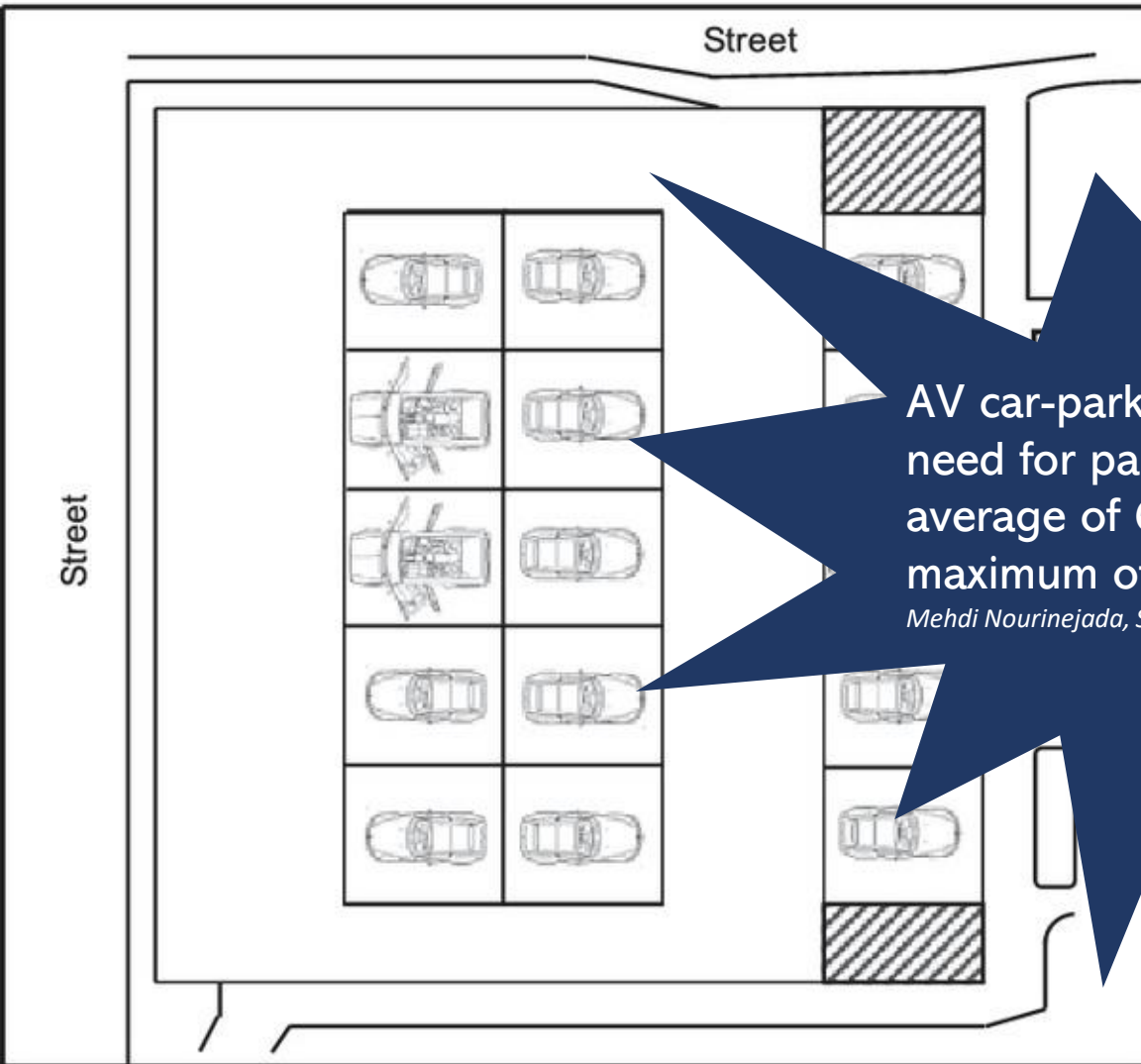
Autonomous vehicle car-parks



GAME CHANGER – SELF PARKING CARS

Conventional car-parks

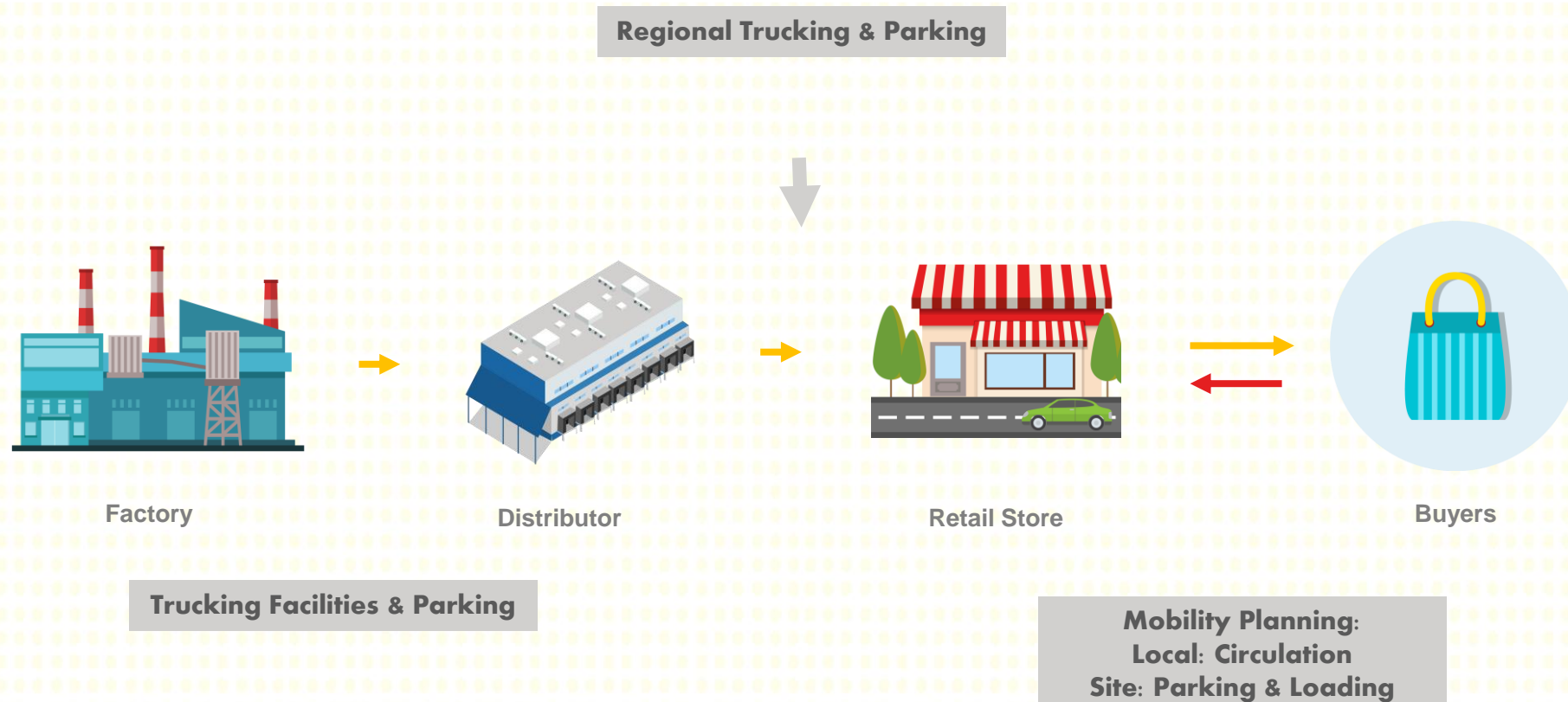
Autonomous vehicle car-parks



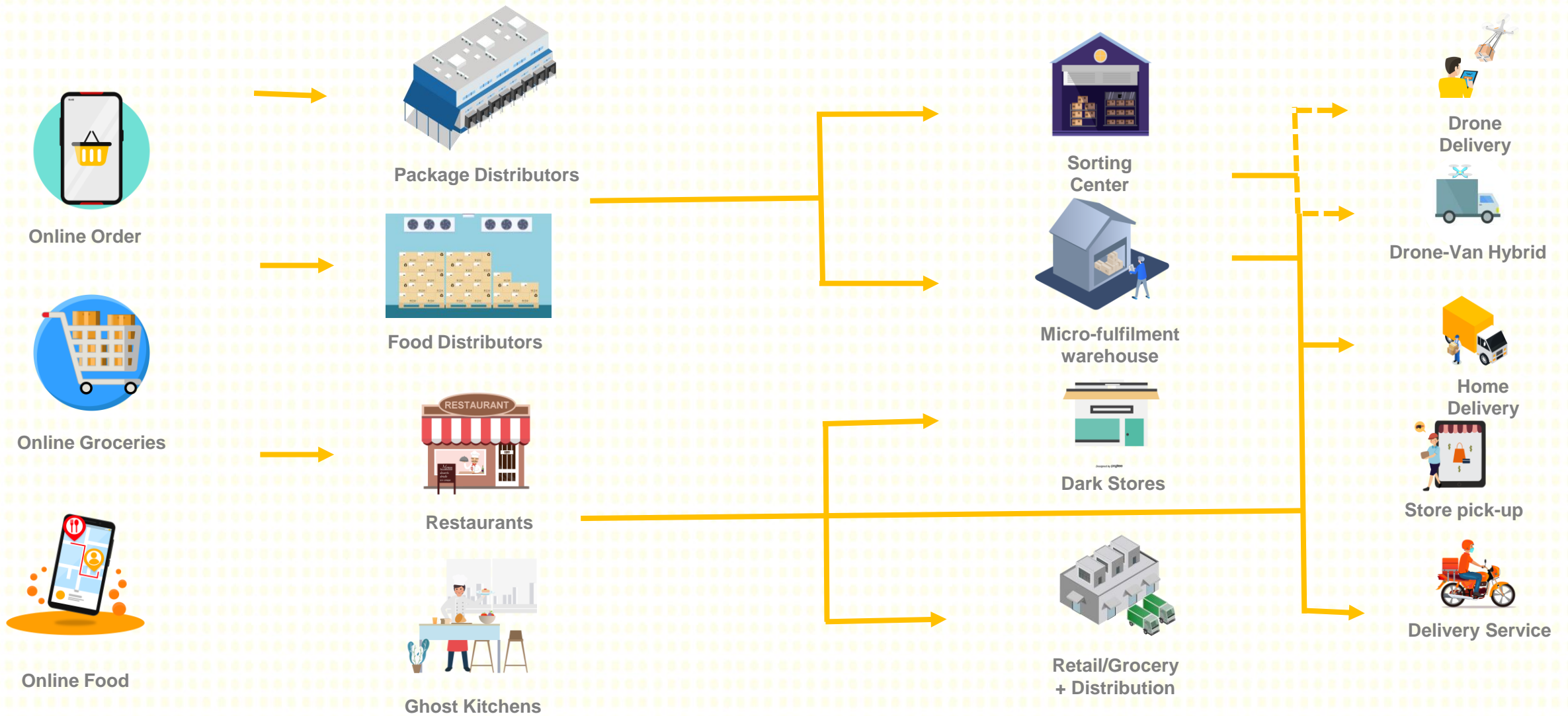
AV car-parks can decrease the need for parking space by an average of 62% and a maximum of 87%.

Mehdi Nourinejada, Sina Bahramib, Matthew J.Roordab

GAME CHANGER – E-COMMERCE



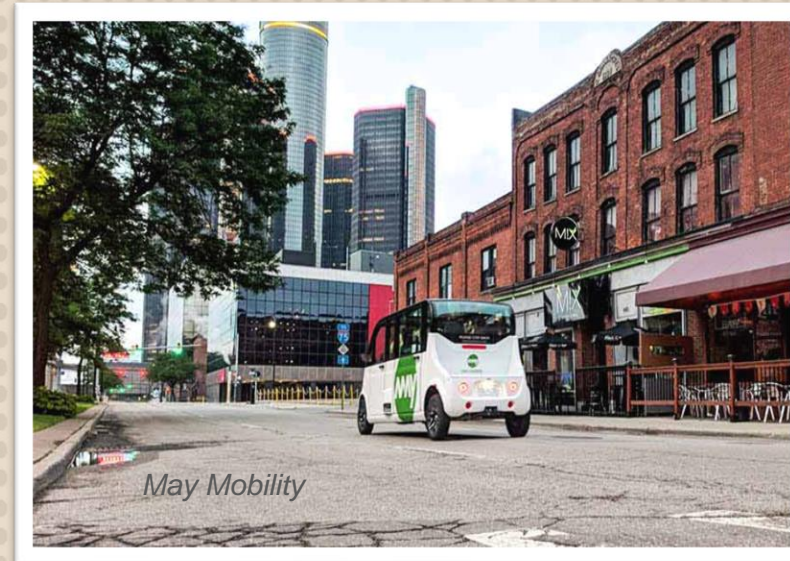
HOW E-COMMERCE DISRUPTS PARKING



HOW E-COMMERCE DISRUPTS PARKING



PULLING IT ALL TOGETHER



PULLING IT ALL TOGETHER

