Regional Bikeways Collaboratives
Regional Bikeways Network

Regional Bikeway Corridors

- OCTA Regional Corridors - Existing
- OCTA Regional Corridors - Future
- Other Regionally Significant Bikeways
- Local Bikeways

Source: OCTA
Note: Regional Corridors identified through countywide studies.
Design Toolbox

- Understanding Advances in Bicycle Design Treatments
  - Bike Boxes, Green Paint, Cycle Tracks?
Design Toolbox

1-Page Sheets on Bicycle Treatments

- Definition
- Applicability
- Rendering
- Consistency with Standards
  - HDM
  - MUTCD
  - FHWA, etc.

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<td>Bicycle Boulevard</td>
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<td>Buffered Bicycle Lane</td>
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<td>Called &quot;one-way sideway&quot;</td>
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Marked Shared Roadway

Description
A marked shared roadway is a general purpose travel lane marked with shared lane marking (SLM) usually known as "sharrows" used to encourage bicycle travel and proper positioning within the lane.

In constrained conditions, the SLMs are placed in the middle of the lane to discourage unsafe practices by motor vehicles. On a wide outside lane, the SLMs can be used to promote bicycle travel to the right of motor vehicles.

In all conditions, SLMs should be placed outside of the dominate travel lane.

Guidance
- In constrained conditions, preferred placement is in the center of the travel lane to minimize wear and promote single file travel.
- Minimum placement of SLM marking concrete a 11 feet from edge of curb where on should parking is present, 4 feet from edge of curb with no parking. If parking lane is wider than 7.5 feet, the SLM should be moved further out according.

Discussion
Bike Lanes should be considered on roadways with outside travel lanes wider than 15 feet, or where other lane narrowing or removal strategies may provide adequate road space. SLMs shall not be used on shoulders, on designated Bike lanes, or to designate Bicycle Detection at signalized intersections. MUTCD R4C07.

Additional References and Guidelines
- NCIPC - Bicycle Planning and Design Guide, 2010

Materials and Maintenance
- Placing SLMs between vehicle tire tracks will increase the life of the markings and minimize the long-term cost of the treatment.

Bike Box

Description
A bike box is a designated area located at the head of a traffic lane in a signalized intersection that provides layup space to cyclists and drivers space to perform an intersection of turning motorized traffic during the red signal phase. Motor vehicles must come to rest in the white stop line at the rear of the bike box.

Guidance
- 14 foot maximum depth
- A "No Turn On Red" (MUTCD R4-12) shall be installed overhead to prevent vehicle from entering the bike box.
- A "Stop here on red" sign should be post-mounted at the stop line to maintain clearance of the stop line.
- A "Bike Box" sign should be post-mounted in advance of and in conjunction with an approach to intersection that bicycle traffic have the right-of-way going through the intersection.
- An ingress lane should be used to provide access to the box.
- A supplemental "Exit Here on Red" can be provided in advance of the stop box to increase clarity to motorists.

Discussion
Bike boxes should be placed only at signalized intersections, and right turns on red shall be prohibited for motor vehicles. Bike boxes should be used in locations that have a large volume of bicyclists and are least utilized in control areas where traffic is usually moving more slowly.

Additional References and Guidelines
- NCIPC - Bicycle Planning and Design Guide, 2010

Materials and Maintenance
- Because the effectiveness of the space depends entirely on their visibility, maintaining markings should be a high priority.
Dotted Line Extensions

Ped Beacon

Road Rebalancing

Guidance

- See MUTCD Section 350.0b: "dotted line extensions."
- Crossing stripes shall be at least six inches wide when adjacent to motor vehicle travel lanes. Dotted lines should be two-foot lines spaced two to six feet apart.
- Chevron, shared lane markings, or colored bike lanes in conflict areas may be used to increase visibility within conflict areas or across entire intersections. Elephant's Foot markings are common in Europe and Canada.

Before

11'-12' Travel
11' Travel

After

6' Bike
10'-12' Travel
10'-12' Turn
Orange County = 35 Jurisdictions
Thank You!

Paul Martin
Active Transportation Coordinator
(714) 560-5386
pmlartin@octa.net
www.octa.net/bike