Research Report
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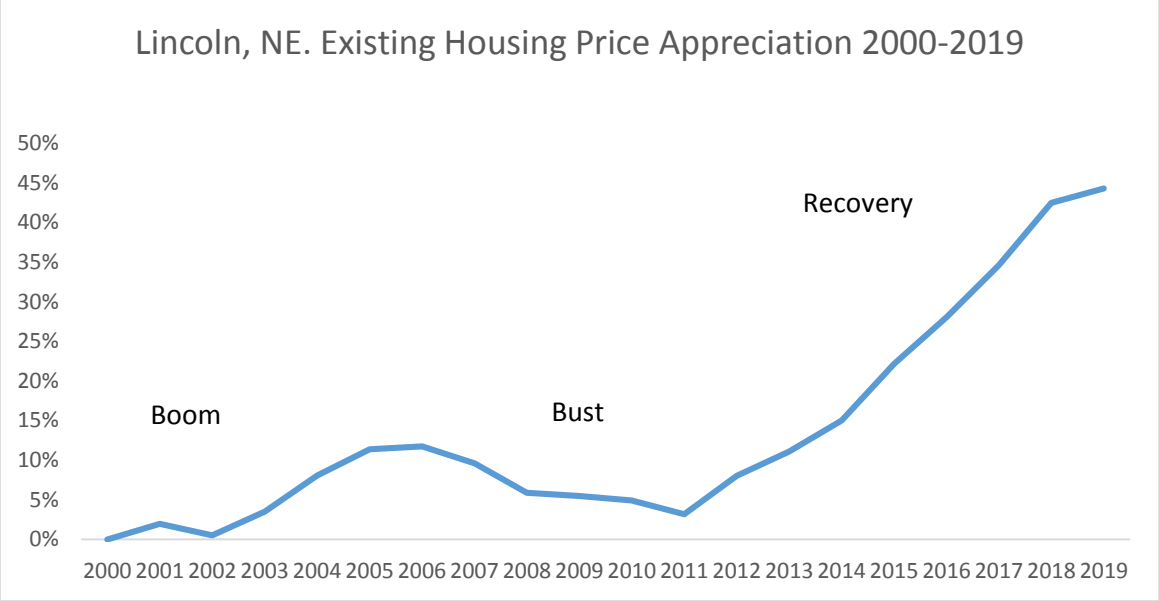
Existing Single Family House Price Appreciation in Lincoln Nebraska (2000 to October 2019)

Report Author:
Steven Shultz
Bariight Professor of Real Estate and Land Use Economics
Dept. of Finance, Banking Law and Real Estate
College of Business Administration, University of Nebraska at Omaha
Website: www.unorealestate.org email: sshultz@unomaha.edu



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Other UNO Real Estate Center Research Reports *summarized in the final appendix of this report, can be downloaded from: https://www.unomaha.edu/college-of-business-administration/center-for-real-estate-and-asset-management/research/index.php*

Executive Summary

This study evaluates existing single-family housing price appreciation across the Lincoln, NE, Metropolitan Area (the Lincoln School District) from 2000 through September 30, 2019.

Price appreciation was estimated using sales transaction data for existing (i.e. older than 1 year) housing sales aggregated by the Great Plains Multiple Listing Service, using alternative approaches: median price changes, median price changes accounting for home size, and multiple regression based mass appraisal modelling which is the most reliable of the approaches and the primary focus of this study. Appreciation was estimated City-wide and then across 14 zip codes and 6 high school attendance areas to evaluate the spatial uniformity (i.e. homogeneity) of price appreciation in different parts of Lincoln.

Over the full 19 year period, existing Lincoln-wide home prices increased by 44%. During the housing market crash of 2006 to 2011, prices depreciated 9%, and since 2013 have recovered by 41%. In the last 18 months (January 2018 to September 30, 2019), prices have increased by 9.7%. More simplistic median based appreciation estimates generated slightly higher appreciation rates during all of these time periods.

Appreciation was not homogeneous across the Lincoln market with 19-year appreciation rates ranging from 40% to 68% across different market segments. And appreciation trends across sub-markets are not uniform over time which indicates that it is not wise to rely on a single (Lincoln-wide) housing price appreciation metric to explain the current state of the Lincoln housing market.

Lincoln housing price appreciation has lagged slightly behind Omaha's except during the housing market crash of 2007-11. Finally, both Omaha and Lincoln home prices have appreciated more than in other Midwestern Cities from 2016 to the end of 2018.

Background and Justification for this Study

A primary objective of the Real Estate Research Center at the University of Nebraska at Omaha is to conduct timely and unbiased research on residential, commercial and rural real estate issues in the Omaha metropolitan area as well as throughout Nebraska and the Upper Great Plains. Since 2005 this has included annual or bi-annual research reports that have quantified housing price appreciation across Omaha which have been extensively reported on in the local press, and widely utilized by real estate professionals and property owners to gain a better understanding of the complex dynamics of the local real estate market.

No similar housing price appreciation studies are known to have been conducted for the nearby city of Lincoln, NE where the reporting of residential housing market price trends have historically been limited to simplistic median sale price appreciation statistics usually over limited time spans and without geographical specificity. For example, a recent (October 17, 2019) article in the Lincoln Journal Star Newspaper noted that the median price of home in Lincoln as of August 2019 was $187,000 which was 4.2% higher than the previous year and 30% higher than 5 years prior. It was not clear if this statistic included new housing construction sales, and price appreciation was not explicitly reported for different market segments or over longer time periods. Finally, it is not yet known whether median price appreciation estimates in Lincoln differ from the more complex and accurate mass appraisal appreciation estimates that account for the specific characteristics of sold homes over time.

Methods and Data Sources

This study relied on housing transaction data recorded by the Great Plains Multiple Listing Service which recently merged Omaha and Lincoln data. The Lincoln Metropolitan Study area is defined as the Lincoln School District, where a total of 52,077 ‘arms-length’ housing sales were evaluated over the 2000 though September 30, 2019 period. It is important to note that both condominium sales as well as ‘new construction sales’ (defined as home sold within a year of being built) were excluded, as were homes sold on lots larger than 1 acre, and those outside the $20,000 to $600,000 price range.

A ‘mass appraisal’ multiple regression model was used to estimate annual appreciation by specifying the log of sold price to be a function of: structural housing and neighborhood level characteristics (home and lot sizes, home style, age, and features present), and dichotomous (dummy) variables indicating the year in which homes are sold (see Appendix C for the specific model specification and results). A very similar version of this model used in the nearby City of Omaha, NE has been peer reviewed by mass appraisal experts and published in national real estate journals and has been demonstrated to compare favorably against both more simplistic and more complex appreciation estimation approaches (average house price changes and repeat-sale indices respectively).

Corresponding median price appreciation estimates were calculated as the percentage difference in median sale price across two time periods. A limitation with median estimates is that they may not always represent homogeneous (similar) housing stock sold over time, particularly within relatively small sub-market areas which may have small numbers of sales within particular time periods. As well, these results are considered non-parametric and their statistical significance or validity is not calculated in a multi-variate framework. Nevertheless, these simple median estimates are useful for making quick and easily understood appreciation estimates and for confirming the relative accuracy of more complex mass appraisal estimates. To improve the accuracy of median price estimates, sale prices are divided by home size (above grade living area) to lessen the potential bias of homes with varying sizes being sold over time. For those readers interested in additional details about these and other house price appreciation measures, refer to Appendix A at the end of this Report.

Housing price appreciation is first estimated for the entire City of Lincoln (defined as the Lincoln School District), and then separately for 14 distinct zip codes and 6 high school attendance areas. While zip codes and high school attendance areas are not expected to be perfect (i.e. completely homogeneous) housing market segments, they have the advantages of: 1) Being large enough to containg a sufficient number of sales required for mass appraisal models; 2) Having similar geo-spatial (i.e. neighborhood) conditions; 3) Being generally recognizable to

property owners and real estate professionals interested in geographically explicit appreciation rates; 4) Having their identifying features readily available in multiple listing service data.

For all market segments, price appreciation is calculated and reported over the following 6 distinct time periods: 1) the entire 2000 to September 30, 2019 period; 2) The 2000 to 2006 period, often described as the housing boom years; 3) The housing 'crash' of 2006 to 2011; 4) The recovery period of 2011 to 2019; and 5) The most recent 19 months (January 1 2018 to September 30, 2019) for which sales data has been collected and analysed.

Results

1) Housing Sale Characteristics

A total of 52,077 existing 'arms-length' Lincoln housing sales were evaluated over the 2000 to September 30, 2019 period. As a reminder, these sales only include detached single-family residences that were: Sold at least a year after being built; On lots smaller than 1 acre; And, within the $20,000 to $600,000 price range.

The frequency, value, and size of these home sales are summarized by median and standard deviation statistics across alternative Lincoln market segments during the last 19 months (January 2018 thourhg September 30, 2019) in Table 1 in order to present a summary of typical home prices, ages, and market segment heterogeneity. Median sale prices for all of Lincoln were $184,000 with a range of $118,000 to $323,000 across 14 zip codes in contrast to smaller range of $149,000 to $242,000 across the 6 high school areas.

Three zip codes (68502 and 68512) had a particularly large variation in sale prices as measured by their relatively high sale price standard deviations indicating that these areas are heterogeneous with regards to price. For the high school areas, much smaller variations in sale prices were observed. Regarding the age of sold homes, a high degree of variation was observed in four of of the 14 zip codes and two of the six high school areas (Northstar and Southwest).

Table 1: 2018 to October 2019 Lincoln Existing Housing Sale Summary Statistics

	Year 2018-19 Sale Price (thousands)		Age		# Sales (2018/19)
	Median	Std. Dev.	Median	Std. Dev.	
1) All of Lincoln (Lincoln School District)	$183	$86	43	33	5,453
2) Zip Codes					
68502 (Central)	$155	$86	93	22	565
68503 (Central)	$118	$41	99	58	192
68504 (North Central)	$136	$52	63	28	233
68505 (Central East)	$169	$58	56	25	425
68506 (South East)	$180	$78	56	21	677
68507 (North East)	$160	$61	58	31	320
68510 (Central East)	$165	$72	66	21	451
68512 (South West)	$225	$110	19	15	304
68516 (South Central)	$255	$81	25	16	1,029
68521 (North West)	$190	$59	24	19	603
68522 (Central West)	$180	$40	19	22	227
68524 (North West)	$155	$40	20	21	107
68526 (South East)	$323	$110	14	7	165
68528 Central West)	$183	$74	21	25	155
3) High School Attendance Areas					
East	$225	$95	38	22	1,120
Lincoln	$150	$62	79	37	827
Northstar	$182	$58	22	24	819
Northeast	$149	$57	63	40	836
Southeast	$188	$80	55	25	1,081
Southwest	$242	$96	22	15	621

2) Price Appreciation Over Time

Existing house price appreciation across the entire Lincoln study area from 2000 to September 30, 2019, based on the three alternative appreciation approaches (median prices, median prices divided by above grade living area, and mass appraisal modelling) are portrayed in Figure 1.

The mass appraisal model was based on 52,077 existing home sales and 11 explanatory variables dealing with housing characteristics, and a series of time trend dichotomous variables, all of which have statistically significant coefficients. The model has an adjusted R^2 value of 0.78 meaning that 78% of the variation in sale prices in the model are explained by the explanatory variables. These mass appraisal modelling results are very similar to those recently estimated by the UNO Real Estate Center for the nearby Omaha market and which have published in peer reviewed real estate valuation journals. The full mass appraisal model specification and results (Lincoln-wide) are summarized in Appendix B at the end of this report.

As expected, median based price appreciation (63%) is consistently higher than median price by square footage appreciation (54%), and mass appraisal estimates (44%) over the full 19 year period (Figure 1 and Table 2). Alternative appreciation estimates are most similar during periods of strong price appreciation in contrast to the 2006 to 2011 period when home prices fell by a range of -1% to -6%. The mass appraisal based estimates are considered to be the most reliable of the three approaches since they account for the particular characteristics of sold homes while the median price adjusted by home size is considered superior to the simple median price estimates. As observed in other locations where all three approaches have been used to estimate housing price appreciation (in particular in Omaha, NE over these same time periods), mass appraisal based appreciation estimates tend to be slightly more conservative than the other approaches as represented by lower appreciation during years of price appreciation and higher depreciation in years of declining prices.

Focusing only on these superior mass appraisal results over the last 19 years, existing homes in Lincoln appreciated by 44% and most of this appreciation has occurred in the post 2011 recovery period. The housing crash/bust of 2007-2011 was very mild in Lincoln (a decline of only 6%) and in the last 19 months, home prices have increased by 9.7%.

Figure 1. Lincoln Existing House Price Appreciation (2000-2019) Based on Alternative Calculation Approaches

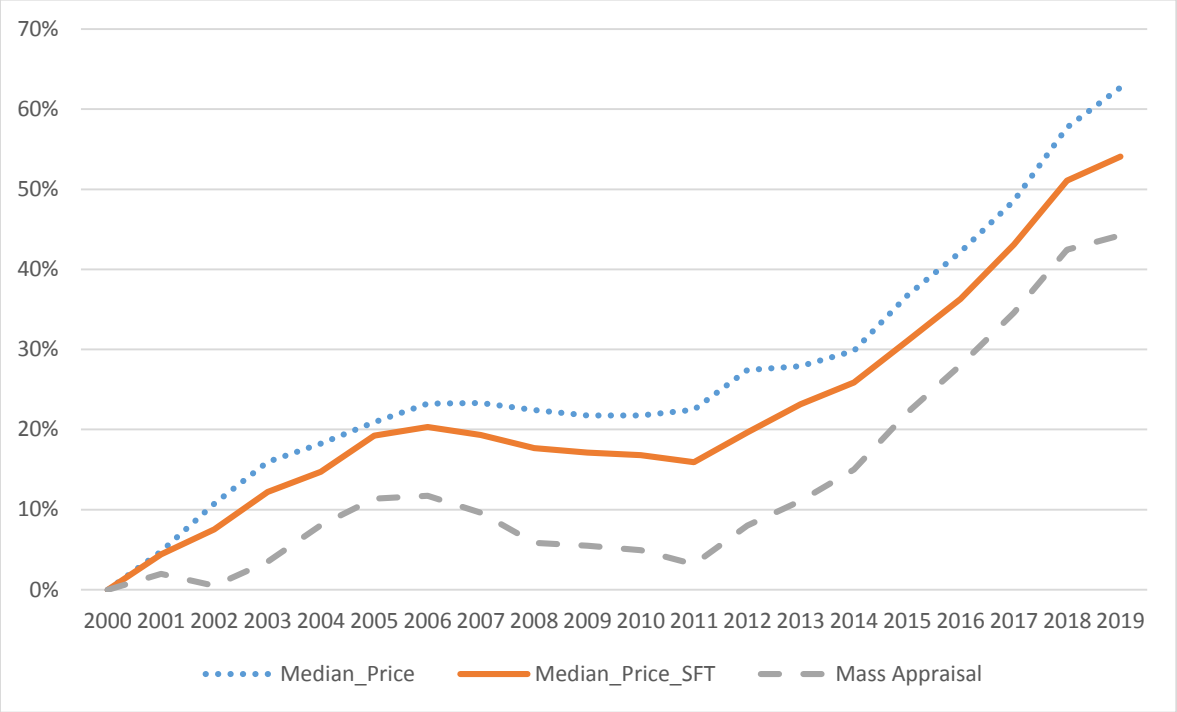

Table 2 Lincoln Existing Housing Price Appreciation (2000-2019) Based on Alternative Calculation Approaches

	Mass Appraisal	Median Sale Price Divided by AGLA	Median Sale Price
2000-Sept 30 2019	44%	54%	63%
2000-2006 (Boom)	12%	20%	23%
2006-2011 (Bust)	-9%	-4%	-1%
2012-Sept 30, 2019 (Recovery)	36%	35%	35%
2018- Sept. 30, 2019	9.7%	11%	14%

3) Price Appreciation across Different Lincoln Market Segments

The mass appraisal model generated statistically significant price appreciation estimates for 12 of the 14 Lincoln zip codes and 5 of the 6 high school attendance areas. Exceptions were zip codes 68503 and 68528 (Central and Central West) and the Northstar high school area. The inability to obtain reliable mass appraisal based appreciation estimates in these areas is likely due to heterogeneous housing sales in conjunction with other factors influencing sale prices not accounted for in the mass appraisal model. Future mass appraisal estimation efforts should consider modifying the boundaries of these 3 sub-markets to make them more homogeneous.

From 2000 through September 30, 2019, housing price appreciation across 12 Lincoln zip codes ranges from 40% in zip code 68506 (South East) to a high of 68% in 68524 (North West). But relative differences in appreciation across zip codes is not constant over time: During the boom years of 2000 to 2006 appreciation was highest (26%) in zip code 68512 (South West) and lowest in 68526 (9%) in the South East. Conversely, during the crash years of 2006-2011 price depreciation was most pronounced in zip code 68504 (North Central) at -19%, and non-existent in 68526 (South East) where homes actually appreciated in value by 1%. Appreciation over the 2012 to 2019 recovery years ranges from 33% in 68512 (South West) to 52% in 68503 (North Central). Finally, in the last 19 months, appreciation ranged from 7% to 19% across Lincoln zip codes with the highest appreciation occurring in 68505 (19%) and 68524 (17%) versus the lowest appreciation in 68512, 68516, and 68526 (all at 7%).

Price appreciation across the 5 high school attendance areas over the 2000 to 2019 time period ranged from a low of 42% (Southwest) to a high of 53% (Northeast). However, over different time periods, several anomalies appear: The East and Southwest areas were largely unscathed by the housing crash of 2006-2011, and in the last 19 months appreciation was markedly higher in the Lincoln (12%) and Northeast (16%) versus the other high school areas (7% to 8%).

This demonstrates that a single housing price appreciation metric should not be used to describe the complexity of the Lincoln housing market over short time periods. While a rising tide may eventually raise all boats, it does not necessarily happen at the same time.

Table 3. Mass Appraisal Based Lincoln Housing Price Appreciation Over Time and Market Segments

	2000-2019	2000-2006	2006-2011	2012-2019	2017 - Oct. 2019
All of Lincoln	44%	12%	-9%	41.1%	9.7%
Zip codes*					
68502 (Central)	49%	12%	-13%	49%	10%
68504 (North Central)	47%	14%	-19%	52%	9%
68505 (Central East)	59%	18%	-8%	48%	19%
68506 (South East)	40%	11%	-8%	37%	10%
68507 (North East)	50%	12%	-12%	49%	13%
68510 (Central East)	45%	9%	-11%	47%	11%
68512 (South West)	58%	26%	-2%	33%	7%
68516 (South Central)	46%	13%	-1%	34%	7%
68521 (North West)	53%	17%	-7%	43%	11%
68522 (Central West)	59%	22%	-7%	45%	14%
68524 (North West)	68%	24%	-8%	52%	17%
68526 (South East)	44%	9%	1%	35%	7%
High School Attendance Areas*					
Lincoln	47%	15%	-13%	44%	12%
East	49%	14%	-1%	36%	8%
Northeast	53%	15%	-13%	51%	16%
Southeast	44%	11%	-8%	40%	8%
Southwest	42%	13%	-3%	32%	7%

***** Mass Appraisal based Appreciation estimates were not statistically valid and not reported for zip codes 68503 and 68528 and the Northstar High School Area

4) Lincoln Versus Omaha Housing Price Appreciation

Lincoln and Omaha are the two largest metropolitan areas in Nebraska and being only 45 minutes apart, it was assumed that they would have similar housing price appreciation trends over time as they face similar economic conditions and housing construction costs.

Over the 18 year period (2000 to the end of 2018) which represents the most recently analyzed Omaha sales data, existing housing price appreciation based on median prices adjusted by home size, was 64% in Lincoln versus 54% in Omaha. However, based on the superior mass appraisal approach, Omaha appreciation was 47% versus 43% in Lincoln (Table 4).

During the last two years of data available for both locations (January of 2016 to the end of 2018), housing price appreciation was slightly higher in Omaha (17%) than in Lincoln (14%) based on mass appraisal modelling, and slightly higher in Lincoln based on the inferior median price approach. Comparisons between Omaha, Lincoln and other Midwestern locations is only possible using the most simplistic of the three appreciation estimation approaches: median prices without any adjustments for home size which indicates that Lincoln and Omaha have very similar two-year appreciation rates (16% and 15% respectively) which is substantially higher than the 9.6% appreciation rate observed in other Midwestern Cities over this same two-year period based in part on data reported by the National Association of Realtors.

Figure 2 illustrates Lincoln versus Omaha mass appraisal based housing price appreciation over the entire 18 year time period. From this, it be seen that Lincoln price appreciation has consistently been lower than in Omaha with the exception of the housing market crash years 2007-2011 when housing price depreciation was steeper in Omaha (-13%) than in Lincoln (-9%).

Figure 2. Lincoln & Omaha Mass Appraisal Based Housing Price Appreciation Over Time

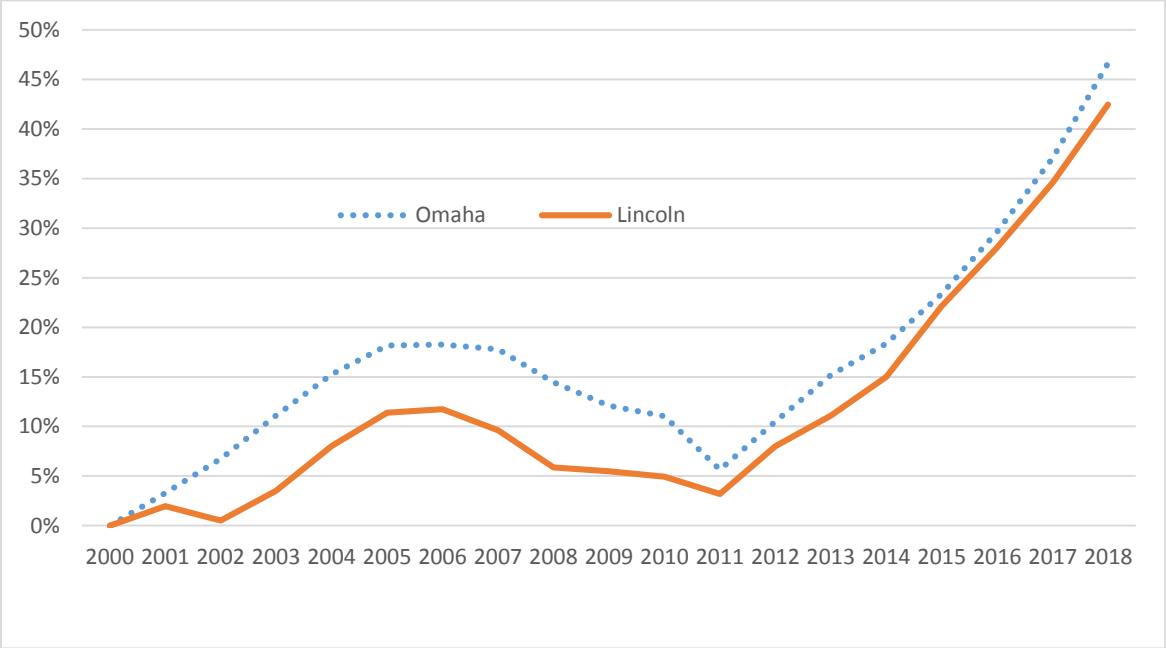

Table 4. Lincoln Versus Omaha Housing Price Appreciation (2000-2016)

	Lincoln	Omaha	Other Midwestern Cities*
2000 to the end of 2018			
Mass Appraisal	43%	47%	
Median Prices/AGLA	64%	54%	
2016 to the end of 2018			
Mass Appraisal	14%	17%	
Median Prices/AGLA	15%	12.5%	
Median Prices	16%	15%	9.6%

**** As reported by the National Association of Realtors***

Appendix A.

Background: Alternative Approaches to Estimate Housing Price Appreciation

There are three commonly used approaches to calculate housing price appreciation, defined as the change in sold prices over time. The most simplistic approach which is regularly used in press releases by the National Association of Realtors is to report price appreciation as a percentage based on average price trends (either means or medians) over time using a formula such as:

$$Appreciation = \frac{P_t - P_{t^*}}{P_{t^*}}$$

where t^* is the first period in a sequence and t is the year immediately following t^*.

The advantage of this approach is that it is easy to calculate and intuitive. Disadvantages are that the results susceptible to statistical outliers and that it is difficult to ensure that same types of housing are compared over time. Therefore most analysts relying on this approach use median statistics rather than means, remove statistical outlier sales, exclude new housing, and often evaluate prices adjusted for house size. Another limitation of the approach is that it is not possible to ascertain whether or not noted appreciation rates are statistically significant (i.e. it is a non-parametric approach). This approach can be improved by dividing median sale prices by sold home size (usually above grade living area) to account for differently sized homes selling over two more time periods.

A second and usually more accurate approach for estimating housing price appreciation involves a mass appraisal model (also commonly known as hedonic price model or an automated valuation model). This requires the estimation of a multivariate statistical model where housing sale prices are specified to be a function the physical and location related characteristics of sold homes and the time period in which they are sold. A generic form of such a model is:

$$\ln P = \beta_0 + \sum_{i=1}^{n} \beta_j X_{ij} + \delta_t D_{it} + \varepsilon$$

where *X* is a vector of housing characteristics, and *D* is a matrix of binary variables equal to 1 if the home sold in time *t* and 0 if otherwise. Each estimated (reported) time-dummy variable coefficient measures the cumulative change in price up to the year of the sale. The advantage of this technique is that it controls for changing housing characteristics over time and that the statistical significance is reported for appreciation and the other explanatory variables. A disadvantage of the approach is that it requires large numbers of detailed housing sales and that model specifications often need to be complex.

The third and most widely accepted and reported approach to measure housing price appreciation is the repeat sales approach which conceptually measures price changes for individual homes when they re-sell over time. The approach is used the Federal Housing Finance Authority (FHFA) to track the performance of federally backed (Fannie Mae and Freddie Mac) mortgages and the trademarked and highly publicized Case-Shiller Repeat Sale Index. A repeat sale index

involves calculating sale and re-sale prices of individual homes. When applied to many homes re-sold over different time periods the generic specification of the repeat-sale model is:

$$(\ln P_t - \ln P_{t^*}) = \sum_{i=1}^{n} \delta_t D_{it} + \varepsilon$$

which involves regressing the difference in logged prices of the second and first sales against a matrix of time variables equal to -1 if the home sold for the first time in that year, equal to 1 if the home sold for the second time in that year, and 0 otherwise. These dummy year coefficients are interpreted as the logged price index.

To ensure that similar and typical homes are evaluated, the approach usually excludes housing sales in which a re-sale occurs within a single year and/or when substantial (atypical) improvements are made to homes between sales (usually identified by changing home sizes). This is the superior approach as it guarantees that similar homes are evaluated over time, and that like the mass appraisal approach, it is parametric (statistical significance is reported). A disadvantage of the approach is that it requires complex data manipulation to identify and classify repeat sales which is why the Case-Shiller indices are estimated only for 20 major U.S. cities, approximately 3 to 4 months after specific sale periods. A weakness of the approach is that there are often insufficient sample sizes of repeat sales to accurately estimate appreciation in specific sub-markets (neighborhoods) within a city over short time periods. Finally, the repeat-sale approach usually under predicts appreciation (in comparison to other approaches) since it inherently uses geometric means rather than arithmetic means to estimate appreciation.

Researchers at the UNO Center for Real Estate and Asset Management have previously evaluated the use of all three of these approaches for measuring single-family housing price appreciation in Omaha over the 2000 to 2011 time period. They concluded that during periods of steady and moderate price appreciation over intermediate time periods (around 5 continuous years) that all three approaches generate very similar appreciation estimates particularly at the Omaha-wide level of analysis with mass appraisal results in most cases generating slightly higher appreciation rates than median based estimates during years of price growth versus slightly lower depreciation rates during years of price decline. However, appreciation results over shorter time periods (between 1 and 3 year time spans) and/or longer periods (e.g. 2000-2016) vary across the two approaches especially across different neighborhoods. It was found that appreciation estimates based on repeat sales during short and long time periods were consistently lower than the median calculations particularly after 2006 It was also concluded that median based appreciation estimates were less stable (i.e. accurate) when appreciation was estimated within specific neighborhoods (i.e. based on smaller samples sizes of sales), which can result in sale prices of non-similar homes being compared.

A known problem with both mass appraisal and median appreciation calculations are they give too much weight to appreciation in areas of new housing construction (i.e. the suburbs) relative to already developed (i.e. inner city) areas. Therefore the use of repeat sales indices are warranted but they involve substantial data management/calculation effort which is one reason why UNO Real Estate researchers have not estimated repeat sale indices in Omaha since 2011.

Appendix B: Mass Appraisal Model Results (Regression Modelling, Lincoln, 2000-2019

Source	SS	df	MS	Number of obs	=	52,077
				F(30, 52046)	=	6312.66
Model	9927.26278	30	330.908759	Prob > F	=	0.0000
Residual	2728.24456	52,046	.05241987	R-squared	=	0.7844
				Adj R-squared	=	0.7843
Total	12655.5073	52,076	.243019958	Root MSE	=	.22895

log_price	Coef.	Std. Err.	t	P>t	[95% Conf.	Interval]
d_townhouse	-0.07217	0.003928	-18.38	0	-0.07987	-0.06448
d_2_story	-0.10312	0.003616	-28.52	0	-0.11021	-0.09603
d_m_t_s	-0.04012	0.003113	-12.89	0	-0.04622	-0.03402
d_bung_rr_15	-0.09613	0.003126	-30.75	0	-0.10226	-0.09001
age	-0.00329	4.04E-05	-81.51	0	-0.00337	-0.00321
agsf	0.000313	2.70E-06	115.82	0	0.000308	0.000318
b_fsf	0.000169	2.96E-06	57.11	0	0.000164	0.000175
baths	0.10552	0.001973	53.49	0	0.101654	0.109387
garage_stalls	0.076948	0.001369	56.2	0	0.074264	0.079631
d_fireplace	0.108363	0.002409	44.98	0	0.103641	0.113085
d_walkout	0.010809	0.005616	1.92	0.054	-0.0002	0.021816
d_2001	0.019747	0.008386	2.35	0.019	0.003309	0.036184
d_2002	0.005085	0.007863	0.65	0.052	-0.01033	0.020496
d_2003	0.035056	0.007855	4.46	0	0.019661	0.050451
d_2004	0.080449	0.007774	10.35	0	0.065212	0.095687
d_2005	0.113737	0.007764	14.65	0	0.098519	0.128955
d_2006	0.117389	0.007805	15.04	0	0.102092	0.132686
d_2007	0.096048	0.007791	12.33	0	0.080777	0.111319
d_2008	0.058672	0.007996	7.34	0	0.043	0.074345
d_2009	0.054953	0.007788	7.06	0	0.039689	0.070217
d_2010	0.049236	0.00807	6.1	0	0.033419	0.065053
d_2011	0.031836	0.008017	3.97	0	0.016122	0.04755
d_2012	0.080099	0.007823	10.24	0	0.064766	0.095432
d_2013	0.110938	0.007806	14.21	0	0.095638	0.126239
d_2014	0.150036	0.007786	19.27	0	0.134776	0.165296
d_2015	0.221342	0.007718	28.68	0	0.206213	0.23647
d_2016	0.28038	0.007658	36.61	0	0.26537	0.295389
d_2017	0.345684	0.007651	45.18	0	0.330688	0.36068
d_2018	0.42458	0.007688	55.23	0	0.409511	0.439648
d_2019	0.442719	0.008009	55.28	0	0.427021	0.458417
_cons	10.943	0.007329	1493.16	0	10.92864	10.95737

Appendix C: Other/Ongoing UNO Real Estate Research Projects

Faculty and staff at the UNO Center for Real Estate and Asset Management undertakes research to provide public and private stakeholders in the Omaha community with objective and unbiased information to help assist with equitable and efficient real estate development. Funding for such research efforts has been obtained from Federal, State and local governments and agencies as well as from private benefactors. Current (ongoing and pending) research efforts include:

- Modelling the frequency and success of tax protests.

- Evaluating the accuracy of tax assessment and appraisal adjustment factors in Omaha

- Quantifying the impact of lending and community development programs on Omaha Price Appreciation.

- Understanding the extent and role of house flipping in the Omaha Market.

- Measuring the impact of TIFF projects on adjacent/nearby housing prices

- The impact of alternative approaches to determining the assessment value of Low Income Housing Tax Credit Properties

- Refining the use of the cost approach to value flood damage risk.

- Relationships between apartment rents and housing price appreciation

- Predicting cost approach values for apartment buildings based on observed rents.

If readers are interested in obtaining copies of these research reports when they become available, they should request to be placed on the email distribution list of the UNO Center for Real Estate and Asset Management by emailing: realestate@unomaha.edu.

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