State Tax Commission

Development of Economic Condition Factors

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1. Introduction

What is an Economic Condition Factor (ECF)? An ECF adjusts the assessor's use of the Assessors Manual to the local market. County multipliers are provided by the State Tax Commission and adjusted annually to reflect change in the market of the construction costs found in the State Tax Commission Assessor's Manual and to "bring" those costs to the County level. Economic condition factors are adjusted annually by the assessor to further refine these costs to the local market.

An ECF must be determined and used in all cost appraisal situations where the *Assessor's Manual* is used. Saying "I didn't need to use an ECF because I used the new *Assessor's Manual*" is not correct; even if the cost manual being utilized is brand new. The Assessors Manual is a statewide manual and must be adjusted to local market conditions through the use of an ECF. It is also incorrect to indicate "I didn't need to use an ECF because I was valuing new construction". Again, an ECF must be used to adjust the statewide costs of the *Assessor's Manual* to local markets. An ECF must be used regardless of the age of the improvements being valued.

According to the Constitution, assessments are to be set at 50% of the true cash value appraisals of each property. When using mass appraisal, the assessor frequently uses a cost less depreciation analysis and relates it to what properties are selling for through the use of an Economic Condition Factor (ECF). The ECF is derived by analyzing properties which have sold, then comparing the cost less depreciation of the buildings to that portion of the sale prices attributable to those buildings (this procedure will be discussed in detail later). If there is a consistent relationship between the cost-less-depreciation analysis and the sale values of the buildings, this relationship is expressed as an ECF which is used to adjust the cost-less-depreciation estimates to what properties are selling for in the market.

2. Calculation of Economic Condition Factors

An ECF is calculated by analyzing verified property sale prices. The portion of each sale price attributed to the building(s) only, on the parcel is compared to the value on the record card of the same building(s). The ECF represents the relationship between the appraised value of the building as calculated using the Assessors Manual and the sale value of that building. When the building value is added to the value of the land and the land improvements, an indication of true cash value can be obtained for assessed valuations.

The verified sales used for an ECF analysis should generally be drawn from the same 24-month time period used for the sales study utilized for Equalization. Form the examples below it can be determined that sales from October 1, 2010

through September 30, 2012 are used for both the sales study and ECF analysis for 2013.

Assessors should start their ECF calculation by identification of an ECF "neighborhood". The neighborhood should be set so that properties sharing similar characteristics are analyzed together. Borders for ECF neighborhoods can be natural or manmade; they can be based on age of buildings, construction of buildings, locations, etc. ECF's are typically calculated for a group of properties based upon the primary structure and its characteristics, i.e., brick one-story homes built in the 1950's in a subdivision developed with 800 lots or frame two-story homes built in the 1960's throughout a small community.

Many assessors make the mistake of having too many neighborhoods. Many assessors set up neighborhoods based on subdivisions and the parcel count is simply too small to do any type of analysis. Within the commercial and industrial classes, ECF's are sometimes calculated for different types of properties, i.e. apartments, warehouses, industrial manufacturing plants, etc.

It is crucial that the ECF analysis be based upon a sufficient number of verified arms-length transactions and that the sales be representative of the properties to be appraised using the ECF. In some rural townships where there are insufficient sales to determine an ECF, the assessor may have to analyze sales in adjoining townships to determine the ECF or include historical sales (using an appropriate time adjustment). It may be necessary to compare the subject area to another area with a known ECF and make adjustments in much the same way as comparable sales are adjusted to a subject property in a market appraisal.

An assessor should verify the sale price and terms of sale for each parcel to be used in the ECF analysis. An assessor should also make a physical inspection of the property to determine if there were any physical changes that may affect the sale price. Physical changes could include remodeling a basement, an addition to the building, or a new garage. These changes must be noted so that the assessor can properly value the property as it existed prior to the sale, or so that the property can be removed from the ECF analysis. The assessor should use the effective age as of the date of sale, and not the assessment date.

As outlined in Chapter 4, the determination of land value is crucial to an accurate ECF. The determination of the depreciated value of the land improvements is also crucial. It is important that the land values used to set the ECF are also the land values used for the appraisals of those properties. These items are removed from the sale price when determining an ECF.

In terms of comparisons, assessors should try to use properties with small amounts of land and land improvements. The fewer and smaller the deductions will allow for the most accurate ECF because the most value is in the structure. An example would be trying to use a parcel with a house on an 80 acre parcel

compared to a similar house on a 1 acre parcel. Chances are the 80 acres are worth more than the house. A slight value difference in the land would cause a huge value change in the residual for the house.

ECF's should generally be applied as calculated. Any variation from the calculated ECF must be fully documented. The detailed calculations used to develop the economic condition factor (ECF) must be kept on file to be used in defense of appeals, necessary in 14 Point Review audits, etc.

The following table contains an example of reproduction costs of four homes which are identical except for that their location; they are located in four different counties. The base cost is multiplied by the appropriate County multiplier to give the final cost new for each house in each County.

County	Base Reproduction Cost New	County Multiplier	Final Reproduction Cost New
Alcona	$100,000	1.05	$105,000
Marquette	$100,000	1.13	$113,000
Sanilac	$100,000	1.14	$114,000
Kent	$100,000	1.19	$119,000
Wayne	$100,000	1.36	$136,000
Van Buren	$100,000	1.13	$113,000

After getting an estimate of cost new you subtract depreciation which gives an estimate of cost new less depreciation. To generate an ECF, the depreciated cost of a building which has sold is compared to the sale value of that building. The ECF indicator for each sale is calculated by dividing the sale price of the building by the cost new (with county multiplier applied) less depreciation of the building. One ECF indicator is not sufficient for the calculation of a valid ECF. Use of a sufficient number of sales is necessary to ensure the accuracy of an ECF determination.

Example Economic Condition Factor Calculation

Parcel Number	Sale Price	Land and Improve.	Sale Price Buildings	Cost New Less Depreciation Buildings	Indicated Economic Condition Factor
001-01-0001	$275,500	$90,000	$185,500	$172,238	1.08
001-01-0025	$269,900	$95,000	$174,900	$158,758	1.10
001-01-0010	$345,000	$120,000	$225,000	$196,951	1.14
001-01-0200	$278,000	$90,000	$188,000	$181,714	1.03
001-01-2300	$165,000	$65,000	$100,000	$97,170	1.03
001-01-0123	$275,000	$90,000	$185,000	$170,779	1.08
001-01-0134	$300,000	$100,000	$200,000	$208,034	0.96
001-01-0432	$190,000	$75,000	$115,000	$107,805	1.07
001-01-0002	$224,900	$80,000	$144,900	$133,376	1.09
001-01-0035	$280,000	$95,000	$185,000	$195,690	0.95
001-01-0057	$225,000	$80,000	$145,000	$131,436	1.10
001-01-0075	$210,000	$75,000	$135,000	$114,338	1.18
001-01-0189	$261,900	$90,000	$171,900	$155,527	1.11
001-01-0023	$260,500	$85,000	$175,500	$159,401	1.10
001-01-0321	$200,000	$75,000	$125,000	$113,719	1.10
001-01-0100	$250,000	$135,900	$114,100	$97,525	1.17
		TOTALS	$2,569,800	$2,394,461	1.07

The sale price of buildings in is calculated by subtracting the value of land and land improvements from the sale price. The ECF is calculated by taking the **total** sale price of the buildings and dividing by the **total** depreciated cost of the buildings ($2,569,800 ÷ $2,394,461 = 1.07 rounded to 2 decimal places). Individual ECF indications are calculated by dividing the sale price of buildings by the depreciated cost of the buildings.

Although the individual ECF calculations are shown in the ECF analysis, **the separate ECF indicators are not averaged to produce the overall ECF**. The separate ECF indications are listed so that an assessor can easily see and review an "outlying" ECF. Also, showing the individual ECF indications allows the assessing officer to see if there is consistency in the analysis. It is also a good practice to plot the individual ECF indications on a map of the ECF area. Plotting individual ECF indications on a map can also help in an assessor's evaluation. This same procedure is followed to determine commercial and industrial ECF's.

The determination of the ECF is relatively simple if there are numerous recent sales in the area. Sales for the ECF calculation should be limited to those occurring during the same time period as the sales study used to set the starting base. It is not necessary to adjust sales for time if they fall within the proper time period.

3. Detailed Calculation Procedure

An ECF represents the relationship between the appraised value of a building generated by using the Assessor's Manual and the sale value of that building. An ECF, when applied to depreciated costs, is how an assessing officer estimates the value buildings are actually bringing in the market studied. When the building values are added to the value of land and land improvements, indications of true cash value are obtained for assessment purposes.

There are two primary ECF calculation methods. The first ECF calculation method is the method used by most assessing officers and differs from the second method, in that, the land values used for the parcels for the first year of the updated ECF analysis are changed. The land values used for these parcels will be the updated land values drawn from the current land value analysis, and not the land values that were used for those parcels in the prior year's ECF analysis. Either method is acceptable, but you cannot mix the two methods in the same unit in the same year; this would cause significant uniformity issues.

The calculation for the first method begins with the parcels from the oldest year of the prior ECF analysis being removed from the analysis, they are the parcels lined out in the chart below. The grid without these parcels is used, with parcels added from the next year to determine the ECF.

Example ECF Calculation						
A	**B**	**C**	**D**	**E**	**F**	**G**
Parcel #	**Sale Date**	**Sale Price**	**Land & Improve[1]**	**Sale Price Buildings**	**Cost New Less Dep.[2]**	**Indicated ECF**
~~15-208-010~~	~~4-3-09~~	~~$375,500~~	~~$90,000~~	~~$285,500~~	~~$272,238~~	~~1.05~~
~~15-128-048~~	~~4-25-09~~	~~$369,900~~	~~$95,000~~	~~$274,900~~	~~$238,758~~	~~1.15~~
~~15-128-040~~	~~5-17-09~~	~~$445,000~~	~~$120,000~~	~~$325,000~~	~~$296,951~~	~~1.09~~
~~15-231-005~~	~~5-20-09~~	~~$378,000~~	~~$90,000~~	~~$288,000~~	~~$281,714~~	~~1.02~~
~~15-204-010~~	~~7-1-09~~	~~$265,000~~	~~$65,000~~	~~$200,000~~	~~$177,170~~	~~1.13~~
~~15-229-016~~	~~8-11-09~~	~~$375,000~~	~~$90,000~~	~~$285,000~~	~~$270,779~~	~~1.05~~
~~15-208-021~~	~~8-23-09~~	~~$400,000~~	~~$100,000~~	~~$300,000~~	~~$278,034~~	~~1.08~~
~~15-255-012~~	~~9-16-09~~	~~$290,000~~	~~$75,000~~	~~$215,000~~	~~$207,805~~	~~1.03~~
15-177-003	5-19-10	$324,900	$80,000	$244,900	$223,376	1.10
15-183-008	8-18-10	$380,000	$95,000	$285,000	$295,690	0.96
15-181-007	8-31-10	$325,000	$80,000	$245,000	$231,436	1.06
15-258-002	11-22-10	$310,000	$75,000	$235,000	$214,338	1.10
15-256-001	1-30-11	$361,900	$90,000	$271,900	$255,572	1.06
15-276-002	3-3-11	$360,500	$85,000	$275,500	$239,401	1.15
15-135-003	3-30-11	$300,000	$75,000	$225,000	$213,719	1.05
15-127-016	3-31-11	$350,000	$135,900	$214,100	$197,525	1.08
Totals:						

[1] Prior Year Land Value Analysis used
[2] After applying County Multipliers

The grid without these parcels is then updated with current County Multipliers for the reused parcels and with parcels added from the next year to determine the ECF. The land values as of the sale date do not change from year to year.

A	B	C	D	E	F	G
Parcel #	**Sale Date**	**Sale Price**	**Land & Improve[3]**	**Sale Price Buildings**	**Cost New Less Dep.[4]**	**Indicated ECF**
15-177-003	5-19-10	$324,900	$80,000	$244,900	$227,844	1.07
15-183-008	8-18-10	$380,000	$95,000	$285,000	$301,604	0.94
15-181-007	8-31-10	$325,000	$80,000	$245,000	$236,065	1.04
15-258-002	11-22-10	$310,000	$75,000	$235,000	$218,625	1.07
15-256-001	1-30-11	$361,900	$90,000	$271,900	$260,638	1.04
15-276-002	3-3-11	$360,500	$85,000	$275,500	$244,189	1.13
15-135-003	3-30-11	$300,000	$75,000	$225,000	$217,993	1.03
15-127-016	3-31-11	$350,000	$135,900	$214,100	$201,476	1.06
15-141-080	4-5-11	$305,000	$70,000	$235,000	$209,821	1.12
15-711-016	6-16-11	$341,900	$90,000	$251,900	$226,937	1.11
15-987-002	8-10-11	$355,000	$130,000	$225,000	$252,809	0.89
15-711-017	11-29-11	$335,500	$80,000	$255,500	$252,970	1.01
15-656-008	2-28-12	$360,000	$142,000	$218,000	$200,128	1.09
15-654-009	4-11-12	$375,000	$140,000	$235,000	$199,153	1.18
15-554-121	8-23-12	$318,900	$70,000	$248,900	$247,887	1.00
Totals				**$3,665,700**	**$3,498,139**	**1.05**

[3] As of date of sale and not from grid
[4] After applying County Multipliers

The second ECF calculation method differs from the first method only in that, the land values used for the parcels for the first year of the updated ECF analysis are changed and drawn from the updated land value analysis. In other words, for the parcels that are reused in the analysis, the land value used for those parcels will be the updated land values drawn from the current land value analysis, and not the land values that were used for those parcels in the prior year's ECF analysis (as drawn from last year's land value analysis). This second ECF calculation method is not found in the Assessor's manual but is commonly used by assessing offices. First the parcels from the oldest year of the ECF analysis from last year are removed from the analysis, lined out in the grid.

A	B	C	D	E	F	G
Parcel #	**Sale Date**	**Sale Price**	**Land & Improve[5]**	**Sale Price Buildings**	**Cost New Less Dep.[6]**	**Indicated ECF**
~~15-208-010~~	~~4-3-09~~	~~$375,500~~	~~$90,000~~	~~$285,500~~	~~$272,238~~	~~1.05~~
~~15-128-048~~	~~4-25-09~~	~~$369,900~~	~~$95,000~~	~~$274,900~~	~~$238,758~~	~~1.15~~
~~15-128-040~~	~~5-17-09~~	~~$445,000~~	~~$120,000~~	~~$325,000~~	~~$296,951~~	~~1.09~~
~~15-231-005~~	~~5-20-09~~	~~$378,000~~	~~$90,000~~	~~$288,000~~	~~$281,714~~	~~1.02~~
~~15-204-010~~	~~7-1-09~~	~~$265,000~~	~~$65,000~~	~~$200,000~~	~~$177,170~~	~~1.13~~
~~15-229-016~~	~~8-11-09~~	~~$375,000~~	~~$90,000~~	~~$285,000~~	~~$270,779~~	~~1.05~~
~~15-208-021~~	~~8-23-09~~	~~$400,000~~	~~$100,000~~	~~$300,000~~	~~$278,034~~	~~1.08~~
~~15-255-012~~	~~9-16-09~~	~~$290,000~~	~~$75,000~~	~~$215,000~~	~~$207,805~~	~~1.03~~
15-177-003	5-19-10	$324,900	$80,000	$244,900	$223,376	1.10
15-183-008	8-18-10	$380,000	$95,000	$285,000	$295,690	0.96
15-181-007	8-31-10	$325,000	$80,000	$245,000	$231,436	1.06
15-258-002	11-22-10	$310,000	$75,000	$235,000	$214,338	1.10
15-256-001	1-30-11	$361,900	$90,000	$271,900	$255,572	1.06
15-276-002	3-3-11	$360,500	$85,000	$275,500	$239,401	1.15
15-135-003	3-30-11	$300,000	$75,000	$225,000	$213,719	1.05
15-127-016	3-31-11	$350,000	$135,900	$214,100	$197,525	1.08
Totals:						

[5] As of date of sale and not from grid
[6] After applying County Multipliers

The appraisals for the reused parcels are updated using this year's study land values and current County multipliers. Again, note that the land values as drawn from the land value analysis change from year to years (with the updating of the chart).

A	B	C	D	E	F	G
Parcel #	**Sale Date**	**Sale Price**	**Land & Improve[7]**	**Sale Price Buildings**	**Cost New Less Dep.[8]**	**Indicated ECF**
15-177-003	5-19-10	$324,900	$81,600	$243,400	$227,844	1.07
15-183-008	8-18-10	$380,000	$96,000	$284,000	$301,604	0.94
15-181-007	8-31-10	$325,000	$81,600	$243,400	$236,065	1.03
15-258-002	11-22-10	$310,000	$76,400	$233,600	$218,625	1.07
15-256-001	1-30-11	$361,900	$91,800	$270,100	$260,638	1.04
15-276-002	3-3-11	$360,500	$86,700	$273,800	$244,189	1.12
15-135-003	3-30-11	$300,000	$76,500	$223,500	$217,993	1.03
15-127-016	3-31-11	$350,000	$137,900	$212,100	$201,476	1.05
15-141-080	4-5-11	$305,000	$70,000	$235,000	$209,821	1.12
15-711-016	6-16-11	$341,900	$90,000	$251,900	$226,937	1.11
15-987-002	8-10-11	$355,000	$130,000	$225,000	$252,809	0.89
15-711-017	11-29-11	$335,500	$80,000	$255,500	$252,970	1.01
15-656-008	2-28-12	$360,000	$142,000	$218,000	$200,128	1.09
15-654-009	4-11-12	$375,000	$140,000	$235,000	$199,153	1.18
15-554-121	8-23-12	$318,900	$70,000	$248,900	$247,887	1.00
Totals:				**$3,653,100**	**$3,498,139**	**1.04**

[7] This Year Land Value Analysis used
[8] After applying County Multipliers

4. Summary

- Sales for an ECF analysis should generally be drawn from the same time period used for a sales study performed to set the starting base for equalization purposes. A two-year residential class sales study performed for 2013 and an ECF analysis performed for 2013 would both include sales information from October 1, 2010 through September 30, 2012.

- ECF areas should be established so that groups of properties (i.e., neighborhoods) sharing similar characteristics are included together. Natural or man-made boundaries will usually serve as ECF area boundaries. ECF areas should also be established so that they are not too large. Doing so could lead to an ECF which properly values the overall ECF area, but incorrectly values various neighborhoods, and individual parcels, that are improperly included in the area.

- ECF's can also be calculated for a group of properties based primarily on the structures' other physical characteristics (instead of the properties' geographic location). Examples include houses which are of a certain size, tri-level homes, apartments, warehouses, etc. It is critical that the ECF determination be based on a sufficient number of arms-length sales and that the sales be representative of the properties to be appraised using the ECF.

- Occasionally due to a lack of a number of current sales, it will be necessary to estimate an ECF. In estimating an ECF you should analyze historical sales (application of time adjustment) and sales of comparable properties from outside the area (may require location adjustment).

- An insufficient number of sales from the time period in the area is not a reason to ignore the sale or few sales that are in the area and from the time period. In these cases, it is necessary to obtain and use sales from outside the ECF area, or outside the time period.

- The sale price and terms of sale for each parcel used in an ECF analysis must be verified. Inspections should be done as close as possible to the sale date. The value of any personal property, etc. should be removed from the sale price. Any unusual circumstances should be considered as possible cause for the sale to be removed from the ECF analysis. Physical changes to the property (e.g., remodeling, basement finish, addition, etc.) since the date of sale must be noted so that the property can be valued as it existed prior to those changes, or so that the property can be removed from the ECF

analysis. Effective age of buildings is to be determined as of the sale date, not the assessment date.

- The value of land is estimated as of the date of the sale and the depreciated value of land improvements must be removed from the sale price when determining an ECF. What remains is the estimated 'market price' of the buildings, which is compared to the depreciated cost by manual of the buildings (i.e., the appraised value of the buildings) in the ECF analysis. Water supply and waste removal connections including well and septic systems are considered part of a building's plumbing system when those amenities are valued using the residential cost schedules in the Assessor's Manual and are not deducted as land improvements. When an assessing officer has used local costs or flat values for these items, the value should be subtracted from the sale price in the ECF analysis. An ECF should not be used to value any item that has been flat valued.

- It is important that the land values deducted from the sale prices in the ECF analysis are realistic.

- When it comes time for an ECF to be applied to an appraisal, it is essential that the assessing officer who performed the appraisals for the ECF analysis is the same assessing officer who performs the final appraisal where the ECF is used. This helps ensure that consistent quality classifications and depreciation determinations will be used in the final appraisals compared to the quality classifications and depreciation determinations that were used in the ECF analysis. If an assessing officer uses an ECF developed from appraisals performed by another assessing officer, the assessing officer using the ECF should review the properties and appraisals used to determine the ECF in an effort to achieve consistency.

- ECF analyses are to be retained on file to document the source of the ECF. In addition to documenting the ECF which is used, retaining the ECF analysis saves time and effort in the following year. If the second half of a two-year ECF analysis is reused, the County multipliers used in the analysis will need to be updated.

- ECF's should generally be applied as calculated, meaning that if an ECF analysis of a sufficient number of parcels yields an ECF of 1.15, an ECF of 1.15 should be applied in the mass appraisal process. Assessors and equalization directors should be prepared to explain any departures from use of a calculated ECF. As previously discussed, due to a lack of sales information in the time period and area, it may be necessary to estimate an ECF.

ECF Calculation Exercise 1

Complete the following worksheet. Add the missing information for parcel 20-25-200-016 (on the pages following the worksheet). Calculate the ECF for each parcel (round to two decimal places). Identify the parcel that is an outlier and remove it from the analysis to calculate an ECF for each category of building.

Parcel #	Type of Building	Sale Price	Land & Improve	Sale Price Buildings	Cost New Less Dep.[9]	Indicated ECF
25-300-009	Farmhouse	$219,460	$109,800	$109,660	$97,628	
25-100-004	Farmhouse	$155,000	$61,400	$93,600	$75,550	
25-100-016	Farmhouse	$153,000	$76,400	$76,600	$74,618	
25-400-014	Farmhouse	$300,000	$158,900	$141,100	$82,446	
25-200-016	Farmhouse					
25-300-002	Farmhouse	$239,900	$163,300	$76,600	$70,191	
Total for Farmhouses						
25-300-036	Modular	$196,190	$125,500	$70,690	$108,104	
25-100-009	Modular	$154,800	$99,600	$55,200	$93,744	
25-300-002	Modular	$148,000	$102,000	$46,000	$71,986	
25-100-014	Modular	$135,000	$97,600	$37,400	$68,183	
Total for Modular						
25-200-020	Ranch	$261,400	$147,700	$113,700	$127,645	
25-300-018	Ranch	$229,100	$108,600	$120,500	$117,083	
25-100-010	Ranch	$189,300	$95,600	$93,700	$102,356	
25-200-011	Ranch	$367,800	$120,100	$147,700	$181,915	
25-400-004	Ranch	$143,900	$67,000	$76,900	$89,498	
25-400-008	Ranch	$248,950	$104,700	$144,250	$191,213	
25-200-009	Ranch	$134,000	$59,700	$74,300	$86,765	
25-200-044	Ranch	$130,000	$64,300	$65,700	$78,044	
25-300-018	Ranch	$127,000	$67,400	$59,600	$66,822	
25-100-006	Ranch	$121,500	$60,500	$61,000	$68,500	
25-200-007	Ranch	$188,500	$79,000	$109,500	$111,076	
25-500-010	Ranch	$300,000	$83,300	$216,700	$218,364	
25-500-036	Ranch	$225,000	$107,200	$117,800	$146,278	
Total for Ranch						

[9] After applying County Multipliers

Parcel Number: -20-25-200-016 Jurisdiction: 2003 ECF County: Printed on 07/18/2008

Grantor	Grantee	Sale Price	Sale Date	Inst Type	Terms of Sale	Liber &Page	Verified by	Prcnt Trans
ROBERT T	COSMO C	143,500	10/06/2006	WD	Warranty Deed	4590 29		0.0

Property Address
BUNTON RD

Owner's Name/Address
COSMO C

Taxpayer's Name/Address

Class: Residential | Zoning:

School: LINCOLN CONSOLIDATED

P.R.E. 100% 10/13/2006

Map #:

2007 Est TCV 128,971 TCV/TFA: 141.42

Building Permit(s)	Date	Number	Status

X Improved | Vacant

Public Improvements

	Dirt Road
X	Gravel Road
	Paved Road
	Storm Sewer
	Sidewalk
	Water
	Sewer
X	Electric
	Gas
	Curb
	Street Lights
X	Standard Utilities
	Underground Utils.

Topography of Site

X	Level
	Rolling
	Low
	High
	Landscaped
	Swamp
	Wooded
	Pond
	Waterfront
	Ravine
	Wetland
	Flood Plain

Who When What

Legal Description
*OLD SID - T 20-025-027-00 AU 25-4I COM AT NW COR OF SEC, TH S 375 FT IN W LINE OF SEC FOR PL OF BEG, TH DEFL 89 DEG 47'30" LEFT 400 FT, TH DEFL 89 DEG 47'30" RIGHT 125 FT, TH DEFL 90 DEG 12'30" RIGHT 400 FT, TH N 125 FT IN W LINE OF SEC TO PL OF BEG, BEING PART OF NW 1/4 SEC 25 T4S-R7E 1.14 AC.

Comments/Influences

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Land Value Estimates for Land Table 07ERT.07 E,R,T

Description	Frontage	Depth	Front	Depth	Rate	%Adj.	Reason	Value
			* Factors *					
07 E,R,T	2 ACRE SITE		2.00 Acres		33100	100	HOMESITE	66,200
07 E,R,T	ROW		0.10 Acres		0	100	ROW	
07 E,R,T	-EXCESS ACRES		0.95 Acres		-6400	100	- EXCESS	-6,080
			1.15 Total Acres				Total Est. Land Value =	60,120

Land Improvement Cost Estimates

Description	Rate	County Mult.	Size	%Good	Cash Value
D/W/P: 4in Ren. Conc.	4.21	1.00	168	75	530
Shed: Wood Frame	11.53	1.00	96	80	886
Total Estimated Land Improvements True Cash Value =					1,416

Year	Land Value	Building Value	Assessed Value	Board of Review	Tribunal/ Other	Taxable Value
2007	30,060	34,426	64,486			47,037C
2006	69,650		69,650			45,535S
2005	72,350		72,350			43,911C
2004	69,550		69,550			42,509C

Information herein deemed reliable but not guaranteed

Building Type
- X Single Family
- Mobile Home
- Town Home
- Duplex
- A-Frame

X Wood Frame

Building Style: RANCH/1STY

YearBuilt 0 | Remodeled

Condition for Age: Good

Room List
- Basement
- 1st Floor
- 2nd Floor
- Bedrooms

(1) Exterior
- X Wood/Shingle
- Aluminum/Vinyl
- Brick

X Insulation

(2) Windows
- X Many / Ave. / Few
- X Large / Ave. / Small
- X Wood Sash
- Metal Sash
- Vinyl Sash
- Double Hung
- Horiz. Slide
- X Casement
- Double Glass
- Patio Doors
- Storms&Screens

(3) Roof
- X Gable / Hip / Flat
- Gambrel / Mansard / Shed

X Asphalt Shingle

Chimney: Brick

(3) Roof (cont.)
- X Eavestrough
- X Insulation
- 0 Front Overhang
- 0 Other Overhang

(4) Interior
- Drywall / Paneled
- Plaster / Wood T&G

Trim & Decoration: Ex | X Ord | Min

Size of Closets: Lg | X Ord | Small

Doors | Solid | X H.C.

(5) Floors

Kitchen:
Other:
Other:

(6) Ceilings

(7) Excavation

Basement: 0 S.F.
Crawl: 912 S.F.
Slab: 0 S.F.
Height to Joists: 0.0

(8) Basement
- 8 Conc. Block
- Poured Conc.
- Stone
- Treated Wood
- X Concrete Floor

(9) Basement Finish
- Recreation SF
- Living SF
- Walkout Doors
- No Floor SF

(10) Floor Support

Joists:
Unsupported Len:
Cntr.Sup:

(11) Heating/Cooling
- X Gas / Wood
- Oil / Coal
- Elec. / Steam
- Forced Air w/o Ducts
- Forced Air w/ Ducts
- Forced Hot Water
- Electric Baseboard
- Elec. Ceil. Radient
- Radiant (in-floor)
- Electric Wall Heat
- Space Heater
- Wall/Floor Furnace
- X Forced Heat & Cool
- Heat Pump
- No Heating/Cooling
- Central Air
- Wood Furnace

(12) Electric

Amps Service

No./Qual. of Fixtures: X Ex. | Ord. | Min

No. of Elec. Outlets: Many | X Ave. | Few

(13) Plumbing
- 1 Average Fixture(s)
- 3 Fixture Bath
- 2 Fixture Bath
- Softener, Auto
- Softener, Manual
- Solar Water Heat
- No Plumbing
- Extra Toilet
- Extra Sink
- Separate Shower
- Ceramic Tile Floor
- Ceramic Tile Wains
- Ceramic Tub Alcove
- Vent Fan

(14) Water/Sewer
- 1 Public Water
- Public Sewer
- Water Well
- 1000 Gal Septic
- 1 2000 Gal Septic

Lump Sum Items:

(15) Built-ins
- Appliance Allow.
- Cook Top
- Dishwasher
- Garbage Disposal
- Bath Heater
- Vent Fan
- Hot Tub
- Unvented Hood
- Vented Hood
- Intercom
- Jacuzzi Tub
- Jacuzzi repl.Tub
- Oven
- Microwave
- Standard Range
- Self Clean Range
- Sauna
- Trash Compactor
- Central Vacuum
- Security System

(15) Fireplaces
- Interior 1 Story
- Interior 2 Story
- 2nd/Same Stack
- Two Sided
- Exterior 1 Story
- Exterior 2 Story
- Prefab 1 Story
- Prefab 2 Story
- Heat Circulator
- Raised Hearth
- Wood Stove
- Direct-Vented Ga

(16) Porches/Decks

Area	Type
220	Treated Wood
50	Treated Wood

Class: C
Effec. Age: 30
Floor Area: 912
Total Base Cost: 77,690 — CntyMult X 1.240
Total Cost New: 96,336 — E.C.F.
Total Depr Cost: 67,435 — X 1.000
Estimated T.C.V: 67,435

(17) Garage

Year Built:
Car Capacity:
Class: C
Exterior: Siding
Brick Ven.:
Stone Ven.:
Common Wall: Detache
Foundation: 42 Inch
Finished ?:
Auto. Doors:
Mech. Doors:
Area: 960
% Good:
Storage Area:
No Conc. Floor:

Bsmnt Garage:

Carport Area:
Roof:

Stories	Exterior	Foundation	Rate	Bsmnt-Adj	Heat-Adj	Size	Cost
1	Story Siding	Crawl Space	68.46	-10.02	1.92	912	55,048

Other Additions/Adjustments		Rate	Size	Cost
(14) Water/Sewer				
Public Water		1162.00	1	1,162
2000 Gal Septic		5000.00	1	5,000
(16) Deck/Balcony				
Treated Wood	,Standard	6.95	220	1,529
Treated Wood	,Standard	10.25	50	513
(17) Garages				
Class:C Exterior: Siding Foundation: 42 Inch (Unfinished)				
Base Cost		15.04	960	14,438

Phy/Ab.Phy/Func/Econ/Comb.%Good= 70/100/100/100/70.0, Depr.Cost = 67,435
ECF (2008 ECF TABLE) 1.000 => TCV of Bldg: 1 = 67,435

Information herein deemed reliable but not guaranteed

Answers for ECF Calculation Exercise 1

Parcel #	Type of Building	Sale Price	Land & Improve	Sale Price Buildings	Cost New Less Dep.[10]	Indicated ECF
25-300-009	Farmhouse	$219,460	$109,800	$109,660	$97,628	**1.12**
25-100-004	Farmhouse	$155,000	$61,400	$93,600	$75,550	**1.24**
25-100-016	Farmhouse	$153,000	$76,400	$76,600	$74,618	**1.07**
~~25-400-014~~	~~Farmhouse~~	~~$300,000~~	~~$158,900~~	~~$141,100~~	~~$82,446~~	~~**1.71**~~
25-200-016	**Farmhouse**	**$143,500**	**$61,500**	**$82,000**	**$67,435**	**1.22**
25-300-002	Farmhouse	$239,900	$163,300	$76,600	$70,191	**1.09**
Total for Farmhouses				**$438,460**	**$385,422**	**1.14**
25-300-036	Modular	$196,190	$125,500	$70,690	$108,104	**0.65**
25-100-009	Modular	$154,800	$99,600	$55,200	$93,744	**0.59**
25-300-002	Modular	$148,000	$102,000	$46,000	$71,986	**0.64**
25-100-014	Modular	$135,000	$97,600	$37,400	$68,183	**0.55**
Total for Modular				**$209,290**	**$342,017**	**0.61**
25-200-020	Ranch	$261,400	$147,700	$113,700	$127,645	**0.89**
25-300-018	Ranch	$229,100	$108,600	$120,500	$117,083	**1.03**
25-100-010	Ranch	$189,300	$95,600	$93,700	$102,356	**0.92**
25-200-011	Ranch	$367,800	$120,100	$147,700	$181,915	**0.81**
25-400-004	Ranch	$143,900	$67,000	$76,900	$89,498	**0.86**
25-400-008	Ranch	$248,950	$104,700	$144,250	$191,213	**0.75**
25-200-009	Ranch	$134,000	$59,700	$74,300	$86,765	**0.86**
25-200-044	Ranch	$130,000	$64,300	$65,700	$78,044	**0.84**
25-300-018	Ranch	$127,000	$67,400	$59,600	$66,822	**0.89**
25-100-006	Ranch	$121,500	$60,500	$61,000	$68,500	**0.89**
25-200-007	Ranch	$188,500	$79,000	$109,500	$111,076	**0.99**
25-500-010	Ranch	$300,000	$83,300	$216,700	$218,364	**0.99**
25-500-036	Ranch	$225,000	$107,200	$117,800	$146,278	**0.81**
Total for Ranch				**$1,401,350**	**1,585,559**	**.088**

[10] After applying County Multipliers

ECF Calculation Exercise 2

Complete the following worksheet by calculating the indicated economic condition factor for each parcel. Calculate the ECF for this ECF neighborhood using the information provided.

Parcel Number	Sale Price	Value of Land and Improve.	Sale Price of Building	Cost New Less Depreciation of Buildings[11]	Indicated ECF
100	$120,000	$35,000	$85,000	$82,125	
125	$135,000	$55,000	$80,000	$79,321	
135	$142,900	$32,600	$110,300	$108,357	
144	$150,100	$25,800	$124,300	$125,361	
201	$99,500	$34,300	$65,200	$64,214	
225	$89,500	$24,000	$65,500	$64,214	
313	$115,900	$56,700	$59,200	$57,345	
415	$122,000	$56,700	$65,300	$64,325	
425	$132,000	$62,000	$70,000	$71,213	
500	$200,500	$75,000	$125,500	$115,987	
		Totals			

[11] After applying County Multipliers

Calculation Exercise 2 Answers

Parcel Number	Sale Price	Value of Land and Improve	Sale Price of Building	Cost New Less Depreciation of Buildings[12]	Indicated ECF
100	$120,000	$35,000	$85,000	$82,125	1.04
125	$135,000	$55,000	$80,000	$79,321	1.01
135	$142,900	$32,600	$110,300	$108,357	1.02
144	$150,100	$25,800	$124,300	$125,361	0.99
201	$99,500	$34,300	$65,200	$64,214	1.02
225	$89,500	$24,000	$65,500	$64,214	1.02
313	$115,900	$56,700	$59,200	$57,345	1.03
415	$122,000	$56,700	$65,300	$64,325	1.02
425	$132,000	$62,000	$70,000	$71,213	0.98
500	$200,500	$75,000	$125,500	$115,987	1.08
		Totals	$850,300	$832,462	1.02

[12] After applying County Multipliers