## Department of Local Government Finance

The Sales Comparison Approach Problem and Answer Packet with Audio

2024 Level II Tutorials

## Sales Comparison Class Problem \# 1 Comparative Attributes of an Apartment Building

You are trying to determine if the current value you have on an apartment building is accurate. Currently it is assessed at $\$ 310,000$. Part of your analysis involves comparing the subject apartment building to comparable buildings in your jurisdiction that have sold in the last two years. Values have not changed significantly during this two-year period. The subject and all comparable properties all consist of one bedroom apartment units and each apartment contains three rooms. The information on the subject and the comparable sales that you have found are as follows:

Subject: 10 years old and two stories with 16 units, good location, average condition, Grade $C$ quality of construction. all units have central air conditioning. The building contains 12,800 square feet.

Sale \# 1: 12 year old building, 2 stories, 16 units, contains 12,800 square feet. It is identical to the subject with the exceptions of no central air and the location is average. It sold 8 months ago for $\$ 351,200$.

Sale \# 2: 15 year old building, 2 stories, 16 units, average condition, Grade $C$ quality in a good location. All units have central air. The building contains 13,000 square feet and it sold for $\$ 369,90010$ months ago.

Sale \#3: 8 year old building, 2 stories, 16 units, average condition, C-1 Grade, and in a good location. Units do not have central air. The building has 13,120 square feet and sold 15 months ago for $\$ 348,000$.

Sale \# 4: 18 year old building, 2 stories, 18 units, average condition, Grade C, and good location. The units do not have central air. The building has 14,400 square feet and sold 15 months ago for $\$ 397,000$.

Sale \# 5: 10 year old building, 2 stories, 18 units, fair condition, Grade C, and average location. The units have central air and the building contains 14,400 square feet. It sold 2 years ago for $\$ 371,000$.

Using the sales grid below, analyze the sales to determine if your current value for the subject property is correct. You do not have to make quantitative adjustments, just compare the comparable sales to the subject to determine if your value is correct.

|  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Sale \# | Subject | Sale \# 1 | Sale \# 2 | Sale \# 3 | Sale \# 4 | Sale \# 5 |
| Sale Price | $---a--$ |  |  |  |  |  |
| Square Feet |  |  |  |  |  |  |
| Apartments |  |  |  |  |  |  |
| Rooms |  |  |  |  |  |  |
| $\$$ per square ft. |  |  |  |  |  |  |
| $\$$ per apartment |  |  |  |  |  |  |
| \$ per room |  |  |  |  |  |  |
| Sale Date |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |
| Stories |  |  |  |  |  |  |
| Condition |  |  |  |  |  |  |
| Quality |  |  |  |  |  |  |
| Location |  |  |  |  |  |  |
| Central A/C |  |  |  |  |  |  |
| Overall |  |  |  |  |  |  |
| Comparability |  |  |  |  |  |  |

Sales Comparison Class Problem \# 1 Answer
Comparative Attributes of an Apartment Building

| Sale \# | SUBJECT | SALE 1 | SALE 2 | SALE 3 | SALE 4 | SALE 5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sale Price |  | \$351,200 | \$369,900 | \$348,000 | \$397,000 | \$371,000 |
| Square feet | 12,800 | 12,800 | 13,000 | 13,120 | 14,400 | 14,400 |
| Apartments | 16 | 16 | 16 | 16 | 18 | 18 |
| Rooms | 48 | 48 | 48 | 48 | 54 | 54 |
| \$/SF | \$364,160.00 | \$27.44 | \$28.45 | \$26.52 | \$27.57 | \$25.76 |
| \$/Apt | \$369,904.00 | \$21,950.00 | \$23,119.00 | \$21,750.00 | \$22,056.00 | \$20,611.00 |
| \$/Room | \$369,888.00 | \$7,317 | \$7,706 | \$7,250 | \$7,352 | \$6,870 |
| Sale Date | CURRENT | $8 \mathrm{mo}=$ | $10 \mathrm{Mo}=$ | $15 \mathrm{mo}=$ | $15 \mathrm{mo}=$ | $24 \mathrm{mo}=$ |
| Age | 10 | $12+$ | 15 + | 8 - | 18 + | $10=$ |
| Stories | 2 | 2 = | 2 = | 2 = | $2=$ | 2 = |
| Condition | Ave | Ave = | Ave = | Ave = | Ave = | Fair + |
| Quality | C | $\mathrm{C}=$ | C = | C-1 + | $\mathrm{C}=$ | C = |
| Location | Good | Ave + | Good = | Good = | Good = | Ave + |
| Central A/C | Yes | No + | Yes = | No + | No + | Yes = |
| OVERALL COMPARISON |  | $3+0$ - Inferior | 1 + 0 - Slightly inf | 2+1-Inferior | 2 + 0 - Inferior | 2 + 0 - Inferior |

Range of Unit Values and the Median Value for Each Unit of Comparison

| Unit of Comparison | Range | Median |
| :---: | :---: | :---: |
| $\$ /$ SF | $\$ 25.76$ to $\$ 28.45$ | $\$ 27.44$ |
| $\$ /$ Apt | $\$ 20,611$ to $\$ 23,119$ | $\$ 21,950.00$ |
| $\$ /$ Room | $\$ 6,870$ to $\$ 7,706$ | $\$ 7,317.00$ |


| Unit of Comparison | \# of Square Feet and/or <br> Units in Subject | Median Values | Indicated Value of the <br> subject | Sale \# 2 Values | Indicated Value of the <br> Subject |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ /$ SF | 12,800 | $\$ 27.44$ | $\$ 351,232$ | $\$ 28.45$ | $\$ 364,160$ |
| $\$ /$ Apt | 16 | $\$ 21,950.00$ | $\$ 351,200$ | $\$ 23,119.00$ | $\$ 369,904$ |
| $\$ /$ Room | 48 | $\$ 7,317.00$ | $\$ 351,216$ | $\$ 7,706.00$ | $\$ 369,888$ |

It appears that the value of the subject property is somewhere between $\$ 351,000$ and $\$ 370,000$. These are well above the current $\$ 310,000$ it is assessed for. The property needs to be re-valued.

## Sales Comparison Class Problem \# 2 <br> Lump Sum and Percentage Adjustments

You are using the sales comparison approach to value, to determine the true tax value of a single family residence.
You have determined the following elements of comparison contribute significantly to value and have estimated their values.

| Basement: | $\$ 10,000$ |  |
| :--- | :--- | ---: |
| Garage Space: | $\$ 3,000$ |  |
| Time: | $+1.5 \%$ per month |  |
| Size: | $\$ 40$ per square foot |  |


| Fireplace: | $\$ 3,000$ |
| :--- | ---: |
| Location: | 10\% more for waterfront |
| Brick Exterior: | $\$ 15,000$ |

The subject property is a 2,400 square foot cedar sided ranch home located on a lot with water frontage. It has a full basement, 2 car garage, 1 fireplace, and 2 full bathrooms.
Sale \# 1: Sold for $\$ 210,000$ five months ago. It is identical to the subject in all aspects except it does not have a basement.

Sale \# 2: Sold last week for $\$ 240,000$. It is a brick home with 2,250 square feet. It has a full basement, 2 full bathrooms, 2 fireplaces and a 2 car garage. It is located on the water.
 \$195,000.
 \$172,500.

Using the sales rating grid provided on the next sheet, estimate the value of the subject property.

|  | Subject | Sale \# 1 | Sale \# 2 | Sale \# 3 | Sale \# 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sale Price | Current |  |  |  |  |
| Date of Sale | Current |  |  |  |  |
| Time Adjustment | none |  |  |  |  |
| Time Adj Sale Price | none |  |  |  |  |
| Other Adjustments |  |  |  |  |  |
| Basement | Full |  |  |  |  |
| Garage | 2 car |  |  |  |  |
| Size Sq Feet | 2400 |  |  |  |  |
| Fireplace | 1 |  |  |  |  |
| Location | Water |  |  |  |  |
| Exterior | Cedar |  |  |  |  |
| Bathrooms | 2 |  |  |  |  |
| Net Adjustments |  |  |  |  |  |
| Adjusted Price |  |  |  |  |  |

## Sales Comparison Class Problem \#2 Answer

Lump Sum and Percentage Adjustments

|  | Subject | Sale \# 1 | Sale \# 2 | Sale \# 3 | Sale \# 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sale Price | Current | \$210,000 | \$240,000 | \$195,000 | \$172,500 |
| Date of Sale | Current | 5 months | Current | 11 months | 20 months |
| Time Adjustment | none | \$15,750 | \$0 | \$32,175 | \$51,750 |
| Time Adj Sale Price | none | \$225,750 | \$240,000 | \$227,175 | \$224,250 |
| Other Adjustments |  |  |  |  |  |
| Basement | Full | \$10,000 | \$0 | \$10,000 | \$0 |
| Garage | 2 car | \$0 | \$0 | -\$3,000 | \$3,000 |
| Size Sq Feet | 2400 | \$0 | \$6,000 | -\$8,000 | -\$4,800 |
| Fireplace | 1 | \$0 | -\$3,000 | -\$3,000 | \$0 |
| Location | Water | \$0 | \$0 | \$22,718 | \$22,425 |
| Exterior | Cedar | \$0 | -\$15,000 | \$0 | -\$15,000 |
| Bathrooms | 2 | \$0 | \$0 | \$0 | \$0 |
| Net Adjustments |  | \$10,000 | -\$12,000 | \$18,718 | \$5,625 |
| Adjusted Price | \$235,750 | \$235,750 | \$228,000 | \$245,893 | \$229,875 |
|  | MEDIAN | \$232,813 |  |  |  |

# Sales Comparison Practice Problem \# 1 <br> Paired Sales Problem 

| Sale \# | 1 | 2 | 3 | 4 | 5 |
| :---: | :--- | :--- | :--- | :--- | :--- |
| Sale Price |  |  |  |  |  |
| Square Ft. |  |  |  |  |  |
| Price/SF |  |  |  |  |  |
| Bedrooms |  |  |  |  |  |
| Bathrooms |  |  |  |  |  |
| Garage |  |  |  |  |  |
| Basement |  |  |  |  |  |

Using the information below, fill in the grid and then determine the price per square foot that each attribute contributes. Round any odd cents to the nearest whole dollar.

Sale \# 1 has three bedrooms, two baths, a 2-car garage and a full basement. It sold for $\$ 120,000$ and has 2,000 square feet.

Sale \#2 sold for $\$ 129,500$ and has 2,056 square feet. It contains three bedrooms, two bathrooms, a 3-car garage and a full basement.
Sale \#3 has four bedrooms, two baths, a 2-car garage and a full basement. It sold for $\$ 134,400$ and has 2,100 square feet.

Sale \#4 sold for \$116,000 and has 2,000 square feet. It has three bedrooms, one bathroom, a 2-car garage and a full basement.
Sale \#5 has three bedrooms, two bathrooms, a 3-car garage, but no basement. It sold for $\$ 121,540$ and has 2,060 square feet.

PRICE PER SQUARE FOOT FOR:
Bedrooms $\qquad$ Bathrooms $\qquad$
$\qquad$ Basement $\qquad$

# Sales Comparison Practice Problem \# 1 Answer <br> Paired Sales Problem 

| Sale \# | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sale Price | \$120,000 | \$129,500 | \$134,400 | \$116,000 | \$121,540 |
| Square Ft. | 2,000 | 2,056 | 2,100 | 2,000 | 2,060 |
| Price/SF | \$60 | \$63 | \$64 | \$58 | \$59 |
| Bedrooms | 3 | 3 | 4 | 3 | 3 |
| Bathrooms | 2 | 2 | 2 | 1 | 2 |
| Garage | 2 | 3 | 2 | 2 | 3 |
| Basement | Y | Y | Y | Y | N |

Using the information below, fill in the grid and then determine the price per square foot that each attribute contributes. Round any odd cents to the nearest whole dollar.

Sale \# 1 has three bedrooms, two baths, a 2-car garage and a full basement. It sold for \$120,000 and has 2,000 square feet.
Sale \#2 sold for $\$ 129,500$ and has 2,056 square feet. It contains three bedrooms, two bathrooms, a 3-car garage and a full basement.

Sale \#3 has four bedrooms, two baths, a 2-car garage and a full basement. It sold for \$134,400 and has 2,100 square feet.

Sale \#4 sold for \$116,000 and has 2,000 square feet. It has three bedrooms, one bathroom, a 2-car garage and a full basement.

Sale \#5 has three bedrooms, two bathrooms, a 3-car garage, but no basement. It sold for \$121,540 and has 2,060 square feet.

PRICE PER SQUARE FOOT FOR:

Bedrooms 64-60=4
Bathrooms $\underline{60-58=2}$
(House 3 - House 1)
Garage $63-60=3$
(House 1 - House 4)
Basement 63-59 = 4
House 2 - House 1)
(House 2 - House 5)

## Practice Problem \# 2

## Sales Comparison

Your subject home is 20 years old. It contains 2,400 square feet. There is a 2 car attached garage, 2 baths, and has a full basement. It also has 1 fireplace and is located on a lake and has a Cedar wood exterior.

Sale \# 1 was five months ago for $\$ 210,000$. It is 20 years old and has 2,400 square feet. There is no basement but it has a 2 car attached garage. It has cedar wood siding and is located on the water. It also has 1 fireplace and 2 baths.

Sale \# 2 was 2 weeks ago for $\$ 240,000$. It is 15 years old and has 2,250 square feet. There is a full basement and a 2 car attached garage. It is located on the water and has a brick exterior. It also has 2 fireplaces and 2 baths.

Sale \# 3 was eleven months ago for $\$ 195,000$. It is 25 years old and has 2,600 square feet. There is no basement but it has a 3 car attached garage. It is not located on the water but has cedar wood siding. It has 2 fireplaces and 2 baths.

Sale \# 4 was 20 months ago for $\$ 172,500$. It is 22 years old and has 2,520 square feet. There is a full basement and a 1 car attached garage. It is not located on the water and it has a brick exterior. It has 1 fireplace and 2 baths.

The following elements contribute significantly to value and the contributory value of each has been extracted from paired sales analysis:

Time: \$500 per month
Age: \$1,600 per year
Floor area: \$40.00/square foot
Garage: $\$ 3,000$ for an extra bay
Fireplace: Adds \$3,000
Brick: Sells for \$15,000 more than non brick homes
Basement: Adds \$10,000
Location: On the water: Adds \$22,700

# Practice Problem \# 2 Answer 

Sales Comparison

| SALE \# | SUBJECT | SALE \# 1 | SALE \# 2 | SALE \# 3 | SALE \# 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SALE PRICE |  |  |  |  |  |
| DATE OF SALE |  |  |  |  |  |
| TIME ADJ |  |  |  |  |  |
| TIME ADJ SALE PRICE |  |  |  |  |  |
| OTHER ADJ |  |  |  |  |  |
| AGE |  |  |  |  |  |
| BASEMENT |  |  |  |  |  |
| GARAGE |  |  |  |  |  |
| SIZE |  |  |  |  |  |
| FIREPLACE |  |  |  |  |  |
| LOCATION |  |  |  |  |  |
| EXTERIOR |  |  |  |  |  |
| BATHS |  |  |  |  |  |
| NET ADJ |  |  |  |  |  |
| ADJ PRICE |  |  |  |  |  |

Practice Problem \# 2 Answer
Sales Comparison

| SALE \# | SUBJECT | SALE \# 1 |  | SALE \# 2 |  | SALE \# 3 |  | SALE \# 4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SALE PRICE |  |  | \$210,000 |  | \$240,000 |  | \$195,000 |  | \$172,500 |
| DATE OF SALE | CURRENT | 5 MONTHS |  | CURRENT |  | 11 MONTHS |  | 20 MONTHS |  |
| TIME ADJ |  | \$500/MONTH | \$2,500 |  | \$0 | \$500/MONTH | \$5,500 | \$500/MONTH | \$10,000 |
| TIME ADJ SALE PRICE |  |  | \$212,500 |  | \$240,000 |  | \$200,500 |  | \$182,500 |
| OTHER ADJ |  |  |  |  |  |  |  |  |  |
| AGE | 20 | 20 | \$0 | 15 - | $(\$ 8,000)$ | $25+$ | \$8,000 | $22+$ | \$3,200 |
| BASEMENT | FULL | None + | \$10,000 | FULL = |  | None + | \$10,000 | FULL = | \$0 |
| GARAGE | 2 CAR | $2 \mathrm{CAR}=$ | \$0 | $2 \mathrm{CAR}=$ |  | 3 CAR - | (\$3,000) | 1 CAR + | \$3,000 |
| SIZE | 2,400 | $2400=$ | \$0 | $2250+$ | \$6,000 | 2600- | $(\$ 8,000)$ | 2520- | (\$4,800) |
| FIREPLACE | 1 | 1 = | \$0 | 2 | (\$3,000) | 2 - | (\$3,000) | 1. | \$0 |
| LOCATION | WATER | WATER = | \$0 | WATER = |  | NO + | \$22,700 | NO + | \$22,700 |
| EXTERIOR | CEDAR | CEDAR = | \$0 | BRICK - | (\$15,000) | CEDAR = | \$0 | BRICK - | $(\$ 15,000)$ |
| BATHS | 2 | $2=$ | \$0 | 2 = |  | 2 = | \$0 | 2 = | \$0 |
| NET ADJ |  |  | \$10,000 |  | (\$20,000) |  | \$26,700 |  | \$9,100 |
| ADJ PRICE |  |  | \$222,500 |  | \$220,000 |  | \$227,200 |  | \$191,600 |

I WOULD USE \$222,500 BASED ON ONLY ONE ADJUSTMENT FROM THE COMP TO THE SUBJECT. CLOSEST TO OUR SUBJECT.

## Practice Problem \# 3

## Time Adjustment Practice

1.) Property sells for $\$ 208,000$ and resells one year later for $\$ 233,000$.

What is the amount of the time adjustment?
What is the \% per month?
2.) In completing an appraisal, the following properties sold.

Sale 1 - House sold 5 months ago for $\$ 150,000$. What is the adjusted sales price today using the answer from number 1?
Sale 2 - House sold 11 months ago for \$140,000. What is the adjusted sales price today using the answer from number 1?

## Practice Problem \# 3 Answer

## Time Adjustment Practice

1.) Subtract difference between sale prices which is $\$ 25,000$. Then divide the $\$ 25,000$ by first sale price of $\$ 208,000$.

First sale price of $\$ 208,000$. You come up with .1202 or $12.02 \%$.
This is the \% increase per year, divide by 12, average increase per month is $1 \%$.
2.) Sale \#1- $\$ 150,000 \times 5 \%=\$ 7,500$ (this is amount of time adjustment). The time adjusted sale price is $\$ 150,000+\$ 7,500$ = \$157,500

Sale $\# 2=\$ 140,000 \times 11 \%=\$ 15,400$ (time adjustment). Time adjusted sale price is the $\$ 140,000+\$ 15,400=\$ 155,400$.

