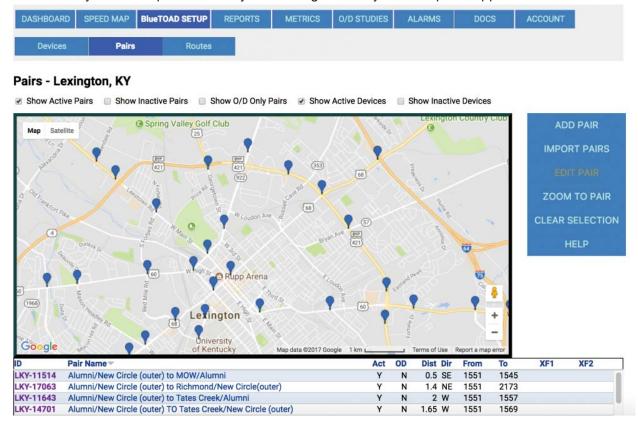
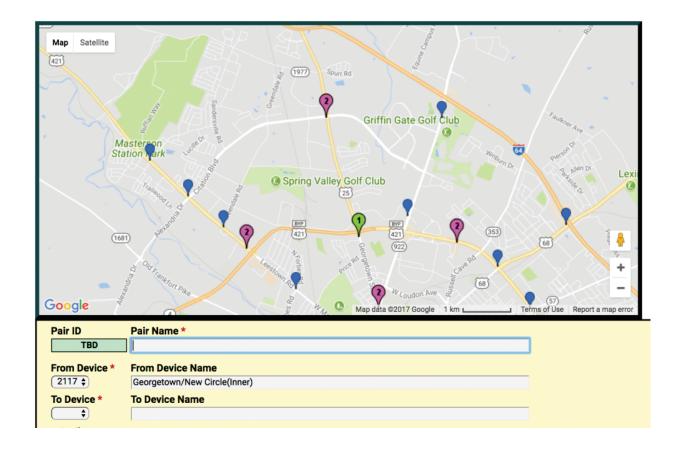
## 3.2.2. How to create a new pair

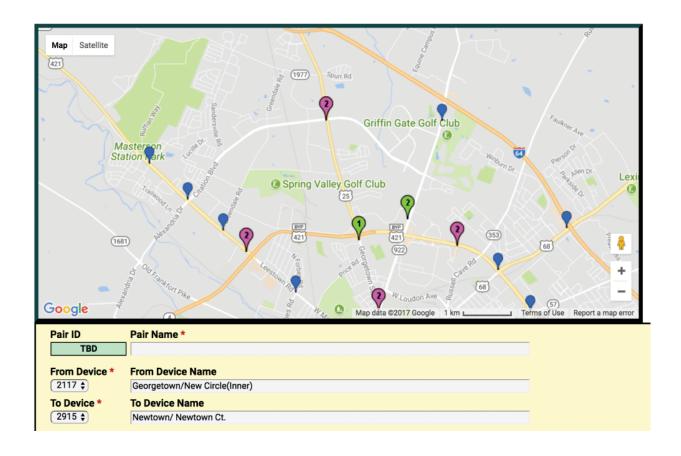
- 1. Click on BlueTOAD SETUP tab in the main menu bar
  - a. the sub-tab Devices underneath BlueTOAD SETUP will already be selected by default
  - b. to change to Pairs, click on the Pairs sub-tab
  - c. an inventory of all the pairs in the system along with a system map will appear



- 2. Click on Add Pair on the right side of the page
- 3. Click on the device pin on the map that you want to be the beginning point of the new pair
  - a. it will then turn green and have a label of (1)
  - b. all existing pairs already involving that device as the starting point will show up as purple and labeled (2)



- 4. Select the device that will be the end point of the new pair by clicking on it on the map
  - a. it should be blue and without a label until you click on it, whereupon it will turn green and be labeled as (2)



5. Go to the New Pair form beneath the map and give the pair a name

a. notice that the From and To pair info is already filled in based on the map pins you selected in Steps 2 and 3

b. the pair ID will be generated automatically once you create the pair

## 6. Fill out the remaining pair attributes:

Distance – the driving distance between the newly created pair end points – this is very important as it affects all calculations and it should be the length along the roadway between the two device end points and not the direct, "as the crow flies" distance

Direction – direction that the pair travels, "From Device" to "To Device"

Speed Limit – the speed limit along the stretch of road that the pair traverses

Road Class – used to calculate LOS, uses HCM and FDOT classifications

Smoothing Method – how the data is processed and filtered – we have developed multiple algorithms to match road conditions and produce the most accurate travel time. Example: arterials vs. freeways. Two Stage Mean is most commonly used for arterials.

XF1, XF2 – user notes, these can be used for descriptive any info you want to include along with the pair

Min/Max Speed – the lower and upper limits of what is considered an outlier, relative to speed limit. Recommend keeping this on Auto for Min. and 30mph for Max.

Stale Time – is used to identify pairs for which the reported travel time/speed is no longer valid. Stale Time is the defined time period since the last match after which a pair will be labeled "stale". Recommend keeping this at 30 min.

TIP – use the Make Like and Add Reverse functions to save time

## 7. Click Save Pair