GeoCoder Project and TriMet

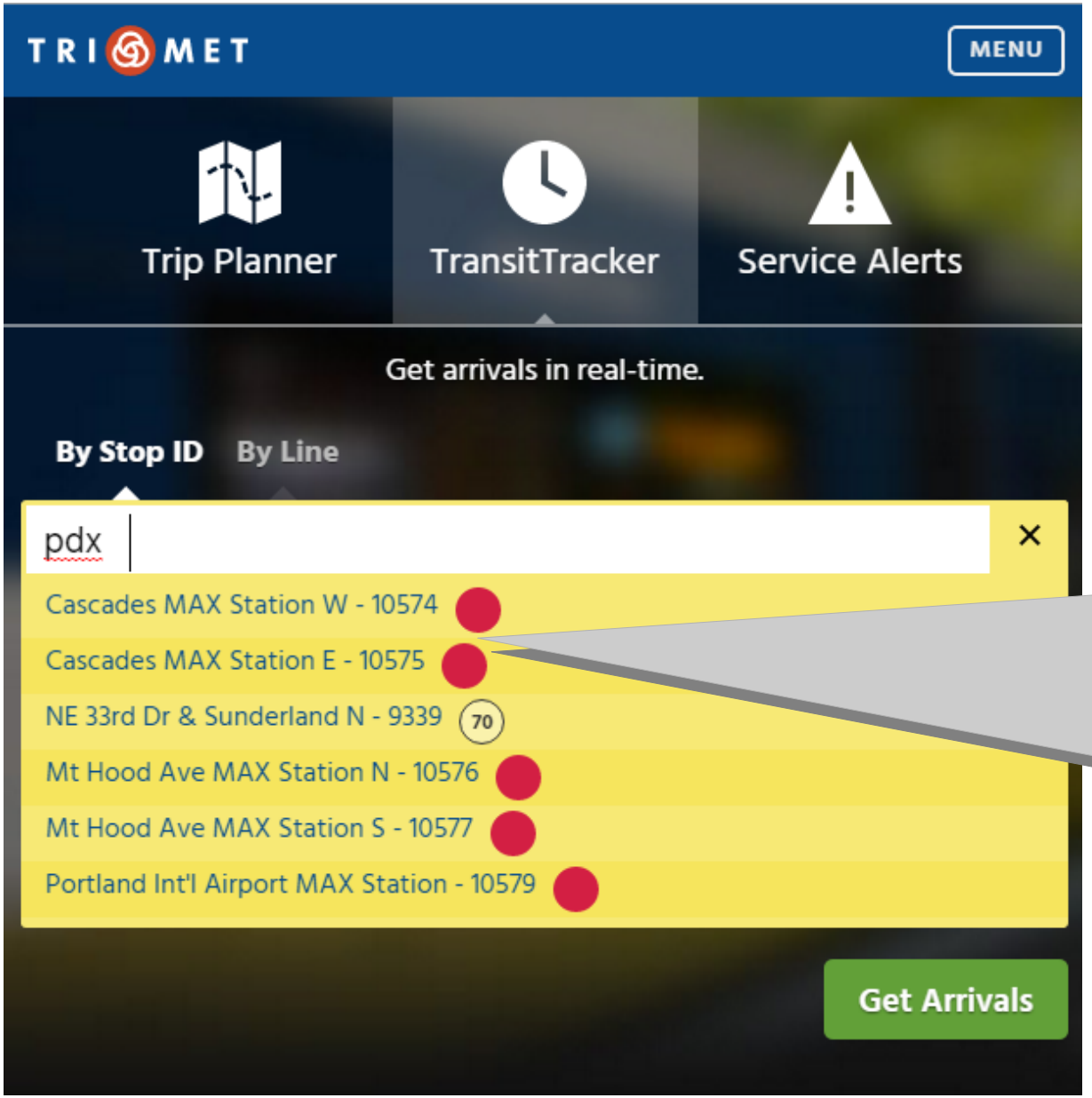
Thoughts on what we're going to need,
both short-term development
and long-term support

November 2016

SOLR: current schema

- https://github.com/OpenTransitTools/loader/blob/master/ott/loader/solr/conf/schema.xml#L129
- SOLR has fields for both Stop ID and Route ID
- SOLR has an *inclusive* search parameter, thus limiting to a sub-set of the index (Stops)
- And an *exclude* param hiding certain types (TVMs)
- SOLR returns fields for in/out TriMet boundary
- Type names can be queried against (Parks)
- Type boosting (Stops) and sorting (City)
- TriMet has apps (internal) that use the OSPN X & Y coords...have to change those

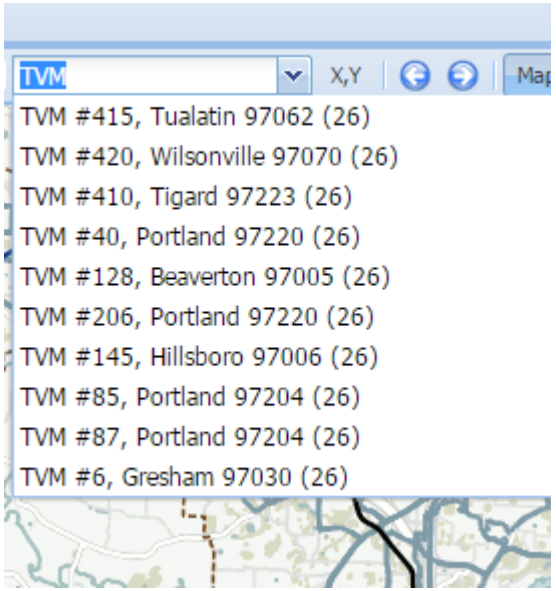
trimet.org – Stop & Route info

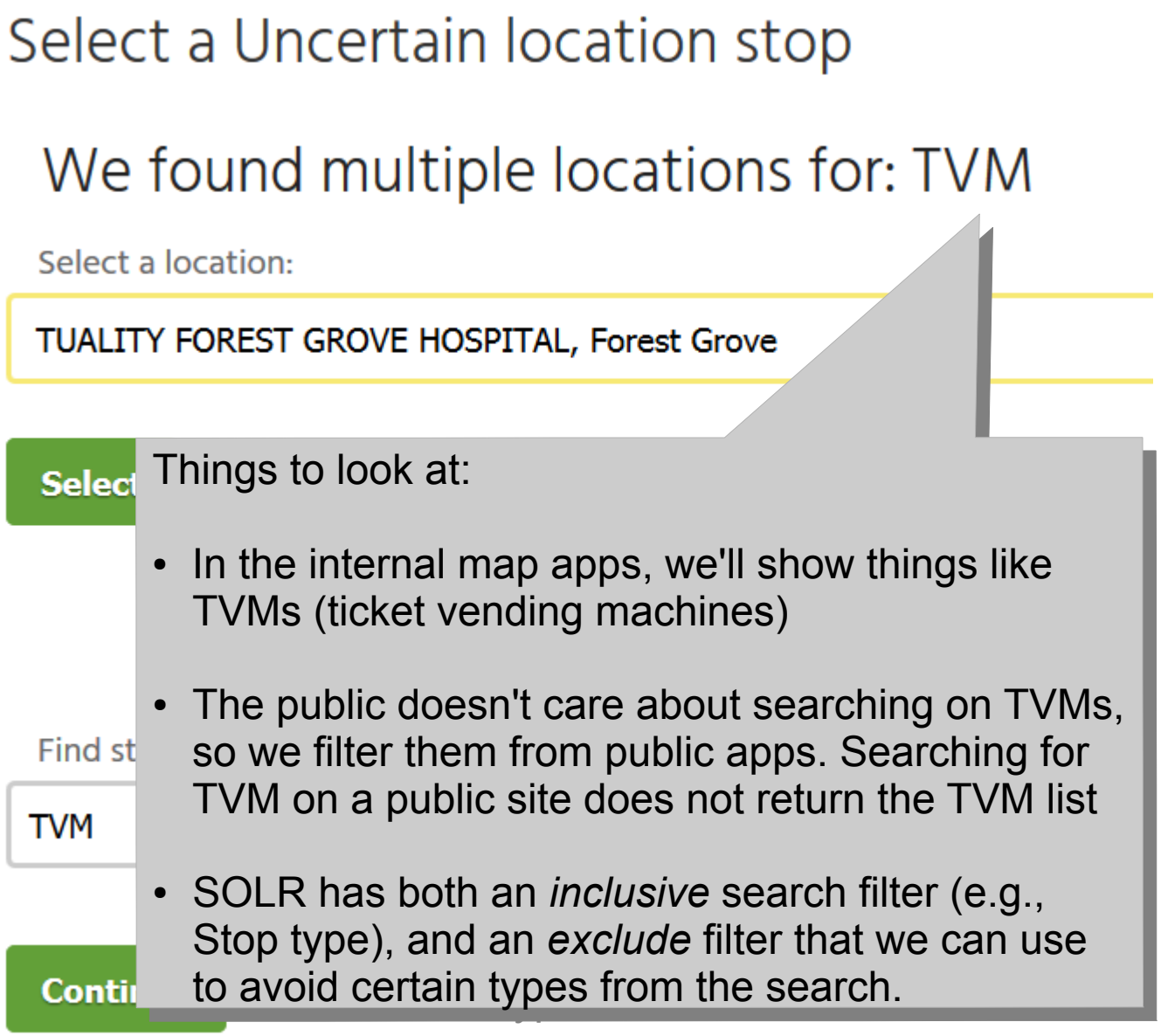


Things to look at:

- SOLR on TransitTracker tab
- *Stops Only* query
- Route data in SOLR response

Filter point types for different apps

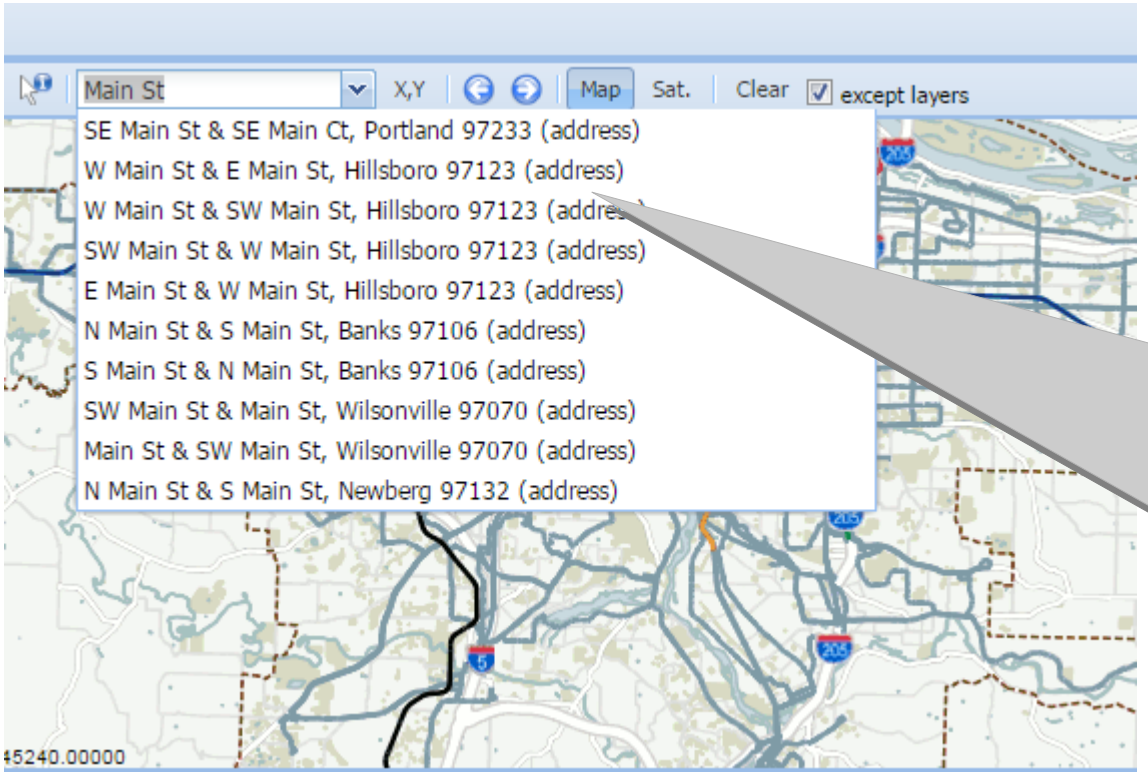




Things to look at:

- In the internal map apps, we'll show things like TVMs (ticket vending machines)
- The public doesn't care about searching on TVMs, so we filter them from public apps. Searching for TVM on a public site does not return the TVM list
- SOLR has both an *inclusive* search filter (e.g., Stop type), and an *exclude* filter that we can use to avoid certain types from the search.

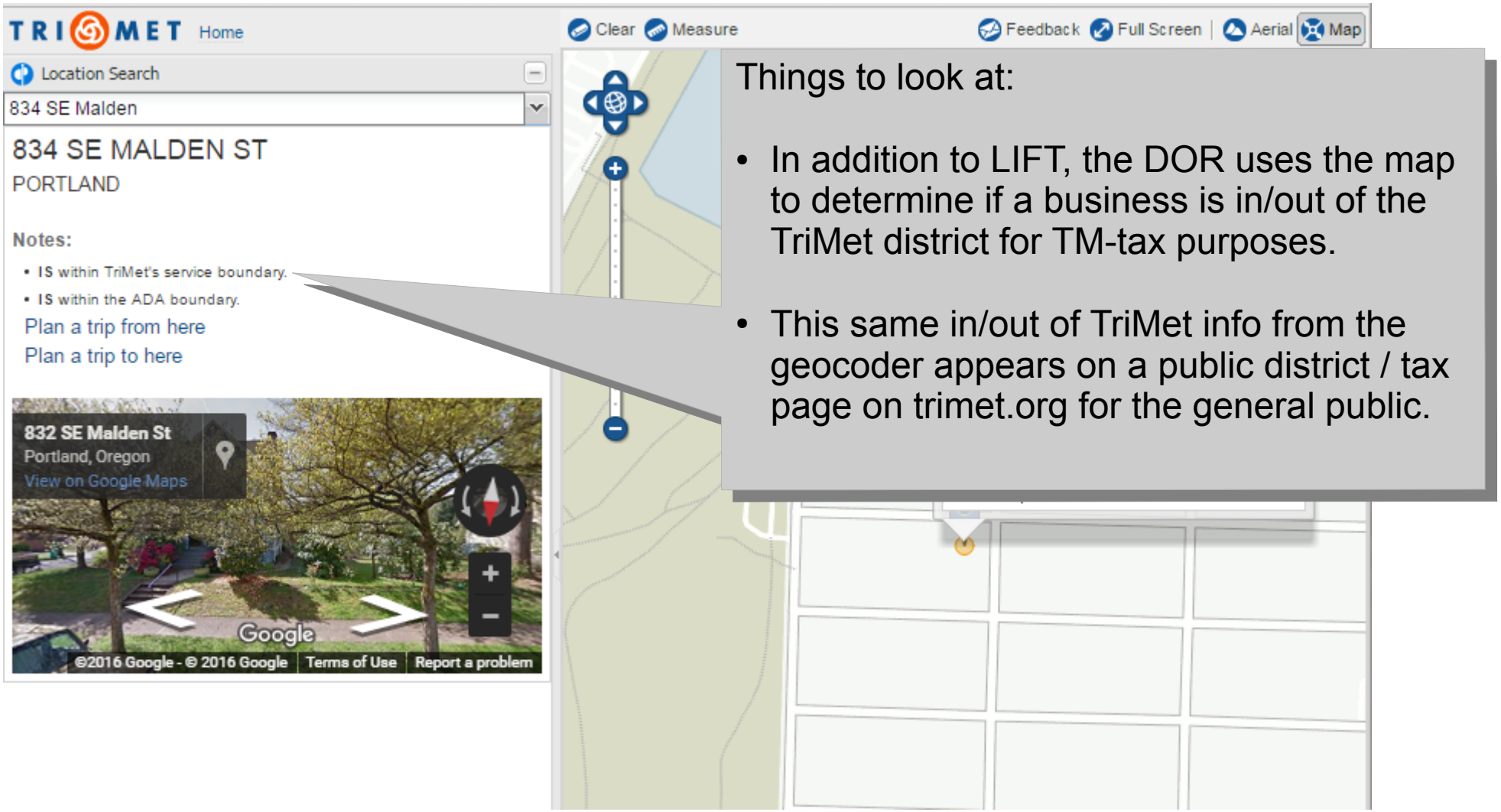
SOLR – city sorting



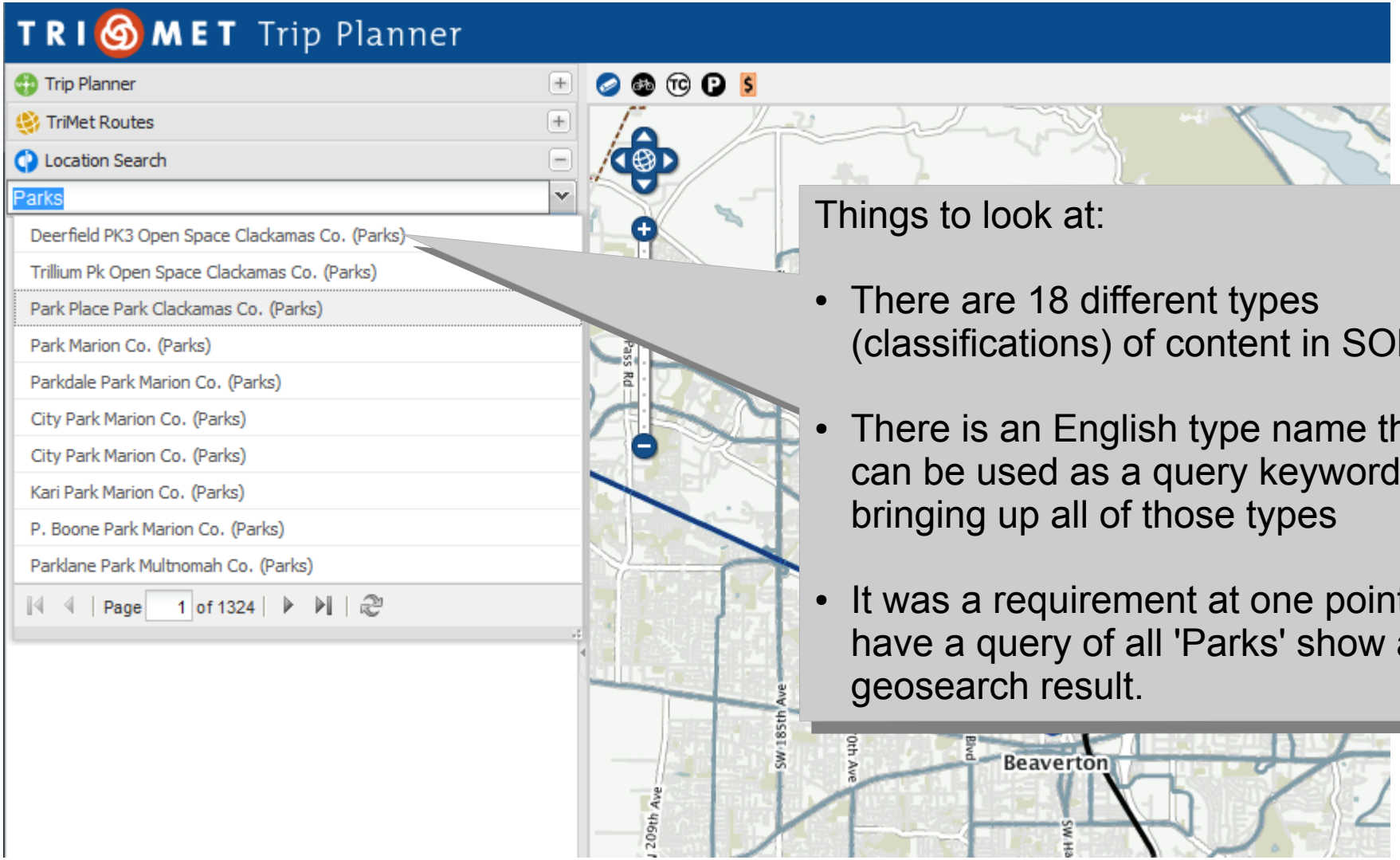
Things to look at:

- SOLR has a higher weight on Portland addresses compared to all other cities. Hillsboro, Gresham and Beaverton are higher than other cities, etc...

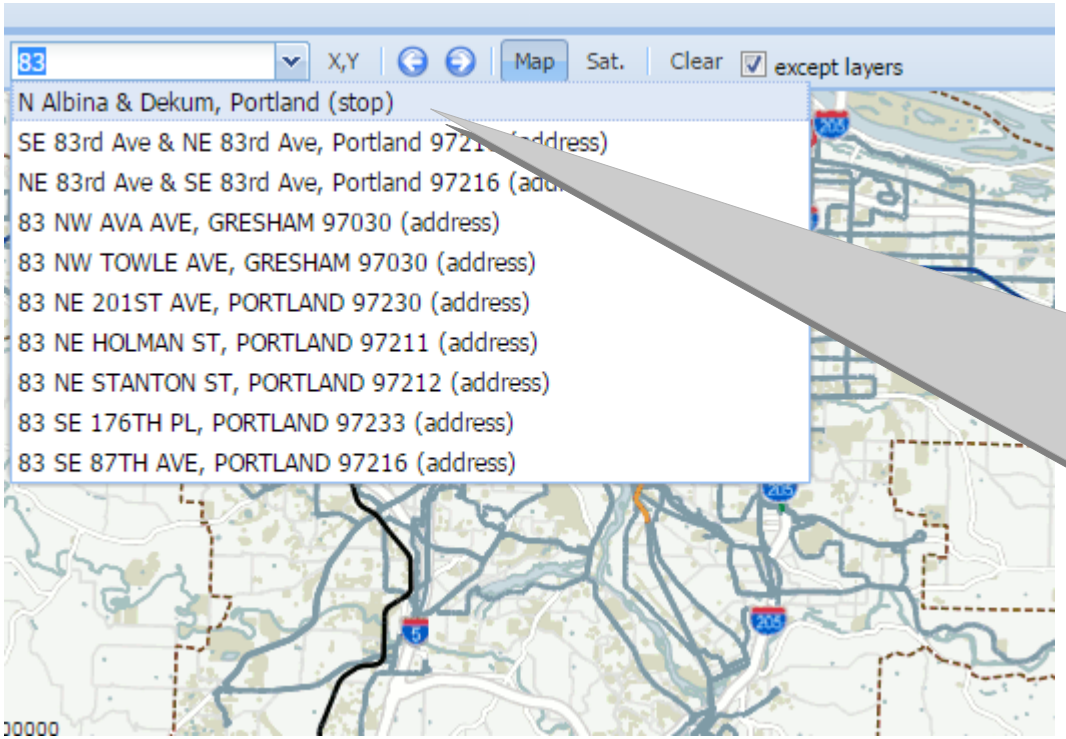
Mobilitymap's in/out Boundary Info



Search on Type Names



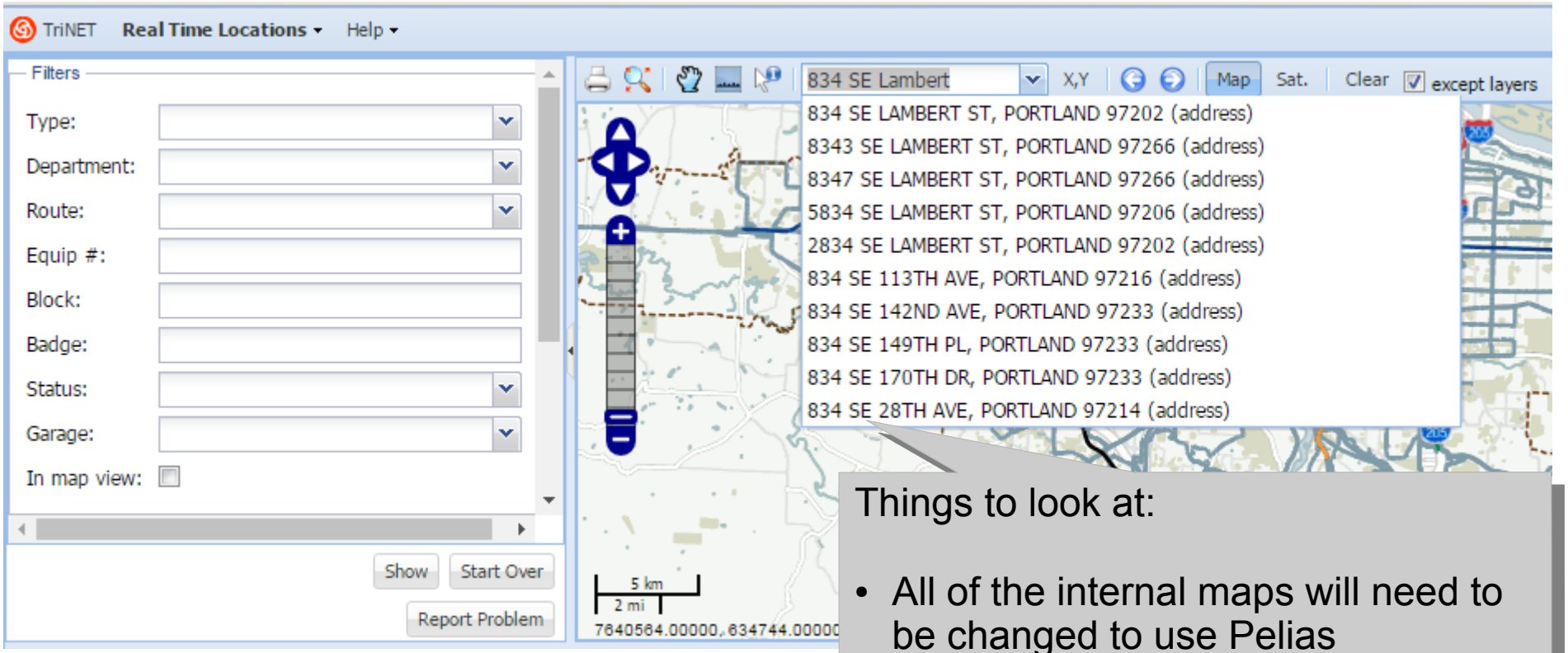
SOLR – stop weighting



Things to look at:

- SOLR is configured to prefer records with Stops IDs, and thus list those higher than other (address) records

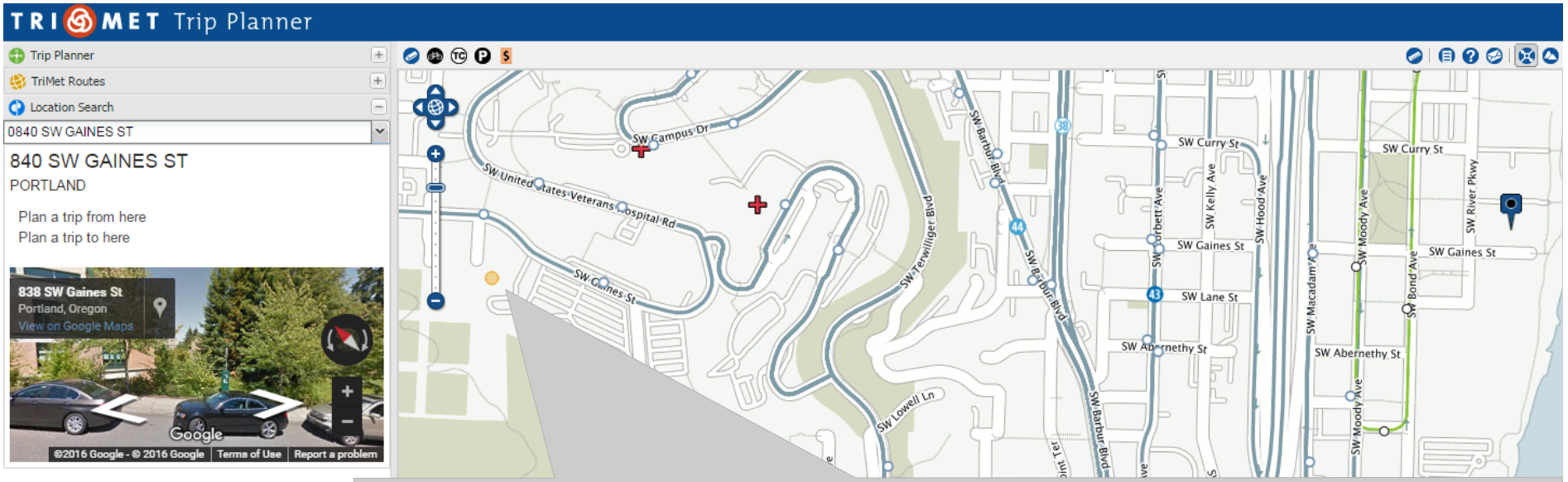
Internal maps use OSPN X & Y



Things to look at:

- All of the internal maps will need to be changed to use Pelias
- These apps will need to re-project Pelias' Lat & Lons into OSPN X & Y coordinates (or maybe the maps get updated away from using OSPN).

840 and 0840 SW Gaines



Things to look at:

- Portland has a weird numbering scheme of leading zeros addresses. The blue marker at map-right is 0840 SE Gaines St.
- About 1 mile west of 0840 SW Gaines St is a building with an address of 841 SW Gaines St.
- Creating address ranges might get somewhat tricky here; searches for *0840 SW...* and *840 SW...* could get interesting.

Pelias: help needed

- consultants to show Frank Purcell and Grant Humphries how to run the ETL tools
- consultants (on-site and electronic availability) from MapZen to work with John Zimmerman (JZ) to install Pelias and all related ETL tools in his server environment
- consultants to set up a support mechanism between Myleen Richardson & Madeline Steele, and respond to their ongoing questions & feedback when they encounter end-user issues with the geocoder
- Address Patching Scheme (e.g., maf_fixes.csv)

Pelias: Potential Challenges

- The ATIS geocoder took 10 years to stabilize
- Myleen & Madeline (M&M) are going to take the brunt of this project long term (see ATIS above)
- Project Success (measured as zero customer complaints) will require a feedback -> fix -> deploy loop involving M&M, MapZen and (to a lesser extent) JZ
- I believe Pelias will have issues with things like ZERO-leading address points … they'll be other issues (there always are)
- *All* new systems require effort beyond SW dev