



CONTRAFLOW BICYCLE LANE

Contraflow bicycle lanes are a striped, designated bicycle lane on one-way streets that permits bicyclists to lawfully travel in the opposite direction of motorized traffic. They effectively make the street two-way for bicyclists while maintaining one-way operations for vehicles.

USE

- Contraflow bicycle lanes typically address unique and limited conditions in a downtown where one-way vehicular operations result in inefficient bicycle connections. They improve the ease, attraction, and efficiency of this travel mode and reduce bicycle riding on sidewalks.
- Contraflow bicycle lanes are tools to bridge short interruptions in desired bicycle travel paths.
- Contraflow bicycle lanes are often established on single blocks or short segments in the areas of highest demand.
- Contraflow bicycle lanes should only be used where there is a clear observed need for the connection.

DESIGN

- Marked contraflow bicycle lanes are located on the left side of travel lanes.
- The contraflow lane is separated from on-coming traffic by a double yellow stripe, which indicates to motorists and bicyclists that they are traveling in opposite directions and not allowed to cross. Alternatively or additionally, the contraflow lane may be separated by a buffer, median, or other barrier.
- Contraflow bicycle lanes shall be a minimum of five feet wide between the yellow striping and face of curb.
- Orient stop signs and traffic signals along the street to face both motorists going one-way and bicyclists in the contraflow lane.
- Extend contraflow lane markings across the intersection to signal the presence of two-way traffic to motorists on cross streets and to direct bicyclists.
- Colored pavement or pavement markings may be used to identify the contraflow lane.
- Bicycle travel in the same direction as vehicle traffic should be accommodated via shared lane markings, bicycle lanes, or other bicycle facilities on the right-hand side of the road.
- Contraflow bicycle lanes require careful design at intersections to minimize conflicts with turning vehicles and to improve legibility, visibility, and predictability for all travelers.

 Bicycle facilities may offer an opportunity for porous concrete or asphalt treatments.

SPECIAL CONSIDERATIONS

- Contraflow bicycle lanes may be paired with left side bicycle lanes to create side by side bi-directional bicycle facilities.
- If space exists, parking may be located between the contraflow bicycle lane and travel lanes, where it can act as a buffer, or be permitted between the contraflow bicycle lane and the curb to its right.

OPERATIONS AND MAINTENANCE

- Bicycle facilities should be kept free of debris, which has a tendency to collect at the edge of the lanes, representing a hazard to bicyclists.
- If trenching is done in the bicycle lane, repair the entire width of the bicycle lane and install pavement markings so there is not an uneven surface as this can be particularly dangerous for bicyclists.
- Avoid locating manholes in bicycle lanes. Ensure any utility or vault covers are flush with the road surface and properly set and maintained.
- Bicycle lanes and associated signs and symbols are additional markings that will require maintenance and replacement.
- If colored pavement is used, routine maintenance plans should be in place to keep the pavement markings clear.
- Bicycle facilities may require additional enforcement to ensure they remain free of parked and stopped vehicles, delivery trucks and other obstacles.
- Recess marking to minimize maintenance requirements and maintain reflectivity.
- Contraflow bicycle lanes may be designed to permit snow clearance using existing equipment. Snow should be cleared from the bicycle lanes the same as any other roadway facility. Bicycle lanes of any type should not be used for snow storage.
- When utility or other construction work requires occupying part or all of a bicycle lane, include provisions in the temporary traffic control plans to prevent a significant disruption of the bicycle network. Consider adding temporary wayfinding signage around detours.

REFERENCES

- NACTO: Urban Bikeway Design Guide, Second Edition, 2014 <http://nacto.org/publication/urban-bikeway-design-guide/bike-lanes/conventional-bike-lanes/>
- AASHTO: Guide for the Development of Bicycle Facilities, 2012
 - Section 4.5: Paved Shoulders
 - Section 4.6: Bicycle Lanes
 - Section 4.7: Bicycle Lane Markings and Signs
 - Section 4.8: Bicycle Lanes at Intersections
 - Section 4.9: Retrofitting Bicycle Facilities on Existing Streets and Highways
- ITE Designing Walkable Urban Thoroughfares: A Context Sensitive Approach, 2010
 - Chapter 9. Traveled Way Design Guidelines: Bicycle Lanes <http://library.ite.org/pub/e1c1ff43c-2354-d714-51d9-d82b39d4d4bad>
 - Part 9 Traffic Control for Bicycle Facilities http://mdotcf.state.mi.us/public/tands/Details_Web/mmutcdpart9_2011.pdf