

# Welcome to the Open House

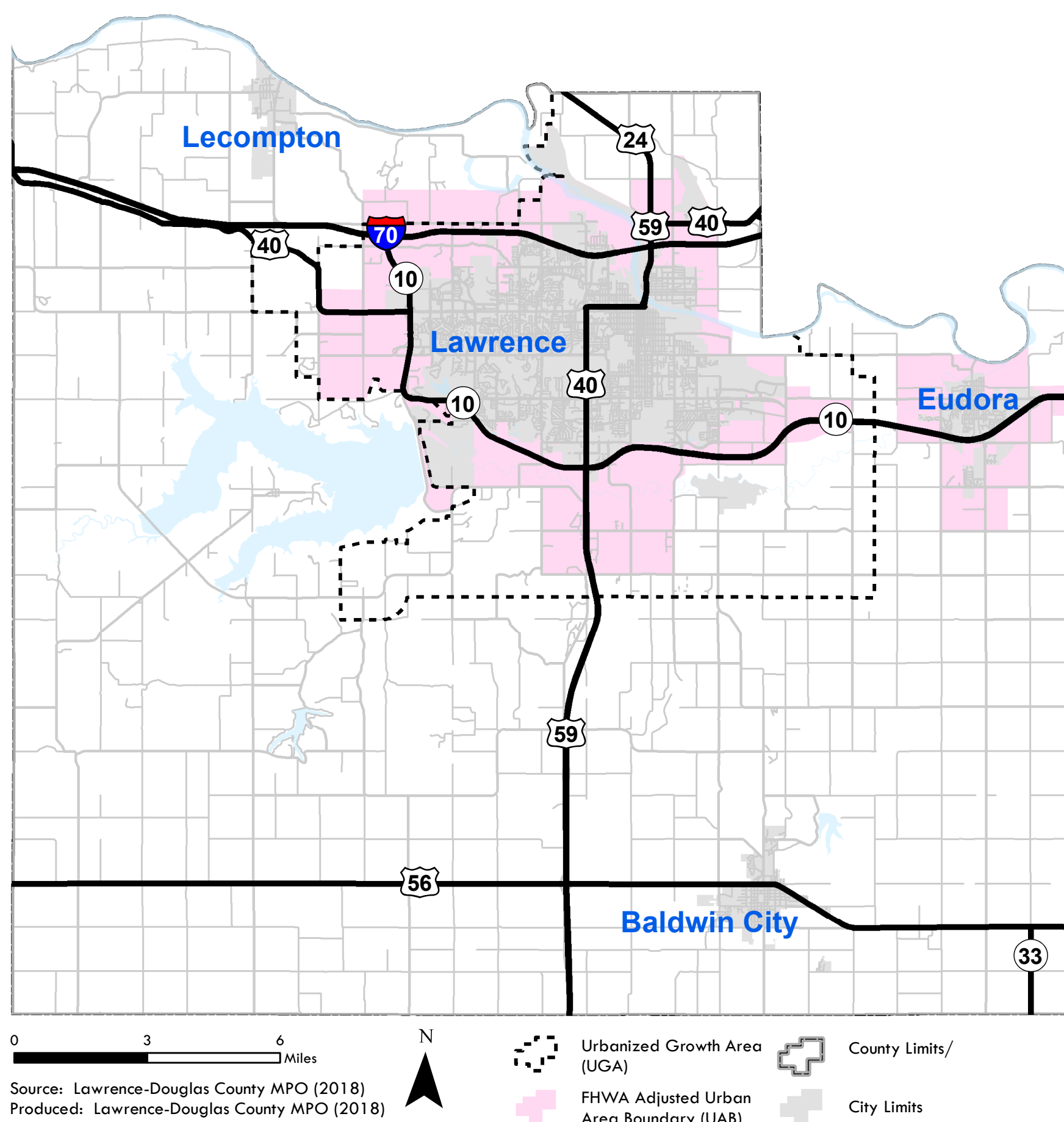
Thank you for coming to learn about the Countywide Bikeway Plan update and to share your input with us. Take a moment to read through the boards and provide input by completing the survey.

## What will the plan do for bicycling in Lawrence and Douglas County?

- Align differences in all the existing plans (Lawrence Pedestrian Bicyclist Issues Task Force, Current Countywide Bikeway Plan, Lawrence Loop Alignment Study) to establish **one unified bicycle vision**
- Set specific measurable **goals & strategies** to improve bicycling
- **Prioritize** projects or project areas
- Address **funding & programming** strategies

## What is the Bicycle Advisory Committee role?

- Create a vision, goals, & strategies based on community input & best practices
- Co-host public/stakeholder engagement
- Help make project & programming priorities clear
- Provide staff feedback during plan development



Lawrence-Douglas County MPO-Planning Area

## What is the MPO?

The Lawrence-Douglas County Metropolitan Planning Organization (MPO) is responsible for long-range transportation planning and programming of federal transportation funds for projects throughout Douglas County and our four cities.

The MPO works with the public, federal transportation agencies, the Kansas Department of Transportation, transit providers, and area stakeholders.

# Why Plan for Bicyclists?

## Health & Wellness

- Exercise boosts brainpower and helps to stave off Alzheimer's in the elderly.
- People who are active on a daily basis are 31% less likely to develop high blood pressure.<sup>1</sup>

## Improved Safety

- High quality bike facilities increase ridership and make biking safer.
- The risk of a bicyclist being struck by a motorist declines as the number of people biking increases.<sup>4</sup>

## Improved Economy

- In 2017, driving a newer sedan cost an average of \$8,171 per year and driving an SUV cost \$9,451 per year.<sup>7</sup>
- Transportation costs are typically the second highest household expense behind housing. Factoring in both housing and transportation costs provides a more comprehensive way to think about housing costs and true affordability.<sup>8</sup>

## Reduced Congestion

- In 2009, 60% of trips under 1 mile were made by automobile.<sup>2</sup>
- Bike facilities reduce traffic delays for automobiles.<sup>3</sup>

## Improved Air Quality

- 60% of pollution created by automobile emissions happens in the first few minutes of operation.<sup>5</sup>
- In 2016, transportation accounted for approximately 28% of total U.S. greenhouse gas emissions.<sup>6</sup>

## Equity & Access

- 1 in 16 (6.3%) Douglas County residents do not have access to a vehicle.<sup>9</sup>
- Safe non-motorized transportation options, combined with access to public transportation, are critical components of a transportation network that connects people - especially low-income households - with jobs, education, and essential services, providing "ladders of opportunity."<sup>10</sup>

## Housing + Transportation Costs % of Income

In Lawrence, housing + transportation costs are **49%** of total income.

In Eudora, housing + transportation costs are **53%** of total income.

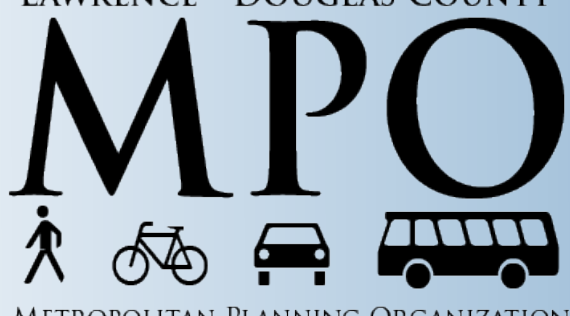
In Baldwin City, housing + transportation costs are **52%** of total income.

In Lecompton, housing + transportation costs are **61%** of total income.

### Sources

1. [www.bicycling.com](http://www.bicycling.com)
2. FHWA
3. [www.citylab.com](http://www.citylab.com)
4. NACTO
5. [www.pedbikeinfo.org](http://www.pedbikeinfo.org)
6. EPA
7. AAA
8. <https://htaindex.cnt.org>
9. 2016 ACS 5-Yr Estimates
10. [www.transportation.gov/safer-people-safer-streets](http://www.transportation.gov/safer-people-safer-streets)

LAWRENCE - DOUGLAS COUNTY



# Current Bikeway Plan

The current Countywide Bikeway Plan was completed as part of the Multimodal Planning Studies in 2014. The plan made strides improving bicycling in the region, but several key items are missing.

- Lack of design options
- Lack of established metrics
- Lack of project prioritization
- Needs stronger E’s

These items will be addressed in the new plan.



## What are the 6 E’s of Bicycle Planning?

- Engineering**  
Creating safe and convenient places to ride and park
- Education**  
Giving people of all ages and abilities the skills and confidence to ride and educating bicyclists and motorists about the rules of the road
- Encouragement**  
Creating a strong bike culture that welcomes and celebrates bicycling
- Enforcement**  
Ensuring safe roads for all users - motorists, bicyclists, & pedestrians
- Evaluation**  
Seek to quantify the outcomes of implementation over time
- Equity**  
Opportunity for all to participate



## Countywide Bicycle Facilities

	Miles		
	Existing	Planned	Total
Bike Lane	15.9	57.8	73.7
Bike Route	43.8	150.9	194.8
Bike Route w/Paved Shoulder	-	81.3	81.3
Climbing Lane	-	2.2	2.2
Cycle Track	-	0.3	0.3
Shared Lane Marking	4.9	3.7	8.6
Shared Use Path	50.2	74.5	124.7
Total	114.8	370.7	485.5



There are 1,762 miles of roadways throughout the County.

# How Lawrence Measures Up



## Bicycle Friendly Community

Diamond is the highest available designation

Lawrence has been a Bronze Bicycle Friendly Community since 2004. In 2016, Lawrence was re-designated and provided the following feedback to improve our score.

- Continue to complete the Lawrence Loop and ensure people can safely access the loop and community destinations from the loop.
- Increase staff time on improving conditions for people who bike and walk.
- Continue to create a connected network that helps people safely access transit and schools.

<b>ENGINEERING</b> Bicycle network & connectivity	4/10
<b>EDUCATION</b> Motorist awareness & bicycling skills	3/10
<b>ENCOURAGEMENT</b> Mainstreaming bicycling culture	4/10
<b>ENFORCEMENT</b> Promoting safety & protecting bicyclists' rights	3/10
<b>EVALUATION &amp; PLANNING</b> Setting targets & having a plan	2/10



## 4-STAR Certified Community

The STAR Community Rating System is the first national certification program to recognize sustainable communities. The STAR framework integrates economic, environmental, and social aspects of sustainability. There are 7 goal areas and 44 objectives by which cities are evaluated. Several actions were suggested to improve the 59% of points earned in the transportation choices category.

### TRANSPORTATION CHOICES



Promote diverse transportation modes, including walking, bicycling, transit, that are safe, low-cost, and reduce vehicle miles traveled.

5-STAR is the highest available designation



## Places for Bikes City Rating

5 is the highest available overall score

Places for Bikes offers a data-driven approach to focus on quickly building better bike infrastructure. Lawrence was provided the following feedback to improve our score:

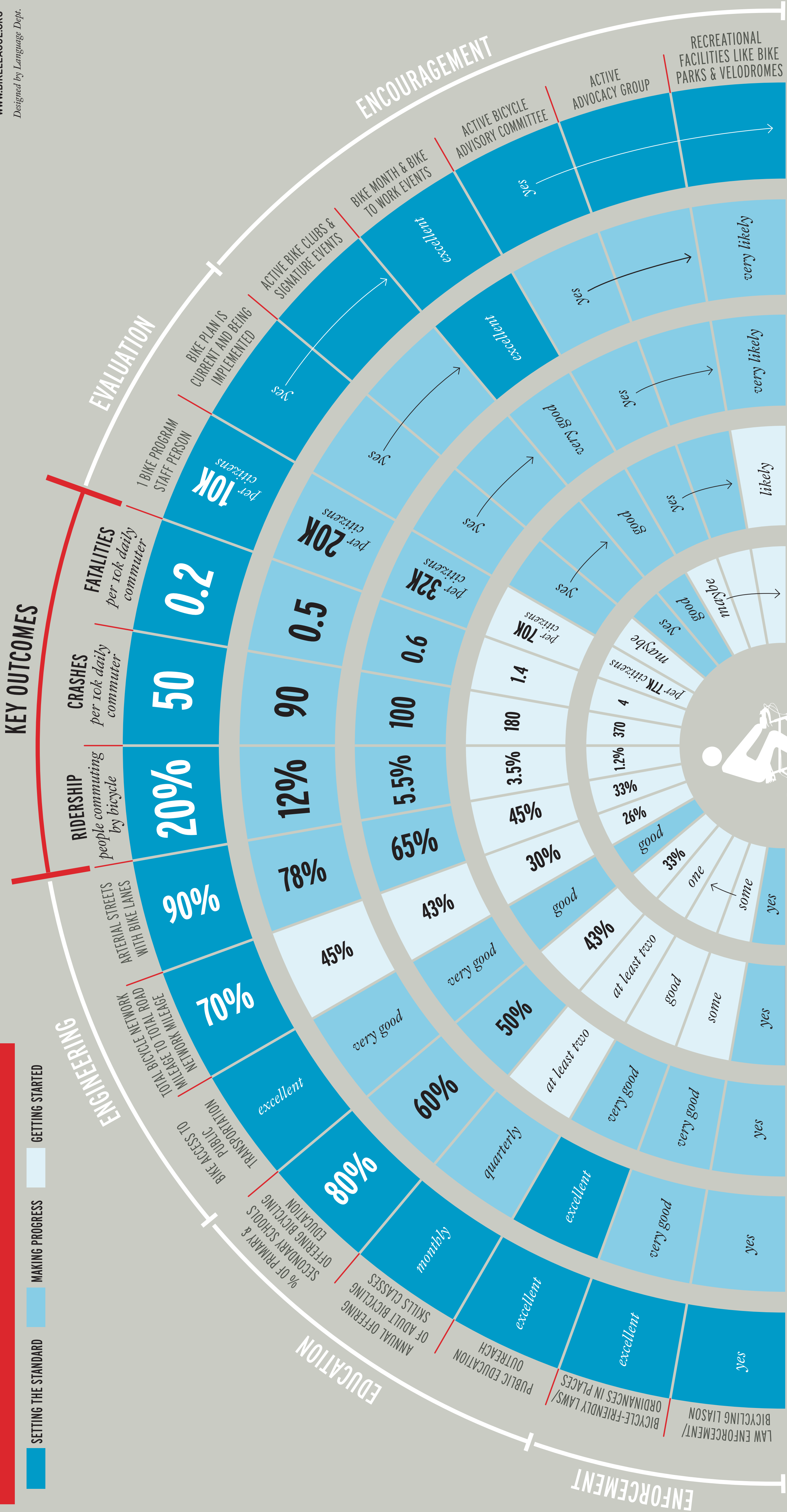
- Hold a monthly social ride for new bikers
- Create a "Vision Zero" policy with measurable goals and a clear timeline
- Install a small network of neighborhood bikeways/bike boulevards by improving a few residential streets
- Implement one pop-up event or pilot bikeway project this year using temporary material
- Build a diverse mobility advisory team

Overall Score  
1.3\*

<b>RIDERSHIP</b> Bicycle commuting Recreational bike riding Perceptions of bike use	1.3
<b>SAFETY</b> All mode fatalities and injuries Bicycle fatalities and injuries Perceptions of safety	1.6
<b>NETWORK</b> Bicycle Network Analysis (BNA) Perceptions of network quality	1.6
<b>REACH</b> Demographic gap in BNA Bicycle commuting rates by gender	1.9
<b>ACCELERATION</b> Growth in bike facilities and events Perceptions of progress	NA

\*The current score does not include public input from a community survey. In August, a City Rating community survey will be released.

# THE BUILDING BLOCKS OF A BICYCLE FRIENDLY COMMUNITY



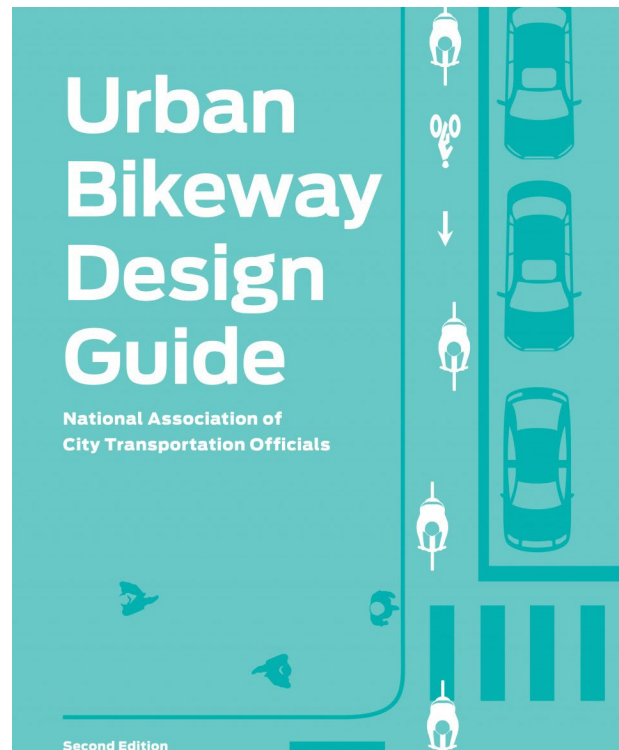
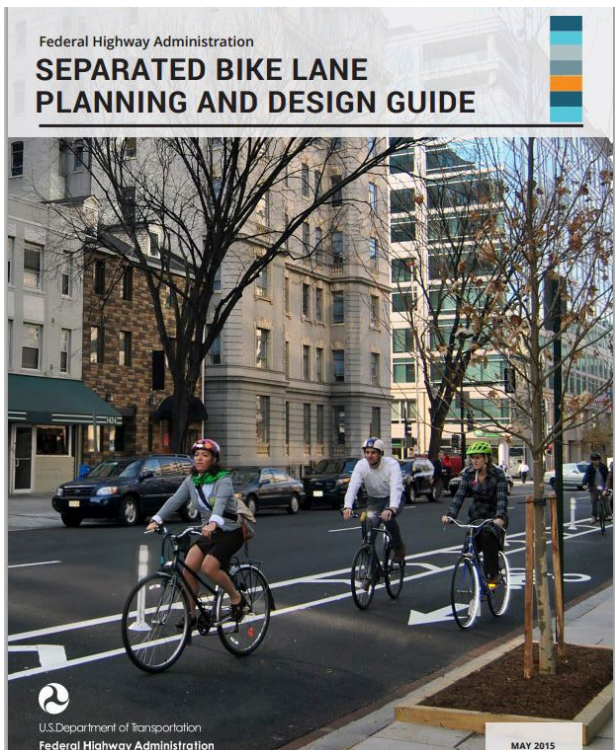
There's no single route to becoming a Bicycle Friendly Community. In fact, the beauty of the BFC program is the recognition that no two communities are the same and each can capitalize on its own unique strengths to make biking better. But, over the past decade, we've pored through nearly 600 applications and identified the key benchmarks that define the BFC award levels. Here's a glimpse at the average performance of the BFCs in important categories, like ridership, safety and education.



# National Trends

**62%** Growth in commuting to work nationwide (2000-2014)

Nearly **1,000,000** bike commuters nationwide in 2014

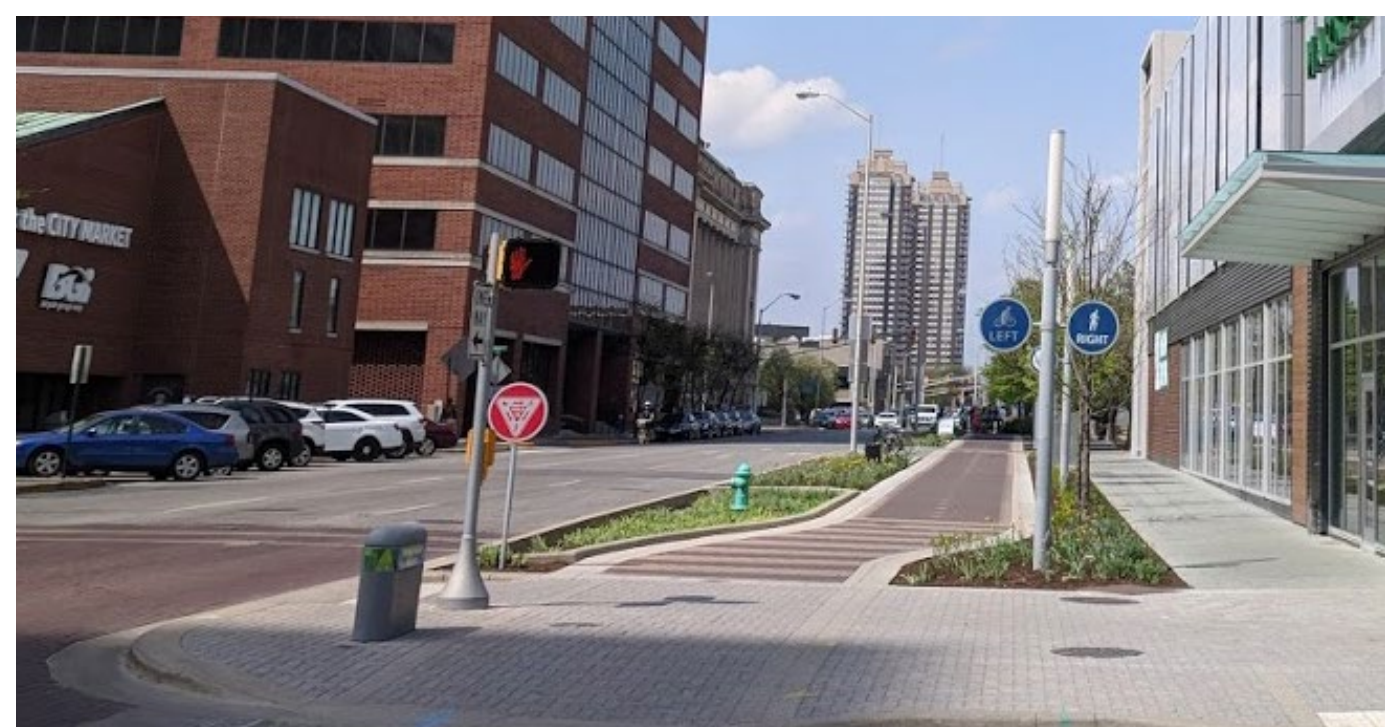


- New guides since the 2014 Countywide Bikeway Plan
- National guidance is clearly established (examples below)

## Buffered Bike Lane



## Raised Cycle Track



## Protected Bike Lane/Two Way Cycle Track



**Examples of national guidance**

# Bicyclist Level of Comfort

## Some roads are more comfortable to bicycle on than others. Why?

- Number of vehicles
- Vehicle speeds
- Number of traffic lanes
- Frequency of on-street parking turnover
- Ease of crossing intersections

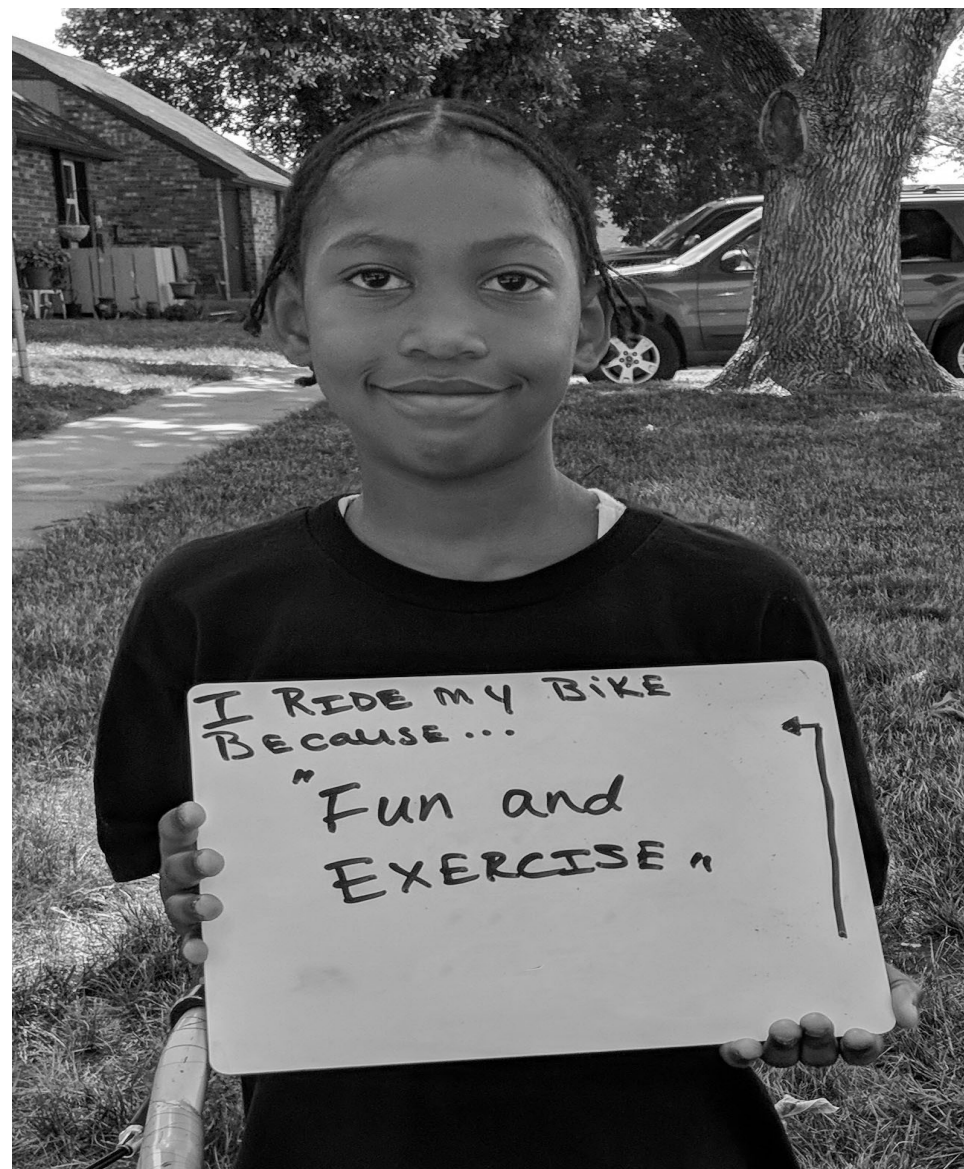
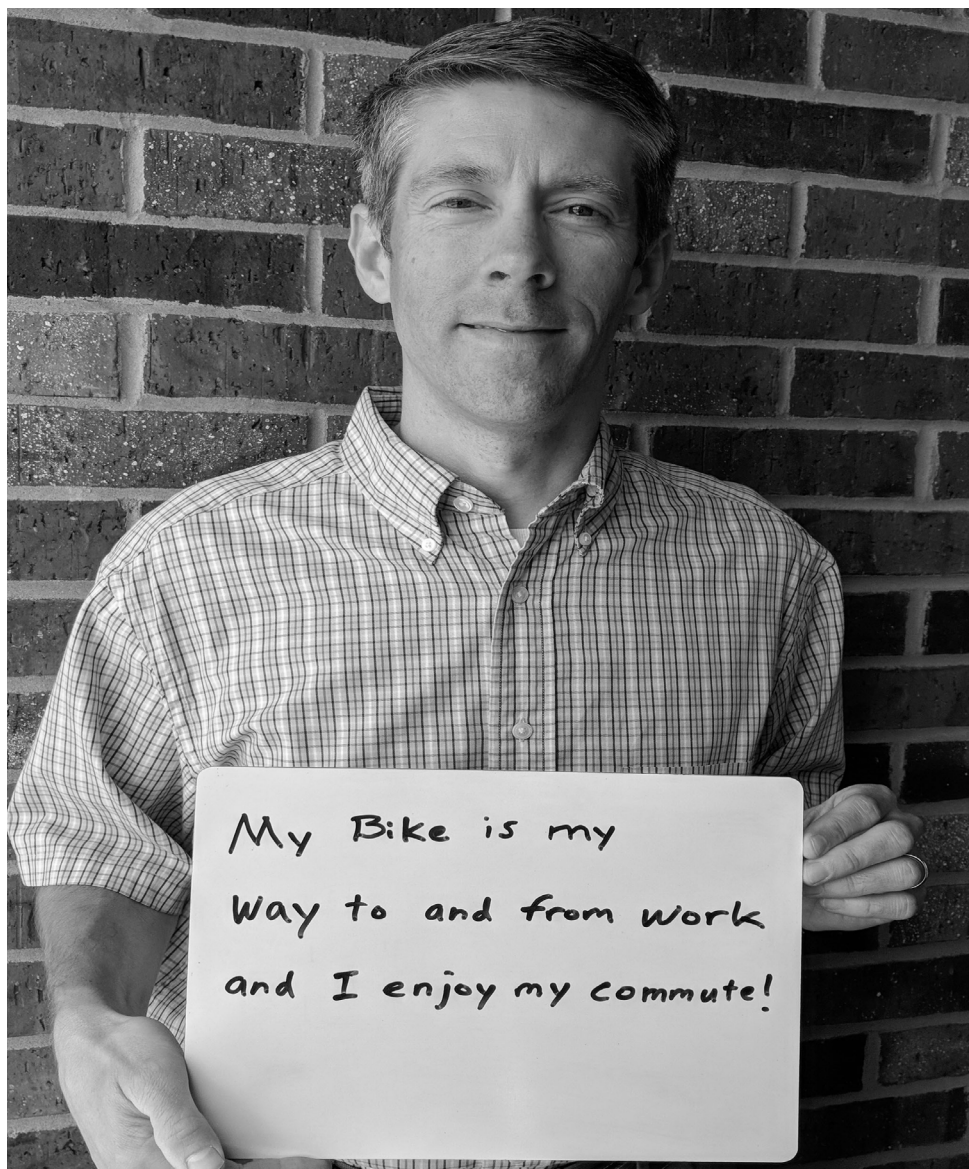
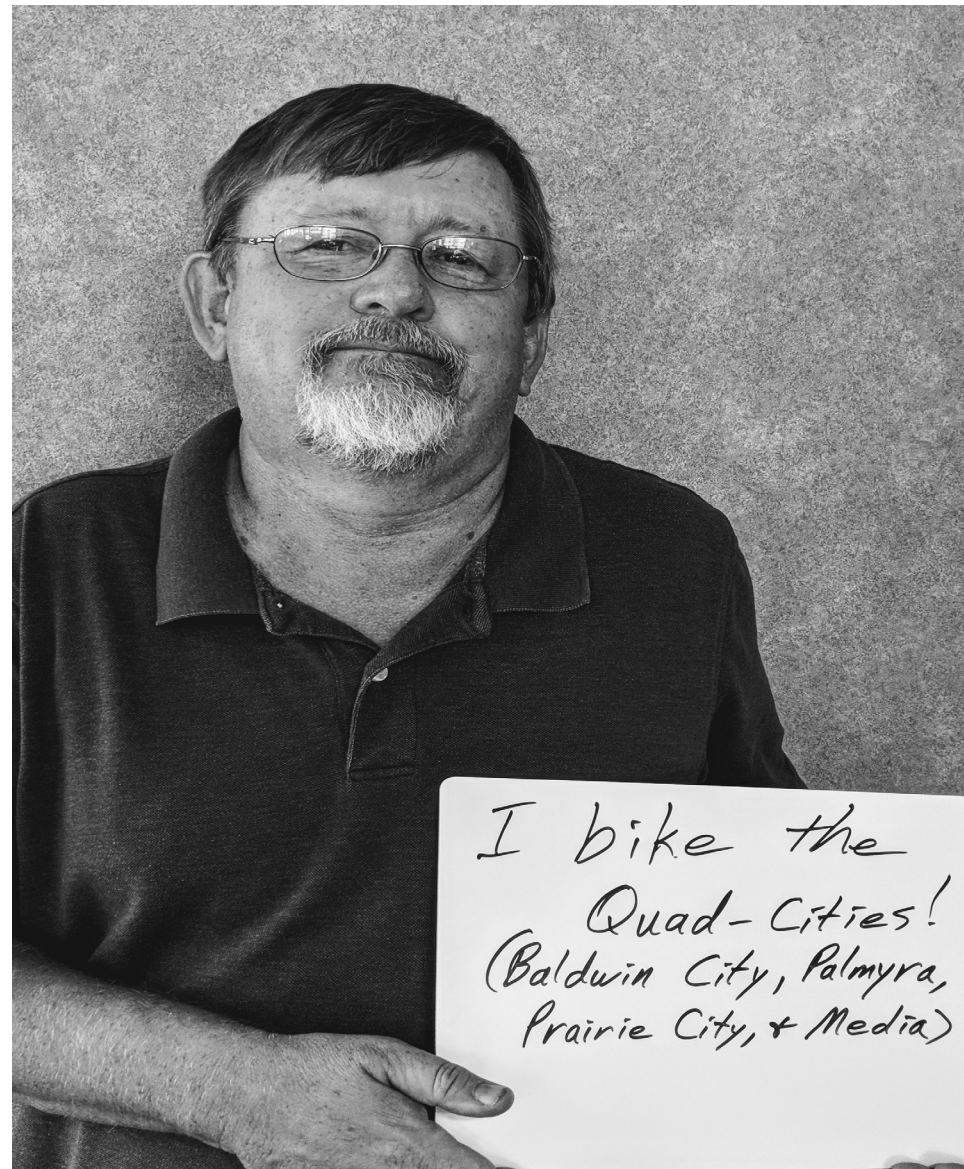
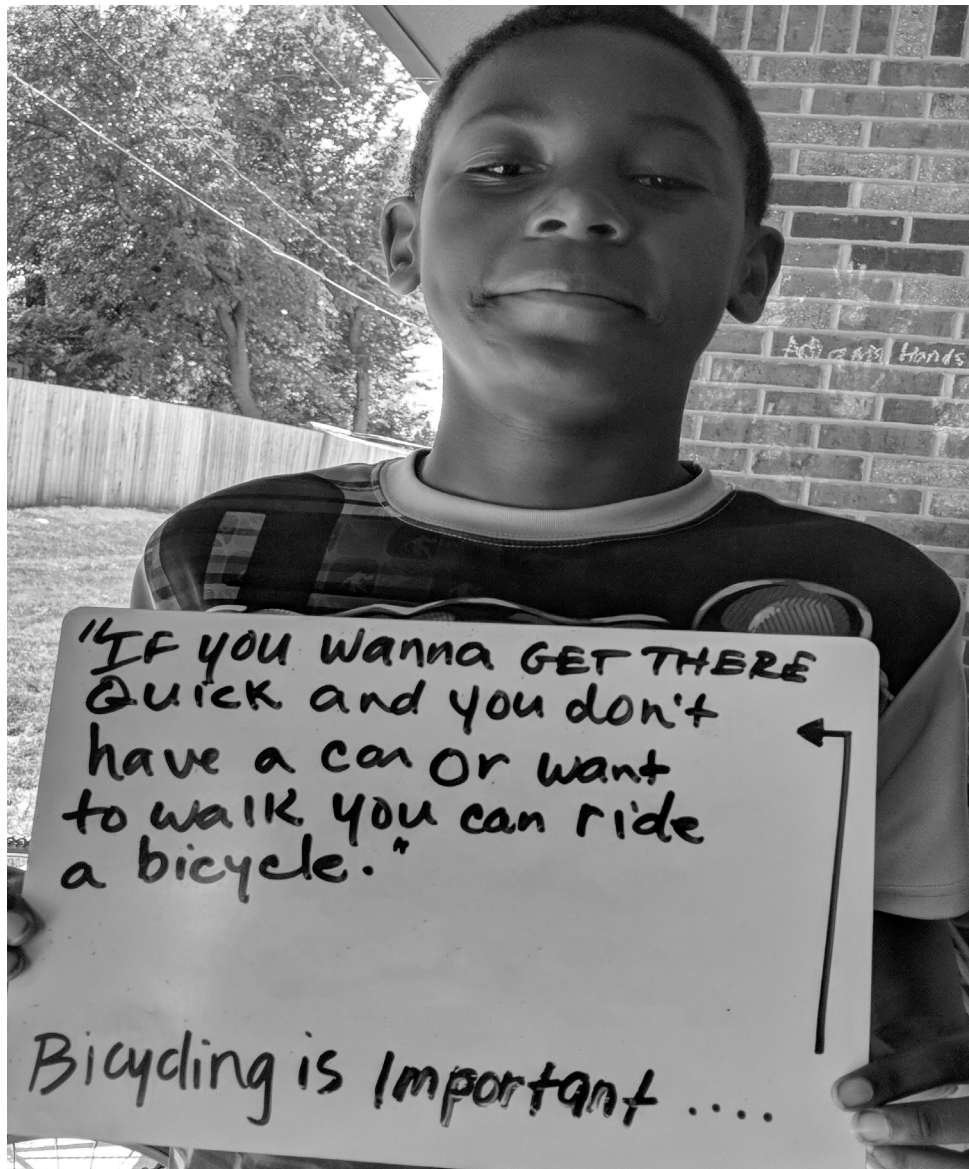
**This plan seeks to develop a low stress/high comfort network of bicycle friendly streets**



# Your Turn...

Grab a white board and answer one of the questions to the right. Have a staff or BAC member snap your picture. Here are a few examples:

- 🚲 I bike because...
- 🚲 I wish it were easier to bike...
- 🚲 I would bike more if...
- 🚲 My favorite place to bike is...
- 🚲 Biking is important to me because...



# Ride Video

As part of the Open House on Saturday, June 16 a guided bicycle ride will be offered. This video is a recording of the ride.

As you watch the video think about the following items:

- How comfortable did the footage make you?
- What was the most/least comfortable part of the ride?
- Are signs and markings along the riding surface visible, well-maintained, easily understood, and adequate?
- What are all roadway users (vehicles, bicyclists, pedestrians, transit, etc.) doing with regard to bicycle traffic? What are bicyclists doing with regard to all other roadway users? Do roadway user behaviors increase crash risk?

## What Are Your Thoughts?

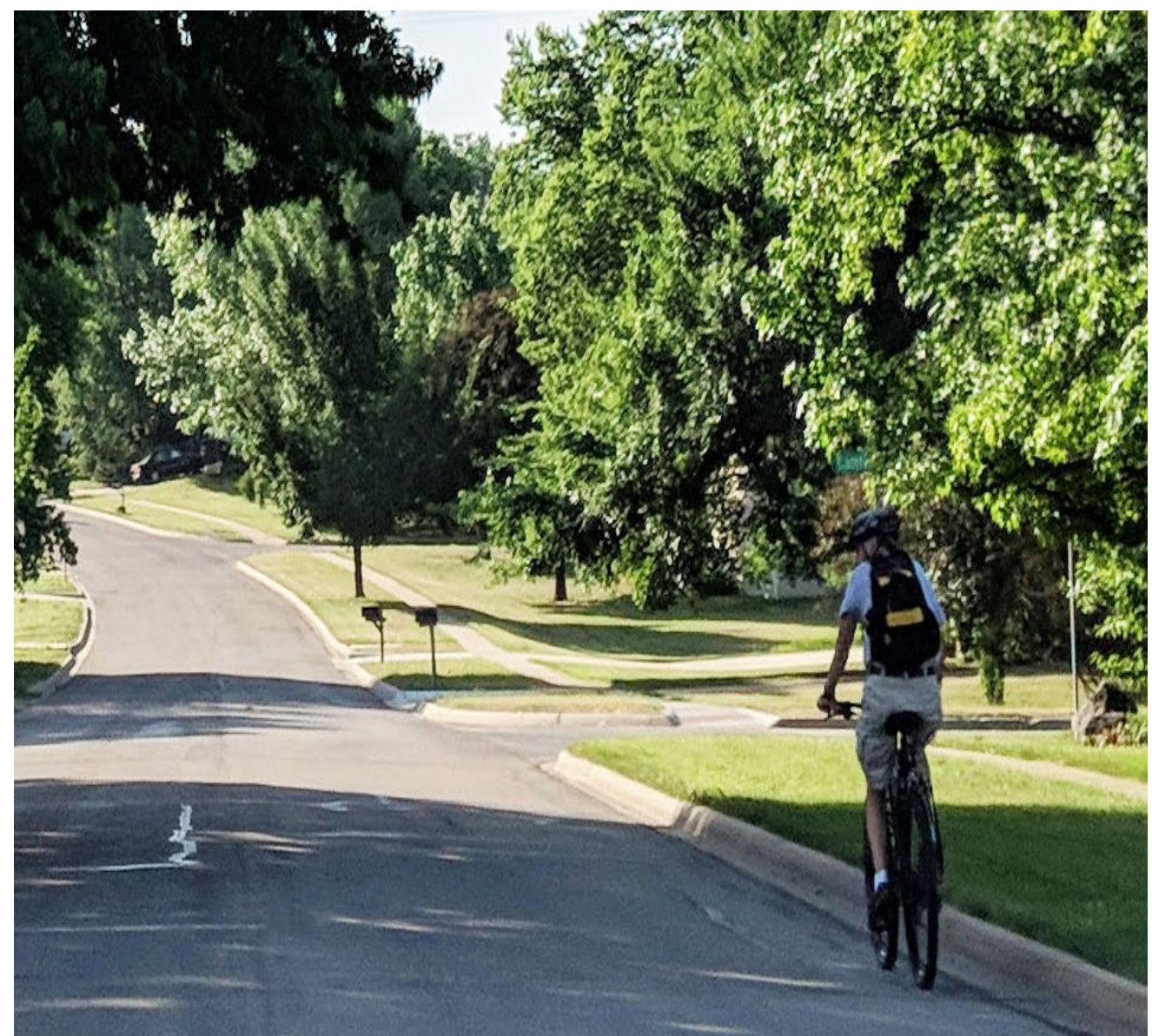
Take the survey either online at -

**[www.lawrenceks.org/mpo/tellus](http://www.lawrenceks.org/mpo/tellus)**

or

**on paper**

Use boards 10 - 13 when you think about your bicycling comfort level while taking the survey.



# Bicycle Facility Types

## Shared-Lane Markings



Shared-lane markings (sharrows) are used on streets where bicyclists and vehicles share the travel lanes. Sharrows help position bicyclists and provide visual cues to motorists. They can be configured to offer directional and wayfinding guidance.

Sharrows are not appropriate on streets with speed limits greater than 35 miles per hour.

## Conventional Bike Lane



A bike lane is a pavement marking that designates a portion of a street for the use of bicycles. Bike lane markings are typically dashed where vehicles are allowed to cross the bike lane, such as right turns or at bus stops. The bike lane is located adjacent to motor vehicle travel lanes and flows in the same direction as motor vehicle traffic. Bike lanes are typically on the right side of the street, between the adjacent travel lane and curb, road edge, or parking lane.

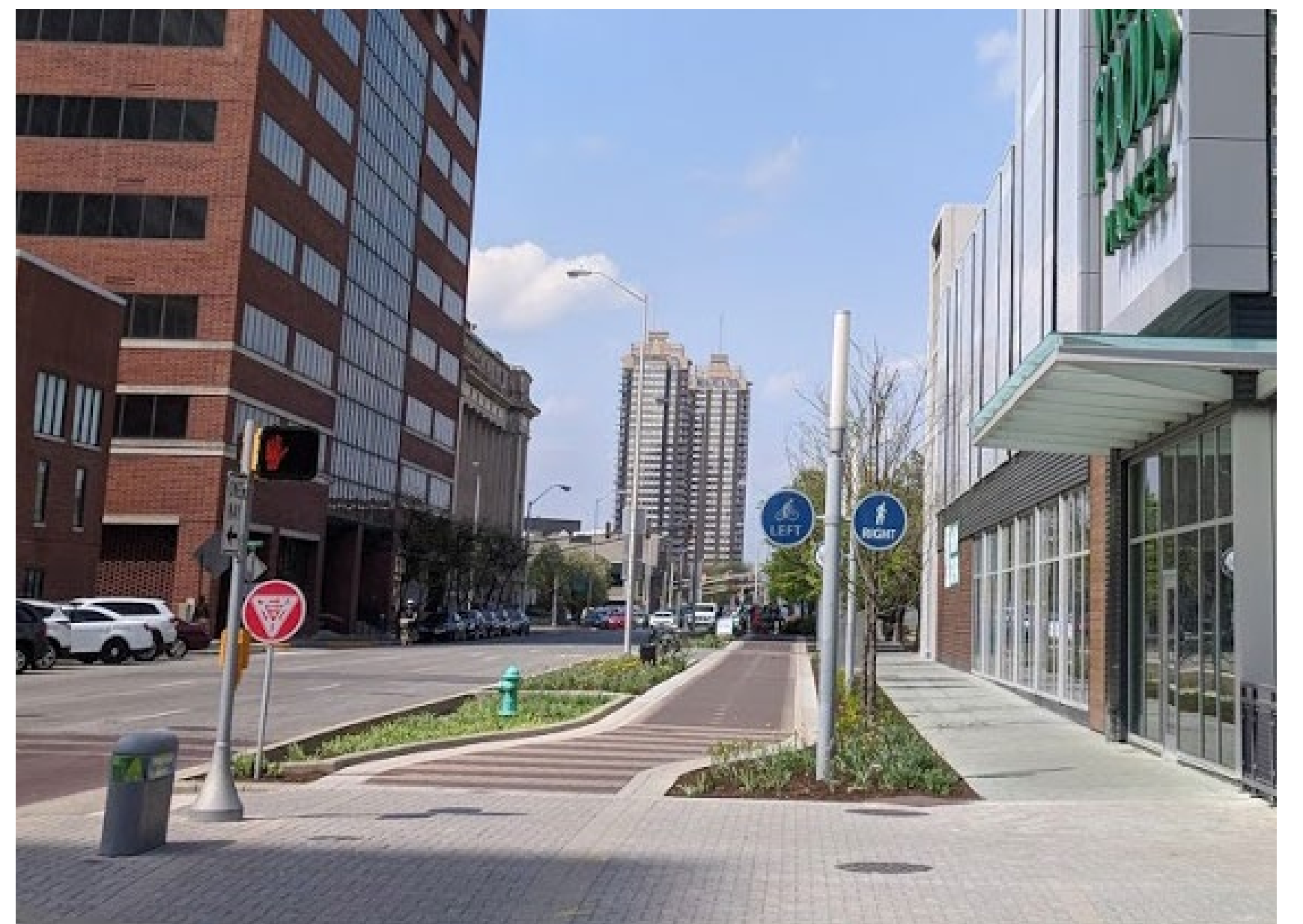
# Bicycle Facility Types

## Buffered Bike Lane



Buffered bike lanes are created by striping a buffer zone between a bike lane and the adjacent travel lane. Some buffered bike lanes also offer a painted buffer between the bike lane and the adjacent parking lane. Buffered bike lanes should be considered at locations where there is excess pavement width or where adjacent traffic speeds exceed 35 mph.

## Protected Lane/Cycle Track

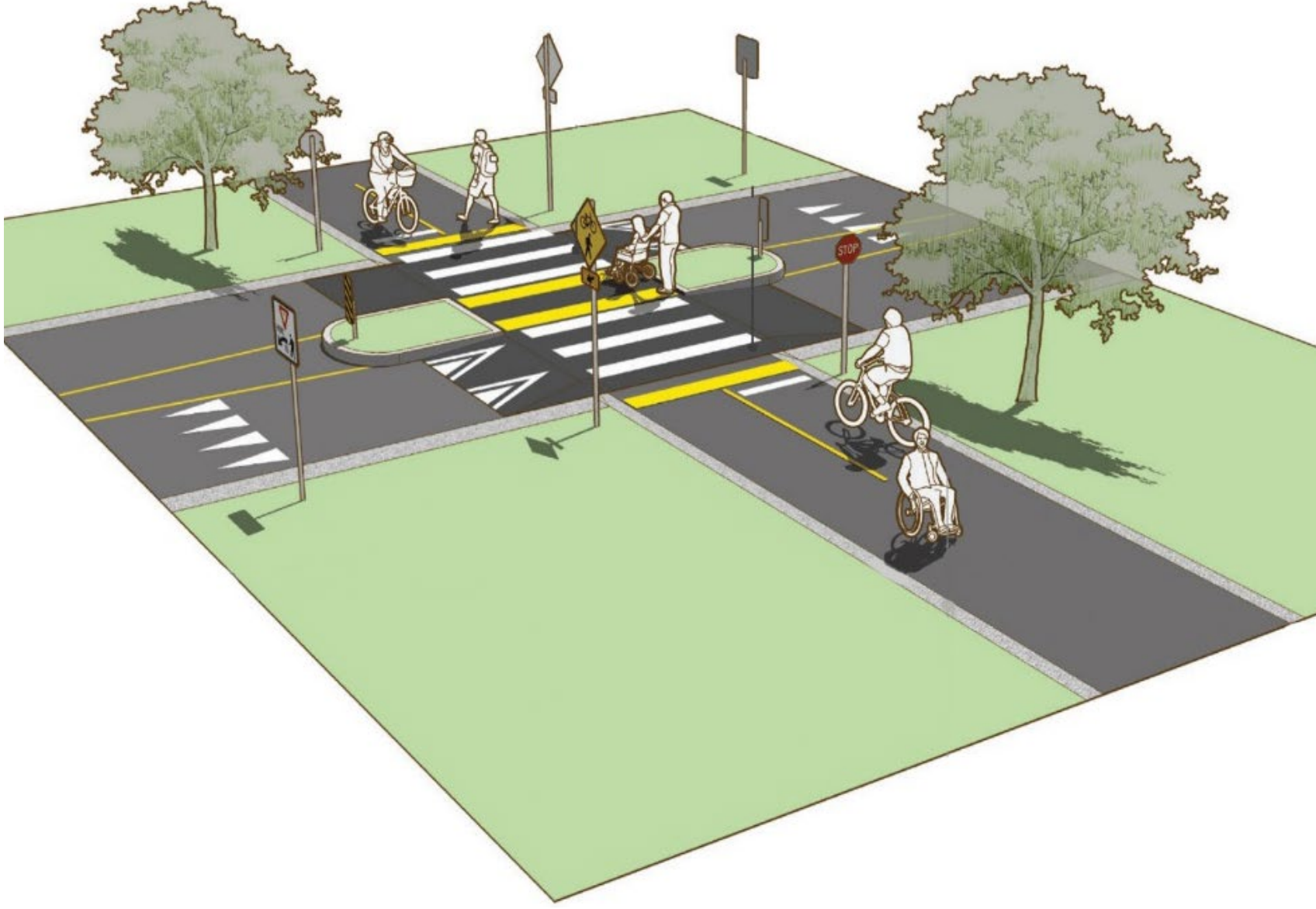


A protected lane/cycle track is an exclusive bike facility that is physically separated from both the street and the sidewalk. A cycle track may be constructed at street level using street space, or at the sidewalk level using space adjacent to the street. Cycle tracks separate bicyclists from motor vehicle traffic using a variety of methods, including curbs, raised concrete medians, bollards, on-street parking, large planting pots/boxes, landscaped buffers (trees and lawn), or other methods. Cycle tracks designed to be level with the sidewalk should provide a physical separation from pedestrian space. Cycle tracks can be one way for bicycles on each side of a two-way road, or two-way and installed on one or both sides of the road.

Cycle tracks are typically used on large multi-lane arterials where higher vehicle speeds exist. They may also be appropriate on high-volume, lower-speed streets.

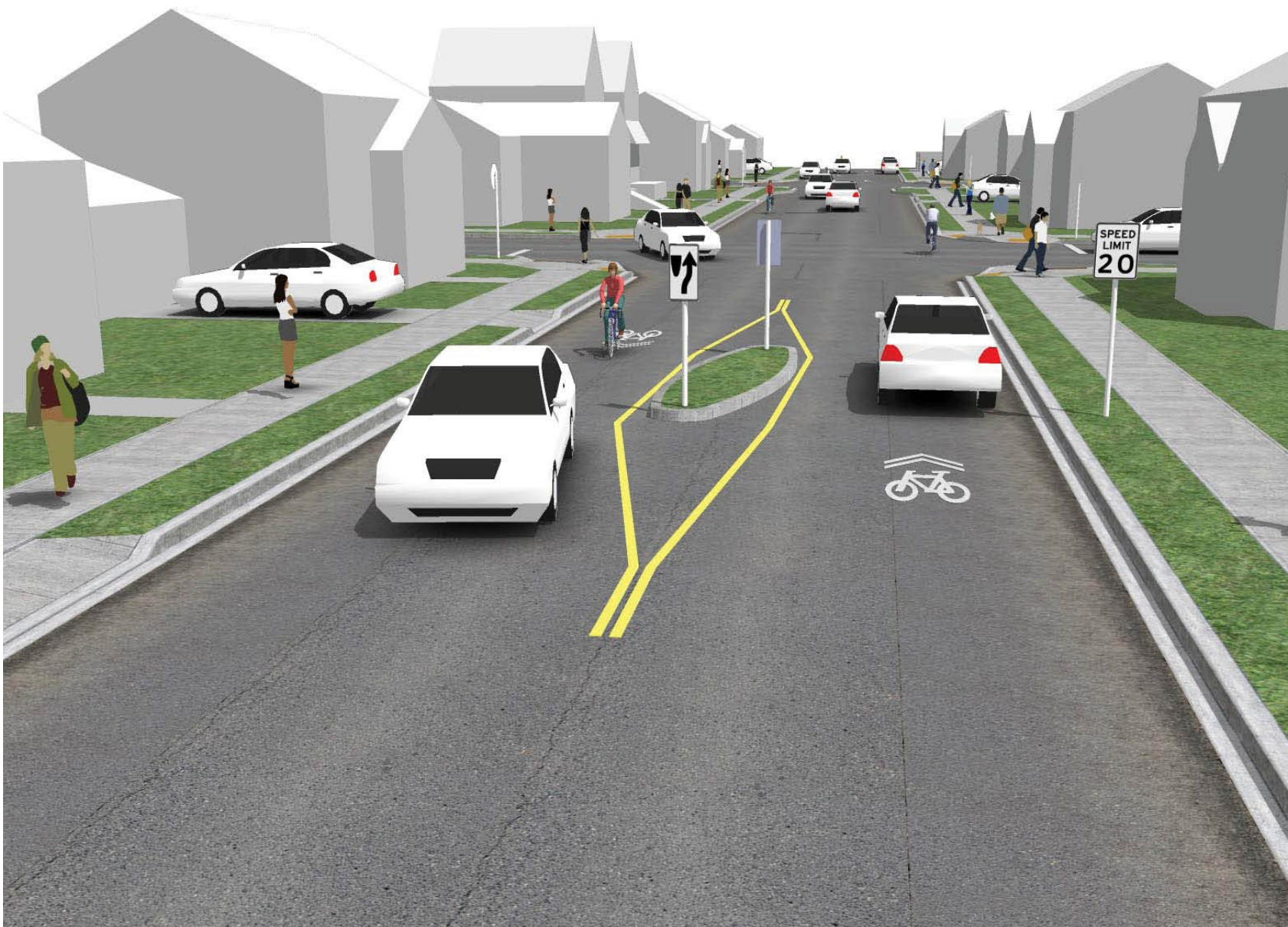
# Bicycle Facility Types

## Shared Use Path



A shared use path (SUP) is an off-street bicycle and pedestrian facility that is physically separated from motor vehicle traffic. Typically SUPs are located in an independent right-of-way such as a park, greenway, along a utility corridor, or an abandoned railroad corridor. They can be located adjacent to a street. SUPs are used by other non-motorized users including pedestrians, skaters, wheelchair users, and joggers.

## Bicycle Boulevard

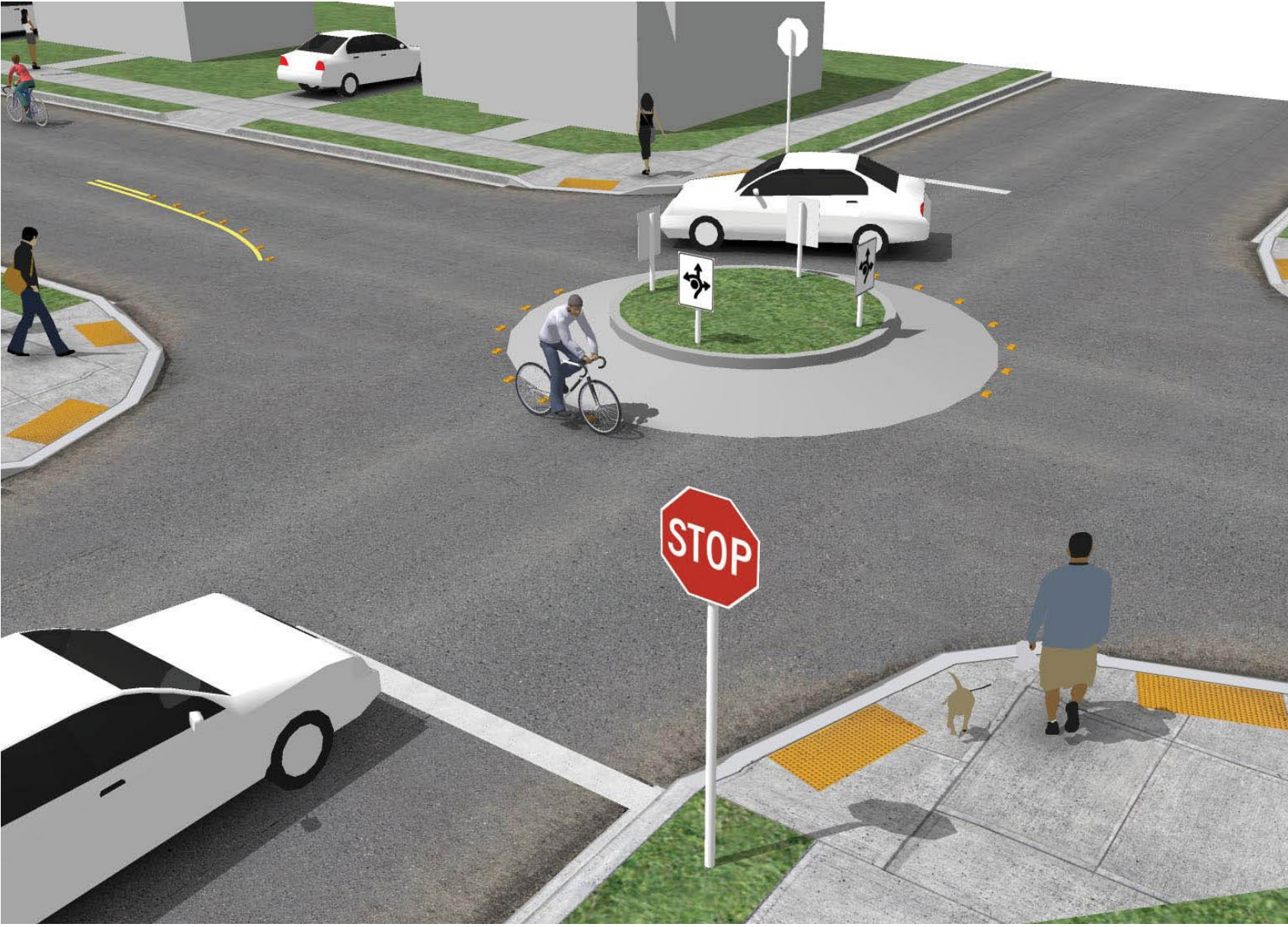


Bicycle boulevards, sometimes also called neighborhood greenways, are streets with low motorized traffic volumes and speeds designated and designed to give bicyclists and neighborhood motor vehicle traffic travel priority. Bicycle boulevards use signs, pavement markings, and traffic calming features such as traffic circles, medians, speed humps, and diverters to slow traffic and discourage through trips by motor vehicles. Street crossing improvements like supplemental signs or refuge islands are implemented to create safe, convenient bicycle crossings of arterial streets.

Bicycle boulevards benefit neighborhoods by reducing cut-through traffic and speeding without limiting access by residents.

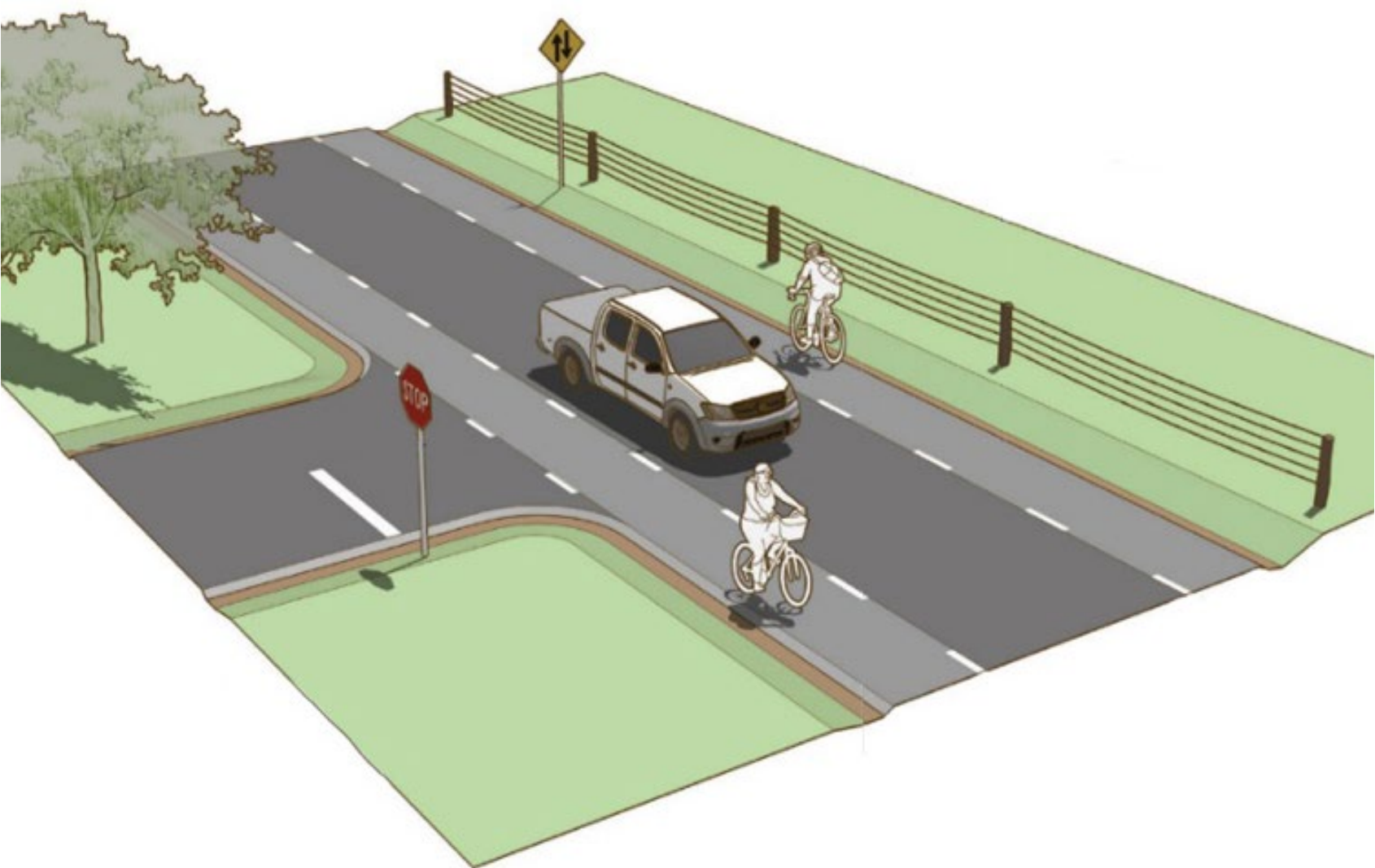
# Bicycle Facility Types

## Traffic Calming



Traffic calming techniques are employed to reduce traffic speed. There are many ways to accomplish this: traffic circles, roundabouts, medians, pinch points, chicanes, lane shifts, speed humps, diverters, and on-street parking.

## Bike Advisory Lane



Bike advisory lanes have a single motor vehicle lane shared by vehicles going in both directions. When two oncoming vehicles meet, motorists yield to bicyclists before merging into the bike lane.

# Next Steps

The Bicycle Advisory Committee will review the results of the survey and begin working on the draft bikeway network and priorities survey for the second phase of public engagement in the Fall of 2018.

**Public input on facility comfort level**      **Summer 2018**

The BAC will develop recommendations programs, policies, and projects based on public input

**Public input on proposed goals, networks, policies, and programs**      **Fall 2018**

**Final review and celebrate the new plan**      **Spring/ Summer 2019**

Let the work begin

