LESLIE TOWNSHIP
2024 ECF ANALYSIS
(sales from 4/1/21 through 3/31/23)

In this section you will find:

1. L-4018 for 2024 Equalization Study for real property
2. ECF tables
3. ECF studies for real property classes
4. ECF map
5. Development of Economic Condition Factors information

E.C.F.s for Neighborhood: 2000 '2000 COMMERCIAL'

Style:	%Good: 100-91	90-81	80-71	70-61	60-51	50-0
STANDARD	1.130	1.130	1.130	1.130	1.130	1.130
VINTAGE HOME	1.283	1.283	1.283	1.283	1.283	1.283
MOBILE HOME	1.130	1.130	1.130	1.130	1.130	1.130
MODULAR/MANUF	1.130	1.130	1.130	1.130	1.130	1.130
DUPLEX	1.130	1.130	1.130	1.130	1.130	1.130

Town Homes/Duplexes: 1.130
Mobile Homes : 1.130
Agricultural Bldgs : 1.200
Commercial Bldgs : 0.891
Industrial Bldgs : 0.891

(Optional) Gross Rate Multipliers
A: 0.000
B: 0.000
C: 0.000
D: 0.000

E.C.F.s for Neighborhood: 3000 '3000 INDUSTRIAL'

Style:	%Good: 100-91	90-81	80-71	70-61	60-51	50-0
STANDARD	1.130	1.130	1.130	1.130	1.130	1.130
VINTAGE HOME	1.283	1.283	1.283	1.283	1.283	1.283
MOBILE HOME	1.130	1.130	1.130	1.130	1.130	1.130
MODULAR/MANUF	1.130	1.130	1.130	1.130	1.130	1.130
DUPLEX	1.130	1.130	1.130	1.130	1.130	1.130

Town Homes/Duplexes: 1.130
Mobile Homes : 1.130
Agricultural Bldgs : 1.200
Commercial Bldgs : 0.891
Industrial Bldgs : 0.891

(Optional) Gross Rate Multipliers
A: 0.000
B: 0.000
C: 0.000
D: 0.000

E.C.F.s for Neighborhood: 4000 '4000 AGRICULTURAL'

Style:	%Good: 100-91	90-81	80-71	70-61	60-51	50-0
STANDARD	1.130	1.130	1.130	1.130	1.130	1.130
VINTAGE HOME	1.283	1.283	1.283	1.283	1.283	1.283
MOBILE HOME	1.130	1.130	1.130	1.130	1.130	1.130
MODULAR/MANUF	1.130	1.130	1.130	1.130	1.130	1.130
DUPLEX	1.130	1.130	1.130	1.130	1.130	1.130

Town Homes/Duplexes: 1.130
Mobile Homes : 1.130
Agricultural Bldgs : 1.200
Commercial Bldgs : 0.891
Industrial Bldgs : 0.891

(Optional) Gross Rate Multipliers
A: 0.000
B: 0.000
C: 0.000
D: 0.000

E.C.F.s for Neighborhood: 4010 '4010 RESIDENTIAL'

Style: %Good:	100-91	90-81	80-71	70-61	60-51	50-0
DUPLEX	1.130	1.130	1.130	1.130	1.130	1.130
MOBILE HOME	1.130	1.130	1.130	1.130	1.130	1.130
MODULAR/MANUF	1.130	1.130	1.130	1.130	1.130	1.130
STANDARD	1.130	1.130	1.130	1.130	1.130	1.130
VINTAGE HOME	1.283	1.283	1.283	1.283	1.283	1.283

Town Homes/Duplexes: 1.130
Mobile Homes : 1.130
Agricultural Bldgs : 1.200
Commercial Bldgs : 0.891
Industrial Bldgs : 0.891

(Optional) Gross Rate Multipliers
A: 0.000
B: 0.000
C: 0.000
D: 0.000

E.C.F.s for Neighborhood: 9000 '9000 PERSONAL PROPERTY'

Residential : 1.000
Town Homes/Duplexes: 1.000
Mobile Homes : 1.000
Agricultural Bldgs : 1.000
Commercial Bldgs : 1.000
Industrial Bldgs : 1.000

(Optional) Gross Rate Multipliers
A: 0.000
B: 0.000
C: 0.000
D: 0.000

E.C.F.s for Neighborhood: 9900 '9900 BLL'

Residential : 1.000
Town Homes/Duplexes: 1.000
Mobile Homes : 1.000
Agricultural Bldgs : 1.000
Commercial Bldgs : 1.000
Industrial Bldgs : 1.000

(Optional) Gross Rate Multipliers
A: 0.000
B: 0.000
C: 0.000
D: 0.000

State Tax Commission Analysis for Equalized Valuation of Real Property

County Name	City/Township Name (check appropriate box)	Study Year / Equalization Year
Ingham County	Leslie Township ☐ City ☑ Township	2023 / 2024

Assessment Roll Classification					Sample				% Ratio Assessments to Appraisals	Projected True Cash Value	Remarks
Class of Real Property	Study Type	Stratified Study	Combined Study	Assessed Value	No. of Parcels	Assessed Value	True Cash Value				
100 Agricultural	AS			40,031,320	28	3,401,518	7,868,578		43.23 %	92,600,786	
200 Commercial	AS			1,495,069	10	1,254,408	2,677,579		46.85 %	3,191,182	
300 Industrial	AS			191,272	7	116,251	242,903		47.86 %	399,649	
400 Residential	SS			100,037,233	43				44.55 %	224,550,467	
500 Timber-Cutover	NC			0					%		
600 Developmental	NC			0					%		
TOTAL - REAL				141,754,894	88					320,742,084	

Study Type Codes

AS: Appraisal Study | NC: None Classified | OH: One Hundred % Study | S1: One Year Sales Study | S2: Two Year Sales Study

NW: New Class | RA: Reappraisal | ES: Estimated Values (Explain): ______

INSTRUCTIONS, Page 1:

Enter county name.

Enter Unit name and check the appropriate box for township or city.

Enter study year followed by equalization year.

For the following, enter into the appropriate field within each classification of real property, the study results of each study conducted.

Study type: Enter the two character code/s that best identify the study type/s used to obtain the projected true cash value for the classification. NOTE: The two character codes to be used can be found under the "Study Type Codes" heading of this form.

Stratified Study: If a stratified study is used, check this box and follow the instructions on page 2 of this form.

Combined Study: If a combined study is used, check this box and follow the instructions on page 3 of this form.

Assessed Value: Enter the current year's ending Assessed Value of the classification from the 2164 (L-4023).

No. of Parcels: Enter the number of parcels included in the study sample.

Sample Assessed Value: Enter the assessed value of the appraisal study sample when study type "AS" is used. If "OH" is also selected this value must match Assessed Value of the classification. **NOTE:** No data entry required if using a sales study, stratified study or combined study.

Sample True Cash Value: Enter the true cash value of the appraisal study sample when study type "AS" is used. NOTE: No data entry required if using a sales study, stratified study or combined study.

% Ratio Assessments to Appraisals: Enter the ratio by dividing the "Assessed Value by the "True Cash Value" of the appraisal study sample when study type "AS" is used. The ratio will be rounded to four decimals and displayed using two decimals (0.4975 displayed as 49.75) NOTE: If using a sales study, enter the applicable ratio from the form 2793 (L-4017/L-4047). If using a stratified or combined study, then the resulting "Study % Ratio" for the classification is used from page 2 for a Stratified Study or from page 3 for a Combined Study.

Projected True Cash Value: Enter the projected true cash value by dividing "Assessed Value" of the classification by the "% Ratio Assessment to Appraisals". NOTE: If using a stratified or combined study, then the total projected true cash value for the classification is used from page 2 for a Stratified Study or from page 3 for a Combined Study.

Remarks: Enter brief remarks relating to the study if applicable.

Study Type Codes: If "ES" was selected as a study type, please give a brief explanation why the estimated value was used.

INSTRUCTIONS: County Summary (Total Recap)

Enter county name.

Enter study year followed by equalization year.

For the following, enter into the appropriate field within each classification of real property, the study results of each study conducted.

Study type: No entry required.

Stratified Study: No entry required.

Combined Study: No entry required.

Assessed Value: Enter the total current year's ending Assessed Value of the classification from the 2164 (L-4023). This is the sum of all the assessed value for the classification from the current year individual unit 2164's (L 4023's).

No. of Parcels: Enter the total number of study parcels included in the classification.

Sample Assessed Value: No entry required.

Sample True Cash Value: No entry required.

% Ratio Assessments to Appraisals: Enter the ratio by dividing the total Assessed Value of the classification by the total Projected True Cash Value of the classification. The ratio will be rounded to four decimals and displayed using two decimals (0.4975 displayed as 49.75).

Projected True Cash Value: Enter the total Projected True Cash Value by summing the projected true cash values of the individual units in the classification.

Remarks: Enter brief remarks relating to the study if applicable.

Michigan Department of Treasury
602 (Rev. 01-18)

 L-4018P

State Tax Commission Analysis for Equalized Valuation of Personal Property

County Name	City/Township Name (check appropriate box)	Year
Ingham County	Leslie Township ☐ City ☑ Township	2024

Class of Personal Property	Study Type	Unit Ending Assessed Value	No. of Parcels	Sample: Assessed Value	Sample: True Cash Value	Study % Ratio	Unit Starting True Cash Value	Remarks
150 Agricultural	NC							
250 Commercial	ES	1,574,399				50.00%	3,148,798	
350 Industrial	NC							
450 Residential	NC							
550 Utility	ES	23,772,262				50.00%	47,544,524	
TOTAL - PERSONAL		25,346,661	0				50,693,322	

AS: Appraisal Study
AU: Audit
CT: Class Transfer
ES: Estimated Values (Explain): Not studied, typically done by the Director. It was discovered that no deed verification had occurred in the last 2+ y
NC: None Classified
NW: New Class
OH: 100%
RV: Review
S1: One Year Sales Study
S2: Two Year Sales Study

Remarks:

RESIDENTIAL 401
ECF STANDARD, MODULAR, DUPLEX MH
2023 FOR 2024 ROLL

Parcel Number	Street Address	Sale Date	Adj. Sale $	Asd. when Sold	Asd/Adj. Sale	Cur. Appraisal	Land + Yard	Bldg. Residual	Cost Man. $	E.C.F.	Land Value	Land Table
33-14-01-200-011	2650 KELLY RD	07/25/23	$455,000	$187,200	41.14	$390,586	$54,810	$400,190	$310,118	1.290	$54,810	4010 RESIDENTIAL
33-14-14-04-400-004	2788 EDEN RD	07/03/23	$435,000	$267,195	61.42	$525,117	$78,107	$356,893	$410,930	0.869	$59,188	4010 RESIDENTIAL
33-14-14-04-400-020	2999 EDEN RD	09/27/21	$274,900	$107,422	39.08	$214,844	$32,000	$242,900	$183,578	1.323	$32,000	4010 RESIDENTIAL
33-14-14-06-100-001	3239 PLAINS RD	10/21/21	$167,500	$74,185	44.29	$153,568	$32,570	$134,930	$188,764	0.715	$32,000	4010 RESIDENTIAL
33-14-14-09-100-031	2396 INGALLS RD	12/27/21	$275,000	$100,076	36.39	$207,654	$33,000	$242,000	$175,355	1.380	$33,000	4010 RESIDENTIAL
33-14-14-09-200-011	3261 EDEN RD	09/29/23	$395,000	$156,253	39.56	$321,256	$52,614	$342,386	$245,665	1.394	$52,614	4010 RESIDENTIAL
33-14-14-09-200-012	3022 EDEN RD	06/30/21	$275,000	$105,640	38.41	$211,279	$32,840	$242,160	$179,156	1.352	$32,840	4010 RESIDENTIAL
33-14-14-11-400-017	3377 WRIGHT RD	10/21/22	$185,000	$0	0.00	$164,951	$39,742	$145,258	$114,793	1.265	$39,742	4010 RESIDENTIAL
33-14-14-13-300-026	3825 WOODS RD	09/15/23	$213,000	$108,980	51.16	$227,532	$42,345	$170,655	$171,469	0.995	$42,345	4010 RESIDENTIAL
33-14-14-21-200-034	2161 KINNEVILLE RD	04/05/23	$262,000	$126,730	48.37	$253,460	$47,146	$214,854	$229,003	0.938	$39,191	4010 RESIDENTIAL
33-14-14-22-176-007	4269 RACE RD	08/14/23	$369,000	$152,524	41.33	$301,405	$36,891	$332,109	$244,596	1.358	$28,146	4010 RESIDENTIAL
33-14-14-23-100-021	4182 WRIGHT RD	08/03/22	$410,000	$167,993	40.97	$366,999	$80,100	$329,900	$272,031	1.213	$57,000	4010 RESIDENTIAL
33-14-14-26-200-005	1236 FITCHBURG RD	10/29/21	$99,900	$43,630	43.67	$90,298	$17,563	$82,337	$83,577	0.985	$16,200	4010 RESIDENTIAL
33-14-14-27-102-001	1900 FITCHBURG RD	11/19/21	$232,000	$94,701	40.82	$196,708	$23,857	$208,143	$174,397	1.194	$22,492	4010 RESIDENTIAL
33-14-14-28-402-007	4822 STATE RD	11/03/23	$285,000	$138,718	48.67	$290,567	$42,908	$242,092	$229,314	1.056	$36,374	4010 RESIDENTIAL
33-14-14-29-100-009	4733 BLACKMORE RD	11/12/21	$202,000	$95,552	47.30	$198,181	$35,554	$166,446	$163,280	1.019	$32,520	4010 RESIDENTIAL
33-14-14-29-200-010	4554 CHURCHILL RD	04/14/23	$300,000	$127,509	42.50	$255,018	$54,025	$245,975	$186,105	1.322	$34,799	4010 RESIDENTIAL
33-14-14-29-476-006	2616 OLDS RD	02/10/22	$130,000	$65,066	50.05	$140,689	$39,205	$90,795	$95,997	0.946	$35,000	4010 RESIDENTIAL
33-14-14-33-201-012	5112 STATE RD	06/18/21	$200,000	$76,242	38.12	$152,484	$31,162	$168,838	$121,809	1.386	$27,000	4010 RESIDENTIAL
33-14-14-33-400-024	5456 STATE RD	04/15/22	$110,000	$59,774	54.34	$119,547	$33,000	$77,000	$70,814	1.087	$33,000	4010 RESIDENTIAL
33-14-14-35-100-025	5230 DUTCH RD	01/07/22	$285,000	$110,725	38.85	$229,856	$33,000	$252,000	$197,647	1.275	$33,000	4010 RESIDENTIAL
33-14-14-35-200-012	1081 OLDS RD	03/17/22	$70,000	$0	0.00	$90,269	$32,000	$38,000	$55,389	0.686	$32,000	4010 RESIDENTIAL
33-14-14-35-300-011	5377 DUTCH RD	10/10/22	$255,000	$126,547	49.63	$280,015	$33,000	$222,000	$234,606	0.946	$33,000	4010 RESIDENTIAL
33-14-14-35-300-025	5269 DUTCH RD	06/24/22	$345,000	$133,334	38.65	$331,066	$60,180	$284,820	$257,496	1.106	$60,180	4010 RESIDENTIAL
33-14-14-36-100-017	823 OLDS RD	03/14/22	$250,000	$107,135	42.85	$233,015	$33,491	$216,509	$189,662	1.142	$32,030	4010 RESIDENTIAL
33-14-14-36-300-003	5306 COOPER RD	09/03/21	$140,000	$81,986	58.56	$163,972	$42,000	$98,000	$122,686	0.799	$42,000	4010 RESIDENTIAL
		Totals:	$6,620,300	$2,815,117		$6,110,338		$5,547,190	$4,908,237			
				Sale. Ratio =>	42.52				E.C.F. =>	1.130		
				Std. Dev. =>	13.78				Ave. E.C.F. =>	1.117		

NOTE:
Due to lack of sales in 101, 201 & 301 land tables, a combined study is deemed to be the most reliable value indicator.

LESLIE TOWNSHIP 2023 FOR 2024
RESIDENTIAL ECF STANDARD, MODULAR, DUPLES & MH

ANALYZED	1.13
APPLIED	1.13

VINTAGE HOME
ECF STUDY (BUILT PRIOR TO 1930)
2023 FOR 2024 ROLL

Parcel Number	Street Address	Sale Date	Adj. Sale $	Asd. when Sold	Cur. Appraisal	Land + Yard	Bldg. Residual	Cost Man. $	E.C.F.	Building Style	Land Table
33-14-14-04-400-025	2950 EDEN RD	04/08/21	$138,800	$62,238	$124,475	$33,000	$105,800	$67,410	1.570	VINTAGE HOME	4010 RESIDENTIAL
33-14-14-17-226-013	2577 COVERT RD	10/04/21	$280,000	$71,730	$249,361	$33,180	$246,820	$160,159	1.541	VINTAGE HOME	4010 RESIDENTIAL
33-14-14-18-400-003	3034 KINNEVILLE RD	06/11/21	$195,000	$98,974	$197,948	$32,000	$163,000	$122,290	1.333	VINTAGE HOME	4010 RESIDENTIAL
33-14-14-22-376-001	4409 RACE RD	09/24/21	$445,000	$262,102	$524,203	$314,954	$130,046	$186,035	0.699	VINTAGE HOME	4000 AGRICULTURAL
33-14-14-23-100-003	1291 KINNEVILLE RD	10/20/21	$85,000	$58,337	$120,448	$32,000	$53,000	$65,179	0.813	VINTAGE HOME	4010 RESIDENTIAL
33-14-14-23-200-003	4231 WRIGHT RD	06/20/22	$265,000	$113,718	$250,539	$34,000	$231,000	$177,052	1.305	VINTAGE HOME	4010 RESIDENTIAL
33-14-14-26-200-032	4551 WRIGHT RD	08/04/22	$215,000	$66,937	$147,152	$32,320	$182,680	$99,434	1.837	VINTAGE HOME	4010 RESIDENTIAL
33-14-14-30-300-006	3290 OLDS RD	10/01/21	$165,000	$70,098	$140,196	$33,170	$131,830	$81,730	1.613	VINTAGE HOME	4010 RESIDENTIAL
33-14-14-33-400-024	5456 STATE RD	04/15/22	$110,000	$59,774	$119,547	$33,000	$77,000	$70,814	1.087	VINTAGE HOME	4010 RESIDENTIAL
		Totals:	$1,898,800	$863,908	$1,873,869		$1,321,176	$1,030,103			
				Sale. Ratio =>				E.C.F. =>	1.283		
				Std. Dev. =>				Ave. E.C.F. =>	1.311		

NOTE:
Due to lack of sales in 101, 201 & 301 land tables, a combined study is deemed to be the most reliable value indicator.

LESLIE TOWNSHIP 2023 FOR 2024
RESIDENTIAL ECF STANDARD

ANALYZED	1.283
APPLIED	1.283

COMMERCIAL/INDUSTRIAL
ECF STUDY
2023 FOR 2024 ROLL

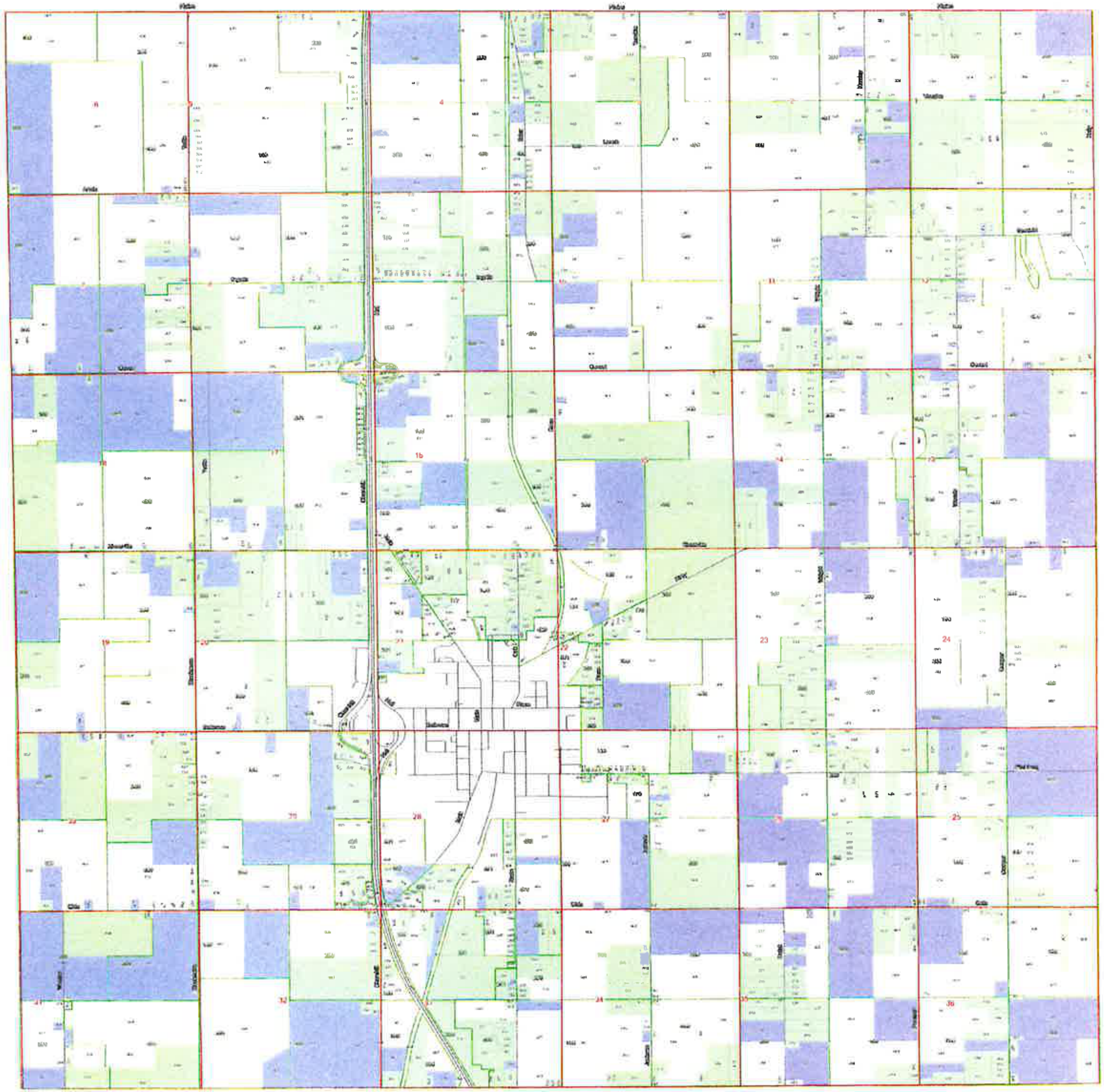
PARCEL #	UNIT	SALE DATE	SALE PRICE	LAND + IMP VALUE	BUILDING RESIDUAL	COST BY MANUAL	INDICATED ECF
33-01-01-09-280-002	LANSING	05/27/22	$300,000.00	$87,668.00	$212,332.00	$225,865.00	0.940
33-25-05-23-208-012	DELHI	02/17/22	$185,000.00	$95,224.00	$89,776.00	$118,794.00	0.756
33-19-10-09-351-008	MASON	12/10/21	$200,000.00	$14,090.00	$185,910.00	$112,800.00	1.648
33-02-02-21-406-001	MERIDIAN	11/19/21	$280,000.00	$158,927.00	$121,073.00	$203,713.00	0.594
33-01-01-28-403-141	LANSING	11/01/21	$549,000.00	$121,641.00	$427,359.00	$465,231.00	0.919
33-02-02-05-352-004	MERIDIAN	10/18/21	$236,000.00	$48,309.00	$187,691.00	$273,735.00	0.686
33-01-01-15-426-451	LANSING	09/20/21	$150,000.00	$26,953.00	$123,047.00	$147,675.00	0.833
33-10-10-16-200-814	VEVAY	07/13/21	$280,000.00	$0.00	$280,000.00	$248,375.00	1.127
33-01-01-06-104-171	LANSING	04/22/21	$135,000.00	$36,244.00	$98,756.00	$140,811.00	0.701
			$2,315,000.00	$589,056.00	$1,725,944.00	$1,936,999.00	0.891

NOTE:
Due to lack of sales in commercial and industrial a combined study is deemed to be the most reliable indicator.

LESLIE TOWNSHIP 2023 FOR 2024
COMMERCIAL/INDUSTRIAL ECF

ANALYZED	0.891
APPLIED	0.891

Leslie Twp
ECF Value Map
2024



ECF Value

	0
	1.13
	1.283

N

1 inch = 1,000 feet

INGHAM COUNTY EQUALIZATION/TAX MAPPING

Chapter 3: Development of Economic Condition Factors

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 (Assessors Manual) and to "bring" those costs to the County level. But economic condition factors are necessary, and developed annually by assessors to further refine these costs to the local market.

"An ECF must be determined and used in cost appraisal situations where the Assessor's Manual is used." It is not appropriate to declare that one isn't used because the assessor relied on a recently published Assessor's Manual, or because the improvements are newly constructed. The ECF is used to adjust the 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 Michigan Constitution, Article IX, Section 3, assessments are developed annually, uniformly and not to exceed 50% of a property's true cash value. Because of the diversity of properties Michigan assessors must value every year in their respective jurisdiction(s), assessors often rely on mass appraisal models to accomplish this task. Most mass appraisal models rely on a cost-less-depreciation approach and adjust its results to what properties are selling for through the use of an ECF. The ECF is prepared by analyzing properties which have sold and then comparing their respective cost-less-depreciation of the buildings (i.e., building value) to that portion of the sale prices attributable to those buildings.

Calculation of Economic Condition Factors

An ECF is developed by analyzing verified property true cash value level 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 and calculated using the Assessors Manual and its respective building value (i.e., 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 is developed for assessment purposes.

Generally, the sales used for the ECF analysis should be from the same time period used for the sales study utilized for Equalization. This is often a 24-month time period.
Michigan assessors must consider the following guidelines when developing and applying ECFs:

1. The time period of sales for the ECF study should be the same as the County Equalization Department study.
2. The County multiplier used by the assessor should be the same as the County Equalization Department.
3. The ECF is not applied to land value or the land improvements.
4. The ECF is only applied to building improvements.
5. The ECF is not applied to any buildings that are assessed as "flat-values".

Assessors should start the ECF calculation by identification of an ECF "neighborhood". The neighborhood should be established so properties sharing similar value-related property characteristics are analyzed together. Borders for ECF neighborhoods may be natural and/or human made. They can also be based on the age of the buildings, construction type and qualities of the buildings, general location amenities, as well as a number of other attributes. ECF's are typically calculated for a group of properties based upon the primary structure and its characteristics. For example, the neighborhood may consist of masonry/brick one-story homes built in the 1950's in a subdivision developed with 800 lots or wood frame two-story homes built in the 1960's throughout a small community.

Assessors can make the mistake of having too many neighborhoods. 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 (e.g., apartments, warehouses, strip retail centers, big box retail stores, manufacturing plants, and research and development buildings)

It is critical that the ECF analysis be based upon a sufficient number of verified arms-length sales transactions and that the sales be representative of the properties being assessed using the ECF. In some rural townships, there may be insufficient sales to develop an ECF. In this case, the assessor may have to analyze sales in adjoining communities to assist in developing an ECF. The assessor may need to include sales having occurred outside the normal period, requiring the use of a market conditions adjustment (i.e., time). 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 used in its 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 the property can be removed from the ECF analysis. The assessor should use the effective age as of the date of sale or the assessment date.

The proper development of land value is essential to an accurate ECF. The estimate of the depreciated value of the land improvements is also critical. It is important that the land values used to set the ECF are also the land values used for the assessments of those properties. These items are removed from the sale price when developing an ECF.

In terms of comparisons, assessors should try to use properties with small amounts of land and land improvements. Fewer and smaller the deductions will allow for the most accurate ECF because, in most cases, 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.

ECFs should generally be applied as calculated. Any variation from the calculated ECF must be fully documented. The detailed calculations used to develop the ECF must be kept on file to be used in defense of appeals, necessary in AMAR audits, explaining assessment to property owners, etc.

The following table contains an example of reproduction costs of four homes which are identical except for their location and are located in six 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 develop an ECF, the depreciated cost of the building which has sold is compared to the sale value of that same building. The ECF indicator for each sale is calculated by dividing the sale price of the building by its cost new (with county multiplier applied) less any and all depreciation associated with the building. One ECF indicator is not sufficient for the development of a reliable ECF. Use of a sufficient number of sales is necessary to ensure the accuracy of an ECF.

Although the individual ECF calculations are shown in the ECF analysis, the separate ECF indicators are **not averaged** to develop the final ECF. The separate ECF indications are listed so an assessor can easily observe and review "outlying" ECFs. Also, showing the individual ECF indications allows the assessing officer an opportunity to observe if there is consistency or patterns reflected by the analysis. It is a good practice to plot the individual ECF indications on a map of the ECF area. Plotting individual ECF indications on a map may help an assessor's ECF evaluation. This same procedure is followed to develop commercial and industrial ECFs.

The development of an ECF is relatively simple if there are a sufficient number of recent, relevant, and reliable sales in the area. Sales for the ECF analysis 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, or appropriate, to adjust sales for market conditions (i.e., time) if they transacted within the proper sale study time period.