## **Traffic Lights**

Last Updated: June 1, 2020

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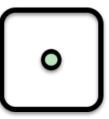
## Agenda

- Objective
- Traffic Signals
  - Simple Intersection
  - Complex Intersection
- Summary of Traffic Signal Tags

## Objective

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Gain a understanding of the tags needed to edit traffic lights.





## Traffic Signals

#### **Traffic Signals**

Traffic Lights indicate that a junction is controlled by signals.





### **Traffic Light Tags**

Key	Value	Explanation
highway	traffic_signals	Tag will applied to all traffic signals represented as a node
traffic_signals:direction	forward	Add this tag when a traffic light is on bidirectional road and complex intersections, where node is placed where the traffic light in real life.  This helps indicate what direction of traffic the traffic light is indicated for.
	backward	

# Simple Intersections

#### **Simple Intersection**

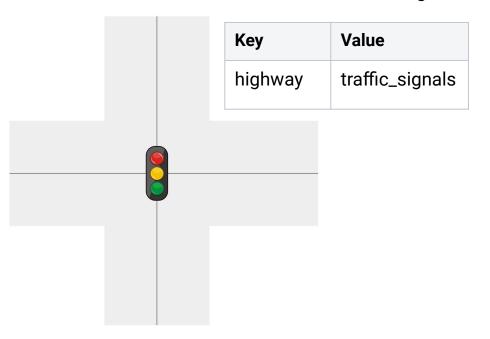
A simple intersection is considered an intersection with signalling traffic lights where two bi-directional ways intersect, creating one central node within the intersection.



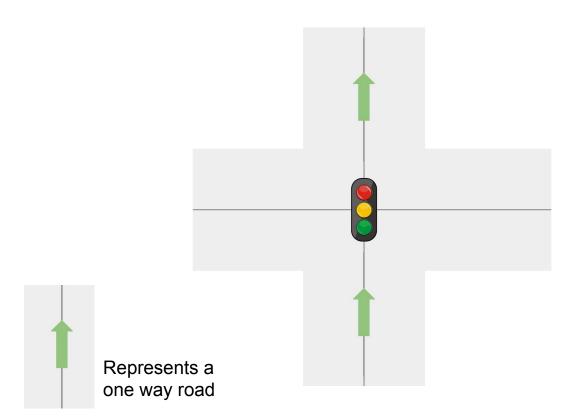
#### **Simple Intersection**



## At the node of the intersection add tag



#### **Simple Intersection**



At the node of the intersection add tag

Key	Value
highway	traffic_signals

# Complex Intersections

#### **Complex Intersection**

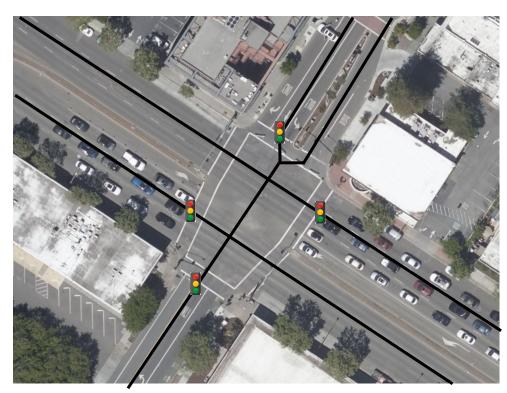
A complex intersection is considered an intersection with signalling traffic lights where two or more one-ways intersect with one or more bi-directional ways, creating two or more central nodes within the intersection.



#### **Complex Intersection**

For the example of the complex intersection to the right, this is the location of the 4 nodes to represent traffic signals.

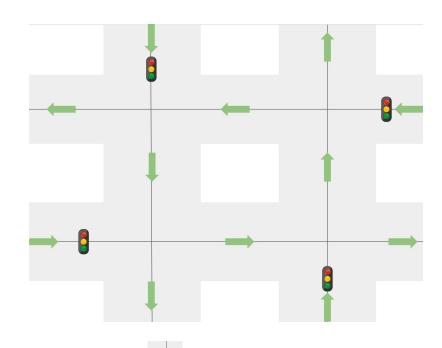
More examples and description in the slides ahead.

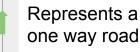


#### **Complex Intersection: One Directional Roads**

- Traffic signal nodes are placed where car will make a legal stop instead of the middle of the intersection
- Since these are all one directional roads it is not necessary to add a tag for directionality
- Only tag needed on each traffic light

Key	Value
highway	traffic_signals

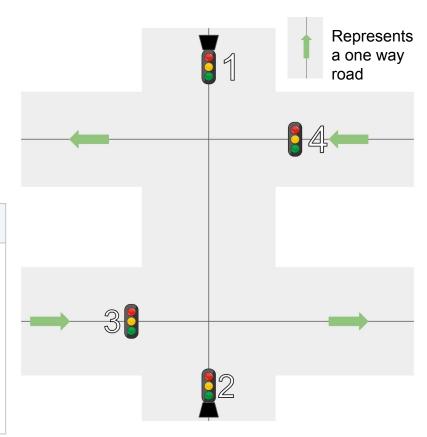




#### **Complex Intersection: Bidirectional Road**

- When roads become complex, create nodes on where the car will stop for the traffic signal
- Add "highway=traffic\_signals" to all traffic signal nodes
- Only nodes on bidirectional roads will need an additional tag

Key	Value	
traffic_signals:direction	forward OR backward	
	*Directionality should be added to face the approaching traffic as shown in the diagram. In other words, it should face the direction of travel it affects.	



# Summary of Traffic Signal Tags

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Key	Value	Explanation
highway	traffic_signals	Tag will applied to all traffic signals represented as a node
traffic_signals:direction	forward	Add this tag when a traffic light is on bidirectional road and complex intersections, where node is placed where the traffic light in real life.  This helps indicate what direction of traffic the traffic light is indicated for.
	backward	



#### Thank you