Understanding the Comparable Sales Report

The scope of this guide does not include a detailed explanation of multiple regression analysis (MRA). The intent is to provide very basic guidelines to build an understanding of the concept of a basic market model.

A short manual cannot fully explain the statistical process of multiple linear regression. The scope of this section is to introduce a few basic statistical measures.

A market model is a statistical model that is designed to predict sale price in a market segment. The model is built using sales and then can be used to predict the value of unsold properties. Orion builds a market model using constrained multiple linear regression. The dependent variable in the model is almost always sale price. The characteristics used to predict sale price must be pulled into market variables and are put into the model as independent variables.

Adjustments: Comparable Sales Report Grid

- Sales are adjusted to the subject. If the sale (comparable) is better than the subject, the sale price is adjusted downward. If the sale is not as good as the subject, the sale price is adjusted upward.

- Say for example that the adjustment for square feet of living area is $80/SF. If the subject property is 1500 SF and the sale property is 1600 SF, the adjustment amount is 100 * 80 = 8000. Since the sale is larger than the subject, the $8,000 will be subtracted from the sale price to get an adjusted sale price.

- In other words, the adjusted sale price *represents what the sale property would have sold for had it been like the subject property*.

- Calculating Adjustments. The Calculation rule: When computing the total adjustment using the MRA coefficients, the calculation rule applied in Orion is to subtract the MRA of the sale from the MRA of the subject and add the difference to the actual sale price of the sale. The internal precision of the MRA estimate is greater than the integer shown on the page, so there may be rounding differences.

To compute the adjustment for one variable, determine or compute the variable for the sale and the subject, apply the adjustment (coefficient) and subtract the Sale from the Subject value. In effect, this is computing one term in the model for the sale and the subject.

For example, assume the coefficient for plumbing fixtures in extra bath rooms is $800 per fixture. If the subject has an extra half bath (2 fixtures), the value on this variable is 2 * 800 = 1,600. If Comp 1 has an extra full bath (3 fixtures), the value on this variable is 3 * 800 – 2,400. The adjustment for extra plumbing fixtures for comp 1 is 1,600 – 2,400 = -800.

For another example, say that the AgeSF (coefficient) factor is -.02. If the subject is 5 years old and has 1500 SF, the AgeSF value is 5 * 1500* -*.02 = -150. Say Comp 1 is 7 years old and also is 1500 SF. AgeSF value for comp 1 is 7 * 1500 * -.02 = -210.

The AgeSF adjustment for Comp 1 is -150 – (-210) = 60.

For example:

- Subject Market Average (MRA) = 286,874 Comp 1 MRA = 274,716

  286,874 – 274,716 = 12,158. Comp 1 sale price is 250,454.

  Comp 1 Adjusted Sale Price is 250,454 + 12,158 = 262,612.

- Comp 2 Difference in the MRAs is 286,874 – 327,269 = -40,395.

Comp 2 Adjusted Sale price is 275,600 – 40,395 = 235,205.

This process is followed for each comparable.

Comparable Sales Report

Tax Year: 2014

For Property: Comp Sheet Format: Residential Comparable Adjusted   Market Area: Residential Lamar

	Subject	Comp1	Comp2	Comp3	Comp4	Comp5
Quick Ref	R.	R.	R:	R	R	R
Address	Dermott Ridge	Reston Point DR	Wynfield Springs	Ellison Ridge DR	Hamden Valley	Felton Mills CT
Subdivision	2248-02	2248-02	2248-02	2248-01	2248-01	2248-02
School District	S01	S01	S01	S01	S01	S01
Neighborhood	1339	1339	1339	1339	1339	1339
Neighborhood Group	128	128	128	128	128	128
Bldg Value	183,850	179,370	195,010	201,490	185,600	197,380
Land Value	46,000	48,500	66,170	42,320	46,000	61,950
Total Value	229,850	227,870	261,180	243,810	231,600	259,330
Class	RG1	RG1	RG1	RG1	RG1	RG1
CDU	4	4	4	4	4	4
Total Living Area	2828	2648	3123	3020	2594	3075
Year Built	2010	2013	2009	2012	2012	2010
Garage-Att/Det/Carport	642 / 0	690 / 0	484 / 0	500 / 0	660 / 0	525 / 0
Porch-Open/Enclosed/Screen	304 / 0 / 0	277 / 0 / 0	269 / 0 / 0	242 / 0 / 0	221 / 0 / 0	267 / 0 / 0
Patio/Deck	91 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0
Pool/Spa	0/0	0/0	0/0	0/0	0/0	0/0
Sale Date		9/19/2013	3/31/2014	4/25/2013	5/10/2013	11/2/2012
Sale Price	$0	$250,454	$275,600	$232,000	$238,000	$252,000
Months from Appraisal Date	0	4	-2	9	8	14
Sale Price per Square Foot		$94.58	$88.25	$76.82	$91.75	$81.95
ADJUSTMENTS						
Time		$7,224	-$4,260	$18,537	$14,153	$29,360
Land		-$2,500	-$20,170	$3,680	$0	-$15,950
Age		-1,733	861	-1,054	-1,225	198
Living Area		$10,420	-$17,062	-$11,125	$13,533	-$14,280
Plumbing Fixtures		-$3,171	-$9,513	-$9,513	-$9,513	-$9,513
Garage-Attached		-$1,672	$5,491	$4,942	-$624	$4,068
Garage-Detached		$0	$0	$0	$0	$0
Carport		$0	$0	$0	$0	$0
Deck		$0	$0	$0	$0	$0
Patio		$1,337	$1,337	$1,337	$1,337	$1,337
Porches		$2,252	$2,920	$5,172	$6,924	$3,087
Pool		$0	$0	$0	$0	$0
Spa		$0	$0	$0	$0	$0
Market Average	$286,874	$274,716	$327,269	$274,898	$262,288	$288,567
Weighted Average	$251,267					
Adjusted Sale Price	$0	$262,611	$235,205	$243,976	$262,586	$250,307
Market Value	$254,720					
Comparability		399	409	450	457	488

Comparable Sales Value

Using the Comparable Sales Report on the previous page:

- Based on the selections in the Market Setup parameters, the rule for computing indicated Market Value when there are five comparable sales is:

- Get the five adjusted sale prices, the Market Average (MRA estimate) of the subject and the Weighted Average.

- From these seven estimates of value discard the two high and two low and take the mean average of the remaining three.

Comp 1 Adj Price	Comp 2 Adj Price	Comp 3 Adj Price	Comp 4 Adj Price	Comp 5 Adj Price	Subject Market Average	Weighted Average
$262,611	$235,205	$243,976	$262,586	$250,307	$286,874	$251,267

Discard two high and two low estimates: ~~262,611~~ ~~235,205~~ ~~243,976~~, 262,586 250,307 ~~286,874~~ 251,267

Average the remaining three: (262,586 + 250,307 + 251,267) / 3 = 254,720

Round to nearest 10: $254,720

Comparable Sales Report Tax Year: 2014

For Property:		Comp Sheet Format: Residential Comparable Adjusted		Market Area:	Residential Lamar		
	Subject		**Comp1**		**Comp2**		**Comp3**
Quick Ref	R		R		R		R
Sale Price	$0		$665,000		$779,000		$712,000
Market Average	$833,909		$698,855		$693,334		$639,292
Weighted Average	$873,279						
Adjusted Sale Price	$0		$800,054		$919,575		$906,617
Market Value	$871,270						
Comparability			1,238		1,277		1,319

In a case where there are only three comparables, as shown above, the rule for computing indicated Market Value is:

- Get the three adjusted sale prices, the Market Average (MRA estimate) of the subject and the Weighted Average.

- From these five estimates of value discard the highest and lowest and take the mean average of the remaining three.

Discard the highest and lowest estimates: ~~800,054~~ ~~919,575~~ 906,617 833,909 873,279

Average the remaining three: (906,617 + 833,909 + 873,279) / 3 = 871,268

Round to nearest 10: $871,270