



BIKE BOX

FACT SHEET

September 26, 2011

What is a bike box*?

A bike box is a designated area at the head of a traffic lane at a signalized intersection that provides bicyclists with a safe and visible way to get ahead of queuing traffic during the red signal phase. Motor vehicles must stop behind the white stop bar at the rear of the bike box.



Bike box benefits

- Increases visibility of bicyclists.
- Reduces signal delay for bicyclists.
- Facilitates bicyclist left turn positioning at intersections during red signal indication. This only applies to bike boxes that extend across the entire intersection.
- Facilitates the transition from a right-side bike lane to a left-side bike lane during red signal indication. This only applies to bike boxes that extend across the entire intersection.
- Helps prevent 'right-hook' conflicts with turning vehicles at the start of the green indication.

*The information contained in this fact sheet was obtained from the National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide, April 2011 edition.

- Provides priority for bicyclists at signalized bicycle boulevard crossings of major streets.
- Groups bicyclists together to clear an intersection quickly, minimizing impediment to transit or other traffic.
- Bicyclists can avoid breathing exhaust while queued at the signal.
- Pedestrians benefit from reduced vehicle encroachment into the crosswalk.

Typical Applications

- At signalized intersections with high volumes of bicycles and/or motor vehicles, especially those with frequent bicyclist left-turns and/or motorist right-turns.
- Where there may be right or left-turning conflicts between bicyclists and motorists.
- Where there is a desire to better accommodate left turning bicycle traffic.
- Where a left turn is required to follow a designated bike route, access a shared-use path, or when the bicycle lane moves to the left side of the street.
- When the dominant motor vehicle traffic flows right and bicycle traffic continues through (such as a Y intersection or access ramp).

Maintenance

- Colored pavement surface may be costly to maintain.
- Placement of markings between tire tracks will reduce wear.