EVALUATING THE CAPITALIZATION EFFECTS OF METRA COMMUTER RAIL TRANSIT UPON LAND VALUES IN THE SUBURBAN CHICAGO MUNICIPALITY OF ARLINGTON HEIGHTS: A TALE OF TWO STATIONS

Helen Chaney

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Approved by:

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(Advisor)

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I. Introduction

The following report examines the capitalization impacts of transit-oriented development of Metra commuter rail stations upon land values in the Chicago metropolitan region. Transit-oriented development (TOD) – the practice of locating a mixed-use, high-density development surrounding transit hubs – is based upon the belief that accessibility to transit and compact land development can help to encourage the viability of public transit while also improving livability.

By employing a hedonic price model designed to evaluate accessibility benefits, the research determines the extent to which preferences for transit-oriented development have been capitalized into the cost of land as compared with the capitalization effects associated with proximity to rail transit involving a conventional development pattern. The analysis employs data on the sales prices of single-family homes and townhomes within a one and a half mile radius of Metra commuter rail stations.

Within recent years, numerous Metra commuter rail stations have been renovated for transit-oriented development. In most cases, the municipality has worked together with the development community to invest in the renovations necessary to allow for commercial, residential and retail vendors to establish themselves in the stations, drawing primarily upon redevelopment grants. The empirical evidence of increased capitalization effects due to transit-oriented development reveals the ability of transit-oriented development to act as a tool for recapturing some of the value that transit investments create in the form of tax revenue.

Whereas previous studies have focused upon the prices of single-family homes, this study examines the capitalization effects resulting from both single-family homes and townhomes. The inclusion of townhomes as units of analysis is crucial, considering that much of the new development that has emerged in close proximity to the Metra stations over the past several years has been of the townhome variety.

Significant growth has been planned for the Metra commuter rail system in the coming years. Serious opposition to the extension has surfaced, focusing upon the potentially harmful impacts that commuter rail service could have upon property owners in the form of reduced land value, resulting in costly delays to plans for implementation. This study will serve to inform the debate by shedding light upon the real versus the perceived effects of commuter rail upon property values.

II. Metra Commuter Rail System

Metra is the second largest commuter railroad in the country in terms of number of passengers counted and the industry's largest in terms of numbers of lines, amount of track miles, amount of equipment, and number of employees. The agency provides service to Chicago and Northeastern Illinois on twelve lines with 240 stations, including a stop at O'Hare International Airport. The agency has purchased service agreements with the two largest freight carriers (UP and BNSF), and has several trackage agreements with other freight carriers.[1]

[1] Pagano, Philip A. "Capital Grants for Transit Programs." Congressional Testimony. 6/20/2002.

Over the past twenty years, commuter rail has been growing throughout the nation. Since 1970, the number of metropolitan areas served by commuter rail systems has increased from 11 to 18 in 2002. This growth in commuter rail has been propelled by the existence of rail rights-of- way and the need for communities to decrease traffic congestion, air pollution, and provide commuters with reliable transportation alternatives to the auto. Another driving force behind the success of commuter rail has been the landmark 1998 TEA-21 legislation, which features a New Starts section to fund new rail lines.[2]

Population increases in suburban Chicago have fueled a rise in Metra ridership levels. The U.S. Census reveals a doubling of population in the 1990s across the six-county area serviced by the Metra commuter rail. Metra has encouraged the growth in ridership by adding new service, such as the North Central line between Chicago and Antioch, which began in 1996, and extending lines to formerly rural towns such as Elburn. To meet demand, Metra embarked upon an unprecedented building boom in 2001 with the construction of numerous new stations and new parking at a total of nineteen stations, totaling $100 million worth of work.[3]

III. The effort to create transit-oriented development

Within the past ten years, a number of rail stations along the Metra commuter rail line in suburban Chicago have been renovated for transit-oriented development – a development pattern in which high-density, mixed-use development is clustered around transit hubs, including rail and bus stations. The effort to create transit-oriented development has been

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[2] *Ibid.*
[3] *Ibid.*

a joint effort between the municipality, Metra, the development community and the federal and state governments.

The municipalities have led the effort to implement transit-oriented development, taking on a variety of crucial tasks, including assembly of land parcels surrounding the stations and negotiations over the placement of commercial, residential and retail vendors in the stations. In the majority of cases, municipalities have relied in large part upon tax increment financing (TIF) districts to pay the local portion of the costs.

The private sector has shown interest in participating in the development activity surrounding stations because of the access and opportunity for public exposure they provide. Retailers have negotiated with the city over space and location of their sites.

Metra has been involved in the effort by building, renovating and relocating stations. According to Metra spokesman, Frank Malone, station improvements "can attract transit-oriented development. It's grown beyond our expectations."[4] Among the most noteworthy efforts toward the creation of transit-oriented development have been the efforts launched by the suburban Chicago villages of Arlington Heights, Des Plaines, Mount Prospect and Palatine.

[4] McCoppin, Bob. "Why Metra is booming Arlington Heights has a new train station, Palatine is getting one and upgrades are planned in Barrington, Schaumburg and all over the suburbs." Daily Herald (Arlington Heights, IL). 3/20/2001.

The Regional Transportation Authority (RTA) – the financial oversight and regional planning body for Metra commuter rail, as well as for the Chicago Transit Authority (CTA) and Pace suburban bus – has been a strong proponent of TOD in the Chicago area. The RTA works to increase awareness of TOD in the planning, development and academic communities through the sponsorship of workshops, seminars and by funding publications, such as Guidelines for Transit-Supportive Development by Lohan Associates, and establishing the RTA as a clearinghouse for TOD research. The RTA has also funded some TOD planning efforts through its Regional Technical Assistance Program.

IV. Literature review

Transit capitalization research has addressed heavy rail, light rail and commuter rail systems using a range of research methods. The majority of the studies to date have employed the hedonic price model, which is widely considered to be the most effective method of measuring transit capitalization effects. Other approaches commonly employed to determine the effects of rail upon land values include case studies and matched pair comparisons. The research to date has focused primarily upon residential properties and to a lesser extent upon commercial areas.

Proximity to a rail line is expected to result in a negative impact upon residential property values, due to nuisance effects such as noise and vibration both around the stations and along rail right-of-ways. Transit capitalization studies have typically revealed the nuisance effects of proximity to rail right-of-way to be substantially stronger than those associated with proximity to transit stations.

Heavy Rail

The positive impacts of the Bay Area Rapid Transit (BART) system in the San Francisco Bay Area upon surrounding land values has been well-documented. Landis and Cervero (1995) have determine the effect of proximity to a BART station on single-family rental rates and the value of commercial buildings and land for two San Francisco Bay area counties using a hedonic price function. The researchers found significant residential rent premiums associated with proximity to BART stations. In both counties studied, single-family home prices in 1990 were about $70,000 less for homes 20 miles distant from a BART station than for homes directly adjacent to BART. The study revealed no commercial rent premiums associated with proximity to BART stations.

In another study, Landis and Cervero (1996) have shown that the transit capitalization effects of one-bedroom and two-bedroom apartment units within a quarter-mile of the Pleasant Hill BART station in suburban Contra Costa County are 10% and 16% higher in price, respectively, than comparable units as compared with similar units away from BART. The suburban areas of Union City and Fremont experienced a similar pattern of higher rents for units in close proximity to transit. While these studies may offer some indication of whether and in which direction transit affects land price, they are problematic in that they do not reflect transit capitalization of land, but rather of "effective rent per square foot."

A separate study of the impacts of the BART system examined the impact on home values in Alameda County and Contra Costa County. The study areas were chosen because the transit line in Alameda County is relatively more mature than that of Contra Costa County. The study showed capitalization effects of $2.29 in decreasing distance from the line in Alameda County, as compared with capitalization effects of $1.96 for in decreasing distance from the line in Contra Costa County. A matched pair comparison showed that a house immediately adjacent to BART would sell for close to 38% more than an identical house away from BART.

An analysis of single family home prices near the 21-mile heavy rail Metrorail system in Miami-Dade County, Florida showed mixed results regarding the effect of transit upon land value (Gatzlaff and Smith, 1993). The study determines the capitalization effects of the transit line, which was established in 1984, by analyzing the change in housing price between 1971 and 1990. The study shows that property values near Metrorail stations experienced a 5% higher rate of appreciation in sales value compared to the rest of the City of Miami. The study revealed that Metrorail's introduction in 1984 increased by a small margin the value of existing properties near transit stations in higher priced neighborhoods experiencing growth. The rail's introduction showed nearly no relative benefit to property values in declining neighborhoods.

Light Rail

While sizeable evidence exists to document the positive impact of heavy rail transit upon land values, research on the capitalization effects of commuter rail and light rail is relatively sparse.

A study of the Dallas Area Rapid Transit (DART) system compared differences in land values of matched pairs of comparable retail and office properties near and away from DART stations (Weinstein and Clower, 1997). From 1994 to 1998, the value of retail properties near stations rose an average of 36.8 percent and the value of office properties near stations rose an average of 13.9 percent. Average changes for the "control" parcels in the no-station areas were 7.1 percent and 3.7 percent, for retail and office respectively. The study suggested premiums of 30 percent for retail uses.

An update to the DART study was completed in 2003, showing that median values of residential properties increased 32.1 percent near the DART rail stations compared to 19.5 percent in the control group areas (Weinstein and Clower, 2002). For office buildings, the increase was 24.7 percent for the station properties versus 11.5 percent for the no-station properties.

A study of DeKalb County along the East Line of the Metropolitan Atlanta Rapid Transit Authority (MARTA) revealed mixed results (Nelson, 1992). The study showed that proximity to rail showed positively affected land values of the low-income areas to the south of the rail line while imposing downward pressure upon the more affluent neighborhoods to the north side of the rail line. With every 100 feet a property was closer to the rail line, land values on the south side of the line increased $1045, while land values on the north side dropped by $965.

Commuter Rail

Very few studies have been conducted on the capitalization effects of commuter rail. Evidence, however, exists to show that rapid and commuter rail systems have a greater impact on property values than do light rail transit (LRT) systems as a result of the higher speeds and greater regional access of commuter rail and heavy rail (Cervero 1984). According to Cervero, the high number of service characteristics gives heavy rail and commuter rail a greater "sphere of influence" (pg. 134).

Voith (1991) estimated the house value premiums in Philadelphia provided by the Southeastern Pennsylvania Authority (SEPTA) using 571 census tracts in the area. He shows that accessibility to the CBD is capitalized into the cost of housing, as the average median home price for census tracts served by SEPTA commuter rail feature a 3.8% premium over the average 1980 median home price for census tracts not directly served by commuter rail. In the same study, Voith reveals that the median home price for census tracts immediately served by the rail line operated by PATCO in suburban New Jersey was roughly 10% higher that the median home price in census tracts located away from the rail line.

In a subsequent study, Voith (1993) examines residential properties near the Lindenwold Line in Philadelphia to determine the extent to which CBD-access affects land values and discovers an average housing value premium of 6.4 percent associated with proximity to the rail line.

Armstrong (1994) has studied the Boston's Fitchburg line on residential property values and found that homes located within census tracts that have rail stations commanded a 6.7 percent premium for home sale prices. In a follow-up study, Armstrong and Rodriguez examined single-family residential properties from four municipalities with commuter rail service, and three municipalities without commuter rail service. The authors found that properties located in municipalities with commuter rail stations exhibit values that are between 15.7 percent and 29.6 percent higher than properties in municipalities without a commuter rail station.

Similarly, Cervero and Duncan (2002) examine the impacts of two commuter rail services in the San Francisco Bay Area and find that commercial properties in commercial business districts within a quarter mile of a CalTrain station command a 20 percent value premiums and that properties located in close proximity to the Altamont Commuter Express command no capitalization premiums for commuter rail stations. The authors believe that the absence of accessibility benefits around the Altamont stations is related to the newness of the system.

V. Description of the hedonic model approach

Under hedonic price theory, as articulated by Rosen, a residential property can be considered to be a complex heterogeneous good, which features an inseparable bundle of attributes, including structural and site features, quality and quantity of local services, accessibility of services and employment centers, and environmental attributes, among others. Thus, the price of the property is a function of the property's various attributes. The price function of a property will increase as more of the attributes that consumers value are added to the property.

To determine the capitalization effects resulting from proximity to two commuter rail stations selected for analysis, a semi-log hedonic regression model has been estimated, in which the dependent variable – the inflation-adjusted sales price of the property – has been transformed.

VI. Station selection

The research design for the project features one transit-oriented development station and one conventional station. The Arlington Heights Metra station, which is located in downtown Arlington Heights, IL, was chosen as it is one of the most ambitious and far-sighted attempts in the Chicago area to create transit-oriented development. During the 1980s, the Village embarked on a progressive plan to create mixed-use developments in the Central Business District that would create a variety of housing options as well as bring more retail, entertainment and service-related opportunities to the downtown. The project has been supported through tax increment financing (TIF) funding. The Village was recognized as the 1999 winner of the Daniel Burnham Award for Excellence in Planning from the Metropolitan Planning Council due, in large part, to the redevelopment activity of its downtown. This award commends the Village for its long-range vision and successful planning and implementation of housing, retail and transit-oriented projects for the downtown area.[5] Arlington Heights also won the 2001 American Planning Association award and the 2000 Illinois APA award for implemention of the downtown development plan.

The Arlington Park station, which is located on the outskirts of Arlington Heights, was chosen as the conventional development station. The station is located adjacent to a race track as well as a large business district. The business uses are all located to the west of the station, separated from residential uses. The two stations chosen (Arlington Park and Arlington Heights) are separated by a distance of roughly one and a half miles.

VII. Data Acquisition

The data on sales prices of single-family and townhome properties were obtained from a proprietary database compiled by First American, under the name of Realquest, for sales occurring between March 1, 2003 and March 1, 2005 within a mile and a half of each of the two stations. Geographic Information System (GIS) files of the street network and highways were obtained through the Census. Spatial data layers showing the location of Metra commuter rail stations and the rail right-of-way were supplied by Metra.

[5] Arlington Heights website. www.vah.com

VIII. Data analysis and results

An extensive analysis of the data was conducted using GIS (See Figure 1). In order to assess the capitalization effects of the accessibility offered by proximity to the station or to the nearest highway onramp, the network distance was calculated from each of these features to the properties selected. To assess nuisance effects of the rail right-of-way and of nearby highways, the aerial distance was calculated to the nearest point of a limited access highway and to the nearest point on the rail right-of-way.

One model was estimated for each of the two station areas using an identical set of independent variables (See Figures 2 and 3). These include building living area (square feet), lot area (square feet), total number of bathrooms, age of housing, the presence of a finished versus unfinished basement, the presence of an attached versus detached garage, the presence of a fireplace, network distance from the station in meters, aerial distance from the closest point on the rail right of way, aerial distance from the closest highway, and network distance from the closest highway onramp. The variable for the closest highway onramp showed high collinearity in the Arlington Heights model and therefore was excluded from both models. A dummy variable for housing over 100 years old was included in both models to determine whether among the properties chosen a premium is paid for historic homes. The variable was insignificant in both models and, thus, was excluded.

The squared transformation of each of the distance variables (network distance to station, network distance to onramp, aerial distance from highway and aerial distance from rail right-of-way) were also included in the model in order to determine whether a curvilinear relationship exists between price and each of these variables. Only the squared transformation of distance variables showing a suitable level of significance (better than 95%) were included in the final models.

The Arlington Heights model shows an r squared value of 0.4223 and includes a total of nine significant variables. (See Figures 4 and 5) Significant variables in the model include living area, lot area, basement (finished or unfinished), and presence of a fireplace. In addition, network distance from the rail station, aerial distance from nearest point on highway and aerial distance from nearest point on the rail right of way were significant, as were the squared transformations for each of these variables, indicating the presence of a curvilinear relationship between the distance variables and the sales price. The model estimated for the Arlington Heights station area shows sizeable capitalization effects associated with proximity to the station. The results reveal that with every 100 meters distance from the station, housing prices decrease by $12,776.15. The model also shows evidence of significant nuisance effects associated with proximity to the rail right-of-way. With every 100 meter distance from the station, price increases by $3,536.45. The remaining results are as expected.

The Arlington Park model shows a slightly lower r squared value of 0.2923 and shows significance for the building living area and lot area variables. (See Figures 6 and 7) The results for these variables are as expected.

IX. Conclusion

The results of the research reveal that in the transit-oriented development study station of Arlington Heights, housing prices decrease by $12,776.15 with each 100 meter distance from the station. The comparison station of Arlington Park, which features conventional development, does not reveal capitalization effects associated with proximity to the station. The research provides decision-makers with localized information on the value-added of proximity to transit-oriented development of commuter rail stations upon residential land values.

Figure 1 Two Metra Station Study Areas in Arlington Heights, IL

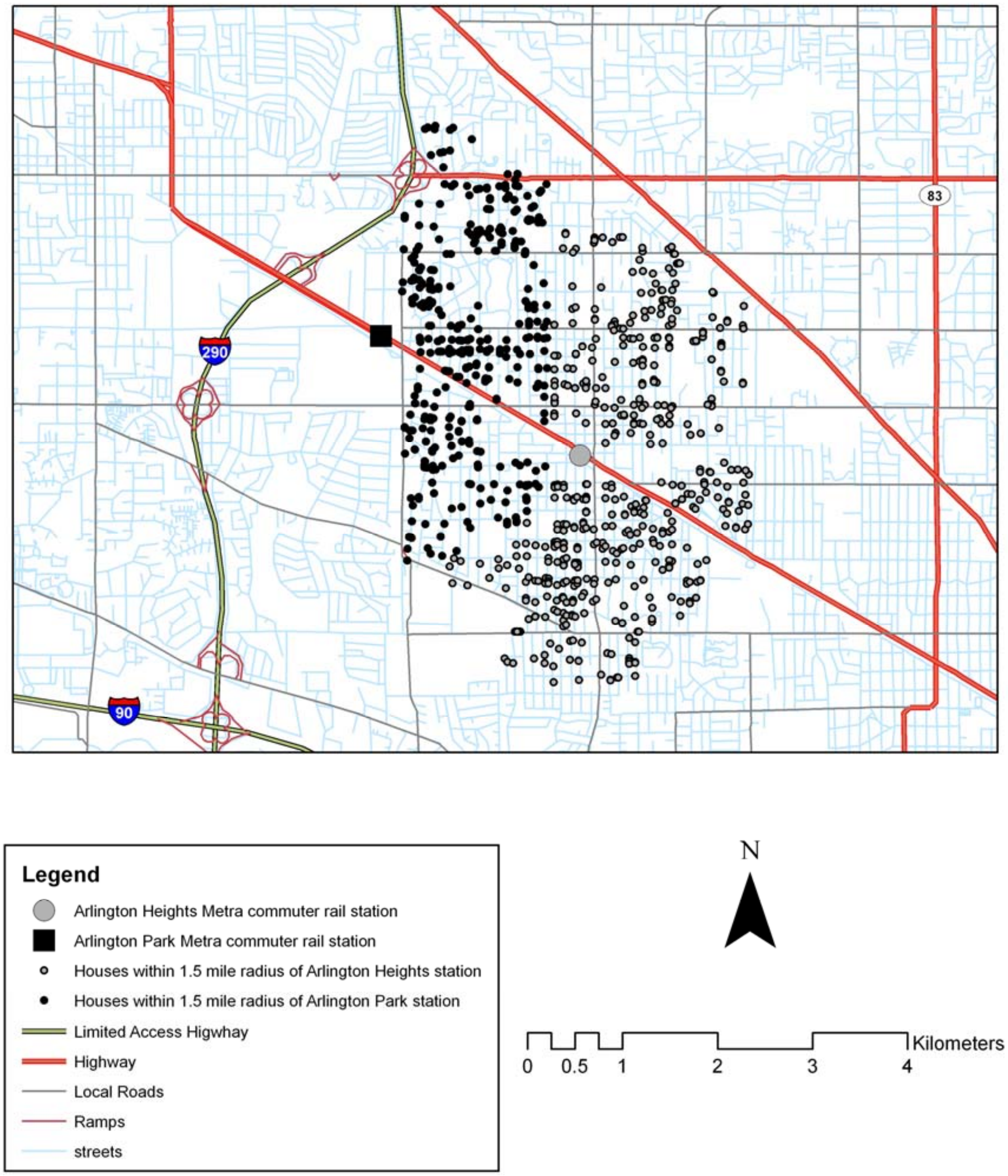

Figure 2: Arlington Heights Descriptive Statistics

Variable	Variable description	N	Minimum	Maximum	Mean	Std. Deviation
LOGSALE_1000	Log transformation of the inflation-adjusted sales price in thousands of dollars	796	4.235028	7.246816	5.872836	.3635439
AREA_BLDG	Area of the building in square feet	796	532	5914	1579.317	689.2446
AREA_LOT	Area of the lot in square feet	795	986	34880	8636.317	3958.871
BATHROOMS	Number of full and half bathrooms	796	2	8	2.447236	.7153166
AGE_HOUSE	Age of housing in years	786	6	147	52.43257	17.61314
BST_FIN_UN	Dummy variable for finished or unfinished basement. Finished basement =1; Unfinished basement = 0	791	0	1	.2402023	.4274765
GAR_ATT_DE	Dummy variable for attached or detached garage. Attached garage = 1; Detached garage = 0	717	0	1	.567643	.4957491
FIREPLACE	Dummy variable for presence of fireplace. Fireplace = 1; No fireplace = 0	796	0	1	.4145729	.4929579
DISTSTA_100	Network distance from station in hundreds of meters	796	3.1552	32.6634	17.21335	6.271857
DISROW_100	Aerial distance from commuter rail right of way in hundreds of meters	796	.3780824	23.74941	9.247364	5.828797
DISHWY_100	Aerial distance from the closest point of either Highway 90 (limited access) or Highway 290 (limited access) in hundreds of meters	796	.0996821	17.38803	7.408735	4.126637
TYPE_HOUSE	Single-family home = 1; townhome = 0	796	0	1	.9711055	.1676153
DSTASQ_100	Square transformation of network distance from station in hundreds of meters	796	9.955287	1066.898	335.5861	221.374
DHYSQ_100	Square transformation of aerial distance from the closest point of either Highway 90 (limited access) or Highway 290 (limited access) in hundreds of meters, squared	796	.0099365	302.3437	71.8971	71.00794

Figure 3: Arlington Park Descriptive Statistics

Variable	Variable description	N	Minimum	Maximum	Mean	Std. Deviation
LOGSALE_1000	Log transformation of the inflation-adjusted sales price in thousands of dollars	371	4.235028	7.120013	5.784221	.3391959
AREA_BLDG	Area of the building in square feet	371	695	4120	1435.598	523.4625
AREA_LOT	Area of the lot in square feet	371	3300	79619	9654.189	5701.607
BATHROOMS	Number of full and half bathrooms	371	2	4	2.393531	.5416304
AGE_HOUSE	Age of housing in years	371	6	127	49.31536	12.04295
BST_FIN_UN	Dummy variable for finished or unfinished basement. Finished basement =1; Unfinished basement = 0	371	0	1	.1913747	.3939145
GAR_ATT_DE	Dummy variable for attached or detached garage. Attached garage = 1; Detached garage = 0	347	0	1	.6195965	.4861871
FIREPLACE	Dummy variable for presence of fireplace. Fireplace = 1; No fireplace = 0	371	0	1	.2722372	.4457124
DISTSTA_100	Network distance from station in hundreds of meters	371	4.9122	33.3317	18.03051	6.823453
DISROW_100	Aerial distance from commuter rail right of way in hundreds of meters	371	.3780824	22.84172	9.279132	6.00735
DISHWY_100	Aerial distance from the closest point of either Highway 90 (limited access) or Highway 290 (limited access) in hundreds of meters	371	.0996821	18.06908	5.508241	3.476322

Figure 4: Arlington Heights Regression Output

Source	SS	df	MS
Model	37.2742021	13	2.86724631
Residual	50.9938561	703	.072537491
Total	88.2680581	716	.123279411

Number of obs	= 717
F(13, 703)	= 39.53
Prob > F	= 0.0000
R-squared	= 0.4223
Adj R-squared	= 0.4116
Root MSE	= .26933

LOGSALE_1000	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
AREA_BLDG	.0002918	.0000269	10.87	0.000	.0002391	.0003445
AREA_LOT	.0000138	2.79e-06	4.94	0.000	8.31e-06	.0000193
BATHROOMS	.0124031	.0251683	0.49	0.622	-.037011	.0618172
AGE_HOUSE	.000946	.0008038	1.18	0.240	-.0006322	.0025242
BST_FIN_UN	.0665577	.0238763	2.79	0.005	.0196803	.1134351
GAR_ATT_DE	.0138367	.0242187	0.57	0.568	-.033713	.0613864
FIREPLACE	.077786	.0250059	3.11	0.002	.0286909	.1268812
DISSTA_100	-.0340803	.0106153	-3.21	0.001	-.0549218	-.0132388
DISROW_100	-.0093178	.0042498	-2.19	0.029	-.0176616	-.000974
DISHWY_100	.0389138	.0114993	3.38	0.001	.0163367	.0614909
TYPE_HOUSE	.112787	.1733967	0.65	0.516	-.2276503	.4532243
DSTASQ_100	.0009485	.0003253	2.92	0.004	.0003099	.0015871
DHYSQ_100	-.0020053	.0005847	-3.43	0.001	-.0031532	-.0008574
_cons	5.270098	.1754136	30.04	0.000	4.925701	5.614496

Figure 5: Interpretation of Arlington Heights Regression Output

Variable	Variable description	Percentage change in housing price resulting from a one-unit increase in variable	Change in housing price in dollars resulting from a one-unit increase in variable (percentage change multiplied by average housing price)
AREA_BLDG	Area of the building in square feet	+0.0292%	+$111.28
AREA_LOT	Area of the lot in square feet	+0.0013%	+$4.88
BST_FIN_UN	Dummy variable for finished or unfinished basement. Finished basement =1; Unfinished basement = 0	+6.8823%	+$26,242.63
FIREPLACE	Dummy variable for presence of fireplace. Fireplace = 1; No fireplace = 0	+8.0891%	+$30,844.52
DISSTA_100	Network distance from station in hundreds of meters	-3.3506%	-$12,776.15
DISROW_100	Aerial distance from commuter rail right of way in hundreds of meters	-0.9275%	-$3,536.45
DISHWY_100	Aerial distance from the closest point of either Highway 90 (limited access) or Highway 290 (limited access) in hundreds of meters	+3.9681%	+$15,130.63

Figure 6: Arlington Park Regression Output

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      Source |       SS       df       MS              Number of obs =     347
-------------+------------------------------           F( 10,   336) =   13.88
       Model |  11.9217613    10  1.19217613           Prob > F      =  0.0000
    Residual |  28.8595399   336  .085891488           R-squared     =  0.2923
-------------+------------------------------           Adj R-squared =  0.2713
       Total |  40.7813012   346  .117865032           Root MSE      =  .29307

------------------------------------------------------------------------------
LOGSALE_1000 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   AREA_BLDG |   .0002662   .0000483     5.51   0.000     .0001711    .0003613
    AREA_LOT |   .0000129   2.86e-06     4.49   0.000     7.23e-06    .0000185
   BATHROOMS |  -.0355091   .0409768    -0.87   0.387    -.1161124    .0450942
   AGE_HOUSE |  -.0026791   .0018533    -1.45   0.149    -.0063247    .0009665
  BST_FIN_UN |    .046543    .041334     1.13   0.261    -.0347631     .127849
  GAR_ATT_DE |   -.049981   .0354479    -1.41   0.159    -.1197089    .0197468
   FIREPLACE |   .0519732    .044396     1.17   0.243    -.0353559    .1393024
  DISSTA_100 |   .0043284   .0039172     1.10   0.270    -.0033769    .0120338
  DISROW_100 |  -.0089451   .0046958    -1.90   0.058     -.018182    .0002919
  DISHWY_100 |   .0075455   .0046793     1.61   0.108    -.0016589    .0167499
       _cons |   5.466632   .1431168    38.20   0.000     5.185114     5.74815
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Figure 7: Interpretation of Arlington Park Regression Output

Variable	**Variable description**	**Percentage change in housing price resulting from a one-unit increase in variable**	**Change in housing price in dollars resulting from a one-unit increase in variable (percentage change multiplied by average housing price)**
AREA_BLDG	Area of the building in square feet	+0.0266%	$101.52
AREA_LOT	Area of the lot in square feet	+0.0013%	$4.92

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