

Bike Lanes

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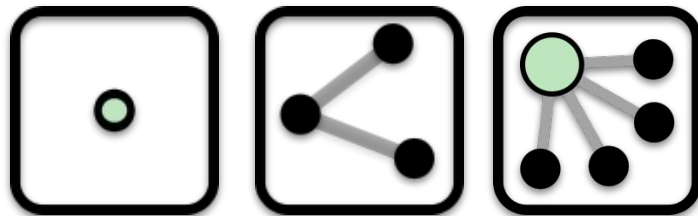
Agenda

- **Objective**
- **Bike Lanes**
 - **Shared cycleway**
 - **Cycle Track vs Cycle Lane**
 - **Intersections**
 - **ASL**
 - **Designated Cycle Lane**
 - **Through Bike Lane**

Objective

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Gain a understanding of the tags needed to edit, parking & bike lanes in OSM.



Biking Lanes

Shared Cycleway

Shared Cycleway

- Bike lanes that are not separate from motorized traffic
- markings that indicate that cars motor vehicles and bikes should share the lane
- use one of the following tags as needed:
 - **cycleway=shared_lane**
 - **cycleway:right=shared_lane**
 - **cycleway:left=shared_lane**



Sharrow - shared paint marking

Example of Shared Cycleway



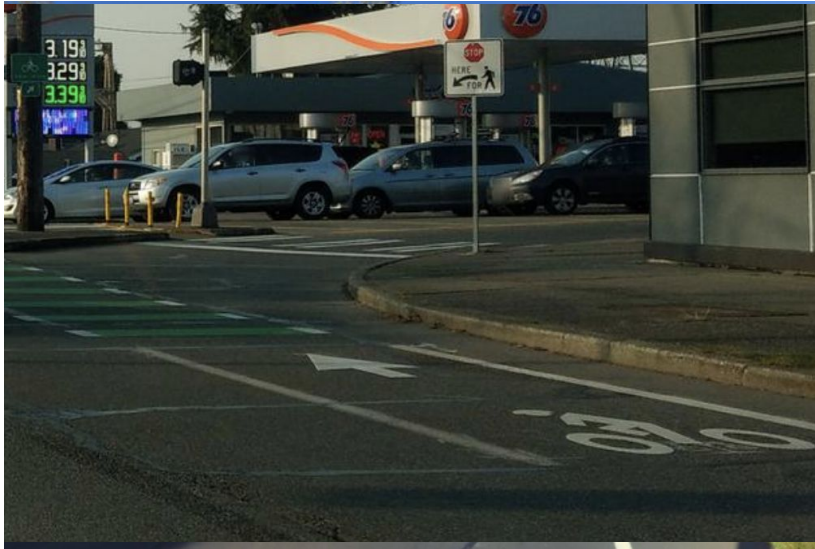
Cycleway Tags

Key	Value
cycleway	shared_lane

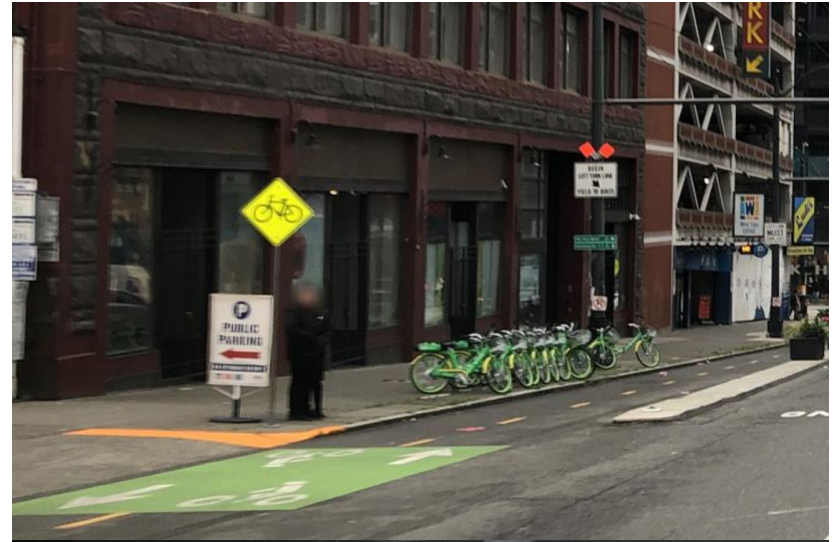
**Separate
Marked
Cycleways**

Cycleway Lane vs. Cycle Track

A **cycleway** is actually a part of the road. A bicycle lane with nothing to mark it but a painted line or a symbol would fall under this category.



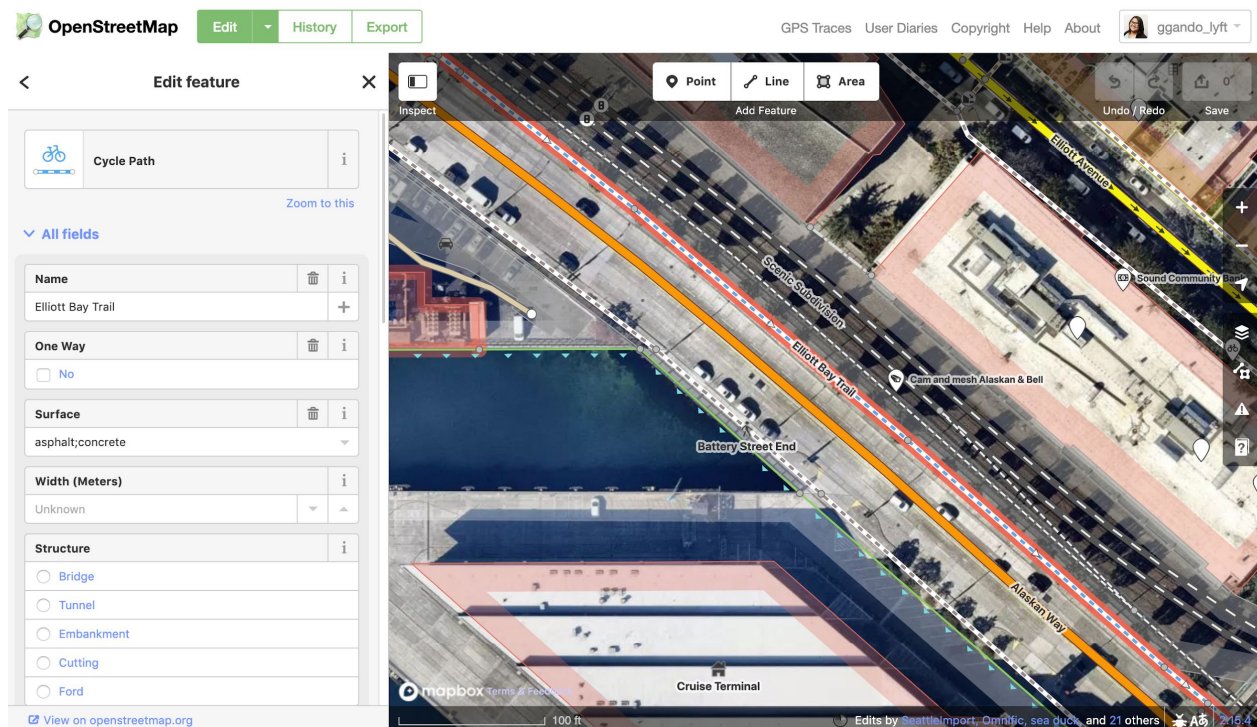
A **cycle track** is separated from the road by a physical barrier such as a curb or a segment of grass border, but still runs alongside it.



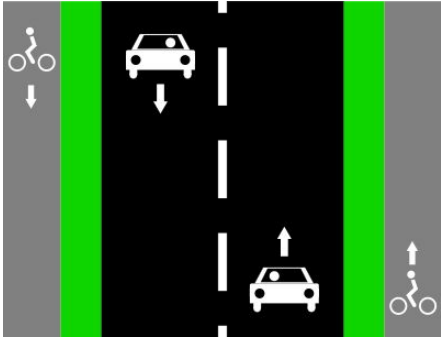

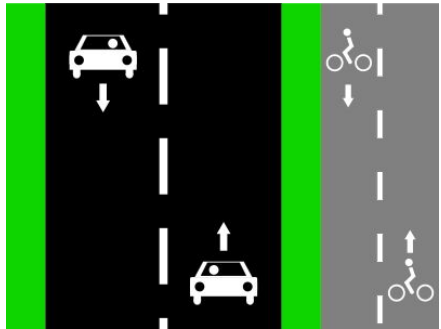

Cycle Track

- Sometimes the cycle track is modeled as its own specific way.
- In this case **do not** add cycle tags to way with “highway=*” tag

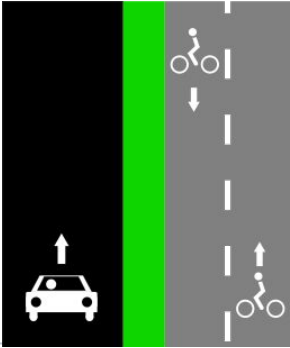

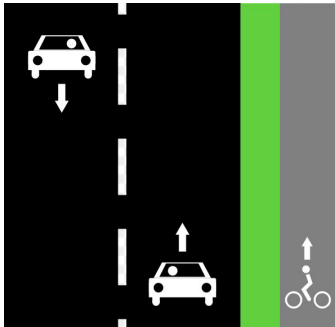

[See example in OSM](#)



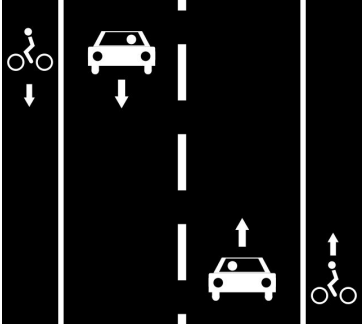

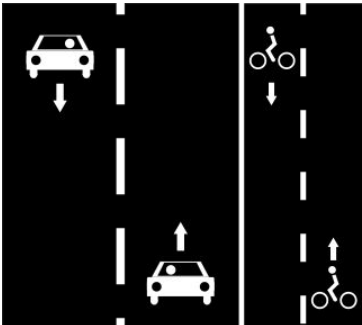

Cycle Track - Examples

Diagram	OSM Way Forward	Description and Tags
		<p>Cycle tracks on left and right side of the road.</p> <p>highway=*</p> <p>cycleway=track</p>
		<p>Bidirectional cycle track on the right side of the road.</p> <p>highway=*</p> <p>cycleway:right=track</p> <p>cycleway:right:one-way=no</p>

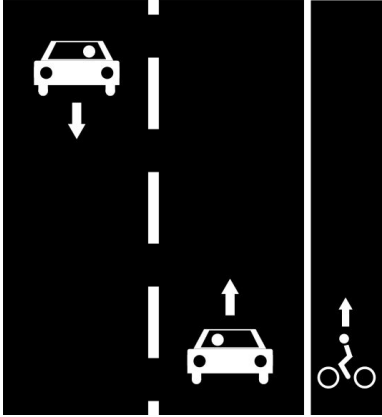

Cycle Track - Examples

Diagram	OSM Way Forward	Description and Tags
 A diagram showing a road layout. On the left, a black rectangular area represents a one-way road with a white car icon and an upward arrow. To the right of the road is a bright green vertical stripe representing a cycle track. To the right of the stripe is a grey area representing a sidewalk. On the sidewalk, there are two white bicycle icons: one with a downward arrow and one with an upward arrow, indicating bidirectional traffic.	 A vertical black line with a solid black circle at the bottom and an arrowhead at the top. The text "Way A" is written vertically to the left of the line.	<p>Bidirectional cycle track right side of the one way road</p> <p>highway=* oneway=yes cycleway:right=track oneway:bicycle=no</p>
 A diagram showing a road layout. On the left, a black rectangular area represents a two-way road with a white car icon and a downward arrow. In the middle, another black rectangular area represents a two-way road with a white car icon and an upward arrow. To the right of the second road is a bright green vertical stripe representing a cycle track. To the right of the stripe is a grey area representing a sidewalk. On the sidewalk, there is a white bicycle icon with an upward arrow, indicating one-way traffic.	 A vertical black line with a solid black circle at the bottom and an arrowhead at the top. The text "Way A" is written vertically to the left of the line.	<p>One-way cycle track on right side of the road.</p> <p>highway=* cycleway:right=track</p>

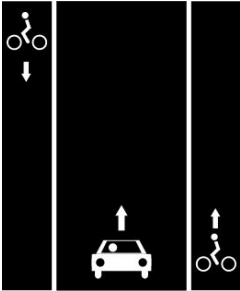

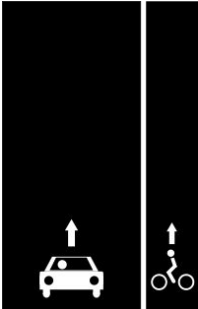

Cycle Lane Bidirectional Roads - Examples

Diagram	OSM Way Forward	Description and Tags
		<p>Cycle lanes on the left and right sides of the road.</p> <p>highway=*</p> <p>cycleway=lane</p>
		<p>Bidirectional cycle lane on right side of the road.</p> <p>highway=*</p> <p>cycleway:right=lane</p> <p>cycleway:right:one-way=no</p>

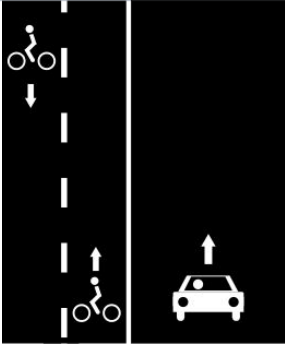

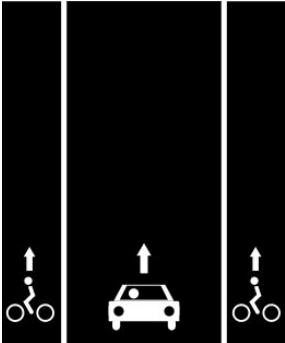

Cycle Lane Bidirectional Roads - Examples

Diagram	OSM Way Forward	Description and Tags
 <p>The diagram shows a cross-section of a road. On the left, a car icon with a downward arrow indicates traffic moving away from the viewer. On the right, a car icon with an upward arrow indicates traffic moving towards the viewer. To the far right, a separate lane contains a bicycle icon with an upward arrow, representing a one-way cycle lane for traffic moving towards the viewer.</p>	 <p>A vertical line with a solid black circle at the bottom and an open arrowhead at the top. The text 'Way A' is written vertically along the left side of the line.</p>	<p>One way cycle lane on right side of the road only.</p> <p>highway=*</p> <p>cycleway:right=lane</p>

Cycle Lane One Way - Examples

Diagram	OSM Way Forward	Description and Tags
 A diagram showing a one-way road with three lanes. The leftmost lane is a cycle lane, indicated by a bicycle icon and a downward arrow. The middle lane is for cars, indicated by a car icon and an upward arrow. The rightmost lane is also a cycle lane, indicated by a bicycle icon and an upward arrow.	 A diagram of a one-way road labeled 'Way A' with an upward arrow. The road is represented by a thick black line with a small circle at the bottom and a small circle with an upward arrow at the top.	<p>Cycle lanes on left and right sides of the one way road.</p> <p>highway=* oneway=yes cycleway:left=lane cycleway:right=lane oneway:bicycle=no</p>
 A diagram showing a one-way road with two lanes. The left lane is for cars, indicated by a car icon and an upward arrow. The right lane is a cycle lane, indicated by a bicycle icon and an upward arrow.	 A diagram of a one-way road labeled 'Way A' with an upward arrow. The road is represented by a thick black line with a small circle at the bottom and a small circle with an upward arrow at the top.	<p>One way cycle lane on right side and same direction of the one-way road.</p> <p>highway=* oneway=yes cycleway:right=lane</p>

Cycle Lane One Road - Examples

Diagram	OSM Way Forward	Description and Tags
		<p>Cycle lanes on left side.</p> <p>highway=* oneway=yes oneway:bicycle=no cycleway:left=lane cycleway:left:oneway=no</p>
		<p>A one-way road flanked by cycleways going the same direction of the one-way road.</p> <p>highway=* oneway=yes cycleway:right=lane cycleway:left=lane</p>

Cycleways & Intersections

Cycleways & Intersections

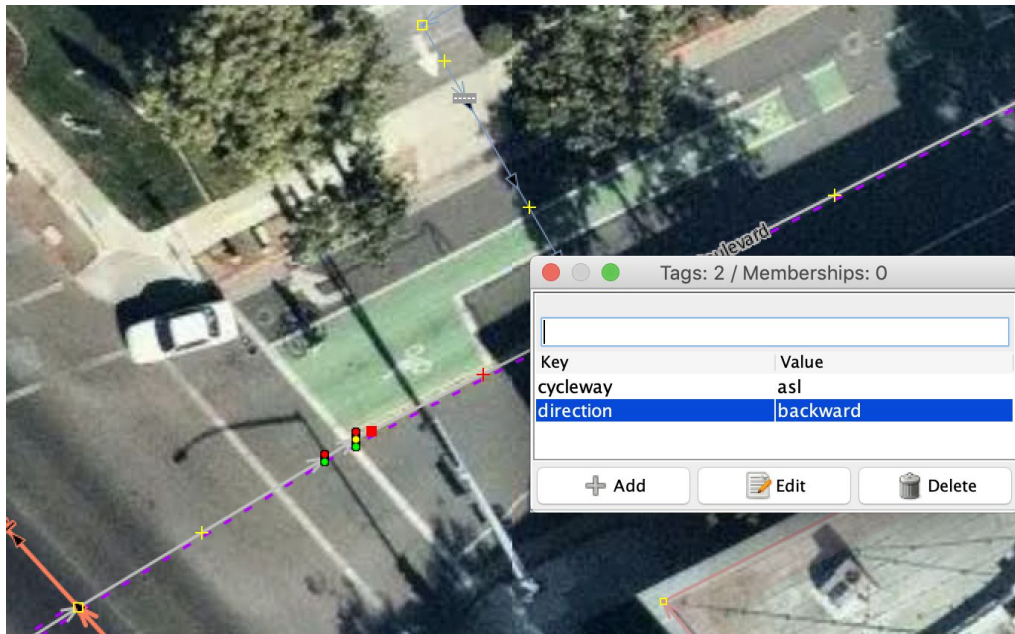
- Cycleways are typically protected by a solid white painted line
- Closer to an intersection where the solid white line becomes dashed
- Dash line indicates that motor vehicles can temporarily use the bike lane to safely turn right into a perpendicular way
- Tag this way as a **cycleway lane** **not** a shared cycleway



Advance Stop Line

Advance Stop Line

- Use the tag **`cycleway=asl`** on a node located at the position of the secondary stop line on way.
- The secondary stop line node should be added at the line where the bikes stop (closer to the crosswalk).
- If the ASL is on a bidirectional way, add directionality to the node by using the tag:
`direction=forward` OR
`direction=backward`
 - Make sure it is own independent way

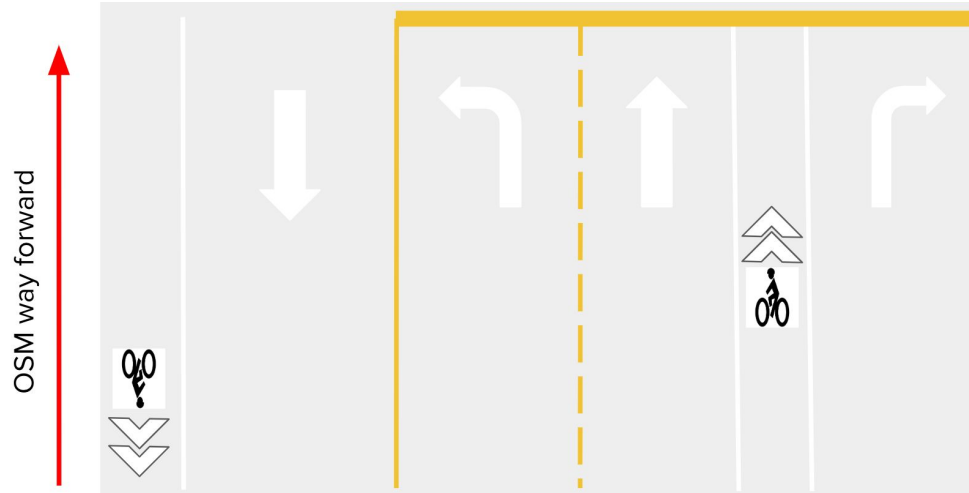


Designated Cycleways in Between Motorized Vehicle Lanes

Designated Cycleway Tags

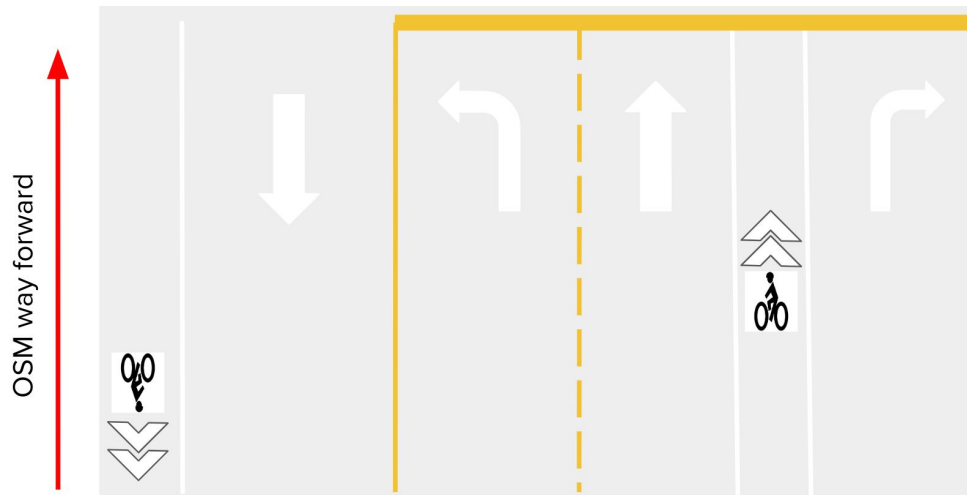
Keys	Values	
bicycle:lanes bicycle:lanes:forward bicycle:lanes:backward	Values	Value Description
	designated	A lane designated for cyclists. Motorized traffic is restricted from using this lane.
	no	A cyclist cannot travel in this lane, it is only for use by motorized traffic.
	yes	A cyclist can travel in this lane (e.g. a left hand turn lane). However, it is primarily used by motorized traffic.

Example 1 - Common Lane Tags



Key	Value
lanes	4
lanes:forward	3
lanes:backward	1
turn:lanes:forward	left through right

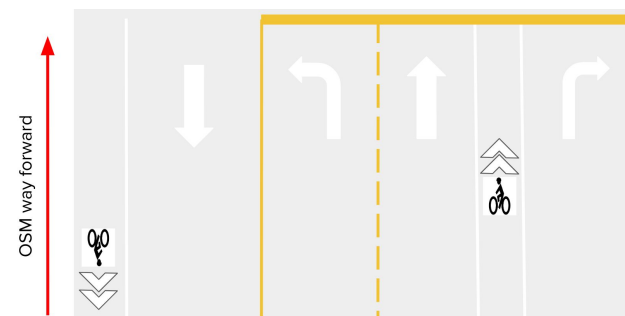
Example 1 - Cycleway Tags



Explanation on the next slide

Key	Value
cycleway:left	lane
bicycle:lane:forward	yes no designated yes

Example 1



lanes=4	This applies to the total number of motorized vehicle lanes on for this segment of the way (both directions)
lanes:backward=1	This applies to the count of motorized vehicle lanes that travel the opposite direction of the OSM way forward
lanes:forward=3	This applies to the count of motorized vehicle lanes that travel the same direction of the OSM way forward
turn:lanes:forward=left through right	This applies to the turn lanes of the motorized vehicle
bicycle:lanes:forward=yes no designated yes	<ol style="list-style-type: none"> 1. A cyclist can turn left from the left hand turn lane 2. A cyclist cannot use the motorized vehicle lane to go straight through the intersection 3. A cyclist is required to use the designated bike lane to go straight through the intersection 4. A cyclist can turn right from the right hand turn lane
cycleway:left=lane	This applies to the bike lane that is to the left of motorized traffic (in respect to the direction that the way has been mapped in OSM)

Example 2



Key	Value
lanes	5
lanes:forward	2
lanes:backward	3
turn:lanes:forward	left none right
cycleway:left	lane
bicycle:lanes:forward	yes no designated yes

Through Cycleway

Through Cycleway

- There are scenarios where a bike lane to the right of traffic will move through traffic to a designated bike lane sandwiched between vehicle lanes
- For bike lanes similar to this scenario, use designated bike lane tags
- Do not use shared bike lane tags





Thank you

June 1, 2020