



Context *Driven*  
Access & Mobility for All  
Users



**Context  
Driven**  
Access & Mobility For All Users 1.0

**MDOT**  
MARYLAND DEPARTMENT  
OF TRANSPORTATION  
STATE HIGHWAY  
ADMINISTRATION

FALL 2019

# It's Time



# Our Commitment to Maryland



# Roadmap



- People ***Driven***



- Data ***Driven***



- Context ***Driven***



- Exploring Your Context



- Next Steps



# People*Driven*

Our Commitment to a Safer Maryland Means Thinking Differently



# People Going Places



# Data*Driven*

Defining Maryland's Context Zones

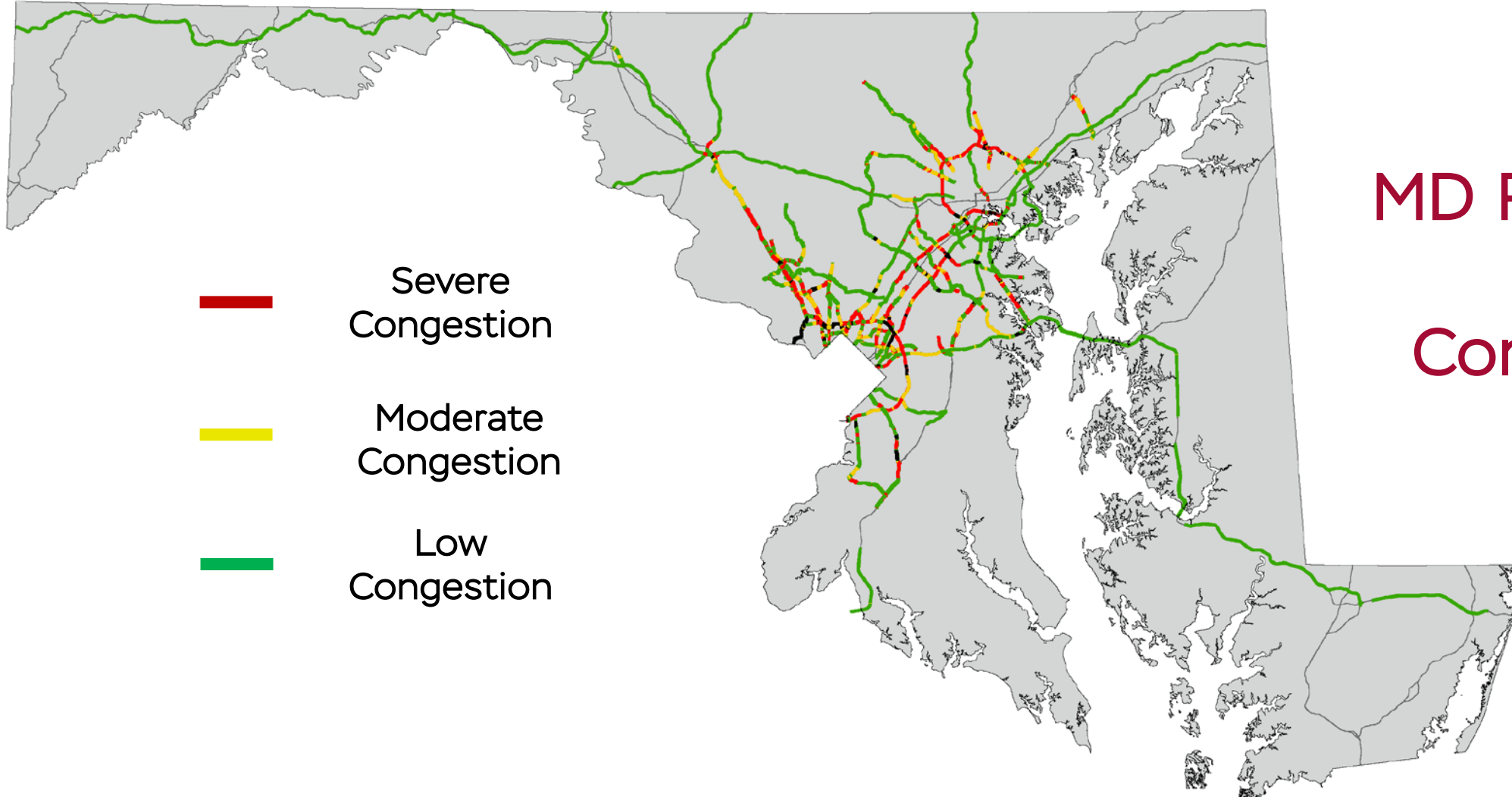


# Where and How Are People Moving?



MD Roadways

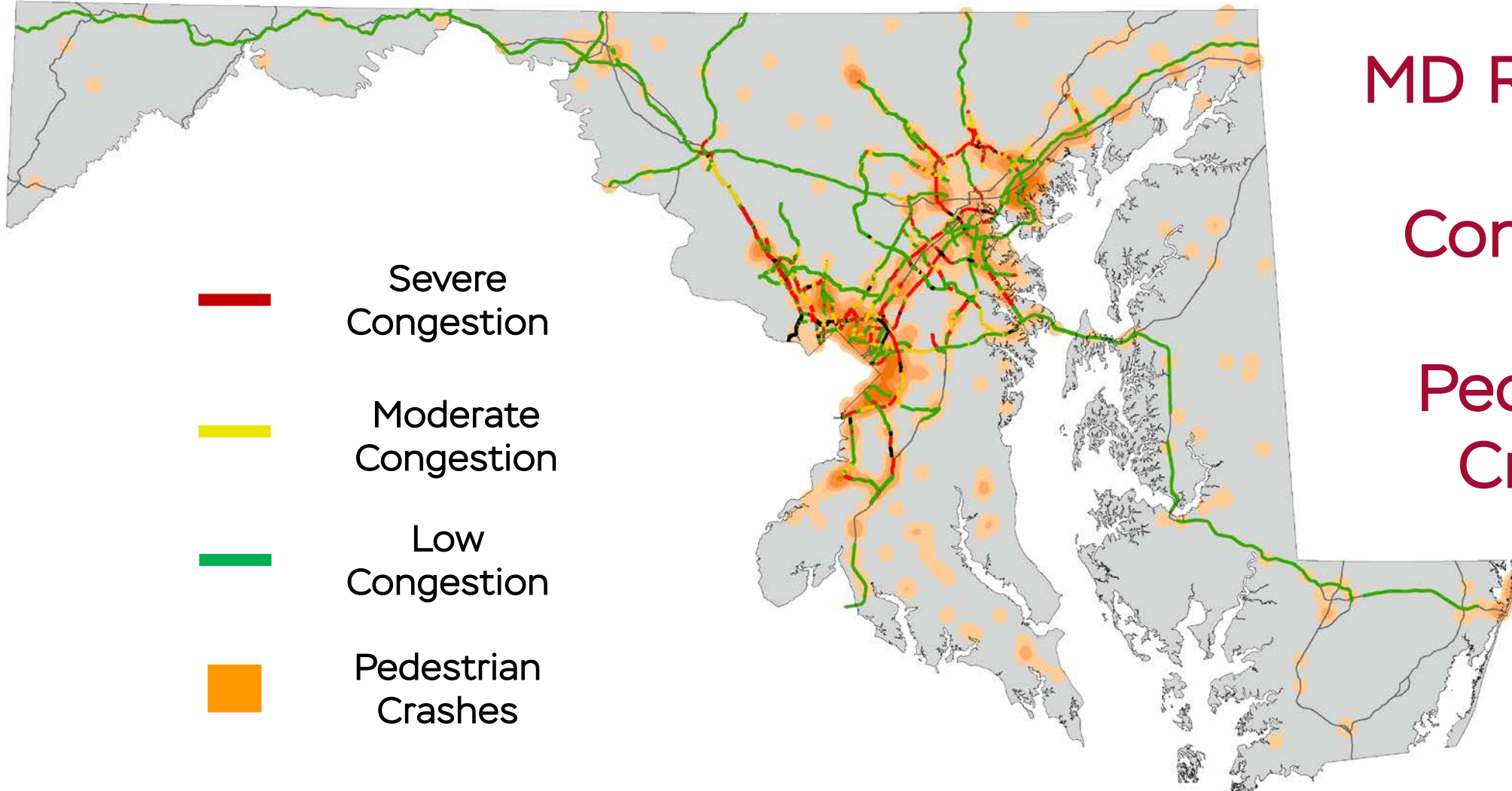
# Where and How Are People Moving?



MD Roadways  
+  
Congestion



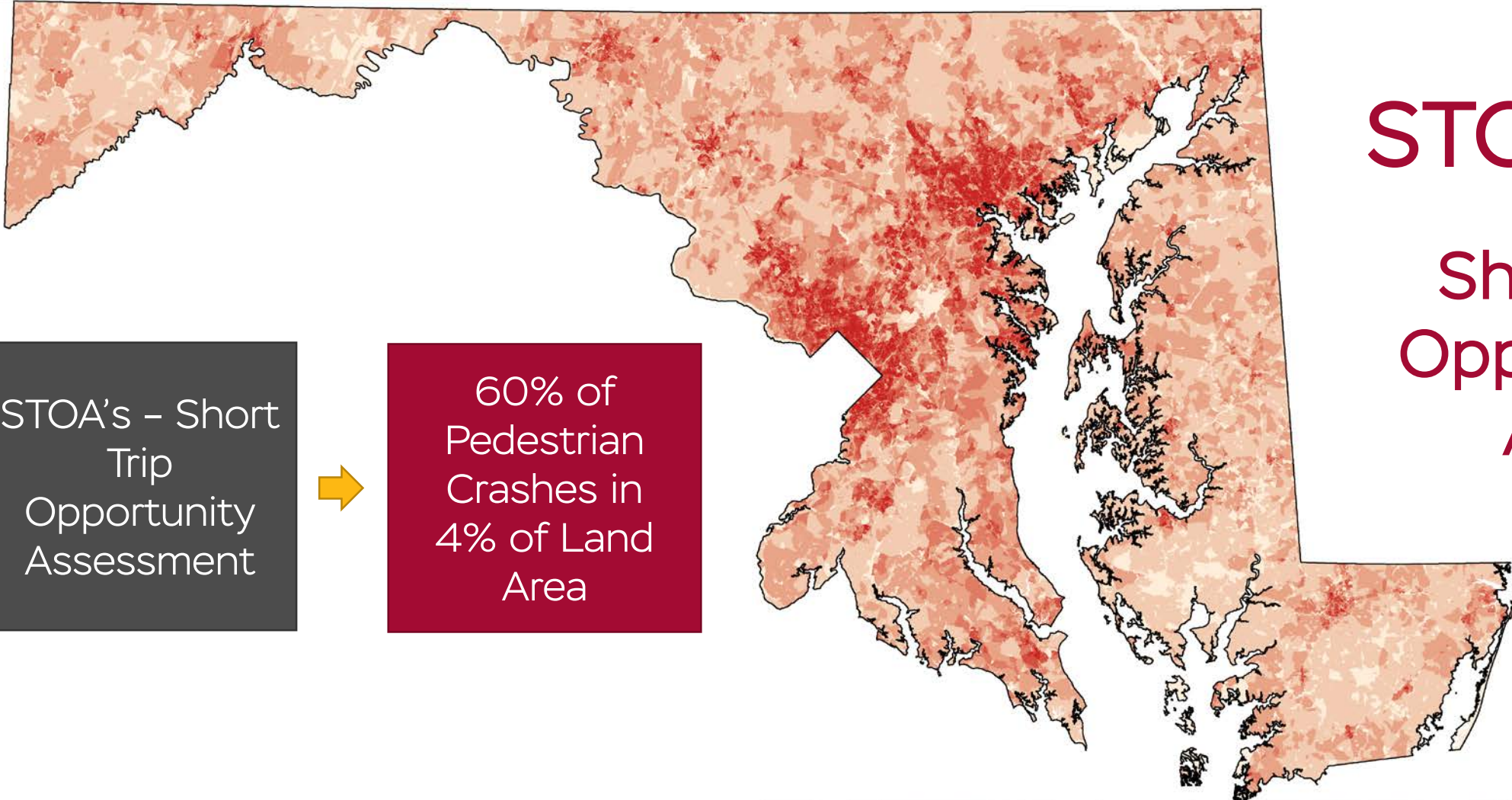
# Where and How Are People Moving?



- Severe Congestion
- Moderate Congestion
- Low Congestion
- Pedestrian Crashes

MD Roadways  
+  
Congestion  
+  
Pedestrian  
Crashes

# Where and How Are People Moving?



## STOA Map

Short Trip  
Opportunity  
Areas

STOA's - Short  
Trip  
Opportunity  
Assessment

60% of  
Pedestrian  
Crashes in  
4% of Land  
Area



# We Realized

A traditional design approach relies on the Federal designation of **urban vs. rural** as the primary context for proposed solutions.

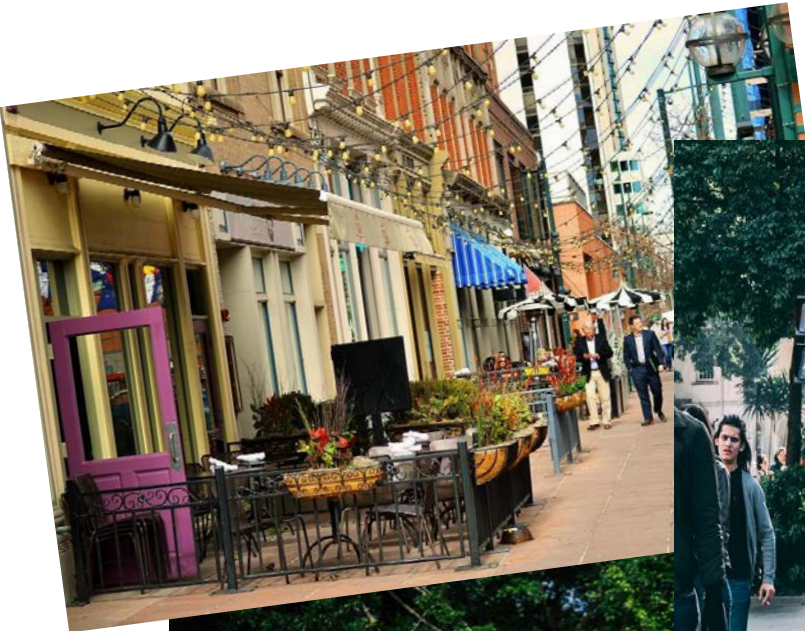
This binary approach does not account for the **unique characteristics of different areas** that ultimately affect the roadway design and resulting safety.



# Context *Driven*

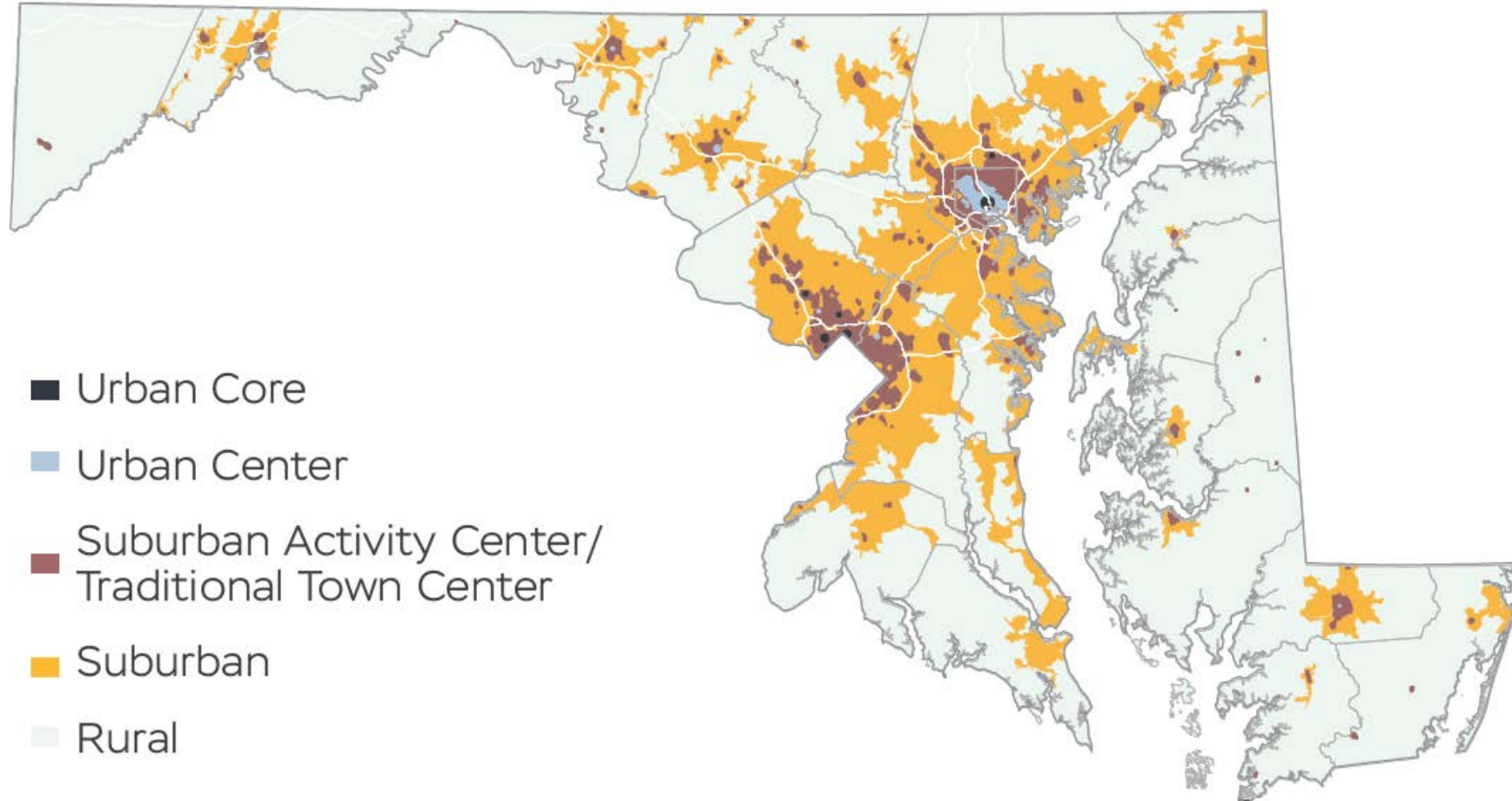
Defining Context in Maryland

# The Way People Move Is Driven by the Context They Are In





# Maryland Context Zones





# Maryland Context Zones

## MDOT SHA Context Zones



Urban Core



Urban Center



Traditional  
Town Center



Suburban  
Activity Center



Suburban



Rural

Federal  
Designations

Urban

Rural

CREATING  
**GUIDANCE**  
for today's **TRANSPORTATION CHALLENGES**

# Balancing Access & Mobility

MDOT SHA  
Context Zones



Urban Core



Urban Center



Traditional  
Town Center



Suburban  
Activity Center



Suburban



Rural

How many places  
can you get to?



How far can  
you go?

# MDOT SHA Context Zones

The transportation challenges we are facing cannot be addressed with the current classification system and corresponding toolkit.

We need new techniques and solutions to achieve safety, accessibility, and mobility goals framed by the surrounding land-use.



# Context *Driven*

Exploring the Context Guide

# An Evolving Resource



- Guide with Context Profiles
- Toolbox of Treatments
- Library of Case Studies

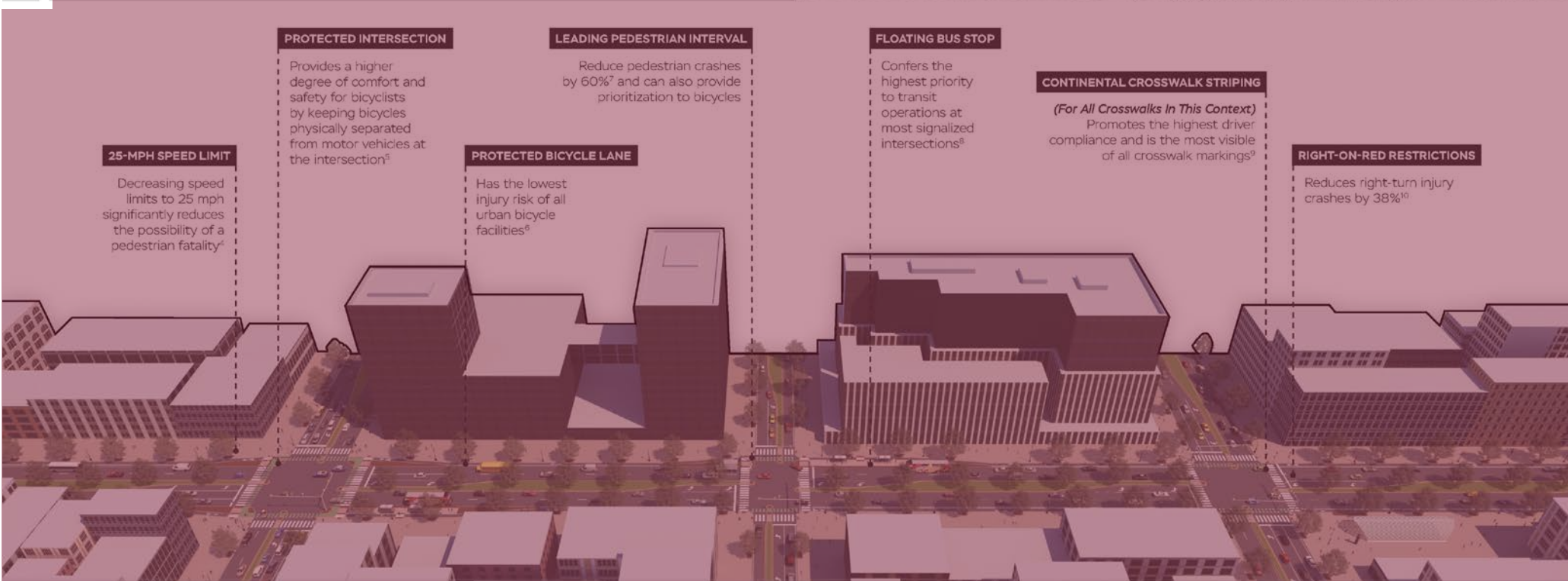




## URBAN CORE

Considered the typical downtown or central business district area, the **Urban Core** zone is defined by a high diversity of uses, including multi-family residential, office, retail, entertainment, civic, and cultural facilities, as well as a high density of development. Development includes high-rise structures with minimal setbacks, high street wall frontage, and minimal building gaps. Off-street parking is

typically included. Because of its development density and diversity of uses, this land-use pattern generates a high prevalence of non-motorized trips, including walking, transit, and bicycling. While the need for mobility through these areas does exist, it is far exceeded by the need for internal circulation within the zone. The Urban Core represents less than one tenth of one percent of the land area in the State.



**25-MPH SPEED LIMIT**  
Decreasing speed limits to 25 mph significantly reduces the possibility of a pedestrian fatality<sup>4</sup>

**PROTECTED INTERSECTION**  
Provides a higher degree of comfort and safety for bicyclists by keeping bicycles physically separated from motor vehicles at the intersection<sup>5</sup>

**LEADING PEDESTRIAN INTERVAL**  
Reduce pedestrian crashes by 60%<sup>7</sup> and can also provide prioritization to bicycles

**PROTECTED BICYCLE LANE**  
Has the lowest injury risk of all urban bicycle facilities<sup>6</sup>

**FLOATING BUS STOP**  
Confers the highest priority to transit operations at most signalized intersections<sup>8</sup>

**CONTINENTAL CROSSWALK STRIPING**  
*(For All Crosswalks In This Context)*  
Promotes the highest driver compliance and is the most visible of all crosswalk markings<sup>9</sup>

**RIGHT-ON-RED RESTRICTIONS**  
Reduces right-turn injury crashes by 38%<sup>10</sup>

### DATA-DRIVEN TRANSFORMATIONS

The six-lane undivided section with a center turn-lane resulted in both a high vehicular and pedestrian crash rate. Community members didn't feel comfortable crossing the street on foot or traveling to the metro

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*In the Urban Core, multiple modes of transportation and a compact road network help travelers reach points of interest located throughout the area.*



1

Zone Name & Icon



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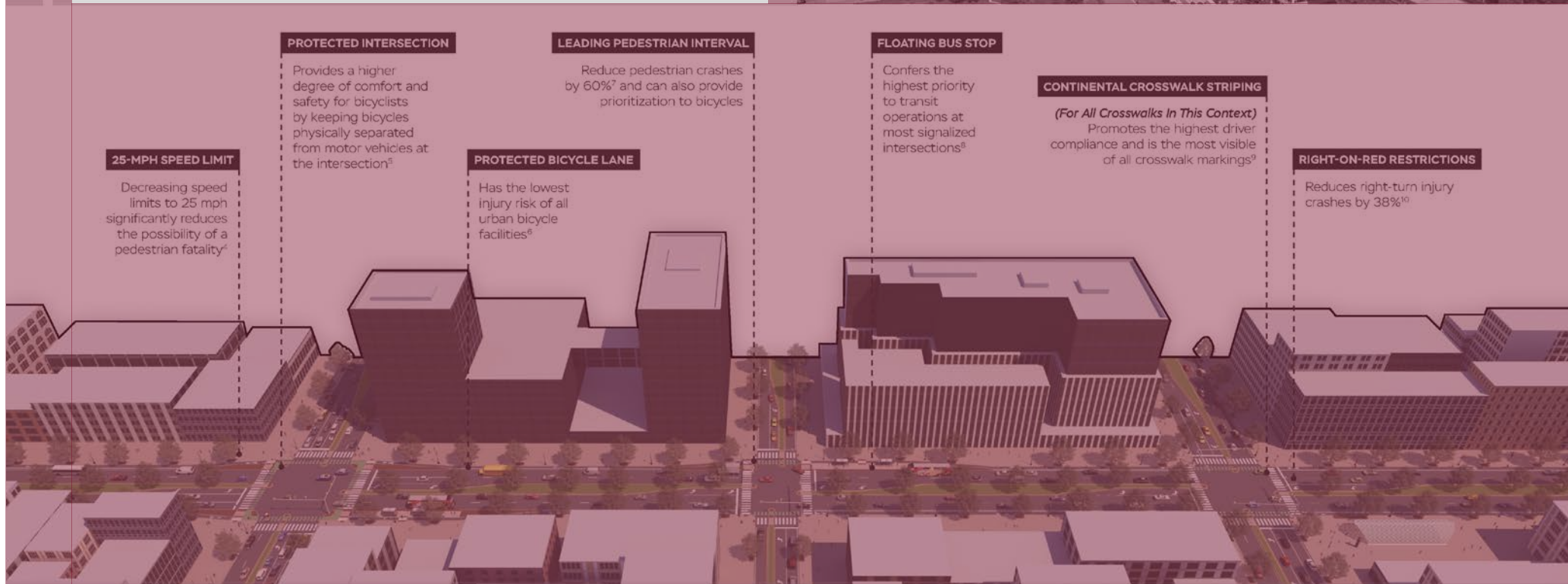
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Locations in Maryland

- Baltimore
- Bethesda
- Friendship Village
- Rockville
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## 2

### Typical Characteristics





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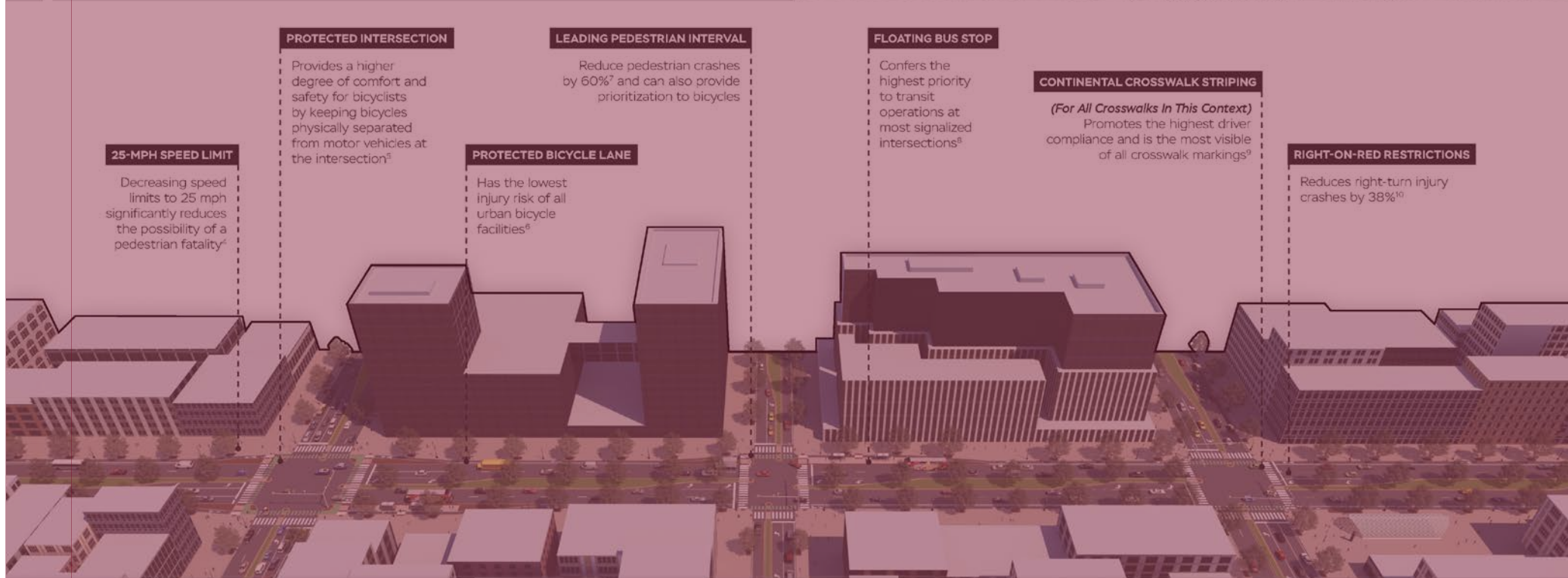
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AREAS of **need**

- TRAVEL OPERATIONS
- SAFETY
- ACCESSIBILITY
- CONNECTIVITY
- STATE OF GOOD REPAIR
- QUALITY OF SERVICE

## 3

### Representative Communities





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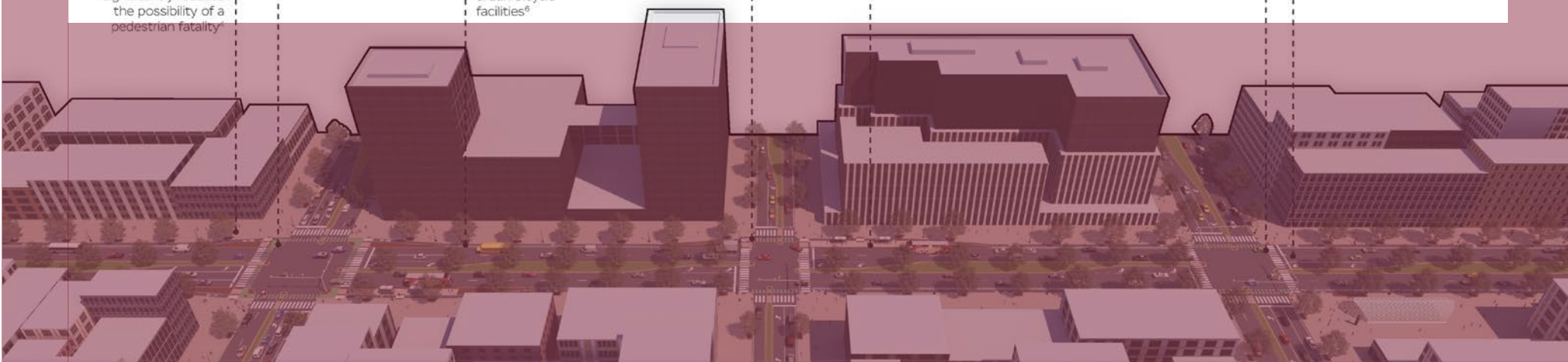
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Proven Treatments





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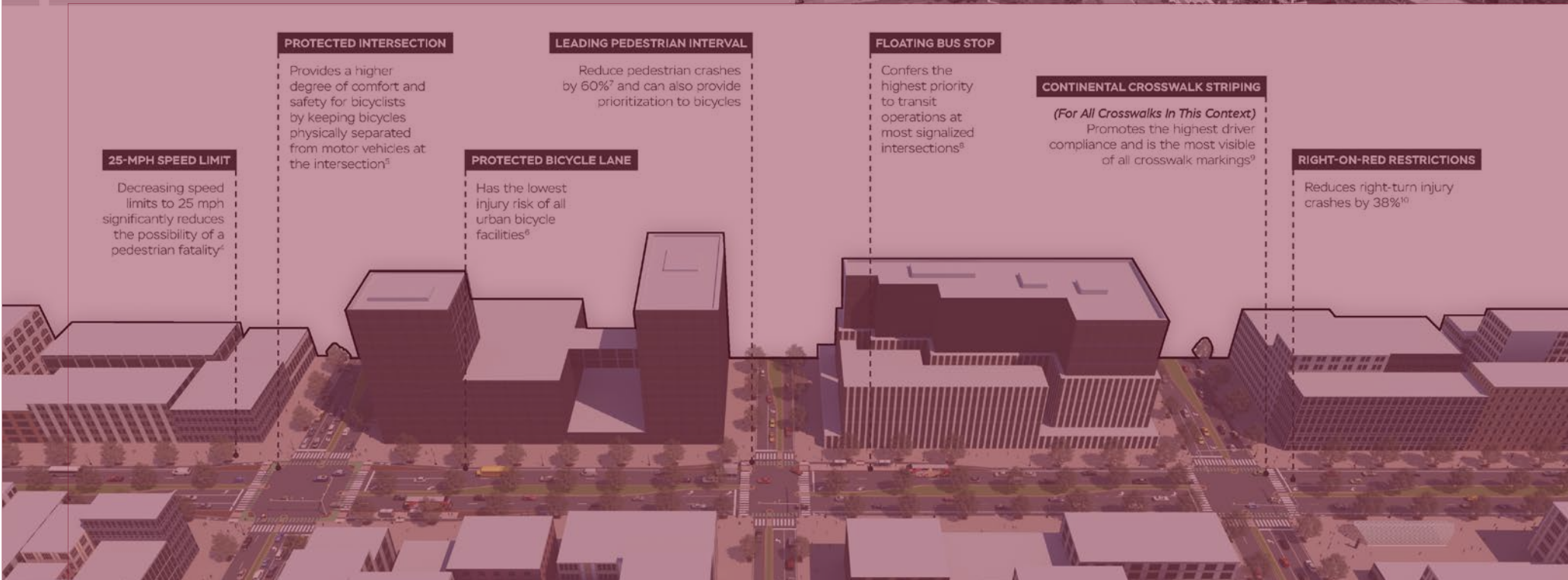
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# 6

## Context Access & Mobility Diagram





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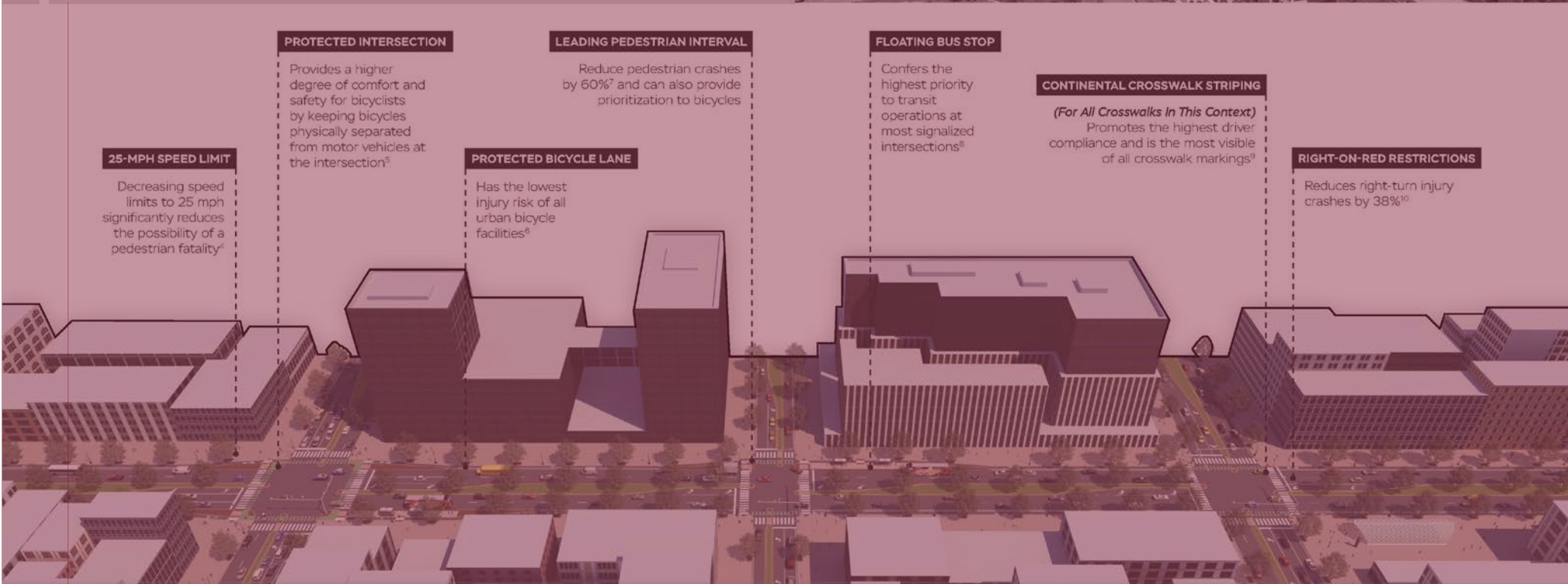
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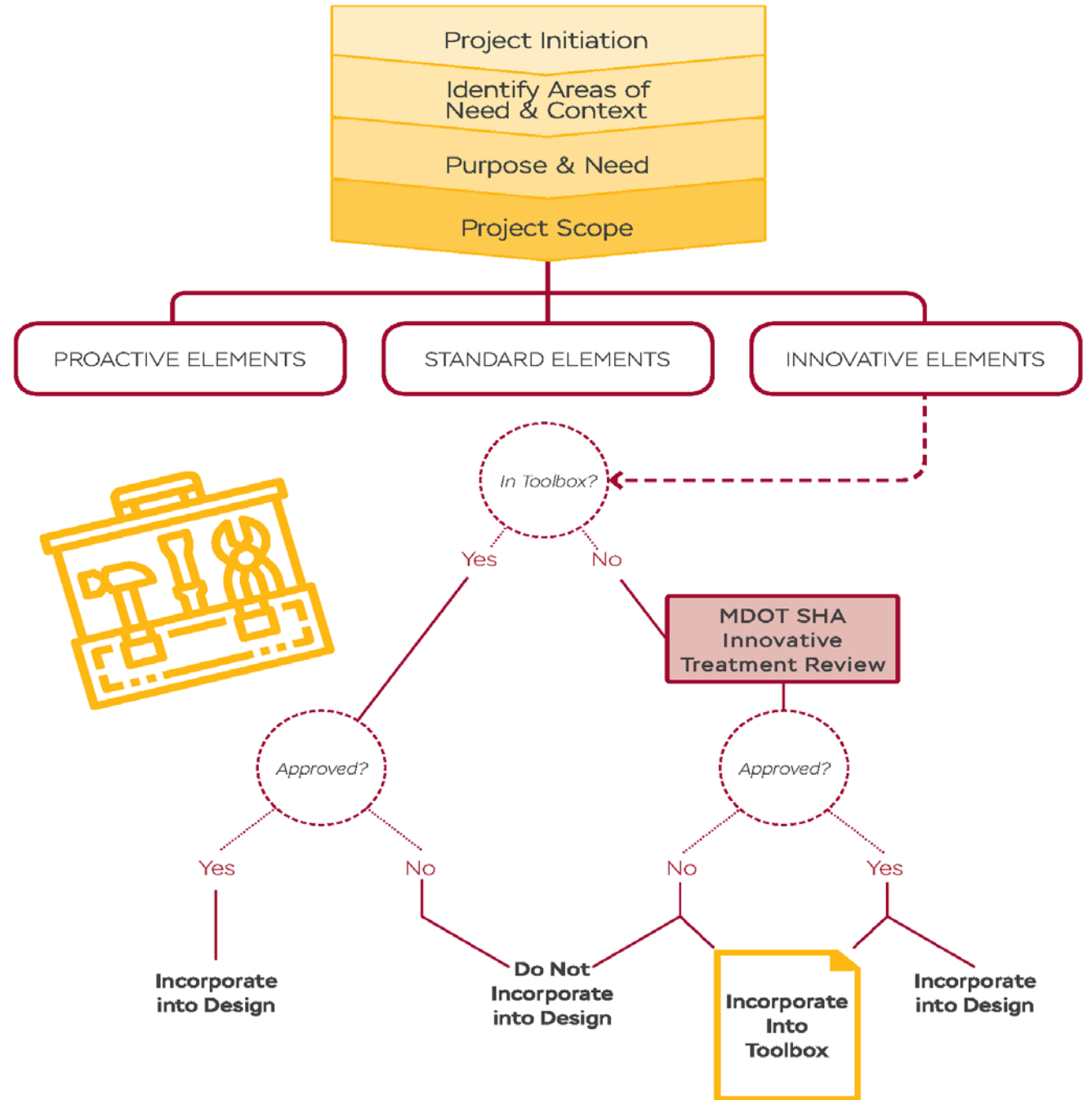


Areas of Need



# A New Approach

- Flexible
- Encourages Innovation
- Continuously Updated





# Next Steps

Continually Supporting Innovative Solutions

CREATING

# GUIDANCE

for today's **TRANSPORTATION CHALLENGES**

Updated Best Practices

Case Studies

Implementation of  
Lessons Learned

Stakeholder Feedback



## “Living” Context Guide

- Up-to-date tools based on current community feedback
- Proven solutions rooted in the surrounding context
- Flexibility to encourage innovation and community-specific solutions





# Our Commitment

Creating a...

✓ **SAFE**

✓ **HIGH QUALITY**

✓ **EFFICIENT**

**...system for all Marylanders.**



# THANK YOU!



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Questions?