**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 the base listing Polygon\_id 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.PropertyType = <Base PropertyType>

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.PropertyType = <Base PropertyType>

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

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

and r.Status = “S”

and s.Subdivision = <Subdivision>

Step 4

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, ignore proximity and use the base polygon geoDNA.

The following returns the base polygon geoDNA and AveragePrice used in the next query.

SELECT c.geoDNA, s.AveragePrice

FROM Real\_Listing r, Real\_Polygon p, Polygon\_Center c, Polygon\_Stats s

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

and p.Polygon\_id = c.Polygon\_id

and c.Polygon\_id = s.Polygon\_id

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

Use the geoDNA returned by the above query to search for more listings. Drop right most chars until we either return enough records (MIN number reached) or only 11 left most chars remain.

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

FROM Real\_Listing r, Real\_Location l, tb\_City t,

Real\_Polygon p, Polygon\_Center c, Polygon\_Stats s

where r.Location\_id = l.Location\_id

and l.City\_id = t.City\_id and t.Include

and l.Location\_id = p.Location\_id

and p.Polygon\_id = c.Polygon\_id

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

and c.geoDNA LIKE “<Base Polygon geoDNA minus right most chars>%”

and r.PropertyType = <Base PropertyType>

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

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

and s.AveragePrice BETWEEN <base polygon AveragePrice-25%>

AND < base polygon AveragePrice+25%>

At the end of this step, process whatever records have been found.