

Second draft – for File with City Clerk

Analysis of Demolitions and Property Sales in Areas Adjacent to the 606 Trail

1st Ward Office, City of Chicago, Illinois

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Report prepared by 1st Ward Policy Director for Alderman La Spata, Alderman Maldonado, additional co-sponsors of “The 606” Ordinance, City Council, and Departments of Housing and Law; revised for public review

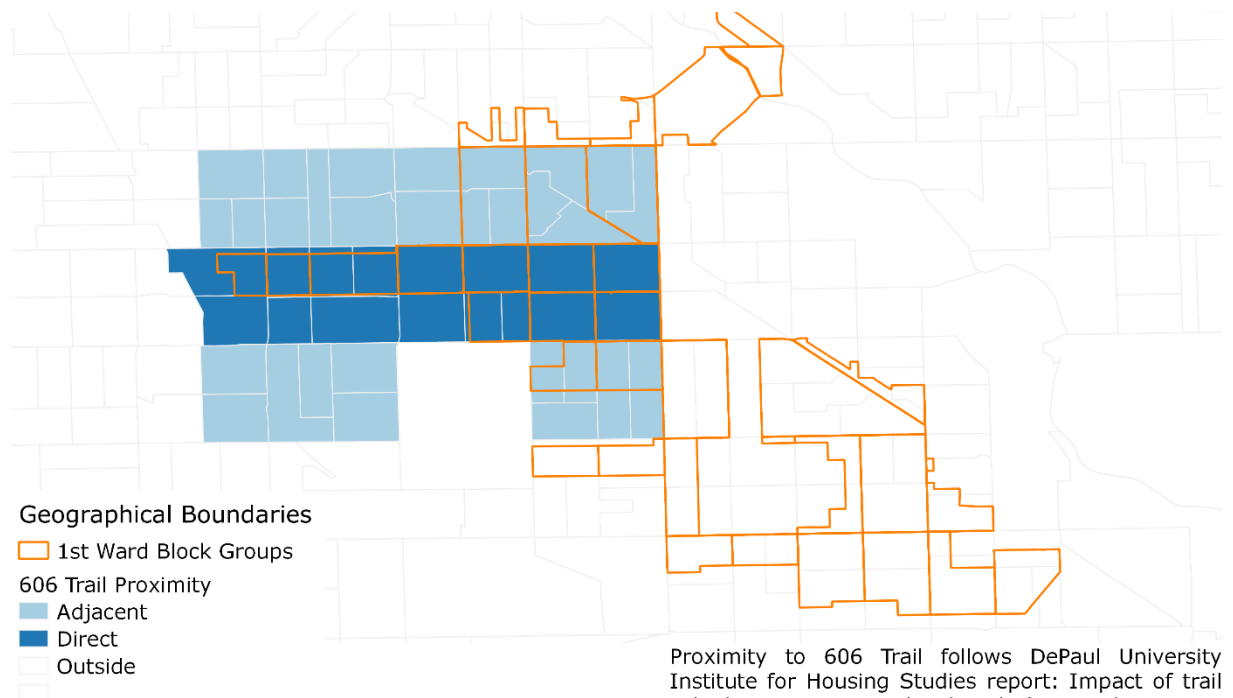
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The 606 Trail, formerly known as the Bloomingdale Trail (hereafter “the trail”, “the 606”), is a publicly accessible infrastructure attraction located within the 1st Ward. It is quite a popular place, as the 606 allows bicyclists, pedestrians, neighbors, performers, protesters, and other types of onlookers an opportunity to enjoy recreation in open space.

From the inception of the trail, the City of Chicago recognized that the trail impacted adjacent property values and development practices, as evidenced by grants administered through Neighborhood Housing Services. In 2016, following the construction and opening of the trail, DePaul University Institute for Housing Studies (IHS) analyzed the impact of the trail on housing in the adjacent area. IHS listed several key findings: that prices increased dramatically along the western portion of the 606; for single-family homes along the western portion of the 606, “more than \$100,000 of the total 2015 sales price is a result of close proximity to The 606” (IHS 12); the premium paid for the 606 dissipates after 1/5 of a mile from the trail.

Figure One

U.S. Census Block Groups by Proximity to 606 Trail



U.S. Census Bureau TIGER/Line Shapefiles, 2010.
 City of Chicago, Ward Boundaries (2015-present).
 North American Datum 1983 Geographical Coordinate System

Humboldt Park block group does not contain data.

Housing practices of concern along the 606 are manifold: proposed demolitions of existing single-unit or multi-unit residences to redevelop luxury housing (a typical redevelopment pitch to the 1st Ward office involves proposed condominium unit sale prices above \$500,000, or even above \$700,000, per unit); proposed “deconversions”, in which a property owner purchases a multi-unit residence and uses a renovation process to create a single-unit residence; land speculation in which a property owner intends to sell their lot above the productive value of their housing units (e.g., listing a four-unit occupied building that supports \$48,000 in annual rental income for \$900,000 or more); deferred maintenance in which a property owner ignores upkeep and then intends to redevelop a lot as a necessary demolition case; and so on.

The following report analyzes recent housing practices adjacent to the 606 by using publicly available property sale data and building permit data. Building permit data were downloaded from City of Chicago Data Portal, including permits to wreck and remove a structure. Property sale data were downloaded from State of Illinois, using the reported sale price from tax declarations filed during real estate closings. Geospatial analysis of these data located the proximity of properties to the 606 by using Census Block Group geography shapefiles. Census Block Groups are the smallest possible geography available for use with American Community Survey 5-year sample demographic data. Where latitude and longitude data were unavailable from their original sources, addresses were cleaned and geocoded by using the U.S. Census geocoding tool.

The purpose of this report is to determine a reasonable impact fee to be applied to proposed demolitions and redevelopment in the 606 Pilot Area, to return real estate practices to marketable assumptions in the area without infringing upon property owners’ reasonable expected return on investment. While the U.S. Environmental Protection Agency documents landfill concerns for demolition and construction materials, specific analyses of environmental issues are excluded from this report.

There are concerning trends regarding the relationship between housing affordability and demolitions, as an increase in demolitions also corresponds to an increase in property sale price along the 606. This mimics citywide trends, suggesting that demolitions are not a tool for blight removal, but instead a tool for redevelopment into new classes of property (e.g., “vernacular housing” to “luxury housing”). An additional concern for the City is a decline in population along the 606, suggesting that despite an increase in development, the area is not increasing the number of residents. This not only mirrors concerns regarding housing affordability or diversity in housing stock, but diversity of residents (in socioeconomic, occupational, and racial

or ethnic classifications). In this regard the increase in development around the 606 may be viewed as a part of broader economic restructuring within Chicago.

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Citywide Demolition & Sale Data: Two tables and two figures (Pages 20 – 23)

Part One: Property Sales

Table One

Change in Property Sales Value in the Areas Surrounding the 606
 Property Class B: Residences (Single unit, condominium, townhome, or duplex)
 Sales figures listed in US\$ 2019

Zip Code	Average Sale (2014)	Expected (2018)	Average Sale (2018)	Difference	Percentage Increase
60622	\$513,969.1	\$618,251.07	\$571,047.07	(\$47,204.0)	11.1%
60639	\$157,878.9	\$189,911.75	\$229,915.14	\$40,003.4	45.6%
60647	\$440,948.7	\$530,415.11	\$528,130.27	(\$2,284.8)	19.8%
60651	\$97,048.1	\$116,738.71	\$158,483.38	\$41,744.7	63.3%
Block Group	Average Sale (2014)	Expected (2018)	Average Sale (2018)	Difference	Percentage Increase
Outside	\$377,615.8	\$454,232.23	\$441,260.81	(\$12,971.4)	16.9%
Adjacent	\$335,016.9	\$402,990.26	\$443,231.14	\$40,240.9	32.3%
Direct	\$347,125.3	\$417,555.45	\$481,070.11	\$63,514.7	38.6%
All	\$370,089.4	\$445,178.80	\$445,178.80	\$445,178.8	20.3%

Expected sale for 2018 is calculated by evenly applying the total percentage increase for the area.
 The total area is defined by the zip codes 60622, 60639, 60647, and 60651

Sources: State of Illinois Revenue, MyDec, PTAX-203 / A / B Data for 2014 and 2018.
 U.S. Census Bureau, Cook County Block Groups shapefile (North American Datum 1983)

In the single-unit residence property class, properties located directly next to the 606 demonstrated the strongest increase among four adjacent zip codes on the north west side (60622, 60639, 60647, and 60651). These four zip codes effectively form a rectangular sub market that includes the 606, as well as sub-neighborhoods immediately south, north, east, and west of the 606. These zip codes were isolated because of the spatial and socioeconomic segregation evident throughout Chicago; the assumption is that due to their spatial proximity, these zip codes would represent a smaller range of factors impacting potential sales prices, and a generally similar set of transportation and natural resources options.

Within this subarea of the north west side, a location directly next to the 606 increased the sale consideration by approximately \$60,000. Properties that were in block groups near ("adjacent"), but not immediately next to, the 606 increased in sale consideration by approximately \$40,000. Strong property sale performance outside the 606 did not continue between 2014 and 2018.

Table Two

Change in Property Sales Value in the Areas Surrounding the 606

Property Class D: Apartment Building (Six Units or Less)

Sales figures listed in US\$ 2019, normalized per unit (sale price per unit)

Zip Code	Average Sale (2014)	Expected (2018)	Average Sale (2018)	Difference	Percentage Increase
60622	\$216,382.5	\$246,488.96	\$257,643.7	\$11,154.8	19.1%
60639	\$94,117.9	\$107,212.98	\$122,980.6	\$15,767.7	30.7%
60647	\$184,319.3	\$209,964.55	\$230,303.1	\$20,338.6	24.9%
60651	\$55,151.0	\$62,824.45	\$100,838.6	\$38,014.2	82.8%
Block Group	Average Sale (2014)	Expected (2018)	Average Sale (2018)	Difference	Increase
Outside	\$153,085.1	\$174,384.61	\$162,098.6	(\$12,286.0)	5.9%
Adjacent	\$153,395.1	\$174,737.69	\$215,995.6	\$41,257.9	40.8%
Direct	\$121,084.9	\$137,932.11	\$199,365.5	\$61,433.4	64.6%
All	\$150,983.1	\$171,990.15	\$171,990.2	\$0.0	13.9%

Expected sale for 2018 is calculated by evenly applying the total percentage increase for the area.
The total area is defined by the zip codes 60622, 60639, 60647, and 60651

Sources: State of Illinois Revenue, MyDec, PTAX-203 / A / B Data for 2014 and 2018.
U.S. Census Bureau, Cook County Block Groups shapefile (North American Datum 1983)

To analyze multi-unit buildings, the classification of six units or fewer represents the typical mid-block, low-rise density that characterizes much of the neighborhoods in this subarea of the north west side. Additionally, multi-unit buildings of approximately six units or fewer demonstrate a “missing middle” property class between single unit residences and large, new construction multi-unit buildings. Since buildings may represent different classes within this categorization, this analysis normalizes property value by expressing each sale according to the sale price per unit (e.g., [Total Sale Price] / [Total Number of Units]).

In terms of percentage of change in sale price, multi-unit buildings in the areas directly next to or nearby the 606 dramatically outperformed single-unit residences. A location within a block group directly next to the 606 received more than \$60,000 in additional sale price beyond the combined performance of the four selected zip codes. Additionally, properties in block groups nearby, but not directly next to, the 606 received more than \$40,000 in additional sale price. Perhaps most notably, in this multi-unit classification, the area west of the 606 increased at the highest rate of any of these zip codes, nearly doubling in sale price per unit between 2014 and 2018. This may suggest that regulations to curtail rent-seeking behavior or a speculative real estate market may be necessary beyond the 606 pilot area.

Table Three

Number of Real Estate Sales Analyzed in the Areas Surrounding the 606

Property Classes B and D, listed by number of sales

Class	Total Sales (2014)	Total Sales (2018)
B	3024	2872
D	486	570
Block Group	Total Sales (2014)	Total Sales (2018)
Outside	2592	2792
Adjacent	410	467
Direct	251	293
All	3253	3552

These numbers reflect the number of transactions that exhibited usable data in zip codes 60622, 60639, 60647, and 60651.

Sources: State of Illinois Revenue, MyDec, PTAX-203 / A / B Data for 2014 and 2018.
U.S. Census Bureau, Cook County Block Groups shapefile (North American Datum 1983)

In order to reduce the number of potential errors or areas for bias in this analysis, only tax declaration entries with reliable, actual addresses or actual consideration listed in their sales price column were used. Properties with "0" consideration were excluded due to the potential unknown circumstances for that "0" (ranging from transaction type, actual cashless transactions, data entry error, etc.).

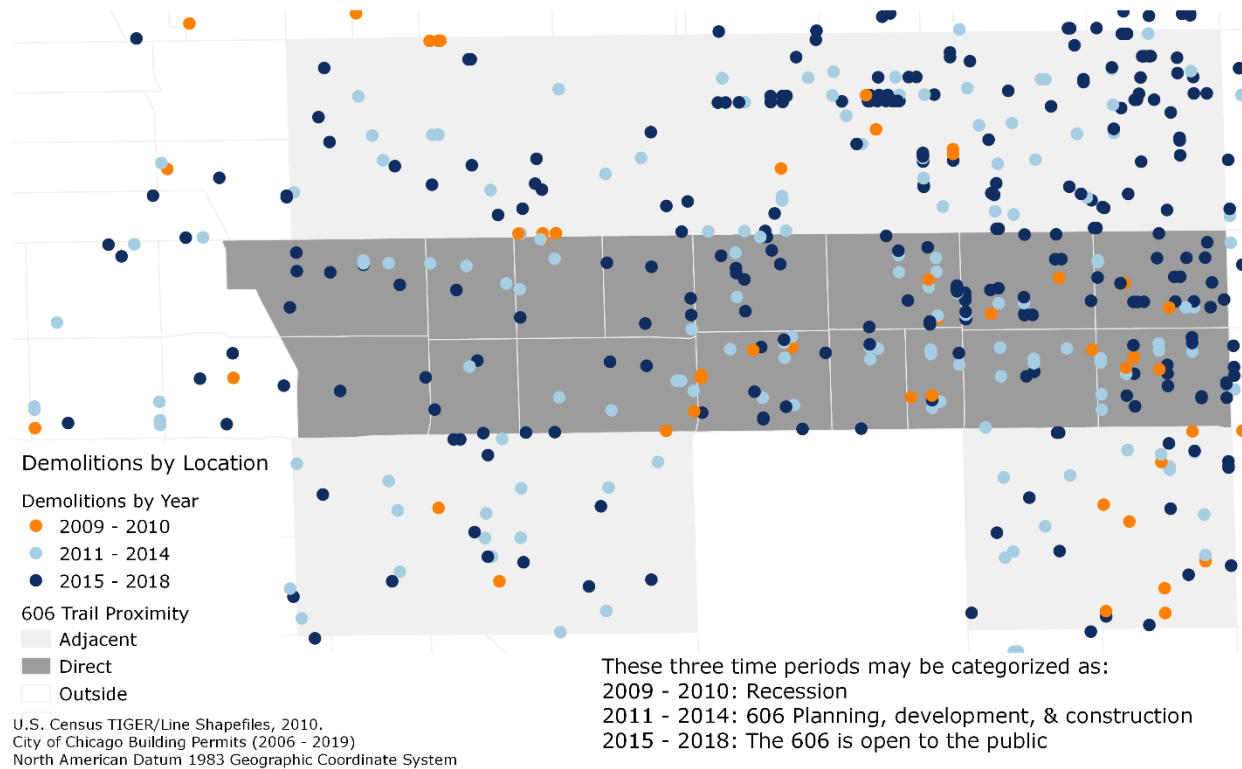
Part Two: Demolitions

Demolitions surrounding the 606 demonstrate several characteristics. First, demolitions did not occur as frequently during years commonly associated with the recession and subsequent housing crisis (2009-2010), instead occurring more frequently during the planning of the trail and actual opening of the trail. Second, demolitions do not typically occur as frequently in areas where housing prices are lower, instead occurring more frequently where housing prices are higher or residents report higher income. This is important because it demonstrates that demolitions are not typically associated with areas experiencing "blight," or areas classified as low income or low cost housing stock. Additionally, not only did frequent demolitions prior to the completion of the 606 demonstrate the speculative nature of property owners or developers recreating housing stock, but the increase of

demolitions once the trail opened demonstrate the staying power of the trail's effect on development.

Figure Two

Proximity of Demolitions to the 606 Trail, 2009 - 2018



Citywide, demolitions are most prevalent in Wards that are highly developed, with the most demolitions occurring in 32nd Ward, 47th Ward, and 1st Ward from 2006 to present. For the purposes of geospatial analysis, only data from 2009 onward featured latitude and longitude information; in order to maintain consistency in comparing each year, 2019 data were excluded. From 2009 onward, demolitions were much more prevalent in Census Block Groups that were directly next to or nearby the 606.

Table Four

City of Chicago Demolitions by Proximity to the 606

Proximity to 606	Block Groups	Demolitions	Demos per Group
Outside	1,668	12,154	7
Adjacent	29	231	8
Direct	15	197	13

Source: City of Chicago Building Permits.
Only permits from 2009 - 2018 were analyzed.

Replicating the demolitions analysis according to zip code – as conducted for the North West Chicago subarea of 60622, 60639, 60647, and 60651 – it is apparent that the 606 still influences demolition practices.

Table Five

Demolitions by Proximity to the 606 Trail, North West Subarea

Zip Code	Demolitions	Block Groups	Demos per Group
60622	664	45	14.8
60639	93	62	1.5
60647	696	73	9.5
60651	295	52	5.7
Proximity to 606	Demolitions	Block Groups	Demos per Group
Outside	1320	187	7.1
Adjacent	231	29	8.0
Direct	197	16	12.3
Citywide (Outside)	12154	1667	7.3

Source: City of Chicago Building Permits (2009 - 2018 data).
Block Groups linked to zip code via geospatial analysis.

This is an important distinction to make because it shows that increased demolition practices are not simply a function of the broader North West sub area that surrounds the 606. For example, properties in the 60651 zip code are demolished at a lower rate than those properties directly next to or nearby the 606.

Most importantly, even within Census Block Groups that are directly next to or nearby the 606, the timing of the trail impacts the number of demolitions that occur. When the recession was occurring (roughly 2009 – 2010), demolitions occurred much less frequently than when the 606 trail was in its

planning and development phase (2011 – 2014). Yet even these arguably speculative demolitions, anticipating potential benefits of the 606 and therefore attempting to begin redevelopment of the area, are largely comparable to Chicago as a whole. When the trail opened in 2015, however, demolitions for the following years increased at a rate double that of all other Block Groups in the city.

Table Six

City of Chicago Demolitions by Proximity to the 606 Trail, by Time Period

Outside	Demolitions	Demos per Year	Rate of Increase	Demos per Block Group
Recession (2009 - 2010)	1,671	835.5	n.a.	1.0
Speculative (2011 - 2014)	5,424	1356.0	1.6	3.2
Built (2015 - 2018)	5,059	1264.8	0.9	3.0
Adjacent	Demolitions	Demos per Year	Rate of Increase	Demos per Block Group
Recession (2009 - 2010)	22	11.0	n.a.	0.7
Speculative (2011 - 2014)	77	19.3	1.8	2.6
Built (2015 - 2018)	132	33.0	1.7	4.4
606 Impact	Demolitions	Demos per Year	Rate of Increase	Demos per Block Group
Recession (2009 - 2010)	21	10.5	n.a.	1.3
Speculative (2011 - 2014)	70	17.5	1.7	4.4
Built (2015 - 2018)	106	26.5	1.5	6.6

Source: City of Chicago Building Permits (2009 - 2018 data used).

The visualization in Figure Two suggests that demolitions occur frequently next to the 606, and occurred more so when the trail was constructed and developed than during recession years. Tables Four and Six underscore the impact of the 606 on demolition practices, as well as the timing of such practices, and Table Five suggests that these demolitions are not simply representative of general development practices across this subarea of the north west side.

Part Three: Demographic Change

It is difficult to prove direct displacement without analyzing specific financial or economic data available at the individual level (such as tax return data from the Internal Revenue Service), so the following analysis will not categorically argue that the 606 spurred gentrification in the area directly next to or nearby the trail. Yet, it should be recognized that observers saw the threat of gentrification in the area surrounding the 606 while the trail was in its early planning stages. For example, Nathalie P. Voorhees Center

noted that while the Logan Square Community Area did not demonstrate formal gentrification according to their study of Census data between 1970 and 2010, “if current trends of upward change continue, Logan Square and Bridgeport are likely to be classified as gentrified in the next decade” (*The Socioeconomic Change of Chicago’s Community Areas (1970-2010)*, 22). By surveying a theory of gentrification, however, it is possible to understand other ways in which rent-seeking or speculative behavior beyond a typically functioning market may impact population near the 606.

Forming a theory or framework of gentrification is difficult because gentrification dialogue represents a contested space. Colloquially, the term is used with such frequency that it may actually lose its significant connotation of displacement. In recent geographic analysis, Erin McElroy and Alex Werth use cases of foreclosure and eviction in Oakland, CA, to demonstrate that the ubiquity of gentrification can be problematic where it overshadows other potential explanations for displacement. Additionally, gentrification is a specific phenomenon in which targeted disinvestment in one area of a city effectively devalues land to allow for the profitable reinvestment within an area. In this sense, Neil Smith’s comprehensive study of gentrification does analyze specific disinvestment in the built environment, which could include a fixed infrastructure feature such as the old unused and undermaintained train line along Bloomingdale, but proper determination of gentrification would require detailed analysis of differences between land value and property value over time (see Smith 55-60). It is also necessary to understand that gentrification may occur in stages which are not necessarily linear or uniform across space (Betancur and Smith). In lieu of gentrification, Matthew B. Anderson’s study of developer practices in Portland’s Pearl District could provide a framework for studying the 606 as it pertains to the “monopoly” obtained by adjacent land owners on the prestige associated with the 606. The 606 could impact neighborhood redevelopment trends, property values, and spur demographic change when property owners act to cultivate “*both demand and scarcity*” within a particular district or subneighborhood (Anderson 1051). Alternately, the 606 could be recognized as a larger part of economic restructuring efforts, as land uses shifting from manufacturing to residential uses in the area mimic citywide economic development efforts to expand its class of flexible, elite professional occupations (Gourzis, Herod, and Gialis 1437 – 1442; see also Sassen).

With this contestation in mind, the following analysis will describe demographic change in the area surrounding the 606. Three particular statistics will demonstrate that the areas around the 606 are facing undue impact from redevelopment: (1) in Census Tracts that are directly next to the 606, total population declined by approximately 900 people between 2006 and 2017; (2) in Census Tracts classified as low income or very low

income nearby the 606, the household income necessary to afford a single-unit residence increased from approximately \$97,000 to \$120,000 and \$60,000 to \$95,000, respectively, between 2014 and 2018; and (3) in Block Groups classified as directly next to the 606, the household income necessary to afford a single-unit residence increased from approximately \$86,000 to \$119,000 between 2014 and 2018. These statistics demonstrate that despite the redevelopment evident around the 606, density is declining in the area, which means that redevelopment is congruent with increased scarcity of housing (alternately, one could hold that the forms of redevelopment are altering the composition of household types that are able to live in the area).

Table Seven

Change in Demographic by Race and Hispanic or Latino Origin Near the 606 Trail
Extrapolating Census Block Groups to Census Tracts

Census Tract	Not Hispanic or Latino			Hispanic or Latino	All Other People	Population Change
	White	Black or African American	Asian	All Hispanic or Latino		
Adjacent	4,764	-1,734	434	-2,652	289	1,101
Direct	1,755	-317	47	-2,526	149	-892

Source: U.S. Census Bureau, American Community Survey, 5-Year Estimates (Table B03002)
46 U.S. Census Block Groups are subsumed by 27 U.S. Census Tracts

While it is unclear how to quantify motives for moving out of the neighborhood, these data also demonstrate that residents who identified as Hispanic or Latino ethnic origin and Black or African American racial origin have moved out of the area. Not only has the area surrounding the 606 declined in population between 2006 and 2017, but the racial and ethnic composition has changed as well.

Following the University of Toronto's methods for constructing regional weighted average income (see Hulchanski 24-25; Nathalie P. Voorhees Center, Average Individual Income; and Appendix), it is possible to grade the per capita income of each Census Tract directly next to or nearby the 606. By comparing each Census Tract to a regional weighted average, it is possible to understand whether a residents living within a specific area are more likely to have better than average incomes, or lower than average income. According to U.S. Census American Community Survey estimates from 2006 – 2010, 13 Census Tracts directly next to or nearby the 606 were

rated Very Low Income, and seven were rated Low Income, while only one Tract was rated High Income or Very High Income. By contrast, estimates from 2013 – 2017 suggest that within the same area only five Tracts are Very Low Income and 10 are Low Income, while three Tracts are High Income and one is Very High Income. In terms of overall demographic shifts, residents living directly next to or nearby the 606 are likely to have more income in 2017 than in 2006.

By linking previous property sale and demolition analyses to this income analysis, it is possible to show the potential impact of improving income within the area.

Table Eight

Analysis of Property Sale Data for Census Tracts Near the 606, Based on Per Capita Income

Income Grade	Property Sales in US\$ 2019						Income Analysis of Property Sales	
	Multi Unit (2014)	Single Unit (2014)	Multi Unit (2018)	Single Unit (2018)	Change in Multi Unit	Change in Single Unit	Affordable Income (2014)	Affordable Income (2018)
Very High	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
High	\$0	\$423,832	\$0	\$536,245	No Data	\$112,414	\$111,948	\$141,641
Medium	\$175,846	\$419,004	\$214,340	\$505,669	\$38,494	\$86,665	\$110,673	\$133,564
Low	\$100,422	\$368,773	\$219,713	\$455,477	\$119,291	\$86,704	\$97,406	\$120,307
Very Low	\$69,097	\$228,693	\$138,892	\$358,653	\$69,794	\$129,960	\$60,406	\$94,732
2010 to 2017 Change	Multi Unit (2014)	Single Unit (2014)	Multi Unit (2018)	Single Unit (2018)	Change in Multi Unit	Change in Single Unit	Affordable Income (2014)	Affordable Income (2018)
Same Income Grade	\$120,511	\$352,838	\$221,514	\$460,059	\$101,003	\$107,220	\$93,197	\$121,517
Income Grade Improved	\$93,358	\$308,381	\$165,027	\$416,764	\$71,669	\$108,384	\$81,454	\$110,082
Income Grade Declined	\$66,064	\$207,631	\$0	\$325,440	No Data	\$117,810	\$54,842	\$85,960

Source: State of Illinois Revenue, MyDec, PTAX-203 / A / B data for 2014 and 2018
U.S. Census Bureau, American Community Survey, 2006-2010 and 2013-2017 estimates (Table B19301).

Specifically, in the area directly next to or nearby the 606, the necessary affordable income for a household to purchase a single-unit residence has expanded to approximately \$95,000 within Census Tracts that were previously Very Low Income; within Low Income Tracts, affordable income necessary to purchase a single-unit residence is approximately \$120,000. Within Census Tracts in which the income grade declined from 2006 to 2017, the increase in single-unit residence sale price is higher than any other Census Tracts near the 606. This is an interesting statistic because it demonstrates that even where average residents may report lower income to the U.S. Census, the particular sales price for single-unit residences is increasing more than in higher income areas.

Table Nine

Analysis of Property Sale Data for Census Tracts Near the 606, with Affordable Housing Income Estimates

Income Grade	Property Sales in US\$ 2019						Income Analysis of Property Sales	
	Multi Unit (2014)	Single Unit (2014)	Multi Unit (2018)	Single Unit (2018)	Change in Multi Unit	Change in Single Unit	Affordable Income (2014)	Affordable Income (2018)
Adjacent	\$119,799	\$323,652	\$201,220	\$403,709	\$81,421	\$80,056	\$85,488	\$106,633
Direct	\$79,729	\$324,043	\$160,674	\$451,397	\$80,945	\$127,354	\$85,591	\$119,229

Source: State of Illinois Revenue, MyDec, PTAX-203 / A / B data for 2014 and 2018
U.S. Census Bureau, American Community Survey, 2006-2010 and 2013-2017 estimates (Table B19301).

Based on the Chicago Area Median Income (AMI) Limits, the average 2014 single-unit residence sale next to or nearby the 606 would be affordable to the median four-person or five-period household (i.e., 100% AMI), and near the affordable income for a household of three people. Now, the average sale of single-unit residences next to or nearby the 606 are not affordable for most household sizes below 120% to 140% AMI.

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Appendix

(1) **Assumptions about housing prices to assess household affordability.**

In order to analyze the level at which a household could afford housing, it is assumed that a household ought to pay no more than 30% of their income on housing (consistent with U.S. Housing and Urban Development assumptions). To assess potential affordability for market rate, for-sale housing, two major factors are included:

- (a) Monthly mortgage payment with a low down payment.
- (b) Property taxes based on sale price. This assumes that property taxes will eventually property sales.

Assumption (a) was calculated using the “PMT” function in Microsoft Excel, with a relatively high market interest rate (4.25%), 30-year loan term, and property value. By not extracting the down payment from the full property value, potential maintenance costs are included in the analysis. Additionally, using a high property value to form the mortgage assumptions will result in a more conservative assessment of affordability.

Assumption (b) was calculated using Cook County Assessor property tax calculation structure.

Once these numbers are obtained on a monthly basis (ex., \$1,700 monthly mortgage and \$800 monthly property taxes), they are added and multiplied by 36 (3 x 12: this accounts for approximately 30% of household income being applied to housing over one year).

(2) **Assumptions about Per Capita Income and Regional Weighted Income.**

In grading income for a region, Regional Weighted Average Income is used because the measurement accounts for Census Tract income weighted by Census Tract Population. Thus, a Census Tract can be assessed for their full share of the region’s income based on its share of regional population as well. This measurement is calculated using Census Tables for population (Age and Sex) and per capita income (U.S. Census, 2017 American Community Survey), in the following manner:

- (a) Each individual Census Tract total population is multiplied by its Per Capita Income [**Tract Weighted Income** = Total Population x Per Capita Income]. These figures were calculated for all Cook County Tracts.
- (b) The **Total Regional Population** for all Census Tracts in Cook County were added. [Regional Population = sum of each Tract population]
- (c) The **Total Regional Weighted Income** for all Census Tracts in Cook County were added. [Total Weighted Income = sum of each Tract Weighted Income].
- (d) The **Regional Weighted Average Income** for Cook County is: [Total Regional Weighted Income] / [Total Regional Population]
- (e) Each Census Tract Per Capita Income can then be compared to the Regional Weighted Average Income. This helps form the **Income Grade** [Income Grade = Census Tract Per Capita Income / Regional Weighted Average Income].

Once the Income Grade is calculated, they can be measured in the following way:

- 1.40 and higher = Very High Income (e.g., 40% above regional average)
- 1.20 to 1.39 = High Income
- 0.80 to 1.19 = Middle Income
- 0.60 to 0.79 = Low Income (e.g., at least 20% below regional average)
- Lower than 0.60 = Very Low Income

(3) **Research Questions and Shortcomings of the Data**

Throughout the fall / winter 2019 – 2020, the 1st Ward Office studied the potential impact of demolitions within the Ward. This project required two phases of research questions:

- (1) What is the frequency of demolitions occurring in the City of Chicago?; What is the frequency of demolitions occurring by U.S. Census Block Group area?; and, What is the frequency of demolitions occurring by Ward?
- (2) What is the typical property sale price, per unit, occurring in the City of Chicago?; What is the typical property sale price, per unit, occurring by U.S. Census Block Group area?; and, What is the typical property sale price, per unit, occurring by Ward?

To assess these questions, the 1st Ward office consulted data from the City of Chicago (“Building Permits”, searched for “Wreck and Remove”) and data from the State of Illinois (“MyDec Data Files”, filtered for City of Chicago zip codes and properly geocoded addresses).

Ward geographic data were used due to the standing legislative practice of “Aldermanic Prerogative” for zoning concerns, since zoning map amendments are legislative processes per the Chicago Zoning Ordinance, and it is typically the case that each sitting Alderman offers recommendation of support for proposed zoning items within their respective Ward at the Committee on Zoning, Landmarks, and Building Standards.

Block Group data were used because although urban planning research supports Census Tracts as cohesive “neighborhood” units, Block Group data allow researchers to zoom further in, and potentially assess the impact of adjacent infrastructure or natural phenomena on demolitions or property sale prices (for example, this makes it easier to study the impact of an infrastructure item such as The 606 Trail on demolitions, as Block Group borders allow for the study of distances approximately on a quarter-mile by

quarter-mile basis, or smaller). Additionally, Block Groups are the smallest possible geographic area for studying American Community Survey demographic estimates.

Since these data sources deal with actually-occurring permit applications and property sales, there are numerous shortcomings with the data. Regarding demolition data, shortcomings include: an assumption that filing a permit is equal to an actually occurring demolition; an assumption that the description of work is correct; an assumption that addresses (and therefore latitude and longitude markers) are correctly reported. Regarding property sale data, shortcomings include: incomplete addresses are reported (such as intersection names when numerous properties are sold on one declaration); an assumption that property characteristics are correct (e.g., type of property and number of units); and, an assumption that sale data are accurately reported. In order to account for potential errors in property transfer tax declarations, only addresses that could be successfully geocoded by the U.S. Census geocoding tool were included in this analysis; additionally, in order to eliminate potential errors or anomalies in data from Block Group analyses, extreme sale price fluctuations over time were excluded, as were extreme fluctuations in the number of data points available (these potentially anomalous data were mostly limited to Central Business District Block Groups, where continued transformations from commercial and manufacturing uses to residential uses occurred between 2014 and 2018).

As of autumn 2019, for demolition data, more than 16,900 building permits to “Wreck and Remove” a structure were filed between 2006 and 2019. Reliable Ward and Latitude / Longitude data were available from 2011 through 2019, during which time more than 11,600 building permits were filed. For geospatial analysis, approximately 12,580 building permits effectively intersected or joined with a U.S. Census Block Group. For consistent comparison with State of Illinois property transfer tax declaration data, 2019 data were excluded due to lack of a complete year (at time of analysis).

As of autumn 2019, for property sale data in years 2014 and 2018, approximately 78,400 sales occurred in City of Chicago across major property classes (vacant lot; single-unit residence class; mobile home; and multi-unit apartment classes). Following geocoding through U.S. Census, approximately 63,300 sales had valid addresses to be translated into latitude and longitude.

(3) **Citywide Data**

Citywide data can be organized in several geographical arrangements. These data should be viewed as estimates of demolitions, due to the reasons stated above. Data from 2011 through 2019 (partial totals shown) are easily classified with Community Area number.

The following Community Areas received more requests for demolition permit than the average Community Area.

Chicago Demolitions by Community Area, 2011 – 2019

<u>Community Area</u>	<u>Estimated Demolitions</u>
West Town	844
Lake View	725
West Englewood	724
Englewood	704
North Center	664
Lincoln Park	613
Logan Square	590
Austin	367
New City	362
Humboldt Park	336
Roseland	334
West Pullman	291
North Lawndale	278
Irving Park	224
West Garfield Park	215
Calumet Park	211
Near West Side	209
Lincoln Square	207
Greater Grand Crossing	190
Near North Side	173

In the same timeframe, citywide demolition data are also easily classified by Ward. The following Wards received more requests for demolition permit than the average Ward. While it is typically understood that zoning decisions are made at the Ward level, since the Chicago Zoning Ordinance uses a legislative process for zoning map amendments (rather than an administrative process), it must be emphasized that each demolition is not tied to an Aldermanic zoning effort. Except for some circumstances involving Landmarks and some properties classified on the Chicago Historic Resources

Survey, property owners can apply for demolition permit at the department level, without any Aldermanic approval or “prerogative.”

Chicago Demolitions by Ward, 2011 – 2019

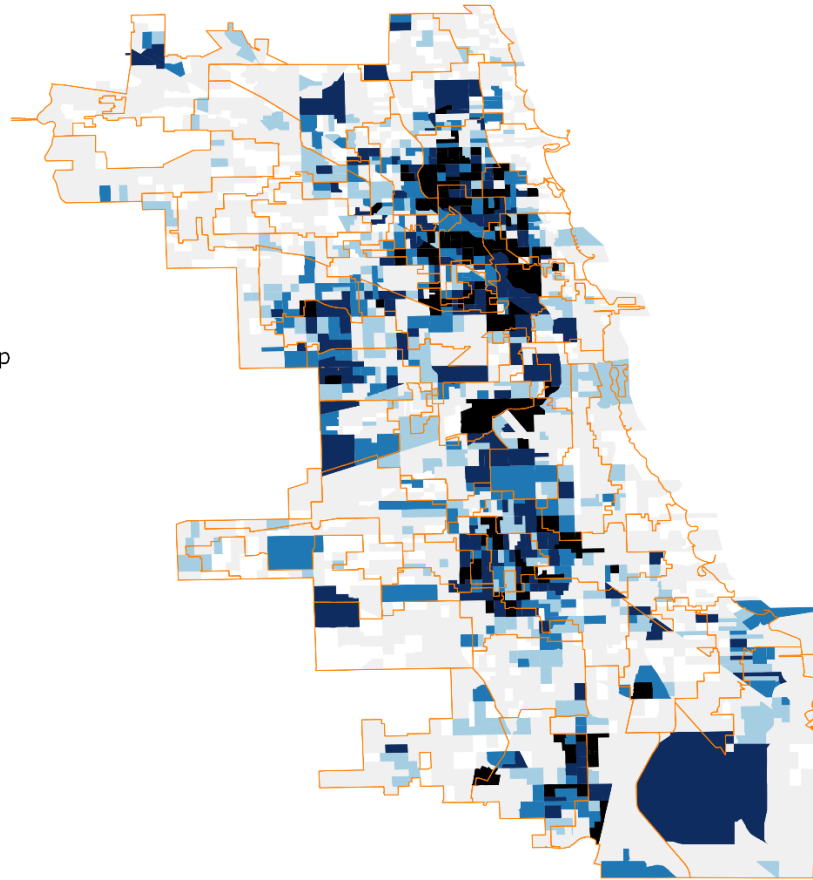
<u>Ward</u>	<u>Estimated Demolitions</u>
32	955
47	696
1	652
16	523
27	468
28	467
34	461
20	449
43	424
15	421
17	389
44	385
24	342
3	302
6	293
9	281
2	252
26	248

City of Chicago
Rate of Demolitions,
2013 - 2018

Research Question: Between 2013
and 2018 for each Block Group,
how many years did a Block Group
have more demolitions than City
average?

Years with Above Average Demolitions

- 0 to 2 Years
- 3 Years
- 4 Years
- 5 Years
- 6 Years
- Wards



City of Chicago,
Number of Elite Sales,
2014 and 2018

Definition: An elite sale is a property sale that is approximately \$1,000,000 (US\$ 2019) or higher. That sale level is approximately two standard deviations above the City average.

Number of Elite Sales per Census Tract

- 0
- 1 to 10
- 11 to 20
- 20 to 100
- 100 to 200
- 200 to 300
- 600
- Wards

