

**HEALTHY CITY DESIGN 2019:** 

**Designing for Utopia or Dystopia?** 

RECLAIMING THE PUBLIC REALM: How do we achieve this?



### Perkins&Will

Gerry Tierney, AIA LEED AP BD+C Co-Director: Perkins&Will Mobility Lab



# What Makes a Successful City?

Opportunity
Governance
Economic Justice
Diversity
Density
Infrastructure



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Opportunity
Governance
Economic Justice
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# Let's consider these as spokes

... and what happens if even one is out of balance?



Water Supply
Waste Water
Power
Data
Public Space
Transportation



Water Supply Waste Water

Power

Data

**Public Space** 

**Transportation** 

Roadways vs. Pedestrian Experience





Water Supply

Waste Water

Power

Data

**Public Space** 

**Transportation** 

Roadways vs. Pedestrian Experience



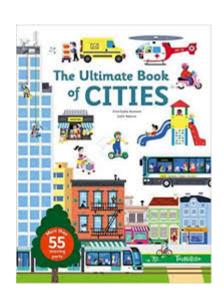


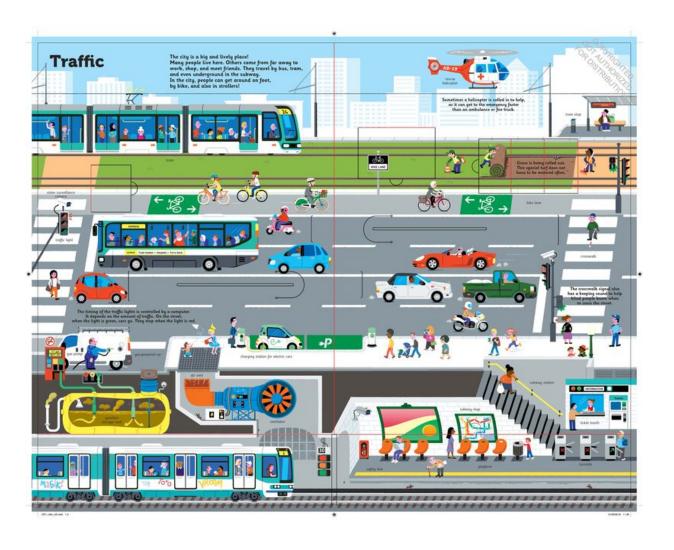
Water Supply
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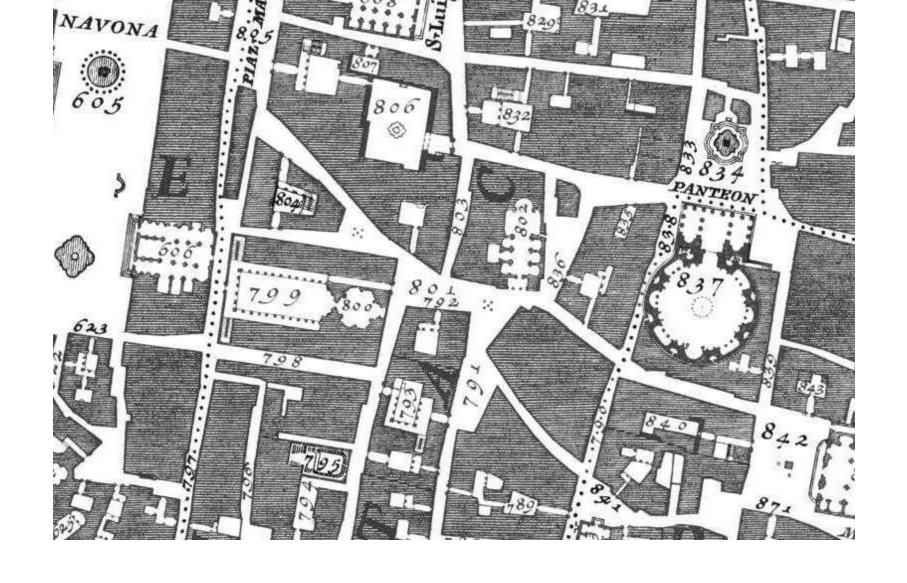
Single Occupant Vehicle vs.

Transit

# ... and this is what we are teaching our children ...







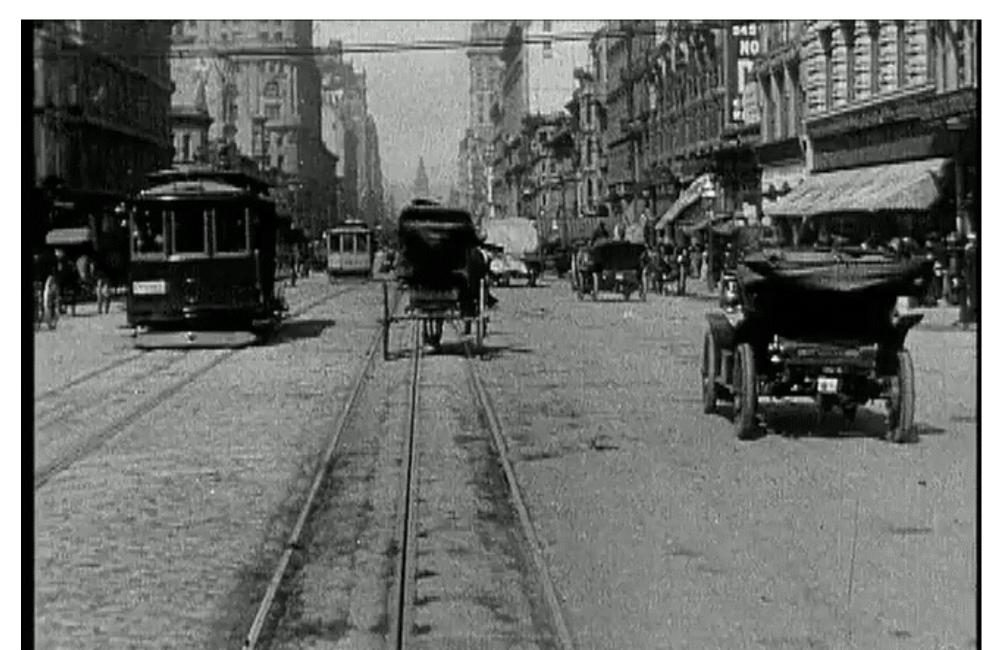
Prior to monopolization by a single modality ... the public realm was used for social interaction



December 21, 2009, 1:00 am, 17 degrees

... today we still try to reclaim space in our cities

Space: Streets at the beginning of the automobile age



# ... now the automobile age transitions into an experience ...











# ... if an experience, what are the potential impacts?



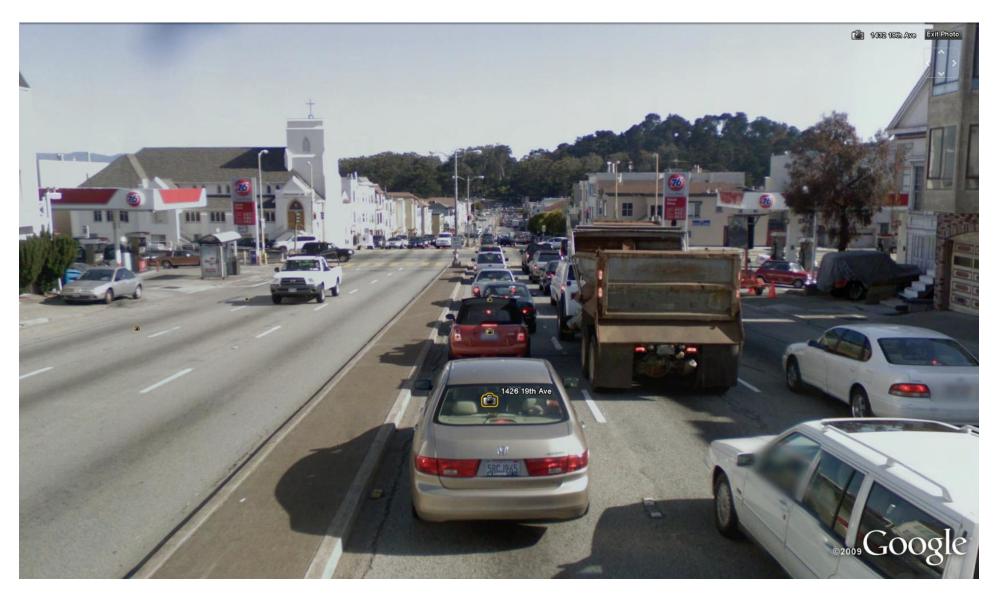








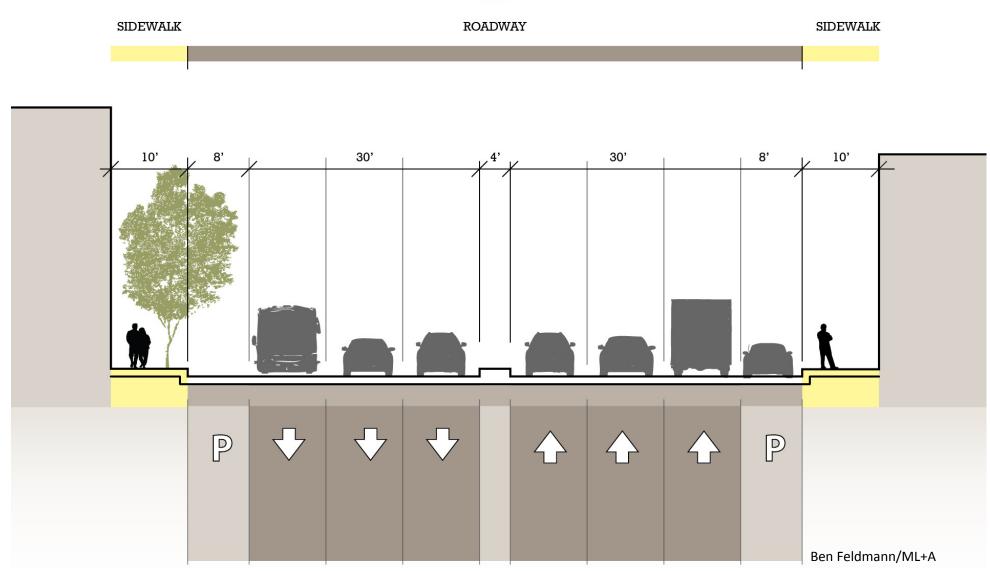
#### Streets Today: 19th Avenue, San Francisco – A Study



Capacity: 6 Traffic Lanes / On-Street Parking

#### 19th Avenue (Current)





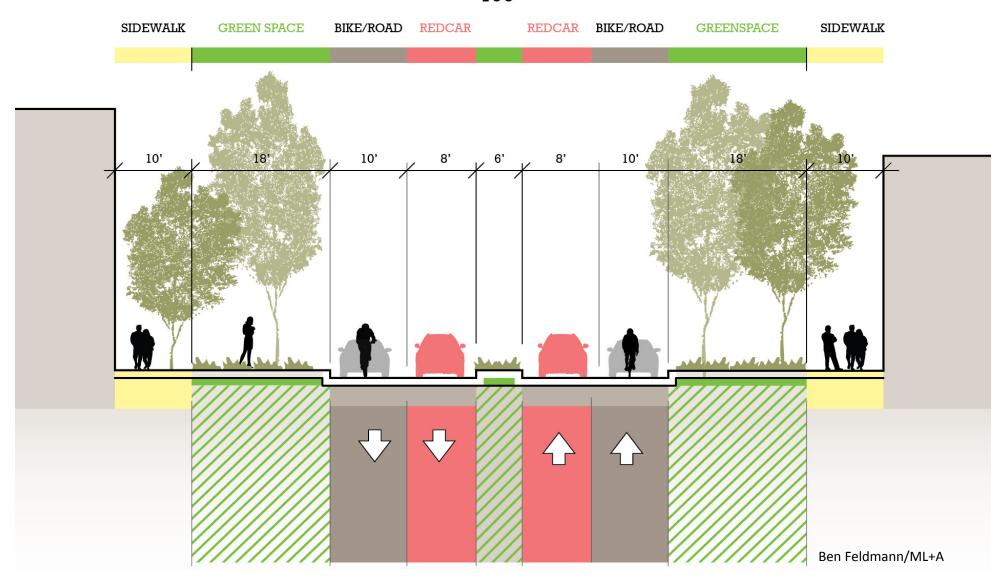
#### Street Tomorrow: 19<sup>th</sup> Avenue, San Francisco – A Study



Capacity: 1 Dedicated RC Lane / 1 Shared Bike Car Lane / Bio-Infiltration Gardens / Transit Plazas

#### 19th Avenue (Potential)

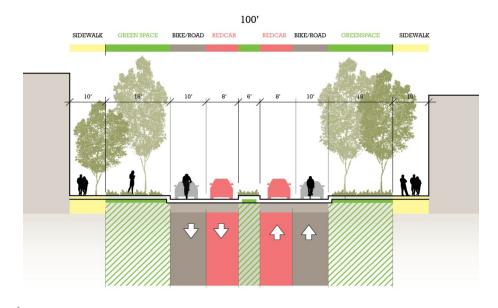
100'



#### Current

# SIDEWALK ROADWAY SIDEWALK 10' 8' 10' P P P P

#### **Potential**



Roadway: 80%

Green Space: 0%

1.75 GOLDEN GATE PARKS



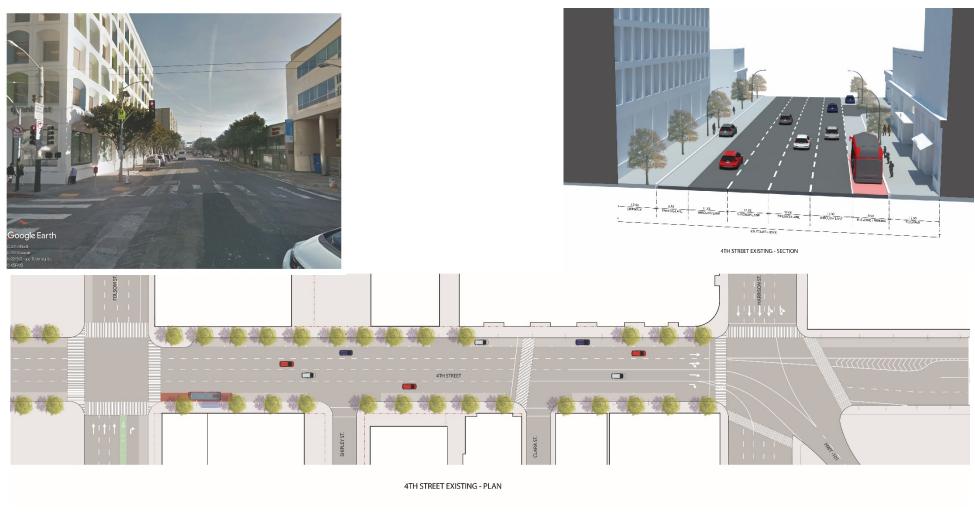
Roadway: 20%

Green Space: 42%

Ben Feldmann/ML+A

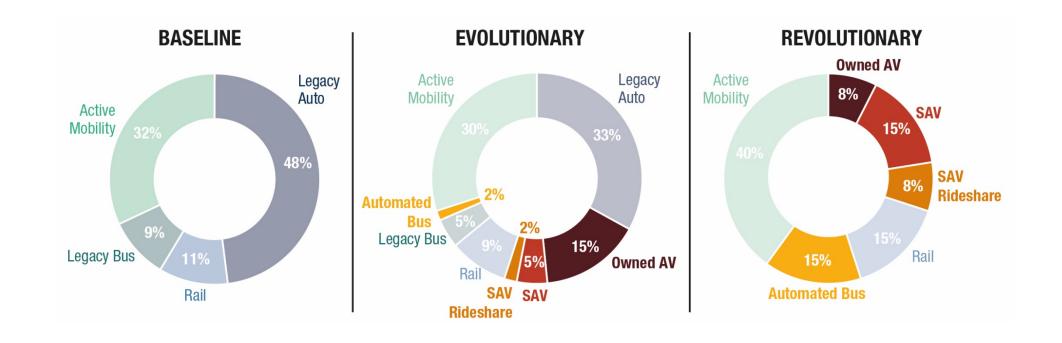
#### Roads & Public Realm: Existing Curb & Street Design [4th & Folsom, San Francisco]

On-street parking with 4 travel lanes; no TNC or e-commerce pick-up or drop-off No dedicated bike lanes; no storm water management



#### Roads & Public Realm: Evolution of Modality Split [4th & Folsom, San Francisco]

Baseline – Evolutionary - Revolutionary

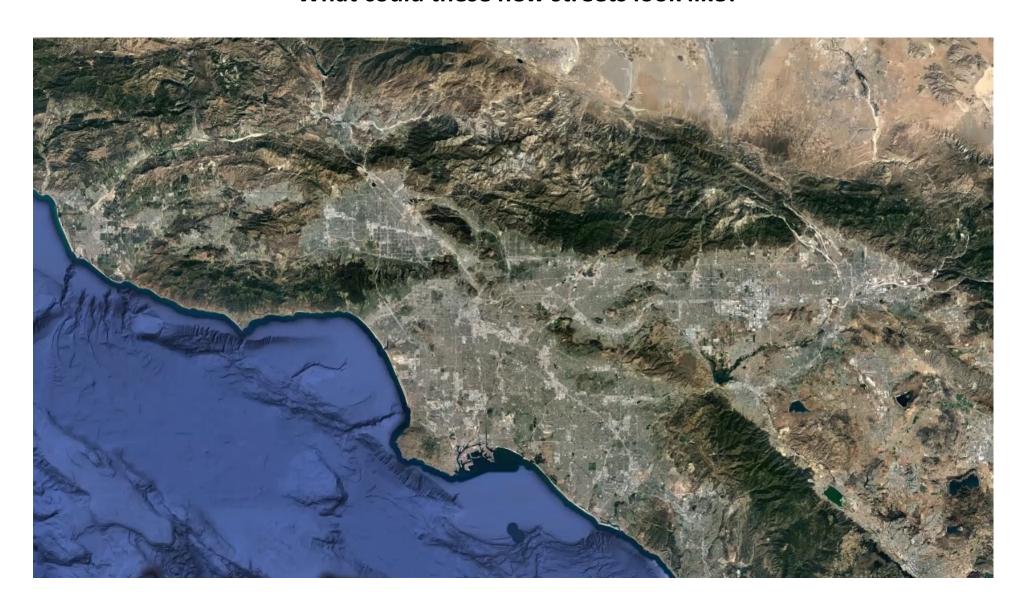


#### Roads & Public Realm: Potential Curb & Street Design [4th & Folsom, San Francisco]

On-street parking replaced with TNC pick-up & drop-off, e-commerce unloading, storm water management, dedicated two-way bike lanes and parklets

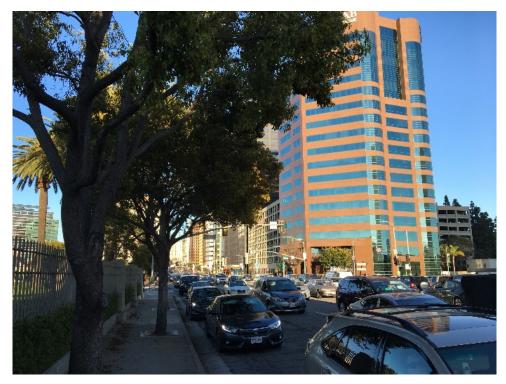


#### What could these new streets look like?



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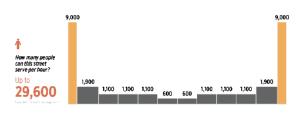
#### Concept study for Lyft, Wilshire Blvd., Los Angeles

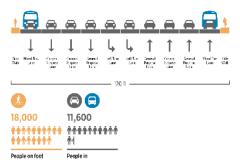


Existing:

Capacity = 29,600 people/hour 7,400 people in SOV's

#### Present

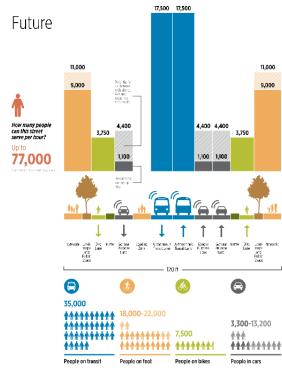




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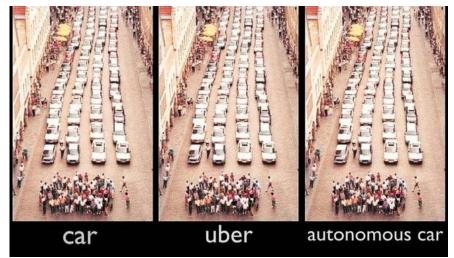




Future:

Capacity = 77,000 people/hour 64,500 people <u>not</u> in SOV's

#### Before we get there we have some hard choices to make ...





Our current trajectory ...
... or "If we leave it to chance"

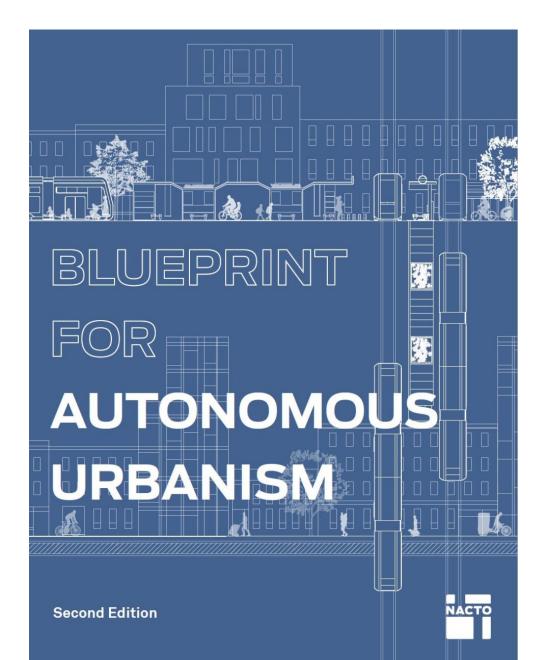
Where we should be going ... ... or "If we shape it"







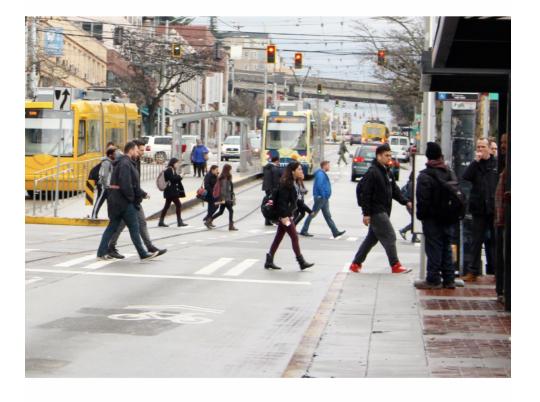
#### **Government needs to take the lead:**



#### Leave it to chance or shape it?

Seattle Department of Transportation

# NEW MOBILITY PLAYBOOK

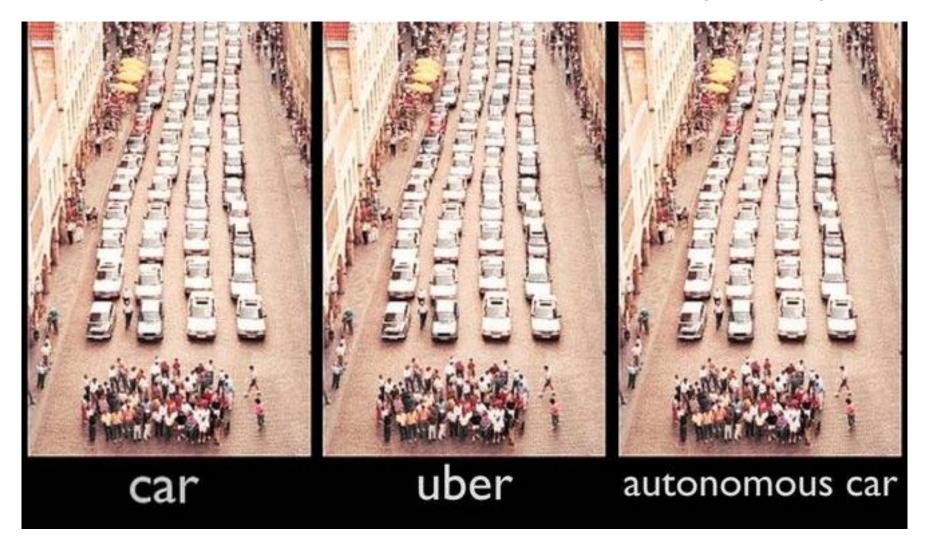


Version 1.0



#### **Ownership: Private Ownership vs. Shared Mobility:**

#### Why is this important?



#### **Ownership: Private Ownership vs. Shared Mobility:**

The Netflixing of car ownership?



#### **Connectivity: Seamless Mobility:**

#### Can we treat Mobility as a City Utility?





Tekes





#### Helsinki today



# Light 89€ /month includes HSL Helsinki season ticket + 1.000 Whim points Use your Whim points as you like, for example:

taxi trips

(~10 km/trip)

daytime

unlimited

local public

transport



daytime



transport

rental

# Pay-as-you-go Try Whim without commitment and upgrade whenever you like. Transport providers: A HSL VEHO We get you to your destination using your preferred mode of transport, letting you pay as you go - all in one app!

#### **Equity: Digital Access = Universal Access?**



The most powerful tool in transportation?
Is this now an essential component of transportation?
How do we avoid creating a two-tier system





Social Access: How much is your data plan? Do we need to create a lifeline mobility access plan?

How do we prevent Tomorrow[land] from being this .... and .... this?



#### **Parking:** What is the future for parking structures?

Major financial burdens in making parking structures adaptable If we need to build them make them recyclable If we need to build them use them for land banking

#### **Parking – Future Scenarios** PARKING AS LAND BANK parking structure as land bank using demountable, recyclable structure DEMOUNTABLE REMOVE/ DEMOUNT REMOVE/ DEMOUNT PARKING STRUCTURE STACKER PARKING **PARKING GARAGE REPLACED WITH FOR AUTONOMOUS** AS PARKING DEMAND AS PARKING DEMAND **HIGHER VALUE VEHICLES** REDUCES REDUCES COMMERCIAL 4 - 10 LEVELS "PEZ DISPENSER" OR RESIDENTIAL DEVELOPMENT 2017 2022 2027 2032

Hypothetical future-proofed parking scenario Collaboration between P+W & Nelson Nygaard

#### Time & Sprawl:

If we loose the friction of time do we induce sprawl?



#### **Demographic Preferences:**

Traditional suburbia vs. revitalized densified contemporary streetcar suburbs?

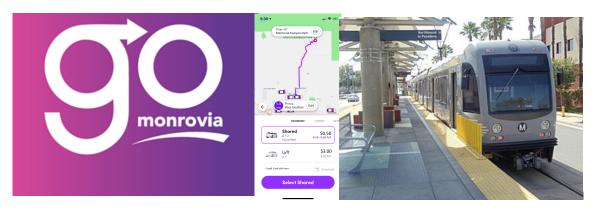


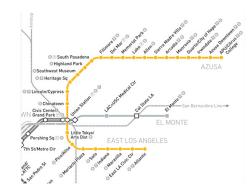
#### But can we really get people out of cars?

GoMonrovia mobility program, Monrovia, California

#### Maybe we need to look at GoMonrovia? Monrovia, CA [pop. 37,061 – 2017]

A New Geofenced Mobility Option to Support and Augment Public Transit in LA County





Feeder to the Gold Line as well as providing transit around Monrovia and to neighboring retail and medical centers

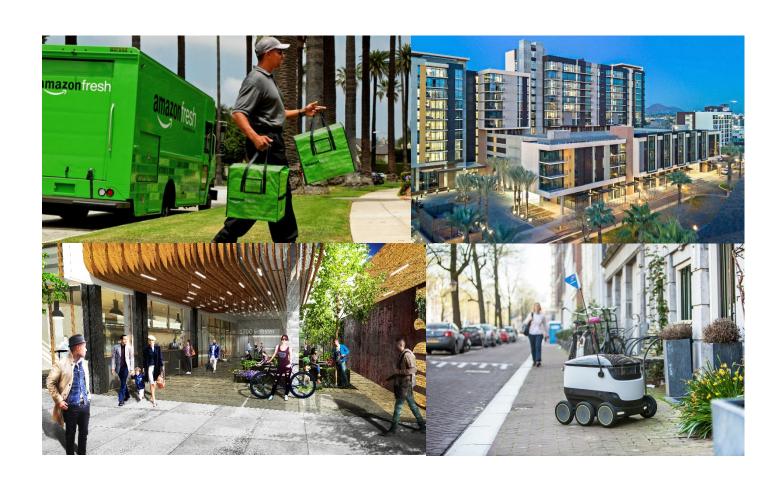
"The new, multi-modal transportation program, called **GoMonrovia**, leverages the strengths of ... the ride-share provider Lyft ... in partnership with the City's existing dial-a-ride operator, to provide fast and affordable transportation for all throughout Monrovia" City of Monrovia web site.

Riders/Month upon introduction March 2018: 4,921 Riders/Month in January 2019: 75,808

Fares: \$3.50 standard / \$1.00 shared ride

#### **E-Commerce:** Fatal for malls, but new life for lobbies?

Q4 2017: E-Commerce = 9.1 - 13% of all sales. Growing at 16.9% per annum Maybe we have neighborhood e-commerce pick-up points [like the rural post office?]



### What could these new neighborhoods look like?

Mission Rock San Francisco



More space for parks and recreation?



Streets shared by other uses?

#### What could these new neighborhoods look like?

Already here? Patrick Street, Cork, Ireland [Beth Gali]







Patrick Street sharing space with buses, TNC's & pedestrians







Traditional streets can handle "tamed" vehicles and enhanced public realm

A shared electric connected automated mobility environment could allow us to

**RECLAIM THE PUBLIC REALM:** 

Let's discuss what we want to do with it.

## Thanks!



Healthy City Design 2019 Perkins&Will Gerry Tierney