

# NACTO Urban Bikeway Design Guide

State of the Practice Solutions

## Cycle Tracks Protected Bikeways







**Joshuah David Mello, AICP**  
*Chief Transportation Official*  
*City of Palo Alto*  
*Certified NACTO Trainer*

- Alta Planning + Design
- City of Atlanta
- City of Wilmington, NC
- Native of Boston



# Cycle Tracks (Protected Bikeways)

*A cycle track is an exclusive bike facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane.*

# Applications

- Streets with high motor vehicle speeds
- Streets with multiple travel lanes
- Streets with double parking or heavy loading
- Streets with high parking turnover
- Downtowns and main streets
- On-street trail connections
- Places with lots of bicyclists
- Places where you want to attract bicyclists
- Place where you want to **REDUCE** stress



# Applications

**1/2**

use parked cars



**1/3**

use plastic posts



**1/4**

use curbs



**a few**

use planters



**2/3**

are one-way



**1/3**

are two-way



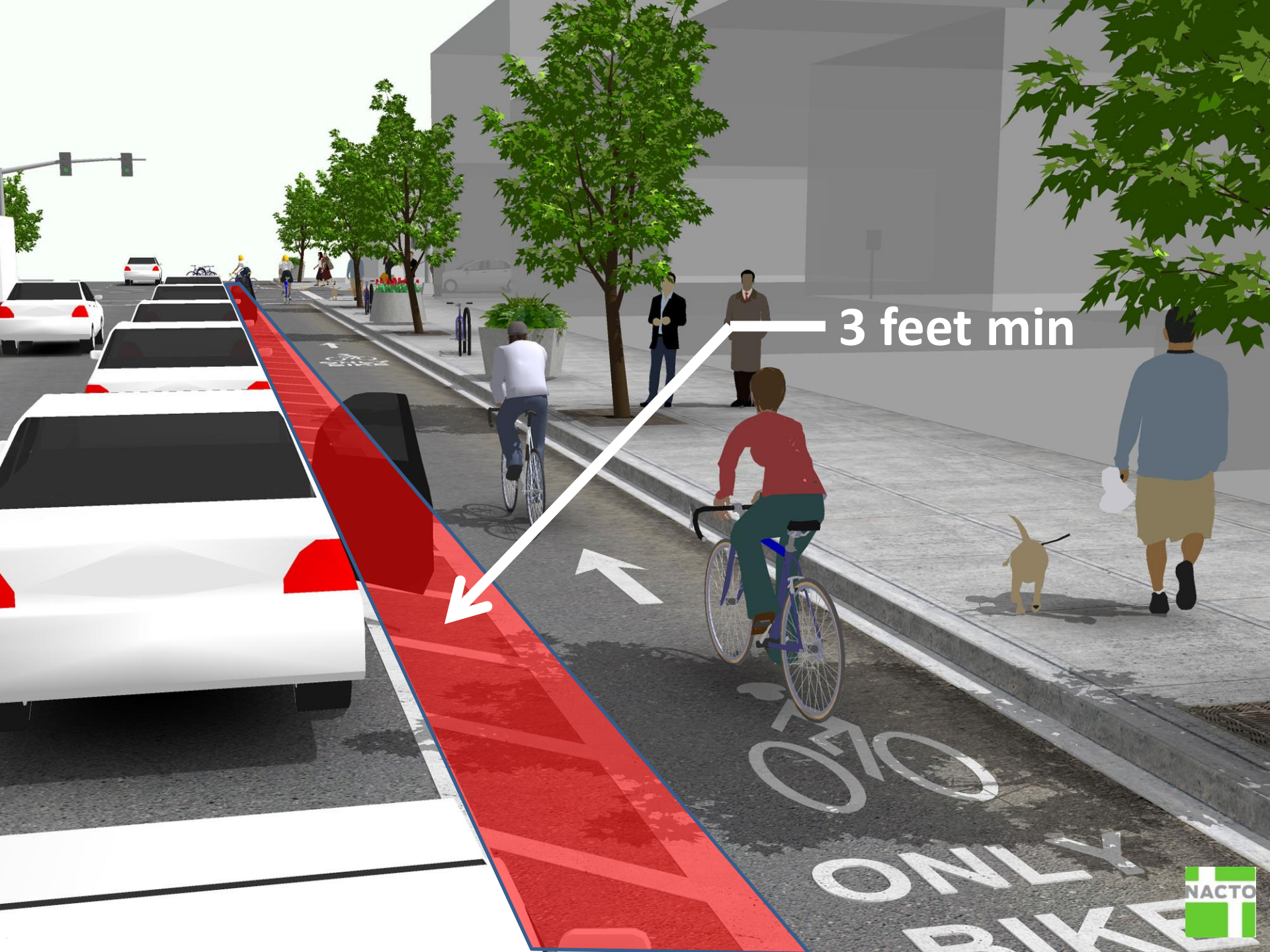
# One-Way Protected Bikeways (Street Level )











3 feet min

















## PROPOSED IMPROVEMENTS

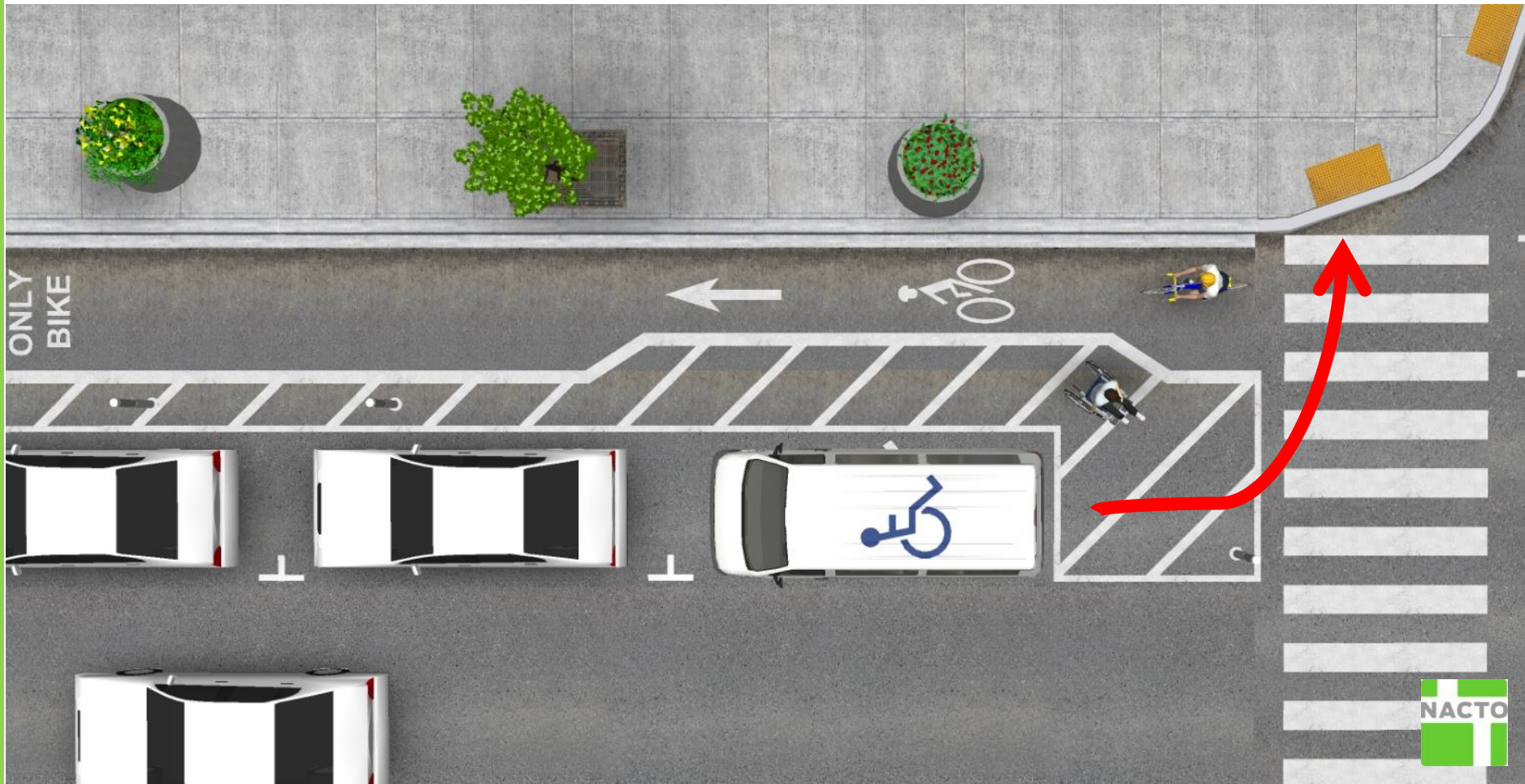
*Looking north at intersection of Juniper and 7th Streets*

# Atlanta, GA – Raised Biofilter Buffer



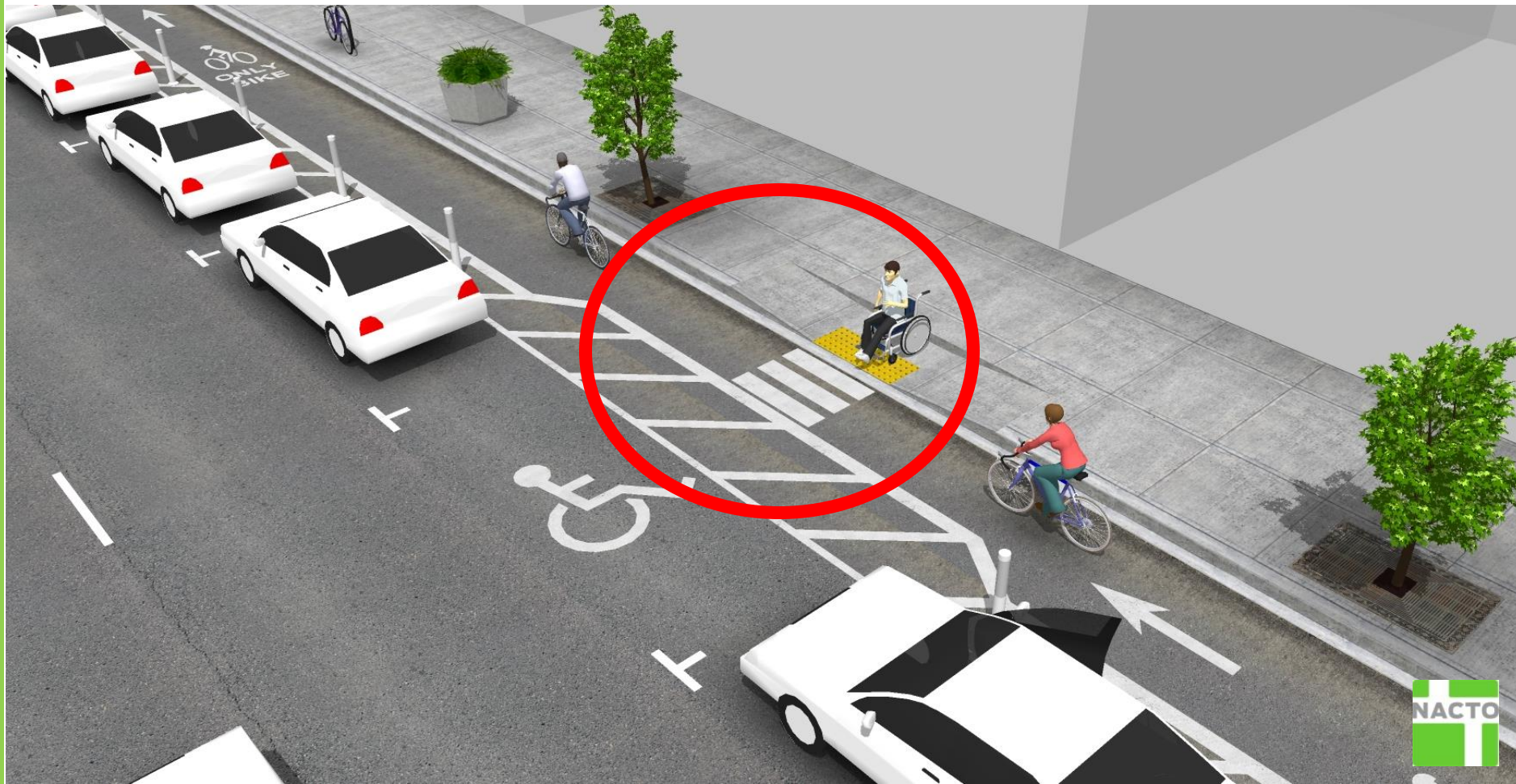
# ADA issues

Key points...



# ADA issues

Key points...







**San Francisco, CA – Accessible Parking**





**Atlanta, GA – Accessible Bus Stop**



# One-Way Protected Bikeways (Raised)

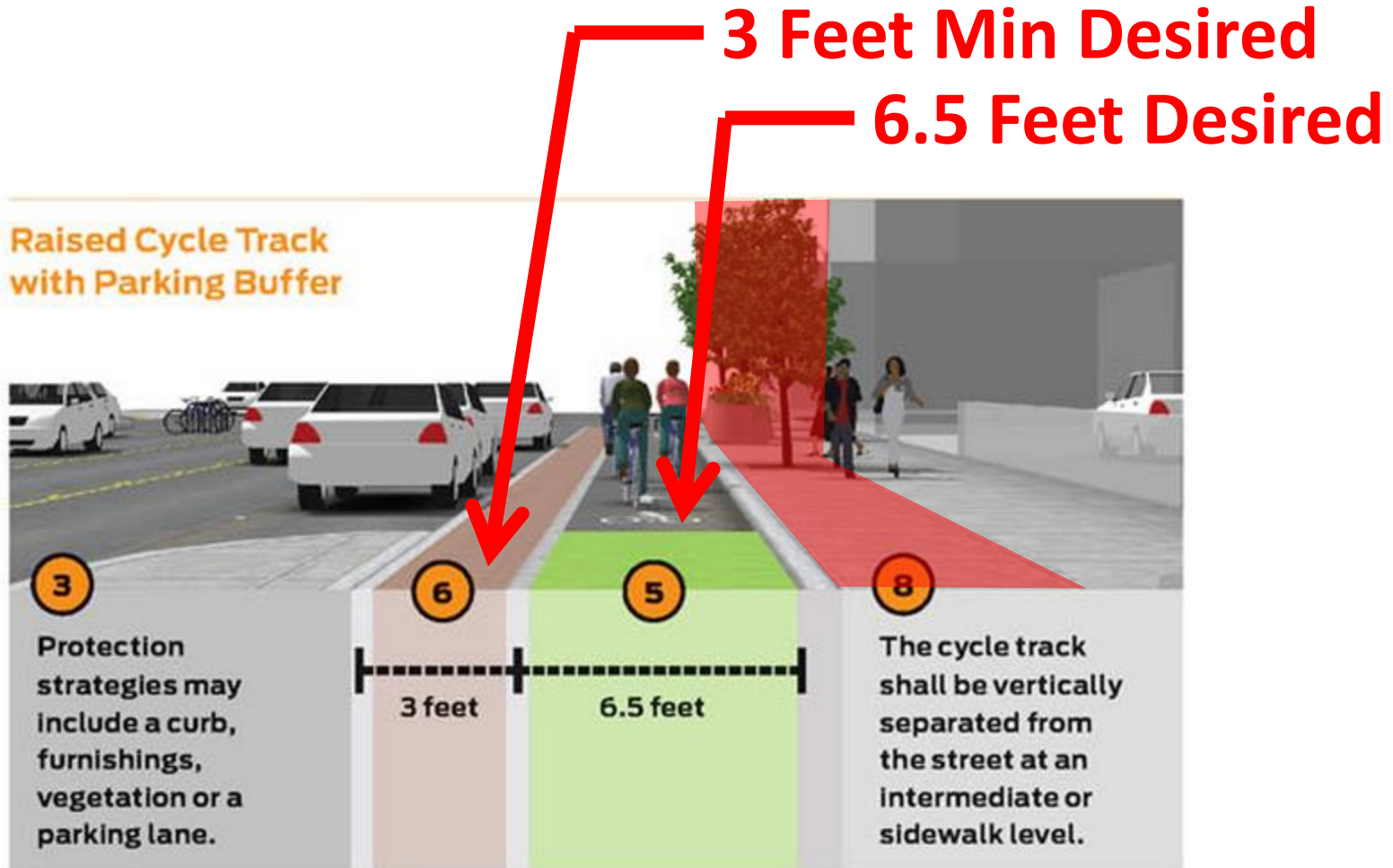


# Applications

- **Everywhere!**
- Where you have **few driveways** and cross-streets
- On **curvy streets** where vehicle encroachment into street level bike lanes may be present
- Repurposing **unused** sidewalk space (what?)



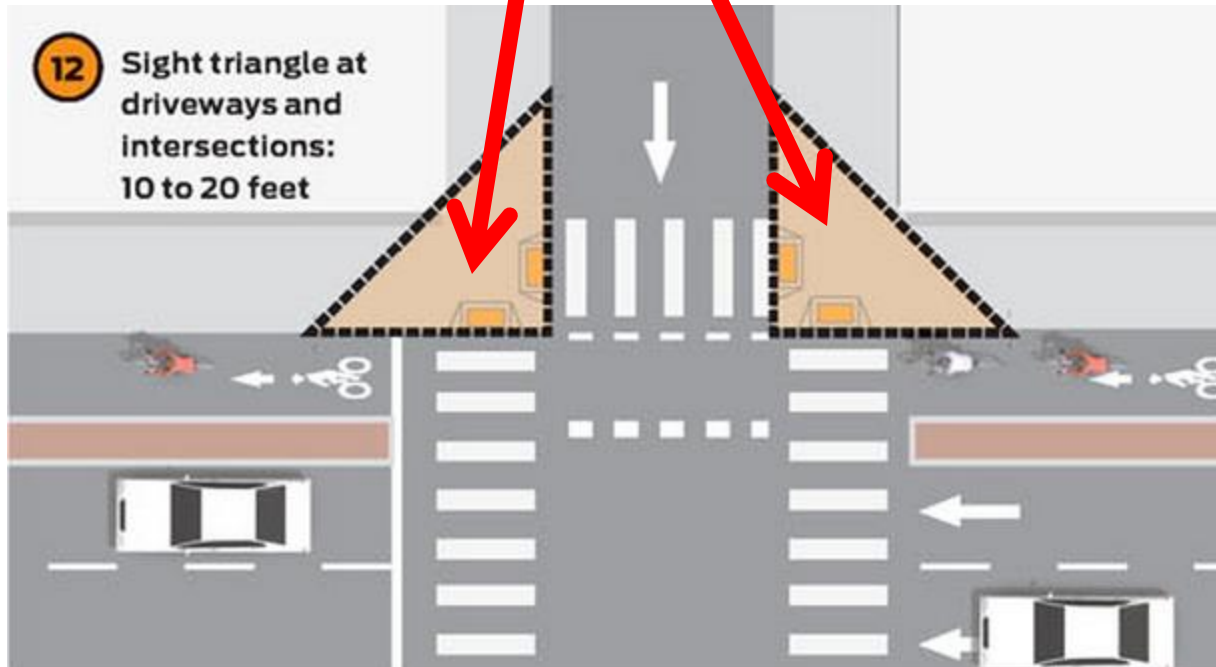
# Design Guidance



# Design Guidance

**Keep Clear.. at least**

- 10 feet for driveways
- 20 feet for minor intersections







**Atlanta, GA – Repurposing Sidewalk (Before)**





**Atlanta, GA – Repurposing Sidewalk (After)**





**Atlanta, GA – Repurposing Sidewalk (After)**





**Atlanta, GA – Getting Creative**



# Two-Way Protected Bikeways (Street Level)



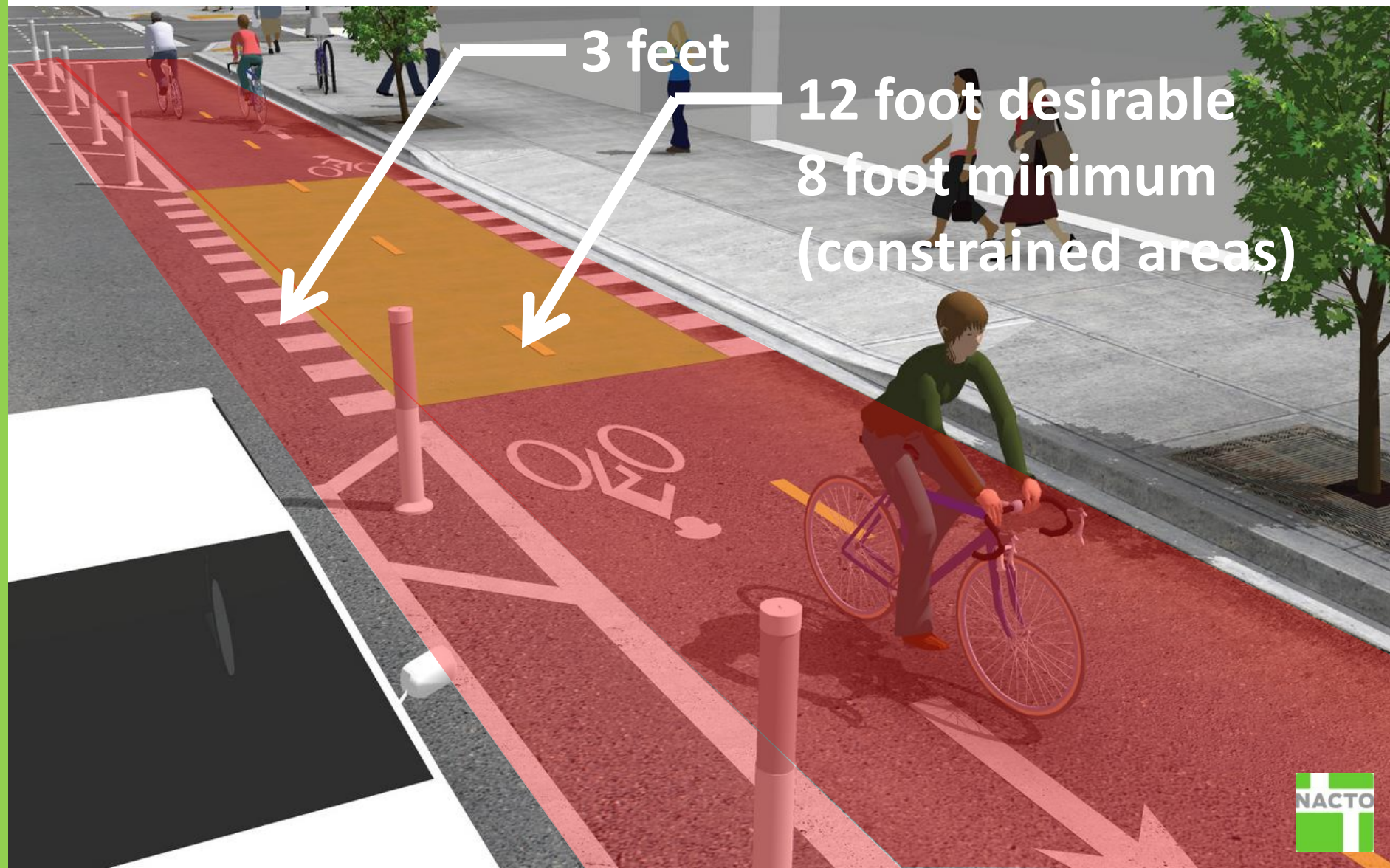
*"Cyclists overwhelmingly feel that riding on 15th Street with the cycle track is much safer and easier now, that it is a useful connection, and that they would go out of their way to ride on the cycle track as opposed to other streets." –DDOT Survey*



# Applications

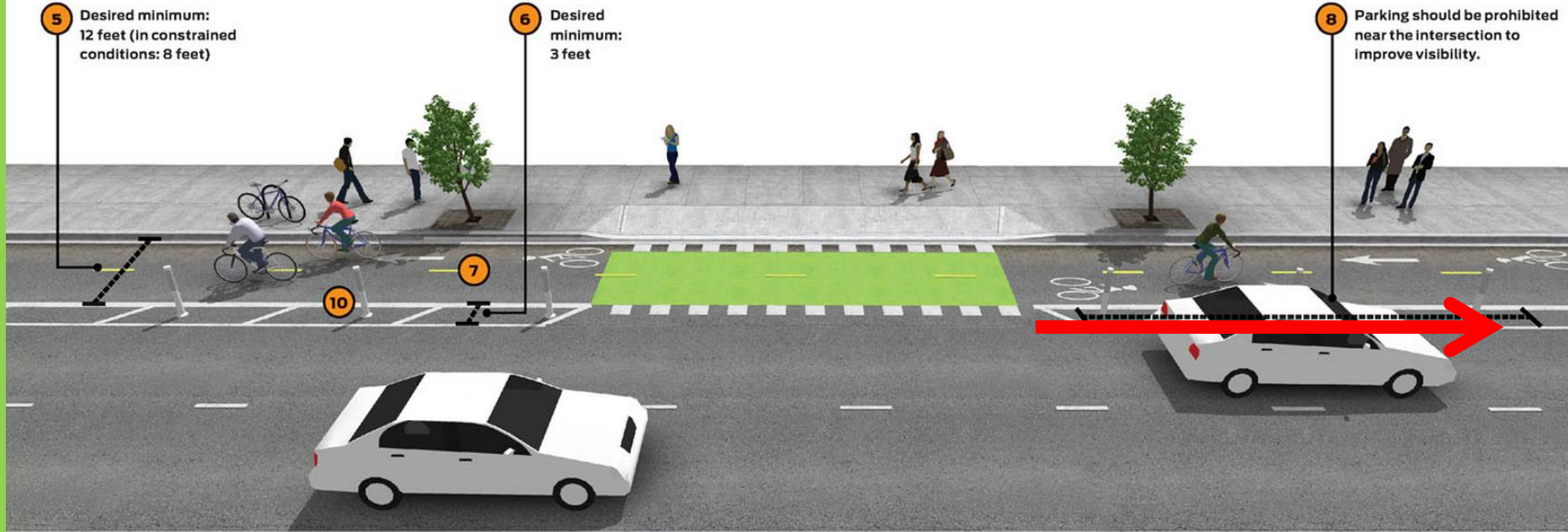
- **Few driveways** and cross-streets
- **One-way streets**
- Where a pair of one-way cycle tracks cannot be accommodated
- To provide seamless connections with other bikeways (i.e. multi-use paths)
- On streets with extra right-of-way on one side

# Design Guidance





# Design Guidance



# Parking Setback

## 30 Feet Desirable



**Atlanta, GA – Bollard Protected (Before)**





**Atlanta, GA – Bollard Protected (Before)**





**Atlanta, GA – Bollard Protected**



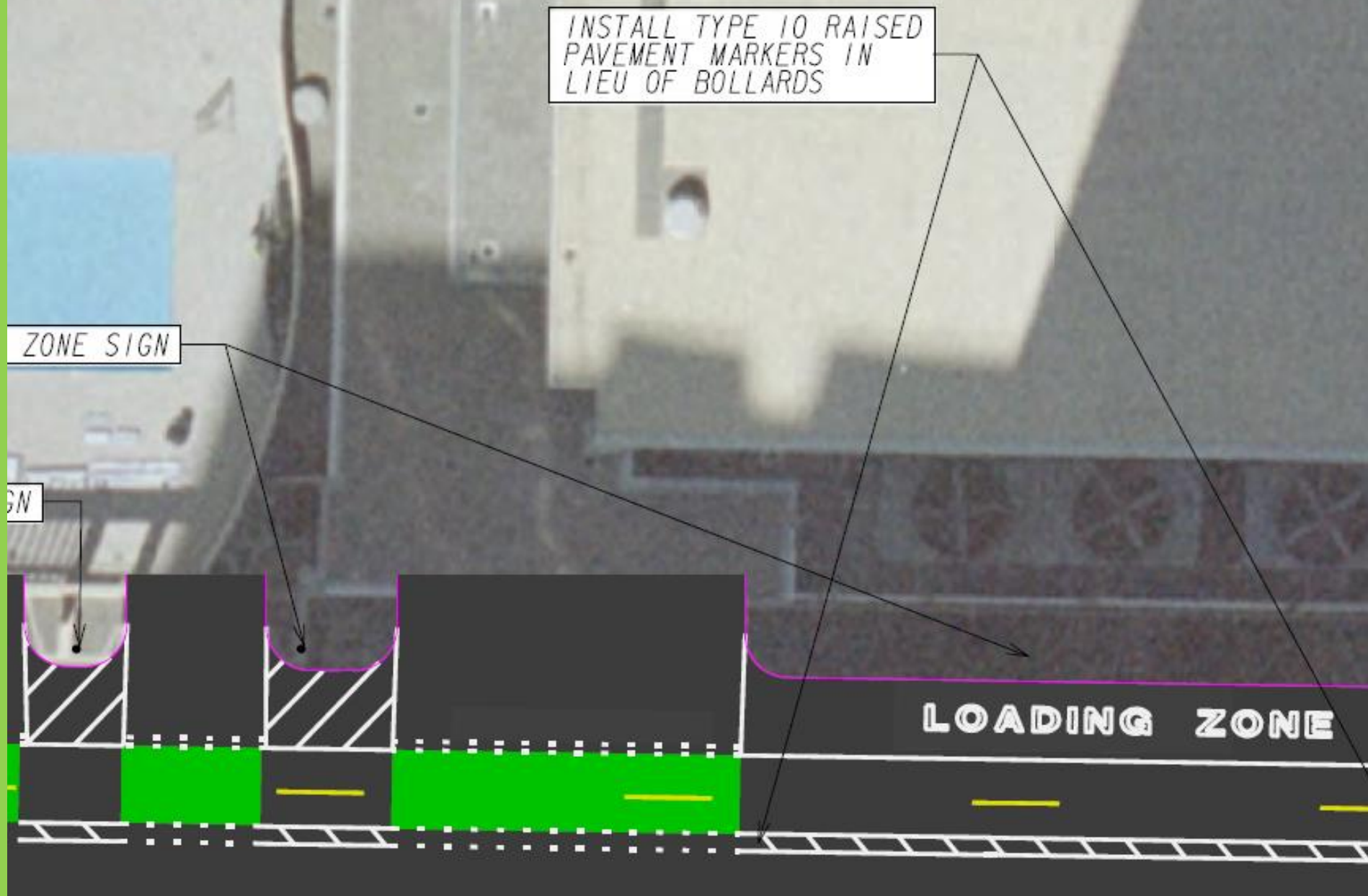


**Atlanta, GA – Bollard Protected (After)**









## Atlanta, GA – Loading Zone Conflict

# Two-Way Protected Bikeways (Raised)





# Design Guidance





**Joshuah David Mello, AICP**

*Chief Transportation Official*

*City of Palo Alto*

*@joshuahmel*

*Joshuah.Mello@CityofPaloAlto.org*

*650-329-2136*

