The Direct Comparison Approach is based on the premise of the "Principle of Substitution" which implies that a rational investor or purchaser will pay no more for a particular property than the cost of acquiring another similar property with the same utility. Therefore, prices that are paid or listed for similar or comparative properties should indicate the market value of a given property. After all, the underlying role of the valuer is to predict human behaviour, and this can be accomplished based upon the inference from past transactions. The best guide to how a buyer might behave in the future is to clearly ascertain what they have done in the past. However, it is not just the motivations of any group of buyers that should be ascertained, but those of that particular group which is most likely to buy a property having the productive features exhibited by the property under appraisal.

Unfortunately, it is rare to find index properties that are identical to that of the subject property. Identical properties to that of the subject might exist but they may not have currently sold. Despite the fact that identical index properties may not be located in the market place, similar index or listed properties can still be used in the analysis. Inference from past transactions is best used under the following circumstances.

1. There must be a useful number of qualified transactions to infer from.
2. The circumstances surrounded each transaction should be known.
3. Market conditions should be stable and similar to the market situation at present.
4. The forecast of most probable price or value is not required in the too distant future.

After a sufficient quantity of transactions are located, specific elements about and surrounding the indexes as well as the subject property should be known. These elements are as follows.

- Property rights conveyed by the transaction,
- The financing terms,
- Motivation by either the buyer or seller,
- Market Conditions,
- Location,
Physical characteristics.

The search for indexes throughout the City of London was conducted by reviewing several database sources: (1) the Multiple Listing Service (where available), Teela (where available), other valuers and the Internet. The selection of the indexes to be used in the report was based on the following parameters,

- Indexes that are located in a similar area,
- Indexes that are of a similar size,
- Indexes of buildings in similar condition to that of the subject,
- Indexes of buildings with similar use potential.

During the course of searching for data there were many indexes considered but there has only been a few indexes that comprised of units near or over 200 units.

The following schedule are of indexes chosen to provide evidence as to the subject property's value by direct comparison. These indexes do not represent the entire population of such indexes but a sampling that should model the behaviour of future buyers.

<table>
<thead>
<tr>
<th></th>
<th>680 Wonderland Road North, London</th>
<th>Date of Sale: January 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Sale Price: $7,550,000</td>
</tr>
</tbody>
</table>

The 2.4 acre site was improved with a 12 storey highrise apartment buildings containing a total of 140 units. The buildings were in good condition at the time of the sale. The building was built in 1982. Economic details of this transaction indicate a GIM of 6.3 and an adjusted overall capitalization rate of 8.1%. The equity dividend rate on this transaction was 8.46% with a cash down payment of approximately 55%. The purchasers later took out a second mortgage after the sale. The selling price per unit was $53,929.

|   | 1570 Adelaide Street North, London | Date of Sale: January 2002 |
The 0.75 acre site was improved with a 12 storey 117 unit highrise apartment building. The building was in very good condition at the time of the sale. The building were built in 1975. Economic details of this transaction indicate a GIM of 5.23 and an adjusted overall capitalization rate of 8.1%. The equity dividend rate on this sale was 8.1% with a cashdown of 44%. The purchaser took out a second mortgage after the transaction was completed. The selling price per unit was $38,402.

<table>
<thead>
<tr>
<th></th>
<th>2520 Barton Street East and 45 Barlake Avenue, Hamilton</th>
<th>May 2002</th>
<th>$11,800,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The 1.93 acre site was improved with two seven storey highrise apartment buildings containing a total of 294 units. The building was in fair to average condition at the time of the sale. The building was built in 1978. Economic details of this transaction indicate a GIM of 5.09 and an adjusted overall capitalization rate of 8.86%. The equity dividend rate of this sale was 17.0% and the cashdown represented 19% of the purchase price. There were insufficient details of the mortgage financing to ascertain an equity dividend rate. The selling price per unit was $40,136.

<table>
<thead>
<tr>
<th></th>
<th>125 Wellington Street, Hamilton</th>
<th>Date of Sale: March 2002</th>
<th>Sale Price: $8,200,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The 1.747 acre site was improved with an 18 and 6 storey highrise apartment building containing a total of 268 units. The building suffered from high vacancy, tenant turnovers and also physical deficiencies at the time of the sale. The building was built in 1977. Economic details of this transaction indicate a GIM of 3.72 and an adjusted overall capitalization rate of 10.4%. There were insufficient details of the mortgage financing to ascertain an equity dividend rate. The selling price per unit was $30,597.

The following tables summarizes the units of comparison considered in the appraisal process.
Index Commentary

The four indexes had a selling price per unit rate between $30,597 to $53,929. This represents a spread of approximately 76.0% and is the result of differences between the indexes. In order for these indexes to be meaningful to the subject property, the types of variables that have caused the index prices to occur need to be identified. These variables must provide the basis for the adjustment process since variations between the subject property and the indexes exist.

Purpose of the Adjustment Process

The goal of making adjustments to the indexes is threefold:

(a) Explain the variance in the actual selling prices of the index properties.

(b) Determine an “adjusted” selling price (unit of comparison such as the price per unit) with as low a variance as possible.

(c) Provide verification that the “Adjusted” selling price range for the subject property is realistic through residual testing of the comparable indexes.

Adjustment Process

Although this method of inference from previous transactions is deemed to be reliable
method of imputing probable value it is not an easy process. No two indexes are ever similar, the availability of information is scare, buyers and sellers are rarely informed, motivations and bargaining positions differ. Despite these shortcomings there are patterns of regularity that can be demonstrated and much of the dispersion between the indexes can be accounted for.

The difficulty with analysing data of this type from an appraisal perspective is the adjustment of differences between the indexes and the subject property. There are a number of methods by which adjustments are made to the indexes. These are outlined as follows.

(1) Commentary and Impression

This method of adjustments tries to identify the most relevant features between the subject property and the indexes. These features are then compared to the subject property using a mental process with the ultimate emerging of value based upon the evidence of the indexes. This methodology may appear to be reasonable and is based upon years of experience but it suffers from many shortfalls. This method of weighing features of properties cannot be taught or communicated because there is no solid foundation for which these “mental” acts of adjustments occur. The conclusion is that since this method cannot be taught or communicated to a client in a manner that convinces them of the logical basis whereby the duty of care owed to them has been completed this method has no place in the valuation of real estate. Unfortunately, this method is a very common practice in both Canada and the USA.

(2) The Adjustment Grid Method

Within appraisal text books this is the method that is the most common. This traditional appraisal methodology would indicate that adjustments for location, site size, etc., are based upon Paired Indexes Method of analysis. Under the Paired Indexes Method, two almost identical indexes are required. The indexes have to be identical with the exception of the difference that requires measuring. Thus, the appraiser is able to extract from these two identical indexes an adjusted amount and apply it to the necessary index. This procedure is generally applied repeatedly until all the necessary differences between the indexes are accounted for. The layout of this method is generally an adjustment grid that shows the various variables and the appropriate +-% or +/-$ adjustment figure.

Unfortunately, the real estate market rarely provides the valuer with this opportunity. More often, the market indexes are vastly different from each another with the exception that the indexes are of a similar use. These types of market conditions generally provide for a poor basis of a Paired Indexes Method. The more recent trend in this method is the use of Qualitative and Quantitative variables and the use of words to describe the differences
between the subject property and the indexes. If a given index had a better location then the subject property the word Superior would be in the adjustment grid box for that variable. If a index had an inferior quality then the word Inferior would appear adjacent to the variable. All of these words are then added up and the indexes that would have the most amount of Superior characteristics would represent the upper end of the value range for the subject property.

The same process would apply to the indexes with either Similar or Inferior characteristics. This method is a step forward from the Paired Indexes method. The problem with this method is that although words convey some information about the indexes, they are not likely to be interpreted as precisely as statements using numbers based upon standard operations. No test on the words could be performed about the indexes that would indicate the rates of Superior, Similar, and Inferior are correct. A prime example is the comparison between a sale having a 1,000 square feet building and the subject property with a 1,500 square foot building. This index would have to be given a rating of Inferior for the variable Building Size because it is smaller than the subject. However, there is nothing built into this valuation model to test to determine if building size was a factor at all. There is also the concern of bias on the behalf of the valuer which could be very unintentional.

(3) The Quality Point Rating System (QP)

The QP Method recognizes differences between the indexes and the subject property that must be explained. The Dollar or Percentage Adjustment Method requires that the evidence for any differences between the indexes and the subject should come from within the marketplace in the form of a paired sales comparison. The QP also acknowledges differences between the indexes and the subject property, but adjusts the difference in terms of the characteristics of the property (indexes and the subject) that ultimately produce value.

The main advantage of the QP over the other methods is that it does not require paired indexes nor is it based upon educated guesses. In other words, the focus of the QP model is not in determining market differences but in the nature of the characteristics that influence value. The emphasis is not on the difference in terms of dollars but in the fact that the difference exists.

The accuracy of the QP model is in the prediction of the selling prices of the indexes. If the model cannot accurately predict the selling price of the indexes, then it cannot accurately determine a value for the subject property. If a wrong score is applied to too many of the indexes’ characteristics, then the predicted value of the indexes will be too high or too low. The result will be an incorrect value for the subject property. Since one index does not create value, a higher or lower than normal spread can still be incorporated into the average selling prices of all other indexes used in the analysis. Therefore, any “outliers” still remain in the data base but are “blended” into the indexes analysis.
(4) Multiple Variate Regression Analysis

Single Linear Regression analysis is a means for building models that describe how variation in one set of measurements affects variation in another set. In its simplest form, regression analysis involves two variables. The analyst forms a hypothesis that one variable is dependent on or responds to another variable (independent or predictor variable). In real estate value analysis, the dependent variable is often the sale price of a property in total or on a price per unit basis. The independent or predictor variable can be a characteristic of the property that is believed to have an influence on the dependent variable-sale price in this example. Aided by a computer with the ability to perform many calculations quickly, regression analysis provides a systematic method for building an equation that summarizes the relationship between the two variables. The resultant equation can then be used for the prediction of value.

Multiple Regression Analysis (MRA) extends the idea of a two variable linear regression model by allowing an analyst to include many explanatory factors to the regression equation. As in simple linear regression, a regression coefficient measures the impact of changes in each explanatory variable on the response variable. In MRA, the coefficient for each variable represents the impact of that variable on the dependent variable while holding the affect of all the other variables constant. In addition to its usefulness in prediction, this allows the use of MRA as an exploratory tool where the coefficients can be interpreted as a level of contribution of the predictor variable.

An MRA model can be specified that reduces the many characteristics of a index into values for different variables. A regression run on a complete data base can then generate coefficients for the variables. The valuer’s expertise in deciphering or interpreting these coefficients will lead to a conclusion as to the appropriate values.

Regression analysis is based on a number of assumptions as to the nature of the underlying data. The use of mathematical statistics allows the analyst to perform many diagnostic tests on the specified model to assess the level to which the assumptions are met. This allows the analyst to explicitly state the level of confidence that can be given to the results of regression modeling. The recipients of the findings of such analysis can then make better informed decisions. This type of analysis is not available to the more traditional appraisal techniques.

The best use of a multiple regression approach is either when it is imperative to isolate a specific real estate variable that is not easily definable in the market place or to make adjustments for an adjustment grid. The main problem with this approach is that it requires a larger sampling of indexes and the interpretation of coefficients could lead to a wrong conclusion.
Type of Approach to be Used in the Direct Comparison Approach to Value

The appraiser has elected to use a Quality Point Method of analysis within the Direct Comparison Approach.

The Quality Point Method (QPM)

The first stage is to select appropriate variables that would be deemed important in explaining the variation in the selling prices of the data set. There are no set rules in determining the best variables but generally the selection process is based upon the type of data under analysis. Similarly, the number of variables are limitless. However, generally five to seven variables are more than adequate for comparative analysis.

A summary of the comparison and ranking procedure applied to the indexes and the subject property is outlined as follows:

1. The selling prices of the indexes are reduced to a similar unit of comparison. In this case, the selling price per unit.

2. The unit selling price is adjusted for non-quality variables such as property rights conveyed, market conditions, and motivation, for example, which allows the indexes to be truly comparable to the subject property.

3. The quality variables of the indexes which best explain the differences of the sale price are identified and appropriately weighted for their relative importance.

4. The index properties are independently assigned quality points for those variables that best explain their selling price. Each assignment of quality points for a particular variable is multiplied by the weight given to that particular attribute. These weighted variable sets are totalled to provide a single composite score for each property.

One method of using these quality rankings as a price predictor is by their conversion into numeric values. In other words, the quality ranking score is converted into a similar unit of measure. This is accomplished by taking the selling price per unit for each index after adjustments for different price variables and then dividing by its total weighted quality score to indicate the price per quality point per unit. These quality per point per unit scores are then
analysed for their average price (mean/central tendency) and dispersion (one standard deviation) and are then applied to the subject’s quality points for a value range determination and probable selling price based on the mean or average.

Quantitative Analysis

Market Conditions

The date of sale is associated with the market conditions prevailing at the time the transaction occurred. Market conditions may change from the time period between the date of sale and the effective date of the appraisal. There is no evidence that this type of real estate product has increased or decreased in value because of time.

Property Rights Conveyed

The rights examined in this analysis are those associated with a fee simple interest together with the leasehold interest of the tenants. These rights would be similar to the subject property.

Financing Terms

This analysis assumes that no unusual financing terms existed at the selling date of the sales and at the time of this appraisal.

Motivation

There was no motivation of the indexes that would warrant an adjustment.

Qualitative Analysis

For this data set, seven attributes for multi-family properties were identified that aid in explaining the variance in the range of the selling prices of the indexes. Each attribute is scored between one and seven. An ordinal scale of (1-2-3-4-5-6-7) will be used to score the comparables and the subject property. The score of seven does not mean that particular attribute of an index is seven times superior than a score of one. There is no value associated with the different scores. The scores represent membership only. The variation within the ordinal scale reflects the difference in quality of a given attribute or variable.
<table>
<thead>
<tr>
<th>Rating</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>7</td>
</tr>
<tr>
<td>Very Good</td>
<td>6</td>
</tr>
<tr>
<td>Good</td>
<td>5</td>
</tr>
<tr>
<td>Slightly Above Average</td>
<td>4</td>
</tr>
<tr>
<td>Average</td>
<td>3</td>
</tr>
<tr>
<td>Slightly Below Average</td>
<td>2</td>
</tr>
<tr>
<td>Fair</td>
<td>1</td>
</tr>
</tbody>
</table>

Scoring of the Index Properties

The following is the rationale for scoring the index properties.

**Location General**

This variable was included to determine if location play a role in determining the variation of the selling prices of the indexes. Indexes #1 and #2 were given scores of 6 each. These properties are very well located and near major intersections. Index #3 is located in the easterly part of Hamilton in an area that is deemed to be run down. This property was given a score of 2. Index #4 was given a score of 1. It is located in an area of east Hamilton that would be deemed worse than Index #3.

**Unit Mix**

Unit Mix represents a possible characteristic that explains the variation in the selling prices of the comparables. All the sales had a reasonable mix of units. Consequently, there is no evidence to support that the comparables should not be scored anything other than a 3 for average.

**Lot Size**

Lot Size might be an explanatory variable of price within the data set. The average lot size of the four comparables
is 1.71 acres. Index #1 was given a score of 4 because it had a lot size that is slightly larger than the average. Index #2 had a lot size that was smaller than the average and was given a score of 2. Indexes #3 and #4 had lot sizes that were near the average and were given scores of 3 each.

**Condition**

This variable is self explanatory. Indexes #1 and #2 were considered to be in good condition and were given a score of 5 each. Index #3 was reported to have a mixed condition but overall it was deemed to be in average condition. Index #4 had a condition that would be deemed to be well below average and was given a score of 1.

**Use Potential**

This variable is determining if the uses that the comparable properties could be used for has any impact on explaining and reducing the variation in the selling prices of the comparables. All the sales were improved with multi-family type properties and their zonings did not indicate and other uses. All the sales were given a score of 3 for average.

**Marketability**

This variable is concerned about the supply and demand aspects of the subject property that incorporates, location (neighbourhood/adjacent property), the physical characteristics of the subject property relative to potential buyers in the market place. Indexes #1 and #2 have very strong marketable characteristics. The buildings are in good condition, well situation and tenanted. These two sales were given a score of 7 each. Index #3 was given a score of 3 for average. The location is not strong and the condition of the property is only deemed to be average. Index #4 would have the poorest marketability because of the condition, high vacancy and deferred maintenance with the property. This index was given a score of 1.

**NOI per Unit**

The average NOI per unit of the indexes was $3,550. Index #1 had a NOI per unit that was slightly higher than
the average and was given a score of 4. Index #3 had a NOI per unit that was near the average and was given a score of 3. Indexes #2 and #4 had average NOI per unit that was below the average and was given scores of 2 each.

Quality Score Weighing

The scoring of the variables is based upon two factors:

(a) The specific average differences of some attributes between the indexes.
(b) Judgement based upon the best information about the indexes.

The different scores of the variables (1-2-3-4-5-6-7) produce a weight for each of the variables. This weight is in effect the importance that each of the variables played in determining the adjusted selling price per unit of the comparable indexes. These weights are expressed as a percentage. These weights are determined by using a Mathematical Solver program that is specifically designed to calculate the lowest difference between two numbers. The solver is calculating the optimum weight for each variable that represents the lowest difference between the selling prices of the indexes. An adjusted selling price per unit of comparison is known as the Adjusted Price Per Point Per Unit because these weights are multiplied by each score (1-2-3-4-5-6-7) of the variables, then added together, and divided into the selling price per unit of each index. It is important to review what these weights tell the valuer about the importance of each of the variables of the indexes. Below are the weights allocated to the variables based upon the scoring (1-2-3-4-5-6-7) of the variables and the valuer’s judgement for each index.

<table>
<thead>
<tr>
<th>Weights</th>
<th>( x 0.05 )</th>
<th>( x 0.09 )</th>
<th>( x 0.16 )</th>
<th>( x 0.05 )</th>
<th>( x 0.17 )</th>
<th>( x 0.43 )</th>
<th>( 1.00 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Location</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit Mix</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lot Size</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Condition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use Potential</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Operating Income Per Unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Weighted Quality Points</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Of all the variables considered in the Direct Comparison process, the variable Net Operating Income Per Unit attracted the largest weight. Although, this might not be considered unusual, it does reflect the importance of income. However, the other characteristics also influence value and should be considered as well. The variables Lot Size and Use Potential attracted significantly large weights which was a surprise to the valuer. Understandably, the variables General Location, Unit Mix, Marketability attracted small weights but there maybe some overlapping (multi-collinarity) occurring between these variables and the variable Net Operating Income Per Unit.

**Testing the Quality Point (QP)**

The valuer has scored (1-2-3-4-5-6-7) the variables of each index and has used a Solver to aid in calculating an adjusted selling price per unit per point. Even though the Solver program produces an adjusted selling price per point per unit, the valuer does not know if this adjusted selling price per point per unit is accurate since they were based upon judgement and the averages of some variables. The values does not know if the “adjustments” (1-2-3-4-5-6-7) are correct.

In order to determine whether or not the valuer made the correct choices in the scoring of the variables, a test called a “Residual Test” will be performed. “Residual” means “left over”. The “residual” or “left over” will be the difference between the actual selling price of the comparable indexes and their predicted price. This “Residential Test” is shown on the spreadsheet as the **Prediction Residual Analysis**. If there is too much “residual” or “left over” between the selling prices of the indexes and their predicted selling prices than the scores (1-2-3-4-5-6-7) and the adjusted selling price per point per unit range are incorrect. However, this needs to be qualified and can reflect the type of property that is under appraisement as well as the differences between the units of comparison of the indexes.

The testing process for the QP is extremely important because not all the scoring is based upon a mathematical average of the various attributes. Dr. Whipple who teaches out of Curtin University in Australia said it best about the residual analysis of the QP model.

“Finally, residual analysis is a most important component of the technique. The assumption underlying the sales comparison approach is that recent buyer behaviour toward comparable sold properties will be the same as for the subject property. Residual analysis shows how well the model replicates the prices fetched for the comparable. If the replication is good, then the expectation is that it will produce an acceptable prediction of price for the subject property if the analogy has been validly constructed. Few valuers test the logic they adopt on actual transactions—this method allows them to do so and is a most desirable feature. The ultimate test of any method is the extend to which it produces results consistent with reality”. 
Since the weights produced by the Solver are directly related to the predicted scores of the indexes it is important to review the weighted outcomes of the QP model. On the opposite page is the Quality Point Rating Analysis Grid. After the predicted index prices of the indexes were determined, the results were compared to their actual selling prices. The results are shown below:

<table>
<thead>
<tr>
<th>Index No.</th>
<th>Selling Price Per Unit</th>
<th>Predicted Selling Price Per Unit</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$53,928.57</td>
<td>$54,279.32</td>
<td>-0.65%</td>
</tr>
<tr>
<td>2</td>
<td>$38,401.71</td>
<td>$38,578.03</td>
<td>-0.46%</td>
</tr>
<tr>
<td>3</td>
<td>$40,136.05</td>
<td>$39,699.89</td>
<td>1.09%</td>
</tr>
<tr>
<td>4</td>
<td>$30,597.01</td>
<td>$30,595.61</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

The QP Model predicts the value of the four indexes within 0.00% to 1.09%. Considering the type of indexes that was used in the report, the results are within acceptable valuation parameters and could not be obtained by the traditional Direct Comparison Approach to Value (paired-indexes, superior/similar/inferior) methods of adjustments.

Since the scoring of the indexes has predicted a value for each sale (0.55% on average), then the same scoring method can be applied to the subject property for a prediction of value.

**Scoring of the Subject Property**

The following is the rationale for scoring the subject property.

- **Location General**: This variable was included to determine if location play a role in determining the variation of the selling prices of the indexes. The subject property is deemed to be in an area that is considered only average. Therefore, this variable has been given a score of 3.

- **Unit Mix**: Unit Mix represents a possible characteristic that
explains the variation in the selling prices of the comparables. There is nothing negative or positive with the subject property that would suggest a score lower or higher than a 3 in this regard.

**Lot Size**
Lot Size might be an explanatory variable of price within the data set. The average lot size of the four comparables is 1.71 acres. The subject property has a lot size that is much greater than the comparables. It is not reasonable to give the subject property a score of 7 in this regard because the densities of the comparables relative to the subject property are different. The density of the subject property is 13.79 units per acre. Typical densities for townhouse units in the City of London are 12 units per acre according to the Official Plan. This does indicate that the density or overall lot size relative to the real estate product is slightly greater than the average and should be given a score of 4.

**Condition**
This variable is self explanatory. The overall condition of the subject project is considered to be average (3). This would take into consideration the new roofs, boilers, the general condition of the units and the deferred maintenance which would be completed over the short term to medium term.

**Use Potential**
This variable is determining if the uses that the comparable properties could be used for has any impact on explaining and reducing the variation in the selling prices of the comparables. All the sales were improved with multi-family type properties and their zonings did not indicate and other uses. All the sales were given a score of 3 for average. The subject property will be given the same score.

**Marketability**
This variable is concerned about the supply and demand aspects of the subject property that incorporates, location (neighbourhood/adjacent property), the physical characteristics of the subject property relative to potential
buyers in the market place. The overall marketability of the subject property is deemed to be average. This blends and takes into consideration the previous marketing of the subject property, the age, current condition, the deferred maintenance, tenant type and the location of the subject property.

NOI per Unit  The average NOI per unit of the indexes was $3,550. The average NOI per unit of the subject property is $4,329 which is similar to Index #1 that was given a score of 4. The subject property will also be given a score of 4.

### Valuation of the Subject Property

The prices per quality point per unit of the indexes were between $13,370.62 and $13,605.43 and are analysed for their central tendency using the mean. This creates an average price per quality point per unit of $13,457.58. One standard deviation resulted in a $91.11 difference from the mean. In other words, the mean ($13,457.58) could also have a rate of ($13,457.58 + $91.11 = $13,548.69 or $13,457.58 - $91.11 = $13,366.47). The total weighted score of the subject property (3.58) is then applied against the mean price point per unit to predict a value for the subject property.

<table>
<thead>
<tr>
<th>Score</th>
<th>Price Per Quality Point Per Unit</th>
<th>No. of Unit</th>
<th>Predicted Value</th>
<th>Rounded To</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.58</td>
<td>$13,366.47</td>
<td>x</td>
<td>203.00</td>
<td>$9,713,948</td>
</tr>
<tr>
<td>3.58</td>
<td>$13,457.58</td>
<td>x</td>
<td>203.00</td>
<td>$9,780,162</td>
</tr>
<tr>
<td>3.58</td>
<td>$13,548.69</td>
<td>x</td>
<td>203.00</td>
<td>$9,846,375</td>
</tr>
</tbody>
</table>

**NOTE:** Some difference in value might occur between the above values and the values indicated on the quality point spread sheet. This is due to the different rounding processes in the spreadsheet and calculators used in the analysis.

### Summary of the Direct Comparison Approach

The indicated value range for the subject property using the QP method within the Direct Comparison Approach is between $9,714,000 to $9,846,000.
The two approaches to value, have resulted in the following value ranges for the subject property.

**Direct Comparison Approach** : $9,714,000 to $9,846,000

**Income Approach** : $9,251,000 to $9,765,000

Each approach provides the valuer with a different perspective. Although these approaches depend on data collected from the same market, each deals with a different aspect of the market. In a perfect market, the approaches would tend to converge on the same value. However, real estate markets are not perfect. Often supply and demand are not in equilibrium.

The value range for the subject property is between $9,251,000 to $9,846,000. This range is considered to be fairly close (6.43%) and reflects the difference between viewing the property on strictly an economic approach (reward/risk) and by a combination of the physical and economic attributes of the property.

The Direct Comparison Approach to value used multi-family apartment building indexes instead of townhouse property indexes. A review of the market place indicated that there were no large townhouse properties selling in Southwestern Ontario. It was considered to be redundant to compare a 203 unit townhouse project to property indexes containing 30 to 75 units. The buyers are not the same.

The value range for the Direct Comparison Approach was determined by using a Qualitative and Quantitative Method of analysis. The use of a Qualitative and Quantitative variable technique has been adopted by both the American and Canadian Appraisal organizations as the best means of completing adjustments to comparable indexes. The approach used in this report uses a Qualitative and Quantitative technique known as Quality Point which extends these techniques further.

The indexes used for comparison purposes had a selling price per square unit difference of 76.0%. The valuer was able to reduce the variance in the selling price per unit down to 1.0% (standard deviation percentage). How this was accomplished was using a rating system (1-2-3-4-5-6-7) as a Qualitative and Quantitative measure for the different variables. Quality Point does not use any type of a +-% or $ adjustments or words such as Inferior, Superior or Similar when relating the comparables to the subject property. The reason for this is that any type of +-% or $ adjustment cannot be market supported. No “test” can be applied to these adjustments to determine if these adjustments are correct. Using words such as Inferior and Superior to describe the differences between the subject property and a given comparable is also redundant.
Quality Point uses an ordinal scale (1-2-3-4-5-6-7) to aid the valuer in determining the importance of each variable to each index property. The use of an ordinal scale is a more accurate measure because the use of words like Inferior, Superior or the +-%, $ method cannot be translated into a computer format for analysis. Computers cannot calculate any type of an average or statistical test using words such as Superior or Inferior. However, these words have been substituted by numbers using an ordinal scale. The nominal scale used in the Quality Point analysis represents words such as Fair, Average, Good, Excellent, etc., but expresses them as numbers.

The adjustments (scores) for the indexes were in the form of an ordinal scale that “rates” the quality of the variables of the indexes. These scores in turn are used to produce the weights or the importance of a given variable relative to the comparable indexes. These weights are used to calculate the total points for each index. “Points” are not good units of comparison. The unit of comparison that is required is the selling price per unit. In order to convert the total points into a per unit, the total point for each index is divided into the selling price per unit of each index to arrive at a unit of comparison known as a sale price per point per unit. This is also known as the Adjusted Selling Price Per Unit of Comparison and is used to value the subject property. It is within this Adjusted Selling Price Per Unit of comparison that its mean is applied to the subject property.

The valuer does not have any means of testing whether or not this Adjusted Selling Price Per Unit of Comparison (selling price per point per unit) is correct when the traditional Direct Comparison Approach is applied. After all, it might have been by random chance that this adjusted selling price per point per unit was calculated. Quality Point has a built-in testing feature that can generate a predicted selling price per unit for each index. This predicted price for each index can be compared to the actual selling prices per unit of each index has a test for accuracy. If the test (residual test) shows very little variance between the predicted selling prices of the indexes and their actual prices then the scores or adjustments of the comparable indexes must be correct. As indicated in the report, this difference is relatively quite small. So therefore, the adjusted selling price per point per unit has to be correct and would reflect the value of the subject property.

When the adjusted selling price per unit is applied against the subject property, the valuer can use several methods of determining a final estimate of value(s). The first method would be to select the best overall comparable(s) and take their adjusted rate and apply it to the subject property. A more accurate method would be to use the average of the adjusted value range for the subject property and calculate the standard deviation or difference from this mean price. This latter method is more accurate because it takes into consideration all of the indexes not just one or two. This is an important point. Valuers should not necessarily adopt the policy of selecting one or two comparables as the best. If that were the case, then what is the point of considering four, six, or even eight indexes? One would be better off to only use the two indexes that are selected at the time of reviewing the adjusted selling prices of the comparables. The point is that from a valuation perspective one does not want to adopt
this type of strategy. Value comes from the accumulation of many indexes not just one or two. By using standard deviation and the mean as a tool for measurement, these methods incorporate all the data. Therefore, the value of the subject property becomes a composite value of all the data.

The Income Approach to value views the property on its ability to produce income to cover the payment of debt and provide a return on the investment. The pro forma statement of the subject property was created based upon past and anticipated future income and expense levels. The capitalization rate applied against the subject’s net operating income was based upon comparable sales of multi-family properties that exhibited similar investment characteristics.

Once the value range for the subject property has been determined, the only choice left to the valuer is the single point estimate of value. There is a value range for the subject property between $9,251,000 and $9,846,000. The lowest indication of value represents a conservative value that was determined using a capitalization rate of 9.5% against the current net operating income. This latter single point estimate of value is also the lowest indicated value than the other values. Given the lack of real estate product within South Western Ontario, a higher single point estimate is suggested. The upper value range has the same dilemma as the lower value amount in that it is an outlier. This is a possible value for the subject property but given the overall condition and tenant type within the complex represent the upper level of value. Two single point estimates of value indicate a value range within the $9,700,000 range. This value is deemed to be slightly optimistic.