

Model and Ratio Study Results:
Preliminary 2008 Assessment Roll

By

Robert J. Gloudemans
Almy, Gloudemans, Jacobs & Denne

For

Florida Department of Revenue
Property Tax Oversight Division

October 18, 2008

Contents

Study Overview	1
Appendix 1 – County 1 Single Family Residential Model (Additive)	3
Appendix 2 – County 1 Condominium Model (Additive)	7
Appendix 3 – County 1 Multi-Family Model (Multiplicative)	10
Appendix 4 – County 1 Commercial Model (Multiplicative)	12
Appendix 5 – County 2 Residential Model (Additive)	14
Appendix 6 – County 3 Residential Model (Additive)	16
Appendix 7 – County 4 Residential Model (Additive)	17
Appendix 8 – County 4 Vacant Land Model - Stratum 4 (Multiplicative)	18
Appendix 9 – County 5 Residential Model (Additive).....	20
Appendix 10 – County 5 Acreage Model - Stratum 5 (Multiplicative).....	21

STUDY OVERVIEW

This project developed time trends and models to help evaluate assessment performance for the 2008 preliminary roll in selected pilot counties. Data was obtained from the preliminary 2008 NAL submissions. The methodology used to develop the time trends and models is similar to that used in the prior study for the same counties using data on 2007 NAL files. In addition, this study compares preliminary 2008 values against (a) time-adjusted sales prices and (b) estimated model values with sales prices adjusted to January 1, 2008. In all cases, sales ranged from January 2004 through June 2008 (a shift forward of one year from the prior study).

Table 1 summarizes the property groups studied in the five pilot counties and time trends developed for each. As can be seen, all ten property groups exhibited inflation in the first part of the time frame, but either no or negative trends in the latter part.

Table 1 – Summary of Time Trends

Model Group	Monthly Time Trends
County 1 Single-family	1.3% thru Aug 06 and -0.4 thereafter
County 1 Condos	1.4% thru June 06 and -0.3% thereafter
County 1 Multi-family	2.4% from Oct 04 thru Jan 06; no trend thereafter
County 1 Commerical	1.3% thru June 08; no trend thereafter
County 2 Single-family	1.5% from thru June 06; no trend thereafter
County 3 Residential	1.3% from Jan 04 thru Dec 06; -1.8% from Aug 07 - June 08
County 4 Single-family	2% thru June 05, 1.1% to June 07; no trand thereafter
County 4 Vacant Land	2% thru Dec 06, -2% thereafter
County 5 Single-family	1.3% from Jan 05 thru June 07; no trend thereafter
County 5 Acreage	3% from Jan 05 - Sep 05; 1% from Oct 05 - June 07; else 0

Based on comparative performance between additive and multiplicative models in the prior study, additive models were used for residential models (stratum 1) and multiplicative models for all other property types. Table 2 below summarizes model results for all 10 pilot areas. Aside from the County 5 acreage model, the results are generally good. As before the County 3 residential model includes both single family residences and mobile homes.

County 2008 preliminary values were compared against sales prices adjusted to the valuation date of January 1, 2008 (were downtrends were indicated for late 2007 and 2008 sales, downward adjustments were applied to sales before January 1, 2008 and upward trends to sales after that date). In addition, preliminary 2008 values were compared against model-estimated values as of January 1, 2008. Table 3 shows sales ratio statistics associated with these comparisons. Both comparisons provide estimates of appraisal performance as of January 1, 2008 with time trends taken into consideration. (Given the poor performance of the acreage model in County 5, the results shown in table 3 should be discounted.)

Table 2 – Summary of Model Performance

	Sales	R-Square	Median	COD
County 1 Single-family	9,772	0.920	1.001	10.5
County 1 Condos	3,106	0.886	1.003	7.5
County 1 Multi-family	185	0.921	1.007	9.9
County 1 Commerical	233	0.925	1.000	14.8
County 2 Single-family	264	0.844	1.021	22.9
County 3 Residential	517	0.769	1.040	24.8
County 4 Single-family	359	0.922	1.011	11.6
County 4 Vacant Land	180	0.932	0.987	17.2
County 5 Single-family	201	0.868	0.992	15.9
County 5 Acreage	261	0.614	0.946	44.4

Table 3 – Preliminary 2008 Ratio Stats (Adjusted for 1st & 8th Criteria)

County	Stratum	Sales	Median	COD	PRD	Median	COD	PRD
County 1	1- SFR	9772	0.945	10.5	1.006	0.954	7.9	0.997
	1 - Condo	3106	0.860	7.1	1.006	0.852	6.7	1.001
	2 - MFR	185	0.966	11.5	1.030	0.973	9.1	1.019
	6 - Com'l	233	0.944	16.2	1.008	0.939	15.9	0.980
County 2	1 - SFR	264	0.974	10.0	1.030	0.978	21.2	1.034
County 3	1 - RES	359	0.882	10.1	1.010	0.875	10.3	1.004
	4 - VL	180	1.016	15.9	1.051	1.015	14.7	1.028
County 4	1 - SFR & MH	515	1.048	21.9	1.087	1.006	18.7	1.043
County 5	1 - SFR	201	0.928	11.2	1.010	0.921	14.9	1.002
	5 - Acreage	261	0.869	21.1	1.078	0.875	38.7	1.033

Appendix 1

County 1 Single Family Residential Model (Additive)

Model: 21

R	R Square	Adjusted R Square	Std. Error of the Estimate
.960	.921	.920	34602.243

Model: 21

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	33208.213	1550.682		21.415	.000
BAV_SF	72.357	4.641	.047	15.590	.000
AVG_SF	103.312	.983	.730	105.144	.000
AAV_SF	114.492	.721	1.088	158.725	.000
EXC_SF	147.327	.705	.866	208.831	.000
SUP_SF	180.925	1.742	.308	103.882	.000
EFFAGE60SF	-.595	.019	-.125	-32.027	.000
LANDSF_.75	4.883	.203	.080	24.096	.000
MKTAREA2	-17892.910	1200.300	-.054	-14.907	.000
MKTAREA3	-16177.508	1565.346	-.051	-10.335	.000
NB_11431003X	-24280.241	3279.596	-.022	-7.403	.000
NB_11431501	13837.393	4987.851	.008	2.774	.006
NB_11431503	41743.665	9292.736	.013	4.492	.000
NB_11432212	91798.945	20013.260	.013	4.587	.000
NB_11432901X	-22925.350	7096.990	-.009	-3.230	.001
NB_11433101X	-17126.691	3803.078	-.013	-4.503	.000
NB_11433203	-31706.074	4002.666	-.023	-7.921	.000
NB_11433204	-27708.166	6596.168	-.012	-4.201	.000
NB_11433408	-67570.224	12375.702	-.016	-5.460	.000
NB_11433501	28641.065	8974.647	.009	3.191	.001
NB_11433505	19137.144	6378.318	.009	3.000	.003
NB_11433507	-40402.670	17342.492	-.007	-2.330	.020
NB_11433531	-21045.823	8691.636	-.007	-2.421	.015
NB_12530433X	-34433.201	5217.925	-.019	-6.599	.000
NB_12530505	-20697.610	5830.944	-.010	-3.550	.000
NB_12530601X	-19140.828	6249.298	-.009	-3.063	.002
NB_12530703	39341.717	6328.310	.018	6.217	.000
NB_12538804	-16791.291	6347.820	-.008	-2.645	.008
NB_12530813	13716.481	4555.006	.009	3.011	.003
NB_12530908X	-54964.450	4247.551	-.038	-12.940	.000
NB_12531702	31706.548	6865.930	.013	4.618	.000
NB_12531703X	63960.916	8884.716	.021	7.199	.000
NB_12531803	28609.813	4636.422	.018	6.171	.000

Model: 21

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
NB_12531806	31026.793	11647.462	.008	2.664	.008
NB_12531815	45279.532	10493.812	.012	4.315	.000
NB_12531903X	14814.024	4339.752	.010	3.414	.001
NB_12531909	77692.333	10045.976	.022	7.734	.000
NB_12531912	37007.324	7984.427	.013	4.635	.000
NB_12531917X	82283.833	9005.278	.026	9.137	.000
NB_12531922X	24220.182	5990.716	.012	4.043	.000
NB_12531926X	69271.811	6592.302	.032	10.508	.000
NB_12532002X	14191.942	3843.651	.011	3.692	.000
NB_12532009	16502.512	5642.536	.008	2.925	.003
NB_12532010	-42346.622	6812.123	-.018	-6.216	.000
NB_12532011	20794.281	7402.442	.008	2.809	.005
NB_12532013	39424.352	10026.433	.011	3.932	.000
NB_12532018	-32566.605	4408.559	-.021	-7.387	.000
NB_12532019X	29590.569	7801.075	.011	3.793	.000
NB_12532101X	-27075.420	2940.986	-.027	-9.206	.000
NB_12532201X	-28013.700	9305.529	-.009	-3.010	.003
NB_12532902X	35446.714	8673.456	.012	4.087	.000
NB_12533002	160663.839	20280.198	.023	7.922	.000
NB_13422502	-23459.034	4571.640	-.015	-5.131	.000
NB_13423601X	55766.120	12302.274	.013	4.533	.000
NB_13432420	-22659.682	7282.212	-.009	-3.112	.002
NB_13432504X	-122419.050	20153.466	-.018	-6.074	.000
NB_14530101	102109.639	8234.385	.036	12.400	.000
NB_14530102	63367.793	4422.089	.041	14.330	.000
NB_14530104X	76796.265	6816.752	.032	11.266	.000
NB_14530201	9773.239	4078.624	.007	2.396	.017
NB_14540402	29438.918	6702.476	.013	4.392	.000
NB_14540403	81868.725	7124.955	.033	11.490	.000
NB_14540405	-22103.539	7019.111	-.009	-3.149	.002
NB_14540501X	-32509.517	7412.664	-.013	-4.386	.000
NB_14540503	-90501.450	11557.274	-.022	-7.831	.000
NB_14540602X	99094.680	4155.156	.069	23.849	.000
NB_14540604X	69779.448	12264.525	.016	5.690	.000
NB_14540901X	-48120.272	6832.526	-.020	-7.043	.000
NB_14541601	-39742.146	10020.664	-.011	-3.966	.000
NB_14820001X	-19944.583	8434.765	-.007	-2.365	.018
NB_14830001X	-49693.289	15580.768	-.009	-3.189	.001
NB_14840001X	-16100.053	6724.851	-.007	-2.394	.017
NB_15432403X	-15372.652	5448.671	-.008	-2.821	.005
NB_15432410	9651.297	3054.998	.009	3.159	.002
NB_16431402	-19743.969	8419.689	-.007	-2.345	.019
NB_16431408X	-23099.354	5460.880	-.012	-4.230	.000
NB_17430050X	-30660.892	5090.599	-.017	-6.023	.000
NB_17432301	-22063.094	7415.143	-.009	-2.975	.003

Model: 21

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
NB_17432317X	-32882.582	3202.202	-.030	-10.269	.000
NB_21520101X	62918.364	10614.813	.017	5.927	.000
NB_21520202X	48096.991	3359.998	.044	14.315	.000
NB_21521202	97489.069	24525.373	.011	3.975	.000
NB_21521401	54038.919	8261.036	.019	6.541	.000
NB_21621601X	-17152.176	6881.570	-.007	-2.492	.013
NB_22210000X	-30545.454	11580.090	-.008	-2.638	.008
NB_22310002X	-11348.535	5008.069	-.007	-2.266	.023
NB_22310008X	-24014.987	7820.920	-.009	-3.071	.002
NB_22310011X	-27425.635	13139.285	-.006	-2.087	.037
NB_22310042X	-14559.218	8642.466	-.005	-1.685	.092
NB_22311701	-83961.782	20056.418	-.012	-4.186	.000
NB_22312401X	-39932.061	14173.087	-.008	-2.817	.005
NB_23320801	-20418.938	10504.857	-.006	-1.944	.052
NB_23321402X	-20496.382	8239.671	-.007	-2.488	.013
NB_31352301	-44809.779	11627.101	-.011	-3.854	.000
NB_31363331	62708.658	13169.586	.014	4.762	.000
NB_31450040X	-59414.385	13218.767	-.013	-4.495	.000
NB_31453003X	-37660.443	17361.011	-.006	-2.169	.030
NB_31540000X	-25240.699	8515.957	-.009	-2.964	.003
NB_31540101	-28280.387	4244.512	-.020	-6.663	.000
NB_31540301	-37074.815	6827.615	-.016	-5.430	.000
NB_31540302X	-35193.591	7688.998	-.013	-4.577	.000
NB_31541000X	-26186.065	5100.932	-.015	-5.134	.000
NB_31541102X	-23884.767	4805.116	-.015	-4.971	.000
NB_31541104X	-49025.798	8293.661	-.017	-5.911	.000
NB_31541200X	-24563.163	6381.818	-.011	-3.849	.000
NB_31550040	-56717.062	17379.826	-.009	-3.263	.001
NB_31550042	-42734.084	20126.802	-.006	-2.123	.034
NB_31550601X	-23284.831	9049.719	-.007	-2.573	.010
NB_31560040X	-73432.772	13241.172	-.016	-5.546	.000
NB_31562601	-44178.755	10090.489	-.013	-4.378	.000
NB_31562603X	-28641.033	7702.308	-.011	-3.718	.000
NB_31562626	-41662.576	10529.934	-.011	-3.957	.000
NB_32240000	-55441.285	24557.190	-.006	-2.258	.024
NB_32340000X	-45657.640	11775.082	-.011	-3.877	.000
NB_32440000	-39241.295	20035.835	-.006	-1.959	.050
NB_32441904	23015.380	4462.524	.016	5.157	.000
NB_32441906X	15778.859	7208.033	.006	2.189	.029
NB_32442802	-11558.424	4105.341	-.009	-2.815	.005
NB_32442901X	23707.066	5062.803	.014	4.683	.000
NB_32442904X	19801.912	5674.672	.010	3.490	.000
NB_32443001X	11158.620	3849.382	.009	2.899	.004
NB_32443100X	78793.719	4317.795	.056	18.249	.000
NB_32443104X	27049.136	4326.171	.019	6.252	.000
NB_32443201X	14910.370	6026.023	.007	2.474	.013
NB_32443203X	37854.293	4968.146	.023	7.619	.000
NB_32443205X	45024.193	7684.659	.017	5.859	.000
NB_32443303	103276.662	6402.526	.047	16.131	.000
NB_32443304	33556.595	5314.042	.019	6.315	.000
NB_32443305	10666.905	5257.511	.006	2.029	.042
NB_32443405	-29221.684	5533.787	-.016	-5.281	.000

Excluded Variables^u

Model: 21

	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
					Tolerance
NB_12530332	.001	.368	.713	.004	.994
NB_11433602X	-.002	-.608	.543	-.006	.970
NB_12530302	.002	.696	.486	.007	.974
NB_11431502	-.002	-.725	.469	-.007	.986
NB_11432803	-.003	-.886	.376	-.009	.992
NB_11432701	.002	.865	.387	.009	.991
NB_11433411X	-.003	-1.001	.317	-.010	.994
NB_31363301	-.003	-1.042	.297	-.011	.978
NB_12531808	-.003	-1.160	.246	-.012	.962
NB_11432802	-.004	-1.231	.218	-.013	.996
NB_13432423	-.004	-1.272	.203	-.013	.994
NB_11432708	.004	1.276	.202	.013	.973
NB_22310401	-.004	-1.325	.185	-.013	.993
NB_32442003	.004	1.405	.160	.014	.968
NB_31541403X	-.004	-1.406	.160	-.014	.981
NB_13432412X	.004	1.419	.156	.014	.985
NB_16431401	.004	1.442	.149	.015	.997
NB_23321404X	-.004	-1.550	.121	-.016	.998
NB_14540507	-.005	-1.577	.115	-.016	.996
NB_23321429	-.005	-1.584	.113	-.016	.996

^u. Dependent Variable: TASP

Ratio Statistics for ESP / TASP

Sales	9772
Median	1.001
Weighted Mean	1.000
Minimum	.343
Maximum	2.269
Price Related Differential	1.016
Coefficient of Dispersion	.105

Appendix 2 County 1 Condominium Model (Additive)

Model: 3

R	R Square	Adjusted R Square	Std. Error of the Estimate
.941	.886	.884	15335.93013

Model: 3

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	40255.709	1563.509		25.747	.000
TOTLAREA	129.722	1.588	.790	81.673	.000
EFFAGE20SF	-2.047	.064	-.384	-32.225	.000
MKTAREA2	-22000.944	2919.800	-.077	-7.535	.000
MKTAREA3	11697.876	1352.397	.071	8.650	.000
NB_11430041	-24288.770	1783.162	-.102	-13.621	.000
NB_11433407	-31250.874	6367.792	-.031	-4.908	.000
NB_12530331	14310.752	2568.127	.035	5.572	.000
NB_12530431	-49784.667	2007.650	-.160	-24.797	.000
NB_12530432	-22394.041	2117.626	-.067	-10.575	.000
NB_12530434	-25037.603	1566.174	-.106	-15.986	.000
NB_12530435	-15474.575	1727.221	-.064	-8.959	.000
NB_12531002	2835.767	1457.152	.013	1.946	.052
NB_12531104	-39091.414	1579.173	-.185	-24.754	.000
NB_12531151	-15151.269	7697.597	-.012	-1.968	.049
NB_12531179	-28318.592	7701.432	-.023	-3.677	.000
NB_12531901	17948.480	1404.371	.089	12.780	.000
NB_12532015	14016.383	4324.934	.021	3.241	.001
NB_13603033	69623.657	2636.910	.175	26.404	.000
NB_14531260	10365.135	2010.390	.033	5.156	.000
NB_14531269	22088.011	1483.541	.101	14.889	.000
NB_14531270	4936.649	2091.136	.015	2.361	.018
NB_14531331	-49019.557	1674.161	-.193	-29.280	.000
NB_14540401	-18487.310	5464.730	-.021	-3.383	.001
NB_14540406	57271.463	10876.679	.032	5.266	.000
NB_14540407	50021.550	4351.835	.080	11.494	.000
NB_14540505	29541.985	5835.371	.031	5.063	.000
NB_14540531	68008.094	3838.184	.112	17.719	.000
NB_14540730	-7655.399	1751.265	-.029	-4.371	.000
NB_14540731	7835.215	3495.567	.014	2.241	.025
NB_14540830	-22892.391	4195.856	-.034	-5.456	.000
NB_14540831	12697.672	2878.248	.028	4.412	.000
NB_14540832	34899.252	3190.301	.068	10.939	.000
NB_14581004	-31302.226	2481.914	-.083	-12.612	.000
NB_14580032	14099.840	2880.601	.031	4.895	.000
NB_14580033	14817.689	4428.119	.021	3.346	.001
NB_14580035	9678.708	1991.360	.032	4.860	.000

Model: 3

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
NB_14580038	-17426.818	5215.635	-.021	-3.341	.001
NB_14810051X	-30199.516	3785.383	-.050	-7.978	.000
NB_14580074	-39655.815	4478.980	-.055	-8.854	.000
NB_14540032	-16565.403	2581.110	-.041	-6.418	.000
NB_14840035	-25128.158	4164.971	-.037	-6.033	.000
NB_14840036	-15120.743	2929.969	-.033	-5.161	.000
NB_14860031	-23374.834	2041.377	-.072	-11.451	.000
NB_14860070	-39327.904	4415.775	-.056	-8.906	.000
NB_14860071	-17820.416	5480.514	-.020	-3.252	.001
NB_21520049	-32760.458	4013.953	-.069	-8.162	.000
NB_23333202	15275.903	4627.395	.027	3.301	.001
NB_32441830	-77523.107	8933.125	-.054	-8.678	.000
NB_32443000X	-35291.697	3836.314	-.060	-9.199	.000
NB_32443034	-27744.718	4434.684	-.040	-6.256	.000
NB_32443109	-16990.271	4470.267	-.025	-3.801	.000
NB_32443204X	-41437.525	6043.459	-.044	-6.857	.000
NB_32443249	18173.739	8932.473	.013	2.035	.042
NB_32443269	-24202.880	10910.391	-.014	-2.218	.027
NB_32443407	-51242.051	3567.306	-.096	-14.364	.000

Excluded Variables^c

Model: 3

	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
					Tolerance
NB_14580031	.002	.357	.721	.006	.941
NB_14580030	-.004	-.588	.557	-.011	.908

c. Dependent Variable: TASP

Ratio Statistics for ESP / TASP

Sales	3106
Median	1.003
Weighted Mean	1.000
Minimum	.517
Maximum	1.490
Price Related Differential	1.010
Coefficient of Dispersion	.075

Appendix 3
County 1 Multi-Family Model - Stratum 2
(Multiplicative Model)

Model: 7

R	R Square	Adjusted R Square	Std. Error of the Estimate
.963	.928	.921	.13080

Model: 7

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	12.610	.100		126.052	.000
LN_SIZEFACTOR	.831	.030	.712	27.738	.000
LN_PCTGOOD	1.403	.361	.088	3.881	.000
MKTAREA2	-.292	.071	-.091	-4.120	.000
MKTAREA3	-.120	.038	-.108	-3.148	.002
NB_12530481	-.582	.041	-.332	-14.065	.000
NB_12530902	-.547	.038	-.358	-14.468	.000
NB_12530907	-.548	.063	-.191	-8.669	.000
NB_12532103	-.247	.047	-.120	-5.255	.000
NB_13603031X	.379	.056	.156	6.737	.000
NB_14540481	-.255	.079	-.069	-3.220	.002
NB_14581072	-.444	.033	-.401	-13.442	.000
NB_17431370	-.709	.079	-.193	-8.980	.000
NB_31540080X	-.699	.061	-.267	-11.509	.000
NB_32441840X	-.227	.058	-.093	-3.923	.000
NB_32442071	-.422	.072	-.132	-5.878	.000
NB_32443470	-.273	.096	-.061	-2.834	.005

Excluded Variables⁹

Model: 7

	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
					Tolerance
NB_32442070	-.013	-.526	.600	-.041	.750
NB_14840008	.006	.293	.770	.023	.954
NB_31541204	-.015	-.698	.486	-.054	.894
NB_14540482X	.014	.600	.549	.046	.834
NB_21620000	-.033	-1.115	.266	-.086	.495
NB_32442970X	.027	1.193	.235	.092	.867

9. Dependent Variable: LN_TASP

Ratio Statistics for ESP / TASP

Sales	185
Median	1.007
Weighted Mean	.994
Minimum	.745
Maximum	1.395
Price Related Differential	1.014
Coefficient of Dispersion	.099

Appendix 4 County 1 Commercial Model - Stratum 6 (Multiplicative Model)

Model: 12

R	R Square	Adjusted R Square	Std. Error of the Estimate
.964	.929	.925	.19244

Model: 12

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	12.886	.038		339.840	.000
LN_SIZEFACTOR	.847	.017	.980	50.433	.000
LN_PCTGOOD	1.037	.113	.213	9.156	.000
QUAL_BAV	-.339	.092	-.070	-3.704	.000
QUAL_GOOD	.102	.035	.067	2.868	.005
OFFICE_PROF	.086	.032	.053	2.639	.009
AUTO_REPAIR	-.521	.065	-.158	-8.025	.000
WH_INDUSTRIAL	-.720	.043	-.363	-16.715	.000
MKTAREA3	-.160	.034	-.103	-4.641	.000
NB_11430050	-.205	.141	-.027	-1.453	.148
NB_14540450X	-.210	.085	-.047	-2.474	.014
NB_25740078	-.503	.105	-.093	-4.797	.000
NB_32443350X	.336	.101	.062	3.332	.001

Excluded Variables

Model: 12

	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
					Tolerance
NB_12531050	.000	.004	.997	.000	.888
NB_32440052X	.007	.341	.734	.023	.809
MKTAREA2	.000	.015	.988	.001	.696
NB_14540552X	.001	.072	.943	.005	.920
NB_13610020	-.008	-.442	.659	-.030	.926
STORE	.015	.722	.471	.049	.772
LN_LRATIO	.021	1.012	.313	.068	.749
NB_11430055X	-.016	-.773	.441	-.052	.788
NB_25710081	-.023	-1.189	.236	-.080	.890
SHOPPING_CTR	-.024	-1.262	.208	-.085	.914
OFFICE_MULTISTORY	-.025	-1.389	.166	-.093	.960

I. Dependent Variable: LN_TASP

Ratio Statistics for ESP / TASP

Sales	233
Median	1.000
Weighted Mean	.974
Minimum	.584
Maximum	1.531
Price Related Differential	1.044
Coefficient of Dispersion	.148

Appendix 5 County 2 Residential Model (Additive)

Model: 8

R	R Square	Adjusted R Square	Std. Error of the Estimate
.922	.851	.844	27491.25759

Model: 8

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	22215.225	6233.489		3.564	.000
QUAL2_SF	27.387	6.909	.136	3.964	.000
QUAL3_SF	32.084	4.919	.346	6.523	.000
QUAL3GD_SF	43.454	4.543	.367	9.565	.000
QUAL4_SF	57.445	3.884	.707	14.789	.000
QUAL4GD_SF	69.493	3.408	.764	20.394	.000
QUAL4VG_SF	69.804	4.177	.495	16.710	.000
EFFAGE60SF	-.144	.087	-.050	-1.648	.101
SQRT_LANDSF	130.507	13.767	.276	9.480	.000
MKTAREA11	16923.031	13899.069	.036	1.218	.225
NB_900	81133.559	8939.893	.234	9.075	.000
NB_1000000	-20557.361	5331.633	-.102	-3.856	.000
NB_1100000	-40909.683	9064.188	-.156	-4.513	.000

Excluded Variables^h

Model: 8

	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
					Tolerance
MKTAREA4	-.012	-.462	.644	-.029	.955
NB_9000000	.016	.560	.576	.035	.776
MKTAREA2	.021	.805	.422	.051	.881
NB_400	.025	1.006	.315	.064	.953

h. Dependent Variable: TASP

Ratio Statistics for ESP / TASP

Sales	264
Median	1.021
Weighted Mean	1.000
Minimum	.426
Maximum	2.177
Price Related Differential	1.068
Coefficient of Dispersion	.229

Appendix 6 County 3 Residential Model (Additive)

Model: 2

R	R Square	Adjusted R Square	Std. Error of the Estimate
.877	.769	.764	32901.80546

Model: 2

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	60705.227	6562.911		9.250	.000
MOBILEHOME_SF	-41.339	2.348	-.402	-17.606	.000
QUAL2SF	46.141	6.100	.194	7.564	.000
QUAL3SF	68.436	3.199	.708	21.390	.000
QUAL4SF	93.319	3.147	1.003	29.658	.000
EFFAGE	-1020.666	149.064	-.174	-6.847	.000
SQRT_LANDSF	161.615	20.480	.196	7.891	.000
NB_10000000	29036.285	3995.770	.198	7.267	.000
NB_30000000	-9962.310	4070.478	-.065	-2.447	.015
NB_40000000	21038.892	7862.133	.061	2.676	.008
NB_50000000	-7952.711	5200.178	-.041	-1.529	.127

Excluded Variables^b

Model: 2

	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
					Tolerance
NB_70000000	-.006	-.252	.801	-.011	.764

b. Dependent Variable: TASP

Ratio Statistics for ESP / TASP

Sales	517
Median	1.040
Weighted Mean	1.000
Minimum	.429
Maximum	2.545
Price Related Differential	1.087
Coefficient of Dispersion	.248

Appendix 7 County 4 Single Family Residential Model (Additive)

Model: 5

R	R Square	Adjusted R Square	Std. Error of the Estimate
.961	.924	.922	20149.92960

Model: 5

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	35377.224	3479.971		10.166	.000
QUAL23SF	73.018	2.776	.750	26.302	.000
QUAL4SF	82.131	2.064	1.163	39.785	.000
QUAL5SF	91.798	2.893	.503	31.726	.000
EFFAGE60SF	-.945	.048	-.361	-19.803	.000
SQRT_LANDSF	221.586	10.072	.407	22.000	.000
MKTAREA1	-11610.628	3310.812	-.057	-3.507	.001
MKTAREA3	-9151.211	4306.147	-.033	-2.125	.034
MKTAREA4	-11412.067	3018.113	-.078	-3.781	.000
NB_119500	18886.970	4870.487	.064	3.878	.000

Excluded Variables^e

Model: 2

	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
					Tolerance
NB_488500	.000	-.011	.992	-.001	.912

e. Dependent Variable: TASP

Ratio Statistics for ESP / TASP

Sales	359
Median	1.011
Weighted Mean	1.000
Minimum	.632
Maximum	1.680
Price Related Differential	1.023
Coefficient of Dispersion	.116

Appendix 8 County 4 Vacant Land Model - Stratum 4 (Multiplicative Model)

Model: 3

R	R Square	Adjusted R Square	Std. Error of the Estimate
.969	.939	.932	.21348

Model: 3

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	10.097	.030		340.945	.000
LN_SIZEFACTOR	.629	.023	.911	27.931	.000
MKTAREA2	.291	.051	.170	5.720	.000
MKTAREA3	-.138	.052	-.073	-2.627	.009
NB_229000	.776	.089	.195	8.702	.000
NB_139900	.243	.129	.053	1.878	.062
NB_948500	.353	.144	.064	2.462	.015
NB_1400	.122	.072	.036	1.697	.092
NB_7000X	-.394	.112	-.071	-3.533	.001
NB_9400	-.887	.153	-.114	-5.796	.000
NB_19700	-.243	.089	-.065	-2.730	.007
NB_29700	-1.070	.126	-.167	-8.492	.000
NB_72000X	.196	.070	.057	2.806	.006
NB_80300	.325	.064	.110	5.056	.000
NB_128800X	1.038	.132	.162	7.859	.000
NB_239500X	-.770	.117	-.139	-6.596	.000
NB_699500	-.296	.101	-.059	-2.928	.004
NB_709000X	-.247	.065	-.078	-3.804	.000

Excluded Variables^c

Model: 3

	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
					Tolerance
NB_3600	.018	.904	.367	.071	.942
MKTAREA1	-.034	-.990	.324	-.078	.329

c. Dependent Variable: LN_TASP

Ratio Statistics for ESP / TASP

Sales	180
Median	.987
Weighted Mean	.980
Minimum	.629
Maximum	1.655
Price Related Differential	1.042
Coefficient of Dispersion	.172

Appendix 9 County 5 Residential Model (Additive)

Model: 2

R	R Square	Adjusted R Square	Std. Error of the Estimate
.934	.873	.868	34352.20102

Model: 2

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	54518.351	8256.236		6.603	.000
QUAL2SF	54.605	29.358	.051	1.860	.064
QUAL3SF	64.938	4.249	.646	15.284	.000
QUAL4SF	82.888	3.207	1.091	25.845	.000
QUAL56SF	103.280	7.719	.382	13.380	.000
EFFAGE40	-1667.172	335.403	-.150	-4.971	.000
SQRT_LANDSF	122.699	14.775	.243	8.304	.000
MKTAREA3	10095.778	3277.498	.085	3.080	.002

Excluded Variables

Model: 2

	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
					Tolerance
MKTAREA2	-.014	-.404	.687	-.029	.533

Ratio Statistics for ESP / TASP

Mean	1.036
Median	.992
Weighted Mean	1.000
Minimum	.639
Maximum	1.892
Price Related Differential	1.036
Coefficient of Dispersion	.159

Appendix 10 County 5 Acreage Model – Stratum 5 (Multiplicative)

Model: 1

R	R Square	Adjusted R Square	Std. Error of the Estimate
.786	.618	.614	.46555

Model: 1

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	10.749	.041		260.116	.000
LN_SIZEFACTOR	.666	.035	.729	18.825	.000
MKTAREA2	.457	.166	.107	2.751	.006
MKTAREA3	.270	.029	.360	9.288	.000

Ratio Statistics for ESP / TASP

Sales	261
Median	.946
Weighted Mean	.902
Minimum	.411
Maximum	2.520
Price Related Differential	1.236
Coefficient of Dispersion	.444