46TH-47TH STREETS AND BENNETT-MIDDLE FISKVILLE NEIGHBORHOOD BIKEWAYS





BACKGROUND

Neighborhood bikeways are local streets with a combination of speed management, signage, and pavement markings that allow people walking, bicycling, driving, and playing to share street space more safely and comfortably. ATD is seeking your feedback on a proposed neighborhood bikeway project designed to provide bikeway connections in Central Austin neighborhoods for people of all ages and abilities.



Example of a shared lane marking, aka "sharrow," on a neighborhood bikeway in Portland, Oregon.

FUNDING

The 2016 Mobility Bond dedicates \$137 million to local mobility projects. The Local Mobility Program is enhancing mobility, safety, and connectivity by funding construction of new infrastructure like bikeways, sidewalks, and urban trails as well as improvements to existing infrastructure. Funding for these proposed changes is available from the Bikeways and Sidewalks programs.

For more information about this project, neighborhood bikeways, the progress of the All Ages and Abilities Bicycle Network, or the 2016 Mobility Bond, visit the following AustinTexas.gov webpages:

/46-47-CLARKSON-BIKEWAYS /NEIGHBORHOODBIKEWAYS **/AAABIKENETWORK** /2016BOND

COMMENT PERIOD

The comment period for this project will be open through Sunday, December 15, 2019. Please submit feedback through the project survey. For questions, please contact:

> **Dylan Johnstone** (512) 974-7021 dylan.johnstone@austintexas.gov

LEARN MORE

PROJECT TIMELINE

The project timeline is subject to change pending the outcome of the public process and coordination with other projects. Sign-up for the project email updates to stay informed of the project status.

11/12 OPEN HOUSE

12/15 SURVEY AND COMMENT PERIOD CLOSES. COMMENTS MAY BE SUBMITTED AT THE OPEN HOUSE AND THROUGH THE PROJECT SURVEY

PUBLIC PROCESS AND PRELIMINARY DESIGN

FALL/WINTER 2019

FINAL DESIGN

Projects that move forward with a build alternative often include changes to the design based on community feedback.



TBD - ESTIMATED 2020

IMPLEMENTATION

If a build alternative moves forward, implementation may occur in phases. Additional detail on phasing would be shared in future project updates.

WHAT ARE NEIGHBORHOOD BIKEWAYS?

Neighborhood bikeways are local streets where motor vehicle traffic speeds and volumes are kept low to make it safer and more comfortable to bicycle, walk, and play.

Neighborhood bikeways were formerly called "quiet streets" in the 2014 Austin Bicycle Plan and were recently renamed "neighborhood bikeways" in the Austin Strategic Mobility Plan. They are sometimes called "bicycle boulevards" in other cities.



Concept for a neighborhood bikeway

Several factors are used in selecting local streets to form neighborhood bikeway routes:

- Naturally lower motor vehicle volumes and speeds are preferred
- Connectivity to other high-comfort bicycle facilities, such as protected bikeways and
- urban trails to form an "all ages and abilities" network
- Elevation changes
- Directness of the route

ALL AGES AND ABILITIES CONNECTIONS

Neighborhood bikeways are designed to be lowstress and are intended to serve people of all ages and abilities.

Austin's <u>All Ages and Abilities Bicycle Network</u> was adopted by City Council through the Austin Bicycle Plan and Urban Trails Plan in 2014, and recently updated in the Austin Strategic Mobility Plan (ASMP).





HOW ARE NEIGHBORHOOD BIKEWAY ROUTES SELECTED?



NEIGHBORHOOD BIKEWAY DESIGN TOOLBOX ROUTING **SPEED REDUCTION**

Pavement markings called "sharrows" encourage users to share the road without the presence of bicycle lanes.





STOP SIGN CHANGES

Stop sign changes are used to prioritize through bicycle movements.



WAYFINDING SIGNS

Wayfinding signs help to guide people along the bikeway route to local and regional destinations. Wayfinding signs can include information on the distance and approximate time it takes to bicycle to a destination.

Asphalt speed humps may reduce speeds by 6-13 mph and speed cushions by 5-7 mph (Source: FHWA ePrimer). Using local data, ATD has found rubber speed cushions can achieve comparable speed reductions as speed humps. Given that asphalt speed humps and rubber speed cushions are more effective at reducing speeds, these devices are preferred for use on neighborhood bikeways. For streets without sidewalks, ATD would install speed devices leaving a 3-foot clear space between the gutter and the edge of the speed device.

Speed humps are constructed to have a gentle, rolling profile and are placed from gutter-to-gutter across a roadway.









Curb extensions are used to shorten crossing distances and slow motor vehicle speeds during turning movements.



Signage, crosswalks, crossing islands, rapid flashing beacons, or pedestrian hyrbid beacons can be used to bring attention to people walking and bicycling at crossings and encourage better yielding behavior by drivers.









CROSSING IMPROVEMENTS

RAPID FLASHING BEACON





PEDESTRIAN HYBRID BEACON

PROJECT OVERVIEW

ROUTING

- New shared lane markings ("sharrows")
- New wayfinding signs
- Two routing options are being considered for the northsouth direction:
 - Alternative A Caswell Avenue to E 46th Street
 - Alternative B Continue on Clarkson Avenue to Bennett Avenue
- Study feasibility of switching stop signs at E 47th/ Avenue G intersection from east-west approaches to north-south approaches

SPEED REDUCTION

New speed reduction devices (e.g., speed humps or speed cushions) to achieve lower 20-25 mph speeds (see the preliminary design for the locations of proposed speed devices)

CROSSING IMPROVEMENTS

- Improvements for crossing major streets for people walking or bicycling
- New sidewalks on E 46th Street (Red River Street to Airport Boulevard) and Bennett Avenue (43rd Street to 46th Street). To avoid impacts to trees, the sidewalk is proposed to bump out into the street on the east side of Bennett Avenue from E 44th Street to Ellingson Lane. This will require a parking restriction on the east side for that one block.



Not-to-scale, updated 2019-11-06



ROUTING ALTERNATIVES



Caswell Avenue is a <u>Level 1</u> ("local") street with low motor vehicle volumes (less than 600 vehicles per day). The street would need speed reduction devices to meet neighborhood bikeway design guidelines, reducing motor vehicle speeds from 27 mph on average to 20-25 mph.



Not-to-scale, updated 2019-11-06



Clarkson Avenue is a <u>Level 2</u> ("collector") street with motor vehicle speeds (33 mph) and volumes (over 2,700 vehicles per day) that exceed neighborhood bikeway design guidelines for all ages and abilities. Improvements to lower speeds are possible, however, motor vehicle diversion to lower volumes is not recommended given the street's character as a neighborhood collector and its connectivity to Red River Street. The proposed improvements for this alternative route might not be able to provide a level of comfort suitable for all ages and abilities.

Based on existing Strava bicycling data and observations, Clarkson Avenue is a route commonly used by bicyclists. However, the observed use maybe by more confident bicyclists willing to tolerate higher traffic stress.



LOWER SPEEDS AND VOLUMES

Neighborhood bikeways are critical pieces of Austin's All Ages and Abilities Bicycle Network. It is important that these streets are comfortable places for people walking, bicycling, and driving to share, including young children and older adults. To do this, lower motor vehicle speeds and volumes are necessary.

Data show us that when speeds increase, so do the risk of crashes and injuries, and related "traffic stress." When motor vehicle volumes increase, the likelihood of a motor vehicle passing a person bicycling in the same direction also increases-the more often this happens, the more stressful it can be for a less confident bicyclist.

For neighborhood bikeways to be low-stress and more welcoming to less confident bicyclists, national best practices recommend a target goal of 20-25 mph for motor vehicles speeds and \leq 500–1,500 vehicles per day for motor vehicle volumes. Austin Transportation collected speed and volume data for this project to evaluate if improvements would be needed to meet neighborhood bikeway design guidelines.

SPEEDS

Motor vehicle speeds for all the streets studied were higher than the target speeds of 20-25 mph. Speed reduction devices are needed to meet neighborhood bikeway design guidelines (see the preliminary design for proposed locations of devices).



motor vehicle traffic is traveling faster than that speed.

VOLUMES

Motor vehicle volumes on W 46th Street, E 47th Street, Caswell Avenue, and Clarkson Avenue (north of 51st Street) were within an appropriate range. The volumes on Clarkson Avenue (south of 51st Street) were higher than the design guidelines recommend. Motor vehicle diverters are not recommended given Clarkson Avenue's character as a neighborhood collector and its connectivity



CROSSING IMPROVEMENTS

Sunshine

W 46th St

Triangle Commons Neighborhood Park

Guadalupe St



Cut-through median island to add crossing and pedestrian hybrid beacon. Change start of third southbound lane on N Lamar Boulevard to Sunshine Drive to provide a shorter crossing (two lanes) at proposed pedestrian hybrid beacon



Add signal and two-way protected bikeway connection

Legend	Route Alternatives	
Proposed Neighborhood Bikeway Route		Alternative A
	•••	Alternative B
Proposed Sidewalk		
——/ Planned / Existing All Ages and Abilities Bicycle Network		

Not-to-scale, updated 2019-11-06

Future connection to Crestview Station via the Red Line Trail to be constructed by the Airport Corridor improvements

Rd

E 51st St

Middle Fiskville

Clarkson Ave

Ave

E 43rd St

S

Red R

E Koenig Ln

E 53rd St

E 47th St

E 45th St

enu

Add green chevrons to call attention to bicycle crossing and add a pedestrian crossing island. Preliminary engineering determined that this location is feasible for a potential pedestrian hybrid beacon

Aven

W North Loop Blvd



Speedway

Shipe Park

 \tilde{S}

Duval

Add pedestrian hybrid beacon and crosswalks

Hancock Golf Course





Add center turn lane and geometric safety improvements

Add green chevrons to call attention to bicycle crossing. Preliminary engineering determined this location is not feasible for a pedestrian hybrid beacon



Lane assignment changes for west leg of 51st Street/Airport Boulevard and add bicycle lanes

Airport Blvd

35

E 46th St

Future signal to be installed by Airport Corridor improvements

Shared use path, sidewalk, and signal improvements for crossing IH-35. For more info, visit AustinTexas.gov/ CherrywoodBikeways