Assessment Equity Study Report
Buncombe County North Carolina
Appendix C Sales Disqualification Study
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Appendix C Sales Disqualification Study

Even if the sales approach is not the primary driver of the valuation process, sales will be used to measure assessment performance. When a property's attributes at the time of sale are principally the same as at the time of valuation, there is a relationship between sale price and market value. When the attributes at time of sale and the attributes at time of valuation are *significantly* different, that relationship no longer holds true. The sale price may bear little or no relationship to the value. If we are using a ratio study as part of the equity analysis, these transactions must be identified and removed from consideration. Section 3.5 of the Standard on Ratio Studies states:

"The appraiser must ascertain whether the property rights transferred, the permitted use, and the physical characteristics of the property on the date of assessment are the same as those on the date of sale. If the physical characteristics of the property have changed since the last appraisal, adjustments may be necessary before including the property in a ratio study. Properties with significant differences in these factors should be excluded from the ratio study."[1] It must be emphasized that these sales are disqualified *only* for ratio studies. Because the attributes are matched with the sales prices, they are fine to use for modeling or valuation and representation studies. It is the comparison to *market values* when the attributes have changed that breaks the relationship between attributes and price.

It is vitally important to use a properly screened and validated data source when conducting analysis of assessment performance, and why it is strongly recommended that a well validated file of transactions where a property's attributes at the time of sale are principally the same as at the time of valuation is created and used to evaluate assessment performance. The difference is not trivial. It is not unusual to disqualify around 40% of the transactions through this process. In qualifying sales for the study used in this report, 42.8% of the transactions were disqualified. If almost half of the data used for a study is flawed, one is bound to get misleading results!

Critics who are unfamiliar with, or choose not to adhere to the IAAO Standard, will say that too many sales are removed. This is not a subjective process, and there is no target number of sales to remove. Disqualification is not determined by a person. The disqualifiers are in the data. *This is the way it is supposed to be done!*

Previous studies for Buncombe County used publicly available sales data that were not validated and did not capture attributes as of the date of sale. Therefore, transactions where the attributes of the property at the time of valuation were different than the attributes that were present at the time of sale were not removed from those ratio studies. We can be sure of this because the Assessor's office created the file that meets this standard in preparation for this study – it has not existed before this.

To qualify /disqualify transactions, I compared neighborhood, property type, condition of improvements, quality of construction, size category and building square footage at time of sale to those same attributes at time of valuation, disqualifying those where any of these attributes were different. Minor changes to a property would not disqualify a transaction.

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[1] IAAO Standard on Ratio Studies April 2013 Section 3.5 *https://www.iaao.org/media/standards/Standard_on_Ratio_Studies.pdf*

Disqualification Rates

Understanding how rates of disqualification vary across submarkets yields valuable insights into the behavior of the residential market in Buncombe County. *Unqualified analysts often assume or posit that disqualification rates should be constant throughout the inventory.* This is hardly ever the case in 'real' markets.

When using sales for valuation, as in building regression models, or running a ratio study it is important to remove transactions that are outliers or not representative of typical market activity. The most common methods of removing outliers are simple truncation or Inter-quartile range (IQR). Both techniques require ranking all ratios from highest to lowest. Simple truncation removes the same percentage of ratios from the top and bottom of the arrayed data. IAAO allows for removal of up to 10% of ratios from a large sample size through truncation. Determining the optimal percentage of transactions to remove can be problematic. The technique also assumes that outliers are evenly distributed at both ends of the ratio array. The IQR method identifies and eliminates the top and bottom quartile of the arrayed ratios. Many assessment oversight agencies use the IQR method. Either method is useful for reporting one set of statistical performance measures for the entire jurisdiction. Neither should be used if the purpose of the ratio study is diagnostic in nature. If a submarket is highly over-assessed or under-assessed, one runs the risk of eliminating all of the observations that would expose that submarket's performance.

An excellent method of outlier removal is the use of studentized residuals. The process precisely identifies and disqualifies transactions that exert undue influence on a regression model. The main drawback is that it requires building regression models. For this study, I used the regression models that I built to isolate the effects of time and time adjust prices to also identify and flag outliers. In each of the three models, approximately 6% of the transactions were identified as outliers.

Disqualification Results

The tables and graphs that follow show breakdowns on disqualified transactions by Development Class; Communities; Census Block Groups; Price Class; Property Types; Size Class; Condition of Improvements; Quality of Construction; Time Period of Construction; Disadvantaged Communities; and Race and Income Class. Some analysts point to variance in disqualification rates by race or income as evidence of bias. This study shows that there is variance in disqualification rates no matter how the data is stratified and that disqualification rates are not a reliable indicator of bias.

Column '0' are the qualified sales. Column '1' are the sales that were disqualified because attributes of the property at the time of valuation were different than the attributes that were present at the time of sale. Column '2' are the sales that were disqualified as outliers.

Disqualification by Development Class

			Disqualify			
			0	1	2	Total
DevClass	Rural	Count	677	505	88	1270
		% within DevClass	53.3%	39.8%	6.9%	100.0%
	Suburban	Count	6628	5409	759	12796
		% within DevClass	51.8%	42.3%	5.9%	100.0%
	Urban	Count	1068	615	99	1782
		% within DevClass	59.9%	34.5%	5.6%	100.0%
Total		Count	8373	6529	946	15848
		% within DevClass	52.8%	41.2%	6.0%	100.0%

This table shows sales in Urban communities have the highest rates of transaction retention, indicating fewer properties are modified after the sale. Urban and Suburban communities tend to have more homogenous inventory, which accounts for a (slightly) lower percentage of outliers.

Disqualification by Price Class

			0	1	2	Total
Price Class	Below 230k	Count	1012	208	325	1545
		% within Price Class	65.5%	13.5%	21.0%	100.0%
	230k to 275k	Count	967	336	73	1376
		% within Price Class	70.3%	24.4%	5.3%	100.0%
	275k to 315k	Count	1086	415	54	1555
		% within Price Class	69.8%	26.7%	3.5%	100.0%
	315k to 350k	Count	1029	516	41	1586
		% within Price Class	64.9%	32.5%	2.6%	100.0%
	350k to 400k	Count	1093	779	42	1914
		% within Price Class	57.1%	40.7%	2.2%	100.0%
	400k to 450k	Count	899	738	35	1672
		% within Price Class	53.8%	44.1%	2.1%	100.0%
	450k to 520k	Count	705	721	42	1468
		% within Price Class	48.0%	49.1%	2.9%	100.0%
	520k to 625k	Count	700	885	73	1658
		% within Price Class	42.2%	53.4%	4.4%	100.0%
	625k to 815k	Count	575	926	74	1575
		% within Price Class	36.5%	58.8%	4.7%	100.0%
	815k+	Count	307	1005	187	1499
		% within Price Class	20.5%	67.0%	12.5%	100.0%
Total		Count	8373	6529	946	15848
		% within Price Class	52.8%	41.2%	6.0%	100.0%

Looking at disqualifications by price classes reveals a pattern. Notice how the attribute disqualification rate increases as price class increases, ranging from a low of 13.5% in the lowest price class to a high of 67% in the highest price class. This is because entry level buyers tend to buy as much house as they can afford. They may struggle to meet the monthly obligations of mortgage, insurance, utilities, maintenance and taxes. They typically do not have money left over after settling on the property to make costly alterations or improvements to the property, but will live in it as it is at the time of purchase. Buyers in the higher price ranges are more likely to have the capacity to modify the residence to suit their particular tastes and needs after purchase. In the highest price range, most owners will make significant alterations or improvements.

Also notice how much atypical market activity takes place in the lowest and highest price classes as evidenced by the high rates of outlier disqualification. This is partially due to the way that sales validation is practiced in the assessor's office, where most transactions are validated *prima facia* (on the face of the transfer document) using the 'arm's length' standard. Very few transactions are invalidated as atypical market activity.

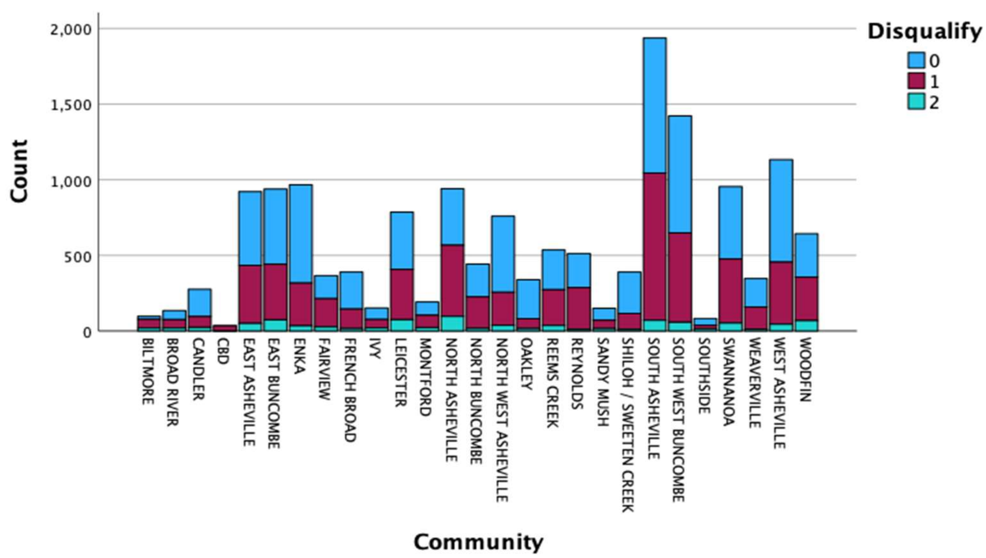
This stacked bar chart visually represents the same information.

Disqualifications by Communities

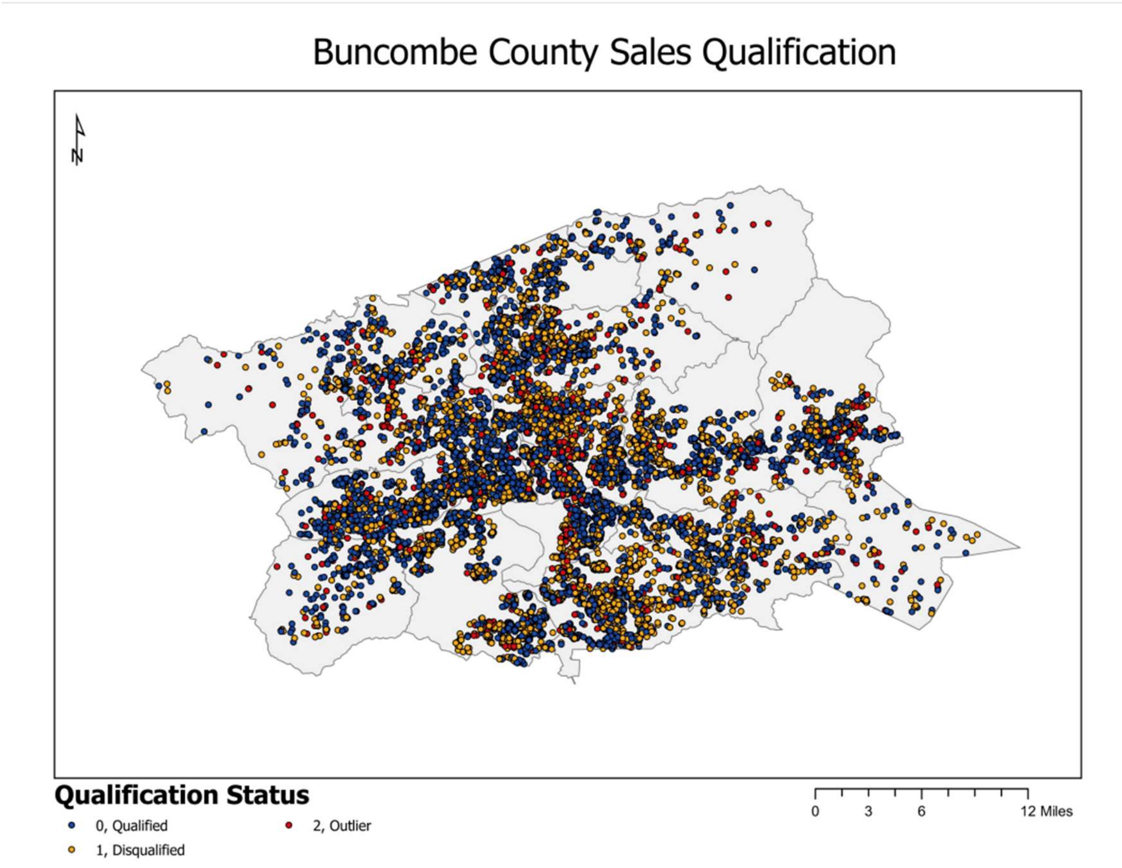
			Disqualify 0	Disqualify 1	Disqualify 2	Total
Community	BILTMORE	Count	21	58	19	98
		% within Community	21.4%	59.2%	19.4%	100.0%
	BROAD RIVER	Count	60	56	19	135
		% within Community	44.4%	41.5%	14.1%	100.0%
	CANDLER	Count	180	72	24	276
		% within Community	65.2%	26.1%	8.7%	100.0%
	CBD	Count	1	34	0	35
		% within Community	2.9%	97.1%	0.0%	100.0%
	EAST ASHEVILLE	Count	488	384	50	922
		% within Community	52.9%	41.6%	5.4%	100.0%
	EAST BUNCOMBE	Count	498	367	74	939
		% within Community	53.0%	39.1%	7.9%	100.0%
	ENKA	Count	650	283	34	967
		% within Community	67.2%	29.3%	3.5%	100.0%
	FAIRVIEW	Count	152	187	27	366
		% within Community	41.5%	51.1%	7.4%	100.0%
	FRENCH BROAD	Count	245	129	16	390
		% within Community	62.8%	33.1%	4.1%	100.0%
	IVY	Count	76	56	20	152
		% within Community	50.0%	36.8%	13.2%	100.0%
	LEICESTER	Count	379	332	75	786
		% within Community	48.2%	42.2%	9.5%	100.0%
	MONTFORD	Count	88	81	23	192
		% within Community	45.8%	42.2%	12.0%	100.0%
	NORTH ASHEVILLE	Count	374	470	97	941
		% within Community	39.7%	49.9%	10.3%	100.0%
	NORTH BUNCOMBE	Count	217	209	17	443
		% within Community	49.0%	47.2%	3.8%	100.0%
	NORTH WEST ASHEVILLE	Count	503	218	38	759
		% within Community	66.3%	28.7%	5.0%	100.0%
	OAKLEY	Count	257	66	16	339
		% within Community	75.8%	19.5%	4.7%	100.0%
	REEMS CREEK	Count	263	237	36	536
		% within Community	49.1%	44.2%	6.7%	100.0%

	REYNOLDS	Count	225	276	11	512
		% within Community	43.9%	53.9%	2.1%	100.0%
	SANDY MUSH	Count	79	55	16	150
		% within Community	52.7%	36.7%	10.7%	100.0%
	SHILOH / SWEETEN CREEK	Count	274	105	11	390
		% within Community	70.3%	26.9%	2.8%	100.0%
	SOUTH ASHEVILLE	Count	893	973	71	1937
		% within Community	46.1%	50.2%	3.7%	100.0%
	SOUTH WEST BUNCOMBE	Count	773	591	58	1422
		% within Community	54.4%	41.6%	4.1%	100.0%
	SOUTHSIDE	Count	44	24	15	83
		% within Community	53.0%	28.9%	18.1%	100.0%
	SWANNANOA	Count	479	423	53	955
		% within Community	50.2%	44.3%	5.5%	100.0%
	WEAVERVILLE	Count	189	146	12	347
		% within Community	54.5%	42.1%	3.5%	100.0%
	WEST ASHEVILLE	Count	678	410	45	1133
		% within Community	59.8%	36.2%	4.0%	100.0%
	WOODFIN	Count	287	287	69	643
		% within Community	44.6%	44.6%	10.7%	100.0%
Total		Count	8373	6529	946	15848
		% within Community	52.8%	41.2%	6.0%	100.0%

Disqualification rates were also examined by communities. Biltmore has the highest disqualification rates for both reasons. In Biltmore, over 79% of transactions were either disqualified or removed as outliers. The neighboring communities of Oakley and Shiloh/Sweeten Creek have the lowest disqualification rates, retaining over 70% of transactions.



Looking at location in a more granular way, there is variance in disqualification rates *within* many of the recognized communities. The last 5 characters of the Census Block Group are a component of the community definitions, so that ‘05001’, ‘05002 and ‘05003’ all lie within North Asheville. While North Asheville as a community has a fairly high retention rate, '05001' and '05002' have very low retention rates. This further validates the importance of disqualifying transactions and outlier removal on a case-by-case basis instead of a more generalized method.



This map shows that qualified, disqualified and outlier sales are interspersed throughout most communities.

Disqualifications by Census Block Group

			Disqualify			
			0	1	2	Total
CBlockGroup	370210001002	Count	1	34	0	35
		% within CBlockGroup	2.9%	97.1%	0.0%	100.0%
	370210002001	Count	17	19	3	39
		% within CBlockGroup	43.6%	48.7%	7.7%	100.0%
	370210002002	Count	28	14	6	48
		% within CBlockGroup	58.3%	29.2%	12.5%	100.0%
	370210003001	Count	22	32	10	64
		% within CBlockGroup	34.4%	50.0%	15.6%	100.0%
	370210003002	Count	21	16	4	41
		% within CBlockGroup	51.2%	39.0%	9.8%	100.0%
	370210004001	Count	35	29	5	69
		% within CBlockGroup	50.7%	42.0%	7.2%	100.0%

	370210004002	Count	10	6	13	29
		% within CBlockGroup	34.5%	20.7%	44.8%	100.0%
	370210004003	Count	22	20	4	46
		% within CBlockGroup	47.8%	43.5%	8.7%	100.0%
	370210005001	Count	19	70	5	94
		% within CBlockGroup	20.2%	74.5%	5.3%	100.0%
	370210005002	Count	6	10	7	23
		% within CBlockGroup	26.1%	43.5%	30.4%	100.0%
	370210005003	Count	47	55	8	110
		% within CBlockGroup	42.7%	50.0%	7.3%	100.0%
	370210006001	Count	25	24	9	58
		% within CBlockGroup	43.1%	41.4%	15.5%	100.0%
	370210006002	Count	39	11	9	59
		% within CBlockGroup	66.1%	18.6%	15.3%	100.0%
	370210007001	Count	36	12	10	58
		% within CBlockGroup	62.1%	20.7%	17.2%	100.0%
	370210008001	Count	33	37	6	76
		% within CBlockGroup	43.4%	48.7%	7.9%	100.0%
	370210008002	Count	41	50	1	92
		% within CBlockGroup	44.6%	54.3%	1.1%	100.0%
	370210008003	Count	38	33	6	77
		% within CBlockGroup	49.4%	42.9%	7.8%	100.0%
	370210009001	Count	5	2	6	13
		% within CBlockGroup	38.5%	15.4%	46.2%	100.0%
	370210009002	Count	13	11	7	31
		% within CBlockGroup	41.9%	35.5%	22.6%	100.0%
	370210009003	Count	26	11	2	39
		% within CBlockGroup	66.7%	28.2%	5.1%	100.0%
	370210010001	Count	89	87	3	179
		% within CBlockGroup	49.7%	48.6%	1.7%	100.0%
	370210010002	Count	134	65	10	209
		% within CBlockGroup	64.1%	31.1%	4.8%	100.0%
	370210011001	Count	81	37	5	123
		% within CBlockGroup	65.9%	30.1%	4.1%	100.0%
	370210011002	Count	85	70	3	158
		% within CBlockGroup	53.8%	44.3%	1.9%	100.0%
	370210011003	Count	94	33	6	133
		% within CBlockGroup	70.7%	24.8%	4.5%	100.0%
	370210012001	Count	45	41	3	89
		% within CBlockGroup	50.6%	46.1%	3.4%	100.0%
	370210012002	Count	45	19	2	66
		% within CBlockGroup	68.2%	28.8%	3.0%	100.0%
	370210012003	Count	44	16	1	61
		% within CBlockGroup	72.1%	26.2%	1.6%	100.0%
	370210012004	Count	52	37	7	96
		% within CBlockGroup	54.2%	38.5%	7.3%	100.0%
	370210012005	Count	10	5	5	20
		% within CBlockGroup	50.0%	25.0%	25.0%	100.0%
	370210013001	Count	69	59	3	131
		% within CBlockGroup	52.7%	45.0%	2.3%	100.0%
	370210013002	Count	55	30	3	88

		% within CBlockGroup	62.5%	34.1%	3.4%	100.0%
	370210013003	Count	71	43	1	115
		% within CBlockGroup	61.7%	37.4%	0.9%	100.0%
	370210014011	Count	26	11	2	39
		% within CBlockGroup	66.7%	28.2%	5.1%	100.0%
	370210014012	Count	31	8	3	42
		% within CBlockGroup	73.8%	19.0%	7.1%	100.0%
	370210014013	Count	49	21	0	70
		% within CBlockGroup	70.0%	30.0%	0.0%	100.0%
	370210014021	Count	33	18	4	55
		% within CBlockGroup	60.0%	32.7%	7.3%	100.0%
	370210014022	Count	1	0	9	10
		% within CBlockGroup	10.0%	0.0%	90.0%	100.0%
	370210015001	Count	67	33	9	109
		% within CBlockGroup	61.5%	30.3%	8.3%	100.0%
	370210015002	Count	20	13	10	43
		% within CBlockGroup	46.5%	30.2%	23.3%	100.0%
	370210016011	Count	33	52	5	90
		% within CBlockGroup	36.7%	57.8%	5.6%	100.0%
	370210016012	Count	54	70	7	131
		% within CBlockGroup	41.2%	53.4%	5.3%	100.0%
	370210016021	Count	26	83	21	130
		% within CBlockGroup	20.0%	63.8%	16.2%	100.0%
	370210016022	Count	23	30	9	62
		% within CBlockGroup	37.1%	48.4%	14.5%	100.0%
	370210017001	Count	32	42	11	85
		% within CBlockGroup	37.6%	49.4%	12.9%	100.0%
	370210017002	Count	47	58	11	116
		% within CBlockGroup	40.5%	50.0%	9.5%	100.0%
	370210018011	Count	16	31	6	53
		% within CBlockGroup	30.2%	58.5%	11.3%	100.0%
	370210018012	Count	99	60	2	161
		% within CBlockGroup	61.5%	37.3%	1.2%	100.0%
	370210018021	Count	31	28	2	61
		% within CBlockGroup	50.8%	45.9%	3.3%	100.0%
	370210018022	Count	88	73	3	164
		% within CBlockGroup	53.7%	44.5%	1.8%	100.0%
	370210019001	Count	75	43	9	127
		% within CBlockGroup	59.1%	33.9%	7.1%	100.0%
	370210019002	Count	33	21	7	61
		% within CBlockGroup	54.1%	34.4%	11.5%	100.0%
	370210020001	Count	129	31	7	167
		% within CBlockGroup	77.2%	18.6%	4.2%	100.0%
	370210020002	Count	110	31	4	145
		% within CBlockGroup	75.9%	21.4%	2.8%	100.0%
	370210020003	Count	20	6	5	31
		% within CBlockGroup	64.5%	19.4%	16.1%	100.0%
	370210020004	Count	78	11	5	94
		% within CBlockGroup	83.0%	11.7%	5.3%	100.0%
	370210021011	Count	21	58	19	98
		% within CBlockGroup	21.4%	59.2%	19.4%	100.0%

	370210021021	Count	122	60	2	184
		% within CBlockGroup	66.3%	32.6%	1.1%	100.0%
	370210021022	Count	28	15	2	45
		% within CBlockGroup	62.2%	33.3%	4.4%	100.0%
	370210021023	Count	44	17	2	63
		% within CBlockGroup	69.8%	27.0%	3.2%	100.0%
	370210022031	Count	6	1	3	10
		% within CBlockGroup	60.0%	10.0%	30.0%	100.0%
	370210022032	Count	114	85	2	201
		% within CBlockGroup	56.7%	42.3%	1.0%	100.0%
	370210022033	Count	42	19	3	64
		% within CBlockGroup	65.6%	29.7%	4.7%	100.0%
	370210022041	Count	89	131	12	232
		% within CBlockGroup	38.4%	56.5%	5.2%	100.0%
	370210022042	Count	23	24	1	48
		% within CBlockGroup	47.9%	50.0%	2.1%	100.0%
	370210022043	Count	43	10	1	54
		% within CBlockGroup	79.6%	18.5%	1.9%	100.0%
	370210022044	Count	11	53	2	66
		% within CBlockGroup	16.7%	80.3%	3.0%	100.0%
	370210022051	Count	234	125	8	367
		% within CBlockGroup	63.8%	34.1%	2.2%	100.0%
	370210022052	Count	53	116	0	169
		% within CBlockGroup	31.4%	68.6%	0.0%	100.0%
	370210022053	Count	63	26	2	91
		% within CBlockGroup	69.2%	28.6%	2.2%	100.0%
	370210022061	Count	60	99	9	168
		% within CBlockGroup	35.7%	58.9%	5.4%	100.0%
	370210022062	Count	46	71	2	119
		% within CBlockGroup	38.7%	59.7%	1.7%	100.0%
	370210023031	Count	48	76	13	137
		% within CBlockGroup	35.0%	55.5%	9.5%	100.0%
	370210023032	Count	90	21	1	112
		% within CBlockGroup	80.4%	18.8%	0.9%	100.0%
	370210023033	Count	50	14	0	64
		% within CBlockGroup	78.1%	21.9%	0.0%	100.0%
	370210023034	Count	98	96	4	198
		% within CBlockGroup	49.5%	48.5%	2.0%	100.0%
	370210023041	Count	107	101	25	233
		% within CBlockGroup	45.9%	43.3%	10.7%	100.0%
	370210023051	Count	83	112	4	199
		% within CBlockGroup	41.7%	56.3%	2.0%	100.0%
	370210023052	Count	81	91	8	180
		% within CBlockGroup	45.0%	50.6%	4.4%	100.0%
	370210023061	Count	189	62	1	252
		% within CBlockGroup	75.0%	24.6%	0.4%	100.0%
	370210023062	Count	11	10	1	22
		% within CBlockGroup	50.0%	45.5%	4.5%	100.0%
	370210024011	Count	24	11	1	36
		% within CBlockGroup	66.7%	30.6%	2.8%	100.0%
	370210024012	Count	51	27	11	89

		% within CBlockGroup	57.3%	30.3%	12.4%	100.0%
	370210024021	Count	50	19	1	70
		% within CBlockGroup	71.4%	27.1%	1.4%	100.0%
	370210024022	Count	52	14	4	70
		% within CBlockGroup	74.3%	20.0%	5.7%	100.0%
	370210024023	Count	27	12	9	48
		% within CBlockGroup	56.3%	25.0%	18.8%	100.0%
	370210025031	Count	63	36	3	102
		% within CBlockGroup	61.8%	35.3%	2.9%	100.0%
	370210025032	Count	49	13	2	64
		% within CBlockGroup	76.6%	20.3%	3.1%	100.0%
	370210025033	Count	32	9	2	43
		% within CBlockGroup	74.4%	20.9%	4.7%	100.0%
	370210025041	Count	104	38	11	153
		% within CBlockGroup	68.0%	24.8%	7.2%	100.0%
	370210025042	Count	29	30	2	61
		% within CBlockGroup	47.5%	49.2%	3.3%	100.0%
	370210025043	Count	59	25	6	90
		% within CBlockGroup	65.6%	27.8%	6.7%	100.0%
	370210025051	Count	151	68	3	222
		% within CBlockGroup	68.0%	30.6%	1.4%	100.0%
	370210025052	Count	37	15	1	53
		% within CBlockGroup	69.8%	28.3%	1.9%	100.0%
	370210025053	Count	100	42	1	143
		% within CBlockGroup	69.9%	29.4%	0.7%	100.0%
	370210025061	Count	126	13	2	141
		% within CBlockGroup	89.4%	9.2%	1.4%	100.0%
	370210025062	Count	36	11	6	53
		% within CBlockGroup	67.9%	20.8%	11.3%	100.0%
	370210025063	Count	13	0	2	15
		% within CBlockGroup	86.7%	0.0%	13.3%	100.0%
	370210026031	Count	49	42	11	102
		% within CBlockGroup	48.0%	41.2%	10.8%	100.0%
	370210026032	Count	23	9	6	38
		% within CBlockGroup	60.5%	23.7%	15.8%	100.0%
	370210026041	Count	47	19	5	71
		% within CBlockGroup	66.2%	26.8%	7.0%	100.0%
	370210026042	Count	76	25	3	104
		% within CBlockGroup	73.1%	24.0%	2.9%	100.0%
	370210026043	Count	45	42	6	93
		% within CBlockGroup	48.4%	45.2%	6.5%	100.0%
	370210026044	Count	103	65	8	176
		% within CBlockGroup	58.5%	36.9%	4.5%	100.0%
	370210026061	Count	22	24	4	50
		% within CBlockGroup	44.0%	48.0%	8.0%	100.0%
	370210026062	Count	26	19	9	54
		% within CBlockGroup	48.1%	35.2%	16.7%	100.0%
	370210026063	Count	31	40	3	74
		% within CBlockGroup	41.9%	54.1%	4.1%	100.0%
	370210026071	Count	57	37	10	104
		% within CBlockGroup	54.8%	35.6%	9.6%	100.0%

	370210026072	Count	60	45	4	109
		% within CBlockGroup	55.0%	41.3%	3.7%	100.0%
	370210026073	Count	45	21	1	67
		% within CBlockGroup	67.2%	31.3%	1.5%	100.0%
	370210026081	Count	6	2	14	22
		% within CBlockGroup	27.3%	9.1%	63.6%	100.0%
	370210026082	Count	6	11	7	24
		% within CBlockGroup	25.0%	45.8%	29.2%	100.0%
	370210026083	Count	22	14	0	36
		% within CBlockGroup	61.1%	38.9%	0.0%	100.0%
	370210026084	Count	37	55	3	95
		% within CBlockGroup	38.9%	57.9%	3.2%	100.0%
	370210026085	Count	32	28	11	71
		% within CBlockGroup	45.1%	39.4%	15.5%	100.0%
	370210026091	Count	26	26	6	58
		% within CBlockGroup	44.8%	44.8%	10.3%	100.0%
	370210027011	Count	73	66	4	143
		% within CBlockGroup	51.0%	46.2%	2.8%	100.0%
	370210027012	Count	59	67	2	128
		% within CBlockGroup	46.1%	52.3%	1.6%	100.0%
	370210027013	Count	2	2	7	11
		% within CBlockGroup	18.2%	18.2%	63.6%	100.0%
	370210027021	Count	48	61	2	111
		% within CBlockGroup	43.2%	55.0%	1.8%	100.0%
	370210027022	Count	34	22	8	64
		% within CBlockGroup	53.1%	34.4%	12.5%	100.0%
	370210027023	Count	120	72	5	197
		% within CBlockGroup	60.9%	36.5%	2.5%	100.0%
	370210027041	Count	50	49	0	99
		% within CBlockGroup	50.5%	49.5%	0.0%	100.0%
	370210027042	Count	78	87	5	170
		% within CBlockGroup	45.9%	51.2%	2.9%	100.0%
	370210027043	Count	19	23	4	46
		% within CBlockGroup	41.3%	50.0%	8.7%	100.0%
	370210027044	Count	85	40	9	134
		% within CBlockGroup	63.4%	29.9%	6.7%	100.0%
	370210027051	Count	32	34	12	78
		% within CBlockGroup	41.0%	43.6%	15.4%	100.0%
	370210028031	Count	41	30	3	74
		% within CBlockGroup	55.4%	40.5%	4.1%	100.0%
	370210028032	Count	13	22	4	39
		% within CBlockGroup	33.3%	56.4%	10.3%	100.0%
	370210028033	Count	67	30	9	106
		% within CBlockGroup	63.2%	28.3%	8.5%	100.0%
	370210028041	Count	15	27	3	45
		% within CBlockGroup	33.3%	60.0%	6.7%	100.0%
	370210028042	Count	43	51	4	98
		% within CBlockGroup	43.9%	52.0%	4.1%	100.0%
	370210028043	Count	58	64	7	129
		% within CBlockGroup	45.0%	49.6%	5.4%	100.0%
	370210029001	Count	38	30	7	75

		% within CBlockGroup	50.7%	40.0%	9.3%	100.0%
	370210029002	Count	13	2	3	18
		% within CBlockGroup	72.2%	11.1%	16.7%	100.0%
	370210029003	Count	11	16	9	36
		% within CBlockGroup	30.6%	44.4%	25.0%	100.0%
	370210030021	Count	51	18	1	70
		% within CBlockGroup	72.9%	25.7%	1.4%	100.0%
	370210030022	Count	27	5	11	43
		% within CBlockGroup	62.8%	11.6%	25.6%	100.0%
	370210030023	Count	20	33	4	57
		% within CBlockGroup	35.1%	57.9%	7.0%	100.0%
	370210030024	Count	150	128	10	288
		% within CBlockGroup	52.1%	44.4%	3.5%	100.0%
	370210030031	Count	63	36	9	108
		% within CBlockGroup	58.3%	33.3%	8.3%	100.0%
	370210030032	Count	59	102	7	168
		% within CBlockGroup	35.1%	60.7%	4.2%	100.0%
	370210030033	Count	44	31	1	76
		% within CBlockGroup	57.9%	40.8%	1.3%	100.0%
	370210030041	Count	23	15	0	38
		% within CBlockGroup	60.5%	39.5%	0.0%	100.0%
	370210030042	Count	42	53	10	105
		% within CBlockGroup	40.0%	50.5%	9.5%	100.0%
	370210031031	Count	103	59	21	183
		% within CBlockGroup	56.3%	32.2%	11.5%	100.0%
	370210031051	Count	36	31	9	76
		% within CBlockGroup	47.4%	40.8%	11.8%	100.0%
	370210031052	Count	55	14	8	77
		% within CBlockGroup	71.4%	18.2%	10.4%	100.0%
	370210031053	Count	57	71	8	136
		% within CBlockGroup	41.9%	52.2%	5.9%	100.0%
	370210031061	Count	47	48	8	103
		% within CBlockGroup	45.6%	46.6%	7.8%	100.0%
	370210031071	Count	56	63	5	124
		% within CBlockGroup	45.2%	50.8%	4.0%	100.0%
	370210031072	Count	15	2	2	19
		% within CBlockGroup	78.9%	10.5%	10.5%	100.0%
	370210031073	Count	39	15	7	61
		% within CBlockGroup	63.9%	24.6%	11.5%	100.0%
	370210031074	Count	47	36	0	83
		% within CBlockGroup	56.6%	43.4%	0.0%	100.0%
	370210031081	Count	43	33	6	82
		% within CBlockGroup	52.4%	40.2%	7.3%	100.0%
	370210032011	Count	52	86	3	141
		% within CBlockGroup	36.9%	61.0%	2.1%	100.0%
	370210032021	Count	29	96	15	140
		% within CBlockGroup	20.7%	68.6%	10.7%	100.0%
	370210032022	Count	23	24	3	50
		% within CBlockGroup	46.0%	48.0%	6.0%	100.0%
	370210032023	Count	36	59	8	103
		% within CBlockGroup	35.0%	57.3%	7.8%	100.0%

	370210032024	Count	17	25	1	43
		% within CBlockGroup	39.5%	58.1%	2.3%	100.0%
	370210032031	Count	32	38	2	72
		% within CBlockGroup	44.4%	52.8%	2.8%	100.0%
	370210032032	Count	18	30	0	48
		% within CBlockGroup	37.5%	62.5%	0.0%	100.0%
	370210032033	Count	129	117	5	251
		% within CBlockGroup	51.4%	46.6%	2.0%	100.0%
	370210032041	Count	51	71	14	136
		% within CBlockGroup	37.5%	52.2%	10.3%	100.0%
	370210032042	Count	44	49	9	102
		% within CBlockGroup	43.1%	48.0%	8.8%	100.0%
	370210032043	Count	55	84	6	145
		% within CBlockGroup	37.9%	57.9%	4.1%	100.0%
	370210032051	Count	60	50	17	127
		% within CBlockGroup	47.2%	39.4%	13.4%	100.0%
Total		Count	8373	6529	946	15848
		% within CBlockGroup	52.8%	41.2%	6.0%	100.0%

Disqualifications by Property Type

			Disqualify			Total
			0	1	2	
SPropertyType	2S	Count	1570	1267	121	2958
		% within SPropertyType	53.1%	42.8%	4.1%	100.0%
	3S	Count	20	29	4	53
		% within SPropertyType	37.7%	54.7%	7.5%	100.0%
	Cc	Count	792	742	74	1608
		% within SPropertyType	49.3%	46.1%	4.6%	100.0%
	Co	Count	183	443	49	675
		% within SPropertyType	27.1%	65.6%	7.3%	100.0%
	Ls	Count	62	71	15	148
		% within SPropertyType	41.9%	48.0%	10.1%	100.0%
	Mh	Count	595	75	185	855
		% within SPropertyType	69.6%	8.8%	21.6%	100.0%
	Mo	Count	405	205	25	635
		% within SPropertyType	63.8%	32.3%	3.9%	100.0%
	Ra	Count	3892	3045	384	7321
		% within SPropertyType	53.2%	41.6%	5.2%	100.0%
	Sp	Count	26	308	13	347
		% within SPropertyType	7.5%	88.8%	3.7%	100.0%
	To	Count	822	326	27	1175

		% within SPropertyType	70.0%	27.7%	2.3%	100.0%
	Un	Count	6	18	49	73
		% within SPropertyType	8.2%	24.7%	67.1%	100.0%
Total		Count	8373	6529	946	15848
		% within SPropertyType	52.8%	41.2%	6.0%	100.0%

Townhouses, Modular and Manufactured Housing have the lowest rates of disqualification. Split levels and Unconventional types have the lowest overall retention rates. A very large percentage of Unconventional types are identified as outliers.

Disqualifications by Size Categories

			Disqualify			
			0	1	2	Total
SSize	Smallest	Count	626	123	160	909
		% within SSize	68.9%	13.5%	17.6%	100.0%
	Small	Count	1713	361	186	2260
		% within SSize	75.8%	16.0%	8.2%	100.0%
	Average	Count	3217	1231	203	4651
		% within SSize	69.2%	26.5%	4.4%	100.0%
	Large	Count	2256	2441	192	4889
		% within SSize	46.1%	49.9%	3.9%	100.0%
	Largest	Count	561	2373	205	3139
		% within SSize	17.9%	75.6%	6.5%	100.0%
Total		Count	8373	6529	946	15848
		% within SSize	52.8%	41.2%	6.0%	100.0%

Disqualifications by Physical Condition

			Disqualify			
			0	1	2	Total
SPhysicalCondition	FAIR	Count	51	42	49	142
		% within SPhysicalCondition	35.9%	29.6%	34.5%	100.0%
	GOOD	Count	1584	1386	146	3116
		% within SPhysicalCondition	50.8%	44.5%	4.7%	100.0%
	NORMAL	Count	5680	4254	599	10533
		% within SPhysicalCondition	53.9%	40.4%	5.7%	100.0%
	POOR	Count	6	6	32	44
		% within SPhysicalCondition	13.6%	13.6%	72.7%	100.0%
	RENOVATED	Count	1051	840	112	2003
		% within SPhysicalCondition	52.5%	41.9%	5.6%	100.0%
	UNSOUND	Count	1	1	8	10
		% within SPhysicalCondition	10.0%	10.0%	80.0%	100.0%
Total		Count	8373	6529	946	15848
		% within SPhysicalCondition	52.8%	41.2%	6.0%	100.0%

Disqualifications by Construction Time Period

			Disqualify 0	Disqualify 1	Disqualify 2	Total
SEra	Pre 1945	Count	1059	498	179	1736
		% within SEra	61.0%	28.7%	10.3%	100.0%
	1946 to 1965	Count	1161	766	134	2061
		% within SEra	56.3%	37.2%	6.5%	100.0%
	1966 to 1985	Count	824	979	148	1951
		% within SEra	42.2%	50.2%	7.6%	100.0%
	1986 to 2005	Count	1959	2441	270	4670
		% within SEra	41.9%	52.3%	5.8%	100.0%
	Post 2005	Count	3370	1845	215	5430
		% within SEra	62.1%	34.0%	4.0%	100.0%
Total		Count	8373	6529	946	15848
		% within SEra	52.8%	41.2%	6.0%	100.0%

Disqualifications by Quality of Construction

			Disqualify 0	Disqualify 1	Disqualify 2	Total
SQuality	AVG	Count	5735	3514	533	9782
		% within SQuality	58.6%	35.9%	5.4%	100.0%
	CUST	Count	2389	2293	205	4887
		% within SQuality	48.9%	46.9%	4.2%	100.0%
	EXCEP	Count	18	111	24	153
		% within SQuality	11.8%	72.5%	15.7%	100.0%
	FAIR	Count	53	51	83	187
		% within SQuality	28.3%	27.3%	44.4%	100.0%
	LUXUR	Count	3	6	14	23
		% within SQuality	13.0%	26.1%	60.9%	100.0%
	POOR	Count	1	1	4	6
		% within SQuality	16.7%	16.7%	66.7%	100.0%
	SUPR	Count	174	553	82	809
		% within SQuality	21.5%	68.4%	10.1%	100.0%
Total		Count	8373	6529	946	15848
		% within SQuality	52.8%	41.2%	6.0%	100.0%

Disqualifications by Income Class

			Disqualify 0	Disqualify 1	Disqualify 2	Total
IncomeClass	Missing Income Data	Count	33	18	4	55
		% within IncomeClass	60.0%	32.7%	7.3%	100.0%
	CBlock Groups with 0 income	Count	358	203	45	606
		% within IncomeClass	59.1%	33.5%	7.4%	100.0%
	LT $47,000	Count	1199	721	149	2069
		% within IncomeClass	58.0%	34.8%	7.2%	100.0%
	$47,000 to $61999	Count	1356	942	160	2458

		% within IncomeClass	55.2%	38.3%	6.5%	100.0%
	$62,000 to $71,999	Count	2125	1494	189	3808
		% within IncomeClass	55.8%	39.2%	5.0%	100.0%
	$72,000 to $90,000	Count	1565	1234	176	2975
		% within IncomeClass	52.6%	41.5%	5.9%	100.0%
	GT $90,000	Count	1737	1917	223	3877
		% within IncomeClass	44.8%	49.4%	5.8%	100.0%
Total		Count	8373	6529	946	15848
		% within IncomeClass	52.8%	41.2%	6.0%	100.0%

Disqualifications by Race Class

			Disqualify			
			0	1	2	Total
RaceClass	Missing Race Data	Count	33	18	4	55
		% within RaceClass	60.0%	32.7%	7.3%	100.0%
	LE 20% Non-White	Count	6327	5125	720	12172
		% within RaceClass	52.0%	42.1%	5.9%	100.0%
	GT 20% to 40% Non-White	Count	1708	1218	177	3103
		% within RaceClass	55.0%	39.3%	5.7%	100.0%
	GT 40% to 70% Non-White	Count	292	168	43	503
		% within RaceClass	58.1%	33.4%	8.5%	100.0%
	GT 70% to 90% Non-White	Count	13	0	2	15
		% within RaceClass	86.7%	0.0%	13.3%	100.0%
Total		Count	8373	6529	946	15848
		% within RaceClass	52.8%	41.2%	6.0%	100.0%

Disqualifications by Race and Income Class

			Disqualify			
			0	1	2	Total
RaceIncomeClass		Count	33	18	4	55
		% within RaceIncomeClass	60.0%	32.7%	7.3%	100.0%
	10	Count	254	106	26	386
		% within RaceIncomeClass	65.8%	27.5%	6.7%	100.0%
	LE 20% Non-White and LT $47,000	Count	684	420	97	1201
		% within RaceIncomeClass	57.0%	35.0%	8.1%	100.0%
	LE 20% Non-White and $47,000 to $61,999	Count	1030	738	125	1893
		% within RaceIncomeClass	54.4%	39.0%	6.6%	100.0%
	LE 20% Non-White and $62,000 to $71,999	Count	1754	1210	142	3106
		% within RaceIncomeClass	56.5%	39.0%	4.6%	100.0%
	LE 20% Non-White and $72,000 to $90,000	Count	1344	1122	154	2620
		% within RaceIncomeClass	51.3%	42.8%	5.9%	100.0%
	LE 20% Non-White and GT $90,000	Count	1261	1529	176	2966
		% within RaceIncomeClass	42.5%	51.6%	5.9%	100.0%
	20	Count	74	67	9	150
		% within RaceIncomeClass	49.3%	44.7%	6.0%	100.0%
	GT 20% to 40% Non-White and LT $47,000	Count	407	230	42	679
		% within RaceIncomeClass	59.9%	33.9%	6.2%	100.0%
	GT 20% to 40% Non-White and $47,000 to $61,999	Count	270	185	21	476
		% within RaceIncomeClass	56.7%	38.9%	4.4%	100.0%
		Count	260	236	36	532

	GT 20% to 40% Non-White and $62,000 to $71,999	% within RaceIncomeClass	48.9%	44.4%	6.8%	100.0%
	GT 20% to 40% Non-White and $72,000 to $90,000	Count	221	112	22	355
		% within RaceIncomeClass	62.3%	31.5%	6.2%	100.0%
	GT 20% to 40% Non-White and GT $90,000	Count	476	388	47	911
		% within RaceIncomeClass	52.3%	42.6%	5.2%	100.0%
	30	Count	30	30	10	70
		% within RaceIncomeClass	42.9%	42.9%	14.3%	100.0%
	GT 40% to 70% Non-White and LT $47,000	Count	108	71	10	189
		% within RaceIncomeClass	57.1%	37.6%	5.3%	100.0%
	GT 40% to 70% Non-White and $47,000 to $61,999	Count	43	19	12	74
		% within RaceIncomeClass	58.1%	25.7%	16.2%	100.0%
	GT 40% to 70% Non-White and $62,000 to $71,999	Count	111	48	11	170
		% within RaceIncomeClass	65.3%	28.2%	6.5%	100.0%
	GT 70% to 90% Non-White and $47,000 to $61,999	Count	13	0	2	15
		% within RaceIncomeClass	86.7%	0.0%	13.3%	100.0%
	Total	Count	8373	6529	946	15848
		% within RaceIncomeClass	52.8%	41.2%	6.0%	100.0%

This table details the disqualification rates for the fourteen valid combinations of race class and income class in the county. The lowest rates of attribute disqualification are in the communities with higher percentages of non-white population and the lower income groups, regardless of race. Conversely the highest rates of outlier disqualification are in these same communities.

Disqualifications by Disadvataged Communities

			Disqualify			
			0	1	2	Total
DISAD	False	Count	8209	6439	922	15570
		% within DISAD	52.7%	41.4%	5.9%	100.0%
	True	Count	164	90	24	278
		% within DISAD	59.0%	32.4%	8.6%	100.0%
Total		Count	8373	6529	946	15848
		% within DISAD	52.8%	41.2%	6.0%	100.0%

This table shows that attribute disqualification rate is lower in the eight Census Block Groups with combined race and income classes 31, 32, 33 and 42 and that outlier disqualification rate is slightly higher in those groups as well.

CBlockGroup * RaceClass Crosstabulation

Count

		RaceClass					
			LE 20% Non-White	GT 20% to 40% Non-White	GT 40% to 70% Non-White	GT 70% to 90% Non-White	Total
CBlockGroup	370210001002	0	0	0	35	0	35
	370210002001	0	0	0	39	0	39
	370210002002	0	48	0	0	0	48
	370210003001	0	0	64	0	0	64
	370210003002	0	41	0	0	0	41
	370210004001	0	69	0	0	0	69

	370210004002	0	29	0	0	0	29
	370210004003	0	46	0	0	0	46
	370210005001	0	94	0	0	0	94
	370210005002	0	0	23	0	0	23
	370210005003	0	110	0	0	0	110
	370210006001	0	58	0	0	0	58
	370210006002	0	59	0	0	0	59
	370210007001	0	0	58	0	0	58
	370210008001	0	0	0	76	0	76
	370210008002	0	0	92	0	0	92
	370210008003	0	77	0	0	0	77
	370210009001	0	0	13	0	0	13
	370210009002	0	0	0	31	0	31
	370210009003	0	0	0	39	0	39
	370210010001	0	179	0	0	0	179
	370210010002	0	0	209	0	0	209
	370210011001	0	0	123	0	0	123
	370210011002	0	158	0	0	0	158
	370210011003	0	133	0	0	0	133
	370210012001	0	89	0	0	0	89
	370210012002	0	66	0	0	0	66
	370210012003	0	61	0	0	0	61
	370210012004	0	96	0	0	0	96
	370210012005	0	20	0	0	0	20
	370210013001	0	0	131	0	0	131
	370210013002	0	0	88	0	0	88
	370210013003	0	115	0	0	0	115
	370210014011	0	0	39	0	0	39
	370210014012	0	0	0	42	0	42
	370210014013	0	0	70	0	0	70
	370210014021	55	0	0	0	0	55
	370210014022	0	0	0	10	0	10
	370210015001	0	109	0	0	0	109
	370210015002	0	43	0	0	0	43
	370210016011	0	90	0	0	0	90
	370210016012	0	131	0	0	0	131
	370210016021	0	130	0	0	0	130
	370210016022	0	62	0	0	0	62
	370210017001	0	85	0	0	0	85
	370210017002	0	116	0	0	0	116
	370210018011	0	53	0	0	0	53
	370210018012	0	0	161	0	0	161
	370210018021	0	61	0	0	0	61
	370210018022	0	164	0	0	0	164
	370210019001	0	127	0	0	0	127
	370210019002	0	61	0	0	0	61
	370210020001	0	0	167	0	0	167
	370210020002	0	145	0	0	0	145
	370210020003	0	0	31	0	0	31
	370210020004	0	0	0	94	0	94
	370210021011	0	98	0	0	0	98

	370210021021	0	184	0	0	0	184
	370210021022	0	0	45	0	0	45
	370210021023	0	0	0	63	0	63
	370210022031	0	0	0	10	0	10
	370210022032	0	201	0	0	0	201
	370210022033	0	0	0	64	0	64
	370210022041	0	232	0	0	0	232
	370210022042	0	48	0	0	0	48
	370210022043	0	54	0	0	0	54
	370210022044	0	0	66	0	0	66
	370210022051	0	0	367	0	0	367
	370210022052	0	169	0	0	0	169
	370210022053	0	91	0	0	0	91
	370210022061	0	168	0	0	0	168
	370210022062	0	119	0	0	0	119
	370210023031	0	137	0	0	0	137
	370210023032	0	112	0	0	0	112
	370210023033	0	64	0	0	0	64
	370210023034	0	0	198	0	0	198
	370210023041	0	0	233	0	0	233
	370210023051	0	199	0	0	0	199
	370210023052	0	180	0	0	0	180
	370210023061	0	252	0	0	0	252
	370210023062	0	0	22	0	0	22
	370210024011	0	0	36	0	0	36
	370210024012	0	0	89	0	0	89
	370210024021	0	70	0	0	0	70
	370210024022	0	0	70	0	0	70
	370210024023	0	48	0	0	0	48
	370210025031	0	102	0	0	0	102
	370210025032	0	64	0	0	0	64
	370210025033	0	43	0	0	0	43
	370210025041	0	153	0	0	0	153
	370210025042	0	61	0	0	0	61
	370210025043	0	90	0	0	0	90
	370210025051	0	222	0	0	0	222
	370210025052	0	53	0	0	0	53
	370210025053	0	143	0	0	0	143
	370210025061	0	141	0	0	0	141
	370210025062	0	53	0	0	0	53
	370210025063	0	0	0	0	15	15
	370210026031	0	102	0	0	0	102
	370210026032	0	38	0	0	0	38
	370210026041	0	71	0	0	0	71
	370210026042	0	104	0	0	0	104
	370210026043	0	93	0	0	0	93
	370210026044	0	176	0	0	0	176
	370210026061	0	50	0	0	0	50
	370210026062	0	0	54	0	0	54
	370210026063	0	0	74	0	0	74
	370210026071	0	104	0	0	0	104

	370210026072	0	109	0	0	0	109
	370210026073	0	67	0	0	0	67
	370210026081	0	22	0	0	0	22
	370210026082	0	24	0	0	0	24
	370210026083	0	36	0	0	0	36
	370210026084	0	0	95	0	0	95
	370210026085	0	71	0	0	0	71
	370210026091	0	0	58	0	0	58
	370210027011	0	1	142	0	0	143
	370210027012	0	128	0	0	0	128
	370210027013	0	0	11	0	0	11
	370210027021	0	111	0	0	0	111
	370210027022	0	64	0	0	0	64
	370210027023	0	197	0	0	0	197
	370210027041	0	99	0	0	0	99
	370210027042	0	170	0	0	0	170
	370210027043	0	46	0	0	0	46
	370210027044	0	134	0	0	0	134
	370210027051	0	78	0	0	0	78
	370210028031	0	74	0	0	0	74
	370210028032	0	39	0	0	0	39
	370210028033	0	0	106	0	0	106
	370210028041	0	45	0	0	0	45
	370210028042	0	98	0	0	0	98
	370210028043	0	129	0	0	0	129
	370210029001	0	75	0	0	0	75
	370210029002	0	18	0	0	0	18
	370210029003	0	36	0	0	0	36
	370210030021	0	70	0	0	0	70
	370210030022	0	43	0	0	0	43
	370210030023	0	57	0	0	0	57
	370210030024	0	288	0	0	0	288
	370210030031	0	108	0	0	0	108
	370210030032	0	0	168	0	0	168
	370210030033	0	76	0	0	0	76
	370210030041	0	38	0	0	0	38
	370210030042	0	105	0	0	0	105
	370210031031	0	183	0	0	0	183
	370210031051	0	76	0	0	0	76
	370210031052	0	77	0	0	0	77
	370210031053	0	136	0	0	0	136
	370210031061	0	103	0	0	0	103
	370210031071	0	124	0	0	0	124
	370210031072	0	19	0	0	0	19
	370210031073	0	61	0	0	0	61
	370210031074	0	83	0	0	0	83
	370210031081	0	82	0	0	0	82
	370210032011	0	141	0	0	0	141
	370210032021	0	140	0	0	0	140
	370210032022	0	50	0	0	0	50
	370210032023	0	103	0	0	0	103

	370210032024	0	43	0	0	0	43
	370210032031	0	72	0	0	0	72
	370210032032	0	48	0	0	0	48
	370210032033	0	251	0	0	0	251
	370210032041	0	136	0	0	0	136
	370210032042	0	102	0	0	0	102
	370210032043	0	145	0	0	0	145
	370210032051	0	127	0	0	0	127
Total		55	12172	3103	503	15	15848

CBlockGroup * IncomeClass Crosstabulation

Count

		IncomeClass							
			0	LT $47,000	$47,000 to $61999	$62,000 to $71,999	$72,000 to $90,000	GT $90,000	Total
CBlockGroup	370210001002	0	0	35	0	0	0	0	35
	370210002001	0	39	0	0	0	0	0	39
	370210002002	0	0	0	0	0	48	0	48
	370210003001	0	0	64	0	0	0	0	64
	370210003002	0	0	0	41	0	0	0	41
	370210004001	0	0	0	0	69	0	0	69
	370210004002	0	0	29	0	0	0	0	29
	370210004003	0	0	46	0	0	0	0	46
	370210005001	0	0	0	0	0	0	94	94
	370210005002	0	0	0	0	0	23	0	23
	370210005003	0	0	0	0	0	0	110	110
	370210006001	0	0	0	0	58	0	0	58
	370210006002	0	0	0	59	0	0	0	59
	370210007001	0	0	0	0	58	0	0	58
	370210008001	0	0	0	0	76	0	0	76
	370210008002	0	92	0	0	0	0	0	92
	370210008003	0	0	0	0	0	0	77	77
	370210009001	0	13	0	0	0	0	0	13
	370210009002	0	31	0	0	0	0	0	31
	370210009003	0	0	39	0	0	0	0	39
	370210010001	0	0	0	0	0	179	0	179
	370210010002	0	0	0	0	0	209	0	209
	370210011001	0	0	0	0	0	123	0	123
	370210011002	0	0	0	0	0	0	158	158
	370210011003	0	0	0	0	0	0	133	133
	370210012001	0	0	0	89	0	0	0	89
	370210012002	0	66	0	0	0	0	0	66
	370210012003	0	0	0	0	61	0	0	61
	370210012004	0	0	0	0	96	0	0	96
	370210012005	0	0	0	0	0	20	0	20
	370210013001	0	0	0	131	0	0	0	131
	370210013002	0	0	0	88	0	0	0	88
	370210013003	0	0	115	0	0	0	0	115
	370210014011	0	0	0	39	0	0	0	39
	370210014012	0	0	42	0	0	0	0	42
	370210014013	0	0	70	0	0	0	0	70

370210014021	55	0	0	0	0	0	0	55
370210014022	0	0	0	10	0	0	0	10
370210015001	0	0	0	109	0	0	0	109
370210015002	0	0	0	43	0	0	0	43
370210016011	0	0	0	0	0	0	90	90
370210016012	0	0	0	0	131	0	0	131
370210016021	0	0	0	0	0	0	130	130
370210016022	0	0	0	62	0	0	0	62
370210017001	0	0	0	0	0	0	85	85
370210017002	0	0	0	0	0	0	116	116
370210018011	0	0	53	0	0	0	0	53
370210018012	0	0	161	0	0	0	0	161
370210018021	0	0	0	0	0	61	0	61
370210018022	0	0	0	0	0	0	164	164
370210019001	0	0	127	0	0	0	0	127
370210019002	0	0	0	61	0	0	0	61
370210020001	0	0	167	0	0	0	0	167
370210020002	0	0	0	145	0	0	0	145
370210020003	0	0	0	31	0	0	0	31
370210020004	0	0	0	0	94	0	0	94
370210021011	0	0	0	0	0	0	98	98
370210021021	0	0	0	0	184	0	0	184
370210021022	0	45	0	0	0	0	0	45
370210021023	0	0	63	0	0	0	0	63
370210022031	0	0	10	0	0	0	0	10
370210022032	0	0	201	0	0	0	0	201
370210022033	0	0	0	64	0	0	0	64
370210022041	0	0	0	0	0	0	232	232
370210022042	0	0	0	0	48	0	0	48
370210022043	0	54	0	0	0	0	0	54
370210022044	0	0	0	0	0	0	66	66
370210022051	0	0	0	0	0	0	367	367
370210022052	0	0	0	0	0	169	0	169
370210022053	0	0	0	0	91	0	0	91
370210022061	0	0	0	0	0	0	168	168
370210022062	0	0	0	0	119	0	0	119
370210023031	0	0	0	0	0	0	137	137
370210023032	0	112	0	0	0	0	0	112
370210023033	0	0	0	0	0	64	0	64
370210023034	0	0	0	0	0	0	198	198
370210023041	0	0	0	0	0	0	233	233
370210023051	0	0	0	0	0	199	0	199
370210023052	0	0	0	0	0	180	0	180
370210023061	0	0	0	0	252	0	0	252
370210023062	0	0	0	22	0	0	0	22
370210024011	0	0	0	0	0	0	36	36
370210024012	0	0	89	0	0	0	0	89
370210024021	0	0	0	70	0	0	0	70
370210024022	0	0	0	70	0	0	0	70
370210024023	0	48	0	0	0	0	0	48
370210025031	0	0	0	102	0	0	0	102

370210025032	0	0	64	0	0	0	0	64
370210025033	0	0	0	43	0	0	0	43
370210025041	0	0	153	0	0	0	0	153
370210025042	0	0	0	0	61	0	0	61
370210025043	0	0	0	0	0	90	0	90
370210025051	0	0	0	0	222	0	0	222
370210025052	0	0	0	0	0	0	53	53
370210025053	0	0	0	0	0	0	143	143
370210025061	0	0	0	0	141	0	0	141
370210025062	0	0	53	0	0	0	0	53
370210025063	0	0	0	15	0	0	0	15
370210026031	0	0	0	102	0	0	0	102
370210026032	0	0	38	0	0	0	0	38
370210026041	0	0	0	0	0	71	0	71
370210026042	0	0	0	0	0	104	0	104
370210026043	0	0	0	93	0	0	0	93
370210026044	0	0	0	0	176	0	0	176
370210026061	0	0	0	0	0	50	0	50
370210026062	0	0	54	0	0	0	0	54
370210026063	0	0	74	0	0	0	0	74
370210026071	0	0	0	104	0	0	0	104
370210026072	0	0	0	0	109	0	0	109
370210026073	0	0	0	0	0	0	67	67
370210026081	0	0	0	0	22	0	0	22
370210026082	0	24	0	0	0	0	0	24
370210026083	0	0	0	36	0	0	0	36
370210026084	0	0	0	95	0	0	0	95
370210026085	0	0	0	71	0	0	0	71
370210026091	0	0	0	0	58	0	0	58
370210027011	0	0	0	0	143	0	0	143
370210027012	0	0	0	0	0	128	0	128
370210027013	0	0	0	0	0	0	11	11
370210027021	0	0	0	0	0	0	111	111
370210027022	0	0	64	0	0	0	0	64
370210027023	0	0	0	0	197	0	0	197
370210027041	0	0	0	0	0	0	99	99
370210027042	0	0	0	0	170	0	0	170
370210027043	0	0	0	0	0	46	0	46
370210027044	0	0	0	0	0	134	0	134
370210027051	0	0	0	0	0	78	0	78
370210028031	0	0	0	74	0	0	0	74
370210028032	0	0	0	0	39	0	0	39
370210028033	0	0	0	0	106	0	0	106
370210028041	0	0	0	45	0	0	0	45
370210028042	0	0	0	0	0	0	98	98
370210028043	0	0	0	0	129	0	0	129
370210029001	0	0	0	0	0	75	0	75
370210029002	0	0	0	0	18	0	0	18
370210029003	0	0	36	0	0	0	0	36
370210030021	0	0	0	0	0	70	0	70
370210030022	0	0	0	0	43	0	0	43

	370210030023	0	0	0	57	0	0	0	57
	370210030024	0	0	0	0	288	0	0	288
	370210030031	0	0	0	0	0	108	0	108
	370210030032	0	0	0	0	168	0	0	168
	370210030033	0	0	76	0	0	0	0	76
	370210030041	0	0	0	0	38	0	0	38
	370210030042	0	0	0	0	105	0	0	105
	370210031031	0	0	0	0	0	183	0	183
	370210031051	0	0	0	0	0	76	0	76
	370210031052	0	0	0	0	0	77	0	77
	370210031053	0	0	0	0	136	0	0	136
	370210031061	0	0	0	103	0	0	0	103
	370210031071	0	0	0	0	0	0	124	124
	370210031072	0	0	19	0	0	0	0	19
	370210031073	0	0	0	0	0	61	0	61
	370210031074	0	0	0	83	0	0	0	83
	370210031081	0	82	0	0	0	0	0	82
	370210032011	0	0	0	0	0	141	0	141
	370210032021	0	0	0	0	0	0	140	140
	370210032022	0	0	0	50	0	0	0	50
	370210032023	0	0	0	0	0	0	103	103
	370210032024	0	0	0	0	0	0	43	43
	370210032031	0	0	0	0	0	72	0	72
	370210032032	0	0	0	0	0	0	48	48
	370210032033	0	0	0	251	0	0	0	251
	370210032041	0	0	0	0	0	136	0	136
	370210032042	0	0	0	0	102	0	0	102
	370210032043	0	0	0	0	0	0	145	145
	370210032051	0	0	127	0	0	0	0	127
Total		55	606	2069	2458	3808	2975	3877	15848