Broward MPO
Metropolitan Planning Organization

New Mobility + Complete Streets Workshop

May 29, 2019

Brad Davis & Jean Crowther– Alta Planning + Design
Catherine Ciarlo – City of Portland

Agenda

- Welcome and Introductions 8:30am
- New Mobility Policy 8:45am
- Lunch + Keynote 11:45am
- New Mobility + Complete Streets Design 1pm
- Closing Remarks 3:30pm

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Presenters

Jean Crowther, AICP

Brad Davis, AICP

Catherine Ciarlo

Complete Streets Initiative

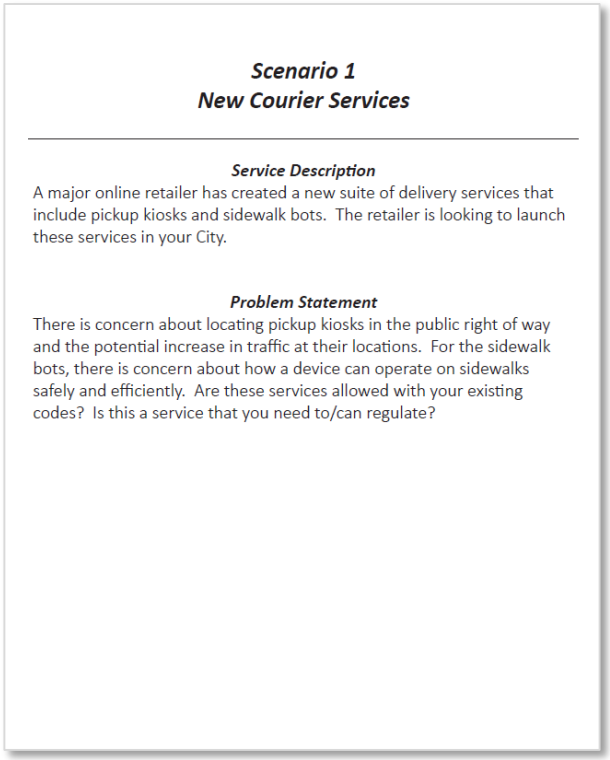



Safer, Healthier Streets for ALL Users

- Overview
- Complete Streets Advisory Committee (CSAC)
- ADA Assistance & Trainings
- Broward Complete Streets Guidelines

New Mobility Policy Scenario Planning Exercise

- Step 1: Policy Scenario



Scenario 1
New Courier Services

Service Description

A major online retailer has created a new suite of delivery services that include pickup kiosks and sidewalk bots. The retailer is looking to launch these services in your City.

Problem Statement

There is concern about locating pickup kiosks in the public right of way and the potential increase in traffic at their locations. For the sidewalk bots, there is concern about how a device can operate on sidewalks safely and efficiently. Are these services allowed with your existing codes? Is this a service that you need to/can regulate?

New Mobility Policy Scenario Planning Exercise

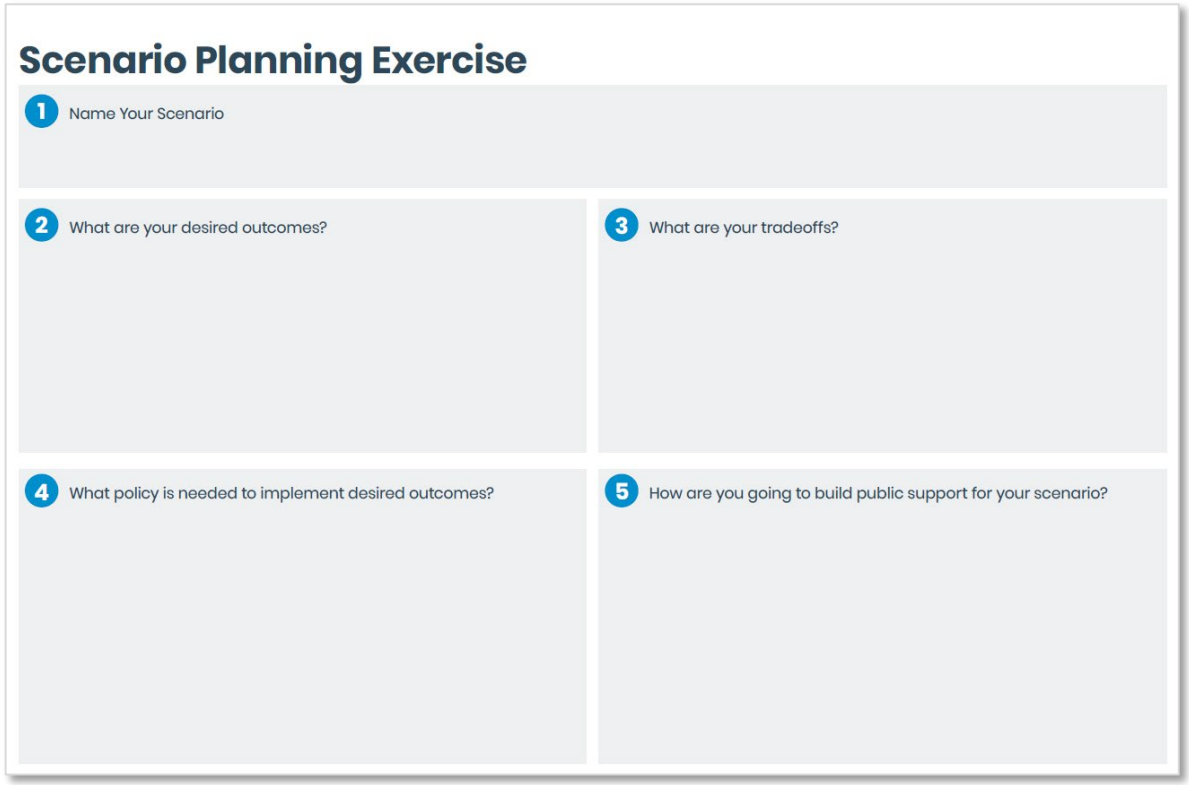
- Step 2: Character Cards

Local Business Owner

Role: Your restaurant and coffee shop is an iconic destination for visitors and residents in Downtown, and is busy throughout the week and weekend. You have been running your business for 15 years. When you started your businesses, Downtown was struggling and it was easy to get to Downtown by car- easy to find parking spaces and no major traffic issues. Now Downtown is bustling with new businesses, residents, and tourism. While you appreciate the growth and financial performance of your businesses, your customers and food delivery services are increasingly complaining about access to your restaurants.

New Mobility Policy Scenario Planning Exercise

- Step 3: Scenario Planning Worksheet

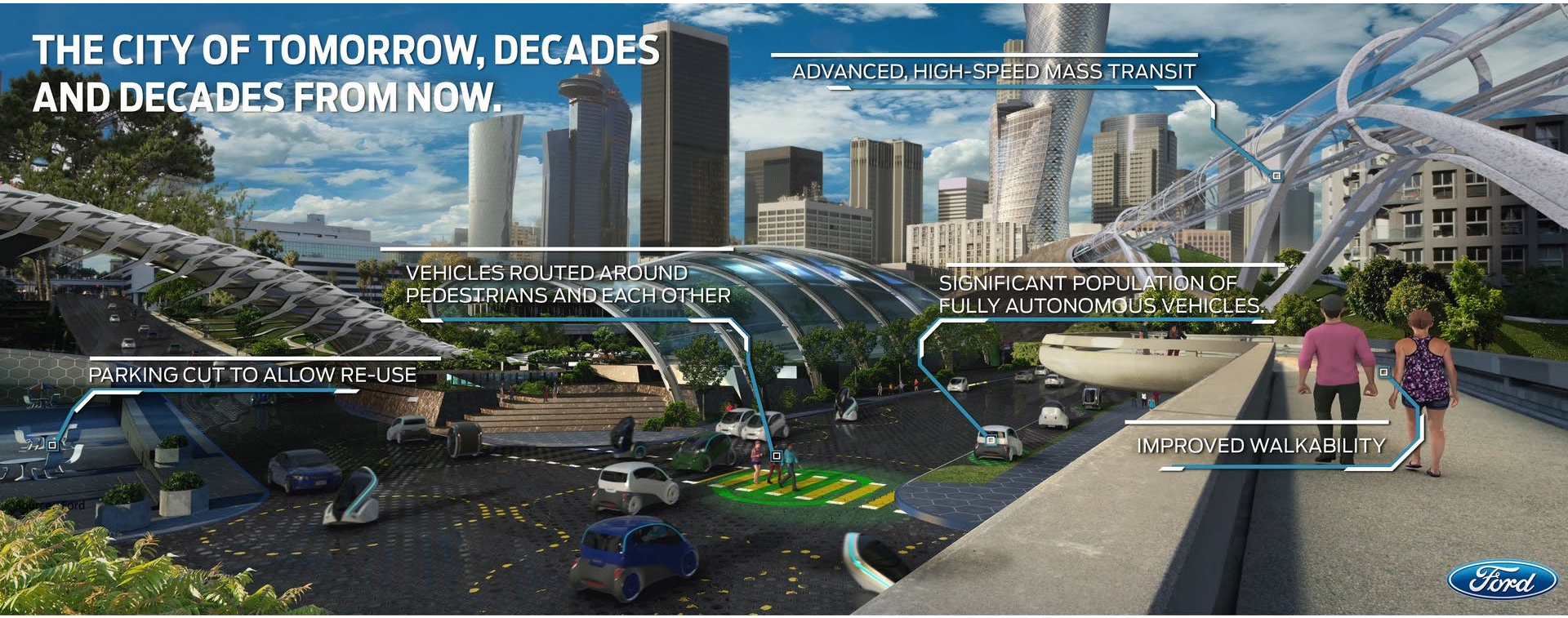


Scenario Planning Exercise

1. Name Your Scenario
2. What are your desired outcomes?
3. What are your tradeoffs?
4. What policy is needed to implement desired outcomes?
5. How are you going to build public support for your scenario?

Trend: Placemaking + People-Oriented Cities

Trend: Autonomous Urbanism



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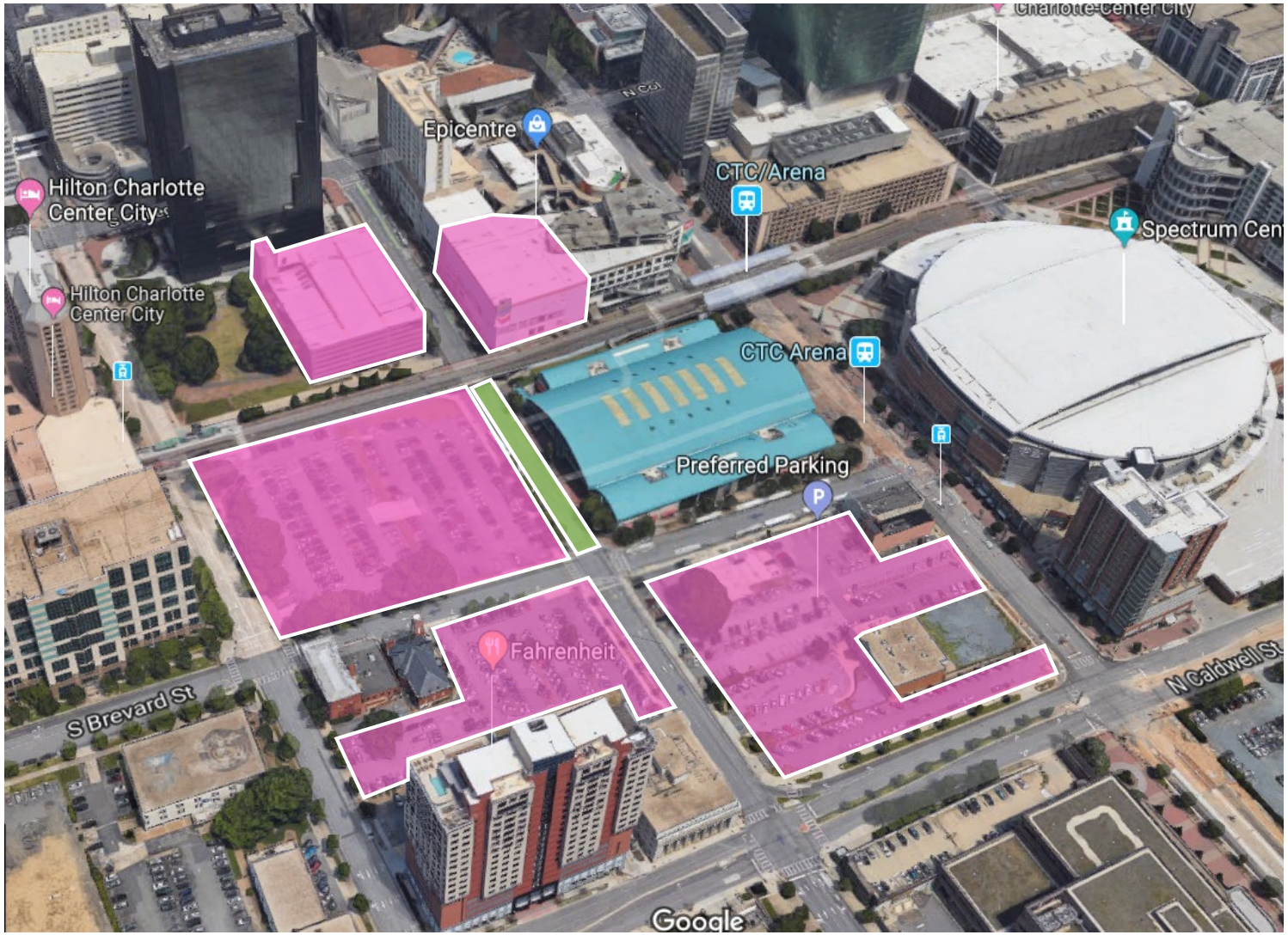

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Complete Streets
2.0

Complete Street Principles

- **Access and mobility** for everyone regardless of age, ability, mode
- **Unique** - responds to the specific needs of the community, streetscape, and land use context
- **Balanced** – Provides the highest degree of transportation options, transitioning away from auto-centric planning and design
- **Safe** – prioritizes the needs of most vulnerable users
- **Comprehensive** – Considers the larger network, a system-wide approach

Complete Streets 1.0

\+ New Mobility

Complete Streets 2.0

Complete Streets 2.0 Principles

PRIORITIZED USES

SAFE BY DESIGN

POINT-TO-POINT TRIPS

MULTIMODALISM

COMPLETE NETWORKS

DIGITAL INFRASTRUCTURE

ADAPTABILITY

OUTCOMES BASED

Complete Streets 2.0 Principles

PRIORITIZED USES

Complete Streets 2.0 Principles

SAFE BY DESIGN

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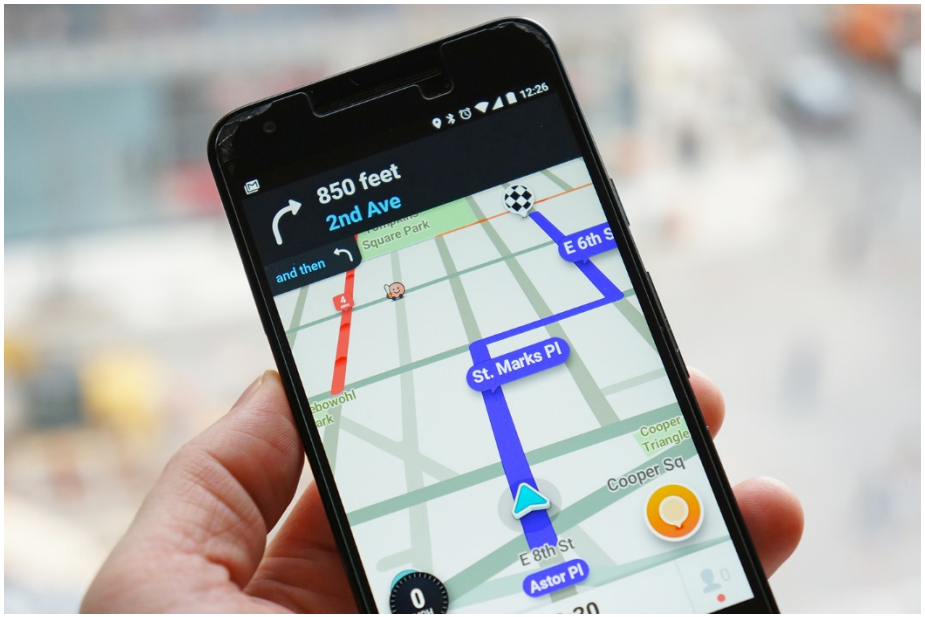
Complete Streets 2.0 Principles

POINT-TO-POINT TRIPS



Complete Streets 2.0 Principles

MULTIMODALISM

Complete Streets 2.0 Principles

COMPLETE NETWORKS

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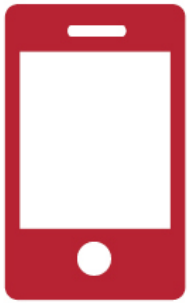
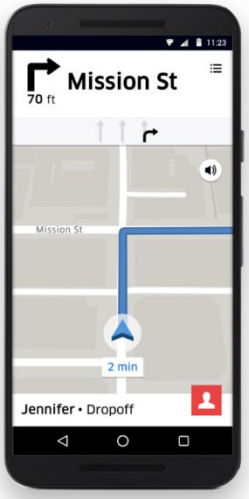
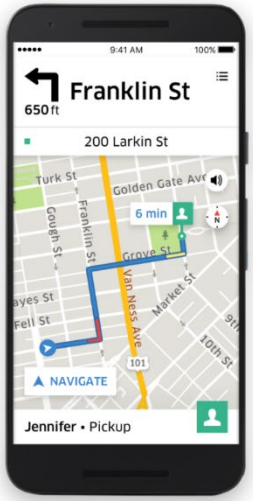
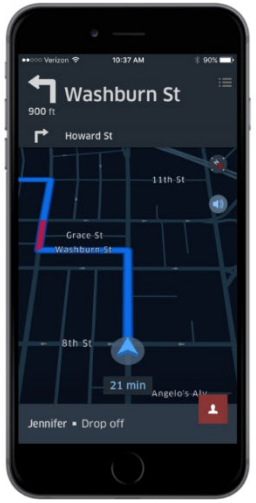


DIGITAL INFRASTRUCTURE







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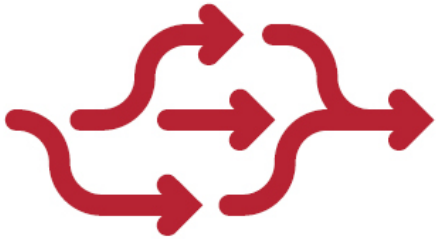
Complete Streets 2.0 Principles



ADAPTABILITY

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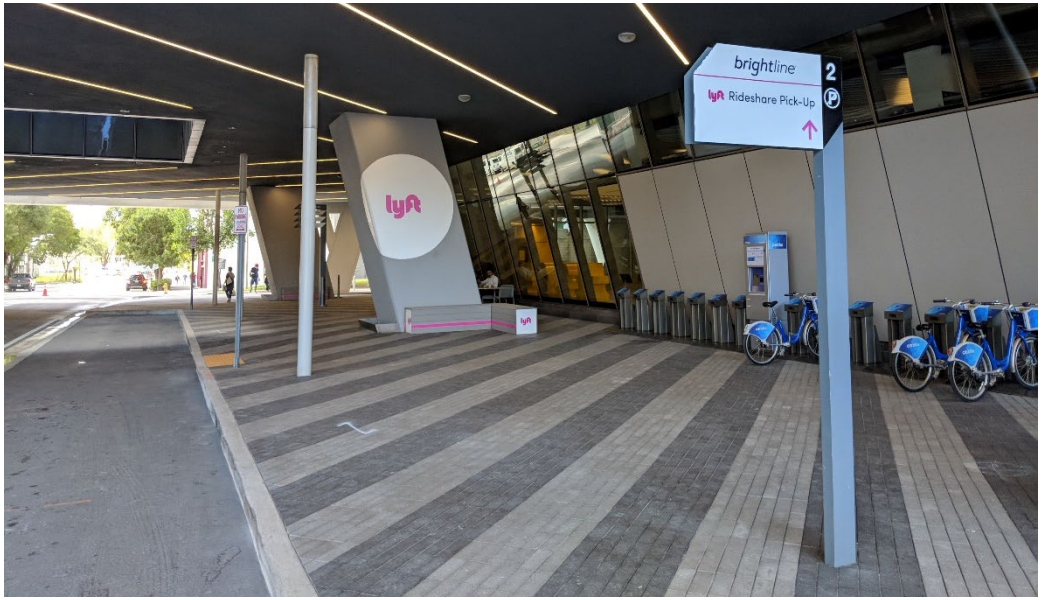
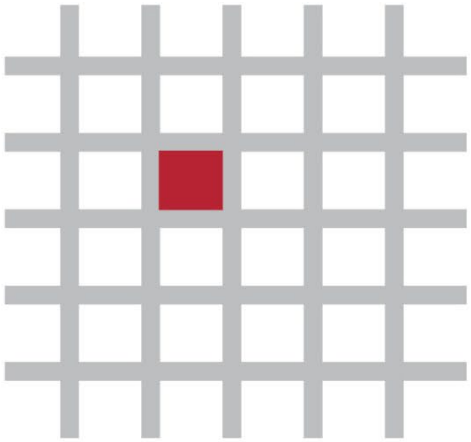
Complete Streets 2.0 Principles

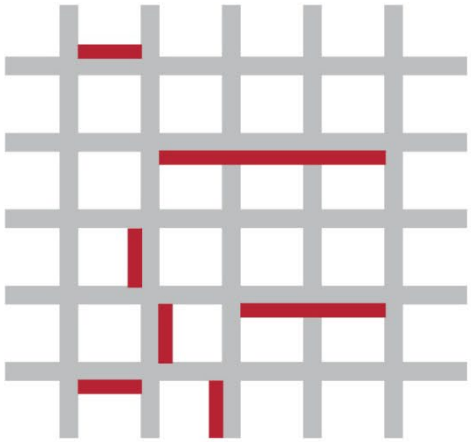
OUTCOMES BASED



Complete Streets 2.0 in Practice



MOBILITY
HUB SITE



LINEAR MOBILITY
BLOCKS

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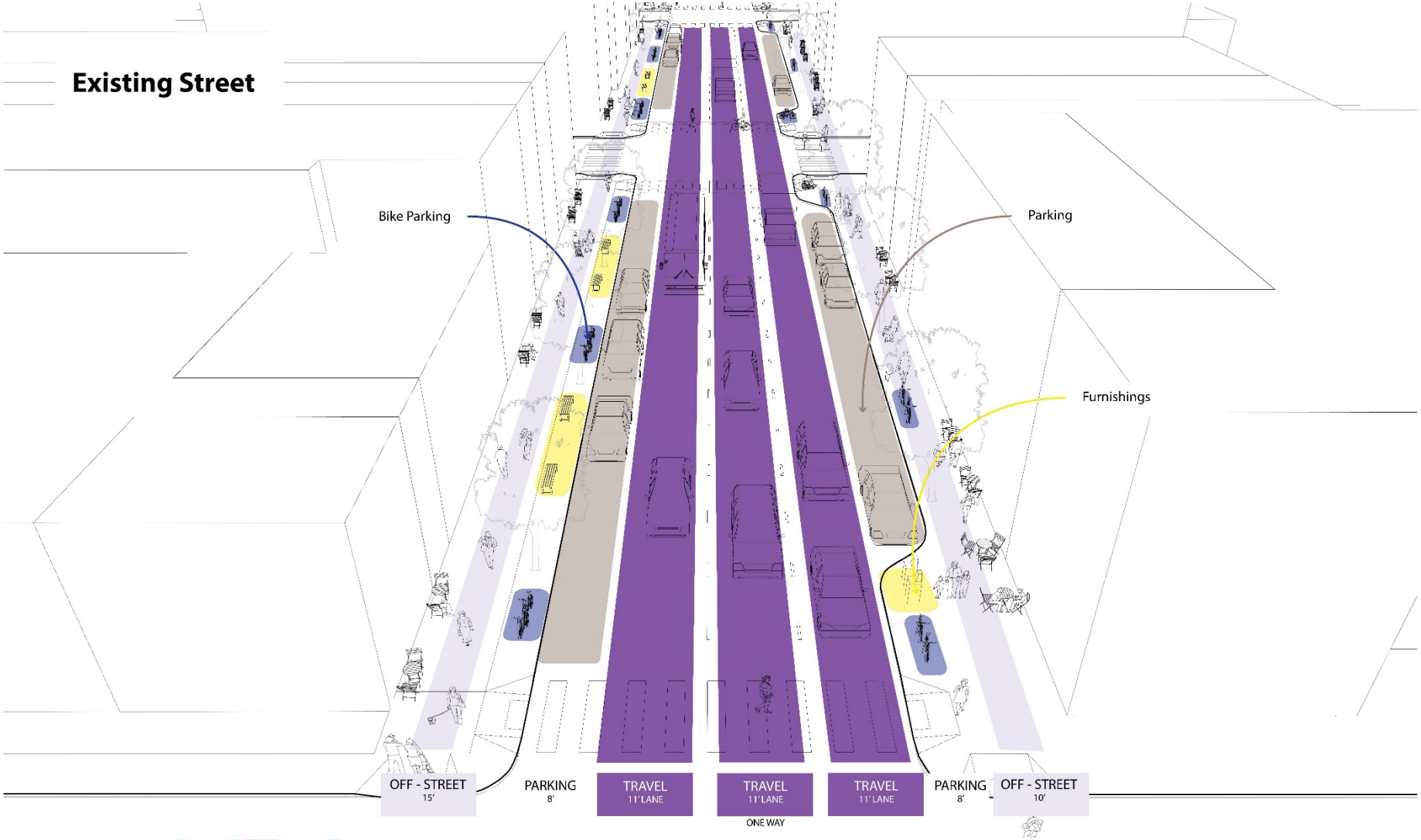
Existing Street



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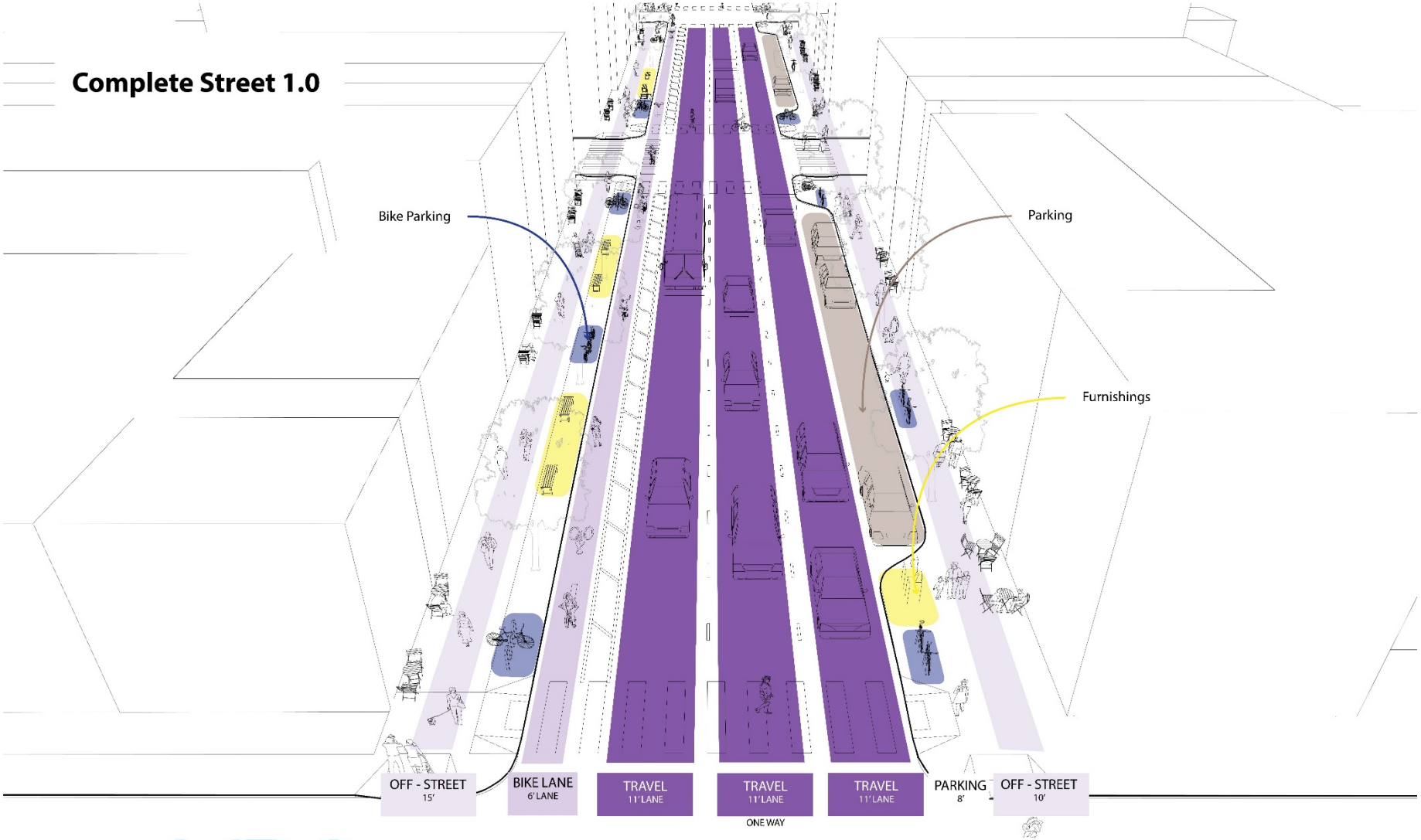
Complete Street 1.0



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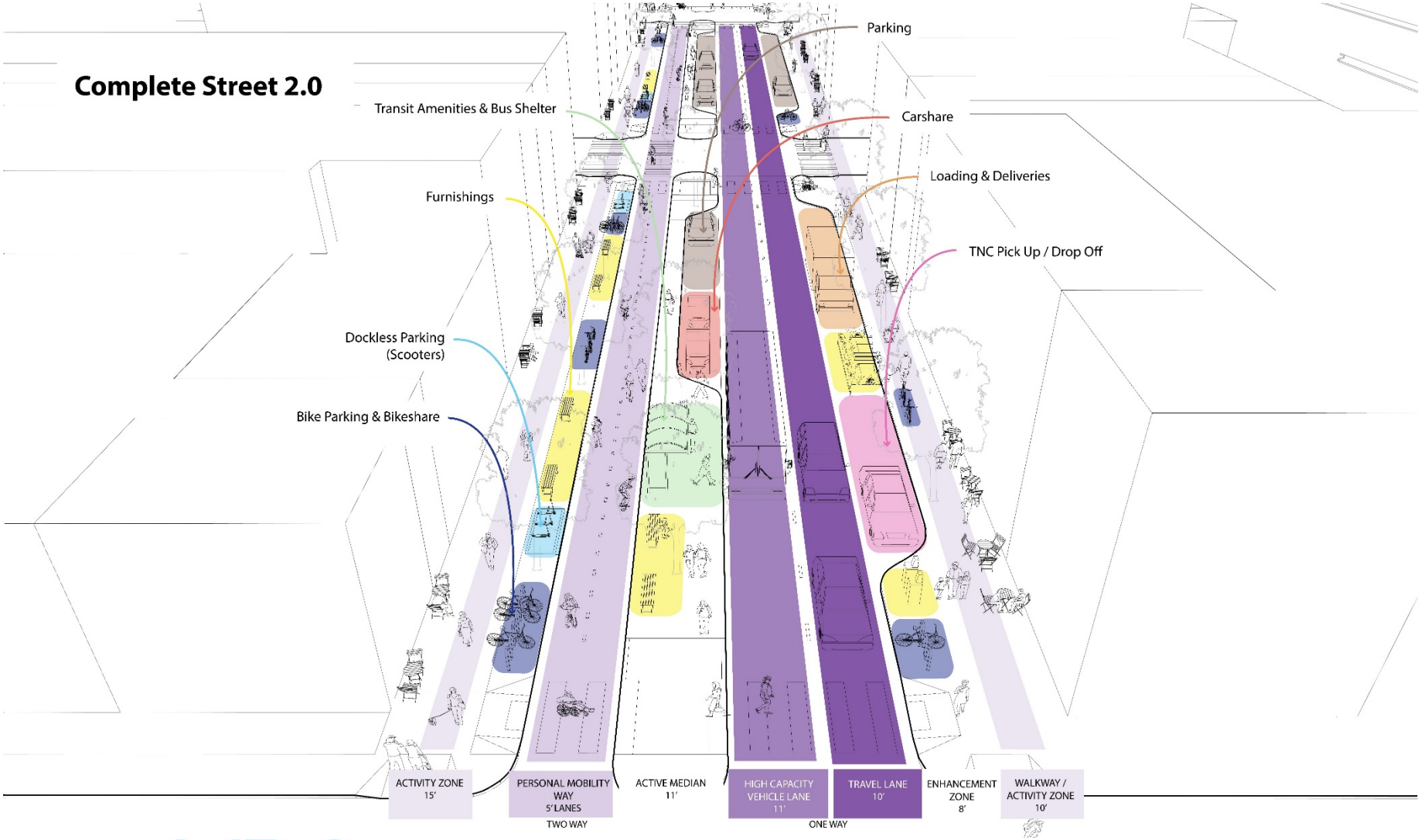
Complete Street 2.0



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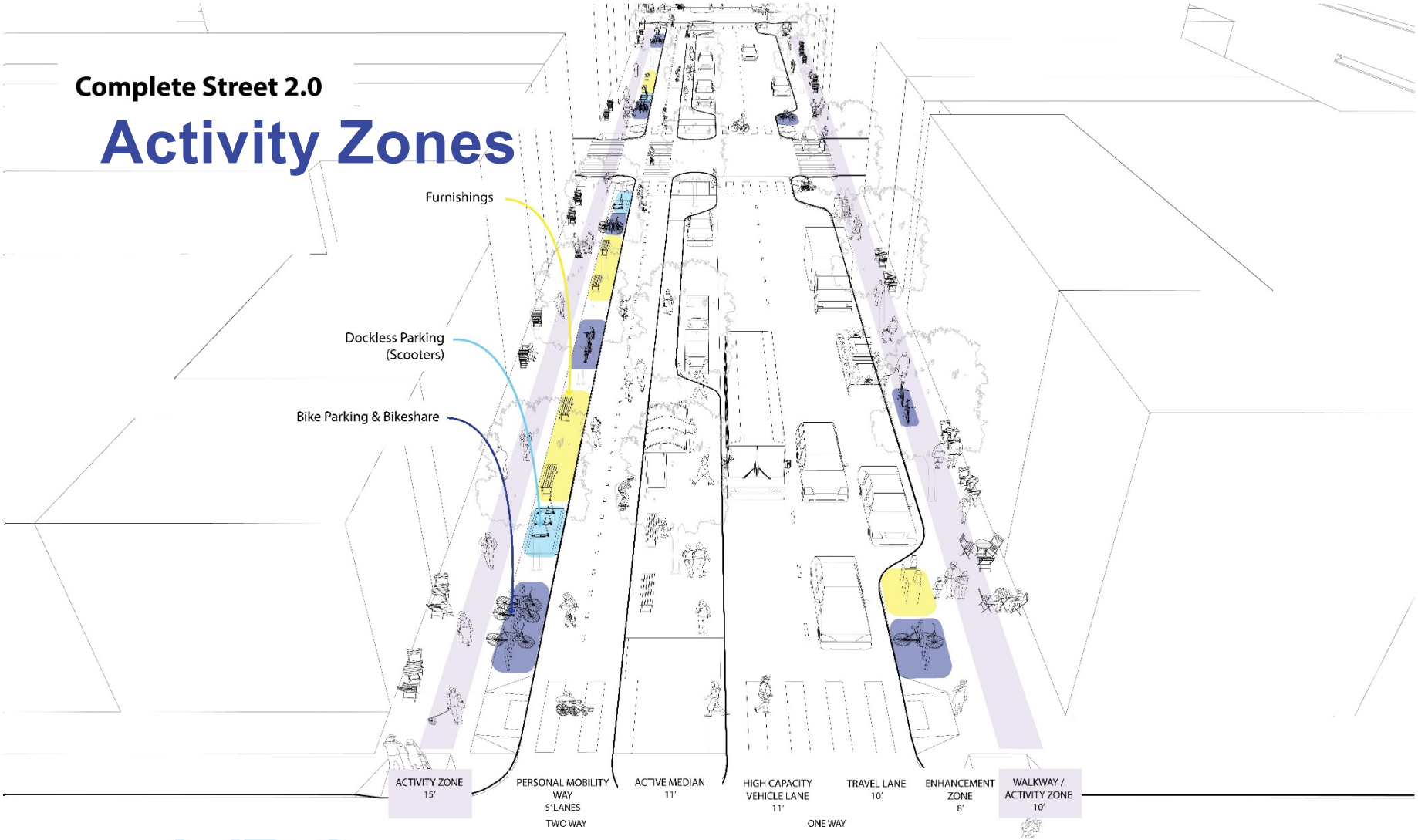
Complete Streets 2.0 in Practice

Design is guided by:

- **Mode**
- **Speed**
- **Person-Capacity**
- **Demand**

Complete Street 2.0

Activity Zones



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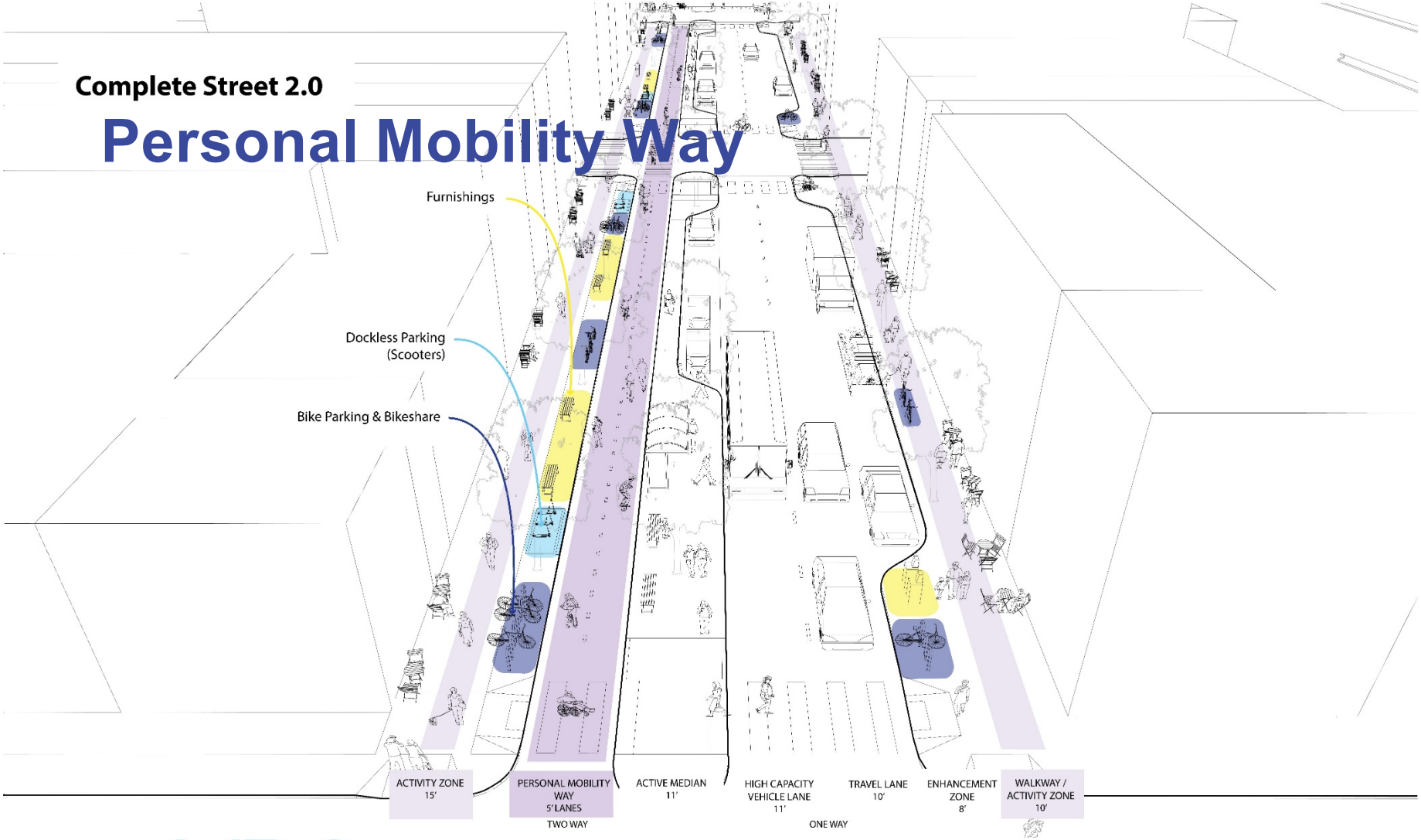
Personal Mobility Way



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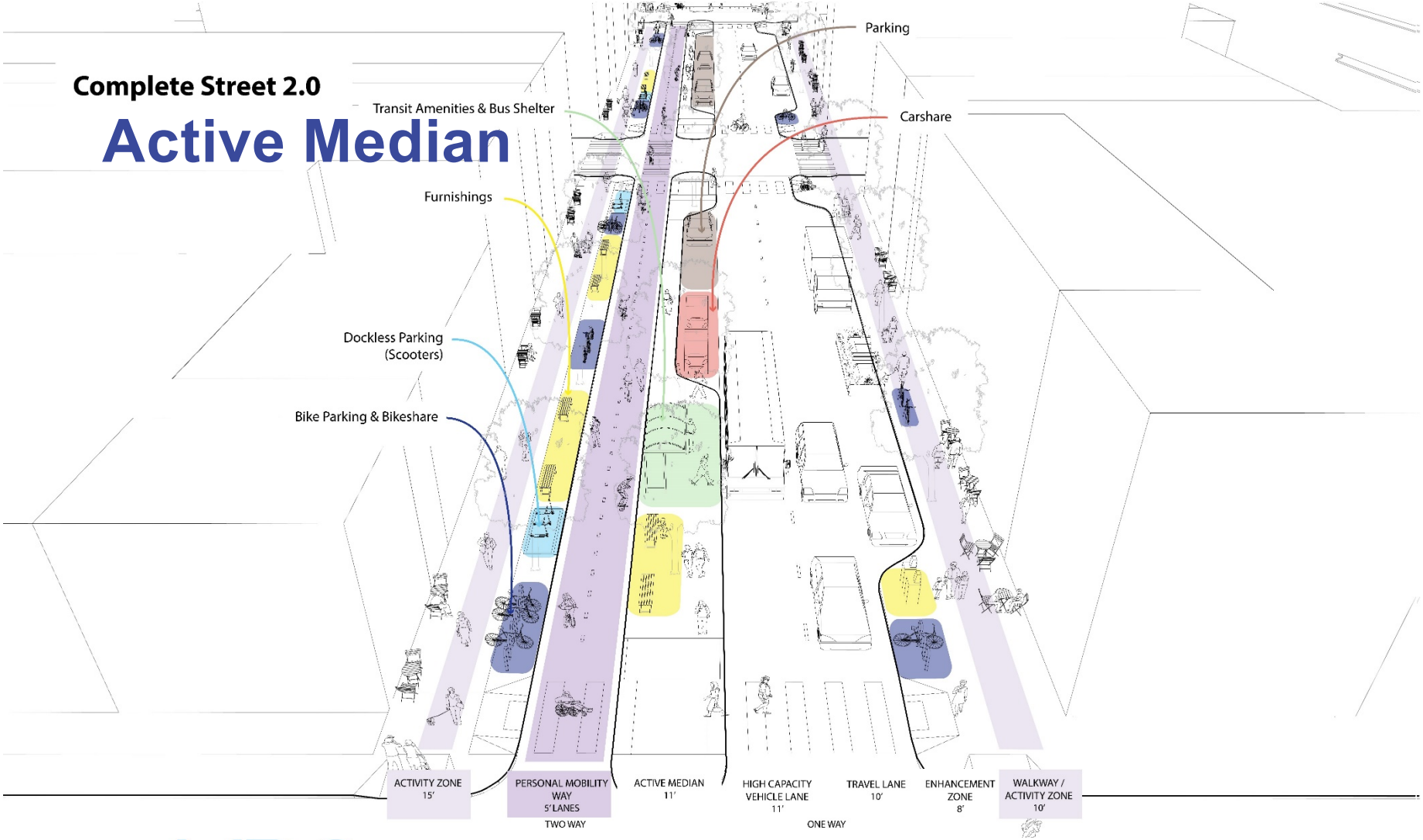
Active Median



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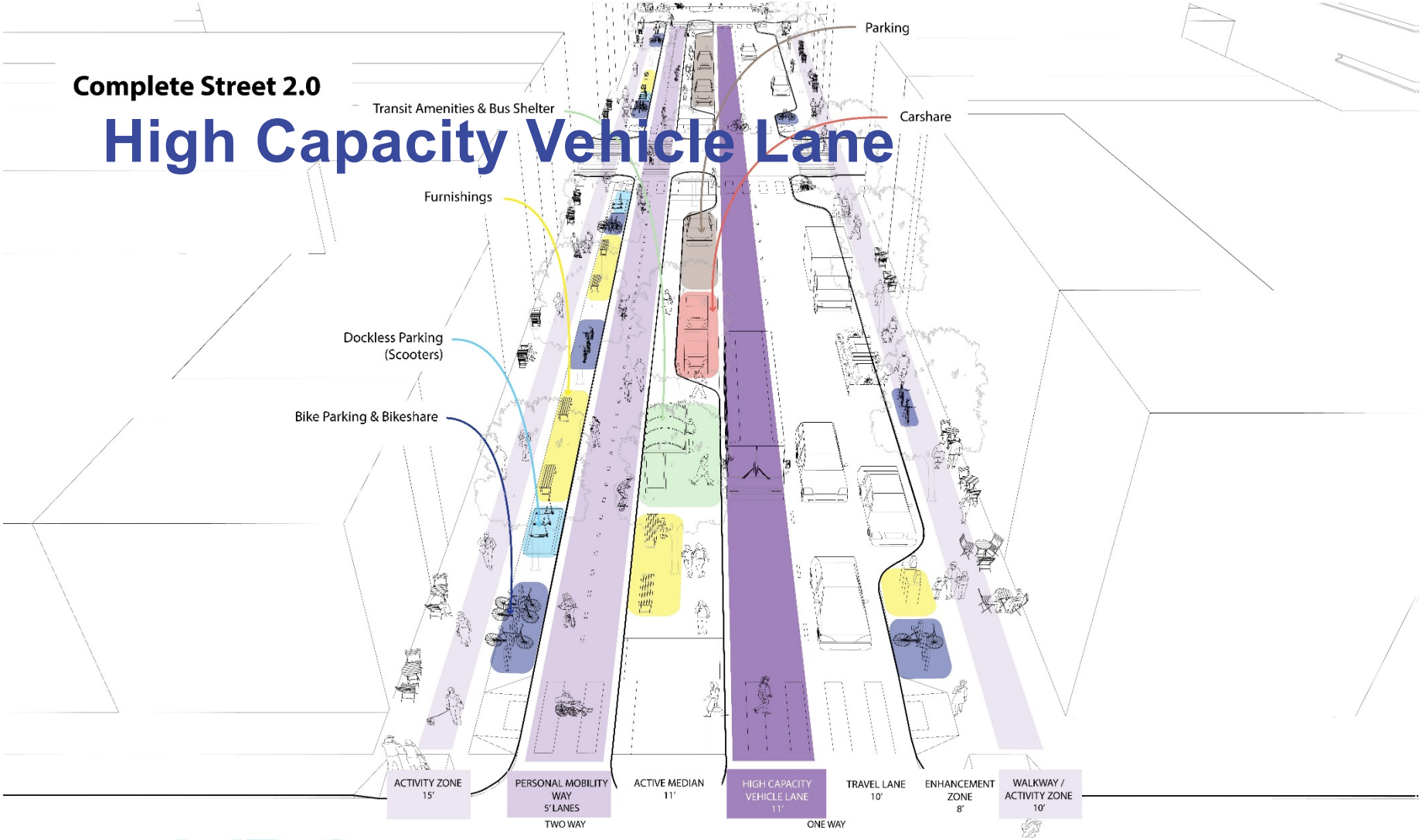
High Capacity Vehicle Lane



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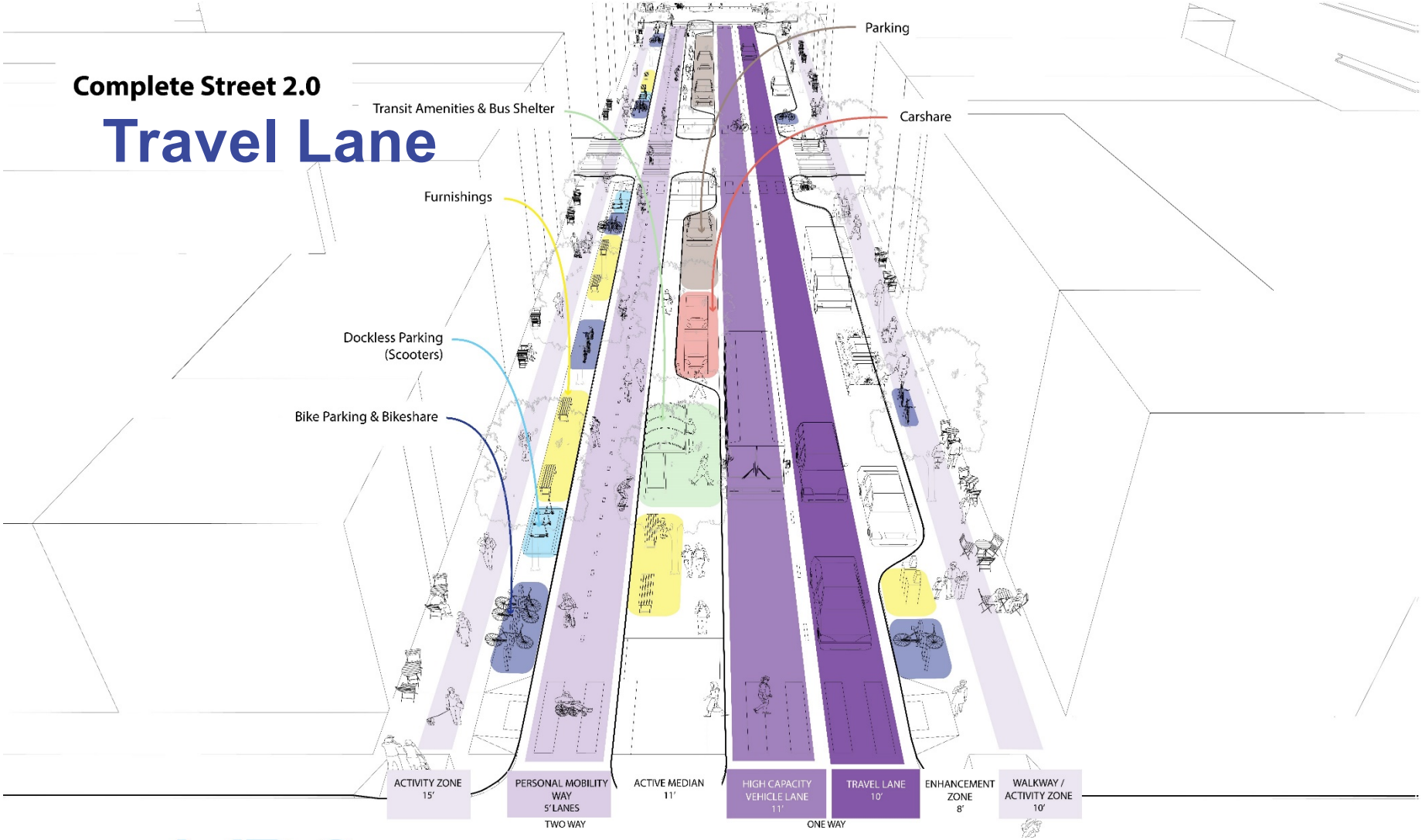
Travel Lane



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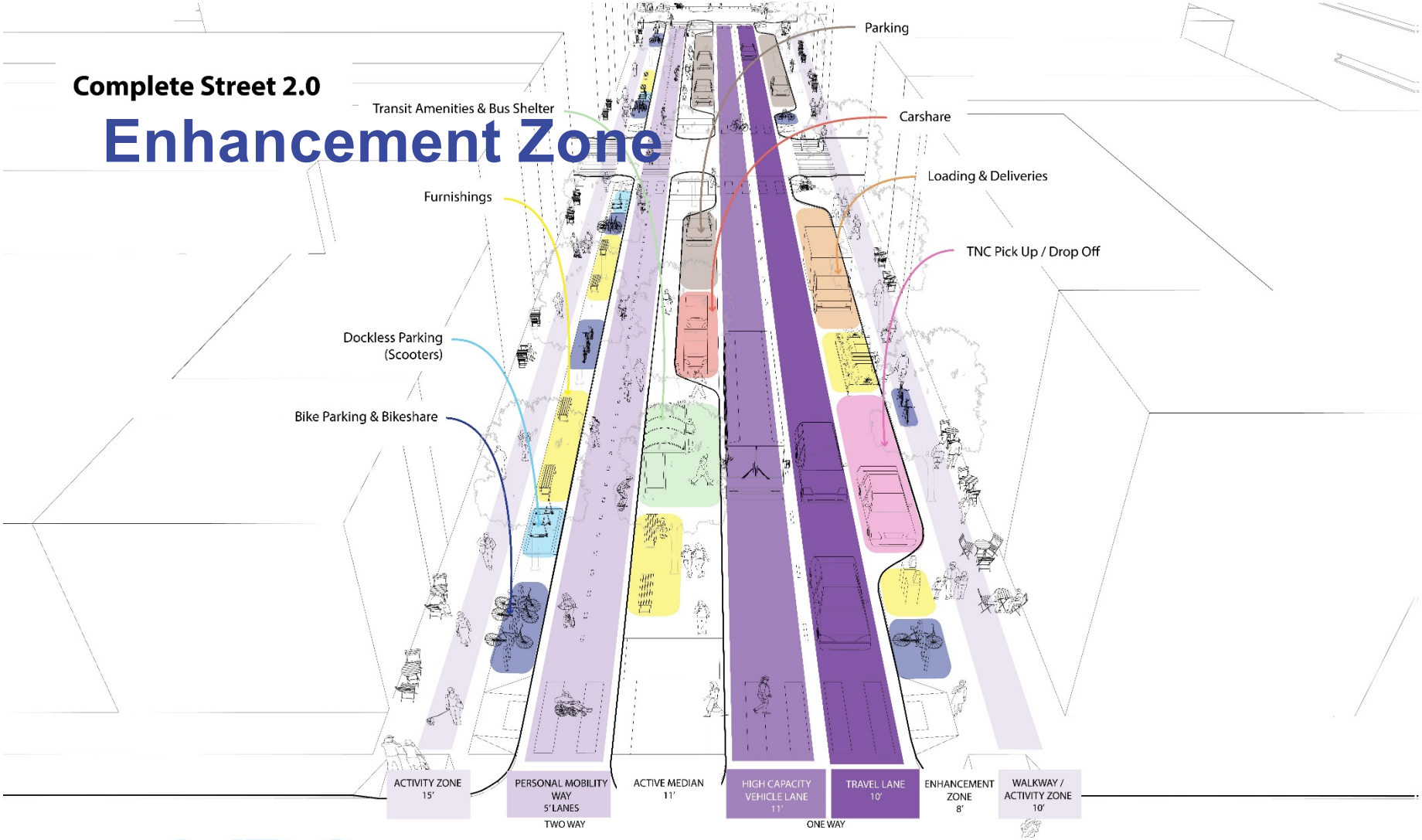
Enhancement Zone



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Complete Streets 2.0 in Practice

Design by **Mode**

Source: NACTO Urban Street Design Guide

Complete Streets 2.0 in Practice

Design for **Person-capacity**

A growing city,
a fixed right-of-way

Cars: 28 people / city block

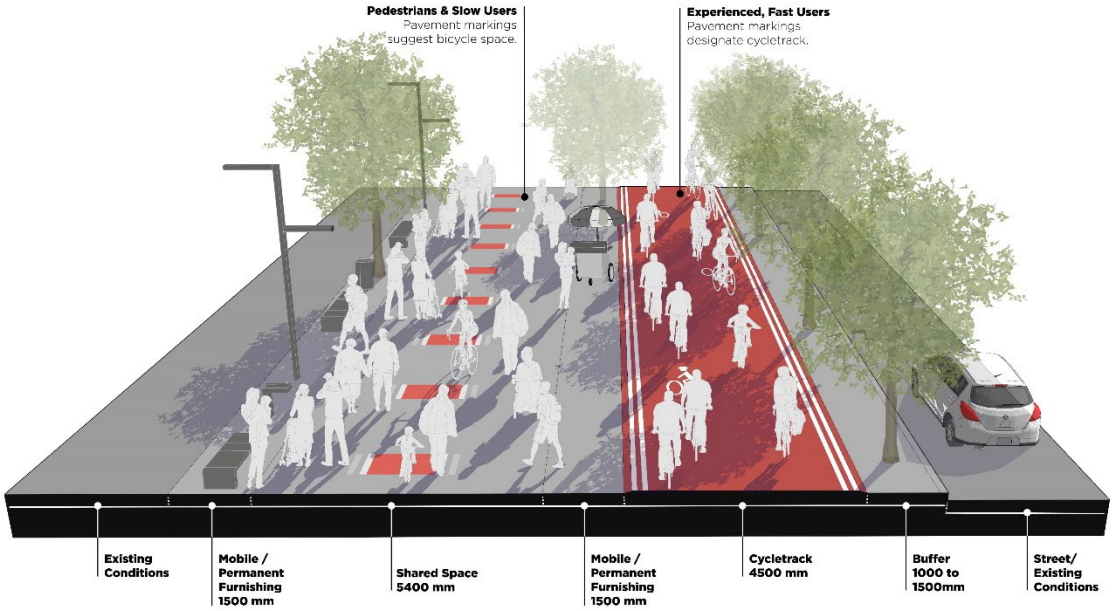
Buses: 225 people / city block

Walking: 1000 people / city block

Source: Portland Bureau of Transportation

Complete Streets 2.0 in Practice

Design by **Speed**



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Complete Streets 2.0 in Practice

Design for **Demand**

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BENEFITS AND RISKS: PEDESTRIANS

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- **Assumed Benefit:** Reduction in crashes since AVs automatically stop for pedestrians

- **Potential Risk:** Pedestrians will be highly regulated to avoid stop-and-go AV traffic

BENEFITS AND RISKS: BICYCLISTS

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BENEFITS AND RISKS: BICYCLISTS

- **Assumed Benefit**: Reduction in crashes and increased bike-sharing options
- **Potential Risk:** Attention to individual AV vehicles prioritizes road space for cars

BENEFITS AND RISKS: CARS

BENEFITS AND RISKS: CARS

- **Assumed Benefit:** Reduction in car use and ownership with shared, autonomous fleets

- **Potential Risk:** Increased car use as travelers eschew active modes and transit for the ease of AVs

BENEFITS AND RISKS: TRANSIT

BENEFITS AND RISKS: TRANSIT

- **Assumed Benefit:** AVs feed more riders to transit
- **Potential Risk:** Transit suffers as riders switch to shared-use ridesharing and AVs

BENEFITS AND RISKS: STREETS

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- **Assumed Benefit:** Excess street space can be converted to parks and open space

- **Potential Risk:** Cities will need to invest heavily in street repair and maintenance to avoid false signals for AVs using roadways

BENEFITS AND RISKS: PARKING

BENEFITS AND RISKS: PARKING

- **Assumed Benefit:** Shared AVs need fewer spaces and parking can be located in otherwise inconvenient locations

- **Potential Risk:** AVs will clog streets as they circulate – using streets like parking. Higher VMT from cars circulating or relocating to distant parking

BENEFITS AND RISKS: FREIGHT & DELIVERIES

BENEFITS AND RISKS: FREIGHT & DELIVERIES

- **Assumed Benefit:** Faster deliveries for on-demand retail and lower delivery costs

- **Potential Risk:** Job losses. Sidewalk congestion with driverless delivery pods

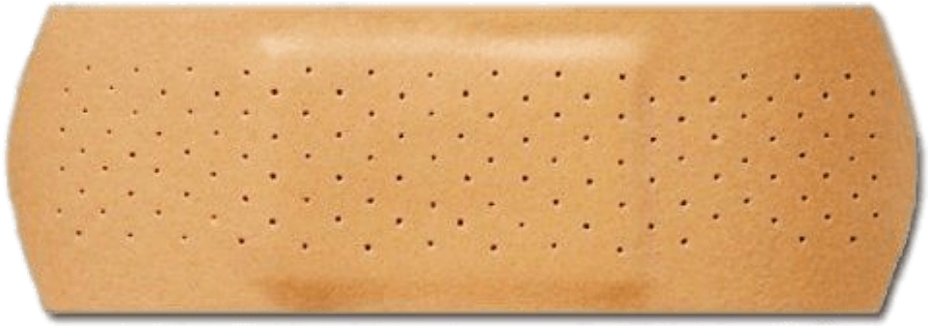
BENEFITS AND RISKS: REVENUE

BENEFITS AND RISKS: REVENUE

- **Assumed Benefit:** Cities can rethink revenue sources as gasoline tax remittances shrink. The new frameworks can include incentives for active and low impact modes

- **Potential Risk:** Job losses. Loss of office and hotel taxes as drivers use vehicles for overnight trips and work. Loss of auto permits, tickets and parking revenue

BENEFITS AND RISKS: SAFETY

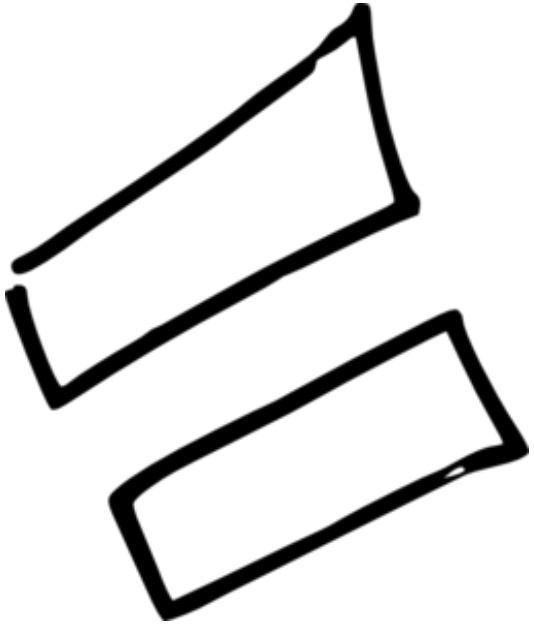


BENEFITS AND RISKS: SAFETY

- **Assumed Benefit:** Fewer collisions between cars and vulnerable roadway users

- **Potential Risk:** AVs can be hacked. Ethical considerations for unavoidable crashes

BENEFITS AND RISKS: EQUITY



BENEFITS AND RISKS: EQUITY

- **Assumed Benefit:** Travel options increase for mobility-impaired populations such as teenagers and the elderly. Greater number of options outside city centers

- **Potential Risk:** Cars can be programmed to avoid certain situations and geographic locations

CROSS SECTION EXERCISE

Urban Location

Street: ***Las Olas Blvd, Ft. Lauderdale, FL***

ROW: ***81'***

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CROSS SECTION EXERCISE

Suburban Location

Street: ***Oakland Park Blvd, Oakland Park, FL***

ROW: ***100'***

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CROSS SECTION EXERCISE

‘Rural’ Location

Street: ***SW 45th Street, Davie, FL***

ROW: ***72’***

CROSS SECTION EXERCISE

GOAL

- Design your ideal cross section.
- Balance the needs of a variety of road users.

At a minimum, strive to achieve the following:

- ***Urban:*** All Ages and Abilities micro-mobility facility, improved pedestrian experience, improved transit experience.
- ***Suburban:*** High-quality transit experience, improved micro-mobility experience, minimum of 2 car lanes.
- ***Rural:*** Improved walking and biking experience, improved freight access, maintain car access.

9th @ HOLLADAY
6' MM PARKING
6' MM PARKING
5' PLANTING/ TREE
6' PLANTING/ TREE
11' LANE
9' PLANTED MEDIAN
11' LANE
6' PLANTING W/ TREE
10' SIDEWALK
8' FURNISHING ZONE
5' PMM 3' BUFFER
11' LANE
12' LANE
11' LANE
7' FREE PARKING
5' PMM 3' BUFFER
6' SIDEWALK
7' PLATFORM
10' LANE
10' LOADING ZONE
8' PAID PARKING
8' PICK UP DROP OFF ZONE
7' LOADING ZONE
9' LANE
10' PRO-TIME PARKING
11' LANE
10' LANE
12' LANE
12' SIDEWALK
10' MEDIAN/ REFUGE ISLAND
12' LANE
7' PAID PARKING
10' SIDEWALK
8' SIDEWALK

CROSS SECTION EXERCISE

RULES

You…

- must stay within the right-of-way (ROW);
- can change curb lines, lane widths, etc.;
- can stack elements that can occur within the same zone; and
- can propose elements that are not part of the game pieces (draw them out!)

CROSS SECTION EXERCISE

ASSUMPTIONS

- Certain uses have MIN and MAX widths:

ITEM	MIN	MAX
SIDEWALK	4’	-
STREET TREES	4’	-
CAR PARKING	7’	8’
PRO-TIME PARKING	10’	-
MICRO-MOBILITY LANE	5’	6’
MICROMOBILITY LANE BUFFER	2’	-
2-WAY MICRO-MOBILITY LANE (BUFFER REQUIRED)	10’	-
STANDARD TRAVEL LANE	10’	-
LANES w/ TRANSIT (EXISTING)	10’	-
LANES w/ TRANSIT (PROPOSED)	11’	-
SIDEWALK	4’	-

10 Steps to Be New Mobility Ready

1. Define success
2. Prepare for rapid flux
3. Engage communities, constituents, clients, and new allies
4. Adopt a new mobility resolution
5. Prepare for disruption at city hall
6. Design high performing, human-oriented streets
7. Take advantage of technology now
8. Focus on transitions as transportation and technology advances
9. Adopt pilot projects as an implementation tool
10. Continue designing human-oriented communities

Contact Us

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