

Review of Property Assessments and Sales in Montgomery County

April 26, 2011



CountyStat Principles

- **Require Data-Driven Performance**
- **Promote Strategic Governance**
- **Increase Government Transparency**
- **Foster a Culture of Accountability**



Agenda

- **Welcome and introductions**
- **Overview of findings**
- **Scope of property assessments and sales**
- **Data analysis**
- **Summary/Recommendations**
- **Wrap-up and follow-up items**
- **Appendix**



Meeting Goal

- **The purpose of this meeting is to analyze residential property assessment data to confirm that the County is receiving appropriate revenue and that residents are being assessed and taxed uniformly across the County.**



Overview of Findings

On average, properties in the County were under assessed, compared to actual 2010 sale values. This finding is similar to the result of the State of Maryland's own evaluation.

- CountyStat reviewed 8,518 arms-length CY2010 sales of improved residential and condo properties in all three assessment groups (2009, 2010 and 2011)

% Difference between Assessed and Sale Value			
Assessment Group	Median	Average	Standard Deviation
Group 3 – Assessed in 2009	2%	1%	.19
Group 1 – Assessed in 2010	-8%	-9%	.22
Group 2 – Assessed in 2011	-11%	-10%	.10

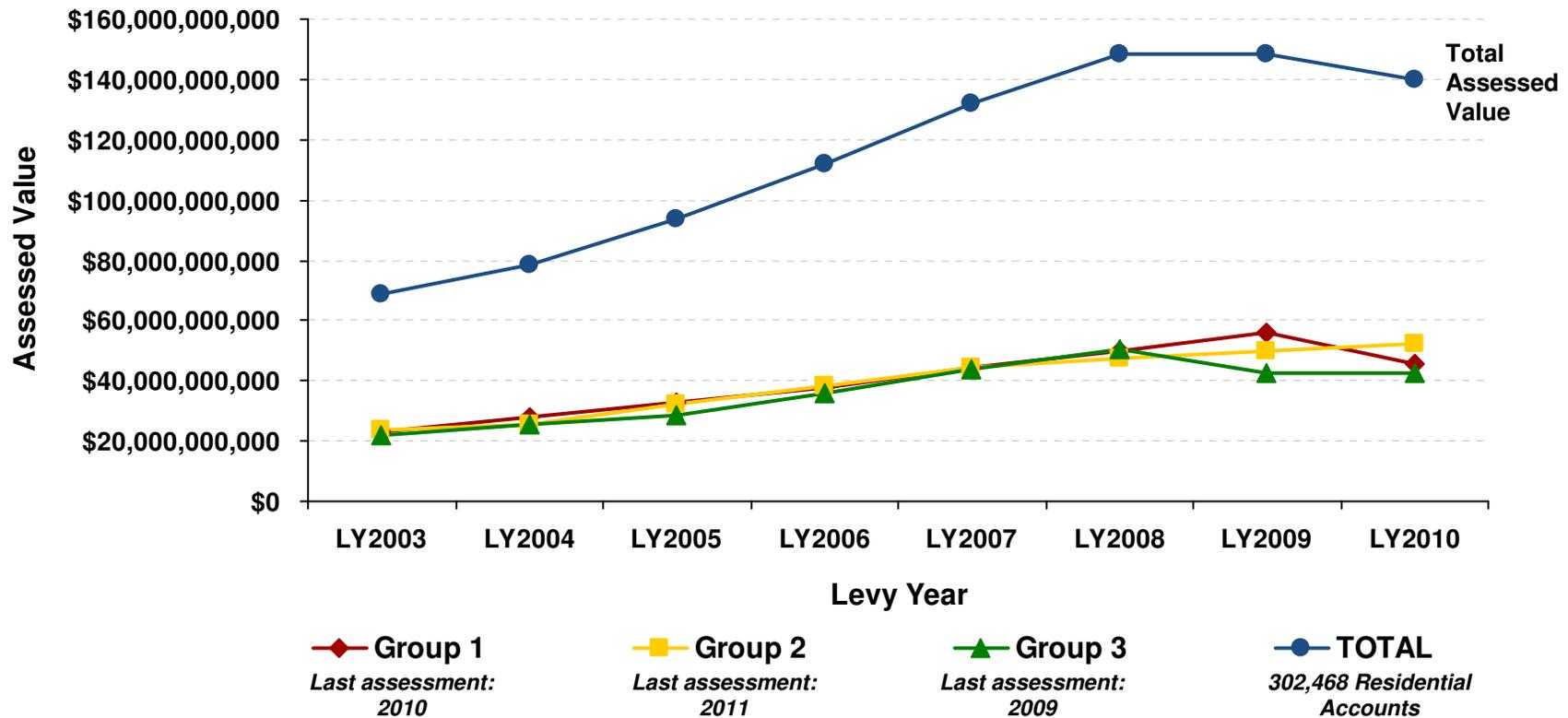
State Department of Assessment and Taxation, 2009 Residential Ratio Study

Reviews arms-length sales of improved residential and condo properties in Group 3 from 7/1/2008 through 6/30/2009 (FY09). Ratios compare the Department's 1/1/2009 assessed value to the actual sale price.

Jurisdiction	# of Sales	Average Ratio	Median Ratio	Coefficient of Dispersion	Standard Deviation	Median Sale Price
Montgomery	2,670	96.5%	94.6%	7.99	0.11	\$370,000



Change in Assessed Value Residential Properties in Montgomery County



The above graph charts the change in the assessed value of all residential properties in Montgomery County. CountyStat's analysis focused on only those properties that were sold in 2010 between 1/1/2010 and 12/31/2010, between \$100,000 and less than \$15,000,000 in assessed value, and were improved arms-length sales only.



Source: Montgomery County Department of Finance



Change in Assessed Value Residential Properties in Montgomery County

Residential Properties: Assessed Value				
Levy Year	Group 1 (Assessed in 2010)	Group 2 (Assessed in 2011)	Group 3 (Assessed in 2009)	TOTAL
LY2003	\$22,868,941,610	\$23,956,672,571	\$22,051,475,167	\$68,877,089,348
LY2004	\$27,685,498,360	\$25,815,786,960	\$25,269,015,532	\$78,770,300,852
%Change	21.06%	7.76%	14.59%	14.36%
LY2005	\$32,745,041,712	\$32,039,164,491	\$28,629,240,470	\$93,413,446,673
%Change	18.28%	24.11%	13.30%	18.59%
LY2006	\$37,933,750,860	\$38,219,628,092	\$36,013,547,259	\$112,166,926,211
%Change	15.85%	19.29%	25.79%	20.08%
LY2007	\$44,117,725,552	\$44,473,906,178	\$43,518,486,619	\$132,110,118,349
%Change	16.30%	16.36%	20.84%	17.78%
LY2008	\$50,157,016,020	\$47,404,923,265	\$50,735,589,834	\$148,297,529,119
%Change	13.69%	6.59%	16.58%	12.25%
LY2009	\$55,943,386,737	\$49,960,331,000	\$42,342,569,239	\$148,246,286,976
%Change	11.54%	5.39%	-16.54%	-0.03%
LY2010	\$45,353,665,351	\$52,129,296,157	\$42,361,443,662	\$139,844,405,170
%Change	-18.93%	4.34%	0.04%	-5.67%



Source: Montgomery County Department of Finance

Agenda

- Welcome and introductions
- Overview of findings
- **Scope of property assessments and sales**
 - Assessment process
 - Residential assessments
 - Appeals
 - State review of assessments and sales
- Data analysis
- Summary/Recommendations
- Wrap-up and follow-up items
- Appendix



Scope of Property Assessments and Sales Overview

- Article 15 of the Declaration of Rights of Maryland's Constitution requires that all property be assessed and taxed uniformly.
 - An assessment is based on an appraisal of the fair market value of the property.
 - State law requires that the increase in value over the old appraisal is to be "phased-in" over the next three years.
- Residential assessments are created using both the sales and cost approaches to property appraisals.
- Residents have the ability to appeal an assessments
 - Of the notices sent out in Montgomery County, 6.8% were appealed in FY08.
- To ensure the accuracy of assessments, SDAT makes an annual assessment ratio survey by comparing actual sales with assessment levels in the various subdivisions.
 - According to the State's own study of property assessments, the median ratio is 94.6%. This ratio compares the 1/1/2009 assessed value to the actual sales price for arms-length sales of improved residential and condo properties in Group 3 from 1/1/2008 to 6/30/2009.



Scope of Property Assessments and Sales

The Assessment Process

- **Fair Market Value**

- Article 15 of the Declaration of Rights of Maryland's Constitution requires that all property be assessed and taxed uniformly. State law specifically requires that all taxable property shall be assessed based on its fair market value.

- **Approaches to Value**

- An assessment is based on an appraisal of the fair market value of the property. An appraisal is an estimate of value. Assessors are the appraisers who estimate the value of the property for tax purposes. Assessors are trained to use standard appraisal approaches and techniques to determine the appraisal estimate.
- There are three accepted approaches to market value: (1) the sales approach; (2) the cost approach; (3) the income approach. While differing in the method of calculation, each approach is designed to indicate the property's fair market value.

- **Phase-In**

- For any increase in the full cash value of a property, State law requires that the increase in value over the old appraisal is to be "phased-in" over the next three years.
- For example, a new appraisal of \$130,000 is compared to an old appraisal of \$100,000. In this example, the new appraisal is \$30,000 higher than the old appraisal. The \$30,000 is "phased-in" equally over the next three years: 1st year, \$110,000; 2nd year, \$120,000; 3rd year, \$130,000.



Source: A HOMEOWNER'S GUIDE TO PROPERTY TAXES AND ASSESSMENTS
<http://www.dat.state.md.us/sdatweb/hog.html>

Scope of Property Assessments and Sales

The Residential Assessment

▪ Sales Approach

- The fair market value of a given property may be determined by examining the sale prices of comparable properties.
- If similar properties sold for approximately \$100,000, it could be assumed that other comparable properties would sell in the \$100,000 range.
- The key to the sales approach is comparability and the availability of sufficient data.

▪ Cost Approach

- The fair market value of a given property equals the total of the cost to construct a similar improvement, less any depreciation for age and condition, and the price of the land.

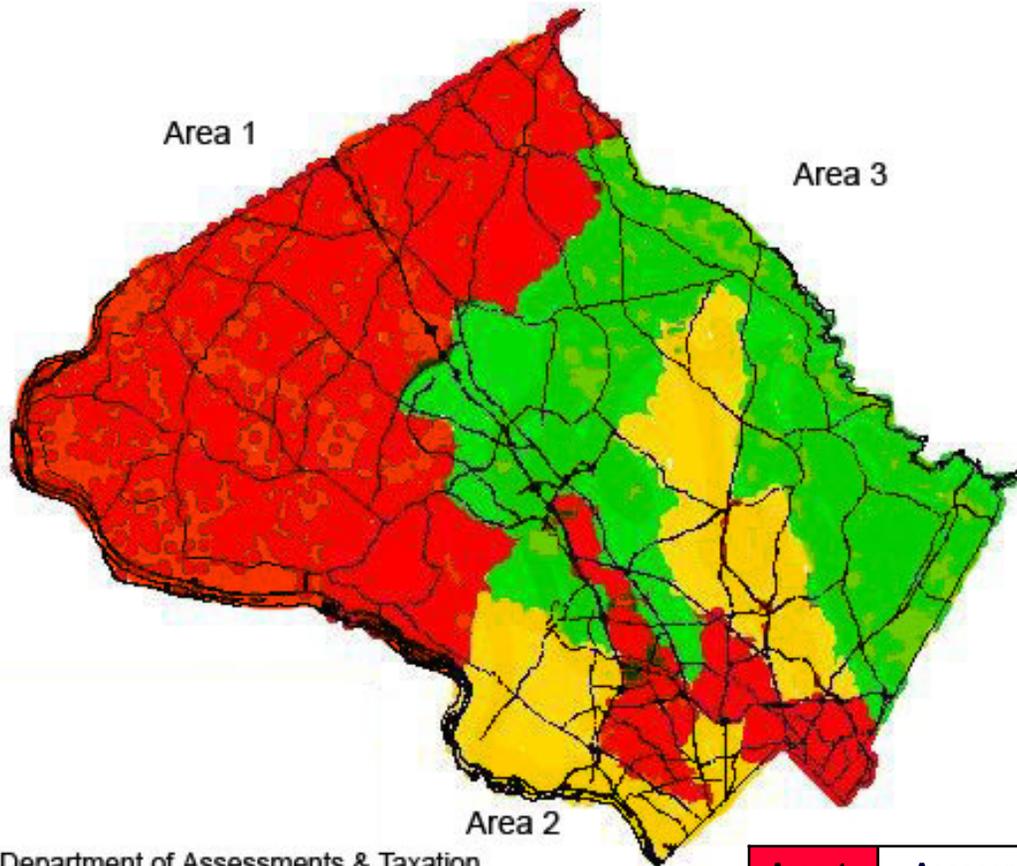
For residential properties, assessors in Maryland use a blend of both the sales and cost approaches. The value of the land is based on the sales approach, using the sale prices of similarly located and zoned parcels. The value of the dwelling is estimated using the cost approach with adjustments made if sales of similar properties indicate that a particular style of house is actually worth more or less than its construction cost.



Source: A HOMEOWNER'S GUIDE TO PROPERTY TAXES AND ASSESSMENTS
<http://www.dat.state.md.us/sdatweb/hog.html>

Scope of Property Assessments and Sales

The Residential Assessment – Assessment Areas



State Department of Assessments & Taxation
March 2006

Area 1	Assessment Area 1 will be reassessed for January 1, 2010
Area 2	Assessment Area 2 will be reassessed for January 1, 2011
Area 3	Assessment Area 3 will be reassessed for January 1, 2012



Source: Maryland Department of Assessment and Taxation,
www.dat.state.md.us/sdatweb/16geo.html

Scope of Property Assessments and Sales Reassessment Appeals

This slide shows data on the number of reassessment appeals made to the county supervisors of assessments.

DEPARTMENT LEVEL APPEALS FY 2006 - 2008

Jurisdiction	FISCAL YEAR 2006			FISCAL YEAR 2007			FISCAL YEAR 2008		
	Notices Sent*	Department Appeals	%	Notices Sent*	Department Appeals	%	Notices Sent*	Department Appeals	%
Allegany	13,002	319	2.5%	11,840	522	4.4%	13,675	735	5.4%
Anne Arundel	58,759	3,383	5.8%	58,920	3,156	5.4%	73,264	2,895	4.0%
Baltimore City	67,822	4,930	7.3%	67,473	5,054	7.5%	82,351	6,833	8.3%
Baltimore	97,287	5,329	5.5%	85,609	3,834	4.5%	90,200	8,877	9.8%
Calvert	17,038	910	5.3%	11,274	820	7.3%	11,381	680	6.0%
Caroline	4,328	266	6.1%	5,415	292	5.4%	5,783	467	8.1%
Carroll	19,146	1,031	5.4%	22,442	1,039	4.6%	20,849	1,464	7.0%
Cecil	14,230	795	5.6%	16,440	734	4.5%	13,016	599	4.6%
Charles	18,875	798	4.2%	19,995	407	2.0%	16,818	696	4.1%
Dorchester	5,383	251	4.7%	7,296	224	3.1%	8,372	858	10.2%
Frederick	22,697	1,107	4.9%	29,721	1,218	4.1%	34,884	1,617	4.6%
Garrett	8,873	264	3.0%	7,362	342	4.6%	10,887	569	5.2%
Harford	34,146	782	2.3%	24,084	1,126	4.7%	31,311	2,149	6.9%
Howard	30,932	913	3.0%	29,454	1,806	6.1%	29,566	2,068	7.0%
Kent	3,681	135	3.7%	3,977	286	7.2%	4,960	316	6.4%
Montgomery	114,322	4,842	4.2%	99,867	4,956	5.0%	90,064	6,134	6.8%
Prince George's	81,600	1,318	1.6%	71,907	2,389	3.3%	110,191	6,530	5.9%
Queen Anne's	9,435	681	7.2%	8,070	523	6.5%	6,424	437	6.8%
St. Mary's	14,091	857	6.1%	12,691	539	4.2%	15,165	1,291	8.5%
Somerset	6,569	333	5.1%	4,183	221	5.3%	5,254	517	9.8%
Talbot	5,432	188	3.5%	8,745	375	4.3%	5,573	383	6.9%
Washington	15,109	1,052	7.0%	20,088	1,221	6.1%	19,400	1,530	7.9%
Wicomico	15,180	344	2.3%	13,661	561	4.1%	14,494	999	6.9%
Worcester	30,344	2,600	8.6%	17,071	853	5.0%	14,565	709	4.9%
TOTAL	708,281	33,428	4.7%	657,585	32,498	4.9%	728,447	49,353	6.8%

*Notices are not sent for exempt property.



Source: Reassessment Appeals filed from FY06-FY08¹³
<http://www.dat.state.md.us/sdatweb/stats/Appeals.pdf>



Scope of Property Assessments and Sales SDAT Review of Assessments

SDAT has adopted national standards for measuring property assessment quality as outlined by the International Association of Assessing Officers. To ensure the accuracy of assessments, it makes an annual assessment ratio survey by comparing actual sales with assessment levels in the various subdivisions.

In evaluating its ability to fairly and accurately appraise properties, SDAT reviews the following:

- Assessed value/sale price ratio: how closely assessed values compare to the actual sales price
 - The average assessed value/sale price ratio indicates a typical level of value
 - Because the marketplace is not perfect, there will always be properties that sell for more or less than can be anticipated, due to factors such as sales between people unfamiliar with the market, buyers willing to pay extra for a unique property, or escalating values in a competitive seller's market

- Coefficient of dispersion and Coefficient of variation: the relative spread or variation that individual ratios fall from the typical
 - The lower the COD, the more uniform the assessment level.

*Source: Maryland Department of Assessment and Taxation 2009 Annual Report,
http://www.dat.state.md.us/sdatweb/stats/AnnualRpt_2009.pdf*

*Maryland Department of Assessment and Taxation 2009 Ratio Report
http://www.dat.state.md.us/sdatweb/stats/09rr_rpt.pdf*



Scope of Property Assessments and Sales SDAT Review of Assessments (1 of 2)

Jurisdiction	# of Sales	Average Ratio	Median Ratio	Coefficient of Dispersion	Standard Deviation	Median Sale Price
Alleghany	155	90.4%	89.7%	7.73	0.10	\$95,000
Anne Arundel	1,316	96.0%	95.0%	9.99	0.13	\$385,000
Baltimore City	1,410	94.9%	91.4%	12.10	0.16	\$210,000
Baltimore	2,449	97.7%	94.4%	11.40	0.12	\$218,000
Calvert	215	97.2%	96.2%	9.31	0.13	\$260,000
Caroline	31	95.3%	92.5%	7.15	0.10	\$172,800
Carroll	394	94.8%	93.4%	8.50	0.11	\$258,500
Cecil	322	96.1%	95.1%	7.78	0.11	\$264,450
Charles	272	93.8%	93.2%	9.10	0.11	\$350,000
Dorchester	26	88.5%	89.6%	6.03	0.09	\$233,500
Frederick	294	96.3%	95.9%	7.39	0.09	\$315,000
Statewide	14,172	95.8%	94.0%	9.42	0.13	\$280,000

The above table displays data from SDAT's 2009 residential ratio study, which reviews arms-length sales of improved residential and condo properties in Group 3 from 7/1/2008 through 6/30/2009. Ratios compare the Department's 1/1/2009 assessed value to the actual sale price.

Source: Maryland Department of Assessment and Taxation 2009 Annual Report,
http://www.dat.state.md.us/sdatweb/stats/AnnualRpt_2009.pdf
 Maryland Department of Assessment and Taxation 2009 Ratio Report
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Scope of Property Assessments and Sales SDAT Review of Assessments (2 of 2)

Jurisdiction	# of Sales	Average Ratio	Median Ratio	Coefficient of Dispersion	Standard Deviation	Median Sale Price
Garrett	81	91.1%	90.7%	10.76	0.13	\$260,000
Harford	1,024	93.5%	92.5%	6.47	0.08	\$235,250
Howard	1,095	94.2%	93.2%	6.13	0.08	\$340,000
Kent	39	90.8%	90.6%	15.61	0.19	\$265,000
Montgomery	2,670	96.5%	94.6%	7.99	0.11	\$370,000
Prince George's	830	98.6%	96.0%	10.32	0.14	\$250,000
Queen Anne's	106	92.8%	90.8%	5.85	0.08	\$377,779
St. Mary's	418	98.7%	96.8%	7.68	0.10	\$279,355
Somerset	47	89.5%	89.2%	12.16	0.15	\$160,000
Talbot	53	96.5%	93.8%	10.02	0.12	\$405,000
Washington	110	92.6%	91.0%	9.50	0.11	\$233,750
Wicomico	201	88.4%	88.7%	8.36	0.10	\$210,000
Worcester	614	95.2%	93.8%	10.07	0.13	\$319,950
Statewide	14,172	95.8%	94.0%	9.42	0.13	\$280,000

The above table displays data from SDAT's 2009 residential ratio study, which reviews arms-length sales of improved residential and condo properties in Group 3 from 7/1/2008 through 6/30/2009. Ratios compare the Department's 1/1/2009 assessed value to the actual sale price.

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Agenda

- Welcome and introductions
- Overview of findings
- Scope of property assessments and sales
- **Data analysis**
 - Methodology of Analysis
 - Comparison of Assessed Value to Sale Price
 - Groups 1 (2010), 2 (2011), and 3 (2009)
 - Additional Analyses (Groups 1 and 3)
 - By zip code
 - By land use designation
 - By sale value
- Summary/Recommendations
- Wrap-up and follow-up items
- Appendix



Analysis of Residential Property Assessments and Sales Methodology and Data Overview

- **CountyStat used property assessment and sales data from the State Department of Assessment and Taxation**
- **Data was filtered to include (Total starting records = 22,058):**
 - Properties with transfer (sale) dates between 1/1/2010 and 12/31/2010
 - (Total records = 21,310)
 - Residential Land Use only – includes single family detached homes, townhouses, duplex, and condominiums
 - (Total records = 18,545)
 - Considered (sale) amounts greater than \$100,000 and less than \$15 million
 - (Total records = 12,457)
 - Improved arms-length sales only
 - (Total records = 8,518)



Analysis of Residential Property Assessments and Sales Data Caveats

- **CountyStat encountered issues related to accurate coding of arms-length sales and non-arms-length sales.**
 - Occasionally, records were coded as **arms-length sales**, but when referred back to the SDAT website were actually non-arms-length sales. Therefore, there may be some data integrity issues of the **arms-length sale** only information
- **MPDU housing is included in this dataset**
 - Moderately priced dwelling units were included in the dataset and may have some sale prices which are *“affordably priced”* as opposed to market price.

To the extent possible, CountyStat identified and addressed coding issues through comparison of our dataset with information available via the State’s Real Property Search database. Erroneous data that could be identified was either corrected or removed.



Analysis of Residential Property Assessments and Sales Methodology and Data Overview

- **Data was analyzed to:**

- For those 8,518 property records, compare the State’s property assessments done for Groups 1(2010), 2(2011), and 3(2009) to the actual 2010 sale price

Assessment Group (Year Assessed)	Total	Methodology
3 (2009)	3,204	Used entire population to construct comparison.
1 (2010)	2,999	Used entire population to construct comparison.
2 (2011)	2,315	Sampled population and collected data from SDAT website on most current assessed value.
Total	8,518	

- **List of Analyses (for Groups 1 and 3):**

- By zip code (community)
- By land use type (single family detached v. townhouse/condo/apt)
- By sale price range

CountyStat also sampled Groups 1 and 3 to ensure that the Group 2 sample results were reasonable and comparable.

Note: This data only includes properties with transfer dates between 1/1/2010 and 12/31/2010; residential land use only – includes single, family detached homes, townhouses, duplex, and condominiums; considered amounts greater than \$100,000 and less than \$15,000,000; improved arms-length sales only.



Analysis of Residential Property Assessments and Sales Group 2 (Assessed in 2011) - Methodology and Data Overview

- Data supplied for Group 2 did not include the most recent assessment (2011)
- For those 2,315 property records, CountyStat selected a random sample to gather the most recent assessment value data from the State's online database and compare to the actual 2010 sale price

Assessment Group	Total	Methodology
2 (2011)	2,315	Sampled population and collected data from SDAT website on most current assessed value.
Sample Size (~14% of population)		330

Note: This data only includes properties with transfer dates between 1/1/2010 and 12/31/2010; residential land use only – includes single, family detached homes, townhouses, duplex, and condominiums; considered amounts greater than \$100,000 and less than \$15,000,000; improved arms-length sales only.



Comparison of Average Sale to Assessed Value

Group 3 - 2009	Data
Property Count	3,204
Sale Value - Average	\$ 373,400
Assessed Value - Average	\$ 378,314
Average \$Dollar Difference	\$ 4,913
Average %Percent Difference	1%
Median %Percent Difference	2%
Standard Deviation - %Diff	19%

- For Group 3 (Assessed in 2009), the median percent difference between the assessed and sale values is 2% (assessed value is 2% higher than sale value).
- For Group 1 (Assessed in 2010), the median percent difference between the assessed and sale values is -8%.
- For Group 2 (Assessed in 2011), the median percent difference between the assessed and sale values is -11%.

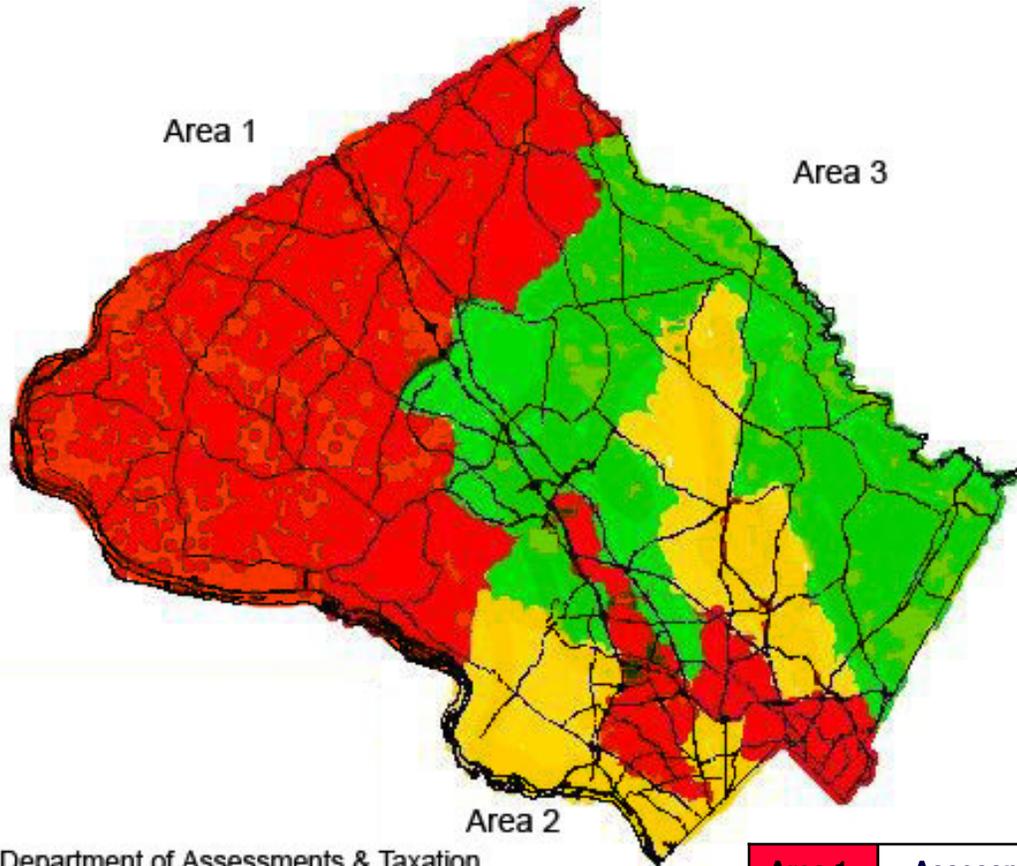
Group 1 - 2010	Data
Property Count	2,999
Sale Value - Average	\$517,140
Assessed Value - Average	\$473,179
Average \$Dollar Difference	\$(43,961)
Average %Percent Difference	-9%
Median %Percent Difference	-8%
Standard Deviation - %Diff	22%

Group 2 – 2011 (Sample)	Data
Property Count	326
Sale Value - Average	\$ 592,011
Assessed Value - Average	\$ 537,251
Average \$Dollar Difference	\$ -54,760
Average %Percent Difference	-10%
Median %Percent Difference	-11%
Standard Deviation - %Diff	10%

Note: This data only includes properties with transfer dates between 1/1/2010 and 12/31/2010; residential land use only – includes single, family detached homes, townhouses, duplex, and condominiums; considered amounts greater than \$100,000 and less than \$15,000,000; improved arms-length sales only.



The Residential Assessment – Assessment Areas



State Department of Assessments & Taxation
March 2006

Area 1	Assessment Area 1 will be reassessed for January 1, 2010
Area 2	Assessment Area 2 will be reassessed for January 1, 2011
Area 3	Assessment Area 3 will be reassessed for January 1, 2012



Source: Maryland Department of Assessment and Taxation,
www.dat.state.md.us/sdatweb/16geo.html

Summary of Additional Analyses

On average, properties in the County were under assessed, compared to actual 2010 sale values. This finding is similar to the result of the State of Maryland's own evaluation.

Comparison by Zipcodes

- For properties assessed in 2009 and 2010, the average difference between assessed and sales value varied widely.

Range	Average % Difference between Assessed and Sale Values
Minimum (Under-assessment)	-17%
Maximum (Over-assessment)	15%

Comparison by Land Use

- The largest land use group, single family detached, the average % difference is -5% (under-assessed)

Comparison by Sale Value Range

- Only the lowest sale value range (\$100,000-299,999) demonstrated over-assessed properties, on average. All other bins demonstrated under-assessed properties, on average.
- For properties with the lowest sale values, the most over-assessed properties are single family detached (land use code 111).

Average % Difference	111	114	116	118	119	Total
\$100,000-299,999	21%	-1%	10%	4%	-3%	9%
Property Count (#)	3,356	324	1,693	462	368	6,203



Comparison of Average Sale to Assessed Value Zip Code Analysis

Groups 1 & 3

- Communities outlined in light blue represent the minimum and maximum average % differences
- Note: Data for zip codes with less than 10 properties are colored gray

Note: This data only includes properties with transfer dates between 1/1/2010 and 12/31/2010; residential land use only – includes single, family detached homes, townhouses, duplex, and condominiums; considered amounts greater than \$100,000 and less than \$15,000,000; improved arms-length sales only.



Zip Code	Property Count	Avg Sale Value	Avg Assessed Value	Average \$Difference	Average %Difference	
Laurel – 20707	1	438,000	702,760	264,760	38%	
Germantown – 20786	1	475,000	443,000	(32,000)	-7%	
Bethesda - 20814	189	754,589	642,136	(112,453)	-17%	
Chevy Chase – 20815	61	1,108,593	979,625	(128,968)	-14%	
Bethesda - 20817	262	920,603	818,163	(102,440)	-14%	
Olney – 20832	72	428,541	418,213	(10,328)	-2%	
Brookeville – 20833	26	628,250	614,955	(13,294)	-2%	
Poolesville - 20837	55	408,294	391,182	(17,112)	-5%	
Barnesville - 20838	2	407,160	471,950	64,790	22%	
Boyds - 20841	69	528,092	482,040	(46,052)	-10%	
Dickerson - 20842	3	237,800	264,567	26,767	13%	
Rockville	20850	435	498,656	469,388	(29,268)	-7%
	20851	110	298,935	312,066	13,131	5%
	20852	410	458,222	432,644	(25,579)	-6%
	20853	17	174,063	172,941	(1,122)	-1%
Potomac - 20854	232	835,549	787,479	(48,070)	-7%	
Derwood - 20855	105	427,296	436,638	9,342	1%	
Sandy Spring - 20860	8	584,363	660,914	76,551	14%	
Ashton - 20861	9	599,100	571,952	(27,148)	-5%	
Brinklow - 20862	3	657,500	681,583	24,083	3%	
Burtonsville – 20866	107	311,650	341,911	30,261	10%	
Spencerville - 20868	2	775,000	951,830	176,830	19%	
Clarksburg - 20871	174	433,013	406,213	(26,800)	-12%	
Damascus - 20872	98	358,085	348,895	(9,190)	-4%	
Germantown	20874	488	312,436	311,695	(741)	1%
	20876	186	295,319	303,827	8,508	5%
Gaithersburg - 20877	183	284,783	326,977	42,194	15%	
Total	6,203	442,895	425,135	(17,759)	-3%	

Comparison of Average Sale to Assessed Value Zip Code Analysis

▪ Groups 1 & 3 (continued)

- Communities outlined in light blue represent the minimum and maximum average % differences
- Note: Data for zip codes with less than 10 properties are colored gray

Note: This data only includes properties with transfer dates between 1/1/2010 and 12/31/2010; residential land use only – includes single, family detached homes, townhouses, duplex, and condominiums; considered amounts greater than \$100,000 and less than \$15,000,000; improved arms-length sales only.

Zip Code		Property Count	Avg Sale Value	Avg Assessed Value	Average \$Difference	Average %Difference
Gaithersburg	20878	669	471,635	439,673	(31,962)	-7%
	20879	236	265,743	290,074	24,331	10%
Washington Grove - 20880		7	408,443	462,056	53,613	10%
Gaithersburg - 20882		95	516,161	515,828	(333)	-3%
Montgomery Village 20886		303	243,843	273,326	29,484	13%
Kensington - 20895		188	536,359	498,405	(37,954)	-8%
Garrett Park - 20896		14	611,814	563,764	(48,050)	-9%
Silver Spring	20901	149	392,808	356,777	(36,031)	-9%
	20902	99	295,982	286,477	(9,505)	-4%
	20903	63	294,134	346,044	51,910	15%
	20904	230	376,144	394,991	18,846	1%
	20905	106	495,738	513,607	17,869	4%
	20906	312	202,719	205,493	2,774	1%
	20910	225	444,267	408,226	(36,041)	-8%
Takoma Park - 20912		196	347,634	314,299	(33,335)	-9%
Mount Airy - 21771		3	299,333	258,833	(40,500)	-15%
Total		6,203	442,895	425,135	(17,759)	-3%

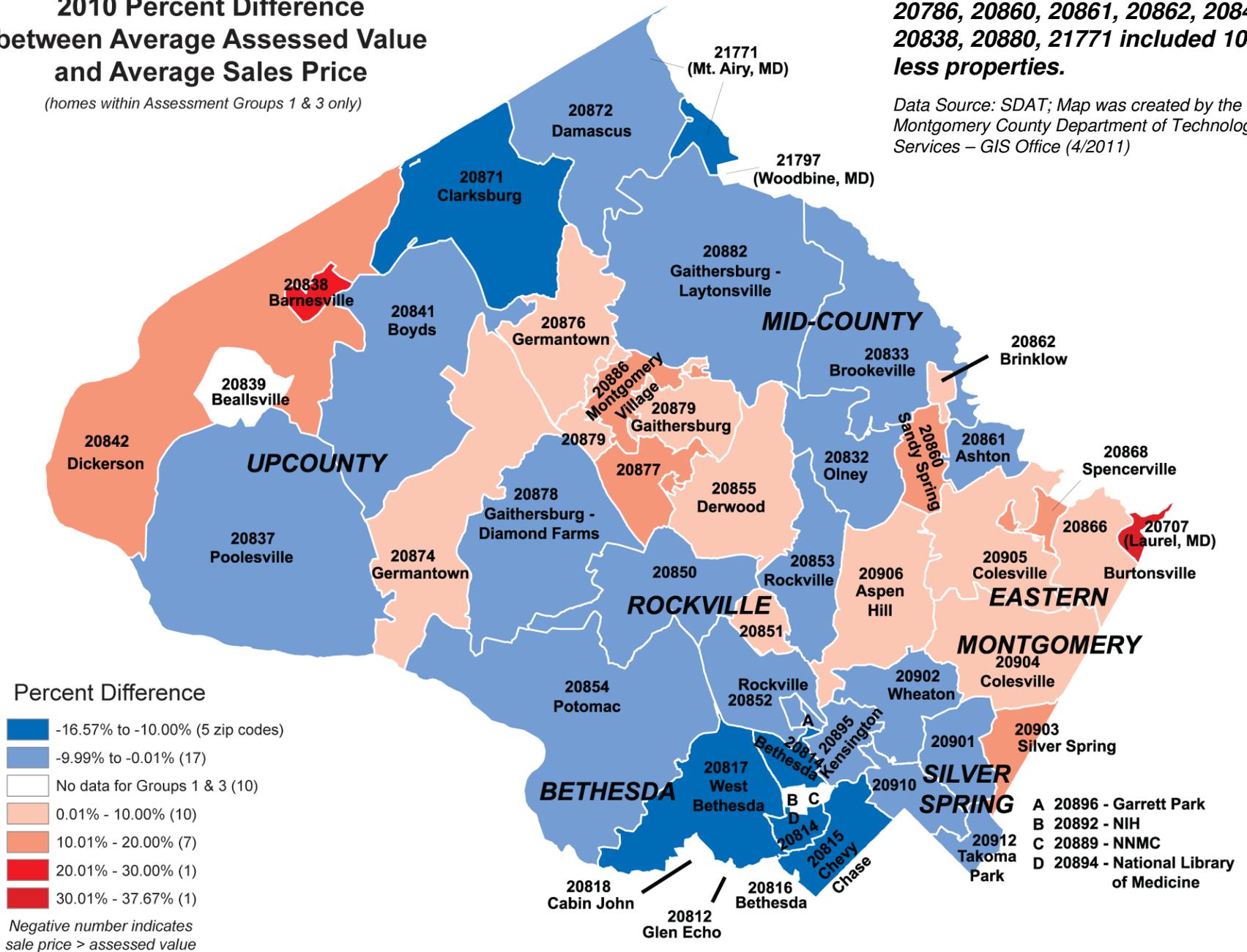


2010 Percent Difference between Average Assessed Value and Average Sales Price

(homes within Assessment Groups 1 & 3 only)

Note: Data in zip codes 20707, 20786, 20860, 20861, 20862, 20842, 20838, 20880, 21771 included 10 or less properties.

Data Source: SDAT; Map was created by the Montgomery County Department of Technology Services – GIS Office (4/2011)



Comparison of Average Sale to Assessed Value Land Use Analysis

- Properties assessed in 2009 and 2010 (Groups 1 & 3)

Land Use	Property Count	Avg Sale Value	Avg Assessed Value	Average \$Difference	Average %Difference
111	3,356	565,232	535,850	(29,382)	-5%
114*	324	271,865	267,774	(4,091)	-3%
116	1,693	325,695	321,759	(3,937)	1%
118*	462	228,355	228,532	177	2%
119*	368	286,333	276,423	(9,910)	-4%
Total	6,203	442,895	425,135	(17,759)	-3%

**Condo properties*

- 111 - Single Family Detached
- 114 - Townhouse, Duplex, Quadruplex, etc. (condominium)
- 116 - Townhouse, Duplex, Quadruplex
- 118 - Garden Apartment (condominium)
- 119 - High-Rise Apartment Elevator (condominium)

Note: This data only includes properties with transfer dates between 1/1/2010 and 12/31/2010; residential land use only – includes single, family detached homes, townhouses, duplex, and condominiums; considered amounts greater than \$100,000 and less than \$15,000,000; improved arms-length sales only.



Comparison of Average Sale to Assessed Value

\$Sale Value Analysis

- Properties assessed in 2009 and 2010 (Groups 1 & 3)

Sale Value Range	Property Count	Avg Sale Value	Avg Assessed Value	Average \$Difference	Avg %Difference
100,000-299,999	2,144	212,031	237,550	25,519	9%
300,000-499,999	2,093	385,178	374,940	(10,238)	-4%
500,000-699,999	1,170	591,375	536,391	(54,984)	-12%
700,000-899,999	445	780,212	714,615	(65,597)	-12%
900,000-999,999	93	941,461	898,233	(43,228)	-8%
1,000,000-1,499,999	187	1,185,656	1,081,278	(104,378)	-15%
1,500,000-1,999,999	52	1,676,308	1,466,181	(210,127)	-20%
>2,000,000	19	2,682,079	1,868,564	(813,515)	-72%
Total	6,203	442,895	425,135	(17,759)	-3%

Note: This data only includes properties with transfer dates between 1/1/2010 and 12/31/2010; residential land use only – includes single, family detached homes, townhouses, duplex, and condominiums; considered amounts greater than \$100,000 and less than \$15,000,000; improved arms-length sales only.



Comparison of Average Sale to Assessed Value Land Use by Sale Value

- **Properties assessed in 2009 and 2010 (Groups 1 & 3)**

- Average % Difference between Assessed and Sale Value

- **Land Use Codes**

- 111 - Single Family Detached
- 114 - Townhouse, Duplex, Quadruplex, etc. (condominium)
- 116 - Townhouse, Duplex, Quadruplex
- 118 - Garden Apartment (condominium)
- 119 - High-Rise Apartment Elevator (condominium)

Sale Value Range	111	114	116	118	119	Total
100,000-299,999	21%	-1%	10%	4%	-3%	9%
300,000-499,999	-2%	-7%	-9%	-8%	-6%	-4%
500,000-699,999	-12%	-9%	-13%	-11%	-11%	-12%
700,000-899,999	-12%	-6%	-10%	-16%	0%	-12%
900,000-1,099,999	-10%		12%		-6%	-10%
1,100,000-1,299,999	-20%		-5%		-6%	-18%
1,300,000-1,499,999	-11%		-13%			-12%
1,500,000-1,699,999	-10%					-10%
1,700,000-1,899,999	-40%		-18%			-38%
1,900,000-2,099,999	-17%					-17%
2,100,000-2,299,999	-17%					-17%
2,300,000-2,499,999	-169%					-169%
2,500,000-2,699,999	-43%					-43%
3,500,000-3,699,999	-38%					-38%
3,700,000-3,899,999	-76%					-76%
3,900,000-4,099,999	-75%					-75%
Total (%)	-5%	-3%	1%	2%	-4%	-3%
Property Count (#)	3,356	324	1,693	462	368	6,203

Note: This data only includes properties with transfer dates between 1/1/2010 and 12/31/2010; residential land use only – includes single, family detached homes, townhouses, duplex, and condominiums; considered amounts greater than \$100,000 and less than \$15,000,000; improved arms-length sales only.



Comparison of Average Sale to Assessed Value Median % Difference – Percentile Groups

In general, the most undervalued properties in terms of their assessment are the highest valued in terms of their sale price.

■ Properties assessed in 2010 (Group 1)

- The data was grouped by percentile rank in the data set
- For example, at the 50th percentile, the percent difference between assessed and sale value is -8%.
 - The assessed value is 8% lower than the sale value
- The median sale value was then calculated for each percentile group (e.g. 0-10th, 11-20th, etc.)

Percentile Rank	Median % Difference	Median Sale Price
0-10	-35%	\$ 640,000
11-20	-22%	\$ 565,500
21-30	-16%	\$ 555,000
31-40	-13%	\$ 485,000
41-50	-9%	\$ 480,000
51-60	-6%	\$ 439,000
61-70	-3%	\$ 386,750
71-80	2%	\$ 350,000
81-90	8%	\$ 300,000
91-100	21%	\$ 231,000

Note: This data only includes properties with transfer dates between 1/1/2010 and 12/31/2010; residential land use only – includes single, family detached homes, townhouses, duplex, and condominiums; considered amounts greater than \$100,000 and less than \$15,000,000; improved arms-length sales only.



Comparison of Average Sale to Assessed Value Median % Difference – Percentile Groups

In general, the most undervalued properties in terms of their assessment are the highest valued in terms of their sale price.

▪ Properties assessed in 2009 (Group 3)

- The data was grouped by percentile rank in the data set
- For example, at the 50th percentile, the percent difference between assessed and sale value is 2%.
 - The assessed value is 2% higher than the sale value
- The median sale value and median % difference was then calculated for each percentile group (e.g. 0-10th, 11-20th, etc.)

Percentile Rank	Median % Difference	Median Sale Price
0-10	-18%	\$488,000
11-20	-11%	\$439,000
21-30	-6%	\$387,500
31-40	-2%	\$355,000
41-50	1%	\$350,000
51-60	5%	\$330,000
61-70	8%	\$313,000
71-80	13%	\$256,500
81-90	20%	\$220,000
91-100	32%	\$170,000

Note: This data only includes properties with transfer dates between 1/1/2010 and 12/31/2010; residential land use only – includes single, family detached homes, townhouses, duplex, and condominiums; considered amounts greater than \$100,000 and less than \$15,000,000; improved arms-length sales only.



Comparison of Average Sale to Assessed Value Median % Difference – Percentile Groups

- **Properties assessed in 2011
(Group 2)**

- The data was grouped by percentile rank in the data set
- For example, at the 50th percentile, the percent difference between assessed and sale value is -11%.
 - The assessed value is -11% higher than the sale value
- The median sale value and median % difference was then calculated for each percentile group (e.g. 0-10th, 11-20th, etc.)

Percentile Rank	Median % Difference	Median Sale Price
0-10	-18%	\$420,000
11-20	-15%	\$356,000
21-30	-13%	\$400,000
31-40	-12%	\$415,000
41-50	-11%	\$430,000
51-60	-9%	\$640,000
61-70	-8%	\$572,000
71-80	-5%	\$418,000
81-90	-1%	\$530,000
91-100	44%	\$317,500

Group 2 (2011) was sampled in order to analyze it in the same manner as Groups 1 and 3. As it is based on a smaller number of properties, the results are somewhat different.

Note: This data only includes properties with transfer dates between 1/1/2010 and 12/31/2010; residential land use only – includes single, family detached homes, townhouses, duplex, and condominiums; considered amounts greater than \$100,000 and less than \$15,000,000; improved arms-length sales only.



Wrap-up

- Follow-up items



Appendix

Comparison of Average Sale to Assessed Value

Zip Code Analysis

- Group 1

Note: This data only includes properties with transfer dates between 1/1/2010 and 12/31/2010; residential land use only – includes single, family detached homes, townhouses, duplex, and condominiums; considered amounts greater than \$100,000 and less than \$15,000,000; improved arms-length sales only.



Zip Code	Property Count	Avg Sale Value	Avg Assessed Value	Average \$Difference	Average %Difference
20814	148	894,117	755,971	(138,146)	-19%
20815	61	1,108,593	979,625	(128,968)	-14%
20817	262	920,603	818,163	(102,440)	-14%
20837	55	408,294	391,182	(17,112)	-5%
20838	2	407,160	471,950	64,790	22%
20841	69	528,092	482,040	(46,052)	-10%
20842	3	237,800	264,567	26,767	13%
20850	189	590,594	534,510	(56,084)	-11%
20852	132	704,618	650,377	(54,242)	-10%
20853	17	174,063	172,941	(1,122)	-1%
20854	40	1,322,382	1,269,953	(52,428)	-5%
20855	1	785,000	653,000	(132,000)	-20%
20871	174	433,013	406,213	(26,800)	-12%
20872	98	358,085	348,895	(9,190)	-4%
20874	300	358,888	346,391	(12,497)	-4%
20876	27	441,533	394,448	(47,085)	-12%
20878	249	563,556	504,234	(59,322)	-12%
20882	48	445,139	428,190	(16,949)	-8%
20895	169	535,086	500,296	(34,789)	-8%
20901	112	390,035	338,492	(51,544)	-14%
20902	99	295,982	286,477	(9,505)	-4%
20903	12	175,167	206,683	31,517	15%
20906	308	200,742	201,974	1,232	0%
20910	225	444,267	408,226	(36,041)	-8%
20912	196	347,634	314,299	(33,335)	-9%
21771	3	299,333	258,833	(40,500)	-15%
Total	2,999	517,140	473,179	(43,961)	-9%

Appendix

Comparison of Average Sale to Assessed Value

Zip Code Analysis

- Group 3

Note: This data only includes properties with transfer dates between 1/1/2010 and 12/31/2010; residential land use only – includes single, family detached homes, townhouses, duplex, and condominiums; considered amounts greater than \$100,000 and less than \$15,000,000; improved arms-length sales only.

Zip Code	Property Count	Avg Sale Value	Avg Assessed Value	Average \$Difference	Average %Difference
20707	1	438,000	702,760	264,760	38%
20786	1	475,000	443,000	(32,000)	-7%
20814	41	250,927	231,220	(19,707)	-8%
20832	72	428,541	418,213	(10,328)	-2%
20833	26	628,250	614,955	(13,294)	-2%
20850	246	428,020	419,356	(8,665)	-3%
20851	110	298,935	312,066	13,131	5%
20852	278	341,228	329,260	(11,969)	-4%
20854	192	734,126	686,964	(47,161)	-8%
20855	104	423,857	434,558	10,701	2%
20860	8	584,363	660,914	76,551	14%
20861	9	599,100	571,952	(27,148)	-5%
20862	3	657,500	681,583	24,083	3%
20866	107	311,650	341,911	30,261	10%
20868	2	775,000	951,830	176,830	19%
20874	188	238,309	256,328	18,019	8%
20876	159	270,491	288,439	17,948	8%
20877	183	284,783	326,977	42,194	15%
20878	420	417,139	401,398	(15,741)	-3%
20879	236	265,743	290,074	24,331	10%
20880	7	408,443	462,056	53,613	10%
20882	47	588,694	605,331	16,637	3%
20886	303	243,843	273,326	29,484	13%
20895	19	547,689	481,583	(66,106)	-13%
20896	14	611,814	563,764	(48,050)	-9%
20901	37	401,203	412,129	10,926	4%
20903	51	322,126	378,834	56,708	15%
20904	230	376,144	394,991	18,846	1%
20905	106	495,738	513,607	17,869	4%
20906	4	354,975	476,428	121,453	32%
Total	3,204	373,400	380,166	6,766	3%



Appendix

Comparison of Average Sale to Assessed Value

Land Use Analysis

Group 1

Land Use	Property Count	Avg Sale Value	Avg Assessed Value	Average \$Difference	Average %Difference
111	1,957	629,463	572,708	(56,755)	-10%
114	131	232,869	226,954	(5,915)	-9%
116	565	386,748	356,405	(30,344)	-7%
118	154	214,299	204,834	(9,464)	-4%
119	192	192,822	185,578	(7,244)	-4%
Total	2,999	517,140	473,179	(43,961)	-9%

Group 3

Land Use	Property Count	Avg Sale Value	Avg Assessed Value	Average \$Difference	Average %Difference
111	1,399	475,382	484,292	8,910	3%
114	193	298,334	295,481	(2,853)	0%
116	1,128	295,115	304,405	9,290	5%
118	308	235,383	240,381	4,997	4%
119	176	388,345	375,526	(12,819)	-4%
Total	3,204	373,400	380,166	6,766	3%

Note: This data only includes properties with transfer dates between 1/1/2010 and 12/31/2010; residential land use only – includes single, family detached homes, townhouses, duplex, and condominiums; considered amounts greater than \$100,000 and less than \$15,000,000; improved arms-length sales only.



Appendix

Comparison of Average Sale to Assessed Value

\$Sale Value Analysis

- Group 1

Sale Value Range	Property Count	Avg Sale Value	Avg Assessed Value	Average \$Difference	Avg %Difference
100,000-299,999	789	205,092	218,660	13,568	2%
300,000-499,999	890	390,456	365,497	(24,959)	-8%
500,000-699,999	744	593,672	524,478	(69,194)	-15%
700,000-899,999	298	779,983	698,962	(81,022)	-15%
900,000-1,099,999	109	980,293	920,422	(59,871)	-10%
1,100,000-1,299,999	62	1,202,422	1,058,918	(143,504)	-23%
1,300,000-1,499,999	37	1,360,716	1,235,977	(124,739)	-12%
1,500,000-1,699,999	28	1,564,406	1,488,715	(75,691)	-10%
1,700,000-1,899,999	19	1,771,298	1,364,705	(406,592)	-38%
1,900,000-2,099,999	6	1,960,000	1,684,950	(275,050)	-17%
2,100,000-2,299,999	5	2,216,000	1,992,620	(223,380)	-17%
2,300,000-2,499,999	4	2,315,000	1,381,000	(934,000)	-150%
2,500,000-2,699,999	3	2,614,833	1,920,102	(694,731)	-43%
3,500,000-3,699,999	3	3,500,000	2,537,831	(962,169)	-38%
3,700,000-3,899,999	1	3,800,000	2,160,400	(1,639,600)	-76%
3,900,000-4,099,999	1	4,000,000	2,291,900	(1,708,100)	-75%
Total	2,999	517,140	473,179	(43,961)	-9%

Note: This data only includes properties with transfer dates between 1/1/2010 and 12/31/2010; residential land use only – includes single, family detached homes, townhouses, duplex, and condominiums; considered amounts greater than \$100,000 and less than \$15,000,000; improved arms-length sales only.



Appendix Comparison of Average Sale to Assessed Value \$Sale Value Analysis

- Group 3

Sale Value Range	Property Count	Avg Sale Value	Avg Assessed Value	Average \$Difference	Avg %Difference
100,000-299,999	1,355	216,071	248,549	32,478	12%
300,000-499,999	1,203	381,273	381,926	652	-1%
500,000-699,999	426	587,363	557,196	(30,167)	-7%
700,000-899,999	147	780,676	746,348	(34,328)	-6%
900,000-1,099,999	44	982,886	937,553	(45,333)	-9%
1,100,000-1,299,999	22	1,188,274	1,145,493	(42,781)	-5%
1,300,000-1,499,999	6	1,355,978	1,261,888	(94,090)	-8%
2,300,000-2,499,999	1	2,425,000	707,810	(1,717,190)	-243%
Total	3,204	373,400	380,166	6,766	3%

Note: This data only includes properties with transfer dates between 1/1/2010 and 12/31/2010; residential land use only – includes single, family detached homes, townhouses, duplex, and condominiums; considered amounts greater than \$100,000 and less than \$15,000,000; improved arms-length sales only.

