Training for OSM Turn Restrictions

Last Updated: June 1, 2020
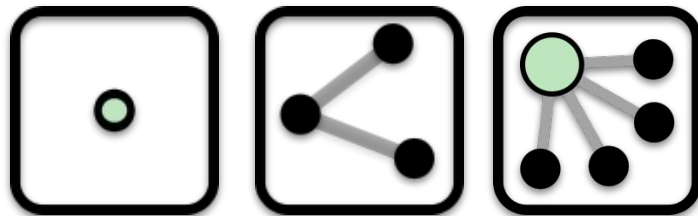
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Agenda

- **Objective**
- **Turn Restrictions**
    - **Turn Restriction Signs**
    - **Turn Restrictions Represented as a Relation**
    - **Mapping Turn Restriction in iD Editor**

Objective

Objective

Gain a understanding of how to read and edit turn restrictions using OSM iD Editor.

Turn Restrictions

Turn Restriction OSM Wiki

- Turn Restriction are different than using a Turn Lane Tag
- A turn restriction at a junction

Turn Restriction Signs

Turn Restriction Signs

Tag Type			iD Editor Icon	Sign Example
No Right Turn				
	type	restriction		
	restriction	no_right_turn		
No Left Turn				
	type	restriction		
	restriction	no_left_turn		
No Straight On				
	type	restriction		
	restriction	no_straight_on		
No U-Turn				
	type	restriction		
	restriction	no_u_turn		

Turn Restriction Signs Rare

Tag Type			iD Editor Icon	Sign Example
No Entry	**type**	restriction	🚫	DO NOT ENTER
	restriction	no_entry		
No Exit	**type**	restriction	🚫	NO EXIT
	restriction	no_exit		

Turn Restriction Signs

Tag Type			iD Editor Icon	Sign Example
Only Right Turn	**type**	restriction		
	restriction	only_right_turn		
Only Left Turn	**type**	restriction		
	restriction	only_left_turn		
Only Straight On	**type**	restriction		
	restriction	only_straight_on		
U-Turn Only	**type**	restriction		
	restriction	only_u_turn		

Turn Restrictions Represented as a Relation

Turn Restriction in OSM

- A relation in OSM is a group of elements
- For a turn restriction it is a group of three elements
  - From
  - Via
  - To
- By using iD Editor to edit turn restrictions, this grouping of three elements will be done automatically once a turn restriction is displayed

| Role	Element Type	Description
From	Way	A way from where the restriction starts (e.g., no right turn from here).
Via	Way Or Node	It is important to know that the via point of a turn restriction can be either a via way or a via node. The via member connects the beginning and end ways that represent the specified maneuver.
To	Way	The end point of the restriction.

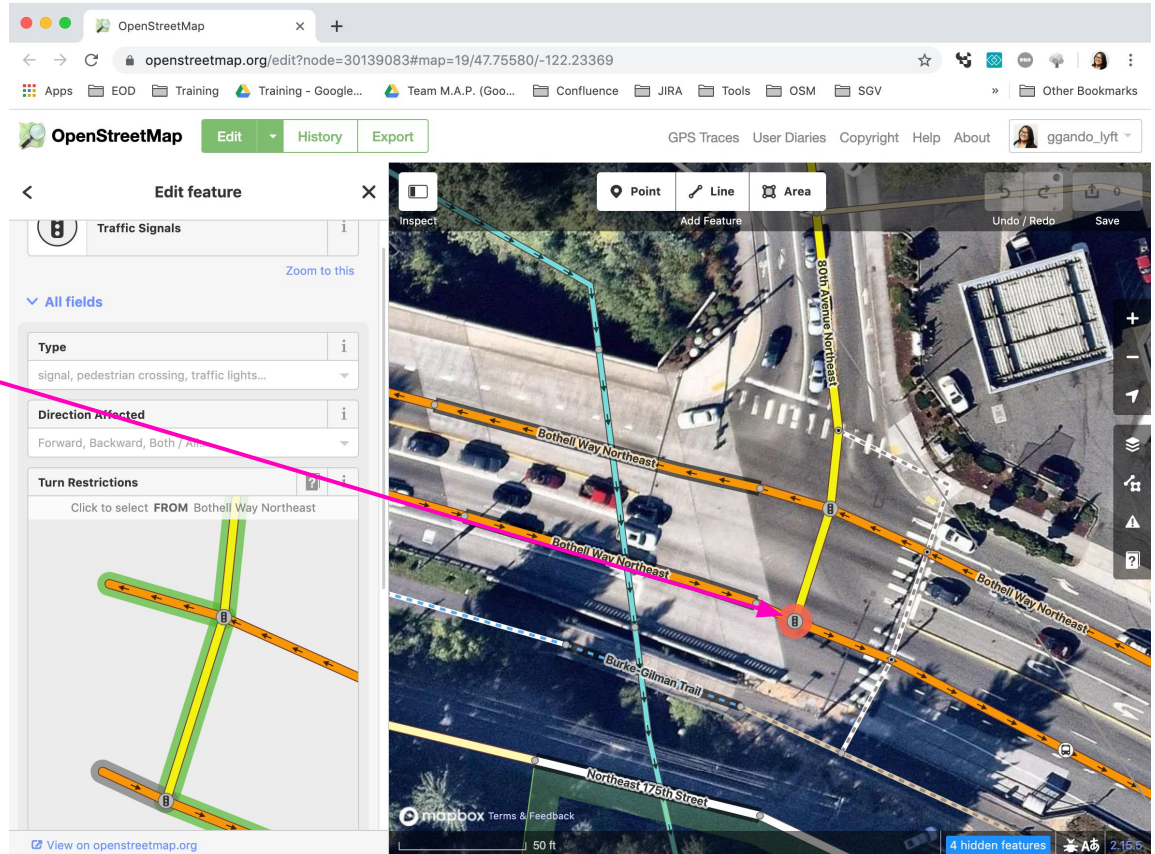# Mapping Turn Restrictions in iD Editor

iD Editor

- Use iD Editor to analyze and edit turn restrictions
  - Easy to visualize
  - Can visually edit
- Use any open source imagery to witness paint markings or signs
- Be aware of local laws
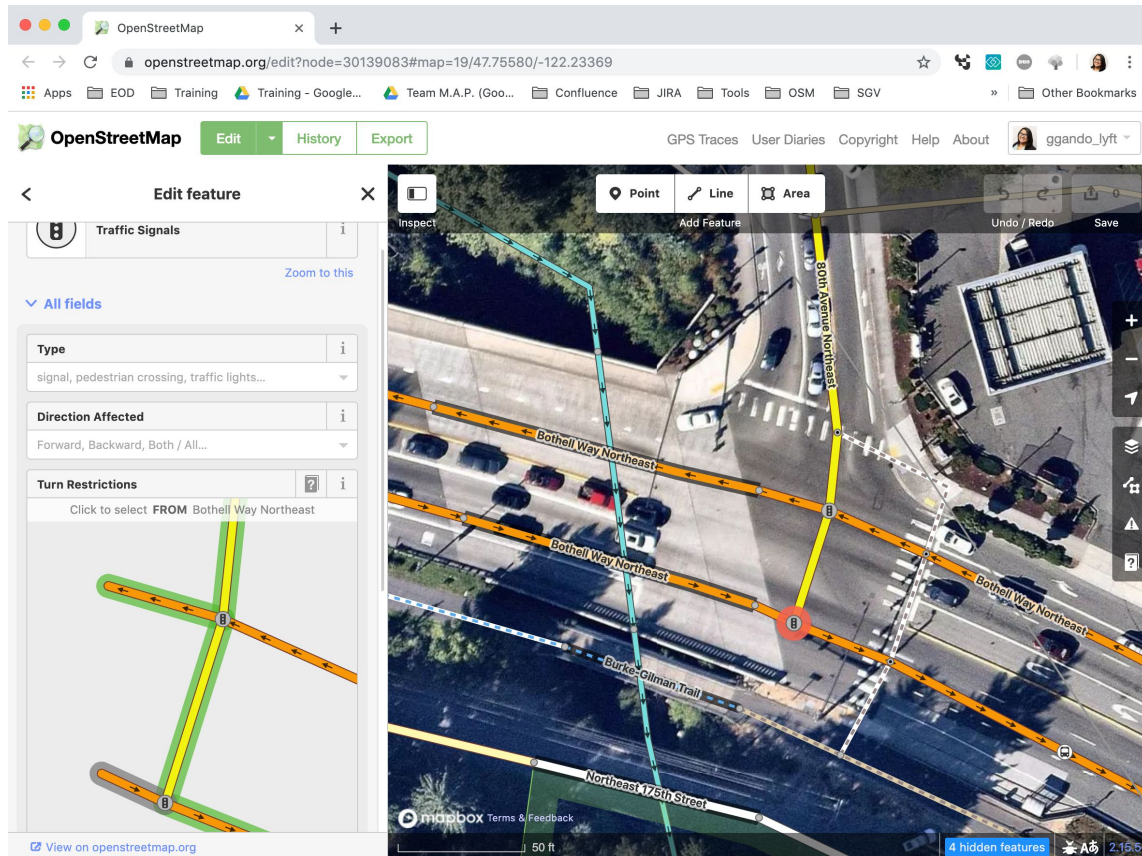
iD Editor

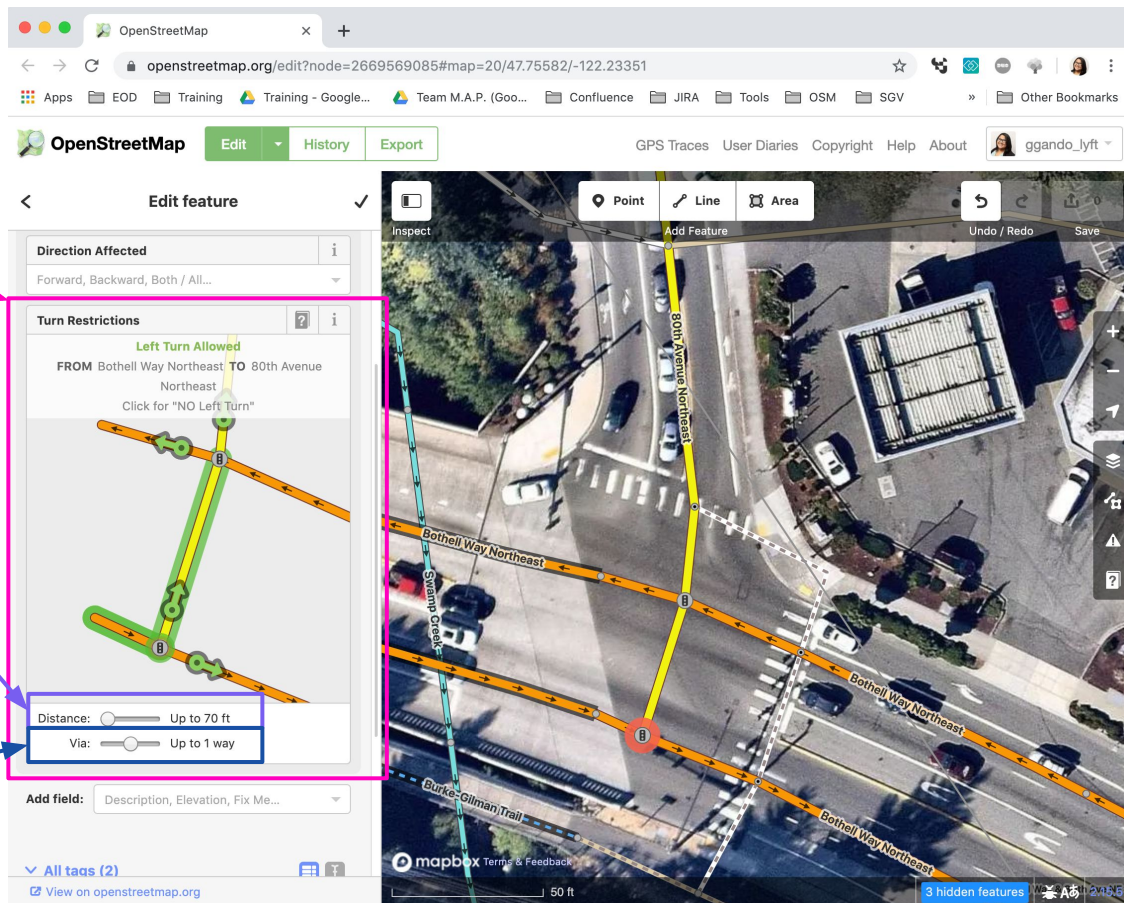1. Click on the intersection you want to analyze in the map

iD Editor

2. On the left side panel scroll down to see the Turn Restriction section

- Be able to see all turns possible from the initial way
- If not all turn restrictions are visible change the *Distance*
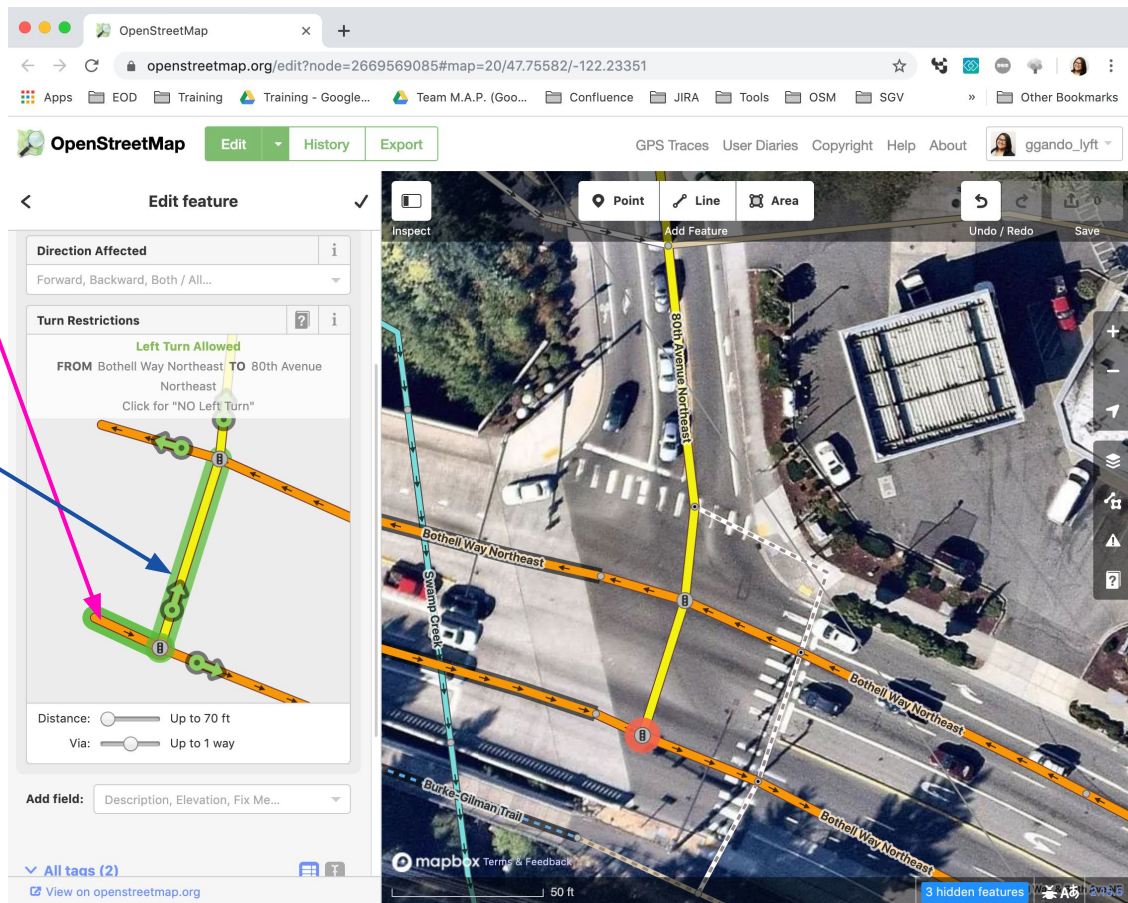- If a turn restriction is more than 1 element away change the *Via*

iD Editor

3. Click on Way that Approaches an intersection
   ○ Be able to see all turns possible from the initial way
4. On the way where the turn would complete click on turn restriction
   ○ By clicking this turn you will be exposed to the different kinds of turn restrictions possible
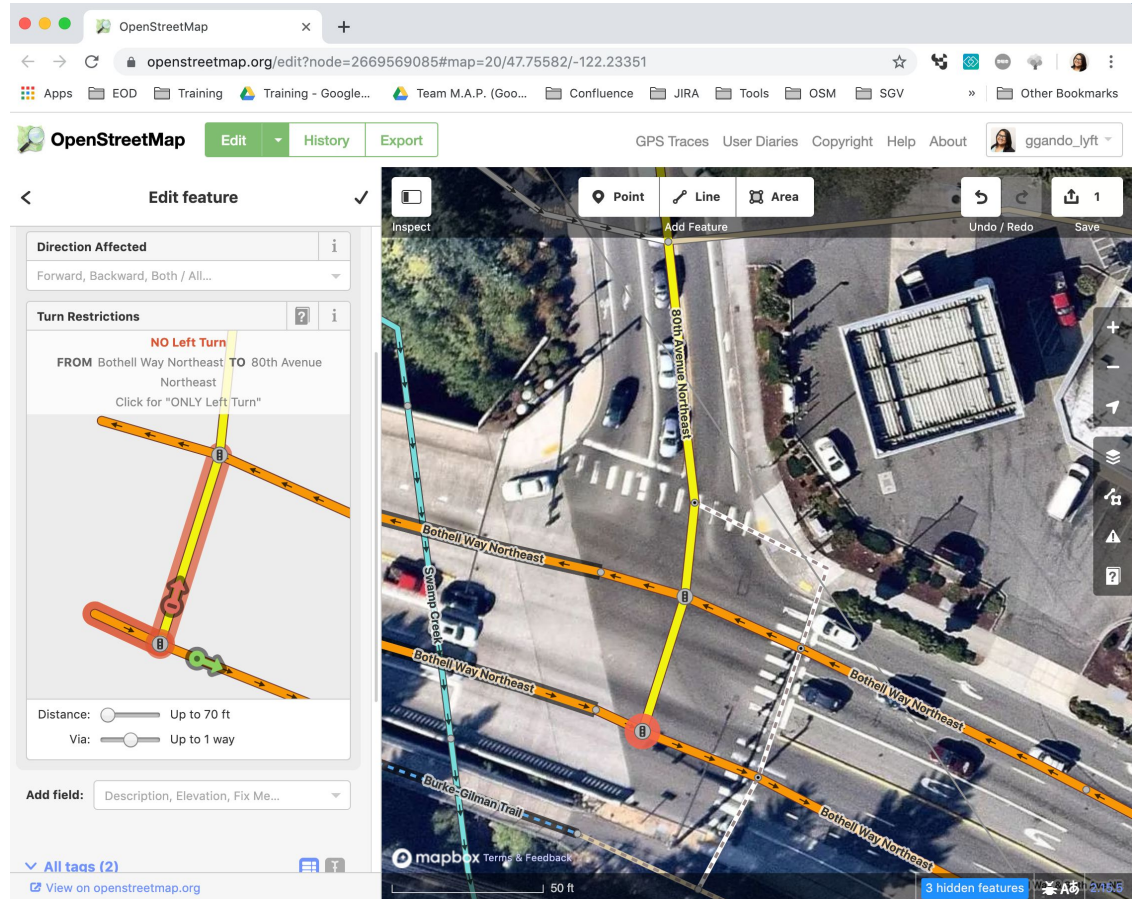
iD Editor

5. Keep clicking on the way that would end the turn to see different turn restriction possibilities

6. Clicked on this way to see a **ONLY Left Turn**
   - Other turns will updated accordingly
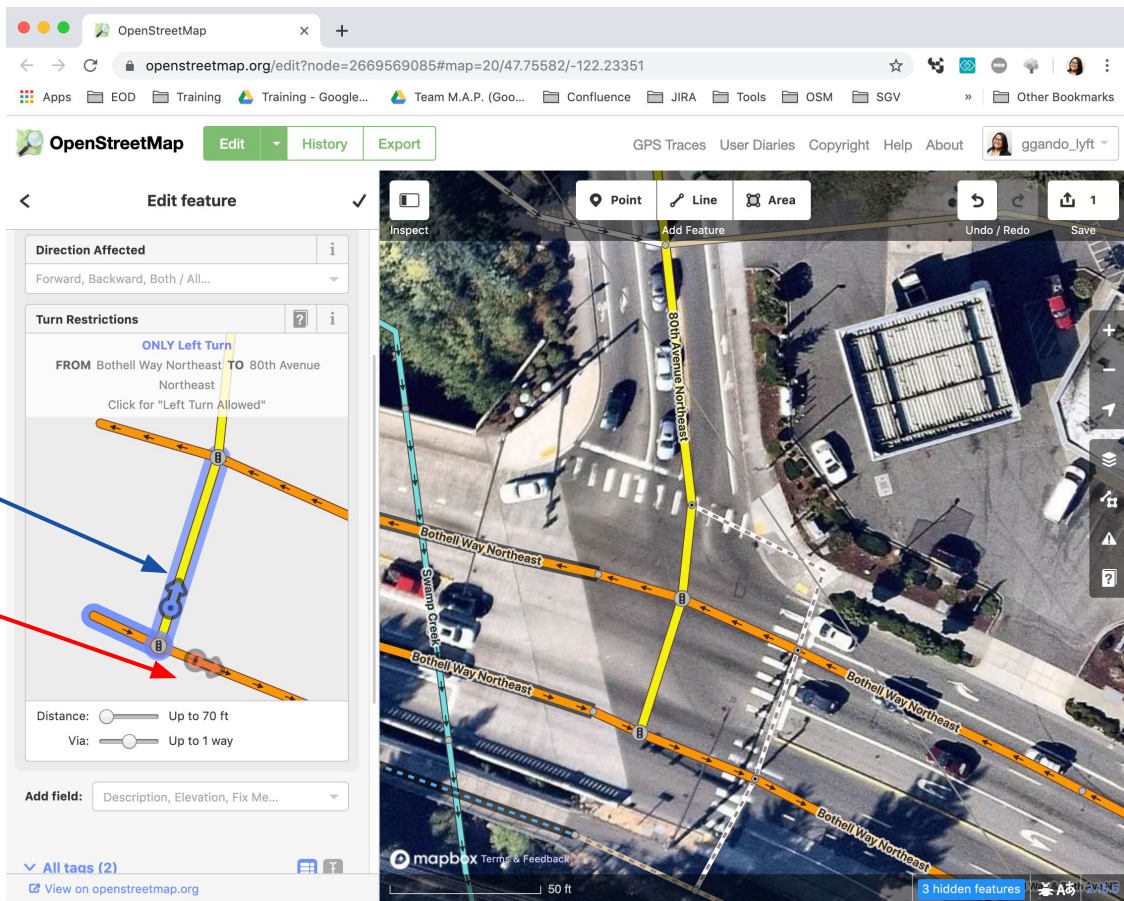
iD Editor

7. Clicked on this way to see a ~~NO Left Turn~~
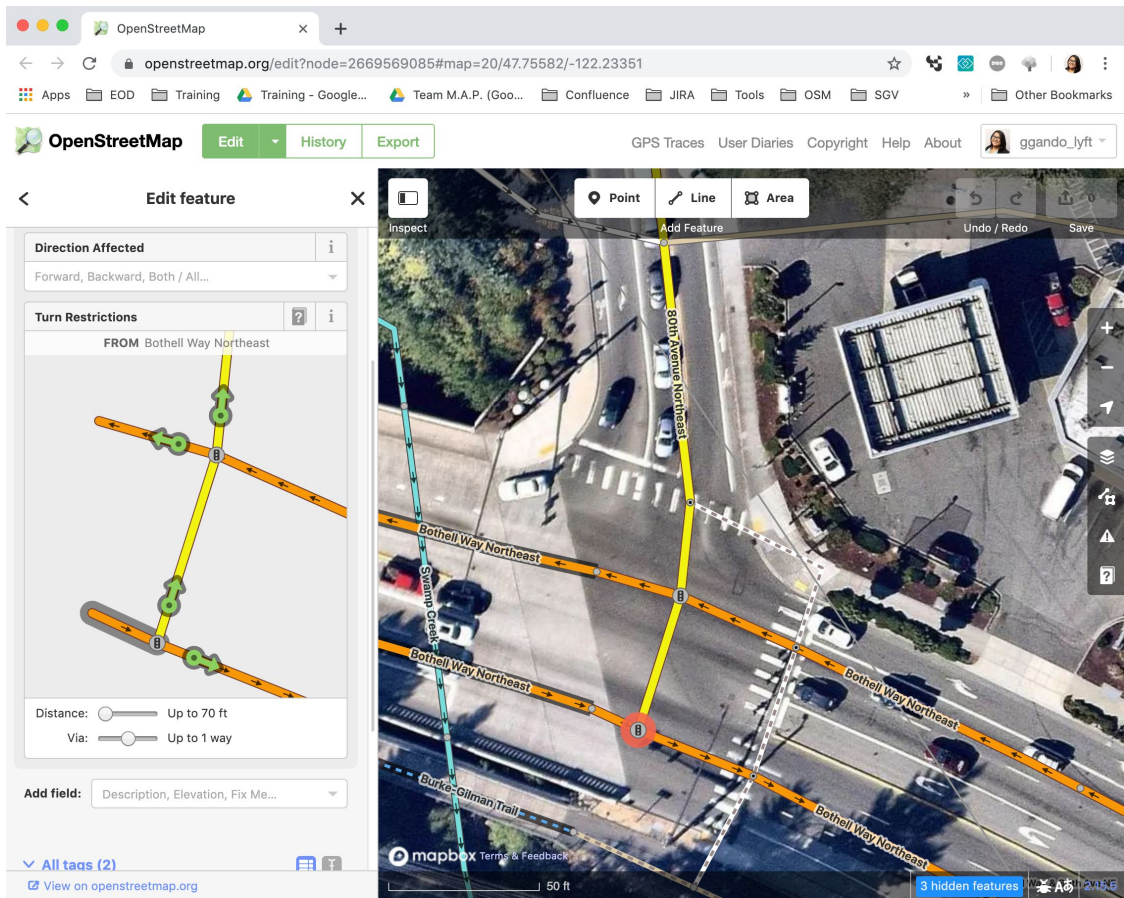
    ○ Way will turn red

iD Editor

8. Clicked on this way again and turns to a green arrow
   - Back to the original state

Things to Note
- Can click on way again to cycle through different turn restrictions
- If there is already turn restrictions mapped arrows will not be green when you initially look at the map

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Thank you

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