Department of Local Government Finance

The Sales Comparison Approach Problems and Answers

2024 Level I Tutorials

Sales Comparison Approach
Class Problem # 1
Paired Sales Analysis

Listed below are five sales of comparable single family residential properties that have recently occurred in a neighborhood. Using the given data below determine the appropriate lump sum dollar adjustment (Contributory value) for the following elements:

Bedroom: _____

Bathroom: _____

Basement: _____

Extra parking bay in garage: _____

Sale	# 1	# 2	# 3	# 4	# 5
Sale Price	$ 140,400	$ 126,000	$ 130,000	$ 124,000	$ 135,500
Sq. Feet	1,800	1,650	1,800	1,600	1,800
Bedrooms	4	3	4	3	4
Bathrooms	2	2	2	1	2
Foundation	Basement	Crawl Space	Crawl Space	Crawl Space	Basement
Garage	2 Car	2 Car	2 Car	2 car	1 Car

(NOTE: Variations in square footage are due to the different number of rooms and do not require adjustment; this is allowed for in the adjustments for bedrooms and bathrooms.)

Bedroom: <u>Sale 2 and Sale 3 are identical except Sale 3 has one extra bedroom.</u>
                  Sale 3   4 bedrooms $130,000
                  Sale 2   3 bedrooms   ($126,000)
                                        indicated adjustment $4,000

Bathroom: <u>Sale 2 and Sale 4 are identical except Sale 2 has one extra bathroom.</u>
                  Sale 2   2 bathrooms $126,000
                  Sale 4   1 bathrooms   ($124,000)
                                        indicated adjustment $2,000

Foundation: <u>Sale 1 and Sale 3 are identical except Sale 1 has a basement.</u>
                  Sale 1   Basement $140,400
                  Sale 3   Crawl Space   ($130,000)
                                        indicated adjustment $10,400

Extra parking bay: <u>Sale 1 and Sale 5 are identical except Sale 1 has a 2 car garage.</u>
                  Sale 1   2 car garage $140,400
                  Sale 5   1 car garage   ($135,500)
                                  indicated adjustment $4,900

Sales Comparison Approach
Class Problem # 1 Answer
Paired Sales Analysis

Listed below are five sales of comparable single family residential properties that have recently occurred in a neighborhood. Using the given data below determine the appropriate lump sum dollar adjustment (Contributory value) for the following elements:

Bedroom:	$4,000
Bathroom:	$2,000
Foundation:	$10,400
Extra parking bay in garage:	$4,900

Sale	# 1	# 2	# 3	# 4	# 5
Sale Price	$ 140,400	$ 126,000	$ 130,000	$ 124,000	$ 135,500
Sq. Feet	1,800	1,650	1,800	1,600	1,800
Bedrooms	4	3	4	3	4
Bathrooms	2	2	2	1	2
Foundation	Basement	Crawl Space	Crawl Space	Crawl Space	Basement
Garage	2 Car	2 Car	2 Car	2 car	1 Car

(NOTE: Variations in square footage are due to the different number of rooms and do not require adjustment; this is allowed for in the adjustments for bedrooms and bathrooms.)

Sales Comparison Approach

- At this time, please go back to the Sales Comparison Approach PowerPoint and resume on slide 44.

Sales Comparison Approach
Class Problem # 2
ADJUSTING COMPARABLE SALES

You are reviewing an appeal of a three bedroom, two bath ranch style house that has 2,420 square feet.
This subject house has a full basement and an attached two car garage. You have located 5 recent comparable sales in the same neighborhood.

Sale # 1:	This is a four bedroom, three bath ranch style home containing 2,600 square feet of living area. It has a full basement and an attached three car garage. Sale price is $275,000.
Sale # 2:	This is a three bedroom, two bath ranch style home that has 2,400 square feet of living space. It is on a crawl space and has a one car attached garage. Sale price is $230,000.
Sale # 3:	This is a three bedroom, two and one half bath residence containing 2,400 square feet of living area. It has a full basement and a three car attached garage. Sale price is $245,000.
Sale # 4:	This is a three bedroom, two and one half bath home located on a crawl space. It contains 2,600 square feet of living area and has a two car attached garage. Sale price is $245,000
Sale # 5:	This is a four bedroom, two bath home with 2,500 square feet of living space. It has a full basement and a three car attached garage. Sale price is $262,250.

You have determined that the following elements of comparison are influential on value: Bedrooms, bathrooms (both full and half), garage bays, and basement. You have conducted a paired sales analysis and determined the contributory value of these elements as follows:

Bedrooms:				$8,000
Bathrooms:	Full	$3,000	Half	$1,000
Garage bay:				$4,000
Basement:				$15,000

Using the grid, determine the estimation of value for the subject property.

	SUBJECT	SALE # 1		SALE # 2		SALE # 3		SALE # 4		SALE # 5	
SALE PRICE											
BEDROOMS	3										
BATHROOMS	2										
GARAGE	2 CAR										
FOUNDATION	BSMNT										
NET ADJ.											
ADJ SALES PRICE											
SQ FEET	2,420										
SALE PRICE/SF											

Sales Comparison Approach
Class Problem # 2 Answer
ADJUSTING COMPARABLE SALES

	SUBJECT		SALE # 1		SALE # 2		SALE # 3		SALE # 4		SALE # 5	
SALE PRICE			$275,000		$230,000		$245,000		$245,000		$262,250	
BEDROOMS	3	4	($8,000)	3		3		3		4	($8,000)	
BATHROOMS	2	3	($3,000)	2		2 1/2	($1,000)	2 1/2	($1,000)	2		
GARAGE	2 CAR	3 CAR	($4,000)	1 CAR	$4,000	3 CAR	($4,000)	2 CAR		3 CAR	($4,000)	
FOUNDATION	BSMNT	BSMNT		CRAWL	$15,000	BSMNT		CRAWL	$15,000	BSMNT		
NET ADJ.			($15,000)		$19,000		($5,000)		$14,000		($12,000)	
ADJ SALES PRICE			$260,000		$249,000		$240,000		$259,000		$250,250	
SQ FEET	2,420	2,600		2,400		2,400		2,600		2,500		
SALE PRICE/SF			$100.00		$103.75		$100.00		$99.62		$100.10	

IT APPEARS THE SQUARE FOOT VALUE OF THE COMPS WOULD BE $100.00/SQUARE FOOT.

THEREFORE, 2,420 SQUARE FEET TIMES $100.00/SQUARE FEET EQUALS (Subject estimated Value) $242,000

$ 99.62
$ 100.00
$ 100.00
$ 100.10
$ 103.75

Sales Comparison Approach
Class Problem # 3
Time Adjustment Problem

Sale # 1 Sold one year ago for $62,000 and resold 7 months ago for $65,100.
Sale # 2 Sold one year ago for $67,000 and resold 5 months ago for $72,225.
Sale # 3 Sold one year ago for $65,000 and resold 1 month ago for $71,500.
Sale # 4 Sold one year ago for $67,250 and resold 3 months ago for $73,300.

Determine the indicated percentage adjustment for time per month_____
Determine the indicated percentage adjustment for time per year   _____

A	B	C	D	E	F
SALE #	FIRST SALE SELLING PRICE	SECOND SALE SELLING PRICE	% CHANGE	MONTHS BETWEEN SALES	PERCENT CHANGE MONTH
1					
2					
3					
4					

PERCENT PER MONTH

PERCENT PER YEAR

Sales Comparison Approach
Class Problem # 3 Answer
Time Adjustment Problem

A	B	C	D	E	F
SALE #	FIRST SALE SELLING PRICE	SECOND SALE SELLING PRICE	% CHANGE	MONTHS BETWEEN SALES	PERCENT CHANGE MONTH
1	$62,000	$65,100	5.0%	5	1.0%
2	$67,000	$72,225	7.8%	7	1.1%
3	$65,000	$71,500	10.0%	11	0.9%
4	$67,250	$73,300	9.0%	9	1.0%

PERCENT PER MONTH   1%

PERCENT PER YEAR   12%   1.0%

(C - B) / B = D

D / E = F

Sales Comparison Approach
Practice Problem # 1
Market Analysis of Attributes

You have analyzed the market and have determined that the following are important attributes in a home. Basement--Bedroom--Garage--Bathroom. You used market information to arrive at the following information.

Sale # 1) Sold for $144,000. It has 1,800 square feet, 3 bedrooms, a full basement, a two car garage and 2 bathrooms.

Sale # 2) Sold for $153,300. It has 2 bathrooms, no basement and 3 bedrooms. It also has a 1 car attached garage and the home has 1,980 square feet.

Sale # 3) Sold for $163,800. It has a full basement and a 2 car garage and 1 bathroom. There are 3 bedrooms and a total of 2,100 square feet.

Sale # 4) This home has 1,700 square feet, no basement but has a 2 car garage and 2 bathrooms. It has 3 bedrooms and recently sold for $127,500.

Sale # 5) This home sold for $140,600. It contains 1,900 square feet, 2 bedrooms, a full basement, a 2 car garage and 1 bathroom.

Using the grid below, develop the dollar amount to add for each attribute based on a cost of sellingprice per square foot.

Element of Comparison	House #1	House #2	House #3	House #4	House #5
Sale Price					
Square Footage					
Basement					
Bedrooms					
Garage					
Baths					
Price/Square Foot					

Basement: _____per square foot

Bedrooms: _____per square foot

Garages: _____per square foot

Bathrooms: _____per square foot

Sales Comparison Approach
Practice Problem # 1 Answer
Market Analysis of Attributes

What you want to do is find two houses with everything exactly the same except for the item you are looking for. Then net the two square foot prices to arrive at the value for the item. Example: You are wanting to know what value a basement adds to the value of the home. Use sale number #1 and sale # 4. Both have 3 bedrooms, both have a two car garage, both have 2 bathrooms. The only thing they differ in is the basement which is the item you are trying to get a value for. So Sale # 1 has a price of $80.00 per square foot and sale #4 has a price of $75.00 per square foot. The difference in the two sales is $5.00 per square foot. That is what we are looking for--$5.00 per square foot for the basement. We are saying that a basement adds $5.00 per square foot to the cost of the structure.

Sales Comparison Approach
Practice Problem # 1 Answer
Market Analysis of Attributes

	HOUSE # 1	HOUSE # 2	HOUSE # 3	HOUSE # 4	HOUSE # 5
Sale Price	$144,000	$153,300	$163,800	$127,500	$140,600
Square Footage	1800	1980	2100	1700	1900
Bedrooms	3	3	3	3	2
Basement	Yes	No	Yes	No	Yes
Garage	2	1	2	2	2
Baths	2	2	1	2	1
Price/Square Foot	$80.00	$77.42	$78.00	$75.00	$74.00

Basement:	$5.00 Per Sq. Ft.	1 & 4
Bedrooms:	$4.00 Per Sq. Ft.	3 & 5
Garages:	$2.42 Per Sq. Ft.	2 & 4
Bathrooms:	$2.00 Per Sq. Ft.	1 & 3

Your subject property has three bedrooms, one bath, an attached 2 car garage and no fireplace. It has forced hot air heat.
You have analyzed the market and found 4 sales to use as comparables.
You have also found that sales prices have increased 5% each year for the last 5 years.

Sale # 1: 4 bedroom, 2 bath with an attached 2 car garage. It has a large fireplace, hot water heat & sold 2 years ago for $172,500.

Sale # 2: 3 bedroom, 1 bath with a 1 car attached garage. No fireplace and has forced hot air heat. Sold recently for $171,850.

Sale # 3: 3 bedroom and 2 baths. An attached 2 car garage with an average fireplace and hot water heat. Sold 2 years ago for $176,500.

Sale # 4: 4 bedroom, 2 baths and an attached 2 car garage. It has a large fireplace and hot water heat. Sold 1 year ago for $185,000.

Estimate a value for the subject property rounding to the nearest $100.

ADJUSTMENT AMOUNTS:

4TH BEDROOM	$8,000
EXTRA BATH	$5,000
1 CAR GARAGE	$9,000
2 CAR GARAGE	$13,200
AVERAGE FIREPLACE	$4,000
LARGE FIREPLACE	$4,800
FORCED HOT AIR HEAT	$4,500
HOT WATER HEAT	$5,600

	SUBJECT	SALE # 1	SALE # 2	SALE # 3	SALE # 4
SALE PRICE					
TIME ADJ					
TIME ADJ SALE PRICE					
BEDROOMS					
BATHS					
GARAGE					
FIREPLACE					
HEAT					
NET ADJ					
ADJ SALES PRICE					

ESTIMATED VALUE INDICATED BY THE SALES COMPARISON APPROACH:

Sales Comparison Approach
Practice Problem # 2 Answer
Sales Comparison

Estimate a value for the subject property rounding to the nearest $100.

ADJUSTMENT AMOUNTS:

4TH BEDROOM	$8,000
EXTRA BATH	$5,000
1 CAR GARAGE	$9,000
2 CAR GARAGE	$13,200
AVERAGE FIREPLACE	$4,000
LARGE FIREPLACE	$4,800
FORCED HOT AIR HEAT	$4,500
HOT WATER HEAT	$5,600

	SUBJECT	SALE # 1		SALE # 2		SALE # 3		SALE # 4	
SALE PRICE			$172,500		$171,850		$176,500		$185,000
TIME ADJ		2 YRS @ 5%	$17,250		NONE	2 YRS @ 5%	$17,650	1 YR @ 5%	$9,250
TIME ADJ SALE PRICE			$189,750		$171,850		$194,150		$194,250
BEDROOMS	3	4	($8,000)	3	$0	3	$0	4	($8,000)
BATHS	1	2	($5,000)	1	$0	2	($5,000)	2	($5,000)
GARAGE	2	2	$0	1	$4,200	2	$0	2	$0
FIREPLACE	NONE	LARGE	($4,800)	NONE	$0	AVERAGE	($4,000)	LARGE	($4,800)
HEAT	FORCED	HOT WATER	($1,100)	FORCED	$0	HOT WATER	($1,100)	HOT WATER	($1,100)
NET ADJ			($18,900)		$4,200		($10,100)		($18,900)
ADJ SALES PRICE			$170,850		$176,050		$184,050		$175,350

ESTIMATED VALUE INDICATED BY THE SALES COMPARISON APPROACH: $176,100

You are valuing a subject property for an assessing official. The subject property is 12 years old in average condition. It has an attached garage. It fronts a golf course. Your property has 1,800 square feet and is of average quality. You have researched the market and found three comparable sales.

#1.) This home sold for $95,800 2 years ago. It is in good condition with 1,700 square feet. This home has an attached garage and fronts a golf course. It is 12 years old and in good condition and average quality.

#2.) Sold 18 months ago. It is a good quality home with 1,600 square feet and a detached garage. It does not front a golf course and is 10 years old and in good condition. The sale price was $94,900 and the quality is good.

#3.) This home sold for $83,900 18 months ago. It is 8 years old, in average condition and does not front a golf course. It has 1,650 square feet and a detached garage and is average quality.

Time: $100 per month decrease
Age: $1500 per year
Condition: $5000 difference between Average and Good
Location: Fronting a golf course sell for $5000 more
Floor Area: $48/Sq Ft
Garage: $800 less for detached garage
Quality: $4000 between average and good

Value the subject property and round to the nearest $100

	Subject	Sale # 1	Sale # 2	Sale # 3
Sale Price				
Time Adj				
Time Adj Sale price				
Age	12			
Condition	Avg			
Fronts Golf Course	Yes			
Floor Area (SF)	1800			
Garage	Att			
Quality	Avg			
Net Adjustment				
Adjusted Sale Price				

Sales Comparison Approach
Practice Problem # 3 Answer
Adjusting Comparable Sales

	Subject	Sale # 1		Sale # 2		Sale # 3	
Sale Price			$95,800		$94,900		$83,900
Time Adj		2 yrs	($2,400)	18 Mos.	($1,800)	18 Mos.	($1,800)
Time Adj Sale price			$93,400		$93,100		$82,100
Age	12	12	$0	10	($3,000)	8	($6,000)
Condition	Avg	Good	($5,000)	Good	($5,000)	Avg	$0
Fronts Golf Course	Yes	Yes	$0	No	$5,000	No	$5,000
Floor Area (SF)	1800	1700	$4,800	1600	$9,600	1650	$7,200
Garage	Att	Att	$0	Det	$800	Det	$800
Quality	Avg	Avg	$0	Good	($4,000)	Avg	$0
Net Adjustment			($200)		$3,400		$7,000
Adjusted Sale Price			$93,200		$96,500		$89,100

The comparable with the least amount of adjustments is Comparable #1.
If you used the median comparable, Comparable #1 would also be the answer.
The amount you would assign to the subject property is $93,200.

Sales Comparison Approach

- This concludes the sales comparison approach tutorial and is a reminder that should you have questions you can email these questions to the Department.

- Please send emails to Level1@dlgf.in.gov.