**Methodology for Housing Stock and Housing Demand**

**November 2012**

**Introduction**

Tauranga City Council Deputy CE Christine Jones produced a housing stock report for Council in 2009. This can be found here <http://file.tauranga.govt.nz/2811801>. This report was updated in 2012.

The instructions below are a guide to producing the data used in the various graphs and information statistics in the report.

The previous report, which was compiled in November 2009 and updated in 2012 sourced information from :

-2006 Census;

-the TCC property valuation exercise in 2009 and then in 2012;

-Development Trends information;

-other information sourced by the Environmental Policy team in TCC.

The three year cycle to update the City’s land, building improvements and therefore capital valuations at 2012 provides the ideal opportunity to update the 2009 report and further to start to compile some trend analysis.

This paper summarises the methodology, largely used in 2009, to provide the 2012 update report. Some further analysis has been added but only to provide more substance to the key messages or context about where Tauranga’s situation is relative to other NZ development areas.

The Key Information and Staff Members responsible are as follows:

-The derivation of income by household composition in section 3 is based on the Census information. So we ideally would like to use more recent survey information but that is not possible and there is no other worthy source, so 2006 Census information continues to be the best;

**Staff Member : Ayv**

-Table 2 : Household Affordability uses a typical household income and looks at its ability to fund mortgage levels. This needs the latest market information about maximum loan equity packages and their interest rates but the restriction that only 30-35% of household income should be spent on house financing costs doesn’t ;

**Staff Member : Mohan**

-Source the latest Demographia International Housing Affordability Survey (google search sources the document). It provides all the necessary information for Table 3 and 4 and has other useful information which can be summarized and graphed;

**Staff Member : Ayv**

-Analyse house sales information over the last three years by capital value and age to update Table 5. Jim has the notes on how this is done after each three cycle revaluation of the City’s properties. These are attached xxxxx ;

**Staff Member : Jim**

-The summary of the capital value of properties in the city into broad bands (over $300,000 and then $100,000 steps to $800,000) is provided in Table 6. The table now has some trend information which is pretty static;

**Staff Member : Jim**

-The analysis of the value of new houses constructed from 1998 in five year bands to 2012 is presented in Graph 1 and comes directly from Jim’s massive spreadsheets. These spreadsheets also provide the information for Graph 2, number of houses constructed over the same period, and Graph 3, change in housing stock;

**Staff Member : Jim**

-The compilation of Table 7 on the suite of section sizes, needed to have an outcome of 15 lots per hectare, was sourced from Neil Gray;

**Developer Expertise**

- Average section size by capital value on Grpah 4 is derived from Jim’s spreasheets;

**Staff Member : Jim**

- The section size by residential zone ??????;

**Staff Member : Ayv or Andy**

-Suburban Residential section size by growth area for Graph 5, Change in Household Type for Graph 6, Household projections to 2051 for Graph 7, Projected Increase in Household Types for Graph 8, are compiled from information which is sourced by Avy;

**Staff Member : Ayv**

-Graphs 9 and 10 on Percentage of Houses by Bedroom Numbers and Number of Houses by Bedroom Numbers requires Census information and so similar to the first step, the 2006 Census information continues to be the best;

**Staff Member : Ayv**

-The Numbers of Houses, by number of bedrooms, actually built and compared to those projected to 2051, uses a Smartgrowth prediction, but who provides this information for graph 11??? Graph12 projects the need for housing stock by bed room number and Graph 13 provides a comparison between actual and required projections for different sized housing stock;

**Staff Member : Ayv or Andy**

-Changes to Land, Improvement and Capital Values is sourced from Jim’s spreadsheets and data is available from 1997 and for each three year cycle of revaluations. Graph 15 compares the percentage of the total capital value for each of the land and improvements valuations and the relationship from 1997 to 2012;

**Staff Member : Jim**

-on Graph 16, a summary of the housing uptake numbers and type is used to ascertain the remaining capacity or stock in the TGA market. This is sourced from the work which Ayv does for the Western Bay Development Trends report. Information from the same report provides the information for Table 11 on growth rates of urban growth areas;

**Staff Member : Ayv**

-Finally, the graph on the Councils’ external debt between growth and non-growth is provided by the finance team and also the table on the key financial ratios.

**Staff Member : Mohan/Frazer/Paul**

**Information tables**

The Key source data information tables as below are compiled by Jim Taylor:

normalised ODBC sequel tables in the TCC Data warehouse from Ozone

dbo\_NPD\_MASTER – This is the District Valuation Roll and holds information about properties for valuation and rating purposes.

dbo\_RT\_VALUATION – This is the Rates record and holds rating information

dbo\_RT\_ASSESSMENT – This is the rates assessment table and hold rates assessment information

dbo\_RT\_VALUATION\_\_RT\_VAL\_ASSESSMENT – This links the valuation and assessment tables.

Ozone Reports for the Office of the Valuer General: (see appendix for list of attributes)

The following two reports are run from Ozone/NPD/Data Export/Export Ovg Audit

Npdprop.txt – details from the DVR about property attributes

Npdsales.txt – details from the DVR about property sales

The ODBC tables are linked in an Access database and the two reports are imported.

**Creation of base Housing Stock data**

The first step is to use the above source data to make tables with key fields that can be linked. The main field is the valuation number with a format like 06601\*001\*00\*A

1. Make a property values table ( lv and cv ) . This query takes the land and capital value from each years assessment where the Category begins with R (Residential) and the property is a current rating unit.

SELECT dbo\_NPD\_MASTER.NPD\_MASTER\_\_ID AS Valuation, dbo\_NPD\_MASTER.NPD\_LUD\_LNDVLL AS 2013LV, dbo\_NPD\_MASTER.NPD\_LUD\_CPTVLL AS 2013CV, dbo\_NPD\_MASTER.NPD\_LUD\_LNDARL AS Area, dbo\_NPD\_MASTER.NPD\_LUD\_MAAGBM AS yearbuilt, dbo\_NPD\_MASTER.NPD\_LUD\_CATGYL AS Category, dbo\_RT\_ASSESSMENT.RT\_ASM\_ID6 AS [Year], dbo\_RT\_ASSESSMENT.RT\_ASM\_CAPVAL AS [Capital Value], dbo\_RT\_ASSESSMENT.RT\_ASM\_LANDVAL AS [Land Value] INTO [HS Residential cv]

FROM (dbo\_NPD\_MASTER INNER JOIN dbo\_RT\_VALUATION\_\_RT\_VAL\_ASSESSMENT ON dbo\_NPD\_MASTER.NPD\_MASTER\_\_ID = dbo\_RT\_VALUATION\_\_RT\_VAL\_ASSESSMENT.RT\_VALUATION\_\_ID) INNER JOIN dbo\_RT\_ASSESSMENT ON dbo\_RT\_VALUATION\_\_RT\_VAL\_ASSESSMENT.RT\_VAL\_ASSESSMENT = dbo\_RT\_ASSESSMENT.RT\_ASSESSMENT\_\_ID

WHERE (((dbo\_NPD\_MASTER.NPD\_LUD\_CATGYL) Like "R\*") AND ((dbo\_NPD\_MASTER.NPD\_LUD\_STATUS)<>"CANCELLED"));

1. Make a property table. This takes the source NPDPROP and creates a copy called Propertynew that I use to update and query etc while leaving the original record.

SELECT npdprop.VNROLL, npdprop.VNABRL, npdprop.VNSSUFL, npdprop.DISTCL, npdprop.SITNO, npdprop.SETNOL, npdprop.SITSTL, npdprop.LDS01L, npdprop.LNDARL, npdprop.CATGYL, npdprop.VLOWNL, npdprop.CREVDL, npdprop.CPTVLL, npdprop.IMPVLL, npdprop.LNDVLL, npdprop.SBELTL, npdprop.CPTVLR, npdprop.IMPVLR, npdprop.LNDVLR, npdprop.SBELTR, npdprop.ANLVLM, npdprop.ANINDM, npdprop.ANLGRM, npdprop.ANBEDM, npdprop.ANLVLR, npdprop.ANINDR, npdprop.RANGRR, npdprop.IMPTDL, npdprop.CTREFR, npdprop.CTREFA, npdprop.LUZONL, npdprop.LNDUSL, npdprop.UNITPL, npdprop.GARPAL, npdprop.BLDAGL, npdprop.BLDCDL, npdprop.BLDCNL, npdprop.BLDSCL, npdprop.BLDFRL, npdprop.MACTRM, npdprop.MAVEWM, npdprop.MASCPM, npdprop.MATFRM, npdprop.MADEKM, npdprop.MALANM, npdprop.MAIMPM, npdprop.MAGR1M, npdprop.MAGR2M, npdprop.PRODNX, npdprop.SLGRPL, npdprop.OCCN1L, npdprop.OCCN2L, npdprop.OCCS1L, npdprop.OCCT1L, npdprop.OWNN1L, npdprop.OWNS1L, npdprop.OWNT1L, npdprop.OWNN2L, npdprop.OWNS2L, npdprop.OWNT2L, npdprop.OWNN3L, npdprop.OWNS3L, npdprop.OWNT3L, npdprop.FILLER INTO Propertynew

FROM npdprop;

1. Make a sales table. This takes the source NPDSALES and creates a copy called Salesnew that I use to update and query etc while leaving the original record.

SELECT Npdsales.VNROLS, Npdsales.VNABRS, Npdsales.VNSUFS, Npdsales.SLDATS, Npdsales.DISTCS, Npdsales.SLTYPS, Npdsales.SLGRPS, Npdsales.SLTENS, Npdsales.BSRELS, Npdsales.SLPGRS, Npdsales.SLPNTS, Npdsales.SLPCTS, Npdsales.SLPOTS, Npdsales.CPTVLS, Npdsales.LNDVLS, Npdsales.COLDDS, Npdsales.SITNOS, Npdsales.SETNOS, Npdsales.SITSTS, Npdsales.CTRFRS, Npdsales.LNDARS, Npdsales.LUZONS, Npdsales.LNDUSS, Npdsales.UNITPS, Npdsales.GARPAS, Npdsales.BLDAGS, Npdsales.BLDCDS, Npdsales.BLSCNS, Npdsales.BLDSCS, Npdsales.BLDFRS, Npdsales.CATGYS, Npdsales.LDESCS, Npdsales.MACTRS, Npdsales.MAVEWS, Npdsales.MASCPS, Npdsales.MATFRS, Npdsales.MADEKS, Npdsales.MALANS, Npdsales.MAIMPS, Npdsales.MAGR2S, Npdsales.MAGR1S, Npdsales.PRODNS, Npdsales.SLREMS, Npdsales.SLVENS, Npdsales.FILLER INTO SalesNew

FROM Npdsales;

1. Make a Housing stock property table. This query filters information from the property table for querying by residential only and creating the valuation key in the linkable format.

SELECT "0" & [VNROLL] & "\*" & IIf(Len([VNABRL])=3,"00" & Left(([VNABRL]),1) & "\*" & Right([VNABRL],2) & "\*",IIf(Len([VNABRL])=4,"0" & Left(([VNABRL]),2) & "\*" & Right(([VNABRL]),2) & "\*",Left(([VNABRL]),3) & "\*" & Right(([VNABRL]),2) & "\*")) & [VNSSUFL] AS [Rating Unit], Propertynew.CATGYL AS Category, Propertynew.LNDARL AS Area, Propertynew.CPTVLL AS [Capital Value], IIf([CPTVLL]<300000,"$0-$300000",IIf([CPTVLL] Between 299000 And 400001,"$300,000-$400,000",IIf([CPTVLL] Between 399000 And 500001,"$400,000-$500,000",IIf([CPTVLL] Between 499000 And 1000001,"$500,000-$1M",IIf([CPTVLL] Between 999000 And 1500001,"$1M-$1.5M",IIf([CPTVLL] Between 1500000 And 2000001,"$1.5M-$2M","over $2M")))))) AS [Capital Value Group], Propertynew.BLDAGL AS Age, Propertynew.MATFRM AS LivingFlArea, Propertynew.BLDFRL AS BuildingFloorArea, Propertynew.IMPTDL AS Improvements, Propertynew.SLGRPL AS SalesGroup INTO PropertyHousingStock

FROM Propertynew

WHERE (((Propertynew.CATGYL) Like "R\*" And (Propertynew.CATGYL)<>"RV" And (Propertynew.CATGYL)<>"RB" And (Propertynew.CATGYL)<>"RP"))

ORDER BY Propertynew.CPTVLL;

1. Make a property age table . This query makes a table from the housing stock property table and adds the age (year built) from the DVR.

SELECT PropertyHousingStock.[Rating Unit], PropertyHousingStock.Age, dbo\_NPD\_MASTER.NPD\_LUD\_MAAGBM AS [Year Built] INTO AgeHousingStock

FROM PropertyHousingStock LEFT JOIN dbo\_NPD\_MASTER ON PropertyHousingStock.[Rating Unit] = dbo\_NPD\_MASTER.NPD\_MASTER\_\_ID

ORDER BY dbo\_NPD\_MASTER.NPD\_LUD\_MAAGBM;

1. Make a Housing stock sales table. This query filters information from the property table for querying by residential market sales only and creating the valuation key in the linkable format.

SELECT "0" & [VNROLS] & "\*" & IIf(Len([VNABRS])=3,"00" & Left(([VNABRS]),1) & "\*" & Right([VNABRS],2) & "\*",IIf(Len([VNABRS])=4,"0" & Left(([VNABRS]),2) & "\*" & Right(([VNABRS]),2) & "\*",Left(([VNABRS]),3) & "\*" & Right(([VNABRS]),2) & "\*")) & [VNSUFS] AS [Rating Unit], SalesNew.SLGRPS AS SalesGroup, SalesNew.BLDAGS AS Age, SalesNew.SLPGRS AS GrossSale, SalesNew.SLPNTS AS NettSale, SalesNew.SLPCTS AS salesChattels INTO SalesHousingStock

FROM SalesNew

WHERE (((SalesNew.CATGYS) Like "R\*" And (SalesNew.CATGYS) Not Like "RV\*" And (SalesNew.CATGYS) Not Like "RB\*") AND ((SalesNew.SLTENS)=1) AND ((SalesNew.BSRELS)=1));

**Creation of Housing Stock queries**

**Section 4**

Query that reports on number of houses in the range $0-$300K, $300-$400K, $400K-$500K, $500K-$1M, $1M-$1.5M, $1.5M-$2M, over $2M by year bands pre 2001 , 2001-2004, 2005-2008, 2009-2012.

SELECT Count(PropertyHousingStock.[Rating Unit]) AS [CountOfRating Unit], PropertyHousingStock.[Capital Value Group], IIf([Year Built]<2000,"B.pre 2001",IIf([Year Built] Between 2000 And 2005,"C.2001-2005",IIf([Year Built] Between 2005 And 2009,"D.2005-2009",IIf([Year Built] Between 2008 And 2013,"E.2010-2012","A.Not Available")))) AS [Year Built band]

FROM PropertyHousingStock INNER JOIN AgeHousingStock ON PropertyHousingStock.[Rating Unit] = AgeHousingStock.[Rating Unit]

GROUP BY PropertyHousingStock.[Capital Value Group], IIf([Year Built]<2000,"B.pre 2001",IIf([Year Built] Between 2000 And 2005,"C.2001-2005",IIf([Year Built] Between 2005 And 2009,"D.2005-2009",IIf([Year Built] Between 2008 And 2013,"E.2010-2012","A.Not Available")))), PropertyHousingStock.[Capital Value Group]

ORDER BY IIf([Year Built]<2000,"B.pre 2001",IIf([Year Built] Between 2000 And 2005,"C.2001-2005",IIf([Year Built] Between 2005 And 2009,"D.2005-2009",IIf([Year Built] Between 2008 And 2013,"E.2010-2012","A.Not Available")))), PropertyHousingStock.[Capital Value Group];

Bullet point 1 A Grouped version of the information above .Answer: the percentage of existing properties with a capital value less than $400,000.

SELECT Count(PropertyHousingStock.[Rating Unit]) AS [CountOfRating Unit], PropertyHousingStock.[Capital Value Group]

FROM PropertyHousingStock INNER JOIN AgeHousingStock ON PropertyHousingStock.[Rating Unit] = AgeHousingStock.[Rating Unit]

GROUP BY PropertyHousingStock.[Capital Value Group];

Bullet point 2 A Grouped version of the information above .Answer: the percentage of new housing stock constructed in the last 5 years with a capital value more than $400,000.

SELECT Count(PropertyHousingStock.[Rating Unit]) AS [CountOfRating Unit], PropertyHousingStock.[Capital Value Group]

FROM PropertyHousingStock INNER JOIN AgeHousingStock ON PropertyHousingStock.[Rating Unit] = AgeHousingStock.[Rating Unit]

WHERE (((AgeHousingStock.[Year Built])>2007 And (AgeHousingStock.[Year Built])<2013))

GROUP BY PropertyHousingStock.[Capital Value Group];

Bullet point 3 use same query as above but change the parameters to the previous 5 year period. A Grouped version of the information above .Answer: the percentage of new housing stock constructed in the 5-10 years period with a capital value more than $400,000 and the change from the answer in bullet point 2

Bullet point 4 .uses the sales data extracted from the Ozone report directly as this is run for the period 1 July 2009 until now. Answer: the percentage of housing sales point 2 in the last three years more than 9 years old.

SELECT Count(SalesHousingStock.[Rating Unit]) AS [CountOfRating Unit], IIf([NettSale]<300000,"$0-$300000",IIf([NettSale] Between 299000 And 400001,"$300,000-$400,000",IIf([NettSale] Between 399000 And 500001,"$400,000-$500,000",IIf([NettSale] Between 499000 And 1000001,"$500,000-$1M",IIf([NettSale] Between 999000 And 1500001,"$1M-$1.5M",IIf([NettSale] Between 1500000 And 2000001,"$1.5M-$2M","over $2M")))))) AS [Capital Value Group], AgeHousingStock.[Year Built]

FROM SalesHousingStock INNER JOIN AgeHousingStock ON SalesHousingStock.[Rating Unit] = AgeHousingStock.[Rating Unit]

GROUP BY IIf([NettSale]<300000,"$0-$300000",IIf([NettSale] Between 299000 And 400001,"$300,000-$400,000",IIf([NettSale] Between 399000 And 500001,"$400,000-$500,000",IIf([NettSale] Between 499000 And 1000001,"$500,000-$1M",IIf([NettSale] Between 999000 And 1500001,"$1M-$1.5M",IIf([NettSale] Between 1500000 And 2000001,"$1.5M-$2M","over $2M")))))), AgeHousingStock.[Year Built]

HAVING (((AgeHousingStock.[Year Built])>1997));

Table 5 House sales over the last three years by Capital Value and age of dwelling.

TRANSFORM Count(SalesHousingStock.[Rating Unit]) AS [CountOfRating Unit]

SELECT IIf([NettSale]<300000,"$0-$300000",IIf([NettSale] Between 299000 And 400001,"$300,000-$400,000",IIf([NettSale] Between 399000 And 500001,"$400,000-$500,000",IIf([NettSale] Between 499000 And 1000001,"$500,000-$1M",IIf([NettSale] Between 999000 And 1500001,"$1M-$1.5M",IIf([NettSale] Between 1500000 And 2000001,"$1.5M-$2M","over $2M")))))) AS [Capital Value Group]

FROM SalesHousingStock INNER JOIN AgeHousingStock ON SalesHousingStock.[Rating Unit] = AgeHousingStock.[Rating Unit]

GROUP BY IIf([NettSale]<300000,"$0-$300000",IIf([NettSale] Between 299000 And 400001,"$300,000-$400,000",IIf([NettSale] Between 399000 And 500001,"$400,000-$500,000",IIf([NettSale] Between 499000 And 1000001,"$500,000-$1M",IIf([NettSale] Between 999000 And 1500001,"$1M-$1.5M",IIf([NettSale] Between 1500000 And 2000001,"$1.5M-$2M","over $2M"))))))

PIVOT IIf([Year Built]>1999,"2000+",IIf([Year Built] Between 1989 And 2000,"1990-1999",IIf([Year Built] Between 1969 And 1990,"1970-1989","Pre 1970")));

Table 6 Number of properties in the City by capital value band

SELECT IIf([CPTVLL]<300000,"<$300,000",IIf([CPTVLL] Between 299000 And 400001,"<-$400,000",IIf([CPTVLL] Between 399000 And 500001,"<$500,000",IIf([CPTVLL] Between 499000 And 600001,"<$600,000",IIf([CPTVLL] Between 599000 And 700001,"<$700,000",IIf([CPTVLL] Between 699000 And 800001,"<$800,000",">$800,000")))))) AS [Capital Value Group], Count("0" & [VNROLL] & "\*" & IIf(Len([VNABRL])=3,"00" & Left(([VNABRL]),1) & "\*" & Right([VNABRL],2) & "\*",IIf(Len([VNABRL])=4,"0" & Left(([VNABRL]),2) & "\*" & Right(([VNABRL]),2) & "\*",Left(([VNABRL]),3) & "\*" & Right(([VNABRL]),2) & "\*")) & [VNSSUFL]) AS [Rating Unit]

FROM Propertynew

WHERE (((Propertynew.CATGYL) Like "R\*" And (Propertynew.CATGYL)<>"RV" And (Propertynew.CATGYL)<>"RB" And (Propertynew.CATGYL)<>"RP"))

GROUP BY IIf([CPTVLL]<300000,"<$300,000",IIf([CPTVLL] Between 299000 And 400001,"<-$400,000",IIf([CPTVLL] Between 399000 And 500001,"<$500,000",IIf([CPTVLL] Between 499000 And 600001,"<$600,000",IIf([CPTVLL] Between 599000 And 700001,"<$700,000",IIf([CPTVLL] Between 699000 And 800001,"<$800,000",">$800,000"))))));

Graph 1 : Percentage of New Houses constructed 1998-2002, 2003-2007, 2008-2012 by capital value band.

Graph 2 : Number of New Houses constructed 1998-2002, 2003-2007, 2008-2012 by capital value band.

Graph 3 : Housing Stock by capital value.

SELECT IIf([Year Built] Between 1997 And 2003,"1998-2002",IIf([Year Built] Between 2002 And 2008,"2003-2007",IIf([Year Built] Between 2007 And 2013,"2008-2012","pre 1998"))) AS [Year Built band], IIf([Capital Value]<300000,"<$300,000",IIf([Capital Value] Between 299000 And 400001,"<$400,000",IIf([Capital Value] Between 399000 And 500001,"<$500,000",IIf([Capital Value] Between 499000 And 600001,"<$600,000",IIf([Capital Value] Between 599000 And 700001,"<$700,000",IIf([Capital Value] Between 699000 And 800001,"<$800,000",">$800,000")))))) AS [Capital Value Group], Count(PropertyHousingStock.[Rating Unit]) AS [CountOfRating Unit]

FROM PropertyHousingStock INNER JOIN AgeHousingStock ON PropertyHousingStock.[Rating Unit] = AgeHousingStock.[Rating Unit]

GROUP BY IIf([Year Built] Between 1997 And 2003,"1998-2002",IIf([Year Built] Between 2002 And 2008,"2003-2007",IIf([Year Built] Between 2007 And 2013,"2008-2012","pre 1998"))), IIf([Capital Value]<300000,"<$300,000",IIf([Capital Value] Between 299000 And 400001,"<$400,000",IIf([Capital Value] Between 399000 And 500001,"<$500,000",IIf([Capital Value] Between 499000 And 600001,"<$600,000",IIf([Capital Value] Between 599000 And 700001,"<$700,000",IIf([Capital Value] Between 699000 And 800001,"<$800,000",">$800,000"))))));

GROUP BY PropertyHousingStock.[Capital Value Group];

Graph 4 : Average Section size by Capital Value ( note it is not clear if this data set should be used or the data from section 5 and Table 7)

SELECT IIf([Capital Value]<300000,"<$300,000",IIf([Capital Value] Between 299000 And 400001,"<$400,000",IIf([Capital Value] Between 399000 And 500001,"<$500,000",IIf([Capital Value] Between 499000 And 600001,"<$600,000",IIf([Capital Value] Between 599000 And 700001,"<$700,000",IIf([Capital Value] Between 699000 And 800001,"<$800,000",">$800,000")))))) AS [Capital Value Group], Avg(PropertyHousingStock.Area) AS AvgOfArea

FROM PropertyHousingStock INNER JOIN AgeHousingStock ON PropertyHousingStock.[Rating Unit] = AgeHousingStock.[Rating Unit]

GROUP BY IIf([Capital Value]<300000,"<$300,000",IIf([Capital Value] Between 299000 And 400001,"<$400,000",IIf([Capital Value] Between 399000 And 500001,"<$500,000",IIf([Capital Value] Between 499000 And 600001,"<$600,000",IIf([Capital Value] Between 599000 And 700001,"<$700,000",IIf([Capital Value] Between 699000 And 800001,"<$800,000",">$800,000"))))))

HAVING (((Avg(PropertyHousingStock.Area))<>0));

Graphs 14 and 15 are derived by totalling the columns by year in this query which is run for CV and then for lv.

TRANSFORM Sum([HS Residential cv].[Land Value]) AS [SumOfLand Value]

SELECT [HS Residential cv].Valuation, [HS Residential cv].[2013LV], [HS Residential cv].[2013CV]

FROM [HS Residential cv]

GROUP BY [HS Residential cv].Valuation, [HS Residential cv].[2013LV], [HS Residential cv].[2013CV]

PIVOT [HS Residential cv].Year;

**Prepared by: Jim Taylor 27 November 2012**

Appendix

These are the other fields in the Property File that can be interrogated. (note the number of bedrooms field is reasonably new and is only partially populated)

| **Propfields** | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **FieldText** | **FieldNo** | **FieldName** | **Start** | **End** | **Type** | **Length** | **Dec** |
| Valuation No. Roll | 1 | VNROLL | 1 | 5 | S | 5 | 0 |
| Valuation No. Assessment | 2 | VNABRL | 6 | 16 | S | 11 | 0 |
| Valuation No. Suffix | 3 | VNSUFL | 17 | 18 | A | 2 |  |
| District (Territorial Authority) Code | 4 | DISTCL | 19 | 20 | S | 2 | 0 |
| Situation Number | 5 | SITNOL | 21 | 24 | S | 4 | 0 |
| Additional Situation Number | 6 | SETNOL | 25 | 28 | A | 4 |  |
| Situation Name | 7 | SITSTL | 29 | 58 | A | 30 |  |
| Legal Description | 8 | LDS01L | 59 | 134 | A | 76 |  |
| Land Area | 9 | LNDARL | 135 | 146 | S | 12 | 4 |
| Property Category | 10 | CATGYL | 147 | 152 | A | 6 |  |
| Ownership Code | 11 | VLOWNL | 153 | 153 | S | 1 | 0 |
| Current Effective Valuation Date | 12 | CREVDL | 154 | 161 | S | 8 | 0 |
| Capital Value | 13 | CPTVLL | 162 | 172 | S | 11 | 0 |
| Improvements Value | 14 | IMPVLL | 173 | 183 | S | 11 | 0 |
| Land Value | 15 | LNDVLL | 184 | 194 | S | 11 | 0 |
| Trees | 16 | SBELTL | 195 | 205 | S | 11 | 0 |
| Revised Capital Value | 17 | CPTVLR | 206 | 216 | S | 11 | 0 |
| Revised Improvements Value | 18 | IMPVLR | 217 | 227 | S | 11 | 0 |
| Revised Land Value 19 | 19 | LNDVLR | 228 | 238 | S | 11 | 0 |
| Revised Trees 20 | 20 | SBELTR | 239 | 249 | S | 11 | 0 |
| Annual Value 21 | 21 | ANLVLN | 250 | 260 | S | 11 | 0 |
| Annual Value Indicator | 22 | ANINDM | 261 | 261 | S | 1 | 0 |
| Gross Rental | 23 | ANLGRM | 262 | 272 | S | 11 | 0 |
| No. of Bedrooms | 24 | ANBEDM | 273 | 276 | S | 4 | 0 |
| Revised Annual Value | 25 | ANLVLR | 277 | 287 | S | 11 | 0 |
| Revised Annual Value Indicator | 26 | ANINDR | 288 | 288 | S | 1 | 0 |
| Improvements Description | 28 | IMPTDL | 300 | 323 | A | 24 |  |
| Certificate of Title | 29 | CTREFR | 324 | 335 | A | 12 |  |
| Additional Certificate of Title | 30 | CTREFA | 336 | 336 | A | 1 |  |
| Zoning | 31 | LUZONL | 337 | 338 | A | 2 |  |
| Actual Property Use | 32 | LNDUSL | 339 | 340 | S | 2 | 0 |
| Units Of Use | 33 | UNITPL | 341 | 343 | S | 3 | 0 |
| Off-street Parking | 34 | GARPAL | 344 | 346 | S | 3 | 0 |
| Building Age Indicator | 35 | BLDAGL | 347 | 349 | A | 3 |  |
| Building Condition Indicator | 36 | BLDCDL | 350 | 351 | A | 2 |  |
| Building Construction Indicator | 37 | BLDCNL | 352 | 353 | A | 2 |  |
| Building Site Coverage | 38 | BLDSCL | 354 | 359 | S | 6 | 0 |
| Building Total Floor Area | 39 | BLDFRL | 360 | 365 | S | 6 | 0 |
| Mass Contour | 40 | MACTRM | 366 | 367 | A | 2 |  |
| Mass View | 41 | MAVEWM | 368 | 368 | A | 1 |  |
| Mass Scope of View | 42 | MASCPM | 369 | 369 | A | 1 |  |
| Mass Total Living Area | 43 | MATFRM | 370 | 375 | S | 6 | 0 |
| Mass Deck | 44 | MADEKM | 376 | 376 | A | 1 |  |
| Mass Workshop Laundry | 45 | MALANM | 377 | 377 | A | 1 |  |
| Mass Other Improvements | 46 | MAIMPM | 378 | 378 | A | 1 |  |
| Mass Garage Freestanding | 47 | MAGR1M | 379 | 379 | S | 1 | 0 |
| Mass Garage Under Main Roof | 48 | MAGR2M | 380 | 380 | S | 1 | 0 |
| Production | 49 | PRODNX | 381 | 387 | S | 7 | 0 |
| Sales Group | 50 | SLGRPL | 388 | 389 | S | 2 | 0 |
| Ratepayer Name 1 | 51 | OCCN1L | 390 | 439 | A | 50 |  |
| Ratepayer Name 2 | 52 | OCCN2L | 440 | 489 | A | 50 |  |
| Ratepayer Street | 53 | OCCS1L | 490 | 519 | A | 30 |  |
| Ratepayer Town | 54 | OCCT1L | 520 | 549 | A | 30 |  |
| Owner Name 1 | 55 | OWNN1L | 550 | 599 | A | 50 |  |
| Owner 1 Street | 56 | OWNS1L | 600 | 629 | A | 30 |  |
| Owner 1 Town | 57 | OWNT1L | 630 | 659 | A | 30 |  |
| Owner Name 2 | 58 | OWNN2L | 660 | 709 | A | 50 |  |
| Owner 2 Street | 59 | OWNS2L | 710 | 739 | A | 30 |  |
| Owner 2 Town | 60 | OWNT2L | 740 | 769 | A | 30 |  |
| Owner Name 3 | 61 | OWNN3L | 770 | 819 | A | 50 |  |
| Owner 3 Street | 62 | OWNS3L | 820 | 849 | A | 30 |  |
| Owner 3 Town | 63 | OWNT3L | 850 | 879 | A | 30 |  |
| Filler | 64 | FILLER | 880 | 929 | A | 50 |  |

These are the other fields in the Sales File that can be interrogated

| **SalesFields** | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **FieldText** | **FieldNo** | **FiedName** | **Start** | **End** | **Type** | **Length** | **Dec** |
| Valuation No. Roll | 1 | VNROLS | 1 | 5 | S | 5 | 0 |
| Valuation No. Assessment | 2 | VNABRS | 6 | 16 | S | 11 | 0 |
| Valuation No. Suffix | 3 | VNSUFS | 17 | 18 | A | 2 |  |
| Sale Date | 4 | SLDATS | 19 | 26 | S | 8 | 0 |
| District (Territorial Authority) Code | 5 | DISTCS | 27 | 28 | S | 2 | 0 |
| Sale Type | 6 | SLTYPS | 29 | 29 | A | 1 |  |
| Sales Group | 7 | SLGRPS | 30 | 31 | S | 2 | 0 |
| Sale Tenure | 8 | SLTENS | 32 | 32 | S | 1 | 0 |
| Price/Value Relationship | 9 | BSRELS | 33 | 33 | S | 1 | 0 |
| Sale Price Gross | 10 | SLPGRS | 34 | 44 | S | 11 | 0 |
| Sale Price Net | 11 | SLPNTS | 45 | 55 | S | 11 | 0 |
| Sale Price Chattels | 12 | SLPCTS | 56 | 66 | S | 11 | 0 |
| Sale Price Other | 13 | SLPOTS | 67 | 77 | S | 11 | 0 |
| Capital Value | 14 | CPTVLS | 78 | 88 | S | 11 | 0 |
| Land Value | 15 | LNDVLS | 89 | 99 | S | 11 | 0 |
| Current Effective Valuation Date | 16 | COLDDS | 100 | 107 | S | 8 | 0 |
| Situation Number | 17 | SITNOS | 108 | 111 | S | 4 | 0 |
| Additional Situation Number | 18 | SETNOS | 112 | 115 | A | 4 |  |
| Situation Name | 19 | SITSTS | 116 | 145 | A | 30 |  |
| Certificate of Title | 20 | CTRFRS | 146 | 157 | A | 12 |  |
| Land Area | 21 | LNDARS | 158 | 169 | S | 12 | 4 |
| Zoning | 22 | LUZONS | 170 | 171 | A | 2 |  |
| Actual Property Use | 23 | LNDUSS | 172 | 173 | S | 2 | 0 |
| Units Of Use | 24 | UNITPS | 174 | 176 | S | 3 | 0 |
| Off-street Parking | 25 | GARPAS | 177 | 179 | S | 3 | 0 |
| Building Age Indicator | 26 | BLDAGS | 180 | 182 | A | 3 |  |
| Building Condition Indicator | 27 | BLDCDS | 183 | 184 | A | 2 |  |
| Building Construction Indicator | 28 | BLDCNS | 185 | 186 | A | 2 |  |
| Building Site Coverage | 29 | BLDSCS | 187 | 192 | S | 6 | 0 |
| Building Total Floor Area | 30 | BLDFRS | 193 | 198 | S | 6 | 0 |
| Property Category | 31 | CATGYS | 199 | 204 | A | 6 |  |
| Legal Description | 32 | LDESCS | 205 | 242 | A | 38 |  |
| Mass Contour | 33 | MACTRS | 243 | 244 | A | 2 |  |
| Mass View | 34 | MAVEWS | 245 | 245 | A | 1 |  |
| Mass Scope of View | 35 | MASCPS | 246 | 246 | A | 1 |  |
| Mass Total Floor Area | 36 | MATFRS | 247 | 249 | S | 3 | 0 |
| Mass Deck | 37 | MADEKS | 250 | 250 | A | 1 |  |
| Mass Workshop Laundry | 38 | MALANS | 251 | 251 | A | 1 |  |
| Mass Other Improvements | 39 | MAIMPS | 252 | 252 | A | 1 |  |
| Mass Garage Under Main Roof | 40 | MAGR2S | 253 | 253 | S | 1 | 0 |
| Mass Garage Freestanding | 41 | MAGR1S | 254 | 254 | S | 1 | 0 |
| Production | 42 | PRODNS | 255 | 261 | S | 7 | 0 |
| Valuer’s Remarks | 43 | SLREMS | 262 | 296 | A | 35 |  |
| Vendor/Purchaser names | 44 | SLVENS | 297 | 318 | A | 22 |  |