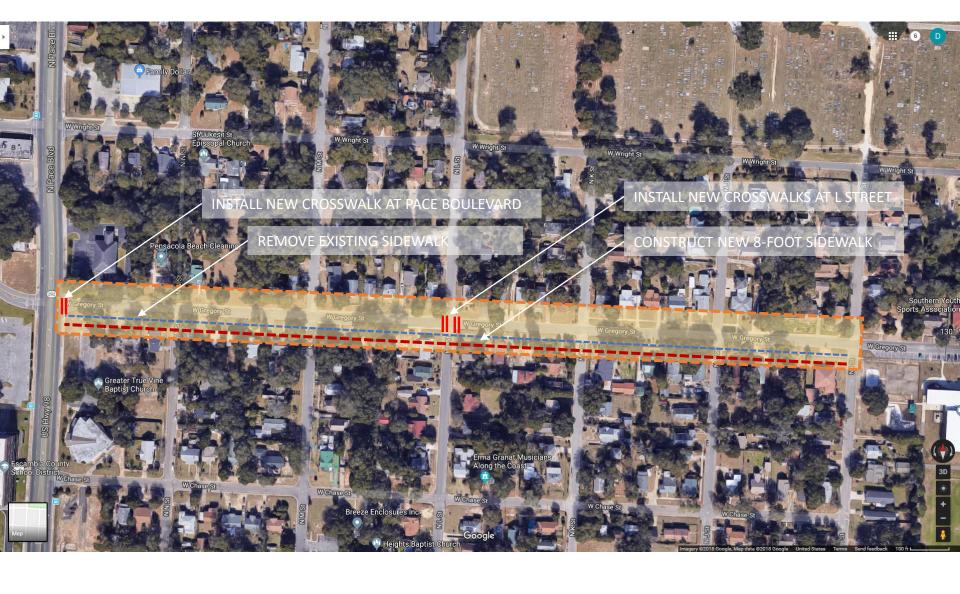


#### Notes:

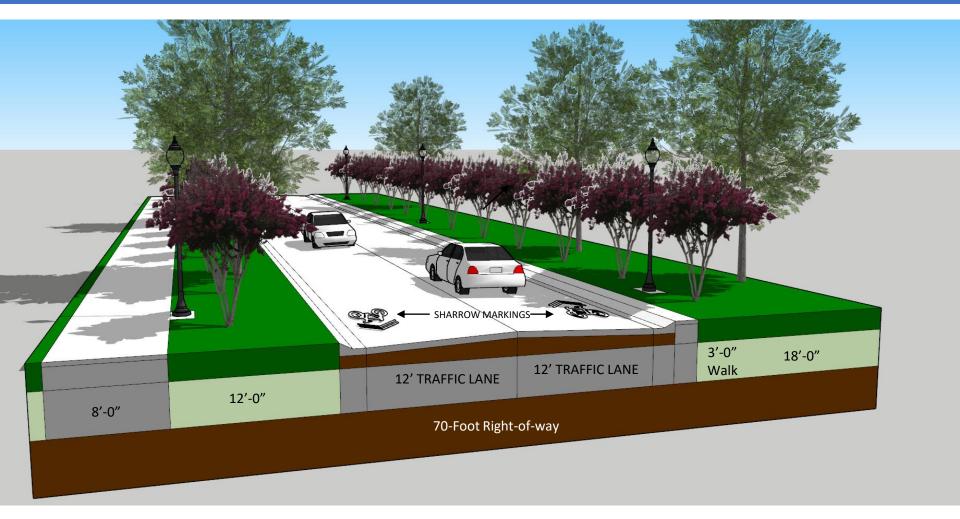
- 1. The improvements to Gregory Street will provide access between the Global Learning Academy and the Westside Branch Library and Theophalis May Neighborhood Center at Legion Field, and to adjacent neighborhoods.
- 2. The Gregory Street corridor improvements are intended to implement revitalization efforts within the Westside CRA.
- The Gregory Street TAP improvements include a wide ADA accessible sidewalk on the south side of the right-of-way, sharrows (as possible), street trees, street lighting, and wayfinding signage.
- 4. Gregory Street is Segment 2 of the TAP application. L Street is Segment 1.





#### Notes:

- Gregory Street has a 70-foot right-of-way with two 12-foot travel lanes. The
  street includes sidewalks on both sides within some blocks with a continuous
  narrow sidewalk on the south side. The project proposes to remove the
  narrow south sidewalk and construct an 8-foot concrete sidewalk.
- 2. Parking on the street may be permissible on either side, however if sharrows are used, parking should not be permitted to ensure continuous safe bicycle space.
- 3. Major oaks and other trees line the street in places and the sidewalk may be meandered to avoid impacting the trees. Street trees will be installed to provide shade along the sidewalk where space allows.
- 4. Street lights will be placed near the road edge on the north side, and closer to the sidewalk on the south side.



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# National Best Transportation Management Practices NACTO Urban Bikeway Design Guide

 For Gregory Street, since sufficient space does not exist, it is proposed to use sharrow markings to delineate traffic to share the road.

#### REQUIRED



The Shared Lane Marking in use within the United States is the bike-andchevron "sharrow," illustrated in MUTCD figure 9C-9.



Shared Lane Markings shall not be used on shoulders, in designated bicycle lanes, or to designate bicycle detection at signalized intersections. (MUTCD 9C.07 03)

## Second Street Sharrows and Green Lane Long Beach, CA

Second Street in the Belmont Shore area of Long Beach, California is a busy corridor which runs parallel to the beach. Many cyclists use the route as a connection between the beach, Orange County, and Ocean Boulevard. The street has significant motorized and pedestrian traffic, and bicyclists often choose to bicycle on the sidewalk rather than in the street. Since Second Street did not have sufficient room for a bike lane, in 2009, the city of Long Beach received FHWA and CTCDC approval to experiment with a shared lane marking that is set within a 5' green painted area at the midpoint of the roadway in the left-most and right-most lanes. A study conducted as part of the experiment measured an 100% increase in cyclists and an improvement in bicyclist lateral position in the roadway.







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## **Bike Route Wayfinding**

## Signage and Markings System

A bicycle wayfinding system consists of comprehensive signing and/or pavement markings to guide bicyclists to their destinations along preferred bicycle routes. Signs are typically placed at decision points along bicycle routes – typically at the intersection of two or more bikeways and at other key locations leading to and along bicycle routes.





# National Best Transportation Management Practices NACTO Yield Street

- The L Street concept "Yield Street", will utilize limited curbed bumpouts at strategic locations to allow the sidewalks to "bump out" to avoid major trees and infrastructure too costly to move. In addition, informal parking will be permissible on both sides of the street, making a formal bike lane inadvisable. For that reason, advance warning signs, such as "Share the Road with Bikes", and intermittent use of sharrows, may be advised.
- Sharrows will be utilized on Gregory Street, the companion project street.
- Wayfinding and information signs will be important to advise bicycle users of the routes and types of conditions.

### Types of Signs

There are three general types of wayfinding signs:

#### CONFIRMATION SIGNS







Oakland, CA

#### **PURPOSE**

Indicate to bicyclists that they are on a designated bikeway. Make motorists aware of the bicycle route.

#### INFORMATION

Can include destinations and distance/time. Do not include arrows

#### **PLACEMENT**

Every ¼ to ½ mile on off-street facilities and every 2 to 3 blocks along bicycle facilities, unless another type of sign is used (e.g., within 150 ft of a turn or decision sign). Should be placed soon after turns to confirm destination(s). Pavement markings can also act as confirmation that a bicyclist is on a preferred route.

#### **DECISION SIGNS**







Oakland, CA

Concept

Portland Metro Cities, OR

#### **PURPOSE**

Mark the junction of two or more bikeways. Inform bicyclists of the designated bike route to access key destinations.

#### INFORMATION

Destinations and arrows, distances, and travel times are optional but recommended.

#### PLACEMENT

Near-side of intersections in advance of a junction with another bicycle route. Along a route to indicate a nearby destination.

## Types of Destinations

Wayfinding signs can direct users to a number of different types of destinations, including the following:

- On-street bikeways
- Commercial centers
- Public transit centers and stations
- Schools
- · Civic/community destinations
- Local or regional parks and trails
- Hospitals
- Bridges

Prior to developing the wayfinding signage, it can be useful to classify a list of destinations for inclusion on the signs based on their relative importance to users throughout the area. A particular destination's ranking in the hierarchy can be used to determine the physical distance from which the locations are signed. For example, primary destinations (such as the downtown area) may be included on signage up to five miles away. Secondary destinations (such as a transit station) may be included on signage up to two miles away. Tertiary destinations (such as a park) are more local in nature and may be included on signage up to one mile away.

### **Pavement Markings**

Pavement markings can be installed to help reinforce routes and directional signage and to provide bicyclist positioning and route branding benefits. Pavement markings may be useful where signs are difficult to see (due to vegetation or parked cars) and can help bicyclists navigate difficult turns and provide route reinforcement. In the United States, pavement markings have been experimented with in cities like Portland OR, and Berkeley, CA. Berkeley has applied a large stencil taking up nearly the entire travel lane designating the street as a 'bicycle boulevard.' In Portland, smaller stencils including a small circle and arrow system were initially used; however, since the adoption and wide spread use of the shared lane marking, most bicycle boulevards are being retrofitted with these larger markings. Portland has also applied the shared lane marking as a wayfinding device by turning the chevrons of the marking in the direction of intended travel.

## Wayfinding Signage Benefits

- Familiarizes users with the bicycle network.
- · Identifys the best routes to destinations.
- Overcomes a "barrier to entry" for infrequent bicyclists.
- Signage that includes mileage and travel time to destinations may help minimize the tendency to overestimate the amount of time it takes to travel by bicycle.
- Visually indicates to motorists that they are driving along a bicycle route and should use caution.
- Passively markets the bicycle network by providing unique and consistent imagery throughout the jurisdiction.

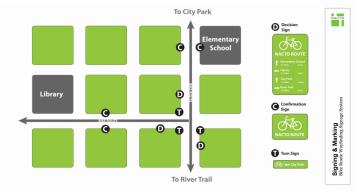
## **Typical Applications**

- Along all streets and/or bicycle facility types that are part of the bicycle network.
- Along corridors with circuitous bikeway facility routes to guide bicyclists to their intended destination.

URBAN BIKEWAY DESIGN GUIDE

SIGNING & MARKING: Bike Route Wayfinding Signage and Markings System 245

#### **Design Guidance**



View a high resolution image here: http://nacto.org/wp-content/uploads/2010/08/WayfindingSignage\_Plan1.jpg



National Association of City Transportation Office

