**Task 2.23.2 FindMore Sold Mar 20, 2015**

The FindMore\_Sold process determines matching property listings that get used by the Valuation process when its algorithm cannot find enough listings.

Start Processing

* Write process start record to the Process\_Status\_Log table

Script Name: findmore\_sold.php

Process name : FindMore Sold

Process id: 2.14

* Initialize

UPDATE MoreLike\_Base

SET SoldBatch = 1

WHERE Property\_id IN (SELECT Property\_id FROM Analysis\_Price\_log WHERE Code = 0)

AND SoldBatch = 0

UPDATE MoreLike\_Base

SET SoldBatch = 1

WHERE SoldBatchDate < more than 7 days in the past

AND SoldBatch = 0

* For each Property\_id in the MoreLike\_Base table where SoldBatch=1
  + Execute the FindMore steps but using property **listings Sold with the last x months**

(x = SystemSettings where keyname=”MORELIKE” and subkeyname=”SOLD\_MONTHS”)

* + Set SoldBatchCount = number of matching Sold listings
  + Set SoldBatch=0 when processing completed for the listing
  + Set SoldBatchDate to today’s date

FindMore Steps

1. Delete all previous data for the listings being processed
2. Retrieve the Polygon\_id for the base property.
3. Select listings by Polygon/Subdivision (see below)
4. Calculate distance, sort by proximity and keep the top MAX\_LISTINGS\_SOLD listings.
5. Match the Q-Values
6. Match the Price per Foot
7. Polygon Match
8. Calculate total score
9. DO NOT DELETE ANY RECORDS

Results are stored in MoreLike\_Listing\_Sold & MoreLike\_QWords\_Sold

* Writeprocess end record to the Process\_Status\_Log table

**Select Listings by Polygon/Subdivision**

The goal is to gather as many listings as possible that are in the same geographic area. There may be multiple approaches implemented to address limitation with the existing data. Steps to gather listings will be implemented one at a time starting with the step detailed below that using subdivision data.

* Calculate the Min/Max from base listing info
  + MinPrice = INT(ListPrice – ListPrice\*0.20)
  + MaxPrice = INT(ListPrice + ListPrice\*0.20)
* Step 1: Retrieve all listings for the base listing Polygon\_id and the associated Subdivision names (ie. Polygon\_Subdivision table)

SELECT s.Polygon\_id, s.Sub\_id, s.Subdivision, s.Count

FROM Real\_Listing r, Real\_Polygon p, Polygon\_Subdivision s

where r.Location\_id = p.Location\_id

and p.Polygon\_id = s.Polygon\_id

and r.Property\_id = <base Property\_id>

order by s.Count desc

and s.Sub\_id > 0 Condition Removed

Insert the results of the following queries into the FindMore\_Listings\_Sold table (add whatever additional fields are needed to the above query).

* Step 2: Process each record where Sub\_id>0 using the following query until there are no more Sub\_id records or the total number of listings retrieved is between MIN\_LISTINGS\_SOLD & MAX\_LISTINGS\_SOLD.

select r.Property\_id,

r.ListingNumber AS MLS,

r.ClosePrice,

r.SquareFeet,

ROUND(r.ClosePrice/r.SquareFeet,0),

r.TotalBedrooms as Bedrooms,

r.TotalBathrooms as Bathrooms,

l.Latitude, l.Longitude, l.geoDNA

from tb\_Subdivision\_City t, Polygon\_Subdivision s, Real\_Polygon p,

Real\_Location l, Real\_Listing r

where t.Sub\_id = s.Sub\_id

and s.Polygon\_id = p.Polygon\_id

and p.Location\_id = r.Location\_id

and r.Location\_id = l.Location\_id

and r.ClosePrice BETWEEN <MinPrice> and <MaxPrice>

and r.CloseDate > <Within Last ## Months>

and r.Status = “S”

and t.Common\_id = <Sub\_id>

* Step 3: If the total number of listings is less than MIN\_LISTINGS\_SOLD, then process the records where Sub\_id=0 using the following query until we have enough records

select r.Property\_id,

r.ListingNumber AS MLS,

r.ClosePrice,

r.SquareFeet,

ROUND(r.ClosePrice/r.SquareFeet,0),

r.TotalBedrooms as Bedrooms,

r.TotalBathrooms as Bathrooms,

l.Latitude, l.Longitude, l.geoDNA

from Polygon\_Subdivision s, Real\_Polygon p,

Real\_Location l, Real\_Listing r

where s.Polygon\_id = p.Polygon\_id

and p.Location\_id = r.Location\_id

and r.Location\_id = l.Location\_id

and r.ClosePrice BETWEEN <MinPrice> and <MaxPrice>

and r.CloseDate > <Within Last ## Months>

and r.Status = “S”

and s.Subdivision = <Subdivision>

Step 4

If we still do not have enough records then step through the Polygon\_Subdivision records again looking for other polygons with the same Sub\_id or Subdivision names.

For example, the following returns 4 polygons (not including Polygon\_id= 59507 where we started)

SELECT \* FROM Polygon\_Subdivision

where subdivision like "Niwot"

and Polygon\_id <> 59507

* For each Polygon\_id retrieve their list of Subdivisions and step through the records as outlined above (ie. Step 1) until enough listings have been retrieved.

Step 5

If after all this we still do not have enough records then search using the geoDNA field as is done in the FindMore for active listings, but do it for Sold listings and ignore proximity and using the following constraint.

and r.ClosePrice BETWEEN <MinPrice> and <MaxPrice>

and r.CloseDate > <Within Last ## Months>