

MAY 2019

ARO

A R O P I L O T S T U D Y

Evaluating its Effects, One Year In

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PRESENTED TO



This research paper was commissioned by the Home Builders Association of Greater Chicago and funded in part by a grant from the State and Local Issues Fund of the National Association of Home Builders.

Introduction

First established in 2003, the City of Chicago's Affordable Requirements Ordinance (ARO) was designed to promote affordable housing alongside the growth of market rate developments using a mechanism commonly referred to as Inclusionary Zoning (IZ). IZ requires market-rate developers to either set aside a certain percentage of a project's units as affordable or pay an in-lieu fee to the city's affordable housing programs.

Over the past 15 years the ARO has gone through a number of changes, most aimed at placing larger and stricter requirements upon large-scale developers seeking to build multifamily in Chicago. As with many markets across the US, Chicago faces a housing shortage across the income spectrum. Chicago is also not alone in expanding its IZ policy in hopes of providing more affordable housing and better integrating populations divided by income.

Data on Chicago's ARO program, as well as those of other markets, has grown to enable stakeholders to begin to answer several key questions:

- What is the effect of the ARO upon an individual development?
- Given the pressure the ARO places on market rate development, what is the corresponding effect on housing supply and the city's taxbase?
- How effective has the ARO been in creating affordable units?
- How close has the program come to reach its unit and funding goals?
- What has been happening around the nation with other IZ programs? Are there models that could better optimize expanding market rate housing while simultaneously growing the affordable housing stock?
- Are there certain incentive models or other policies that could do the same?

IS THERE A BETTER PATH FORWARD
TO EXPANDING HOUSING TO MEET THE
NEEDS OF ALL OF CHICAGO'S
WORKFORCE?

2007 ARO



Scope:

- Land purchased from the City
- Receive financial assistance from the City
- Belong to a PD in a downtown zoning district

Requirement:

- **10% units affordable (20% for those receiving financial assistance)**
- OR pay \$100,000 in-lieu fee per affordable unit not built

Goal: 1,000 units / year
On-site ARO Units Produced: 450 (54 units / year average)
In-lieu Fees Collected: \$84.1M

2015 ARO



Scope: Citywide, with an additional Affordable Density Bonus program for downtown

Requirement: See table, next page

Goal: 1,200 units (240 units / year average), **\$90M** in in-lieu fees for 5 years

On-site ARO Units Delivered & In Progress 2016-2018: 332 (111 units / year average)

In-lieu Fees Promised: \$16.8M (19% of goal at EOY 3)

2017 ARO PILOT



Scope: Near North, Near West and Milwaukee Corridor Zones

Requirement: See table, next page

Goal: 1,000 units over 3 years (333 units / year)

On-site ARO Units Produced: None (72 units under construction)

In-lieu Fees: No fees generated

2018 ARO PILOT



Scope: Pilsen & Little Village Zones

Requirement: See table, next page

Goal: No explicit unit goal

On-site ARO Units Produced: None

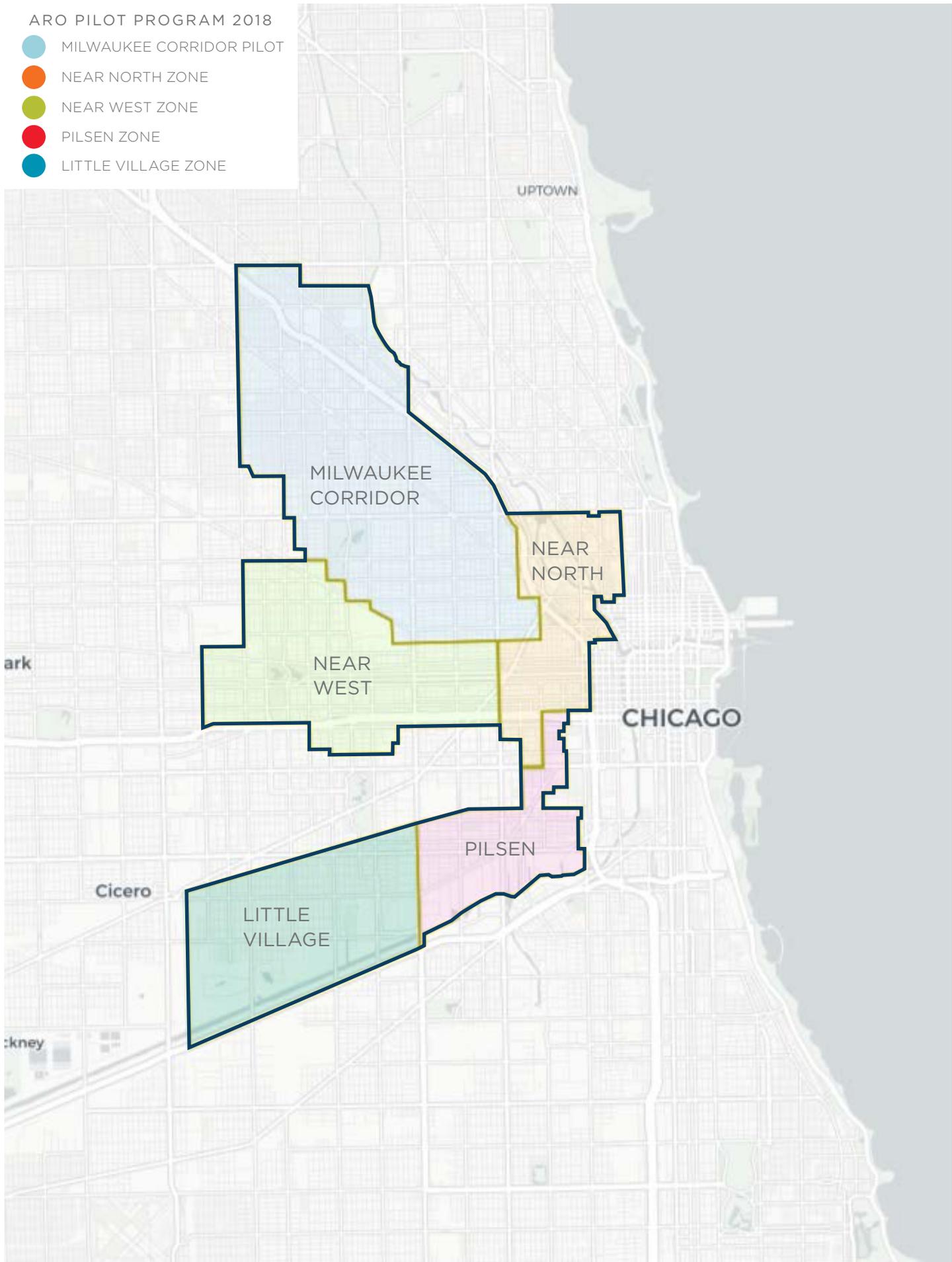
In-lieu Fee Funded Units Produced: None

04 CURRENT ARO PROGRAM

	Unit Obligation (for multifamily above 10 units)	Eligibility Requirements for Affordable Renters	In-lieu Fee (per unit)
2015 ARO	10% units required to be affordable, with 1/4 required as on-site or off-site units within two miles of site and within two miles of site and downtown boundaries	60% of Area Median Income	\$52,214 to \$130,534
EXISTING DOWNTOWN ARO	10% units required to be affordable, with 1/4 required as on-site or off-site units within two miles of site and in downtown boundaries	60% of Area Median Income	\$182,748
MILWAUKEE AVE CORRIDOR PILOT	15% required for on-site units OR 20% for off-site units within Pilot Area OR 20% on-site if the project receives TIF funding	Price rental units for 60% AMI, allow tenants up to 80% AMI to lease	No in-lieu fee available
NEAR NORTH ZONE	20% required: - First 10% on-site or < 2 miles in Zone and/or higher income zone - Additional 10% may be built anywhere in Zone	-On-site units for 60% AMI -Off-site within Pilot for 100% AMI	No in-lieu fee available
NEAR WEST ZONE	15% required: - First 10% on-site or < 2 miles in Zone - Additional 5% may be built anywhere in Zone	-On-site units for 60% AMI -Off-site within Pilot for 100% AMI	No in-lieu fee available
PILSEN PILOT	20% required: - First 10% on-site - Units with multiple bedrooms will partially meet ARO baseline - Additional 10% on-site, off-site, or fees paid	Price rental units for 60% AMI, allow tenants up to 80% AMI to lease	\$178,469
LITTLE VILLAGE PILOT	20% required: - First 10% on-site - Units with multiple bedrooms will partially meet ARO baseline - Additional 10% on-site, off-site, or fees paid	Price rental units for 60% AMI, allow tenants up to 80% AMI to lease	\$101,388

ARO PILOT PROGRAM 2018

- MILWAUKEE CORRIDOR PILOT
- NEAR NORTH ZONE
- NEAR WEST ZONE
- PILSEN ZONE
- LITTLE VILLAGE ZONE



WHAT IS THE EFFECT OF THE ARO UPON A DEVELOPMENT'S PRO FORMA? ASSUMING SELLER STRIKE PRICE OF \$14 MILLION

CASE STUDY BASIS

- Pilot Zone: Near North
- Ward: 27th, Walter Burnett
- Land size: **30,000** sf
- Proposed zoning: DX-5
- Zoning with bonuses: FAR of 8
- Return requirement: **6%**
- Construction costs: **\$285** psf
- Land cost: **\$14M**
- Average unit size: **750** sf
- Pro forma rent: **\$3.30**
- Assuming 4 year process

NO AFFORDABLE REQUIREMENT	
Number of Units	224
Number of Affordable Units	0
Potential Market Rent (\$3.30/sf rent on market units)	\$6,652,800
Total Income Estimate (est of \$3600/unit in other income)	\$6,953,184
Estimated Expenses (\$12,500/unit)	\$2,800,000
NOI Estimate	\$4,153,184
Stabilized Value	\$83,063,680
Cap Rate	5.00%
Build Cost	\$61,880,000
3-Year Return	10.31%

FINANCIAL ASSUMPTIONS

- Any rounding needed for affordable housing is rounded up, including # off-site (eg if 10% on-site and 10% off-site out of 45 units, 23 are calculated as off-site)
- Other Income estimate derived from Yardi Matrix values of buildings built in last 2 years.
- On-Site Expenses per unit derived from Yardi Matrix buildings built in last 2 years.
- Build cost assumes \$250,000 off-site development cost, \$285/rsf on-site costs.
- Potential Market Rent from Affordable units is per CITY OF CHICAGO MAXIMUM AFFORDABLE MONTHLY RENTS 2018
- Assumed 38% Studio, 40% 1-bedroom, 20% 2-bedroom, and 2% 3-bedroom units for affordability calculations.

20% REQUIRED ONSITE (1/2 AT 60% AMI, 1/2 AT 100% AMI)	
Number of Units	224
Number of Affordable Units	45
Potential Market Rent (\$3.30/sf rent on market units)	\$5,996,442
Total Income Estimate (est of \$3600/unit in other income)	\$6,342,771
Estimated Expenses (\$12,500/unit)	\$2,800,000
NOI Estimate	\$3,542,771
Stabilized Value	\$70,855,421
Cap Rate	5.00%
Build Cost	\$61,880,000
3-Year Return	4.62%

20% AFFORDABLE OFFSITE (1/2 AT 60% AMI, 1/2 AT 100% AMI)	
Number of Units	224
Number of Affordable Units	45
Potential Market Rent (\$3.30/sf rent on market units)	\$5,996,442
Total Income Estimate (est of \$3600/unit in other income onsite, \$2,000 offsite)	\$6,274,371
Estimated Expenses (\$12,500/unit onsite, 50% expense ratio offsite)	\$2,682,536
NOI Estimate	\$3,591,835
Stabilized Value	\$71,836,701
Cap Rate	5.00%
Build Cost	\$63,511,250
3-Year Return	4.19%

Development projects require a minimum 6% return to be feasible

10% AFFORDABLE ONSITE 10% AFFORDABLE OFFSITE AT 80% AMI	
Number of Units	224
Number of Affordable Units	45
Potential Market Rent (\$3.30/sf rent on market units)	\$5,996,040
Total Income Estimate (est of \$3600/unit in other income onsite, \$2,000 offsite)	\$6,307,437
Estimated Expenses (\$12,500/unit onsite, 50% expense ratio offsite)	\$2,692,390
NOI Estimate	\$3,615,047
Stabilized Value	\$72,300,944
Cap Rate	5.00%
Build Cost	\$62,713,750
3-Year Return	4.86%

10% AFFORDABLE ONSITE AT 80% AMI	
Number of Units	224
Number of Affordable Units	23
Potential Market Rent (\$3.30/sf rent on market units)	\$6,317,844
Total Income Estimate (est of \$3600/unit in other income onsite, \$2,000 offsite)	\$6,573,275
Estimated Expenses (\$12,500/unit)	\$2,800,000
NOI Estimate	\$3,773,275
Stabilized Value	\$75,465,498
Cap Rate	5.00%
Build Cost	\$61,880,000
3-Year Return	6.84%

ASSUMING \$4 MILLION SALE PRICE:

CASE STUDY BASIS

- Pilot Zone: Near North
- Ward: 27th, Walter Burnett
- Land size: **30,000** sf
- Proposed zoning: DX-5
- Zoning with bonuses: FAR of 8
- Return requirement: **6%**
- Construction costs: **\$285** psf
- Land cost: **\$4M**
- Average unit size: **750** sf
- Pro forma rent: **\$3.30**
- Assuming 4 year process

NO AFFORDABLE REQUIREMENT	
Number of Units	224
Number of Affordable Units	0
Potential Market Rent (\$3.30/sf rent on market units)	\$6,652,800
Total Income Estimate (est of \$3600/unit in other income)	\$6,953,184
Estimated Expenses (\$12,500/unit)	\$2,800,000
NOI Estimate	\$4,153,184
Stabilized Value	\$83,063,680
Cap Rate	5.00%
Build Cost	\$51,880,000
3-Year Return	16.99%

FINANCIAL ASSUMPTIONS

- Any rounding needed for affordable housing is rounded up, including # off-site (eg if 10% on-site and 10% off-site out of 45 units, 23 are calculated as off-site)
- Other Income estimate derived from Yardi Matrix values of buildings built in last 2 years.
- On-Site Expenses per unit derived from Yardi Matrix buildings built in last 2 years.
- Build cost assumes \$250,000 off-site development cost, \$285/rsf on-site costs.
- Potential Market Rent from Affordable units is per CITY OF CHICAGO MAXIMUM AFFORDABLE MONTHLY RENTS 2018
- Assumed 38% Studio, 40% 1-bedroom, 20% 2-bedroom, and 2% 3-bedroom units for affordability calculations.

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Estimated Expenses (\$12,500/unit)	\$2,800,000
NOI Estimate	\$3,542,771
Stabilized Value	\$70,855,421
Cap Rate	5.00%
Build Cost	\$51,880,000
3-Year Return	10.95%

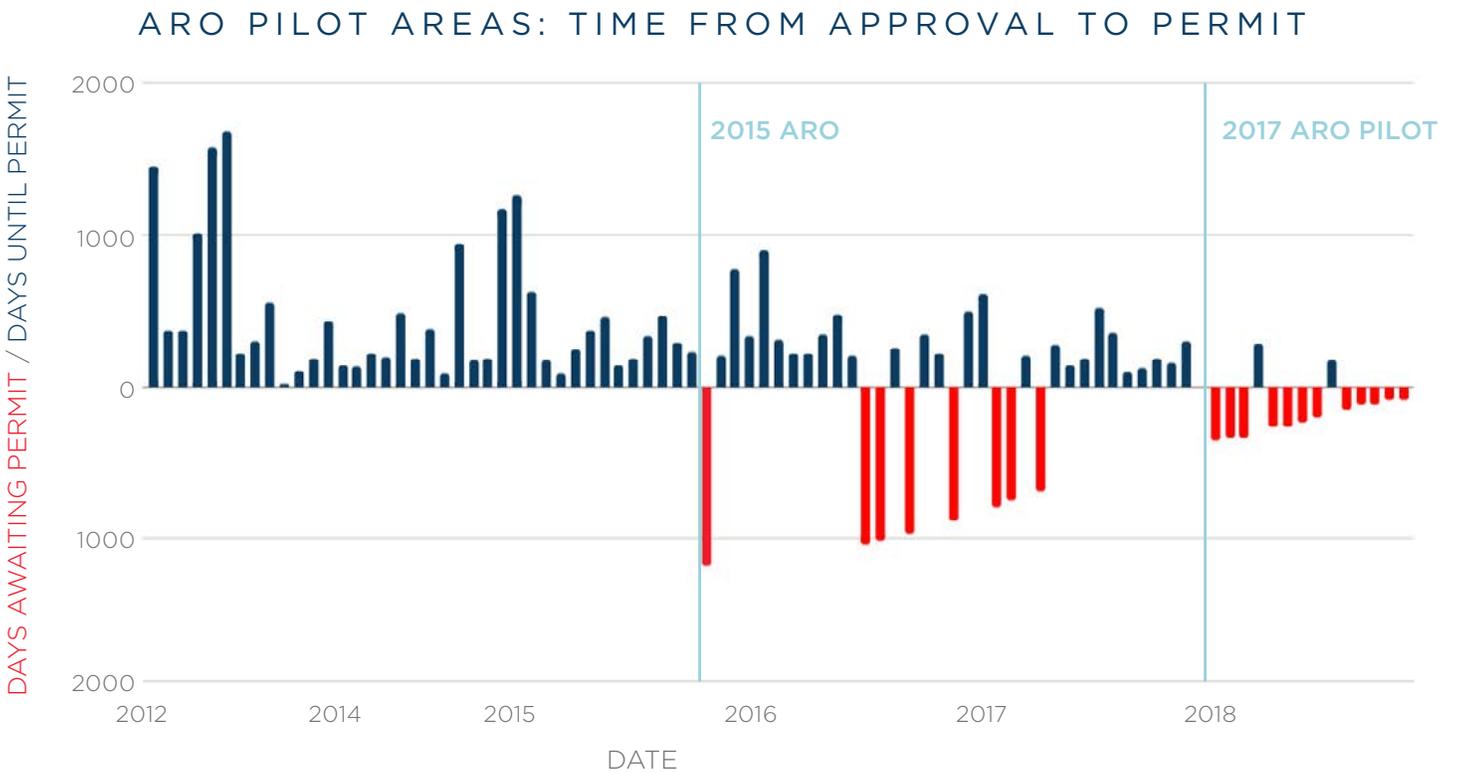
20% AFFORDABLE OFFSITE (1/2 AT 60% AMI, 1/2 AT 100% AMI)	
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Estimated Expenses (\$12,500/unit onsite, 50% expense ratio offsite)	\$2,682,536
NOI Estimate	\$3,591,835
Stabilized Value	\$71,836,701
Cap Rate	5.00%
Build Cost	\$53,511,250
3-Year Return	10.31%

However, no sellers will accept a \$10 Million discount for land of this size and location

10% AFFORDABLE ONSITE 10% AFFORDABLE OFFSITE AT 80% AMI	
Number of Units	224
Number of Affordable Units	45
Potential Market Rent (\$3.30/sf rent on market units)	\$5,996,040
Total Income Estimate (est of \$3600/unit in other income onsite, \$2,000 offsite)	\$6,307,437
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NOI Estimate	\$3,615,047
Stabilized Value	\$72,300,944
Cap Rate	5.00%
Build Cost	\$52,713,750
3-Year Return	11.11%

10% AFFORDABLE ONSITE AT 80% AMI	
Number of Units	224
Number of Affordable Units	23
Potential Market Rent (\$3.30/sf rent on market units)	\$6,317,844
Total Income Estimate (est of \$3600/unit in other income onsite, \$2,000 offsite)	\$6,573,275
Estimated Expenses (\$12,500/unit)	\$2,800,000
NOI Estimate	\$3,773,275
Stabilized Value	\$75,465,498
Cap Rate	5.00%
Build Cost	\$51,880,000
3-Year Return	13.31%

In the year following the establishment of the 2017 Pilot Areas, only 2 projects were approved and then permitted. This is opposed to 7 projects following the establishment of the 2015 ARO program



Note: For building-by-building identification, see appendix
 Source: Cushman & Wakefield Research, Recity, City of Chicago

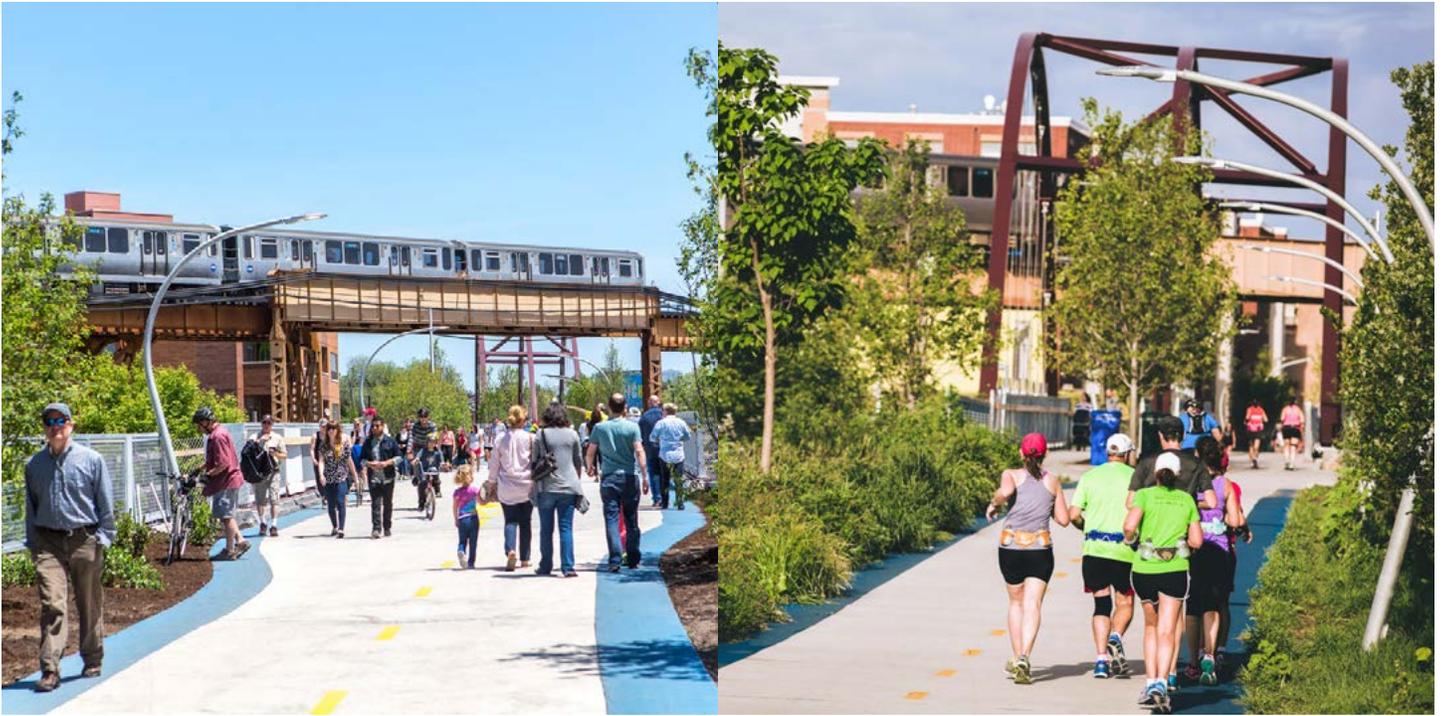
Land sales within the Pilot Areas have not taken a noticeable discount in price since the establishment of the Pilot

Price per square feet of FAR was calculated based on the recorded sale of the land and the final, approved FAR of the project. Ordinance version was based on city record by date of approval.

MULTIFAMILY LAND SALES WITHIN PILOT AREAS



606 TRAIL



6 CORNERS WICKER PARK



As pro formas become more difficult to pencil, more and more sites have been passed over by developers due to infeasibility. Cushman & Wakefield conducted a survey of sites within the Pilot Areas to estimate the lost potential in terms of units and taxes

DEVELOPMENTS PASSED OVER DUE TO PILOT

2,639 estimated units

264 potential ARO units (assuming a 10% affordable requirement)

\$34.5M potential in-lieu fees (assuming a 10% affordable requirement as in-lieu)

\$565M estimated 30-year taxes with development

\$50M estimated 30-year taxes without development

\$515M 30 year spread

DEVELOPMENTS NOT YET APPROVED IN PILOT

616 estimated units

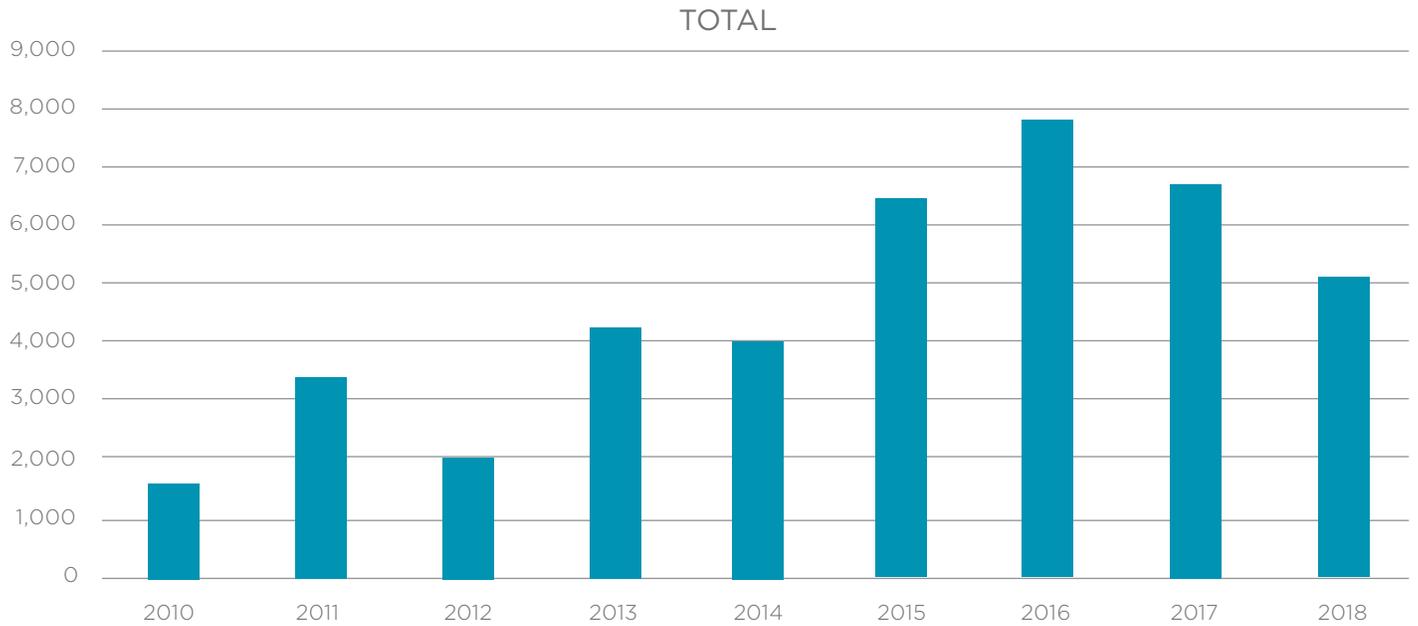
\$132M estimated 30-year taxes with development

\$6.5M estimated 30-year taxes without development

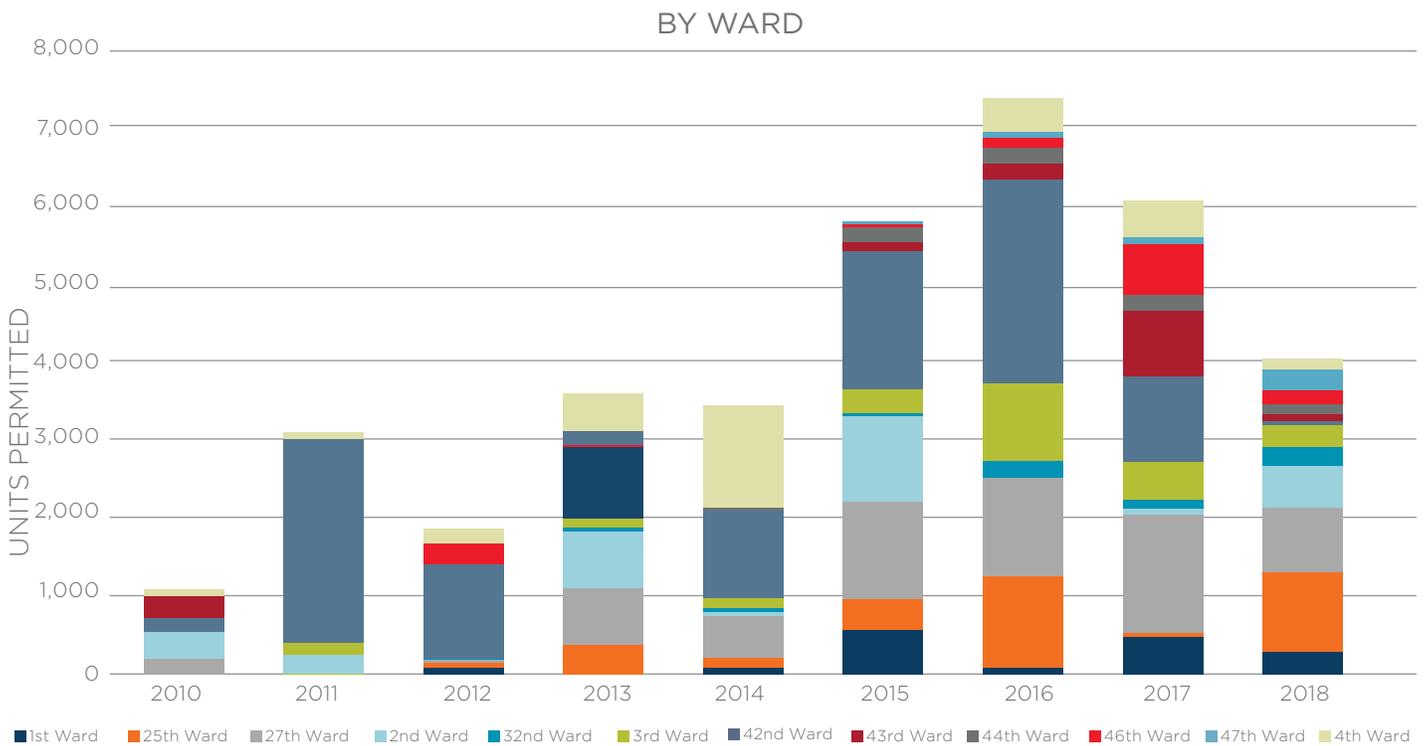
\$125M 30 year spread

NEW CONSTRUCTION PERMITS BY WARD

New construction permits are down throughout the city Looking at buildings permitted with 10 or more units:



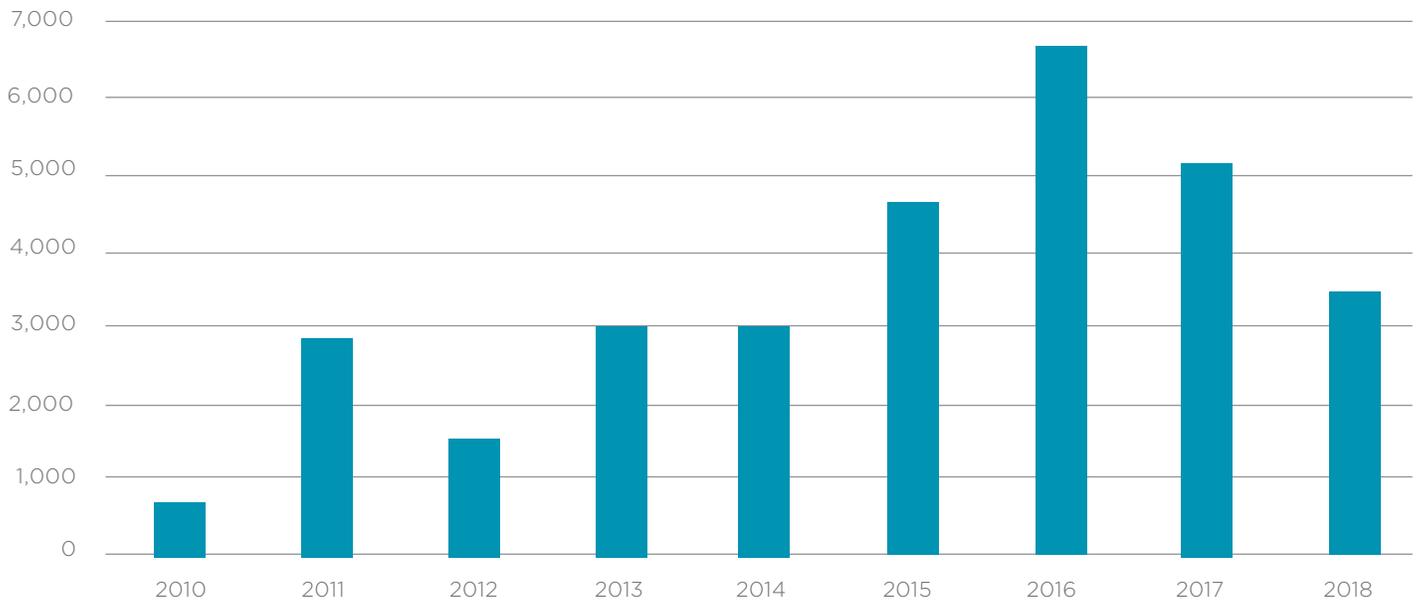
Units permitted are down 23% from 2017 and 34% from the high in 2016 When looking at only the wards with the highest amount of development:



Units permitted are down 33% in 2018 and 45% from the high in 2016

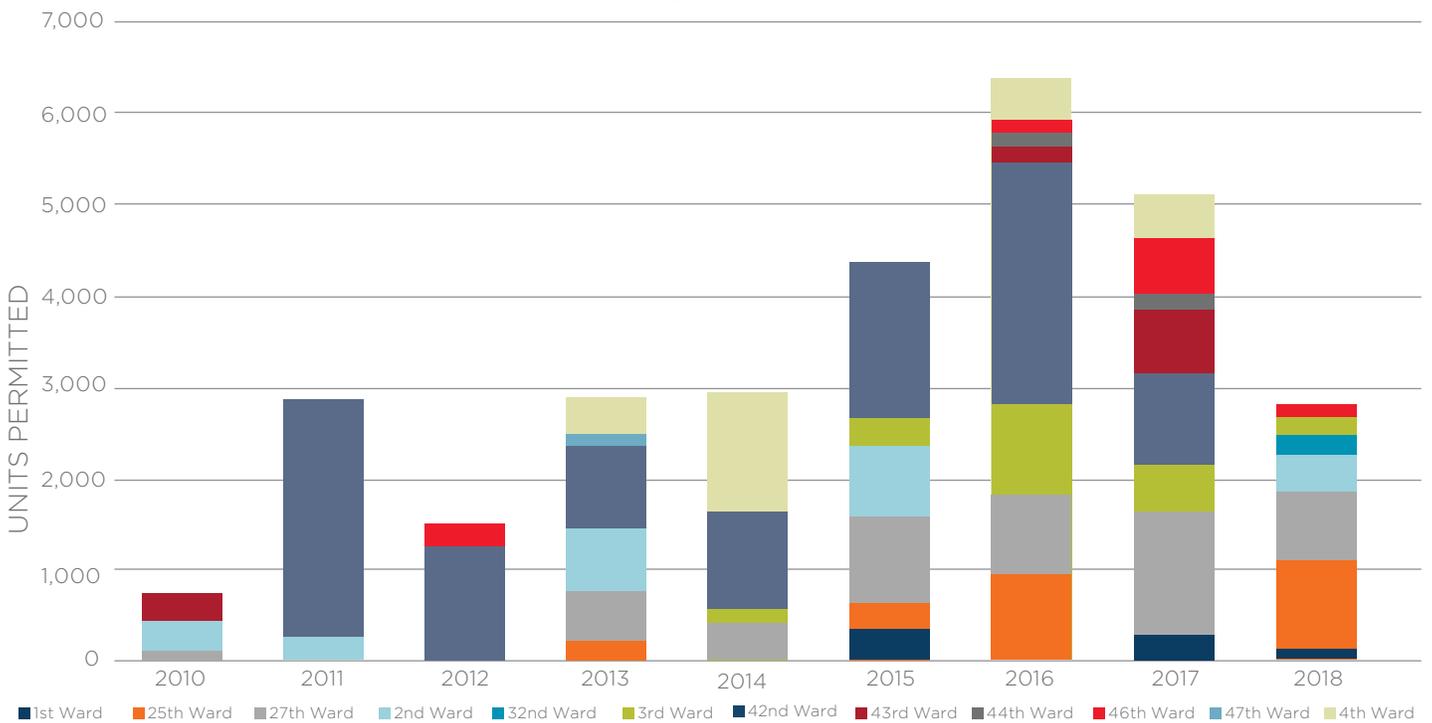
The fall in permitting is even more drastic when looking at developments of 100 or more units

TOTAL



Units permitted are down 33% from 2017 and 49% from the high in 2016

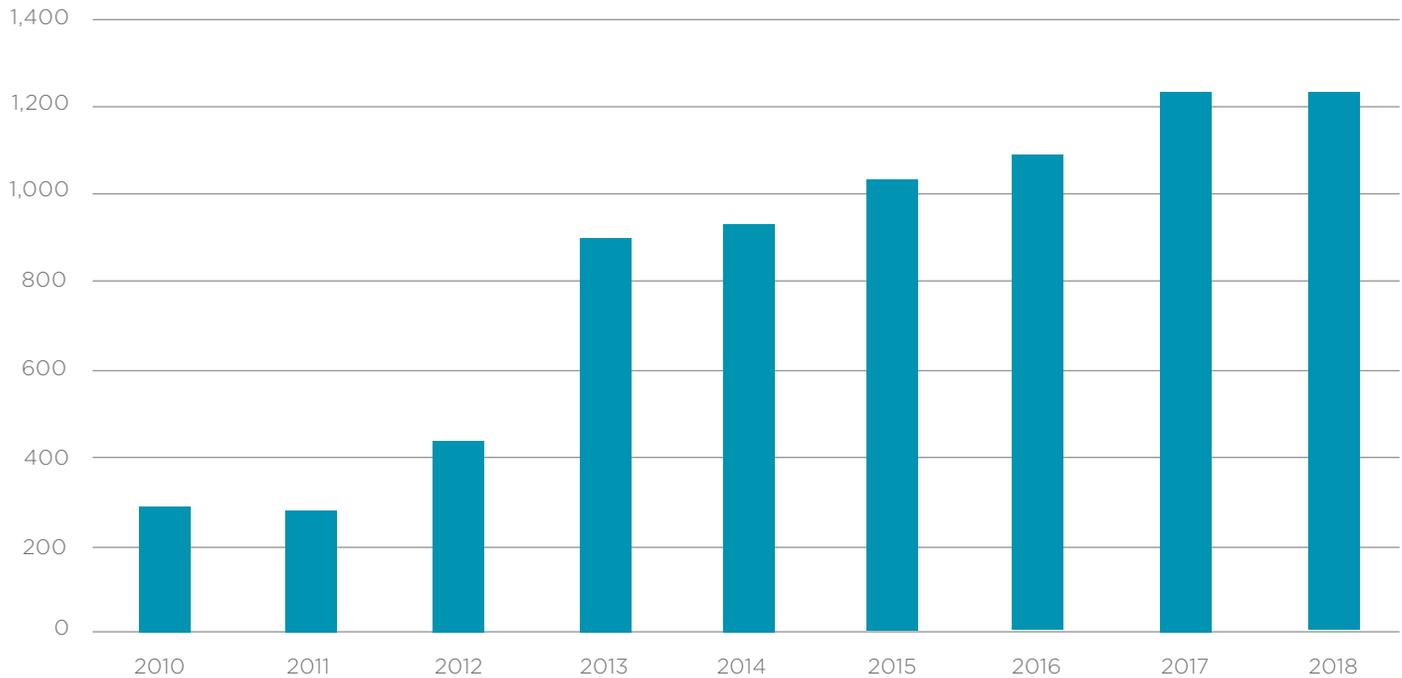
BY WARD



Units permitted are down 45% from 2017 and 56% from the high in 2016

Meanwhile, permitting of buildings under 10 units - which are not affected by the 2017 ARO Pilot - remains strong

LESS THAN 10 UNITS

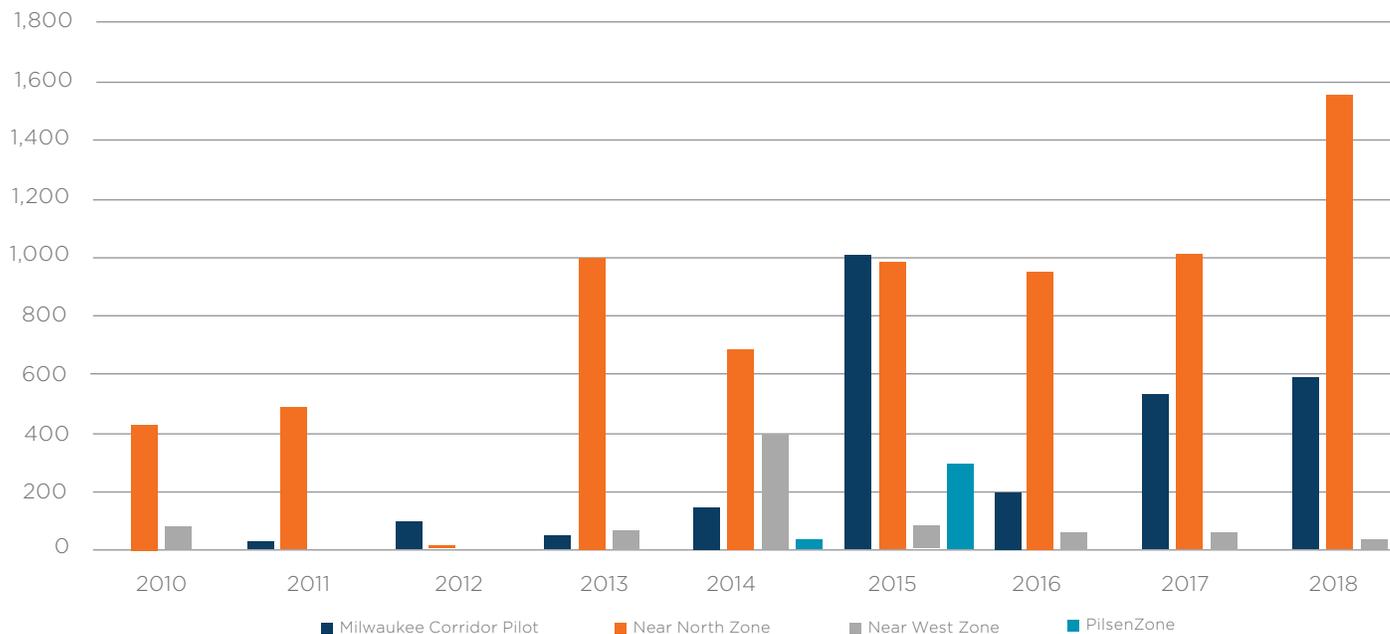


The most active wards in permitting small buildings are:

ARO EFFECTS		
Alderman	Ward	Total Units
Proco Joe Moreno	1st Ward	1,269
Scott Waguespack	32nd Ward	771
Walter Burnett, Jr.	27th Ward	545
Thomas M. Tunney	44th Ward	529
Ameya Pawar	47th Ward	503
Brian Hopkins	2nd Ward	485
Michele Smith	43rd Ward	471
Daniel Solis	25th Ward	328

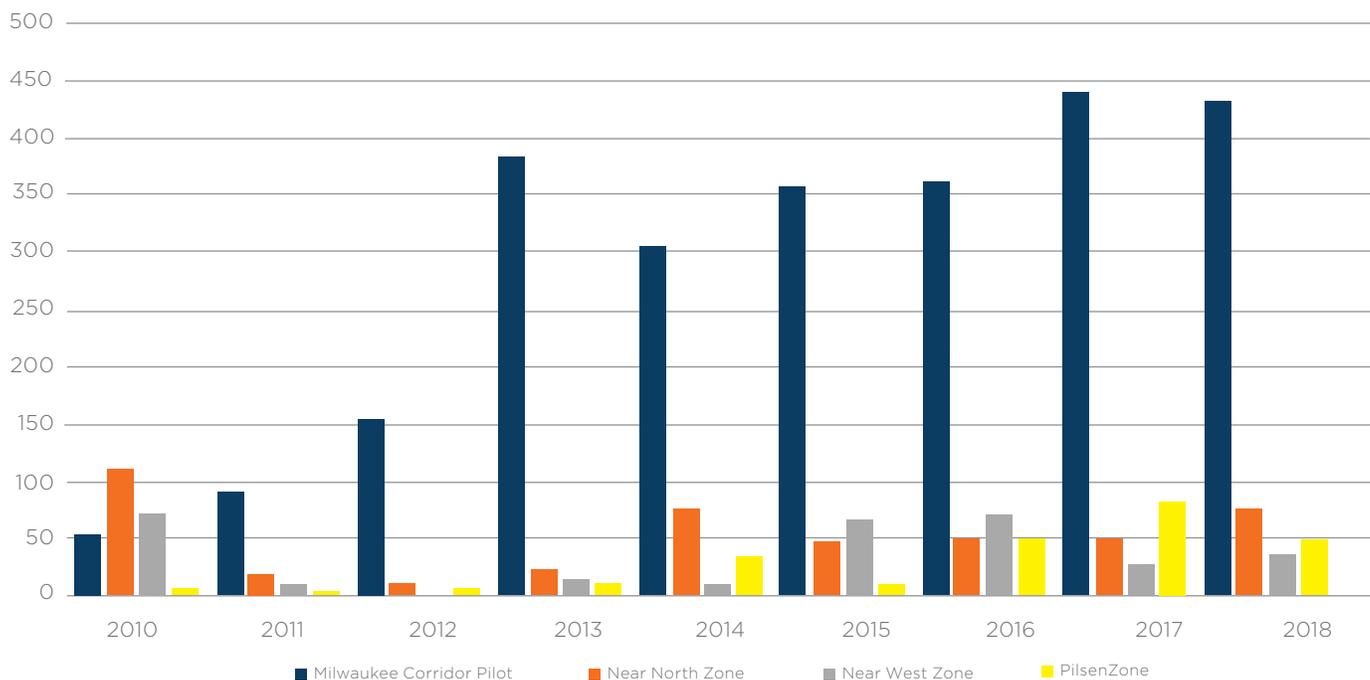
PERMITS ISSUED BY PILOT ZONE AREAS

10 + UNITS

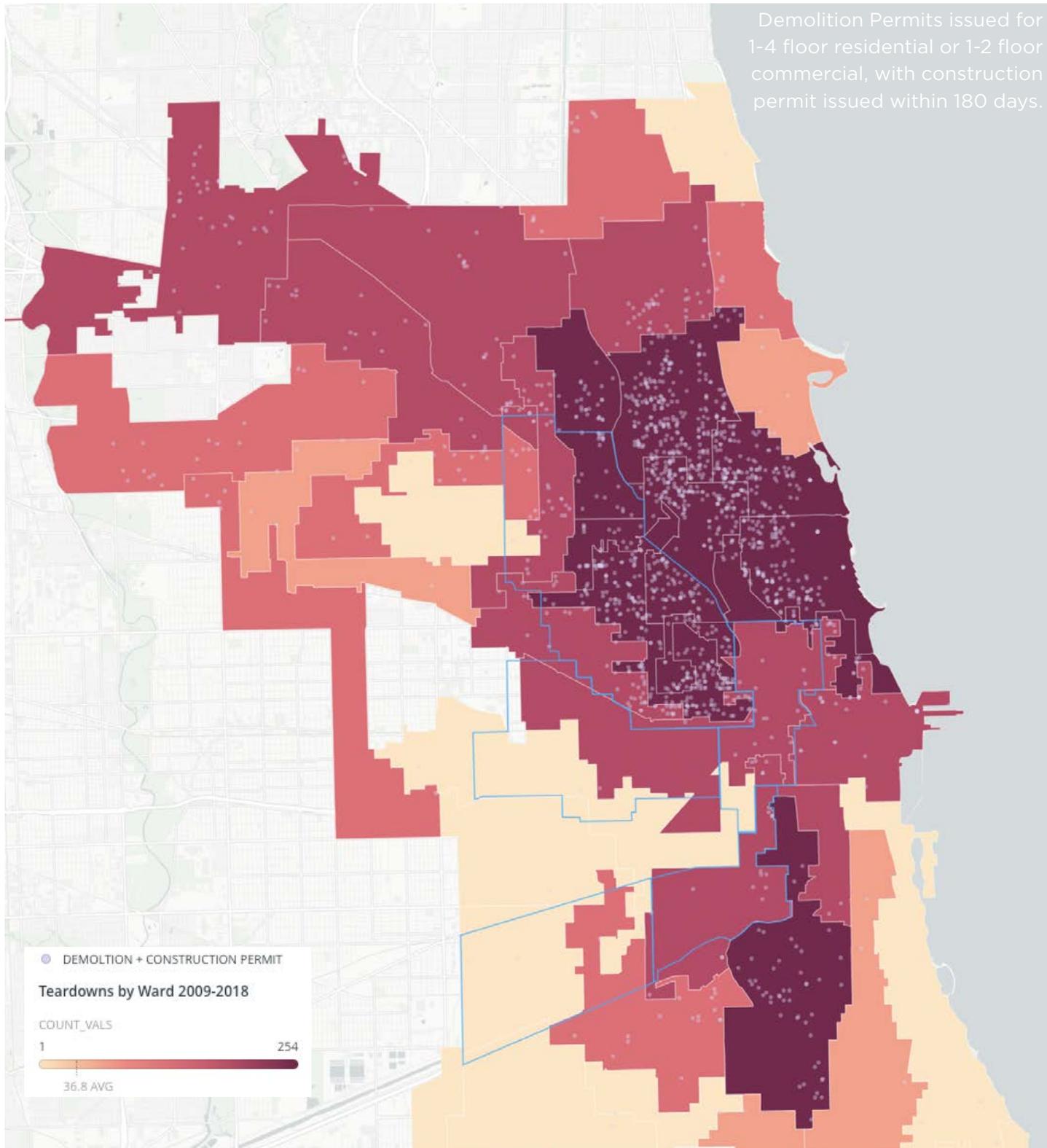


Units permitted of buildings with over 10 units have increased year over year in the Near North and Milwaukee Corridor Pilot Zones since 2015. Since 2010 the Pilot Zone areas have added 11,005 units in multifamily buildings of 10 or more units.

10 UNITS OR LESS



In that same time frame, these areas have also added 3,501 units in buildings of 10 units or less, with the heavy majority of the units built in the Milwaukee Corridor Pilot Area.



Chicago's housing stock in Pilot neighborhoods has been eroded by the **teardown and replacement** of existing 1-4 flats with smaller, single family product

Removal of **1,500+ older buildings** - residences that would otherwise be the "naturally-occurring" affordable housing - has resulted in a much more dramatic loss than the **844 on-site/off-site units** created by the ARO program in the same period.

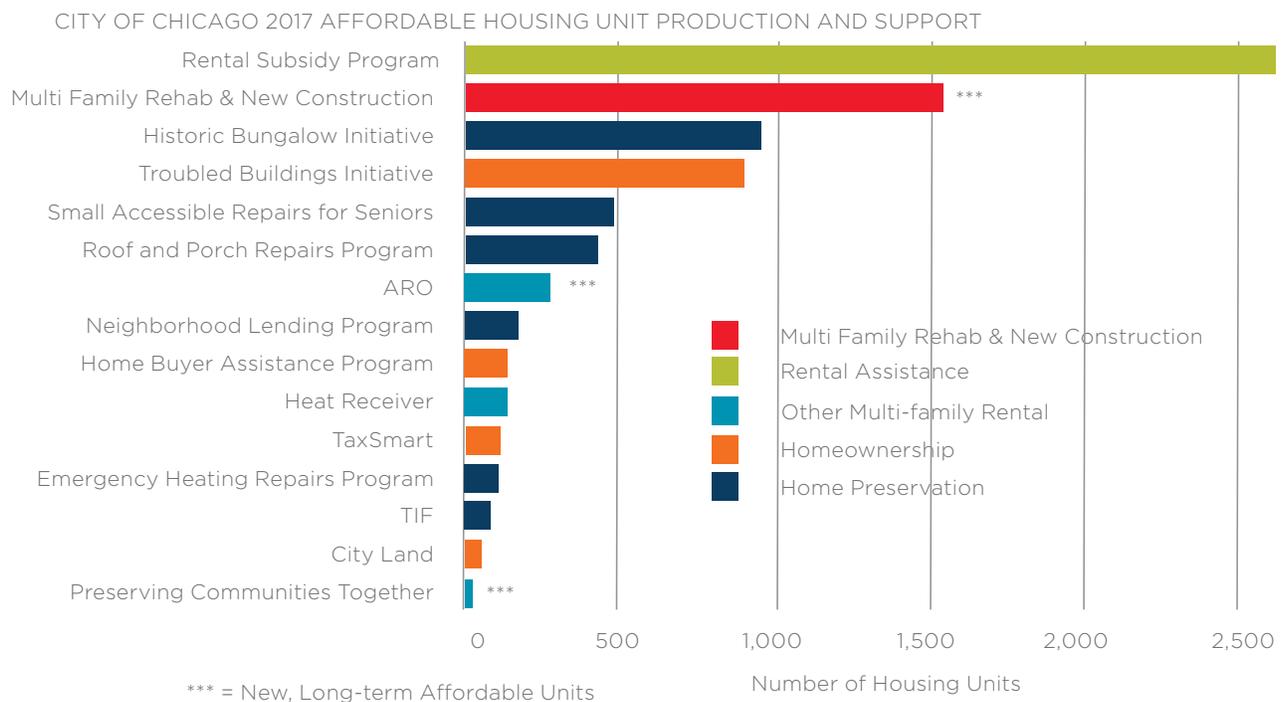
These flats would also represent a perfect opportunity for providing off-site options for developers seeking to fulfill the ARO requirement. However, the erosion of this product, coupled with stringent like-kind unit requirements has led to only **10 units** created in this manner according to city records.

The ARO program has produced **844 units** since 2009, roughly **30%** of the total affordable units created and rehabbed by the City of Chicago

The 2015 ARO stated a goal of 1,200 on-site units and \$90M in in-lieu fees over the course of five years. By the end of 2018, the program has led to 332 completed on-site or off-site units and \$16.8M of in-lieu fees. The program has a **54% shortfall in units expected at this point, as well as attaining only 31% of the expected in-lieu fees at this point.**

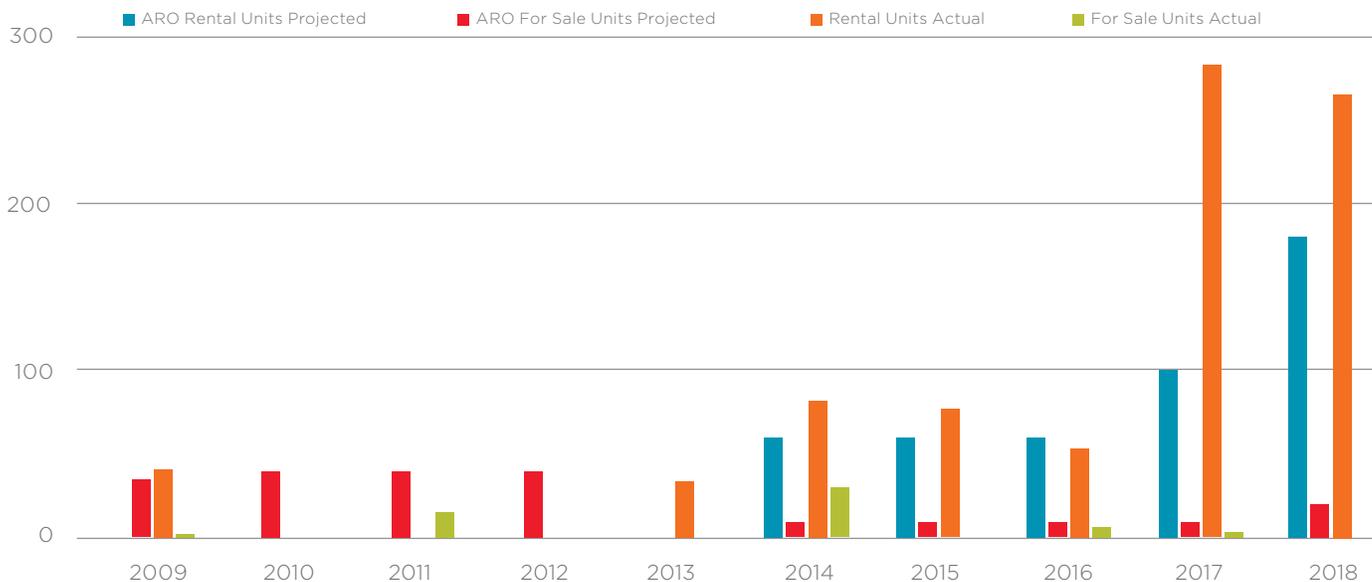
CHICAGO'S AFFORDABLE HOUSING PROGRAMS 2017 Unit Production

Which of the many affordable programs actually produce new affordable units?



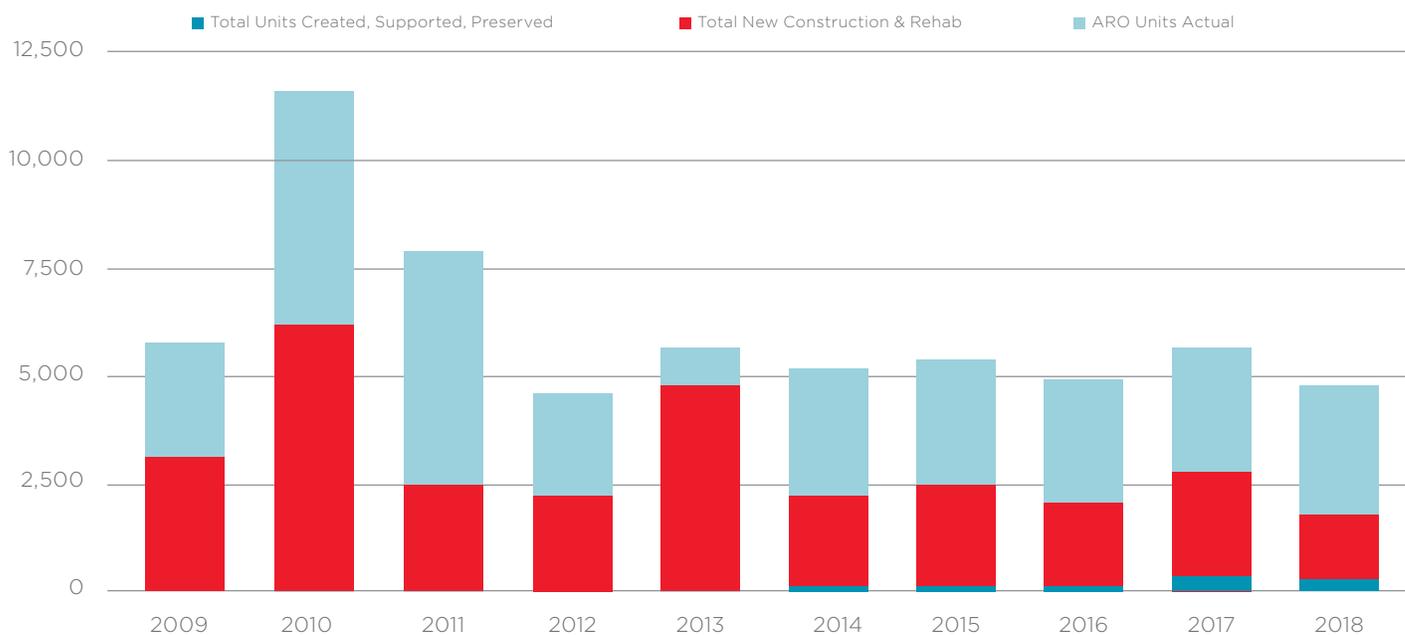
PROJECTIONS VS ACTUAL PRODUCTION

Developers have expedited projects to be completed prior to the establishment of the Pilot Zones, resulting in a temporary increase in ARO units in 2017 and 2018.

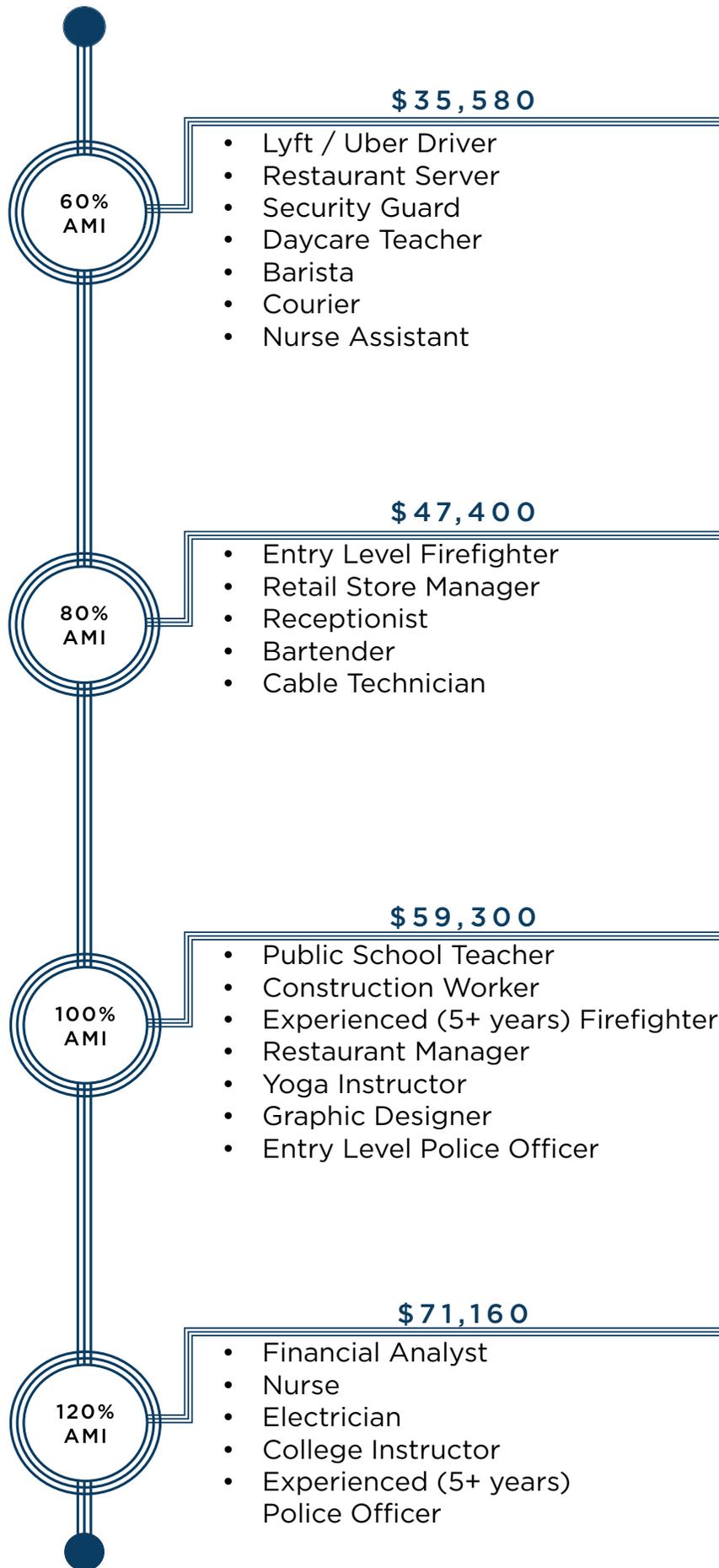


ACTUAL ARO RENTAL PRODUCTION VS TOTAL AFFORDABLE RENTAL UNITS

How much does ARO contribute to the overall HED affordable housing program?



Source: City of Chicago Quarterly Affordable Housing Report



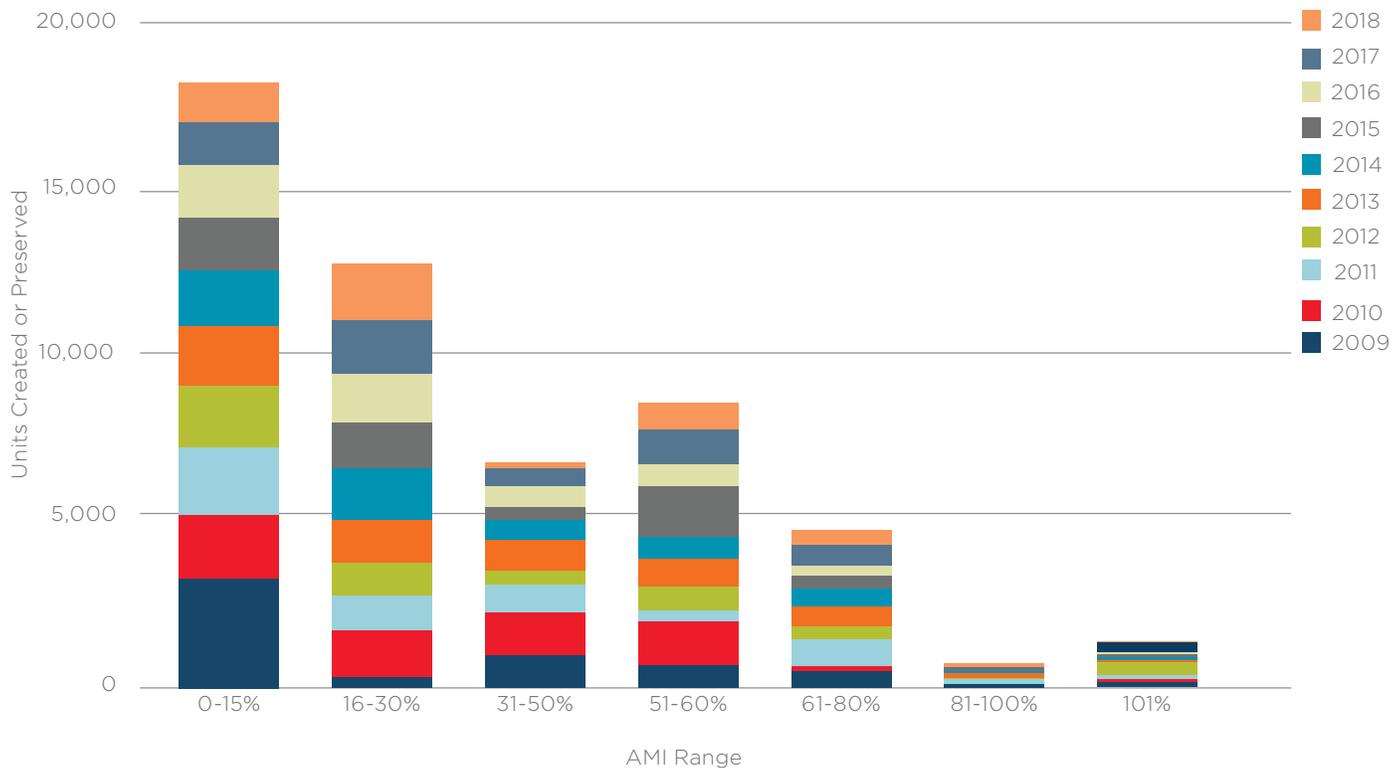
The majority of the city's newly created affordable units have been concentrated between **50-60%** AMI, with relatively little production in the higher AMI bands to which inclusionary zoning is suited for

The ARO was initiated to provide affordable housing to the populace below 60% AMI. However, workforce brackets at the 80% and 100% AMI ranges contain many of the professions belonging to heads of household that are in need of affordability.

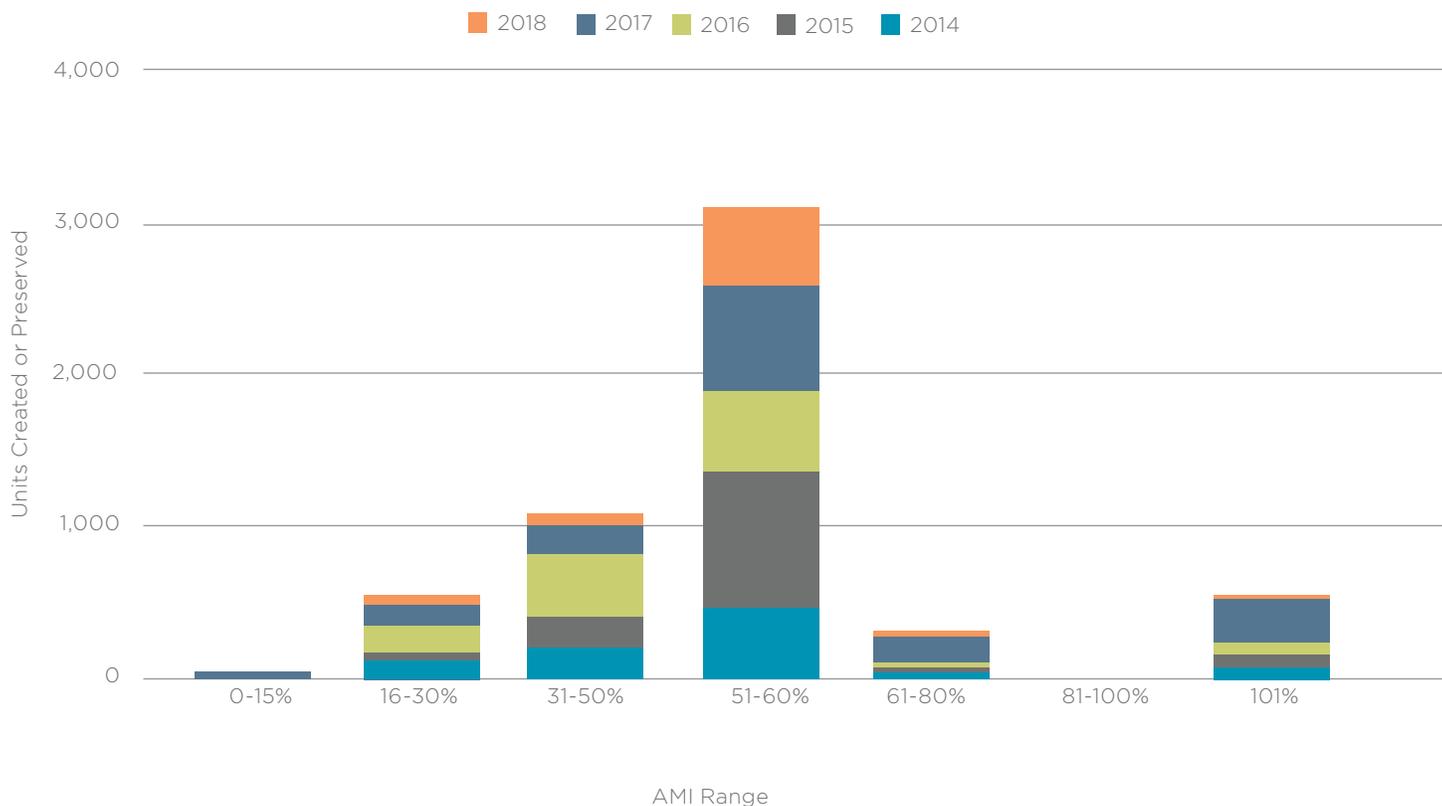
Changes in the ARO Pilot program, enabled some expansion to the 80-100% AMI range but at the expense of making building pro formas less feasible. **Either units are mandated to be priced at 60% AMI for lease by 80% AMI individuals, or 100% AMI options were limited to off-site units.**

Note: AMIs are calculated by HUD on an MSA basis, varying by HH size
 Source: Glassdoor, City of Chicago Quarterly Affordable Housing Report, Department of Housing & Urban Development (HUD)

Total Affordable Units Created / Preserved by AMI, 2009-2018



Affordable Units Created by AMI, 2014-2018



AFFORDABLE UNIT PRODUCTION UNDER 2007, 2015, 2017 ARO

What is the raw comparison between units created in these different systems?

	2007	2015	2017 Pilot
Units Goal	1,000 units/yr	240 units/yr	333 units/yr
In-Lieu Fee Goal	-	\$18M/yr	None
On-site units created	430	303	(72)
In-Lieu Fees Collected	\$84.1M	\$16.8M (no/yr)	**

** In-lieu units generated for non-pilot areas not reported yet . No in-lieu units generated from pilot zones.

Note: 2017 pilot on-site units are currently under construction, 1,582 on-site units are approved of which over 50% are from the multi-decades long River District project.

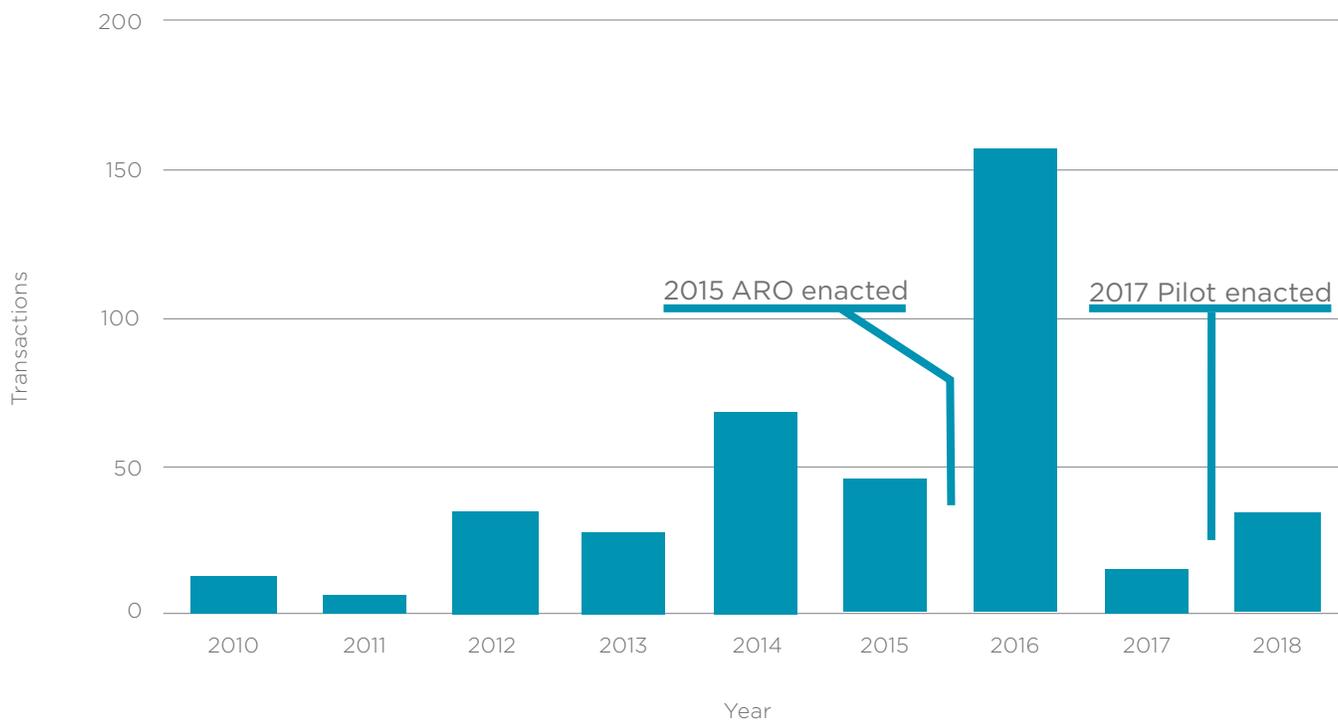
CURRENT PROJECTS UNDER 2017 ARO PILOT							
Name	Approval	Number of Units	On-site	Off-site (known)	In-lieu Fee	Address	Developer
166 North Aberdeen Street	5/25/2018	236	24	23		166 N Aberdeen St	MCZ Development
725 West Randolph Street	7/25/2018	370	40			725 W Randolph St	Related Midwest
Freedom Center Flats	6/21/2018	260	46	6		1515 W Monroe St	Cedar Street Companies
1122 West Chicago Avenue	2/28/2018	97	20			1122 W Chicago Ave	Lipe Property Company
The Mill	7/25/2018	196	39			730 N Milwaukee Ave	Tandem Construction
1220 West Jackson Blvd	3/28/2018	166	29	4		1220 W Jackson Blvd	LG Development Group
1624 West Division Street	3/15/2018	121	21			1624 W Division St	RDM Development
1750 North Western Avenue	9/13/2018	106	16			1750 N Western Ave	GW Properties
335 West Schiller Street	3/15/2018	105	21			335 W Schiller St	Lakshmi Capital Management
Tribune's Freedom Center - Future Phases	10/18/2018	3,600	520			777 W Chicago Ave	Tribune Media
Tribune's Freedom Center - Phase 1	10/18/2018	1,500	300			W Grand Ave	Tribune Media
1125 West Van Buren Street	11/15/2018	201	5			1125 W Van Buren St	Tandem Construction
1050 West Van Buren Street	11/15/2018	200	40			1050 W Van Buren St	Tandem Construction

 Under Construction as of 4/19



Transactions of sites with potential for multifamily development have fallen since the proposal and enactment of the Pilot in 2017

> 15,000 SF Site Transactions Within Pilot Areas



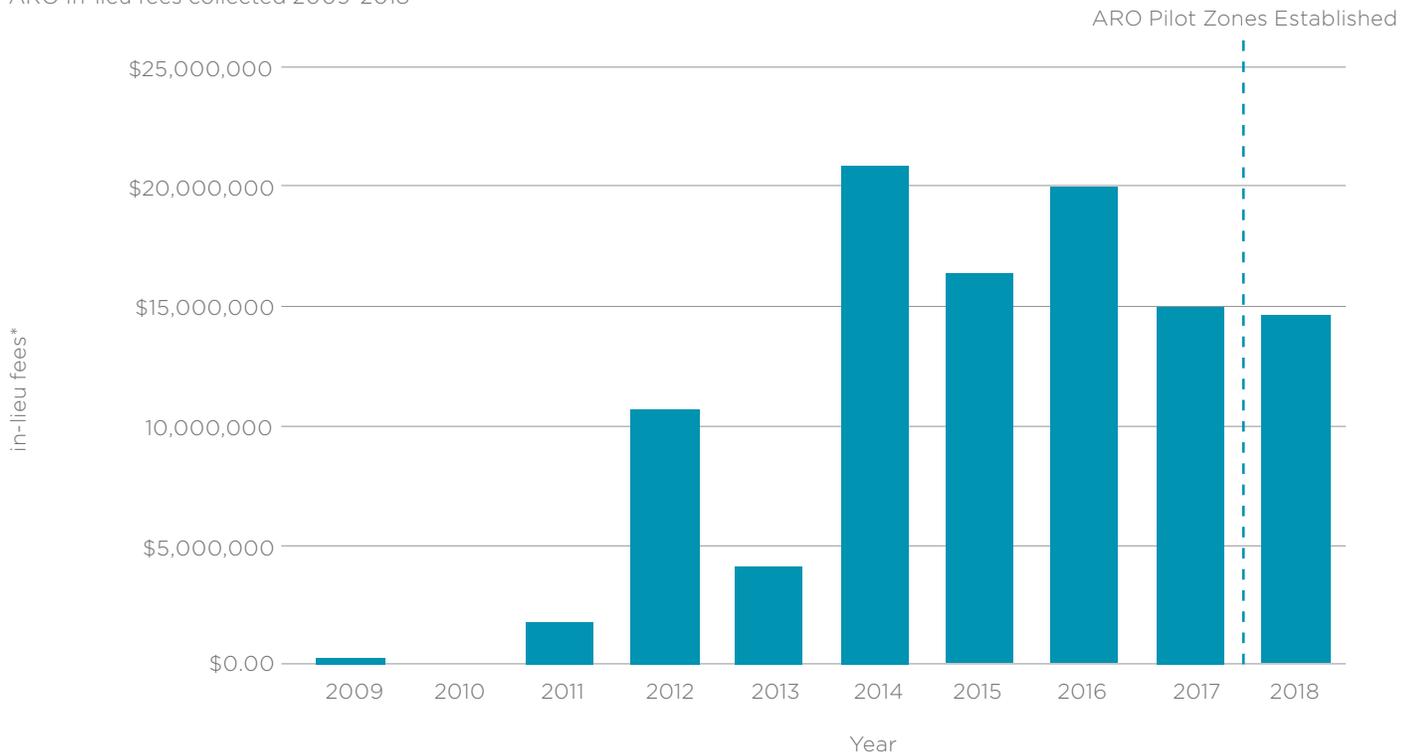
Within the Pilot, transactions have fallen **78%** from their peak in 2016, with the **10** of the 2018 transactions being sales between LLCs that were owned in part by the same entity.

Requirements:

- Over **15,000 SF** of Land
- Site was within borders of one of the 2017 Pilot Zones
- Zoning amenable to multifamily development
- Sale closed between January 1st and December 31st of that year
- Land Use was vacant, commercial, multifamily, retail or tax exempt at time of sale

Source: Reonomy

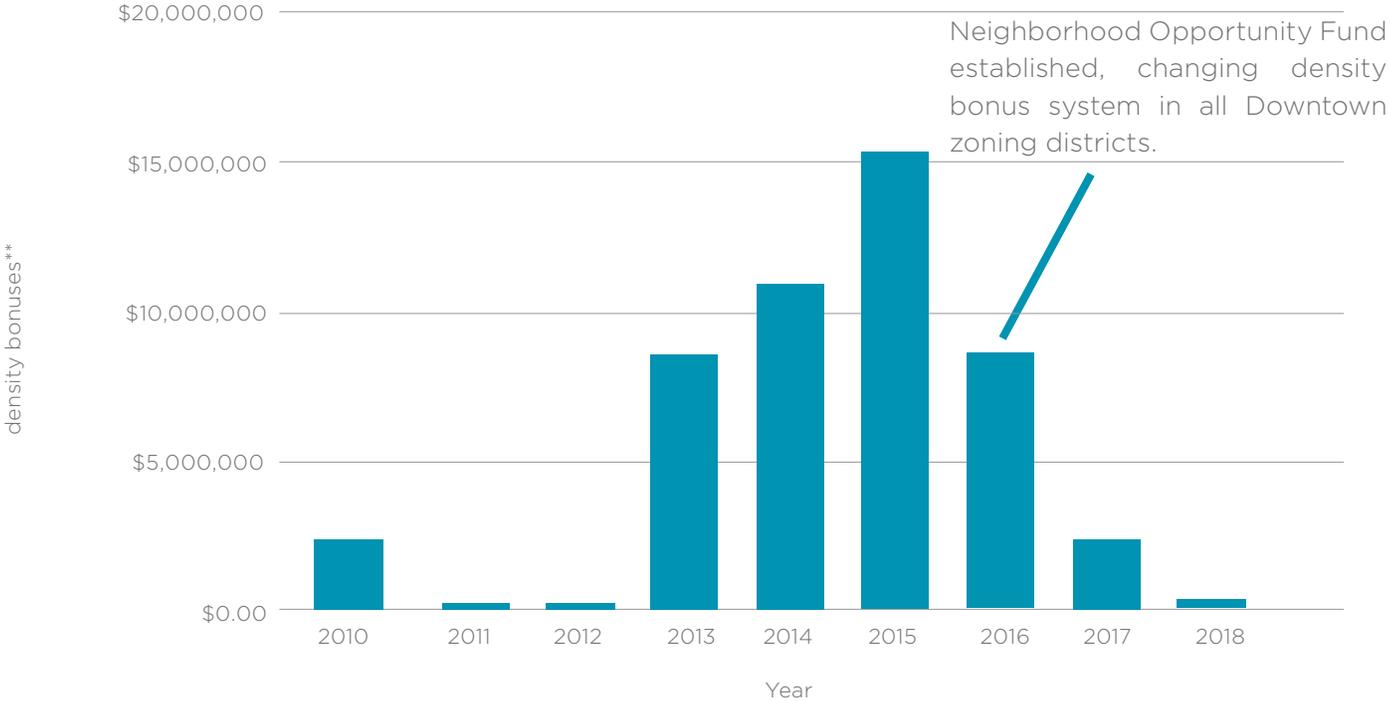
ARO In-lieu fees collected 2009-2018



ARO in-lieu fees have stagnated with the arrival of the Pilot Program

Year	In-lieu Fees*
2009	\$300,000.00
2010	Not Reported
2011	\$1,800,000.00
2012	\$10,800,000.00
2013	\$4,100,000.00
2014	\$20,900,000.00
2015	\$16,400,000.00
2016	\$20,150,000.00
2017	\$15,025,000.00
2018	\$14,717,294.00

Downtown affordable density bonus payments



The discontinued voluntary affordable density program has also reduced the city’s funding sources

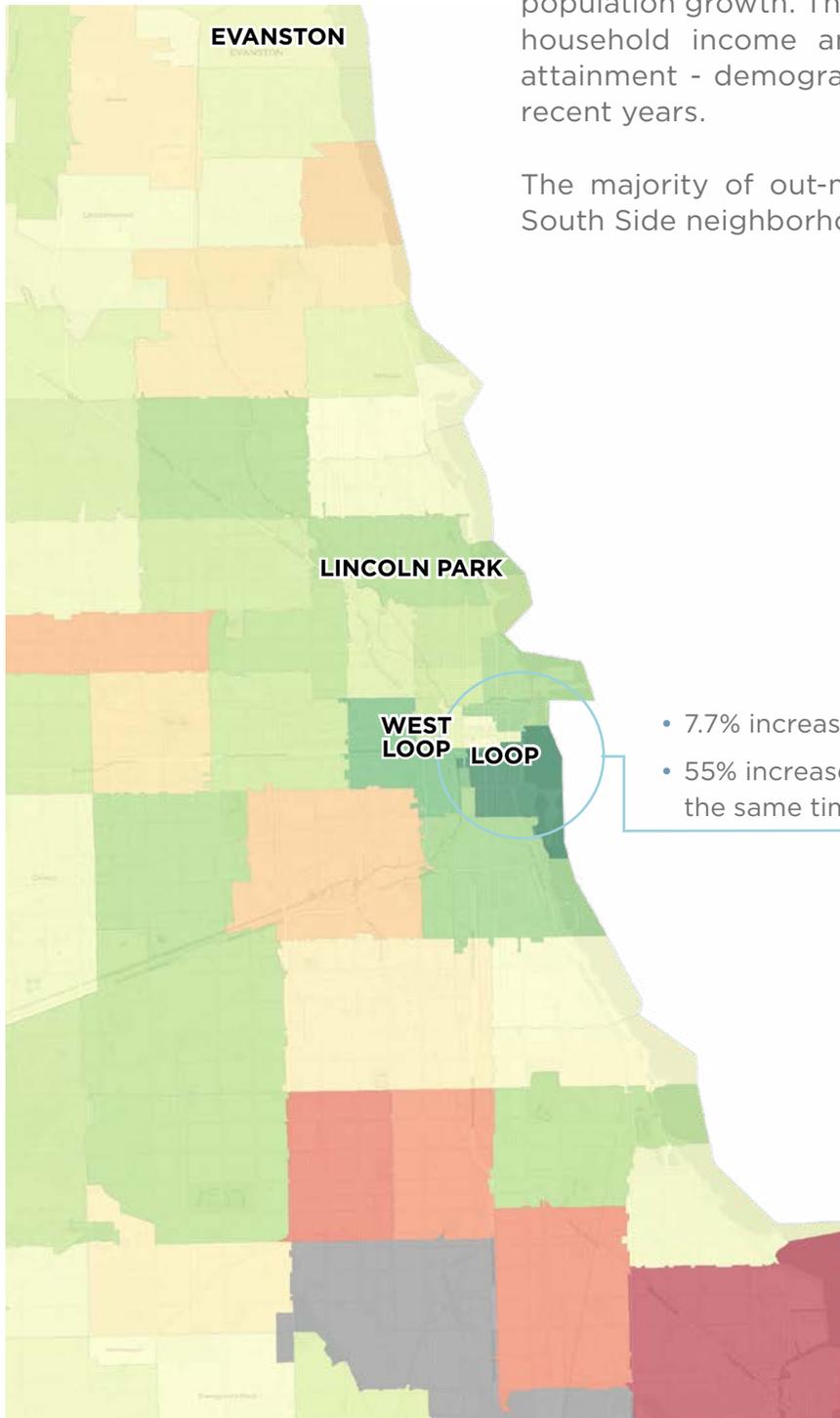
Year	Density Bonuses**
2010	\$2,350,169.87
2011	\$266,677.40
2012	\$132,426.68
2013	\$8,457,646.28
2014	\$10,916,379.00
2015	\$15,424,060.91
2016	\$8,776,998.17
2017	\$2,435,863.69
2018	\$123,401.00

Population moving into the city is going to place upward pressure on rents to lack of new supply

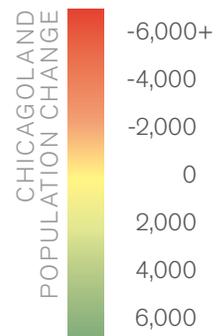
RISING NUMBERS DOWNTOWN 2011 - 2016

Throughout the past several years the urban core and surrounding neighborhoods of Chicago have seen strong population growth. These neighborhoods exhibit high average household income and a high percentage of educational attainment - demographics that have only grown stronger in recent years.

The majority of out-migration has occurred around the Far South Side neighborhoods such as Calumet and Roseland.



- 7.7% increase in population 2010 - 2018
- 55% increase in individuals with \$150,000+ in the same time period



Source: U.S. Census Bureau

Attracting the best talent across industries to Chicago is supported by having continued deliveries of high end rental product

TOP TALENT		ACCESS TO TALENT	
265K	Population with a Graduate Degree	650K+	People commute to downtown Chicago each business day with more than half taking mass transit
714K	People with bachelor's degrees or greater who live in the city of Chicago	1M	College graduates with a bachelor's or higher live within one mile of a CTA or Metra train stop
TOP 2	Business schools in the world		
500K	BigTen and Notre Dame alumni in the greater Chicago Area	3M+	Working age adults are within a 50-minute commute of downtown Chicago - more than 1.2 million are between 18-34 years old

ABUNDANT TALENT

EMPLOYMENT	2016	Management Employment (2016, Thousands)	
Healthcare	571,433	Chicago	337
Government	549,674	New York City	506
Retail	469,764	Los Angeles	238
Manufacturing	414,510	Dallas	141
Hospitality	392,086	Houston	126
Administrative	372,892	Washington D.C.	236
Prof. Services	362,216	San Francisco	163
Wholesale	245,144	Philadelphia	125
Fin. & Insurance	229,904	Boston	221
T&L	212,948	Atlanta	167
Other Services	193,585	Miami	109
Construction	170,507	Seattle	104
Education	142,794		
Management	84,607		
Information	80,542		

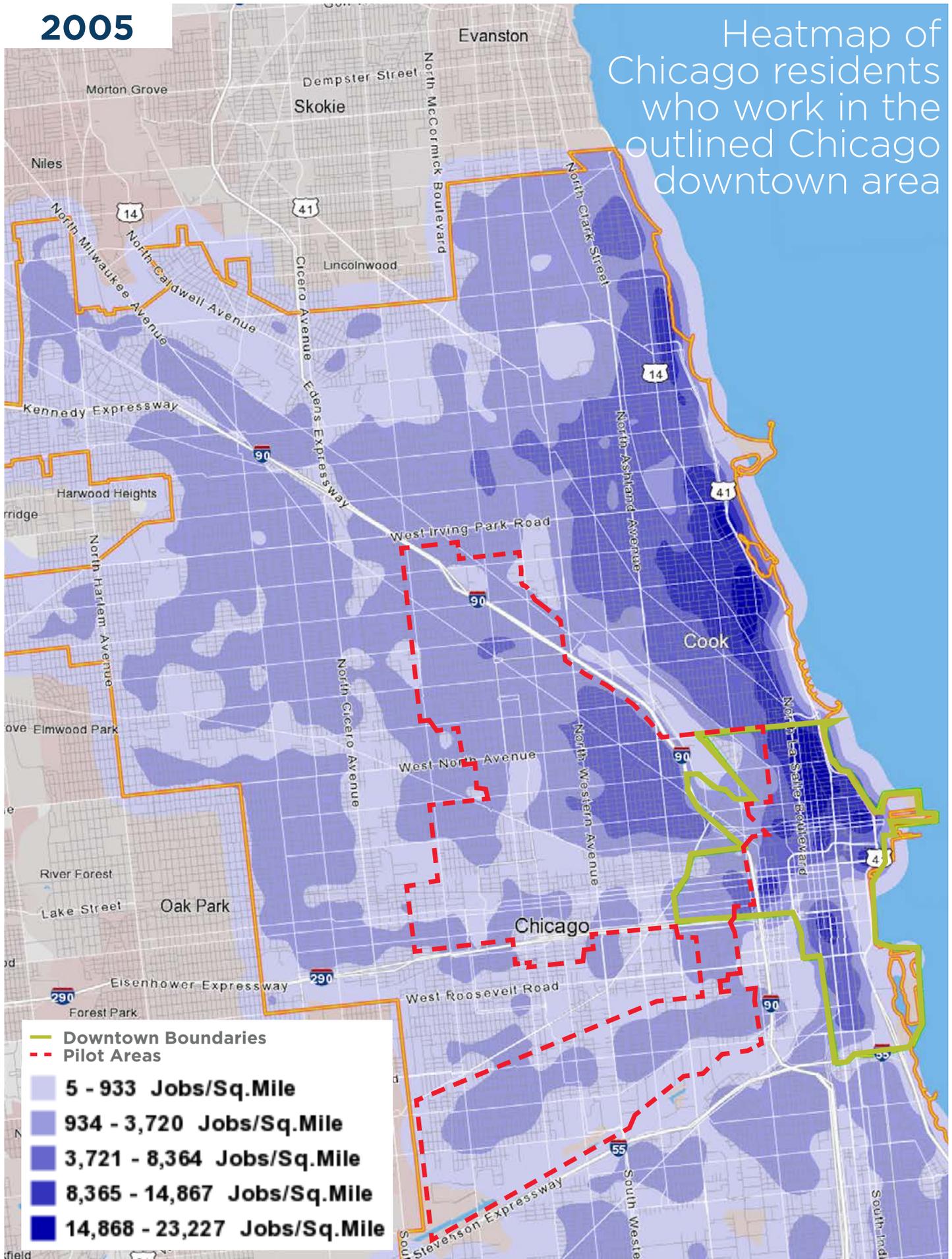
COMPETITIVE COST

Management Wages (2016)	
Chicago	\$116
New York City	\$159
Los Angeles	\$130
Dallas	\$129
Houston	\$140
Washington D.C.	\$142
San Francisco	\$150
Philadelphia	\$138
Boston	\$136
Atlanta	\$123
Miami	\$121
Seattle	\$131

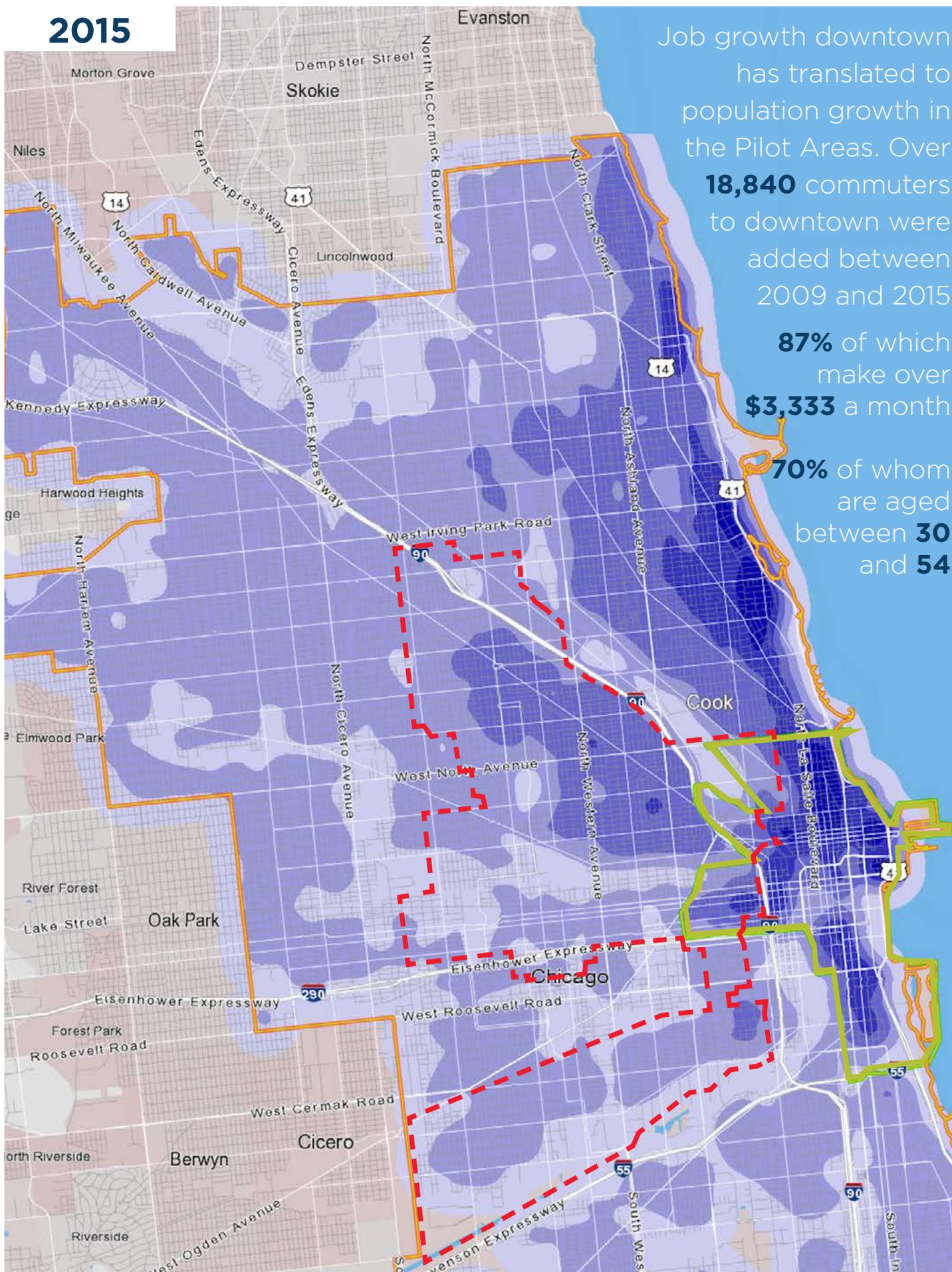
In Chicago, **38.5%** of adults over the age of 24 have college degrees. This is the highest percent of the 5 largest cities in the U.S.

2005

Heatmap of Chicago residents who work in the outlined Chicago downtown area



2015



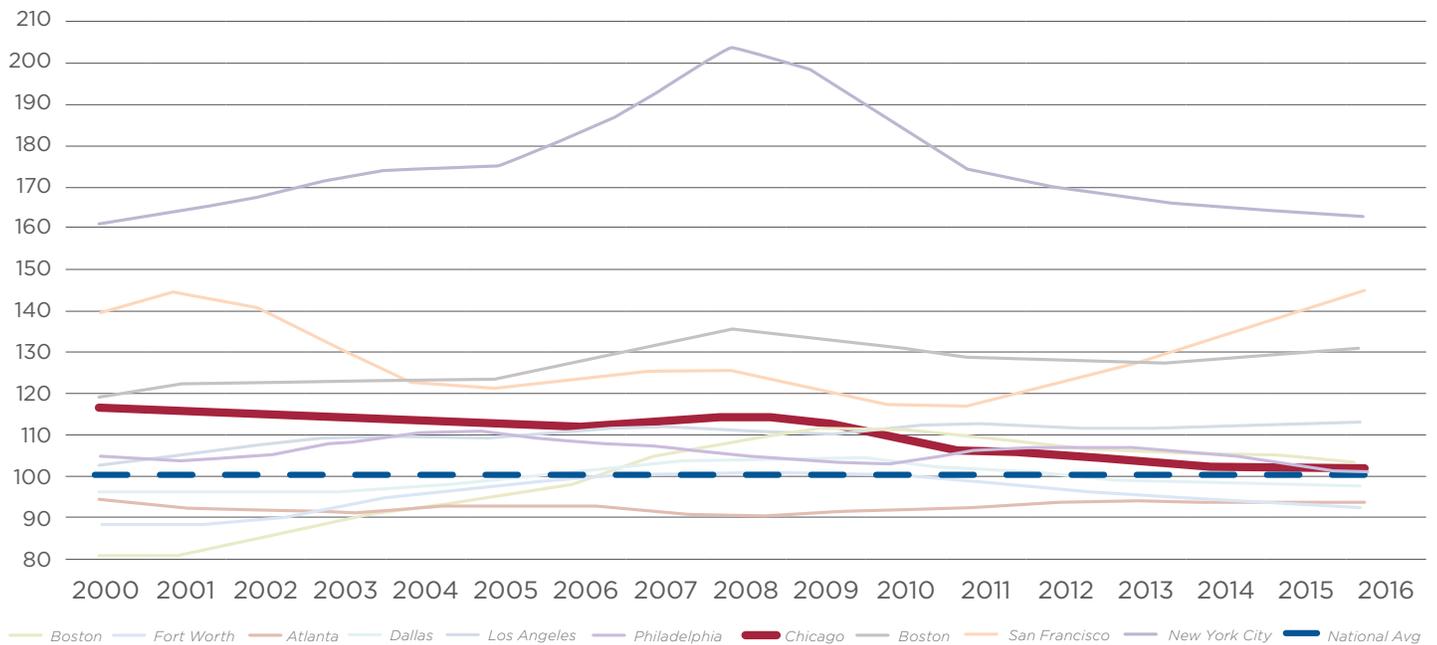
UNIVERSITY	PERCENTAGE (%) OF GRADUATES THAT CHOOSE CHICAGO	CHICAGO'S RANKING AMONG GRADUATE DESTINATIONS	U.S. NEWS 2019 NATIONAL COLLEGE RANKING
University of Chicago	38.4	1	3
Northwestern University	36.4	1	10
University of Notre Dame	14.1	1	18
University of Illinois at Urbana-Champaign	42.0	1	46
University of Iowa	15.6	1	89
University of Illinois at Chicago	67.6	1	129
Loyola Chicago University	63.5	1	89
DePaul University	71.5	1	119
Indiana University	13.2	2	89
Michigan State University	6.5	2	85
University of Minnesota	2.4	2	76
Purdue University	15.0	2	56
University of Wisconsin	10.0	2	49
University of Michigan	6.8	3	27
University of Nebraska	2.3	4	129
Ohio State University	2.6	5	56



Source: Wall Street Journal, U.S. News & World Report

The cost of doing business in Chicago remains competitive with other markets

COST OF DOING BUSINESS IN MAJOR CITIES



Between 2017 and 2018, downtown Chicago saw a net increase of **19,249** jobs - a year-over-year increase of **3.2%**

CHANGES IN CHICAGO-AREA EMPLOYMENT SINCE THE GREAT RECESSION

	MARCH 2010	MARCH 2018	CHANGE	% CHANGE
TOTAL METRO	3.1 MILLION	3.6 MILLION	463,820	+13.9%
COOK COUNTY	2.0 MILLION	2.3 MILLION	270,882	+13.5%
CHICAGO	1.0 MILLION	1.2 MILLION	185,980	+18.4%
DOWNTOWN CHICAGO	479,199	612,914	133,715	+27.9%
COOK W/O CHICAGO	1.0 MILLION	1.1 MILLION	74,902	+7.5%
CHICAGO W/O DOWNTOWN	531,972	575,217	43,245	+8.1%

Source: Cushman & Wakefield Research, Crain's Business



Submarket: **West Loop**

- Status: **Phase 1 Complete / Phase 2 In Process**

- Established Midwest Regional HQ in 2014 with **1,000+** employees in a **327,000+ sf** space
- Google announced yesterday that it would add another **132,000+ sf** to its Chicago campus in a new Sterling Bay development to be delivered in the next several months
- The company also is planning on leasing **14,000 sf** nearby for its first flagship retail store in the world

Submarket: **West Loop Gate / South Loop**

- Status: **In Process**

- In the process of relocating **1,800** employees (including at least **300** tech workers) to the renovated old Chicago Post Office, leasing over **200,000 sf** of space



- Submarket: **Loop**

- Status: **Completed Summer 2018**

- Signed a **263,000 sf** lease in the newly delivered CNA center, bring Facebook up to at least **2,000** employees in Chicago

-Submarket: **River North**

- Status: **Lease Signed**

- Signed lease at Hines' Wolf Point development that will establish a **500,000 sf** space. **1,000** new jobs are promised in the next five years, with room for up to **4,000** additional employees upon the project's completion.

- Submarket: **West Loop**

- Status: **Completed Spring 2018**

- Relocated global headquarters from Chicagoland suburbs to a **250,000 sf** new construction office - totaling over **2,000** employees.

COMPANY	YEAR LEASE SIGNED	YEAR MOVED IN	SUBURBAN LOCATION	NEW CBD LOCATION	NEW SUBMARKET	RSF
Mondelez	2019	2019	Deerfield	905 W Fulton	West Loop	83,000
Walgreens Boots Alliance	2018	2019	Deerfield	433 W Van Buren	West Loop	200,000
Ferrara Candy	2018	2018	Oakbrook Terrace	433 W Van Buren	West Loop	60,000
FTD	2018	2018	Downers Grove	1 N Dearborn	Loop	41,000
Walgreens Boots Alliance	2017	2018	Deerfield	1 S State	Loop	27,000
Allstate	2017	2017	Northbrook	The Mart	River North	57,000
Nielsen	2017	2018	Schaumburg	200 W Jackson	Loop	161,000
Peapod	2017	2018	Skokie	300 S Riverside	West Loop	53,000
Shure*	2017	2017	Niles	125 S Clark	Loop	39,000
Sikich LLP	2017	2017	Naperville	200 W Madison	Loop	22,000
Wilson Sporting Goods Co.	2016	2018	Rosemont	One Prudential	Loop	79,000
McDonald's	2016	2018	Oak Brook	1045 W Randolph	Fulton Market	523,000
Beam Suntory	2016	2017	Deerfield	The Mart	River North	100,000
EN Engineering*	2016	2016	Warrenville	180 N LaSalle	Loop	20,000
Ulta Beauty*	2016	2016	Bolingbrook	120 S Riverside	Loop	23,000
W.W. Grainger*	2016	2016	Lake Forest	125 S Clark	Loop	29,000
Mead Johnson	2015	2017	Glenview	444 W Lake	Loop	76,000
Allstate*	2015	2016	Northbrook	The Mart	River North	45,000
Baxalta*	2015	2016	Bannockburn	540 W Madison	Loop	83,000
ConAgra	2015	2016	Naperville	The Mart	River North	210,000
Kraft Heinz	2015	2016	Northfield	200 E Randolph	Loop	170,000
Stats	2015	2016	Northbrook	203 N LaSalle	Loop	70,000
Horizon Pharma*	2015	2015	Lake Forest	150 S Wacker	Loop	65,000
Motorola Solutions	2015	2015	Schaumburg	500 W Monroe	Loop	150,000
Textura Corporation*	2015	2015	Deerfield	One Prudential	Loop	23,000
Nielsen*	2014	2016	Schaumburg	200 W Jackson	Loop	54,000
Wintrust	2014	2015	Rosemont	231 S LaSalle	Loop	179,000
Archer Daniels Midland Company*	2014	2014	Decatur	77 W Wacker	Loop	46,000
Discover*	2014	2014	Riverwoods	350 N Orleans	River North	26,000
Monitor Liability Managers	2014	2014	Rolling Meadows	233 S Wacker	Loop	27,000
Newark Corp.	2014	2014	Ravenswood	300 S Riverside	Loop	80,000
SAC Wireless	2014	2014	Schaumburg	540 W Madison	Loop	40,000
Gogo Wireless	2013	2015	Itasca	111 N Canal	Loop	232,000
AT&T	2013	2015	Hoffman Estates	225 W Randolph	Loop	53,000

INCLUSIONARY HOUSING COMPARISON BY MARKET					
MARKET	YEAR ESTABLISHED/ ALTERED	UNITS THRESHOLD	% UNITS SET ASIDE	AMI TARGET	AFFORDABILITY PERIOD
Austin	*Texas prohibits mandatory inclusionary zoning	Optional	Not mandatory	<80%	Various
Boston	2000, 2015	10+	13-18%	<70%	30+
Chicago	2003, 2015, 2017, 2018	10+	10-20%	<60-120%	30
Denver	2015, 2017	30+	10%	<100%	15
Los Angeles	2016	10+	11-25%	<30-80%	55
Minneapolis	2019 (under development)	10+	Undergoing development	Undergoing development	Undergoing development
New York City	1987, 2005, 2016	10+	20-30%	<60-115%	Permanent
Portland	2017	20+	10-25%	<60-80%	99
San Francisco	2002, 2017, 2019	10+	12-25%	<50-130%	55
Seattle	2016, 2018	All	5-11%	<60%	Unspecified
Washington, D.C.	2009	10+	8%- 10% of residential floor area	<60-80%	Unspecified

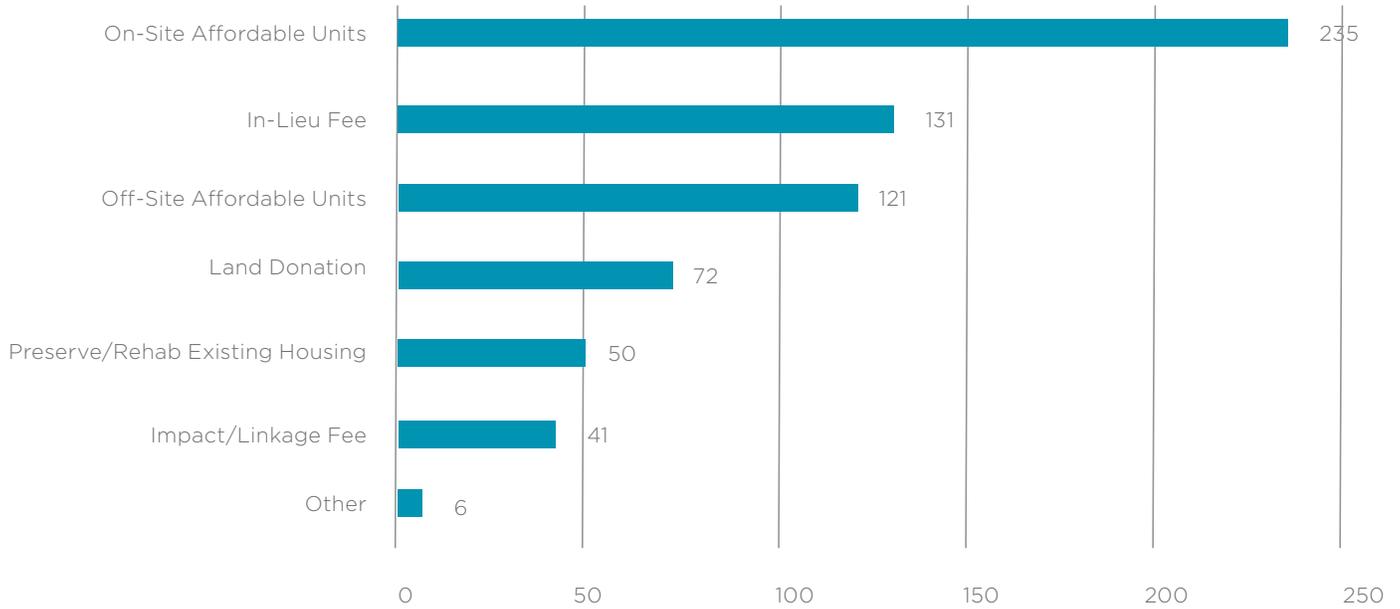
MARKET	ON-SITE OPTION/ REQUIREMENT	IN-LIEU FEE MODEL	AFFORDABLE DENSITY BONUS PROGRAMS	OTHER INCENTIVES
Austin	10%	By GSF	Various, bonuses based on SF	Unit size, Parking requirements, Design flexibility, Fee waivers/reductions, Fee deferrals, Fast track permitting and Subsidy
Boston	13%	By Unit Cost (15-18%)	New density bonus incentive program beta launched 2017	
Chicago	2.5-20%	By Unit Affordability (7.5-10%)	Additional density bonus for on-site TOD options, max out at a 1 FAR bonus for Dash 3 zoning. Downtown-specific bonus removed in 2016, replaced with Neighborhood Opportunity Fund Bonus	
Denver	<10%	By Unit Cost	No cap, case-by-case basis	Up to \$25,000.00 cash incentive in high-need areas, 20% parking reduction and/or expedited review process, more flexible developer options
Los Angeles	5-20%	By Unit Affordability	Up to a maximum 35% FAR bonus for 20% units set aside as affordable	Can qualify for reduced cost of development and/or increased exposure, open space etc. by State Density Bonus Program
Minneapolis	Undergoing development	Undergoing development	Undergoing development	Undergoing development
New York City	20-30%	By GSF	Up to a maximum up to 20% FAR bonus, enabling in-lieu fee, preservation or new construction	Tax Incentive Programs
Portland	6-20%	By GSF	Developing program, max 3 FAR bonus with Affordable units	
San Francisco	18-20%	By GSF	Up to a 35% FAR bonus	Can qualify for reduced cost of development and/or increased exposure, open space etc. by State Density Bonus Program
Seattle	5-11%	By GSF, housing cost	No cap, case-by-case basis	Tax exemption under new MHA program
Washington, D.C.	10% of residential floor area	N/A	Up to a 25% FAR bonus	

Source: Cities of Austin, Boston, Chicago, Denver, Los Angeles, Minneapolis, New York City, Portland, San Francisco, Seattle and Washington, D.C., US Census Bureau

Chicago is the only major city that does not in some way offset the losses to developers associated with providing inclusionary units

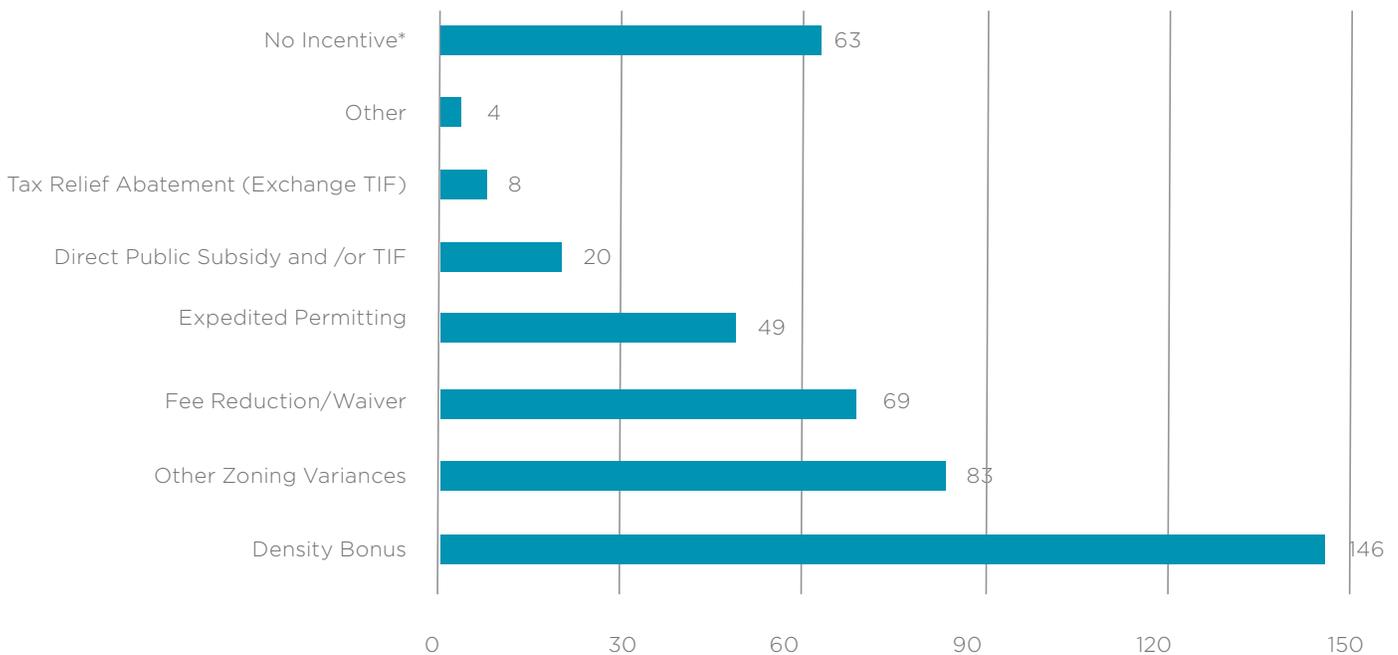
NATIONAL SURVEY OF INCLUSIONARY ZONING REQUIREMENTS

Number of programs



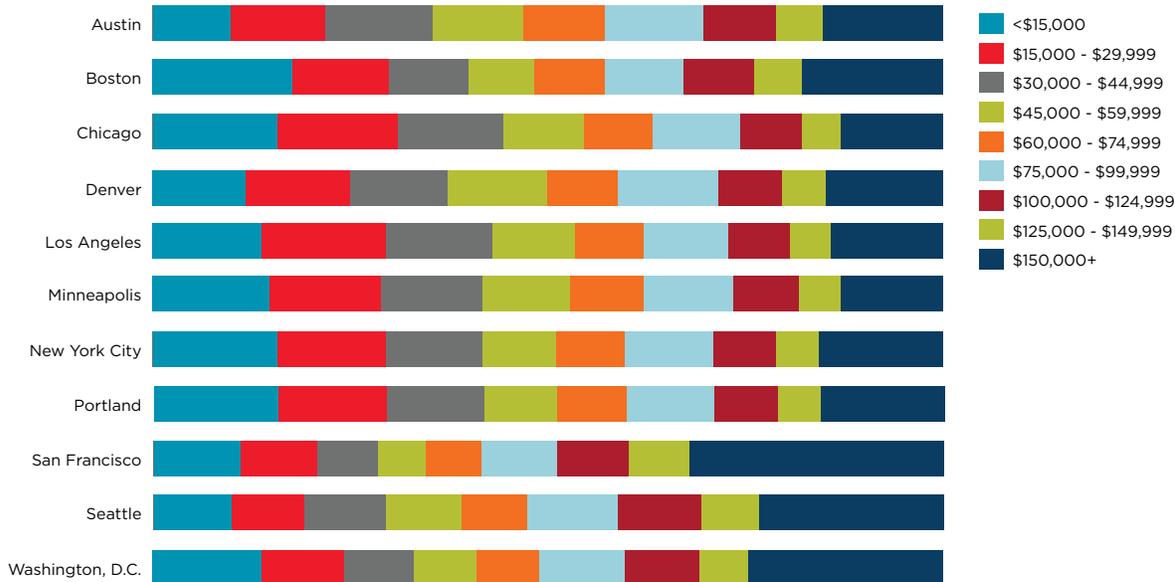
NATIONAL SURVEY OF INCLUSIONARY ZONING REQUIREMENTS

Number of programs



* Save for Chicago, the remainder of no incentive IZ programs are from cities with populations less than 500,000
 Source: Lincoln Institute for Land Policy

TARGET MARKET'S % POPULATION BY INCOME

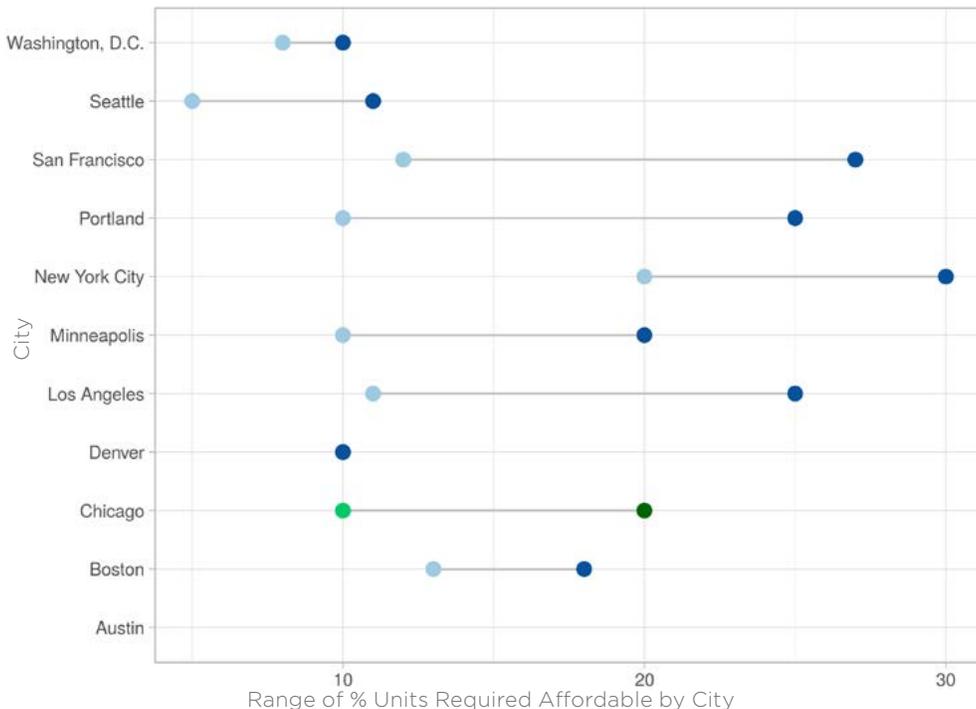


MARKET POPULATION BY INCOME

Market	Area AMI Individual	Area AMI Family	Total Population	<\$15,000	\$15,000 - \$29,999	\$30,000 - \$44,999	\$45,000 - \$59,999	\$60,000 - \$74,999	\$75,000 - \$99,999	\$100,000 - \$124,999	\$125,000 - \$149,999	\$150,000+
Austin	\$50,700	\$72,400	361,257	35,786	43,290	47,837	42,462	38,022	44,046	34,067	20,593	55,154
Boston	\$71,000	\$107,800	263,229	47,236	31,600	26,217	22,914	22,118	26,157	23,767	16,044	47,176
Chicago	\$59,300	\$84,600	1,046,789	165,177	162,829	135,886	108,515	92,476	114,428	81,270	51,278	134,930
Denver	\$62,900	\$89,900	287,262	33,850	36,954	37,441	35,182	26,296	35,093	23,845	16,445	42,156
Los Angeles	\$67,800	\$69,300	1,364,227	188,778	212,568	183,494	143,198	121,866	145,629	107,422	67,193	194,079
Minneapolis	\$62,900	\$94,300	172,082	25,631	24,138	22,113	18,721	15,796	19,944	14,676	9,198	21,865
New York City	\$73,000	\$70,300	3,142,405	491,844	439,246	375,015	302,670	267,568	341,935	255,389	170,004	498,734
Portland	\$57,000	\$81,400	260,949	32,517	33,868	32,024	28,894	25,233	33,251	24,633	14,801	35,728
San Francisco	\$102,700	\$118,400	358,772	40,254	33,354	27,413	23,467	24,578	34,819	33,742	26,156	114,989
Seattle	\$70,300	\$103,400	314,850	31,277	29,493	31,486	30,849	26,431	37,338	31,422	23,079	73,475
Washington, D.C.	\$67,800	\$117,200	277,985	39,079	28,667	24,162	22,461	21,259	29,781	26,091	18,308	68,177

Source: U.S. Census Bureau, HUD

Major cities across the US have either added or increased their inclusionary zoning requirements over the past several years, with many minimums set at 10% and reaching up to as much as 30%



Source: Cities of Austin, Boston, Chicago, Denver, Los Angeles, Minneapolis, New York City, Portland, San Francisco, Seattle and Washington, D.C., US Census Bureau

INCLUSIONARY ZONING PROGRAMS LIKE THE ARO REQUIRE STRONG DEVELOPMENT OF MARKET RATE HOUSING TO BE EFFECTIVE

Production of affordable units under inclusionary zoning has historically been limited, pushing urban policymakers to seek to expand production by increasing set-aside requirements and requiring more units constructed on-site. However, this tactic leads to diminishing returns - resulting in more and more infeasible units as the percentage set-aside is increased. However, production can be scaled along with market-rate developments - by spreading the affordable units over a larger number of new projects.

THE ARO PILOT HAS PUSHED MANY DEVELOPMENTS TO BE INFEASIBLE, THROTTLING FUTURE DEVELOPMENT WITHIN THEIR BOUNDARIES

Leading indicators of multifamily developments within neighborhood areas, land purchases and construction permits, both saw a sizable reduction in 2018. Both of these suggest that the latest requirements instituted have resulted in stagnation of future housing - market or affordable - within the 2017 Pilot neighborhoods.

IF THE GOAL OF THE ARO PILOT PROGRAM IS TO REDUCE COMMUNITY DISPLACEMENT, OTHER POLICIES MAY BE MORE EFFECTIVE

Displacement arises from a multitude of factors, that cannot alone be solved by the increases in affordable requirements and corresponding reduction in new housing delivered. More comprehensive policy frameworks that address teardowns of small-scale product and better enable locals to reap the benefits of increased capital investment in their neighborhoods should be evaluated.



POTENTIAL INCENTIVE PROGRAMS

EXPANSION OF DEVELOPABLE LAND & STRATEGIC UPZONING

In order to create the development capacity to hit the number of units necessary to have the ARO make meaningful headway against the city's housing gap, the development capacity of Chicago needs to be increased. Large-scale upzonings are currently under various stages of deployment in both Seattle and Minneapolis, backed by data analysis and created in conjunction with local communities. Some sample implementations of this include:

- Advocating for a more expansive review of Chicago's zoning, with an aim to expand housing in areas that make sense
- Expedite the sale and conversion of City-owned land toward creating more housing that will also increase the city's property tax revenues
- Supporting and expanding the new bus transit corridor TOD designations, so they affect more routes and zoning classes

ABATEMENTS, WAIVERS AND FEE REDUCTION

In order to enable pro formas to function under the current ARO Pilot Requirements, a number of government incentives could increase feasibility. Most other major U.S. metros provide extensive incentive programs along these lines. Some examples include:

- Abatement of taxes
- Waiving of permit fees
- Fast-tracking of approval
- Subsidies for construction costs associated with affordable units.

Each of these will vary in terms of its impact and cost and must take into account the political and fiscal realities of the current environment.

A MORE FLEXIBLE ARO

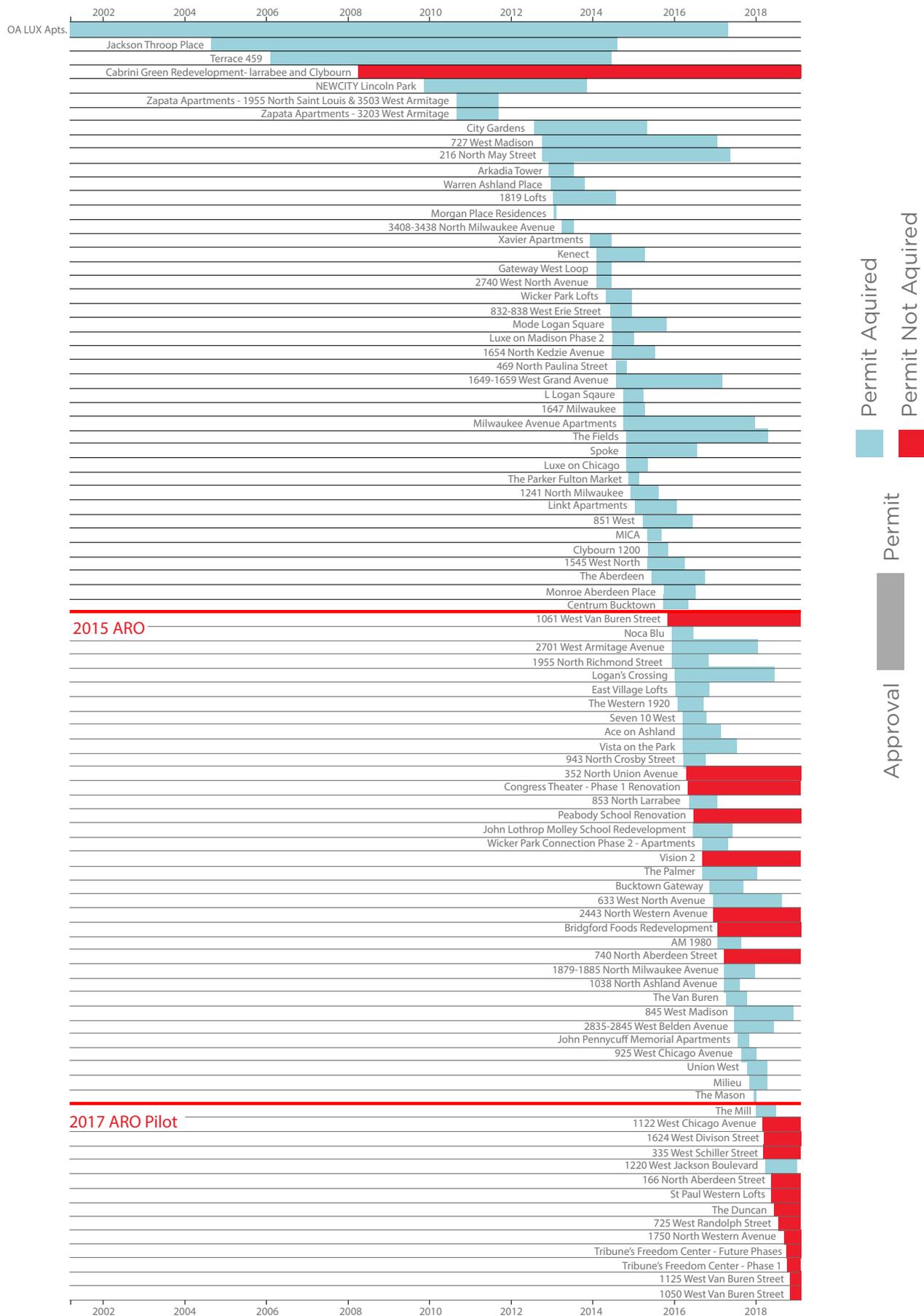
Under the current ARO, restrictions on both on-site and off-site units have grown - loosening these restrictions would expand and expedite the creation of new affordable units:

- Simplify distance requirements for off-site units to same ward, thereby removing the additional 2-mile and income matching requirements which were occasionally coupled with an implied same ward requirement
- Review the requirements on like-kind for both on- and off-site units. Marginal differences in finish quality can dramatically increase the feasibility of ARO units
- Similarly, like-kind requirement for off-site units encompass amenity space. These spaces average 38,000 sf in new market-rate developments. Requiring like amenity spaces in off-site developments drastically reduce the amount of space available for residential space (a valuable resource for family-targeted units) and considerably increases overall costs.

Sources

Page	Source
2	
3	City of Chicago Quarterly Affordable Housing Report, 2014 ARO Proposed Enhancements
4	City of Chicago
5	
6	Cushman & Wakefield Research
7	Cushman & Wakefield Research
8	Cushman & Wakefield Research
9	Cushman & Wakefield Research
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11	Cushman & Wakefield Research, Recity, Reonomy, City of Chicago
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13	Cushman & Wakefield Research, Recity, Reonomy, Cook County Assessor. Note: The basis for the tax calculation was the current Mill for the unrealized properties as they are, grown by 3.0% annually and added together versus the average Mill per unit (multiplied by the number of units) for new construction apartment buildings in the same neighborhoods as the unrealized properties. This average mill per unit for this was calculated using Yardi Matrix. The same growth rate was used annually and added together over a 30 year stretch to show the difference between current underutilized or vacant land and what new construction apartments could realize.
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18	City of Chicago, Chicago Cityscape
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TIME FROM APPROVAL TO PERMIT WITHIN PILOT AREAS





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