

Protected Bike Lanes

Ensuring World-Class Bike Accommodations
within the Opportunity Corridor

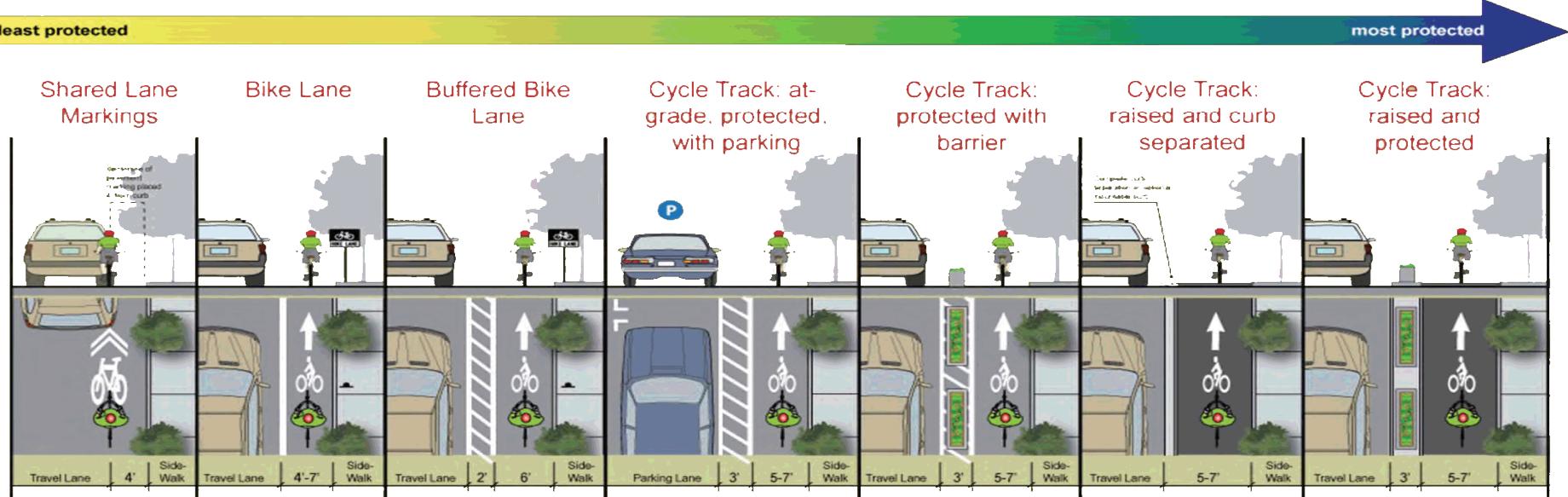
GUIDING PREMISE:

The commuting needs of motorists, bicyclists, pedestrians and transit riders can be safely and comfortably accommodated within the Opportunity Corridor right of way.

TYPES OF BIKEWAYS



On-Street Marked Bikeway Continuum



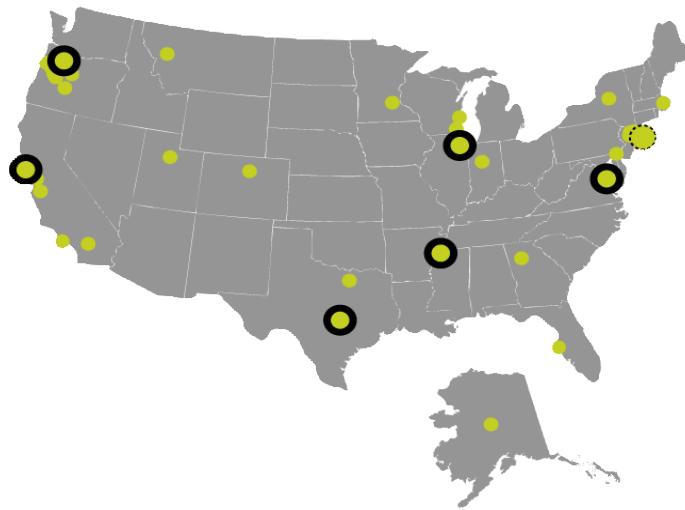
What is a protected bike lane?

- Dedicated, inviting spaces for people on bikes in the roadway.
- Protected from motor vehicles
- Separated from sidewalks.
- Safe, efficient and ease of travel for all street users.



Where do these exist?

By end of 2013: 200 protected bike lane projects across US



Akron, OH



Indianapolis, IN



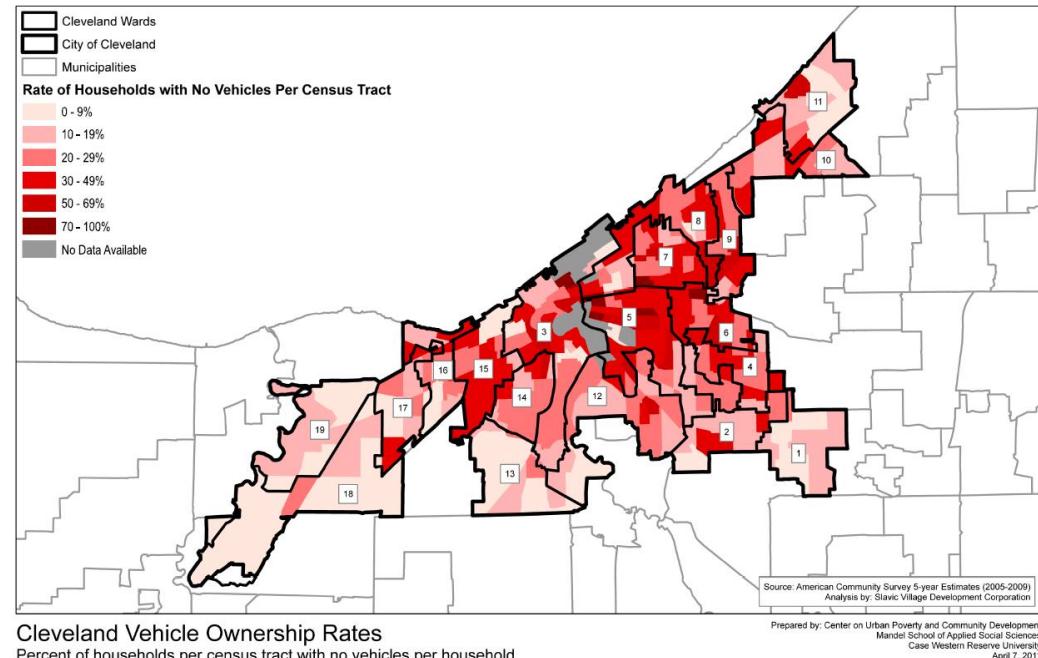
Cincinnati, OH

WHY THE OPPORTUNITY
CORRIDOR?

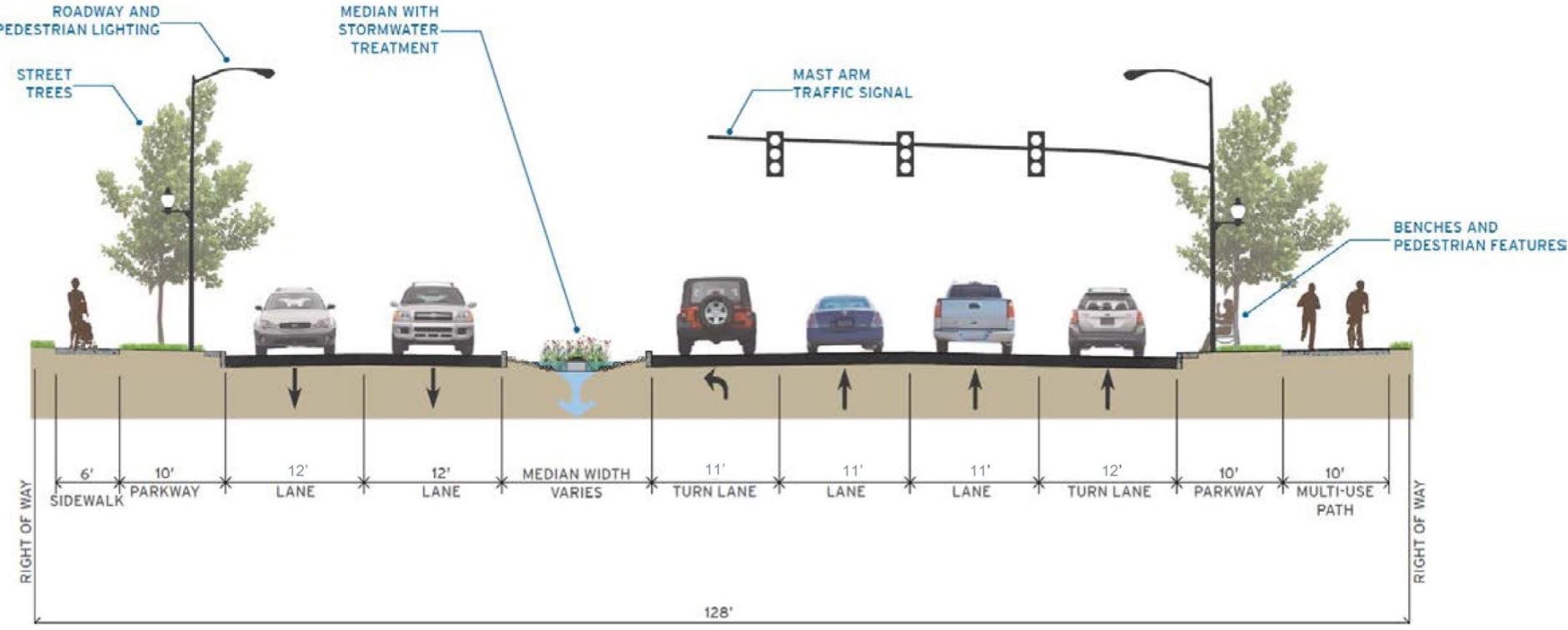
1. To achieve the project's full economic development potential, it is regionally significant to design Opportunity Corridor as a world-class multi-modal facility.
2. Connectivity between E.55th and University Circle is important not only to automobile-based commuters employed there but also to residents of existing and proposed neighborhoods along the corridor.
3. Improved facilities for pedestrians and cyclists in an area where facilities currently are lacking.
4. Improved system linkages and mobility for people on bikes and pedestrians
5. Improved safety for all users
6. AASHTO Guide for the Development of Bicycle Facilities (section 5.2.2) – “provisions of a pathway adjacent to the road is not a substitute for the provision of on-road accomodations...but may be considered in some conditions IN ADDITION TO on-road bicycle faciliities.”

EQUITY CONSIDERATIONS:

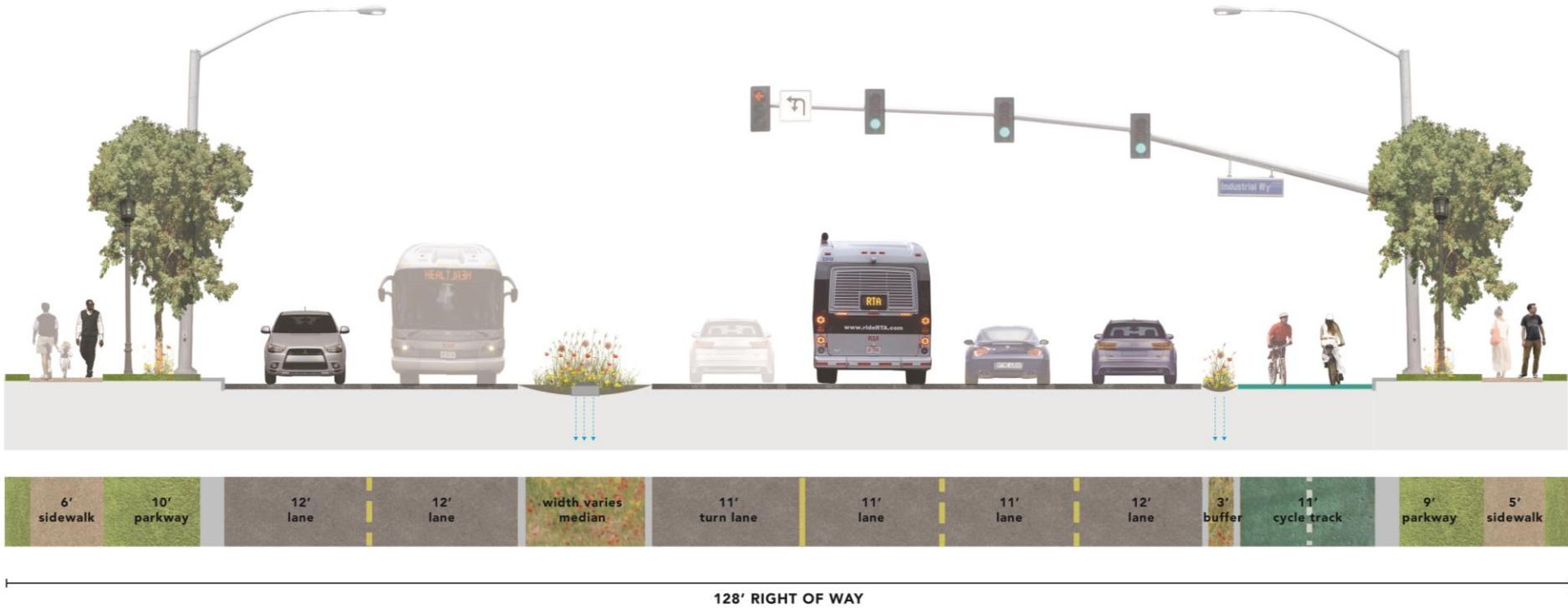
Upwards of 30% of Cleveland households lack access to private automobiles, making multi-modal facilities a necessity.



THE DESIGN



Current cross-section of Opportunity Corridor



Proposed typical cross-section of Opportunity Corridor



Conceptual rendering of protected bike lane on Opportunity Corridor

ADVANTAGE OF PROTECTED BIKE LANES:

Avoids mixing road users traveling at very different speeds (i.e., bikes and pedestrians on side path, bikes and autos on roadway)

Improved safety - 56% reduction in injuries to all road users (*NYC*), 18% decrease in all collisions (*Vancouver, BC*), Streets with protected bike lanes saw 90 percent fewer injuries per mile than those with no bike infrastructure (*AJPH, Teschke, K., et al., 2012*)

Offers a buffer between bicyclists and adjacent automobile traffic while ensuring visibility of people on bikes.

WHY BUILD PROTECTED BIKE LANES?

WHAT ARE THEY?

Protected bike lanes put a barrier between drivers and bike riders.
The barrier can be parked cars, plastic posts, or planters.
They are popular in cities with high amounts of bike riders for everyday use.



GOOD FOR SAFETY

89%

fewer injuries among bike riders on streets with protected bike lanes.⁵



Bike- and pedestrian-friendly street design leads to less collisions, even when there are more people out!⁶

- DRIVERS** don't have to worry about unexpected bike maneuvers.
PEDESTRIANS don't have to worry about bike riders on the sidewalks.

GOOD FOR BUSINESS

9th Ave in New York City saw a increase in business after protected bike lanes were installed.¹ Nearby streets only saw a 3% increase.

More bike traffic on Kinzie St in Chicago after a protected bike lane was installed.²

A Portland study found bike riders will **go out of their way** to a street with good bike infrastructure. That's more business exposure.³



Pedestrians and bike riders in Toronto SPENT THE MOST MONEY and visited stores more often.

Maybe because it costs less to walk or bike?

GOOD FOR LAWFULNESS



In Chicago, protected bike lanes have resulted in a 161% increase in the number of bike riders obeying the stoplight.⁷

GOOD FOR EVERYONE

71%

of Americans have expressed interest in riding a bike more often, but find it unsafe.⁸
Are you one of them?

LESS

Each bike on the road is one less car in traffic, causes less pollution, less wear on the road (and therefore less taxpayer-funded maintenance), and creates a healthier population.

LIKE PROTECTED BIKE LANES?
TELL YOUR LOCAL ELECTED OFFICIALS!

Studies show that protected bike lanes are:

- Good for improving safety of all users
- Improve business retail sales
- Increase motorist and bicycle lawfulness
- Increase the number of people riding bikes.

1. NYC DOT. Measuring the Street: New Metrics for 21st Century Streets. <http://www.cyclinginnewyork.org/measuringthestreet.pdf>
2. Daniel H. Dill. Bicycling for Transportation and Health: The Role of Infrastructure. <http://www.pubsportjournal.com/journals/30/v52/iss1/pdf/200956a.html>
3. City of Portland. Bike and Pedestrian One-Way Business Exposure and Business A Study of Bloor Street in Toronto's Annex Neighborhood.



Transitized.com

5. Key Trachte, M., Anne Harris, et. al. Route Infrastructure and the Risk of Injuries to Cyclists. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1220510/>
6. <http://tiny.cc/meyarw>
7. Chicago Tribune. City Keys Dearborn side signals keep cyclists in line. June 10 2013.
8. NHTSA. 2010 findings Report National Survey of Bicyclist and Pedestrian Attitudes and Behavior. 2008.

EXAMPLES FROM
ELSEWHERE

