

Raised bike lanes:

Raised bike lanes incorporate the convenience of riding on the street with some physical separation, achieved with a mountable curb. The mountable curb lets motorists know they are straying into the bike lane when they feel the slight bump created by the curb; it allows cyclists to enter or leave the bike lane to turn left, or overtake another cyclist; and it allows drivers to cross the bike lane to turn right.

The mountable curb should have a 4:1 or flatter slope, with no lip, so a bicycle tire is not caught during crossing maneuvers. The raised bike drains to the roadway, not the curb or sidewalk; this requires drainage grates in the travel lanes. The raised bike lane is dropped prior to intersections, where the roadway elevation is uniform.

Raised bike lanes cost more to construct, as the travel lanes and bike lanes must be paved separately, and a narrow paving machine is required for paving the bike lane. The additional costs are mitigated by reduced long-term maintenance costs as the bike lane portion receives less wear and tear than the travel lanes; the bike lane accumulates less debris, requiring less frequent sweeping; and the bike lane stripe doesn't need frequent repainting, especially if a concrete curb is placed between asphalt travel lanes and asphalt bike lanes (this also increases the visibility of the separation).

Raised bike lanes are otherwise designed, marked and operated as conventional at-grade bike lanes. On roads with parking, the bike lane is placed between the motor vehicle lanes and parked cars, elevating the parking lane. Adjacent to a curb and sidewalk, a barrier curb separates the raised bike lane from the sidewalk; the curb can be lower than conventional height, to avoid elevating the sidewalk more than necessary. Bicyclists proceed at signalized intersections as they would in an at-grade, striped bike lane, and make left turns by leaving the bike lane and positioning themselves correctly in the roadway.