American Planning Association Sustainable Communities Division Webinar

### **Re-shaping Urban Environments for Disruptive Transport**

March 26, 2019 CM | 1 (live viewing only)



#### Thank You to the 2018-2019 Sustainable Communities Division Sponsors!



Interested in sponsorship for 2019-2020? Contact Karla Ebenbach (kebenbach@yahoo.com)



#### **Contact**

Website: planning.org/divisions/sustainable

- **Blog:** sustainableplanning.net
- LinkedIn: APA Sustainable Communities Division
- Facebook/Twitter: APASCD
- Email: APASCD@gmail.com



Sustain

#### Q We're having a Celebration!

#### https://npc19.eventbrite.com



#### **APA NPC 19** Multi-division & chapter reception



#### Sunday, April 14, 2019 (5:30 - 7:30 PM)

#### SPUR Urban Center | 654 Mission Street (located about 2 blocks from the conference center)

#### **\$10 Entrance Fee** (fee includes 2 drink tickets)

Sponsored By: GOLD SPONSOR

Additional sponsorship opportunities are available. Please contact your division or chapter leadership for details.



#### Re-shaping Urban Environments for Disruptive Transport

William (Billy) Riggs, Ph.D., AICP, LEED AP | Professor, University of San Francisco School of Management
Michael V. Johnson, PLA, ASLA | Director of Urban Design, SmithGroup



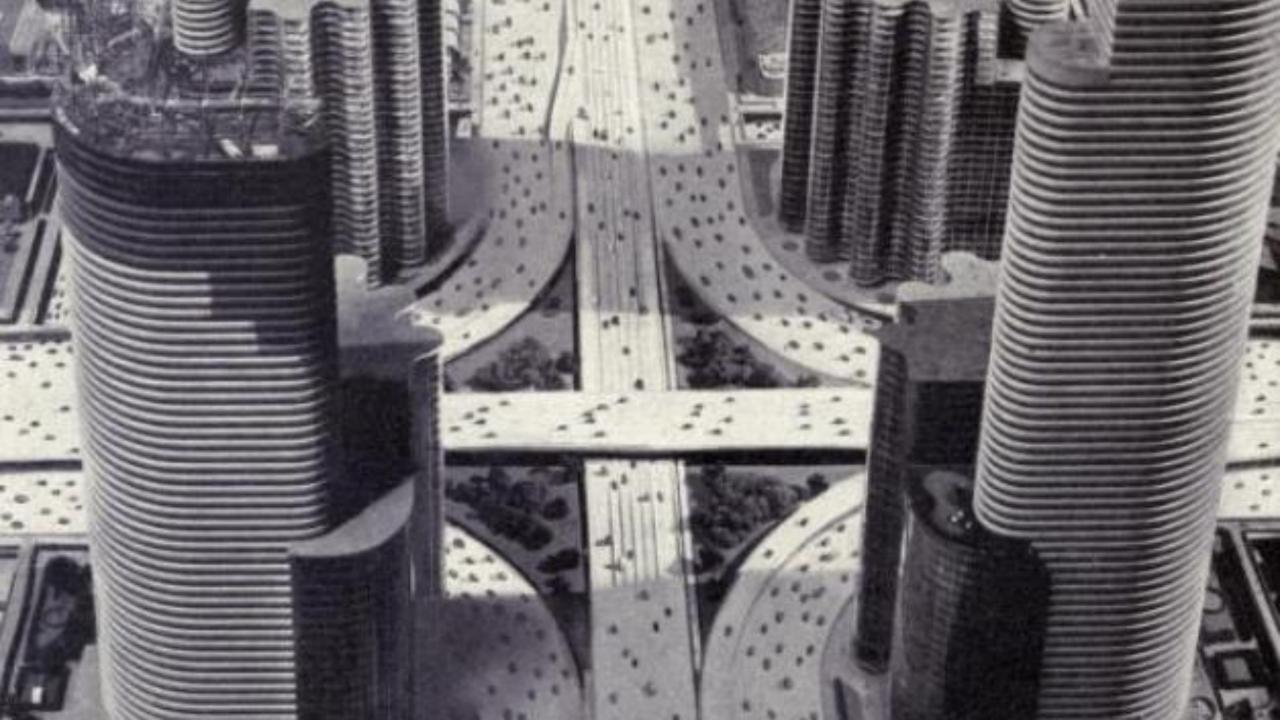
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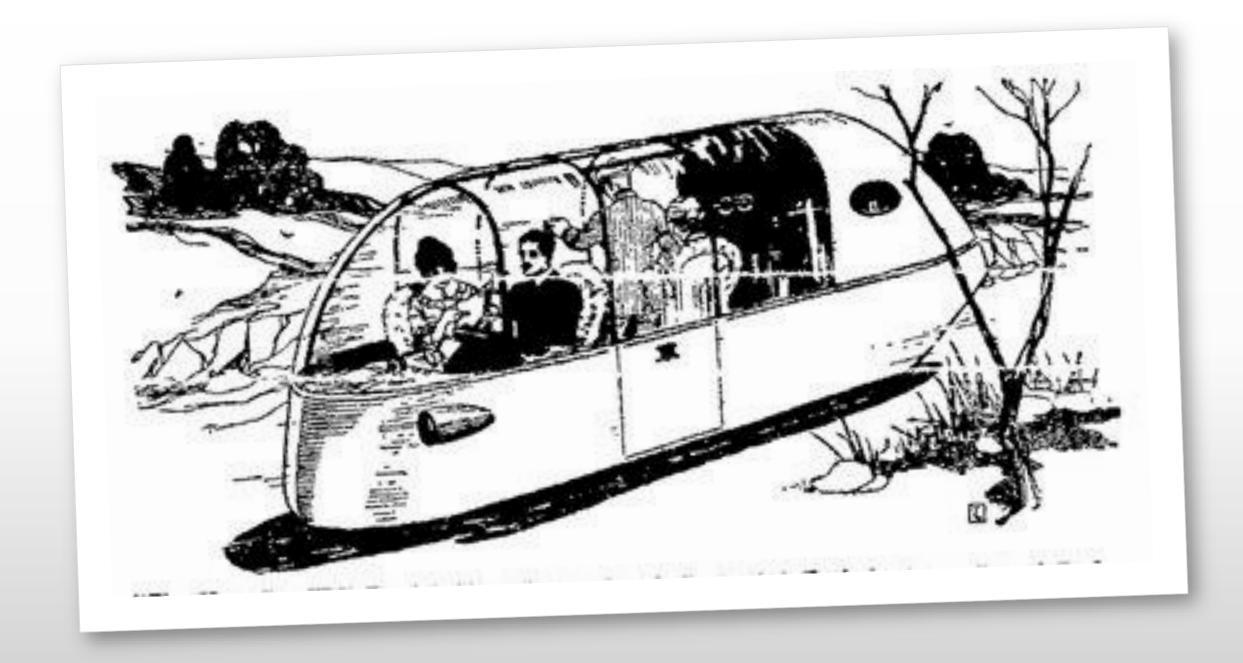
## **Re-Shaping** Urban Environments for Disruptive Transport

APA SCD Webinar Tuesday, March 26, 2019

William Riggs, PhD, wriggs@usfca.edu | @billyriggs Michael Johnson, michael.johnson@smithgroup.com | @johnsonmichaelv















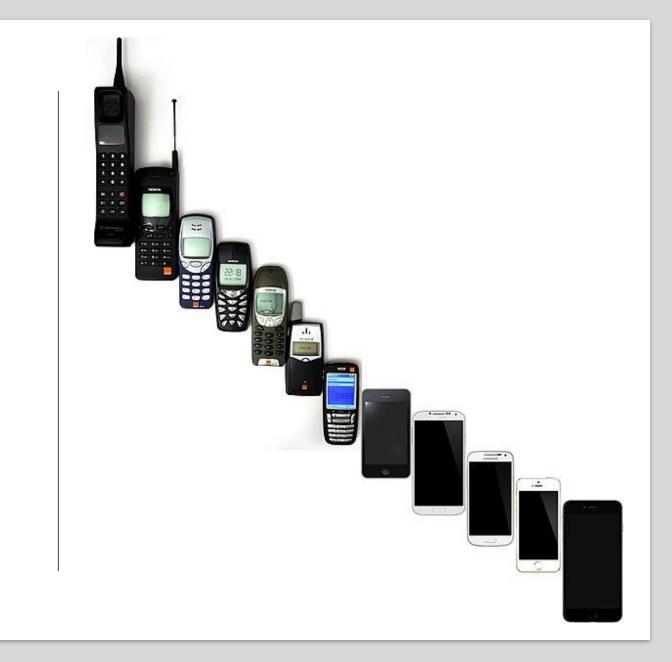
Company	Level 3 Availability	Level 4/5 Availability	Shared / Fleet	Notes / Sources
BMW	2021	2025	Y	Shared at first. Partnership with Intel and Mobileeye
Ford	2021	TBD	Y	Potential partnership with Waymo or Lyft
Fiat-Chrysler	2021	TBD		Potential partnership with Waymo or Lyft
GM	2018	TBD		Partnership with Lyft
Hyundai	2020	TBD		Level 3 (highway capable) by 2020
Tesla	2017	2020	Ν	Claims level 3 with autopilot and level 4 achieved without LiDAR
Waymo	2020	TBD	Y	May develop vehicles independently

# A vehicular evolution

Lorean

36

















## How might the auto evolve?



#### UBER'S PLAN TO LAUNCH FLYING CARS IN LA BY 2020 REALLY COULD TAKE OFF



## HSX / Hyperloop



A revolution that's not just about the car

What will autonomous vehicles mean to our communities?

## FUTURE OPPORTUNITIES-OPTIMISTIC PERSPECTIVES



LESS VEHICLE

**OWNERSHIP** 



**EXPENSIVE AVS/MORE SHARED** 



LESS COMMODITIZATION



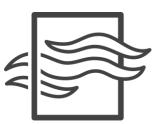


**LESS VMT** 

**MORE TIME FOR HUMAN** CONNECTIVITY



**MORE ACCESSIBLE** REGIONS



**IMPROVED AIR QUALITY** 



REDUCED

INFRASTRUCTURE

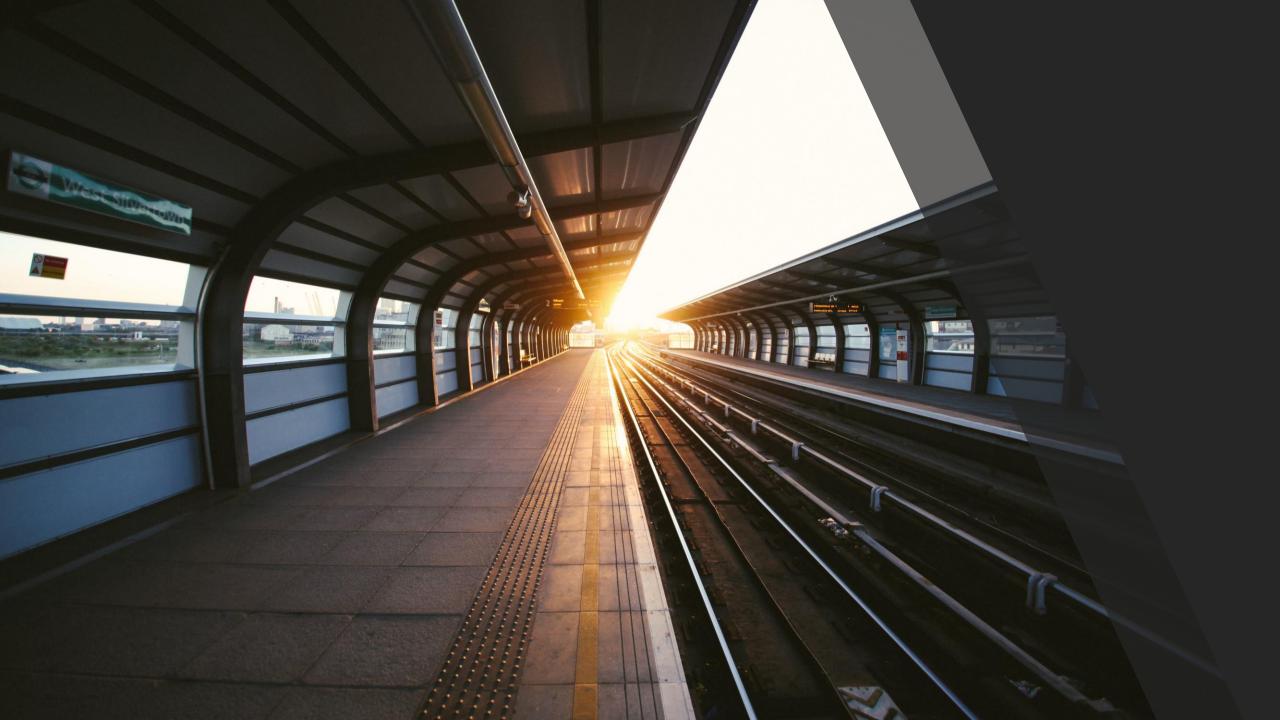


**REDUCED PARKING** 

**MORE TIME FOR** LEISURE

### POTENTIAL CHALLENGES-PESSIMISTIC VIEWS









Impact	Expected Net Impact
Traffic Safety	+
Air Quality (Emissions)	+/-
<b>Reduction in Travel Stress</b>	+
Use of Active Modes of Transportation	+/-
Improved Mobility for Transportation	
<b>Disadvantaged Populations</b>	+
Health Equity	-

What are the top 3 words that you HOPE will describe future streets?

When poll is active, respond at **PollEv.com/avcity** Text **AVCITY** to **22333** once to join

deliberate diverse pervious equitable populated enjoyable pedestrian-oriented movement sensible shared culture cafes happy sexy interesting inspiring 👌 balanced i active fast livable village treed tersatile accessib Φ clean cycling 8 cobbleston open congested reliable resilient sustainable friendly parks pedestrian engaged innovative efficient inclusive community lively innovative

#### What are the top 3 words that you FEAR will describe future streets?

When poll is active, respond at **PollEv.com/avcity** Text **AVCITY** to **22333** once to join

 When poll is active, response

 reckless
 unpredictable

 fatalities collisions car-focused

 bad isolating death health dying

 bad isolating death health dying

 bad isolating death health dying

 ≟ culture 2es 🞖 laziness cars noisy inaccessible S robots Cars noisy inaccessible inhuman car congested loud or richetti ety lots private dangerous lack wide polluted isolates innovation isolation clunkers safety conflicted <u></u> crowded issues smog car-dominated



## Planning & Design

A market-driven spatial evolution

## WE MUST ADVANCE POLICY RAPIDLY

## **DESIGN + POLICY MUST: LEAD WITH AUTONOMOUS MASS TRANSIT**

VERBAR NO.

### **DESIGN + POLICY MUST REPURPOSE THE CURB**

Bus Stop

Tow Away (100 ft)

# Transport for London DESIGN + POLICY MUST IMPLEMENT CONCESTION POLICIES charging C, Central ZONE BEAU DE CH

RESIDE ACCESSORIE

Mon - Fri 7 am - 6 pm

## DESIGN + POLICY MUST RE-THINK PARKING

## DESIGN + POLICY MUST REPURPOSE SPACE FOR PEDESTRIANS

MAMMA

## DESIGN + POLICY MUST EMPHASIZE IMPROVED HUMAN HEALTH



## **DESIGN + POLICY** MUST LEAD + PARTNER WITH TECHNOLOGY

# DESIGN + POLICY MUST INCLUDE CREATIVE LAND USE POLICIES DETROIT DESIGN DETROIT DESIGN 1-29 Presents average of the statement of the stateme DETROIT DESIGN 139 presents a UNESCO City of Design bi-annual estrosett that will show care a second that will show case relevant projects being completed in the City of Detroit. Structured around the targeted neighborhood frameworks identified by the

DETROIT DESIGN IN

DETROIT DESIGN 139 presents a UNESCO City of Design bi-annual exposition

ured around the targeted neighborhood frameworks identified by the of Planning Department, the expo will establish a collective day. oplative land use planning, green infrastructure creative reand architectural design excellence for all of Detroits

mt at 1001 Woodward Avenue.

sure that the DETROIT DESIG

A Loning Handbook for Detroit's

DRAFT AUG 22 2017

that will show

Structured

City of De

wide vis use of

139

City of Detroit Planning Department, the expo will establish a collective durwide vision for innovative land use planning, green infrastructure, creative reuse of existing buildings and architectural design excellence for all of Detroits

139 square miles.

oit's

exposition will be headquartered in a 'storefront' at 1001 Woodward Avenue.

Stratil locating a coordinated series of design advocacy initiatives that the an exhibition, lectures, events, and tours. Providing an open

Barefront for this collection of design initiatives will ensure that

mmunities impacted by these projects are integral to the

139 exposition will channel the experience of locality wide

9 forure opportunities, with the underlying objective

The DETROIT DESIGN 139 exposition will channel the experience of local

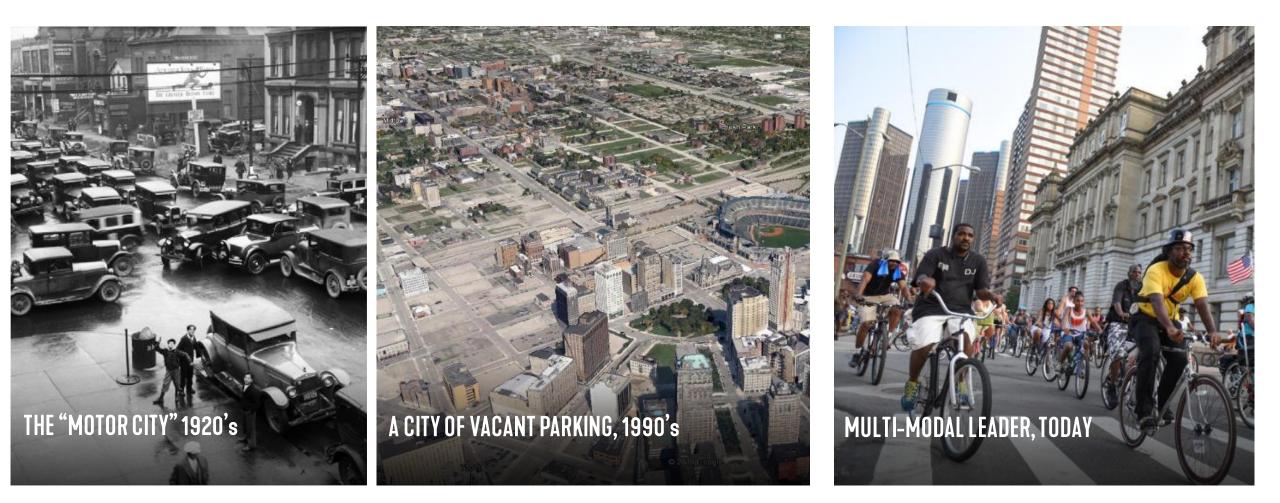
For thirty days in September and October, the DETROIT DESIGN 139

## **CITY OF DETROIT RECLAIMING PUBLIC RIGHT-OF-WAY**

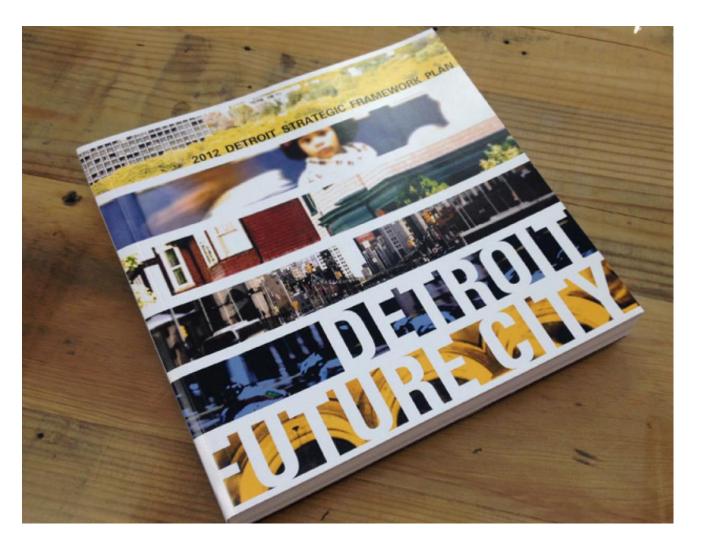
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## CITY OF DETROIT RECLAIMING PUBLIC RIGHT-OF-WAY

## **CITY OF DETROIT, MICHIGAN**



### DETROIT FUTURE CITY-MASTER PLAN



CREATE MULTIPLE EMPLOYMENT DISTRICTS ALONG EXISTING CORRIDORS

CONNECT PEOPLE TO OPPORTUNITY USING MULTI-MODAL TRANSIT

RE-FRAME VACCANT LAND AS GREENSPACES THAT CONTRIBUTE TO HEALTH

DEVELOP DISTINCT, ATTRACTIVE NEIGHBORHOODS

**50 YEAR VISION** 



#### **CITY OF DETROIT: RE-PURPOSING INDUSTRIAL INFRASTRUCTURE**

## **CITY OF DETROIT: RE-PURPOSING INDUSTRIAL INFRASTRUCTURE**

## JOE LOUIS GREENWAY

# We want to hear from you.

Join us for a Q&A with city officials and the final two consulting firms under consideration to develop the planning framework for the Joe Louis Greenway. This is an opportunity for you to have your questions and concerns addressed. Saturday, January 19 11 am - 1 pm & 2 pm - 4 pm

Palmer Park Community Building 1121 Merrill Plaisance St Detroit, MI 48203

Free and open to the public.







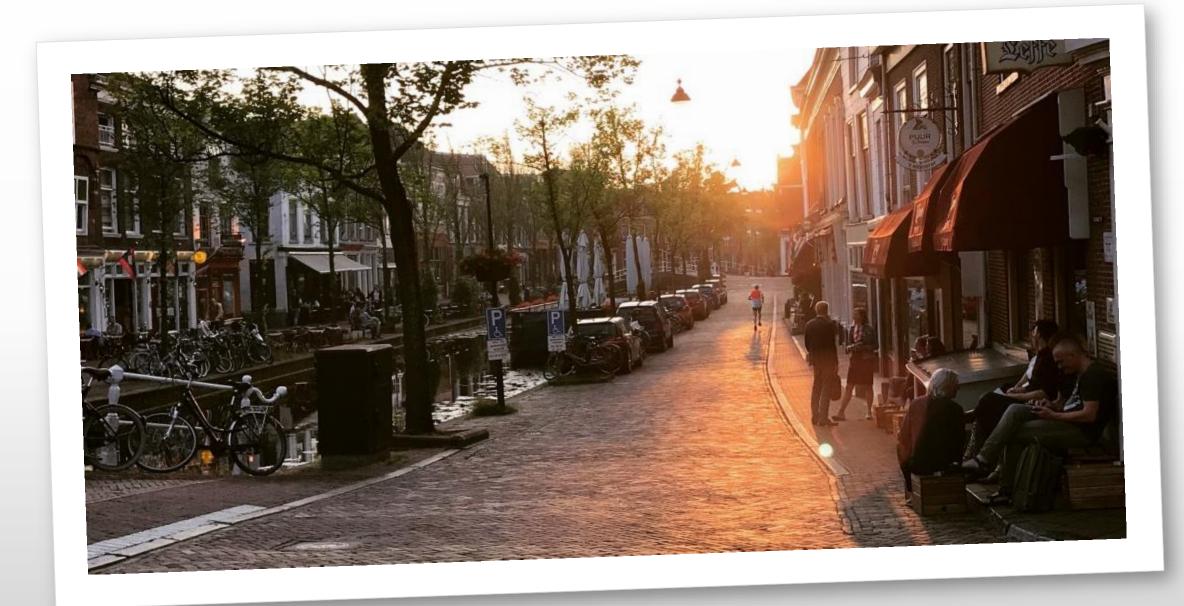


Bus Box
 Bike Box
 Pedestrian Cross Walk
 Projected Travel Lines
 Bike Lane Buffer
 Bike Lane Delineator
 Directional Bike Lane

#### CITY OF DETROIT: 100+ MILES NEW PROTECTED BIKE LANES

FUN

#### Kill the Street Can we move beyond "complete streets" and rethink what our streets are and can be?



#### **Evolving Policy Faster -- https://app.restreet.com/**

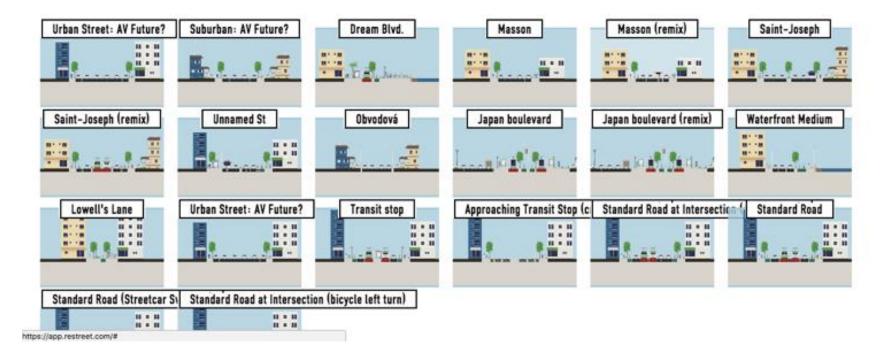


Admin Dashboard Sign out

#### RESTREET allows you to recreate streets, share them and capture the feedback from others.

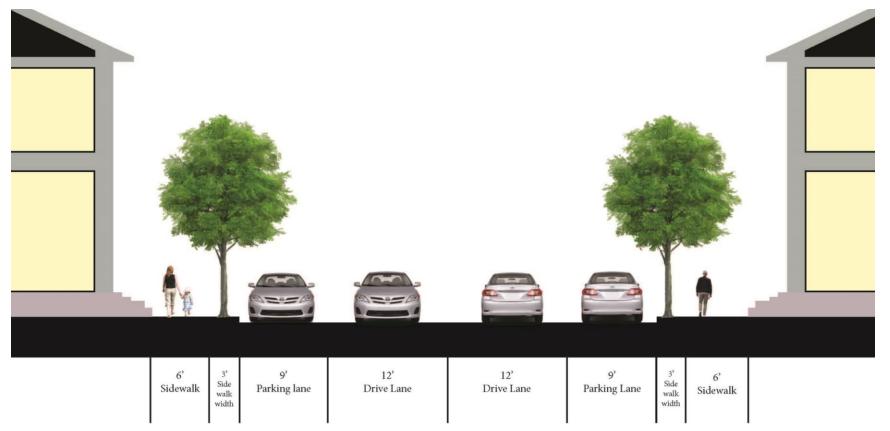
You can check out the "starting streets" we have made below and submit your thoughts.

Or you can create your own account so you can make your own streets and send them to other people to see what they think of them. We look forward to seeing your thoughts and working together to rethink the future of our streets.

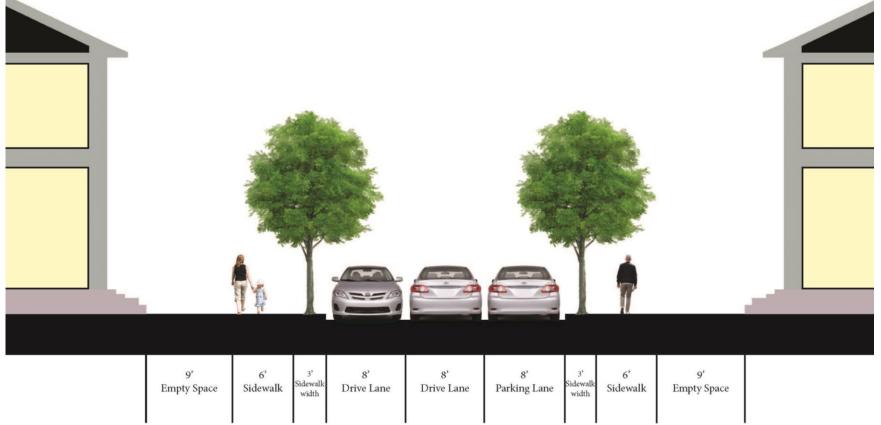


Riggs, William, Technology, Civic Engagement and Street Science: Hacking the Future of Participatory Street Design in the Era of Sel f-Driving Cars (February 1, 2018). Available at SSRN: https://ssrn.com/abstract=3117731 or http://dx.doi.org/10.2139/ssrn.3117731

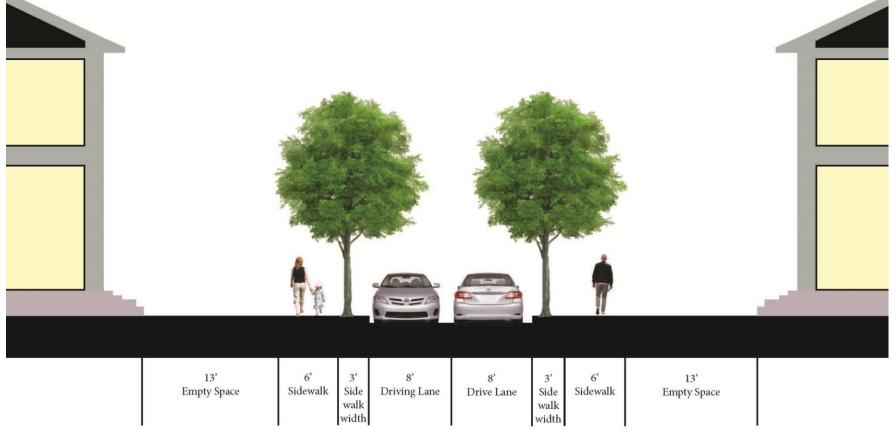
#### Thin Lanes | Remove Parking | Think Shared



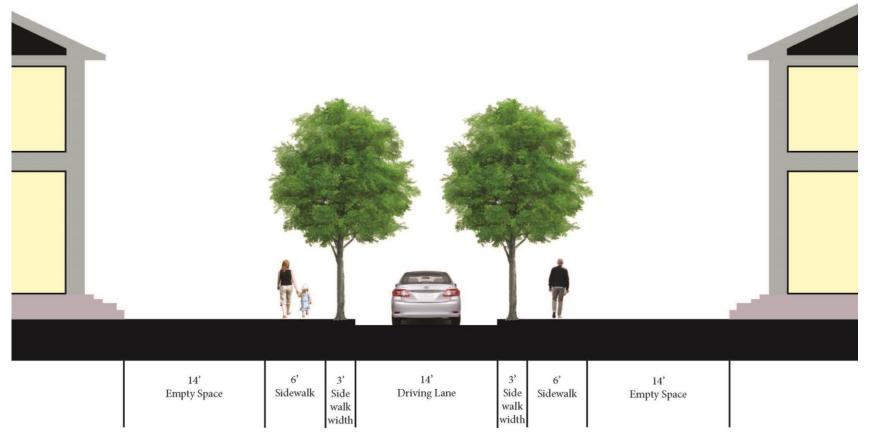
Thin Lanes | Remove Parking | Think Shared



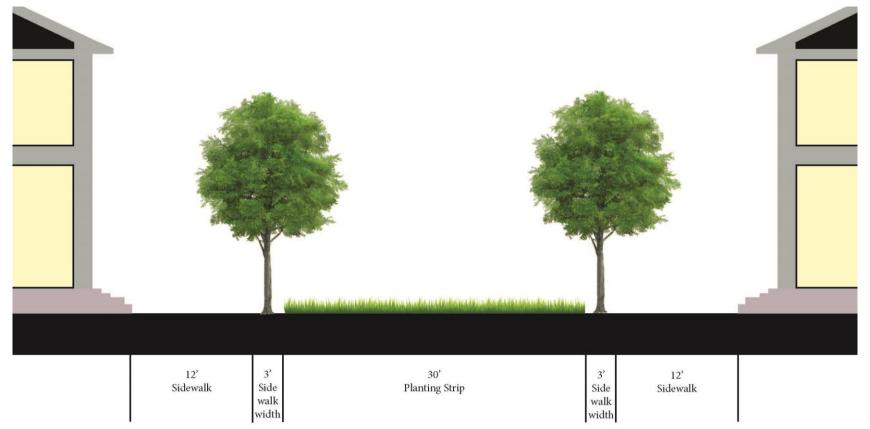
Thin Lanes | Remove Parking | Think Shared



Thin Lanes | Remove Parking | Think Shared



Thin Lanes | Remove Parking | Think Shared



# Disruptive transport is a planning & design issue.

The time to act is now

## What will you do today?

Disruptive Transport: Driverless Cars, Transport Innovation and the Sustainable City of Tomorrow

Available from Routledge: http://bit.ly/disruptivetransport

William Riggs, PhD, wriggs@usfca.edu@billyriggsMichael Johnson, michael.johnson@smithgroup.com@johnsonmichaelv

Contades Equity, Justice and the Sustainable City write

#### **DISRUPTIVE TRANSPORT**

DRIVERLESS CARS, TRANSPORT INNOVATION AND THE SUSTAINABLE CITY OF TOMORROW

> Edited by William Riggs





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