

FEATURE 216

BIKE LANES/PEDESTRIAN FACILITIES

Roadway Side	Allows Tie	LRS Package	Feature Type	Interlocking	Secured
C/R/L	Yes	No	Length	Yes	Yes
Responsible Party for Data Collection		District Planning			

Definition/Background: This feature denotes the location of bike and pedestrian facilities along a route.

BIKELNCD | BICYCLE LANE

HPMS	MIRE	Who/What uses this Information	Required For	Offset Direction	Offset Distance
	41	Safety Offices, Roadway Design, Planning Offices	All non-limited access highways, including bridge segments.	N/A	N/A

Definition/Background: A designated bike lane is a stripe-separated portion of the roadway that is designated by pavement markings and/or signs for the preferential use of bicycles. These features of the roadway will not break at intersections or on bridges.

How to Gather this Data: For a designated bike lane, the beginning milepoint is recorded and is considered to begin with the first stripe, and the ending milepoint is recorded when striping ends.

If the bike lane begins or ends a reasonable distance beyond the one milepoint, use that point as a reference for the milepoint. It may be helpful to set the “one milepoint” at some easily identified geographic or physical feature or boundary, street intersection, or bridge.

The end of a bike lane is determined in one of three ways:

1. At a “BIKE LANE ENDS” sign.
2. At the beginning of the bike lane in the opposing direction.
3. At the last symbol or sign.

If a bike lane ends at an intersecting street, code the ending point as the middle of the intersecting street. If the bike lane continues on the far side of the intersection, it is recommended not to code a gap, but to carry the bike lane through the intersection. The same is true for separated bike lanes; carry the separated bike lane through driveways and intersections.

It is at the Districts’ discretion to collect as much or as little data as they need. Districts may break their data at any appropriate milepoint breaks they deem necessary. There is no restriction on the minimum or maximum for length requirement.

For bike lanes, also code Feature 214 SHLDTYPx using code 1—Paved. The bike lane width is part of the paved shoulder width. Measure from the outside of the pavement edge stripe to the outer edge of the bike lane. If the shoulder area contains curb and gutter, measure to the face of the curb.

For separated bike lanes, always code the width in Feature 216 SEPBLNWD. The separated bike lane width should also be captured in Feature 214 SHLDTYPx and SHLDWTHx only if the separated bike lane is present as a paved shoulder. For bike lanes, also code Feature 216 BIKSLTCD (Bicycle Keyhole Lane). Do not break bike lanes at the keyhole lane; continue through.

Codes	Descriptions
1	Designated
2	Buffered
3	Colored
4	Both 2 and 3
5	Sharrow
6	Separated
7	Bus-Bike

EXAMPLES



1: Designated (with diamond, symbology, and words)



1: Designated (with biker symbology)



1: Designated (with sign)



2: Buffered



3: Colored



4: Both 2 and 3



5: Sharrow



6: Separated



7: Bus-Bike

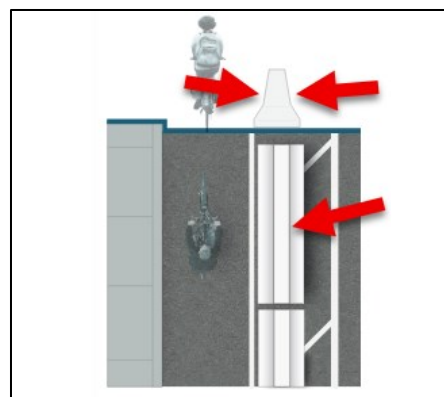
BIKLNBCD | SEPARATED BIKE LANE SEPARATOR TYPE

HPMS	MIRE	Who/What uses this Information	Required For	Offset Direction	Offset Distance
		Safety Offices, Roadway Design, Planning Offices	All non-limited access highways, including bridge segments.	N/A	N/A

Definition/Background: The separator type or vertical element which differentiates separated bike lanes from other on-street bicycle facilities.

How to Gather this Data: Record the separator type where separated bike lanes exist. Milepoints should match the measures recorded for '06' SEPARATED in BIKELNCD. Do not record a value for BIKLNBCD unless a separated bike lane is coded in BIKELNCD.

Special Situations: Use Code '10'—Combination in situations where multiple separator types are uniformly applied along a significant distance of 500ft or greater. Otherwise, code the primary treatment type.



Codes	Descriptions
01	Raised Median
02	Sidewalk Level/Raised Lane
03	Delineator Post/Tubular Marker
04	Bollards
05	Modular Traffic Separator
06	Rigid/Concrete Barrier
07	On-Street Parking
08	Planters
09	Parking Stops
10	Combination
11	Other

EXAMPLES

		
01: Raised Median	02: Sidewalk Level/Raised Lane	03: Delineator Post/Tubular Marker
		
04: Bollards	05: Modular Traffic Separator	06: Rigid/Concrete Barrier
		
07: On-Street Parking	08: Planters	09: Parking Stops
		
10: Combination		

Image Source: Dianne Yee, PeopleForBikes, Seattle DOT, City of Austin, City of Cambridge, Oregon Transportation Research and Education Consortium, City of Boulder, Seattle DOT, City of Missoula, and NYC DOT via FHWA Separated Bike Lane Planning and Design Guide

BIKSLTCD | BICYCLE KEYHOLE LANES (NAME CHANGE EFFECTIVE SEPTEMBER 2019)

HPMS	MIRE	Who/What uses this Information	Required For	Offset Direction	Offset Distance
	41	Safety Offices, Roadway Design, Planning Offices	All non-limited access highways, including bridge segments.	N/A	N/A

Definition/Background: A bicycle lane that is placed between a through lane and the adjacent right turn lane, left turn lane, bus bay, parking lane, or merge lane. Bike slots are sometimes referred to as “keyholes.”

How to Gather this Data: The beginning milepoint for the bicycle keyhole lane is recorded where the auxiliary lane begins. The keyhole lane is coded for the extent of the auxiliary lane. Alternatively, in the presence of a through lane that terminates at an intersection, the beginning milepoint is recorded at the point where the painted white skip lines or solid white lines of the bike lane begin to separate the outermost lane from the remaining through lanes, and the ending milepoint is recorded where its striping ends. (See the sketch below.)



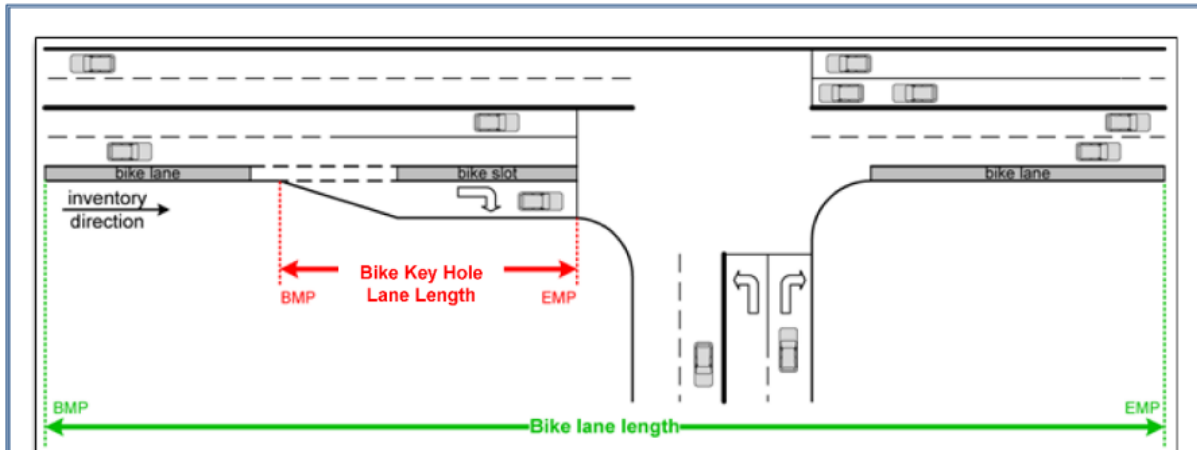
Special Situations: Code bike lanes and bicycle keyhole lanes independently.

- Bike keyhole lane overlap bike lanes.
- No gaps should exist between the bike keyhole lanes and the bike lanes.
- When only a bike keyhole lane exists without any bike lanes, code both BIKELNCD and BIKSLTCD.
- Both the bike keyhole lane and the bike lane should be coded. This is because a bike keyhole lane is an offset bike lane to facilitate the bicyclist’s through movement and reduce conflict with vehicle traffic. Both the bike keyhole lane and bike lane codes are necessary for reporting purposes.

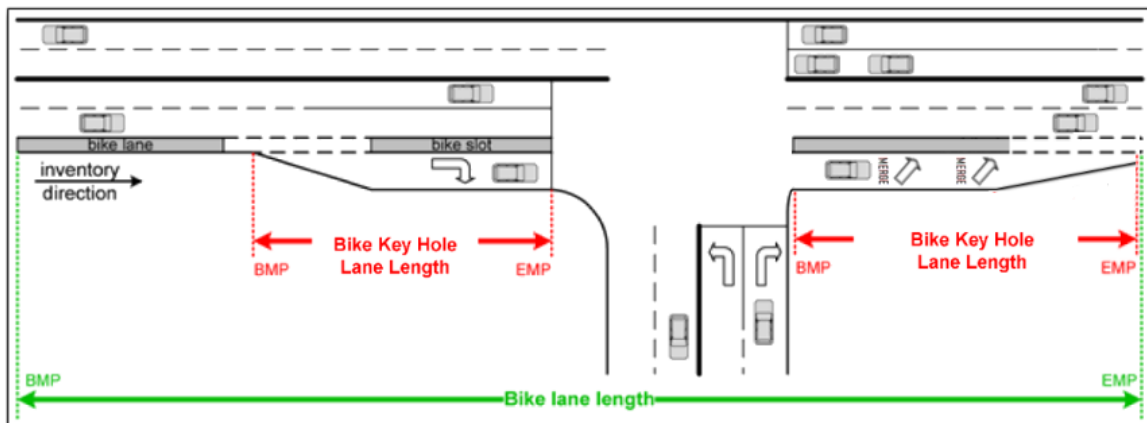
Code	Description
1	Designated

If a bicycle keyhole lane exists, whether it is marked or not, it should be collected under code 1-designated.

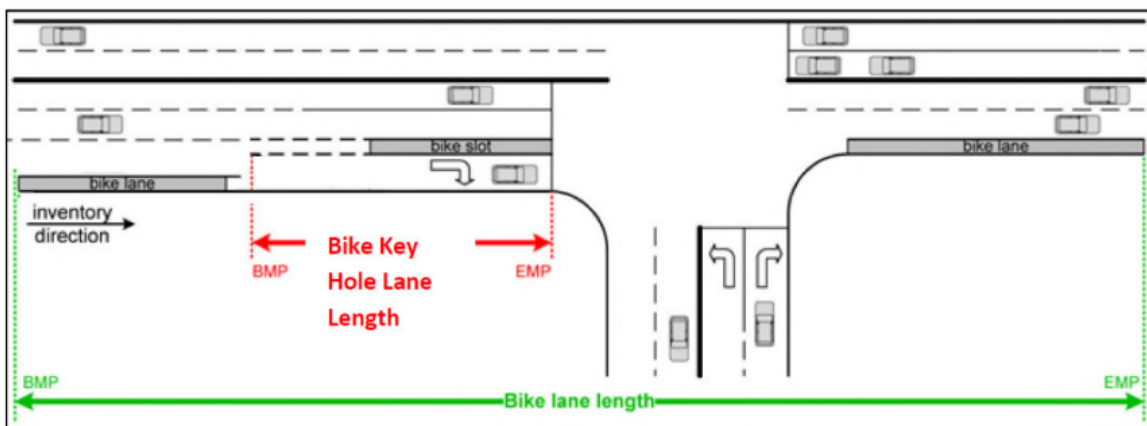
EXAMPLES



Turning (right) Auxiliary Lane with Bicycle Keyhole Lane



Turning (right) Auxiliary Lane with Bicycle Keyhole Lane and Merge Lane Beyond the Intersection



Through Lane Drop off with Bicycle Keyhole Lane

BIKSLTWD | BICYCLE KEYHOLE WIDTH

HPMS	MIRE	Who/What uses this Information	Required For	Offset Direction	Offset Distance
		Safety Offices, Roadway Design, Planning Offices	All non-limited access highways, including bridge segments.	N/A	N/A

Definition/Background: Denotes the width of the bicycle keyhole lane in feet.

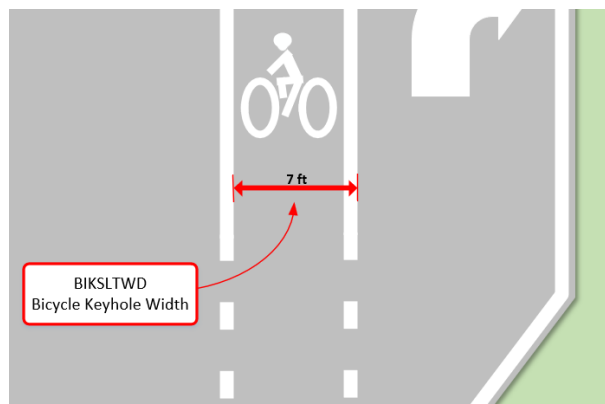
Tolerance: Measured to the nearest 0.5 ft.

How to Gather this Data: Measure the width of the bicycle keyhole lane. The width is measured from the inside edge of the inside stripe to the outside edge of the outside stripe. In other words, the measurement includes one stripe but not the other.

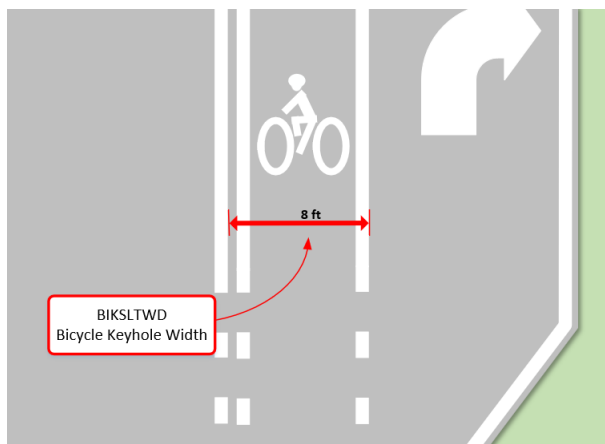
Value for Bicycle Keyhole Width: 3 Bytes: XX.X— Record number of feet. Enter to nearest 6 inches (0.5 feet)

EXAMPLES

BIKSLTWD = 7 ft



BIKSLTWD = 8 ft



SEPBLNWD | SEPARATED BIKE LANE WIDTH & SEPARATION

HPMS	MIRE	Who/What uses this Information	Required For	Offset Direction	Offset Distance
		Safety Offices, Roadway Design, Planning Offices	All non-limited access highways, including bridge segments.	N/A	N/A

Definition/Background: A separated bike lane is an exclusive facility for bicyclists that is located within or directly adjacent to the roadway and that is physically separated from motor vehicle traffic with a vertical element. Separated bike lanes are differentiated from standard and buffered bike lanes by the presence of the vertical element. They are differentiated from shared use paths (and sidepaths) by their more proximate relationship to the adjacent roadway and the fact that they are bike-only facilities. Separated bike lanes are sometimes called "cycle tracks" or "protected bike lanes." This characteristic denotes the width of the separated bike lane, and its separation distance from the roadway in feet.

Tolerance: Measured to the nearest 0.5 ft.

How to Gather this Data: Measure the width of the rideable area of the separated bike lane. This measurement excludes the buffer area between the separated bike lane and the adjacent travelway.

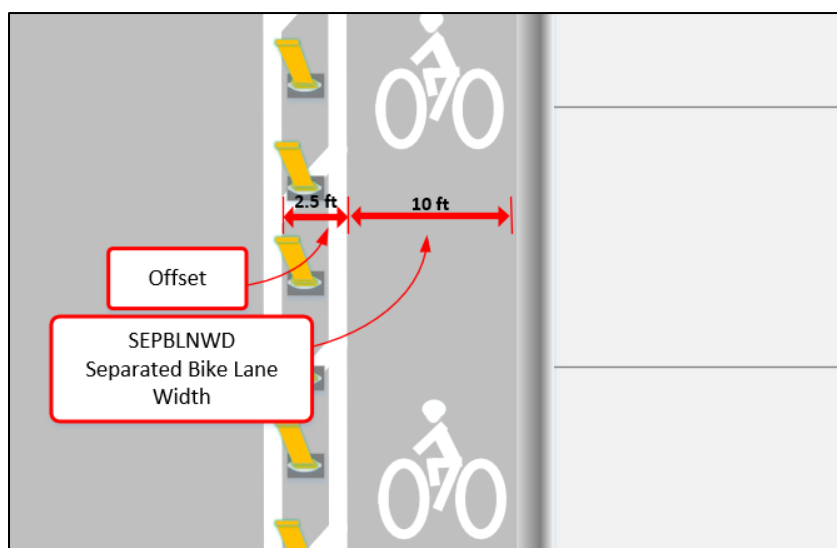
Offset Distance Instructions: XXX.X—Record to the nearest 6 inches (0.5 feet). Record the separation distance between the rideable area of the bike lane and the adjacent travelway. This measurement excludes the outermost lane stripe of the adjacent travelway.

Value for Separated Bike Lane Width: 3 Bytes: XX.X— Record number of feet. Enter to nearest 6 inches (0.5 feet)

EXAMPLES

SEPBLNWD = 10.0 ft

Offset = 2.5 ft



SHARDPATH | SHARED PATH WIDTH & SEPARATION

HPMS	MIRE	Who/What uses this Information	Required For	Offset Direction	Offset Distance
		Safety Offices, Roadway Design, Planning Offices	All highways, including bridge segments.	1-right & left; 2-right; 3-left	In feet

Definition/Background: An asphalt-paved way, within the highway right-of-way, at least ten feet wide, separated from the shoulder or back of curb by an open space at least five feet wide or by a barrier, not signed as closed to bicycle use, designation as a “shared path” not required. It is restricted from motor vehicle usage.



The shared path separation is an important safety measure. The greater the distance the shared path is from the roadway, the less chance there is for conflict between pedestrians/bicycles and vehicles.

How to Gather this Data: If there is a barrier between the shared path and the roadway, determine which type it is and record using Feature 216 SDWLKBCD, in this case, it will become the “shared path” barrier code. Ignore any barriers if they are spaced at distances greater than 60 feet. Remember that short variations can be ignored. Should the offset distance vary, use judgment to determine the average, or representative offset. For more information on measuring offsets, see the diagram on sidewalk separation.

Offset Distance Instructions:

XXX.XX—Record to the nearest 6 inches (0.5 feet). Record the distance from the outer edge of the pavement (pavement includes curb and gutter, if present) to the closest edge of the shared path.

Value for Shared Path Width: 3

Bytes: XXX—Record actual width of the shared path to nearest foot



Arrows depict where measurements are taken.

SIDWLKWD | SIDEWALK WIDTH & SEPARATION

HPMS	MIRE	Who/What uses this Information	Required For	Offset Direction	Offset Distance
	52	Safety Offices, Roadway Design, Planning Offices	All non-limited access highways, including bridge segments.	1-right & left; 2-right; 3-left	In feet

Definition/Background: Sidewalk width and offset distance between outer edge of roadway pavement to the closest edge of the sidewalk. The sidewalk separation is an important safety measure. The greater the distance the sidewalk is from the roadway, the less chance there is for conflict between pedestrians and vehicles.



How to Gather this Data: Collect sidewalk data wherever sidewalks exist.

Offset Distance Instructions: XXX.XX—Record to the nearest 6 inches (0.5 feet). This is known as sidewalk separation. If the sidewalk is flush with the back of the curb, the offset distance is zero. Do not record an offset distance when the sidewalk is located at the back of curb (see images 1, 2, 3, 4 below). Record the offset distance from the outside edge of pavement when there is no curb or from the back of curb to the closest edge of sidewalk (see images 5, 6, 7, 8 below). Should the offset distance vary, as in the case of a meandering sidewalk, use judgment to determine the average, or representative offset.

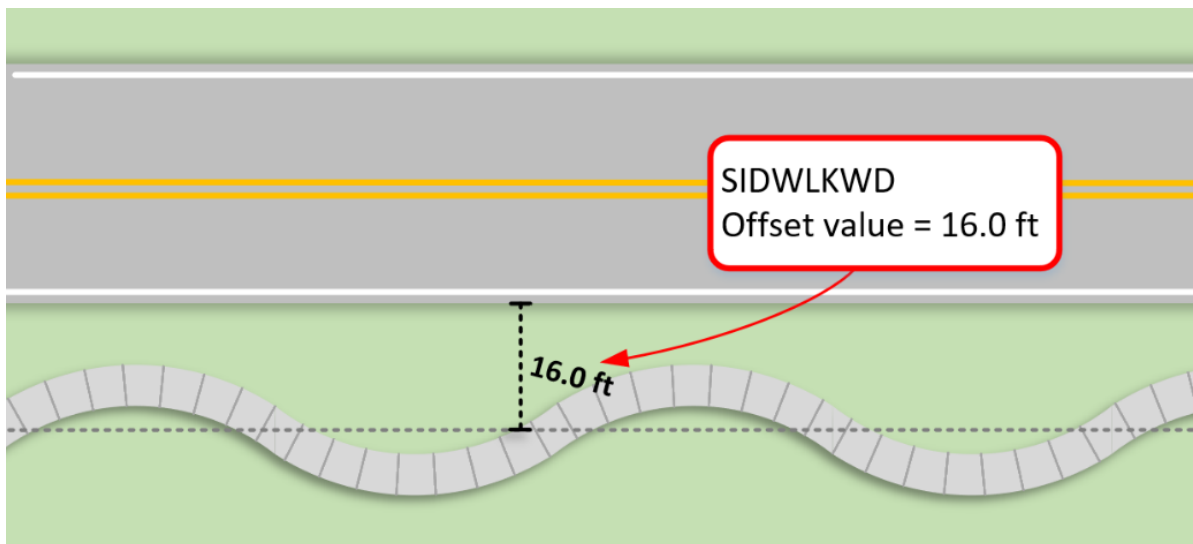
Special Situation: Do not code boardwalks and wood sidewalks as these are collected by Office of Maintenance. Do not break the milepoints for the sidewalks when you encounter boardwalks or wood sidewalks.

Value for Sidewalk Width: 3 Bytes: XXX—Record to the nearest foot



Note: Arrows depict where measurements are taken. Updated August 2016.

EXAMPLE



Note: Should the offset distance vary, as in the case of a meandering sidewalk, use judgment to determine the average, or representative offset.

SDWLKBCD | SIDEWALK BARRIER CODE

HPMS	MIRE	Who/What uses this Information	Required For	Offset Direction	Offset Distance
		Safety Offices, Roadway Design, Planning Offices	All non-limited access highways, including bridge segments.	N/A	N/A

Definition/Background: Physical barriers that separate motorized vehicle lanes from sidewalks or shared paths. The barrier can be of several types, such as areas for vehicular parking, physical traffic barriers, guardrail, or trees.

How to Gather this Data: Record the type of barrier code 0-4.

Special Situations: If barrier objects, such as trees or poles, are spaced more than 60 feet apart, they are not considered barriers. To be coded as a barrier, the distance between objects must be 60 feet or less. The barrier may be constructed in the sidewalk, such as trees planted with areas around them to allow growth, watering, and so forth. These areas may or may not be covered with metal grates. However, if the “barriers” are planted in moveable planters or pots, unless sufficient to form a real barrier between vehicles and pedestrians, ignore these.

In areas with on-street parking, the spacing for parking meters should be considered a barrier to the sidewalk.

Codes	Descriptions
0	No barrier
1	On-street parking lane (with or without meters)
2	Trees, planters, utility poles, or other barriers (less than 60 feet apart)
3	Both 1 and 2
4	Guardrail/traffic railing barrier/swale

EXAMPLES



0: No Barrier



1: On-street Parking Lane
(with or without meters)



2: Trees, Planters (less than
60 feet apart)



3: Both 1 and 2



4: Guardrail/Traffic Railing/
Barrier/Swale



4: Guardrail/Traffic Railing
Barrier