Lanes and Directionality

Introduction

Highways are the most common and fundamental features that we deal with. You will almost never have to draw roads from scratch, but you will often have to fill in the details.

Classification

A highway in its simplest possible form consists of a way with a **highway=<*classification*>** tag. These classifications are detailed in the **highway classifications** document and while it's important to understand them for context, you will usually not be adding classifications, and they are not directly related to AV navigation.

Lanes

The **lanes** key is used whenever there is a *marked* traffic lane. Lanes takes into account all of the marked traffic lanes on a road, regardless of direction.

You do **not** have to use the key if there is only one lane.

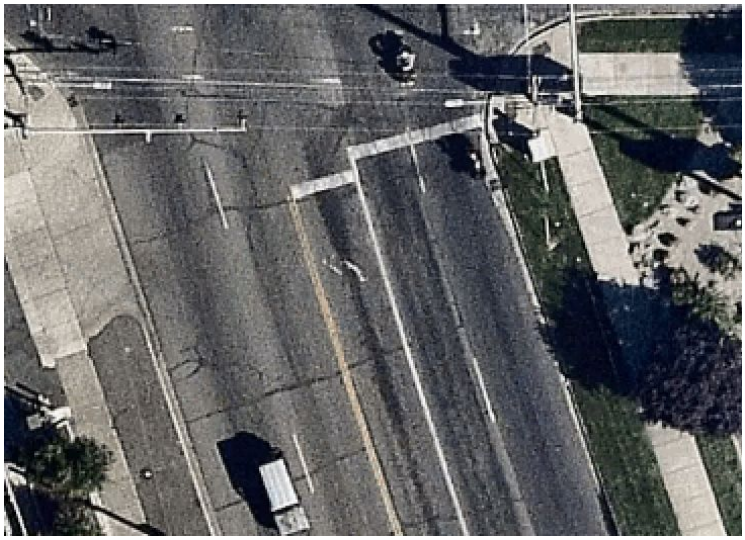
Examples:

lanes=2

-

lanes=3

-



lanes=5

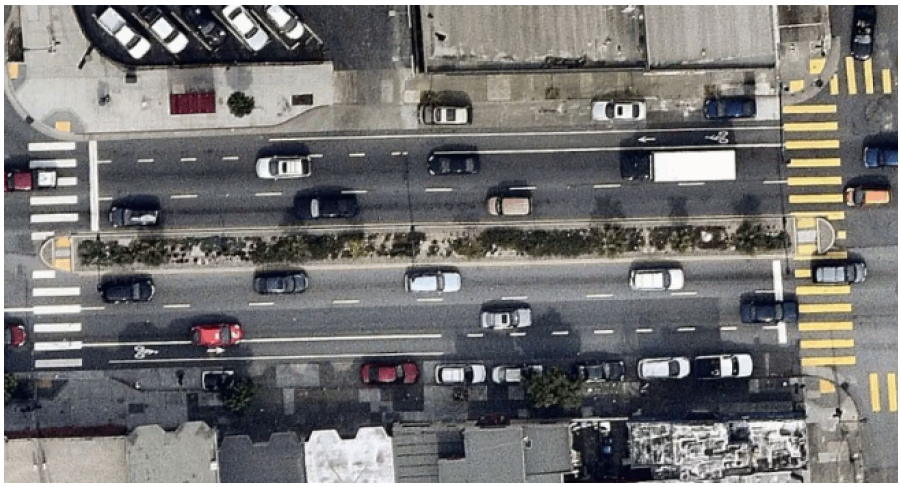
Direction

Every single way has a direction, simply referring to the direction that it was drawn in. Way direction has **nothing** to do with real world features, but it is often used as a reference.

Oneway Streets

If a street only goes in one direction it has to be marked with a **oneway=yes** tag.
In this case, all of the way's tags will apply in the same direction.
Examples:

This is a typical one way road and you can see that the vehicles are all facing the same direction.



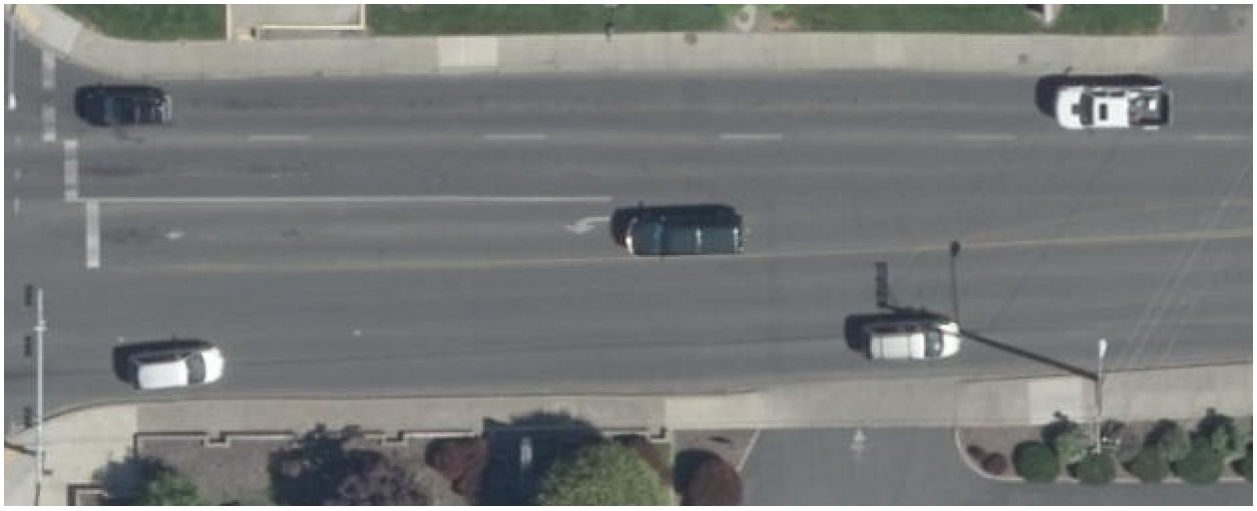
In this type of avenue, traffic is going in both ways, but because there is a *physical barrier* between them, each direction of this avenue would be modeled as a separate way which in turn would each end up getting a **oneway=yes** classification

Two-Way Streets

More often you will encounter ways featuring two directions and this has to be accounted for in the tags. The following examples demonstrate how even though way directionality is arbitrary it is still used as a reference for real world road directionality.

Examples:

Since there are the same number of lanes going in both directions, the arbitrary direction of the way could be in this case assumed to be either going forward or backwards.
lanes=4
lanes:forward=2
lanes:backward=2



This example more clearly demonstrates the relationship between way directionality and real world directionality. Assume that the way directionality in this case is going from right to left
lanes=5
lanes:forward=3
lanes:backward=2