

Williamsburg Bridge Connections: South 5th Place & South 4th Street

2015



Project Background

South 5th Place

from S 5th Street to S 4th Street

South 4th Street

from S 5th Place to Roebling Street

Legend

- Project Routes
- Existing Bike Path
- Existing Bike Lane
- Existing Shared Lane



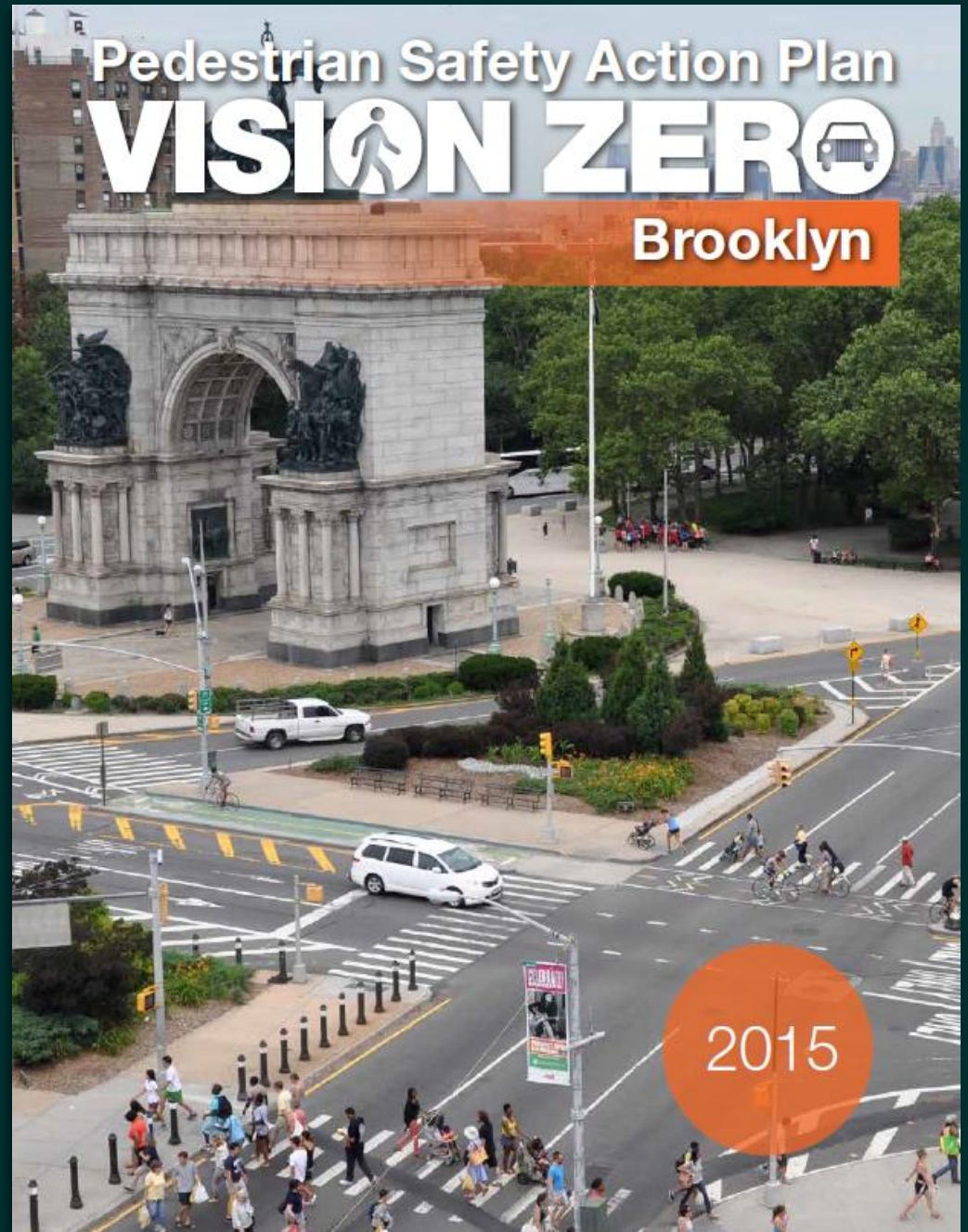
- The Williamsburg Bridge bicycle path is a major connection between Brooklyn and Manhattan
- Over 6,300 cyclists used the bicycle path on an average midweek weekday in 2014*
- Over 8,800 cyclists were counted on the busiest day of 2014**

* April through October, 2014

** Tuesday, 7/24/2014

Vision Zero

- Between 2009 and 2013, seven crashes occurred on South 5th Place
- Five of the seven crashes involved cyclists
- The car driver fled the scene in three of the five crashes involving cyclists



Bridge Access

The bridge's bike path is accessible from:

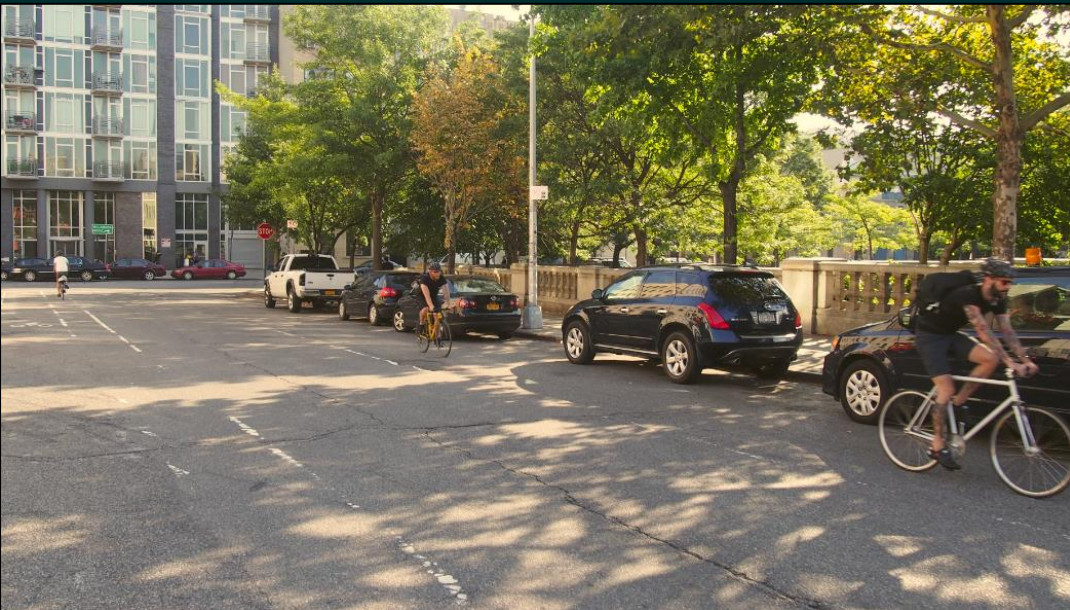
- S 5th Street bike lane heading eastbound
- S 5th Place sidewalk heading southbound



Williamsburg Bridge
bicycle path
entrance

Existing Conditions

S 5th Place, looking north towards S 4th Street



Existing Conditions

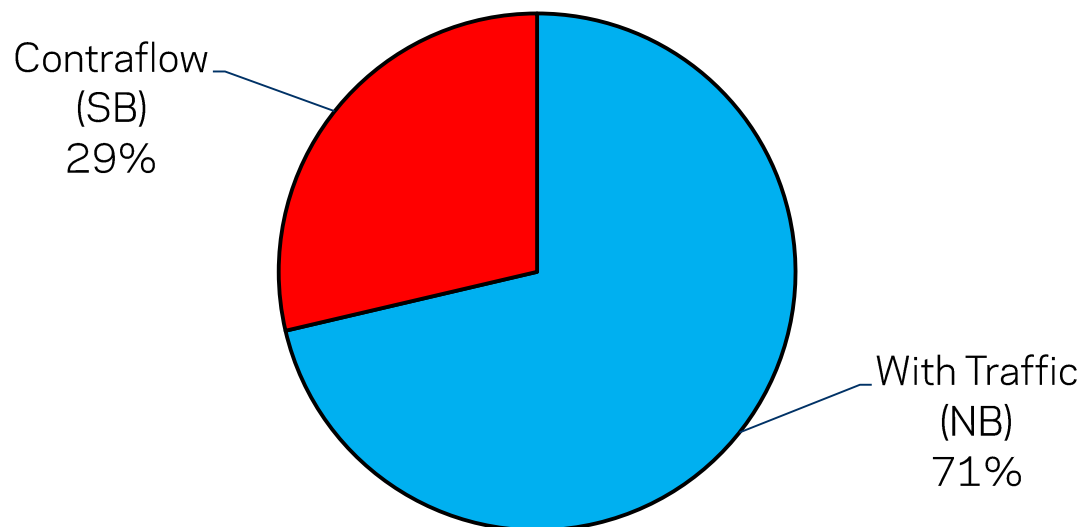
S 5th Place, looking north towards S 4th Street



12-Hour Bicycle Count

- Almost a third of all cyclists in the roadway are riding contraflow
- Contraflow = 591 cyclists
 - southbound
- With Traffic = 1471 cyclists
 - northbound

All Cyclists in Roadway



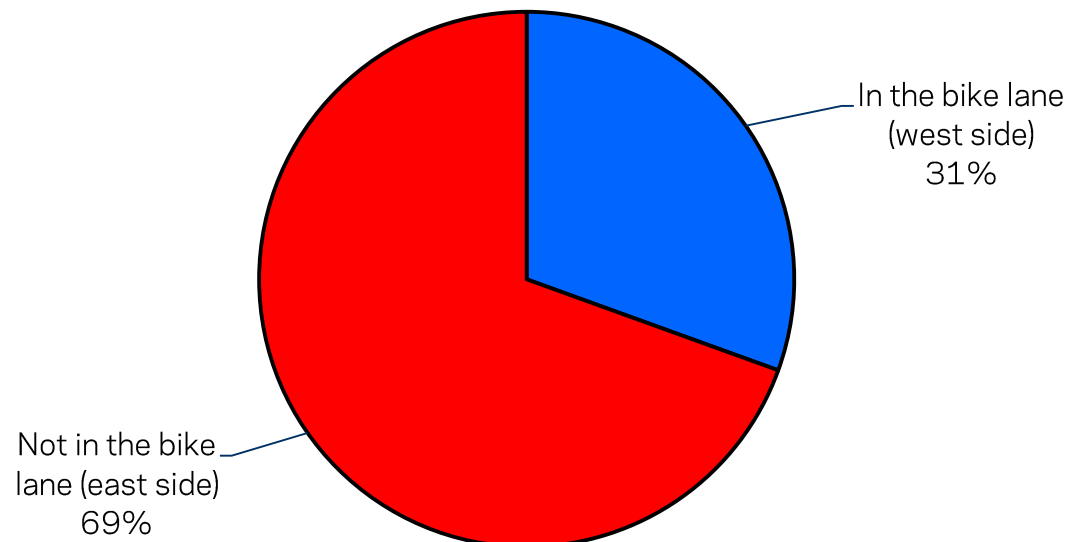
Raw Bicycle Count

	In Street		subtotal	On Sidewalk	totals
	In NB Bike Lane	Not in Lane			
Northbound	449	1022	1471	200	1671
Southbound	279	312	591	1031	1622
<i>totals</i>	728	1334		1231	3293

12-Hour Bicycle Count

- Northbound cyclists prefer to ride on the eastern side of the street at a rate of over 2 to 1
- In bike lane = 449 cyclists
- Not in bike lane = 1022 cyclists

Northbound Cyclists



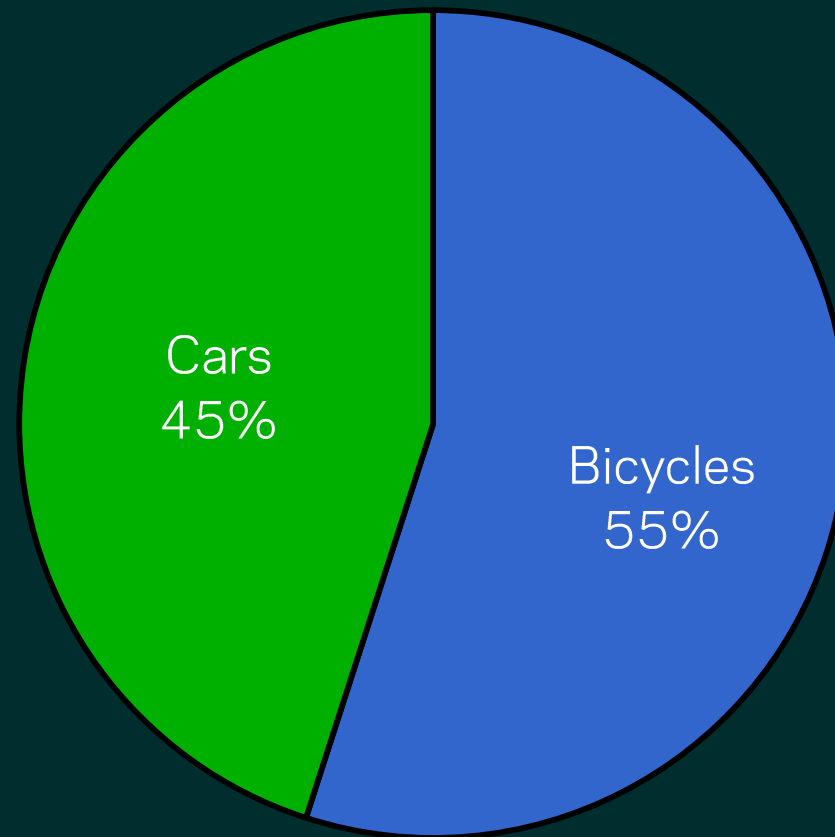
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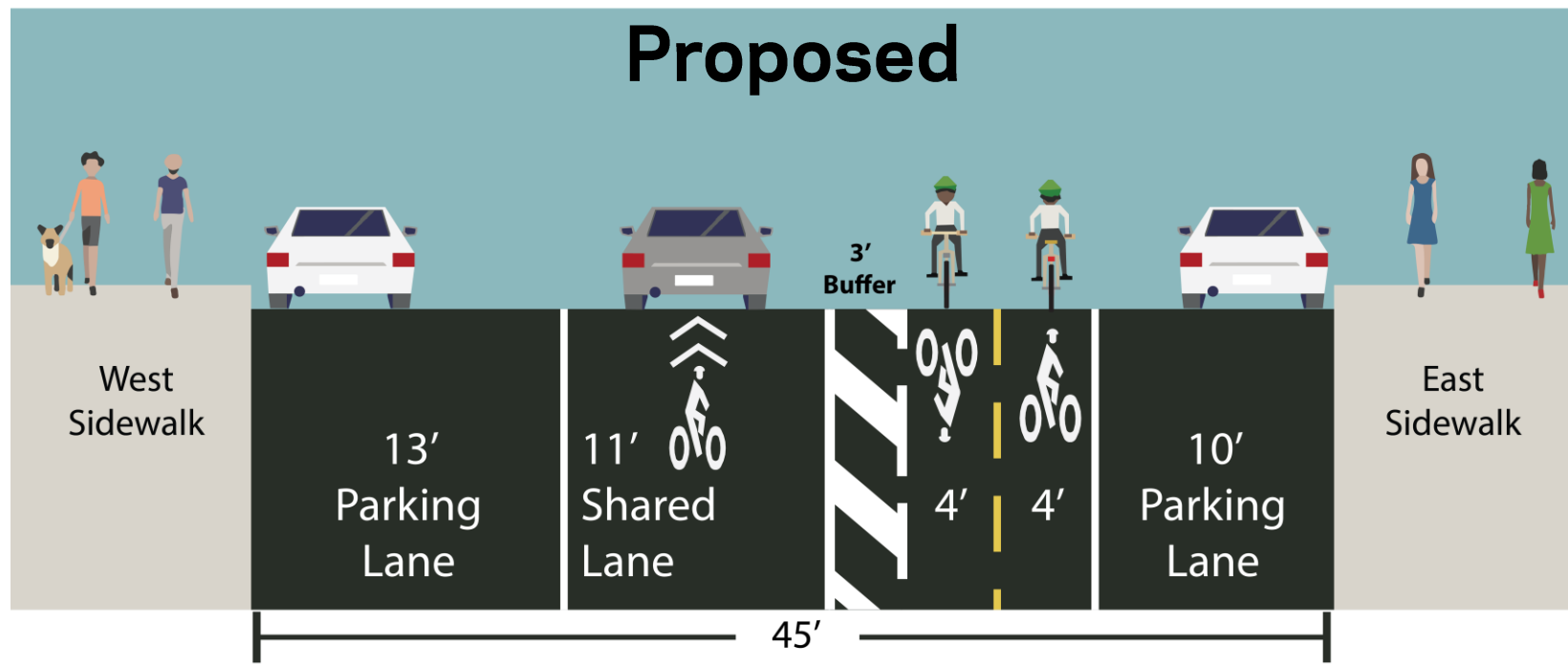
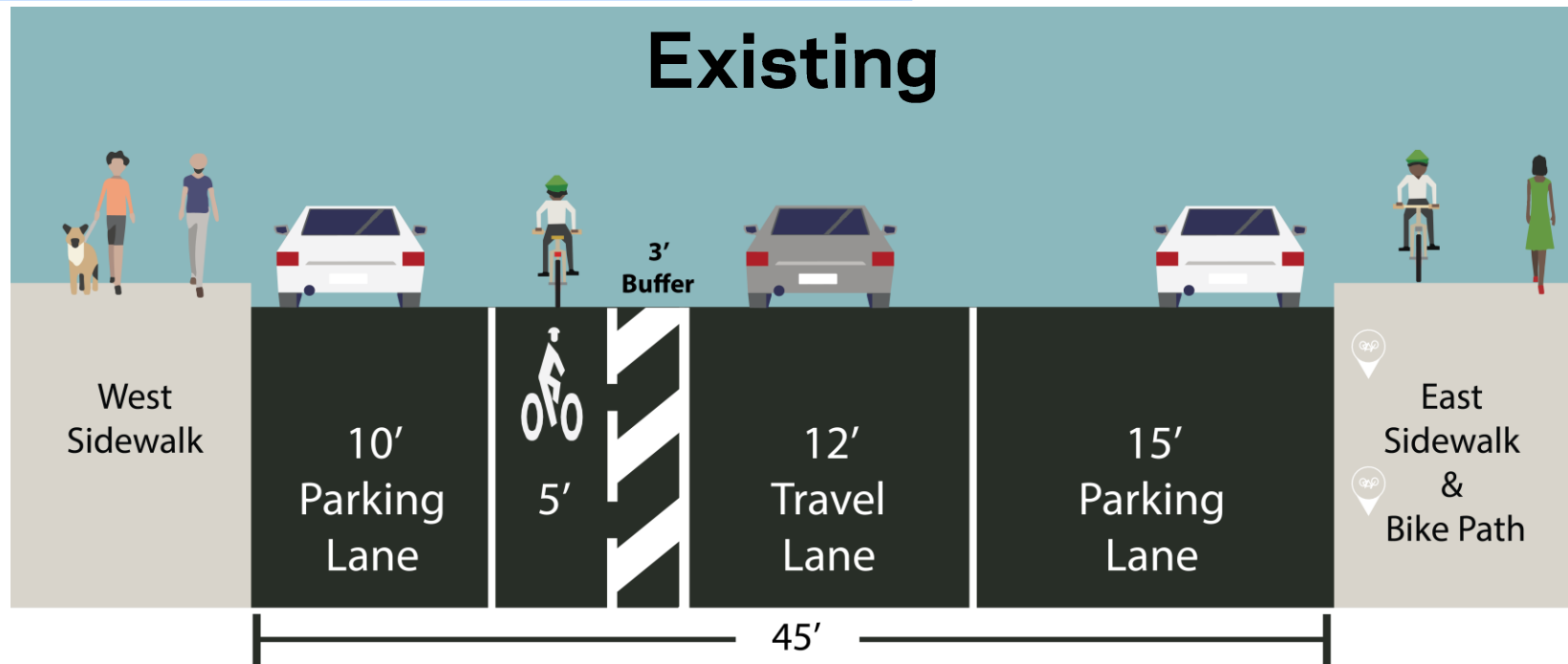
Peak Hour Mode Split

South 5th Place Mode Split Vehicle Peak Hour

- During the vehicle peak hour of 7 to 8 PM, cyclists account for 55% of all traffic on S 5th Place
 - Cars = 231
 - Bicycles = 282



Proposed Design: S 5th PI



Example of Proposed Design

Plaza Street, Brooklyn

- Two-way lane on a one-way street



Turn Conflicts at S 5th Street

- The existing design requires all cyclists and drivers to cross paths at the bend between S 5th Street and S 5th Place
- The proposed design eliminates this conflict

Legend

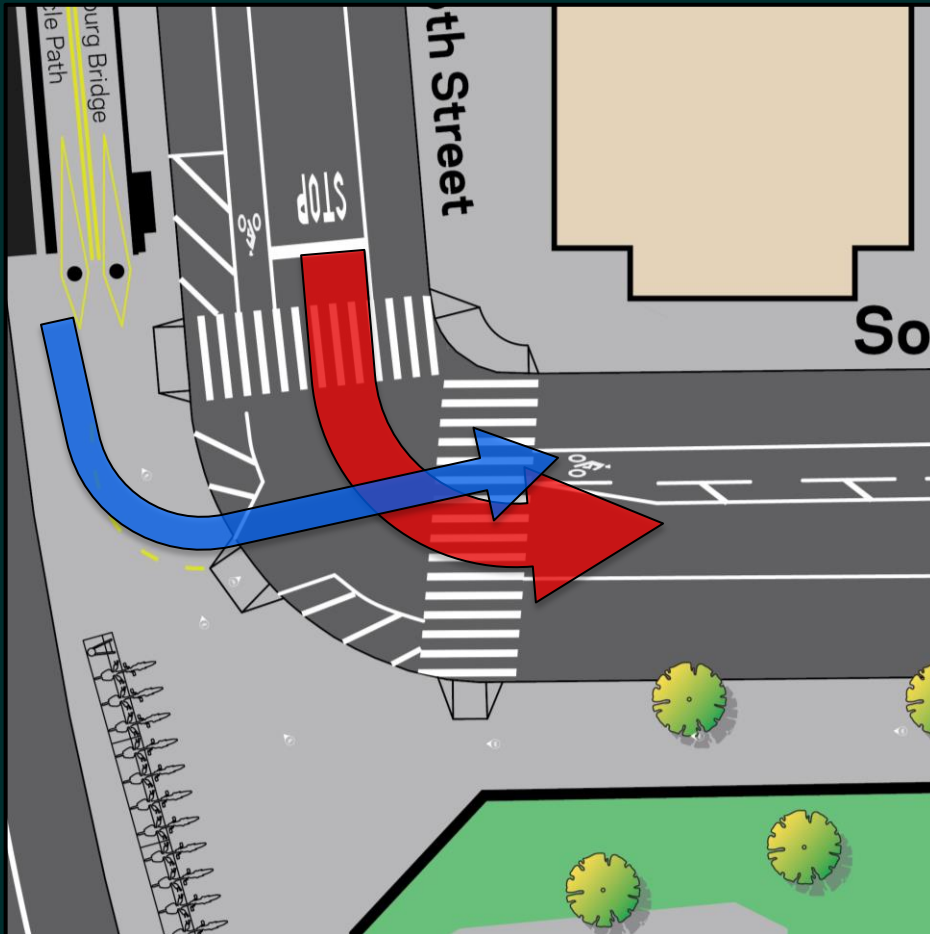


Car Turn

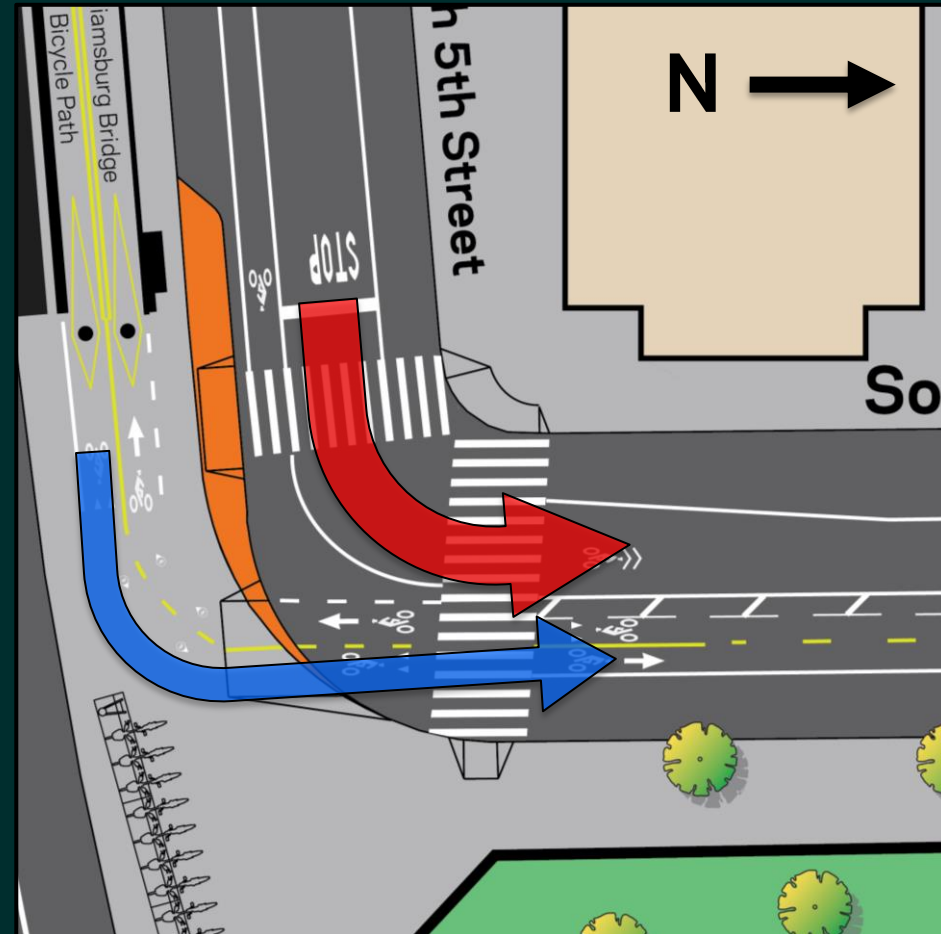


Bicycle Turn

Existing Condition



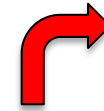
Proposed Design



Turn Conflicts at S 4th Street

- The existing design requires cyclists and drivers turning right to cross paths at the intersection of S 4th Street and S 5th Place
- The proposed design eliminates this conflict

Legend

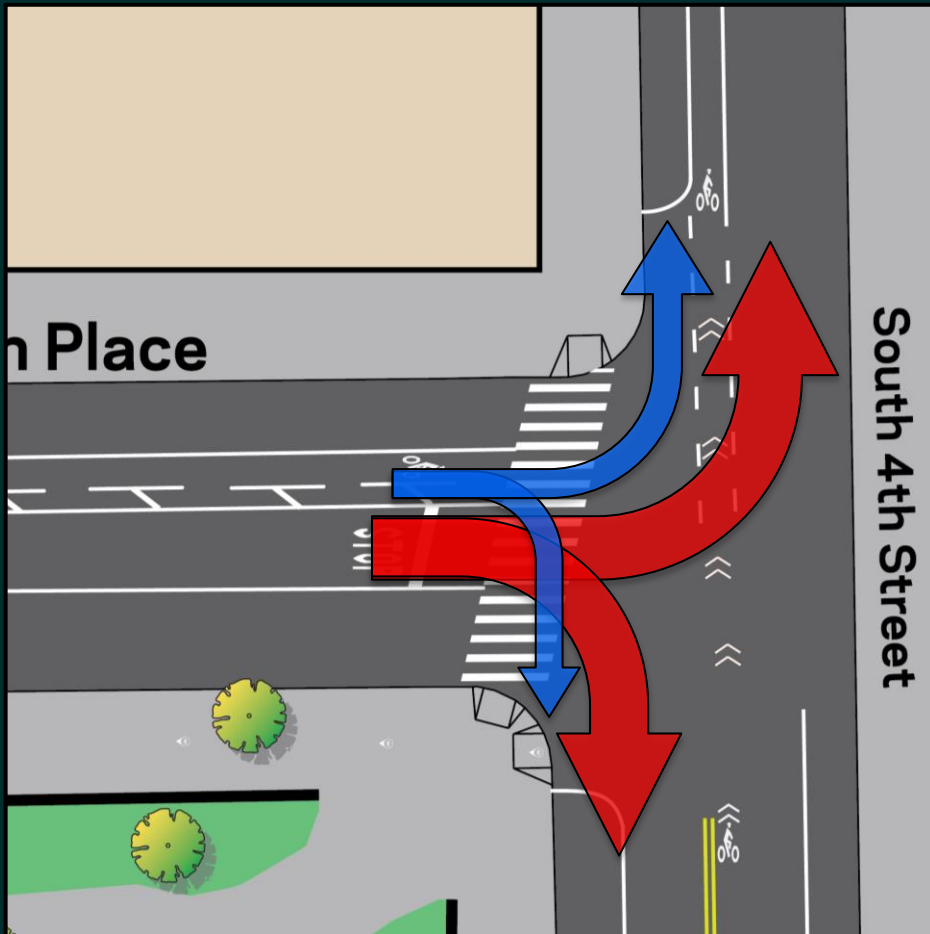


Car Turn

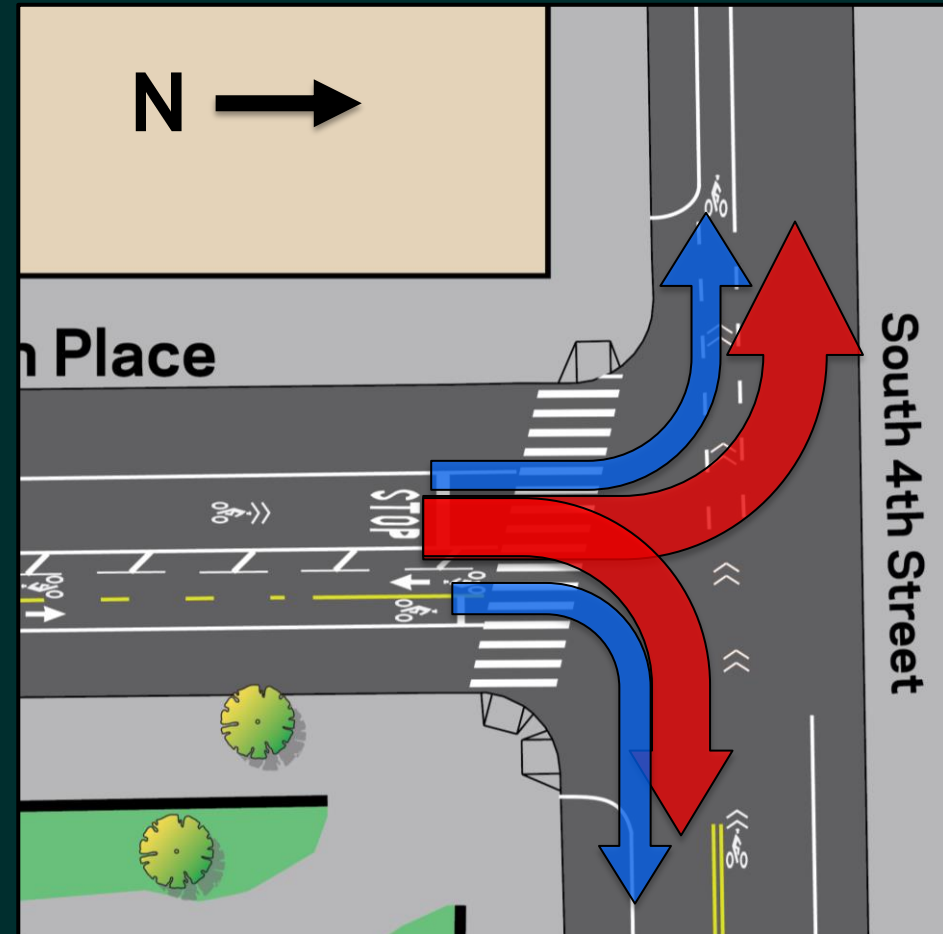


Bicycle Turn

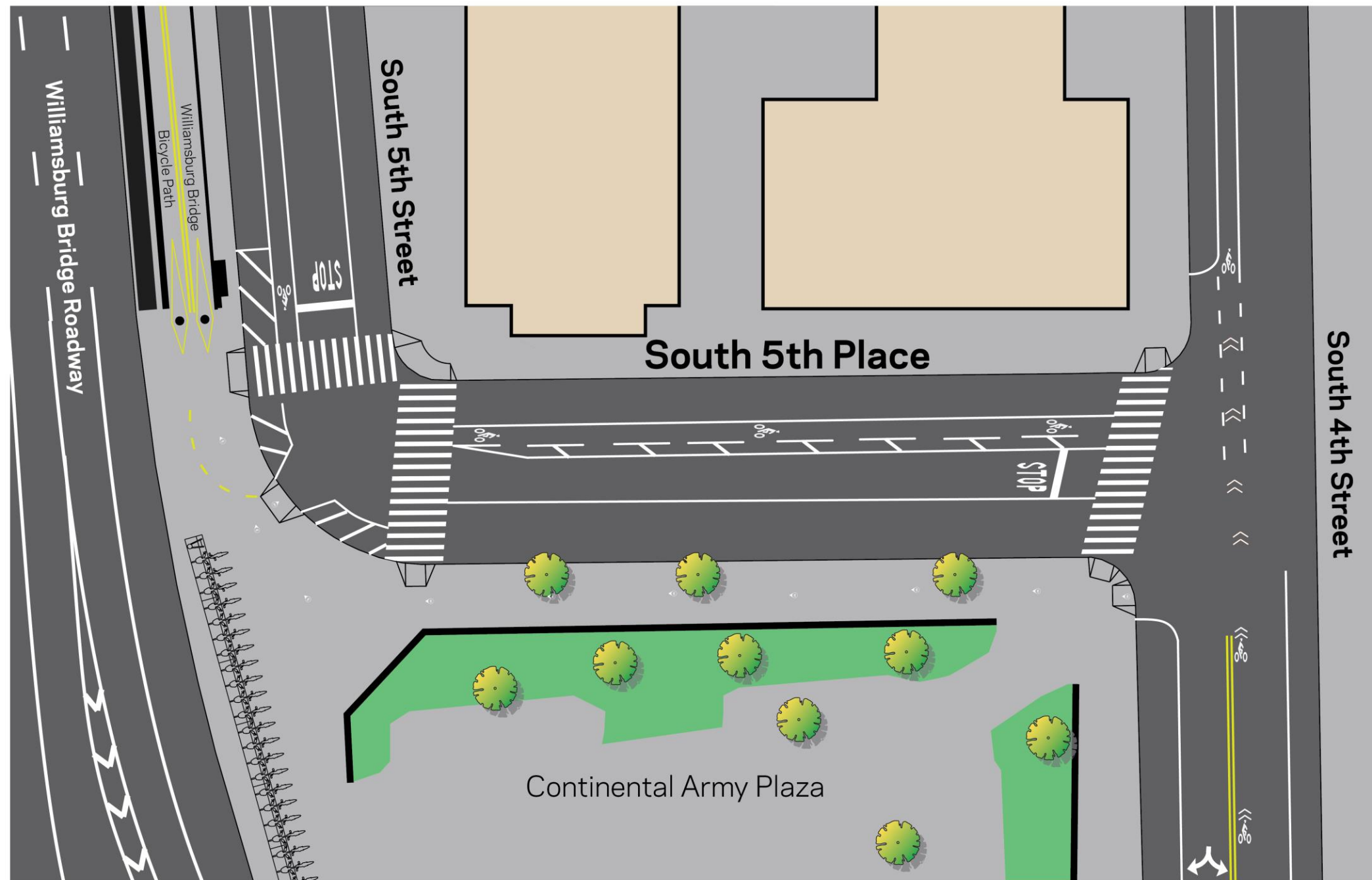
Existing Condition



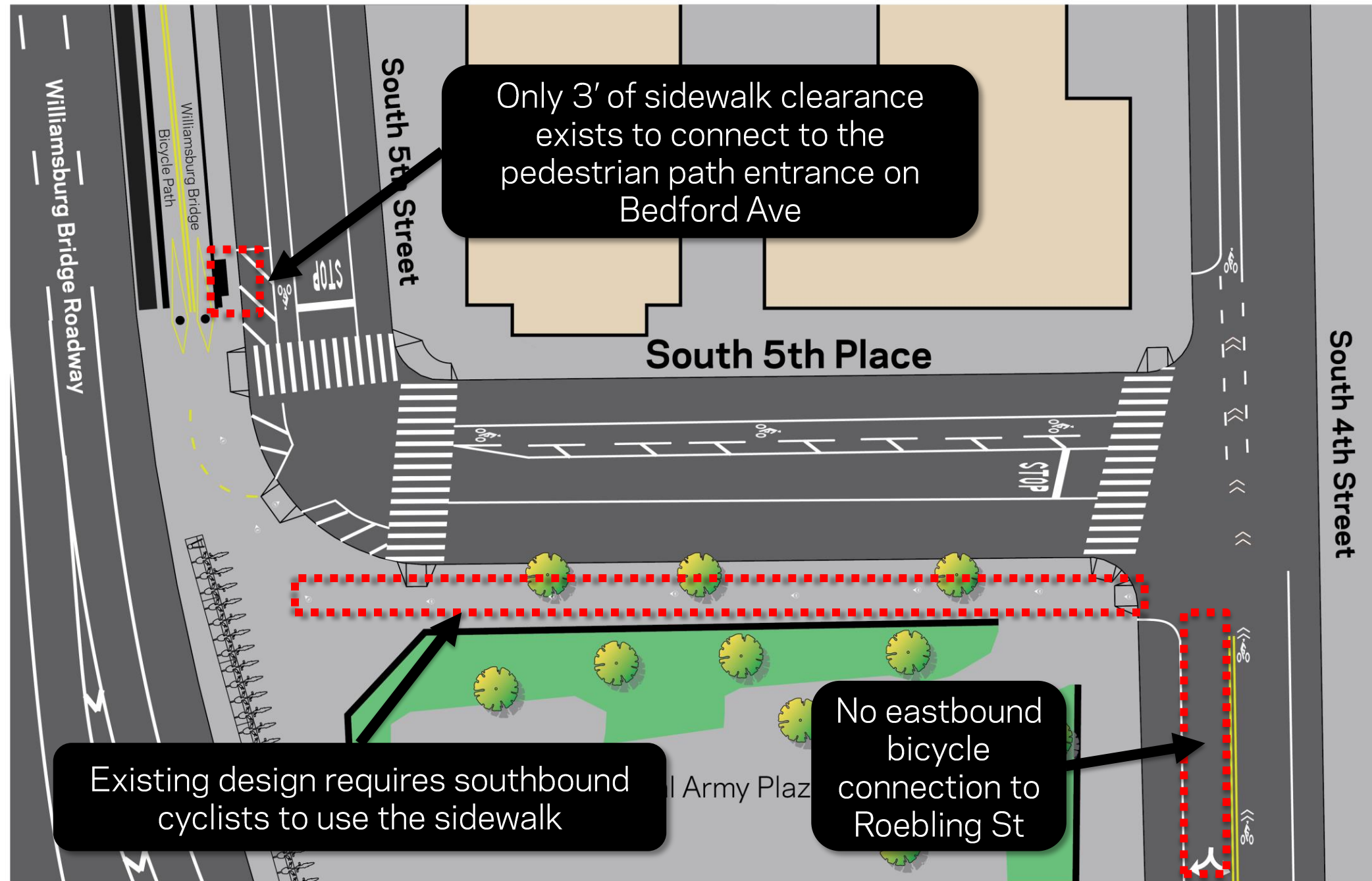
Proposed Design



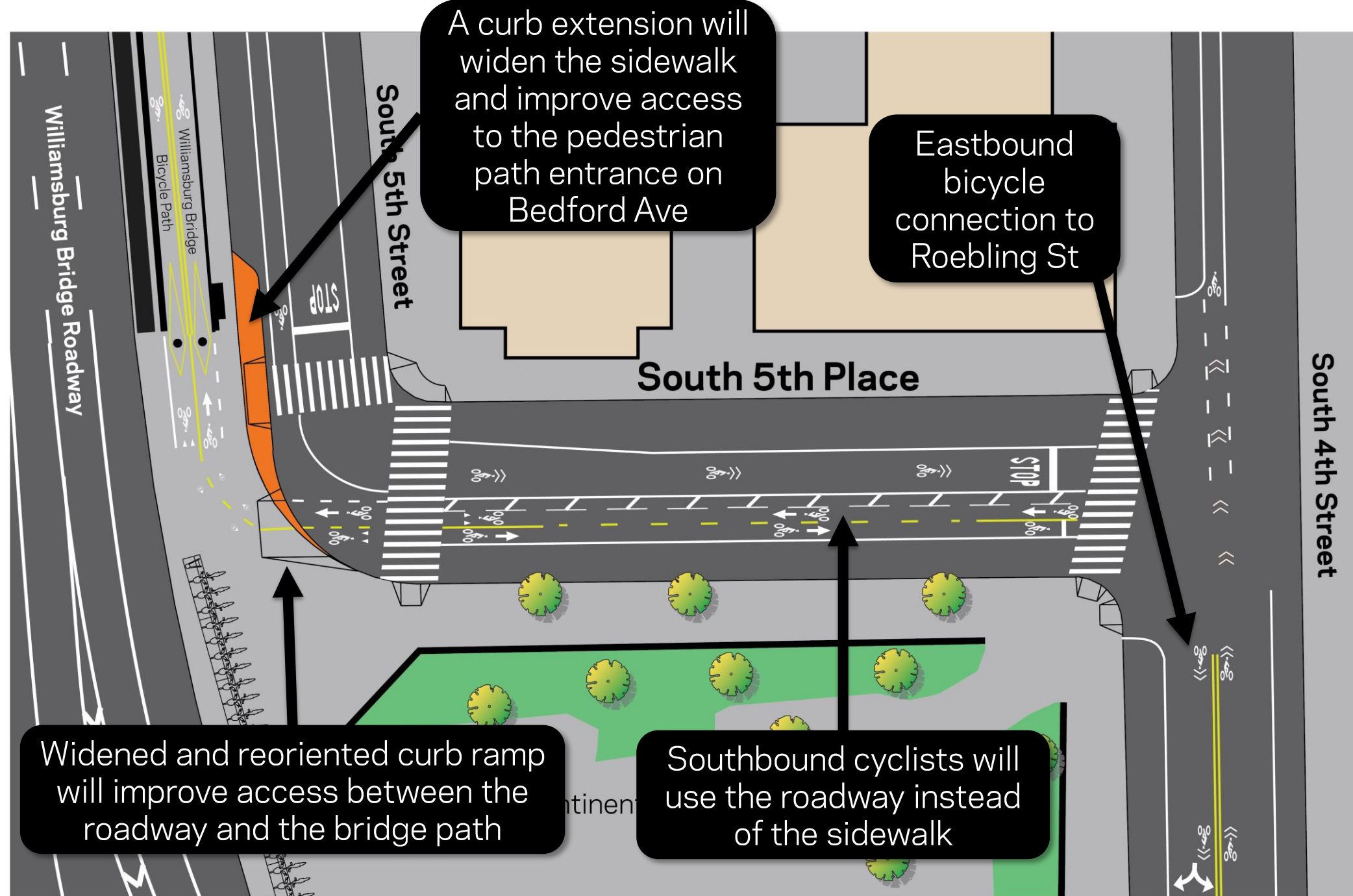
Existing Design



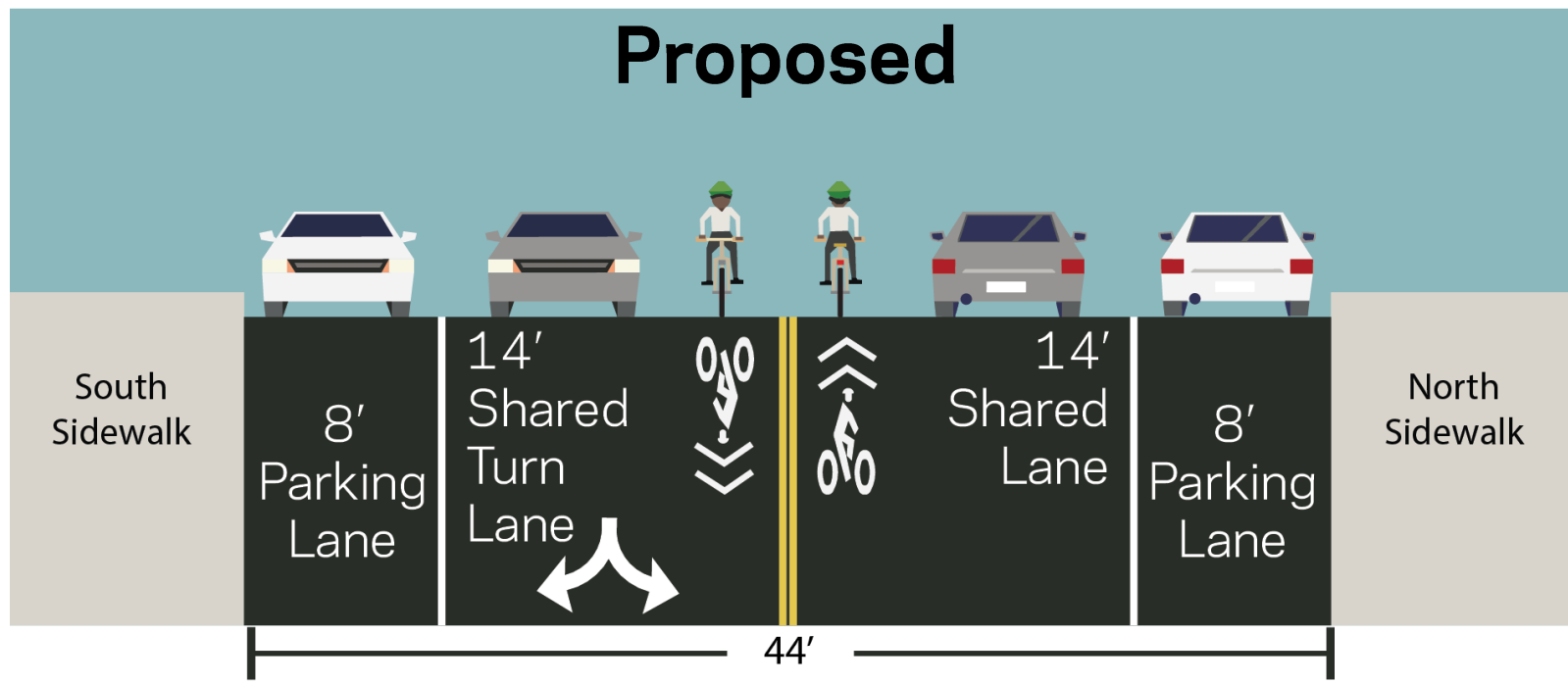
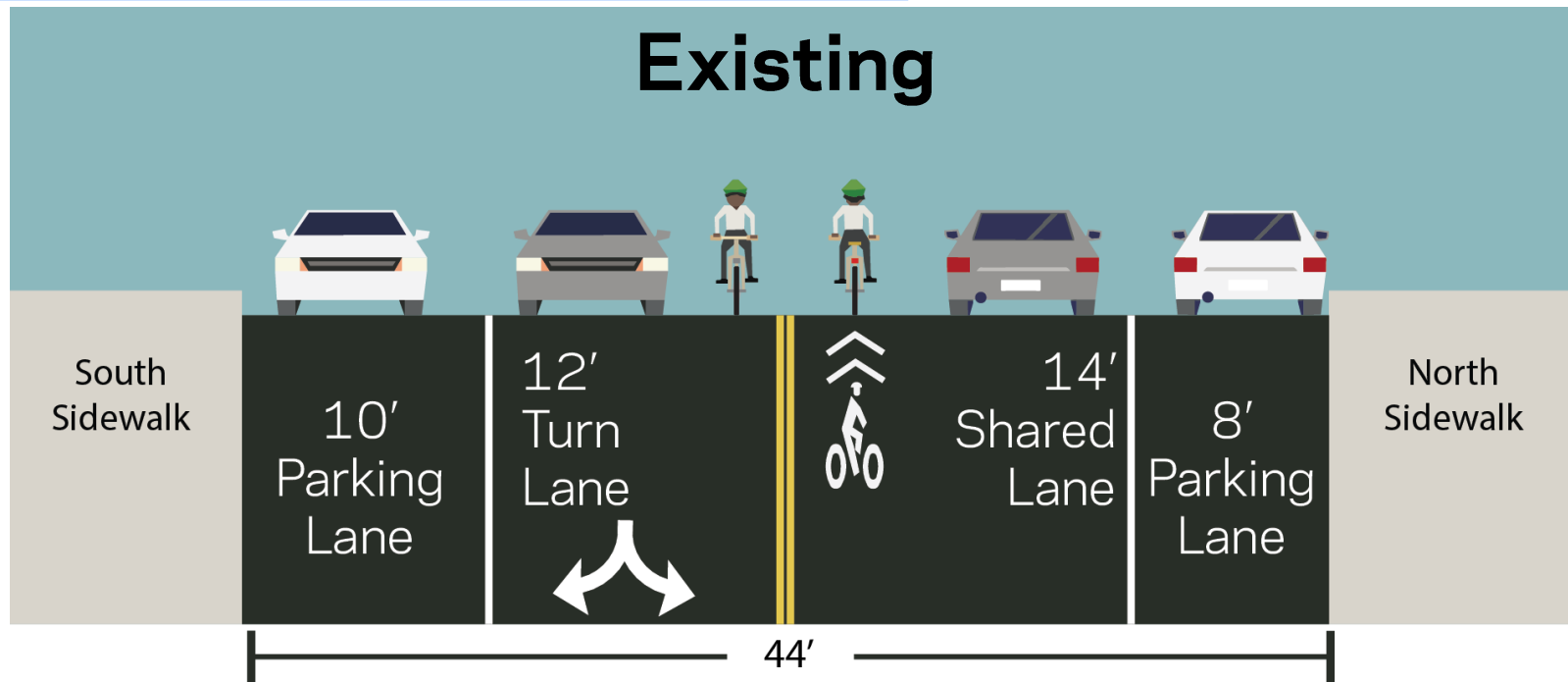
Existing Design



Proposed Design



Proposed Design: S 4th St



Summary of Benefits

- Improves conditions for cyclists
 - Two-way facility will be aligned with existing use patterns
 - Turning conflicts with cars will be eliminated
 - Curb ramp will be widened and realigned
 - An eastbound connection to the existing bike network will be established
- Improves conditions for pedestrians
 - The sidewalk adjacent to the Continental Army Plaza will be reserved for pedestrian use only
 - Curb extension will create a convenient connection to the pedestrian path entrance on Bedford Ave
- The quantity of parking spaces will remain the same

Questions?

**Thank
You**