



AGENDA PACKET
VILLAGE OF LAKE ZURICH
Planning and Zoning Commission Meeting

August 16, 2023
07:00 pm

VILLAGE OF LAKE ZURICH

PLANNING AND ZONING COMMISSION MEETING

AUGUST 16, 2023
07:00 PM
AGENDA

1. CALL TO ORDER AND ROLL CALL

Chairperson Orlando Stratman, Vice-Chair Antonio Castillo, Joe Giannini, Sean Glowacz, Jake Marx, Scott Morrison, Mike Muir and Ildiko Schultz.

2. CONSIDERATION OF MINUTES AND FINDINGS OF THE COMMISSION

A. Minutes of the Planning and Zoning Commission Meeting, on July 19 and July 20, 2023.

Attachment: [7-19-23.pdf](#)

Attachment: [7-20-23.pdf](#)

3. PUBLIC MEETING - No items received.

4. PUBLIC HEARING

(This agenda item includes proposals presented to the Planning & Zoning Commission requiring public testimony, discussion and recommendation to the Village Board for final action.)

A. 120 Telser Road -- Special Use Permit. (2023-12)

Application for a Special Use Permit and Final Plat of Subdivision to establish a self-storage facility with outdoor vehicle storage on the rear 2/3 portion of a vacant property located within the I Industrial District. The facility will be operated by "Extra Space Storage."

The Applicant has requested additional time and requested continuing the application to the September 20 meeting to be able to address certain comments related to stormwater management.

Applicant: James Lapetina of Design Build Storage

Owner: Rose Road Enterprises, LLC

Attachment: [4A-120Telser_SelfStorage_Continued-23-08-16.pdf](#)

B. 22843 North Lakewood Lane -- Annexation, Zoning and Plan Approval (2023-09)

Application for Annexation, Zoning and Development Concept Plan Approval to redevelop the property commonly known as Midlothian Manor with a new two-story building containing 24 affordable rental apartments. The property will be zoned within the R-6 multiple-family residential district.

The hearing was continued to allow the Applicant, Staff and PZC to respond to the testimony provided.

Applicant: Housing Opportunity Development Corporation (HODC)

Owners: Lake County Housing Authority

Attachment: [4B-MidlothianManor_Staff Report 2023-08-16 packet.pdf](#)

5. OTHER BUSINESS

6. STAFF REPORTS

This is an opportunity for staff of the Community Development Department to report on matters of interest to the Planning & Zoning Commission

7. PUBLIC COMMENT

This is an opportunity for residents to comment briefly on matters included on the agenda and otherwise of interest to the PZC.

8. ADJOURNMENT

Unapproved
VILLAGE OF LAKE ZURICH
PLANNING & ZONING COMMISSION MINUTES
July 19, 2023

Village Hall
70 E Main Street, Lake Zurich, IL 60047

The meeting was called to order by Chairman Stratman at 7:00 p.m.

ROLL CALL: *Present* – Chairman Stratman, Commissioners Castillo, Glowacz, Marx, Morrison, and Schultz. Chairman Stratman noted a quorum was present.
Commissioner Giannini was absent.

Commissioner Muir was absent and excused.

Also present: Community Development Director Sarosh Saher, Planner Tim Verbeke, Village Attorney Scott Uhler, and Management Services Director Michael Duebner.

CONSIDERATION OF MINUTES AND FINDINGS OF THE COMMISSION

Approval of the June 21, 2023 Meeting Minutes of the Planning & Zoning Commission:

MOTION was made by Commissioner Schultz, seconded by Commissioner Marx to approve the June 21, 2023 minutes of the Planning and Zoning Commission with one modification.

Upon roll call:

AYES: 6 Chairman Stratman, Commissioners Castillo, Glowacz, Marx, Morrison, and Schultz.

NAYS: 0

MOTION CARRIED

Commissioner Giannini arrived at 7:04 pm

PUBLIC HEARING:

MOTION was made by Commissioner Schultz, seconded by Commissioner Glowacz to open the following public hearings at 7:05 p.m. for Application PZC 2023-12 for the property at 120 Telser Road – Special Use Permit, Application PZC 2023-09 for the property at 22843 North Lakewood Lane – Annexation, Zoning and Plan Approval, 615 S Grethe Court – Fence Variation PZC 2023-13, 679 Beechwood Drive – Pool Variation PZC 2023-15, 519 Telser Road – Special Use Permit PZC 2023-16, and 629 Rose Road –Planned Unit Development (PUD) and Plat of Subdivision PZC 2023-17.

Upon roll call vote:

AYES: 7 Chairman Stratman, Commissioners Castillo, Glowacz, Giannini, Marx, Morrison, and Schultz.

NAYS: 0

MOTION CARRIED

Those wishing to speak were sworn in by Chairman Stratman.

Planning & Zoning Commission Meeting Minutes, July 19, 2023

2

The following applications were considered:

A. 120 Telser Road – Special Use Permit. (2023-12)

Public Hearing to consider the Application for a Special Use Permit and Final Plat of Sub-division to establish a self-storage facility with outdoor vehicle storage on the rear 2/3 portion of a vacant property located within the I Industrial District. The facility will be operated by “Extra Space Storage.”

Applicant: James Lapetina of Design Build Storage

Owner: Rose Road Enterprises, LLC

Director Saher informed the Commission that the Applicant has requested that the hearing be further continued to at least the August 16, 2023 meeting of the PZC to allow more time to prepare exhibits.

MOTION was made by Commissioner Schultz, seconded by Commissioner Glowacz to continue the item.

Upon roll call:

AYES: 7 Chairman Stratman, Commissioners Castillo, Glowacz, Giannini, Marx, Morrison, and Schultz.

NAYS: 0

MOTION CARRIED

B. 22843 North Lakewood Lane – Annexation, Zoning and Plan Approval (2023-09)

This item was moved to the third item, due to the Application for Annexation, Zoning and Plan Approval to redevelop the property commonly known as Midlothian Manor with a new two-story building containing 24 affordable rental apartments. The property will be zoned within the R-6 multiple-family residential district.

The Application was continued due to time constraints to allow testimony to be obtained.

Applicant: Housing Opportunity Development Corporation (HODC)

Owners: Lake County Housing Authority

The item was presented by Mr. Richard Koenig, Executive Director of the Housing Opportunity Development Corporation, the Applicant, with support from the property owner Lake County Housing Authority. He declined to make a presentation this month, instead left the time to public comment. Many members of the public had the chance to speak. Liesl Kochanny, Paul Reilio, Ken Toeller, Alicia Timm, Vitaliy Stefanov, and Pat Nelis spoke in support of the proposed project. Larry Schaedel, Maja Majeen, Tim Gorey, Mary Miske, Jennifer Felton, Bill Kochanny, Rick Kuennen, Doug Sandy, and Kathy Schaedel spoke against the project. Christina Catalano wanted more information before making a final decision. Mr. Schaele provided handouts for the Commissioners. Due to the amount of public comment and the time running out on the meeting, the item was continued to the August 16, 2023 meeting.

MOTION was made by Commissioner Schultz, seconded by Commissioner Glowacz to close the public hearing.

Upon roll call:

AYES: 7 Chairman Stratman, Commissioners Castillo, Glowacz, Giannini, Marx, Morrison, and Schultz.

NAYS: 0

MOTION CARRIED

Planning & Zoning Commission Meeting Minutes, July 19, 2023

3

C. 615 S Grethe Court – Fence Variation PZC 2023-13, 679 Beechwood Drive – Pool Variation PZC 2023-15, 519 Telser Road – Special Use Permit PZC 2023-16, and 629 Rose Road –Planned Unit Development (PUD) and Plat of Subdivision PZC 2023-17.

Public Hearing to consider these Applications.

Director Saher informed the Commission that the Applicants will have their applications continued to tomorrow nights meetings due to the time constraints on this meeting.

MOTION was made by Commissioner Castillo, seconded by Commissioner Morrison to continue the items.

Upon roll call:

AYES: 7 Chairman Stratman, Commissioners Castillo, Glowacz, Giannini, Marx, Morrison, and Schultz.

NAYS: 0

MOTION CARRIED

OTHER BUSINESS – None.

STAFF REPORT:

Staff indicated there will be 4 items on the next Planning and Zoning Commission meeting agenda. This would be conducted as a special meeting the following day (7/20/2023).

PUBLIC COMMENT:

No additional public comment was provided.

ADJOURNMENT:

Upon roll call:

AYES: 7 Chairman Stratman, Commissioners Castillo, Glowacz, Giannini, Marx, Morrison, and Schultz.

NAYS: 0

MOTION CARRIED

The meeting was adjourned at 9:10 p.m.

Submitted by: Tim Verbeke, Planner

Approved by:

Unapproved
VILLAGE OF LAKE ZURICH
PLANNING & ZONING COMMISSION MINUTES
July 20, 2023

Village Hall
70 E Main Street, Lake Zurich, IL 60047

The meeting was called to order by Chairman Stratman at 7:00 p.m.

ROLL CALL: *Present* – Chairman Stratman, Commissioners Glowacz, Marx, Morrison, and Schultz. Chairman Stratman noted a quorum was present.

Commissioners Muir, Giannini, and Castillo were absent and excused.

Also present: Community Development Director Sarosh Saher, Planner Tim Verbeke, and Management Services Director Michael Duebner.

PUBLIC HEARING:

MOTION was made by Commissioner Schultz, seconded by Commissioner Glowacz to open the following public hearings at 7:04 p.m. for Application PZC 2023-12 for the property at 120 Telser Road – Special Use Permit, 615 S Grethe Court – Fence Variation PZC 2023-13, 679 Beechwood Drive – Pool Variation PZC 2023-15, 519 Telser Road – Special Use Permit PZC 2023-16, and 629 Rose Road –Planned Unit Development (PUD) and Plat of Subdivision PZC 2023-17.

Upon roll call vote:

AYES: 5 Chairman Stratman, Commissioners Glowacz, Marx, Morrison, and Schultz.

NAYS: 0

MOTION CARRIED

Those wishing to speak were sworn in by Chairman Stratman.

The following applications were considered:

C. 615 S Grethe Court – Fence Variation (2023-13)

This Public Hearing is to consider an Application for a variation to allow for the construction of a five-foot high fence in the required corner side yard at the Subject Property located in the R-5 single-family residential district.

Applicant and Owner: Christine Madland and Robert Gotschewski

This item was presented by Ms. Christine Madland. She gave a brief description of the property and the fence variance requested. There were no major questions or objections from the Commissioners or the Public.

MOTION was made by Commissioner Schultz, seconded by Commissioner Glowacz to close the public hearing.

Upon roll call:

AYES: 5 Chairman Stratman, Commissioners Glowacz, Marx, Morrison, and Schultz.

NAYS: 0

MOTION CARRIED

MOTION was made by Commissioner Schultz, seconded by Commissioner Glowacz, to receive into the public record the staff review of compliance of this Application with the zoning standards as presented by staff; and to receive the testimony presented by the Applicants, by members of the public, by the PZC Members, and by Village Staff at tonight's Public Hearing; and make these standards and testimony a part of the official record for

the Application and Findings of the PZC; and to recommend that the Village Board approve Application PZC 2023-13 – an Application for a variation to allow for the construction of a five-foot high fence in the required corner side yard at the Subject Property located in the R-5 single-family residential district.”

Upon roll call:

AYES: 5 Chairman Stratman, Commissioners Glowacz, Marx, Morrison, and Schultz.

NAYS: 0

MOTION CARRIED

D. 679 Beechwood Drive – Pool Variation (2023-15)

This Public Hearing is to consider an Application for a variation to allow for the construction of a pool within the rear yard setback at the Subject Property located in the R-5 single-family residential district.

Applicant and Owner: Jennifer and Craig Lee

This item was presented by Ms. Jennifer Lee. She gave a brief description of the property and the pool variance requested. There were no major questions or objections from the Commissioners or the Public.

MOTION was made by Commissioner Schultz, seconded by Commissioner Morrison to close the public hearing.

Upon roll call:

AYES: 5 Chairman Stratman, Commissioners Glowacz, Marx, Morrison, and Schultz.

NAYS: 0

MOTION CARRIED

MOTION was made by Commissioner Schultz, seconded by Commissioner Marx, to receive into the public record the staff review of compliance of this Application with the zoning standards as presented by staff; and to receive the testimony presented by the Applicants, by members of the public, by the PZC Members, and by Village Staff at tonight’s Public Hearing; and make these standards and testimony a part of the official record for the Application and Findings of the PZC; and to recommend that the Village Board approve Application PZC 2023-15 – an Application for a variation to allow for the construction of a pool within the rear yard setback at the Subject Property located in the R-5 single-family residential district.”

Upon roll call:

AYES: 5 Chairman Stratman, Commissioners Glowacz, Marx, Morrison, and Schultz.

NAYS: 0

MOTION CARRIED

E. 519 Telser Road – Special Use Permit (2023-16)

This Public Hearing is to consider an Application for a Special Use Permit to allow the establishment of a physical fitness and training facility within a tenant space in a building located in the I Industrial District.

Applicant: Form Function Fitness LLC, d/b/a CrossFit Lykos

Owner: Telser Commercial Properties LLC

This item was presented by Mr. Rich Feroles representing CrossFit Lykos. He gave a brief description of the project, and the various challenges with the property. Mr. Feroles also gave a rebuttal to all the various staff concerns. The building owner, Greg Lemkau and

customer Alexandra Ovington provided their support for the project. The Commissioners had questions regarding the hours of operation, parking and neighboring tenants. MOTION was made by Commissioner Glowacz, seconded by Commissioner Schultz to close the public hearing.

Upon roll call:

AYES: 5 Chairman Stratman, Commissioners Glowacz, Marx, Morrison, and Schultz.

NAYS: 0

MOTION CARRIED

MOTION was made by Commissioner Glowacz, seconded by Commissioner Schultz, to receive into the public record the staff review of compliance of this Application with the zoning standards as presented by staff; and to receive the testimony presented by the Applicants, by members of the public, by the PZC Members, and by Village Staff at tonight's Public Hearing; and make these standards and testimony a part of the official record for the Application and Findings of the PZC; and to recommend that the Village Board approve Application PZC 2023-16 – an Application for a Special Use Permit to allow the establishment of a physical fitness and training facility within a tenant space in a building located in the I Industrial District and abide by the following conditions prior to the Village Board Meeting.

- The Applicant provides documentation for the agreement for the additional parking usage and compliance with Village Staff requirements.
- Provide documentation of the hours of operation stated at the July 20, 2023 Planning and Zoning Commission Meeting.

Upon roll call:

AYES: 5 Chairman Stratman, Commissioners Glowacz, Marx, Morrison, and Schultz.

NAYS: 0

MOTION CARRIED

F. 629 Rose Road –Planned Unit Development (PUD) and Plat of Subdivision (2023-17)

This Public Hearing is to consider an Application for a Planned Unit Development (PUD) and Plat of Subdivision to subdivide the property and allow for the development of an industrial building on one of the two resultant lots, located in the I industrial District.

Applicant: NorthStar Pickle Company, LLC

Owner: S.S. Enterprise, LLC

This item was presented by Mr. Steve Spector and Mr. Jeff Oziemkowski. They gave a brief description of the property and various departures from the code that will be required to achieve the PUD and construct the NorthStar Pickle Company building. There were questions from the Commissioners regarding the insulated panels, the truck traffic, dock areas, and the detention basin. All the questions were answered to the satisfaction of the Commission.

MOTION was made by Commissioner Schultz, seconded by Commissioner Marx to close the public hearing.

Upon roll call:

AYES: 5 Chairman Stratman, Commissioners Glowacz, Marx, Morrison, and Schultz.

NAYS: 0

MOTION CARRIED

MOTION was made by Commissioner Schultz, seconded by Commissioner Marx, to receive into the public record the staff review of compliance of this Application with the

Planning & Zoning Commission Meeting Minutes, July 20, 2023

4

zoning standards as presented by staff; and to receive the testimony presented by the Applicants, by members of the public, by the PZC Members, and by Village Staff at tonight's Public Hearing; and make these standards and testimony a part of the official record for the Application and Findings of the PZC; and to recommend that the Village Board approve Application PZC 2023-17 – an Application for a Planned Unit Development (PUD) and Plat of Subdivision to subdivide the property and allow for the development of an industrial building on one of the two resultant lots, located in the I industrial District.”

Upon roll call:

AYES: 5 Chairman Stratman, Commissioners Glowacz, Marx, Morrison, and Schultz.

NAYS: 0

MOTION CARRIED

OTHER BUSINESS – None.

STAFF REPORT:

Staff indicated there will only be one item on the agenda next month, Midlothian Manor Annexation.

PUBLIC COMMENT:

No additional public comment was provided.

ADJOURNMENT:

Upon roll call:

AYES: 5 Chairman Stratman, Commissioners Glowacz, Marx, Morrison, and Schultz.

NAYS: 0

MOTION CARRIED

The meeting was adjourned at 8:16 p.m.

Submitted by: Tim Verbeke, Planner

Approved by:



At the Heart of Community

COMMUNITY DEVELOPMENT DEPARTMENT

505 Telser Road
Lake Zurich, Illinois 60047

(847) 540-1696
Fax (847) 726-2182
LakeZurich.org

PZC 2023-12

Item 4.A

PZC Hearing Opening Date: June 21, 2023

PZC Hearing Date: August 16, 2023

STAFF REPORT

To: Chairperson Stratman and Members of the Planning & Zoning Commission

From: Sarosh Saher, Community Development Director

CC: Mary Meyer, Building Services Supervisor
Tim Verbeke, Planner

Re: PZC 2023-12 – 120 Telser Road – “Extra Space” Self Storage
Special Use Permit and Plat of Subdivision
Request to Continue Hearing to September 20, 2023

SUBJECT

Mr. James Lapetina, representing Design Build Storage, and Mr. Jeff Budgell of Architect’s Studio, the architect for the project (jointly referred to as the “Applicant”) with the consent of the property owner Rose Road Enterprises LLC (the “Owner”), request a Special Use Permit and Final Plat of Subdivision to establish a self-storage facility with outdoor vehicle storage on the rear 2/3 portion of a vacant property located within the I Industrial District. to be operated by “Extra Space Storage.”

BACKGROUND

The hearing for the application was opened by the PZC on June 21, 2023. However, the applicant had requested additional time to address certain engineering concerns and explore TIF assistance options. The Applicant continues to work on their revisions to the project and therefore requested that the hearing be continued to the September 20, 2023 meeting of the PZC to allow for additional time to address these issues.

REQUESTED ACTION

Staff recommends that the public hearing be continued to the September 20, 2023 meeting of the PZC to provide the Applicant time to complete their preparation of necessary exhibits.



At the Heart of Community

COMMUNITY DEVELOPMENT DEPARTMENT

505 Telser Road
Lake Zurich, Illinois 60047

Phone (847) 540-1696
Fax (847) 726-2182
LakeZurich.org

APPLICATION PZC 2023-09

AGENDA ITEM 4.B

PZC Hearing Opening Date: June 21, 2023

PZC Continued Consideration: August 16, 2023

STAFF REPORT

To: Chairperson Stratman and Members of the Planning & Zoning Commission

From: Sarosh Saher, Community Development Director

CC: Mary Meyer, Building Services Supervisor
Tim Verbeke, Planner

Date: August 16, 2023

Re: Zoning Application for 22843 North Lakewood Lane - Midlothian Manor
Annexation, Zoning and Planned Unit Development (PUD)
Continued Consideration

This report serves as an addendum to reports presented to the Planning and Zoning Commission (PZC) at the hearing opened on June 21, 2023 and continued on July 19, 2023 which contain the findings and recommendations of Village Staff. The reports and all attachments can be viewed at the following links:

[Link to June 21, 2023 Staff Report, Application Packet and Correspondence \(Midlothian Manor\)](#)

[Link to July 19, 2023 Staff Report, Application Packet and Correspondence \(Midlothian Manor\)](#)

SUBJECT

Mr. Richard Koenig, FAICP, Executive Director of the Housing Opportunity Development Corporation (HODC) (the "Applicant") requests approval of Annexation, Zoning and Development Concept Plan (Preliminary Plan) Approval to redevelop the property commonly known as Midlothian Manor with a new two-story building containing 24 affordable rental

Staff Report
APPLICATION PZC 2023-09

Community Development Department
PZC Hearing Date: August 16, 2023

residential apartments at the property commonly known as Midlothian Manor at 22843 Lakewood Lane, and legally described in Exhibit A attached hereto (the “Subject Property”).

The public hearing was opened by the PZC on June 21, 2023 and continued on July 19, 2023. The proposal was presented by the Applicant and his team. The PZC received testimony from attendees that were present at the hearing verbally and in printed copy through July 19, 2023.

The proceedings of the June 21 meeting can be viewed at the following link:
<https://play.champds.com/lakezurichil/event/91>

The proceedings of the July 19 meeting can be viewed at the following link:
<https://play.champds.com/lakezurichil/event/93>

LIST OF ADDITIONAL EXHIBITS

Additional information has been provided by the Applicant which are listed below. These exhibits should be considered in addition to those that were included as part of the June 21 and July 19 staff report and packet. Note: this report does not contain information that was submitted at the meetings.

1. Lake Zurich Housing Market Summary prepared by HODC
2. Economic Analyses regarding Affordable Housing and Home Values submitted by HODC:
 - a. Voith. Journal of Housing Economics, Effects of Concentrated LIHTC Development on surrounding house prices, March 2022 about Cook County and home value increase
 - b. Hipp. Livable Cities Lab Report, The Impact of Affordable Housing on Housing & Crime in Orange County, 2022
 - c. Stacy and Davis. Urban Institute, Assessing the Impact of Affordable Housing on Nearby Project Values in Alexandria, Virginia, April 2022
3. Land Use details and statistics submitted by HODC:
 - a. Census commute
 - b. Census Income
 - c. Census Percent on rent
 - d. Census rents and incomes
 - e. Census rents
 - f. ILHousingSearch.org – local Lake Zurich apartment availability
 - g. U.S. Census Bureau QuickFacts for Lake Zurich

Correspondence – Additional correspondence which is attached for the reference of the PZC.

The Applicant plans to additionally present their response and clarification to statements and information submitted by persons who provided public comment at both the June 21 and July 19 meetings of the PZC and will present such information at the upcoming August 16 meeting.

Staff Report
APPLICATION PZC 2023-09

Community Development Department
PZC Hearing Date: August 16, 2023

CLARIFICATION OF MODIFICATIONS TO THE CODE

The Applicant clarified that parking will be based on the following bedroom units. Section 9-10-1.F.2.A requires that parking for multiple-family dwellings be provided at a rate of 2 spaces for each 1- or 2- bedroom dwelling and 3 for each 3 or more-bedroom dwelling unit, plus 1 for each 10 spaces. Based on the proposed number of units, the requirement is revised to the following counts below. However, the deficiency remains the same based on the provisions of Section 9-10-1.B.2.c.(2) further described below:

- 6 One Bedroom Units requiring 12 spaces
 - 12 Two Bedroom Units requiring 24 spaces
 - 6 Three Bedroom Units requiring 18 spaces
 - 1 additional space for each 10 spaces requiring 6 spaces
- Total required parking – 60 spaces

The Applicant has indicated that based on their experience with managing other facilities and buildings that they need no more than 1 space per unit. This would amount a parking demand of 24 spaces. The Applicant has however proposed 41 spaces.

However, for multiple-family dwellings, Section 9-10-1.B.2.c.(2) requires that not more than two (2) parking spaces located in a garage, driveway, or other area reserved for the exclusive use of the residents of an individual dwelling unit shall be counted toward the parking spaces required pursuant to subsection F2a(1) of this section for multiple-family dwellings (described earlier in this paragraph). Based on a total unit count of 24, the minimum required number of parking spaces is allowed to be reduced to 48 (24x2), a deficiency of 7 spaces.

Further, the same section provides that not more than two (2) spaces required by said subsection may, and at least one such space shall, be located in an area or areas available for use in common by at least three (3) such individual units. Such areas may include parking spaces located in parking areas or lots within the development in which such units are located, whether located on or off the lot on which such units are located; provided, however, that no such required space shall be located farther than three hundred feet (300'), measured along an established pedestrian circulation route, from the unit it is required to serve. This section essentially provides for parking spaces to be shared by the residential units on the property.

As a matter of note, these regulations were written to prevent the over-design of properties with parking spaces thereby eliminating the effect of a “sea of asphalt” on the property, which also reduces the amount of paved impervious surfaces thereby further reducing the impact of stormwater runoff from the property. Additional clarification to procedural issues will also be provided by staff if further required.

EFFECT OF AFFORDABLE HOUSING ON COMMUNITIES

The Applicant has also provided relevant articles that describe the effect of affordable housing on communities in which they are located. The articles are attached for the reference of the PZC.

Staff Report
APPLICATION PZC 2023-09

Community Development Department
PZC Hearing Date: August 16, 2023

PROCEDURE REGARDING THE PUBLIC COMMENT PERIOD

The requirements for obtaining public testimony are contained within the Lake Zurich Municipal Code. Public comment is obtained either through writing in advance of a hearing, or verbally at the hearing during the time allotted by the Chairman of the PZC.

For this application, the opportunity for public comment was provided on June 21 and July 17. The public comment portion of the public hearing process was completed by the PZC on July 19. The PZC continued the public hearing to August 16 for the express purpose of allowing the PZC to review the available hearing information and to give the Petitioner an opportunity to respond to the additional documents, information and comments submitted by members of the public at both the June 21 public hearing, the July 19 continued public hearing and all the written documentation submitted by the public in advance of and during these meeting dates.

The petitioner will therefore be provided the opportunity to present their response upon resuming the hearing on August 16.

PLANNED UNIT DEVELOPMENT (PUD) PROCESS

The PUD process is intended to allow flexibility in the development of property. The PUD process allows a petitioner to request approval for a development that does not otherwise conform to the zoning requirements of the underlying zoning district. The process allows the Village to work cooperatively with a petitioner so that the Village may receive public benefit (known as compensating amenities) that would not otherwise be provided through a by-right development or through the variation process. In exchange for some public benefit, the Village provides some relief from the underlying zoning requirements. In the case of the subject application, such public benefit is outlined in the conditions for approval and will further be outlined within an Annexation Agreement to be considered and approved by the Village Board.

To address the comprehensive nature of a PUD, the Plan Commission reviews all relevant components of the development. In addition to reviewing how the development complies with the Zoning Ordinance, the Plan Commission evaluates the appropriateness of the development for the area and the community, how it conforms to the Comprehensive Plan and other applicable plans and studies and reviews the appearance, materials, and landscaping of the proposal. The review of these Standards for a PUD has been conducted by staff and included within its June 21 report for the PZC to consider.

Upon completion of their review, the Plan Commission makes a recommendation to the Village Board, who will then consider whether or not to grant approval of a PUD (in this case the Development Concept Plan a.k.a. Preliminary Plan, and Special Use) to permit the construction of the proposed multi-family building containing 24 affordable rental apartments in the R-6 multiple-family residential zoning district.

Action By Plan Commission:

Staff Report
APPLICATION PZC 2023-09

Community Development Department
PZC Hearing Date: August 16, 2023

Within sixty (60) days after the conclusion of the public hearing, the PZC will be required to transmit to the board of trustees its recommendation that:

- the development concept plan either be approved, or
- be approved subject to modifications, or
- not be approved.

The failure of the plan commission to act within sixty (60) days, or such further time to which the applicant may agree, shall be deemed a recommendation for the approval of the development concept plan as submitted.

Action By Board Of Trustees:

Within sixty (60) days after the receipt of the recommendation of the PZC, or its failure to act as provided above, the board of trustees shall:

- deny the application for approval of the development concept plan, or
- shall refer it back to the plan commission for further consideration of specified matters, or,
- by ordinance duly adopted, shall approve the development concept plan, with or without modifications and conditions to be accepted by the applicant as a condition of such approval, and shall grant a special use permit authorizing the proposed planned unit development and such additional approvals as may be necessary to permit development of the planned unit development as approved.

The PUD ordinance and special use permit shall be conditioned upon approval of the final plan in accordance with the procedures and the applicant's compliance with all provisions of the zoning code and the ordinance granting the special use permit.

The failure of the board of trustees to act within sixty (60) days, or such further time to which the applicant may agree, shall be deemed to be a decision denying approval of the development concept plan.

Because approval of an annexation agreement is a function of the Village Board, all public hearings regarding zoning, including special uses and variances where necessary, need to take place before the annexation agreement can be considered and approved by the Village Board. The Village Board will conduct the Annexation Agreement Hearing following the receipt of the PZC's recommendation.

RECOMMENDATION

Staff recommends that the PZC reopen the continued hearing and provide the Applicant with the opportunity to present their response to comments and testimony previously presented during the public comment period.

Upon completion of the hearing and deliberation, staff recommends that the PZC adopt its findings and recommendation on the subject zoning application. Such findings and recommendations may be based upon the findings and recommendations of staff contained within the June 21, July 19 and August 16 reports.

Staff Report
APPLICATION PZC 2023-09

Community Development Department
PZC Hearing Date: August 16, 2023

The recommendation of the Planning and Zoning Commission to classify the development within the R-6 zoning district and approval of a PUD should be based on the standards included in the following Sections of the Lake Zurich Municipal Code:

- Section 9-18-3: Standards for Amendments
- Section 9-19-3 Standards for Special Use Permits
- Section 9-22-5 Standards for Planned Unit Developments (PUD)

Based on the review of staff contained within its June 21, July 19 and August 16 reports, the standards for approval will be met with the identified modifications to the zoning and land development codes. The PZC may make these standards a part of its official record of the Application, with any additional conditions so deemed necessary by the PZC to be included in its findings and recommendation to the Village Board.

Staff of the Community Development Department therefore recommends the approval of Application PZC 2023-09, subject to the following conditions:

1. Substantial conformance with the following documentation submitted as part of the application subject to revisions required by Village Staff and applicable governmental agencies:
 - a. Zoning Application dated March 14, 2023 including cover letter and zoning application prepared by Mr. Richard Koenig of Housing Opportunity Development Corporation (HODC) with application signed by Mr. Koenig as Applicant and Ms. Lorraine Hocker representing the Lake County Housing Authority.
 - b. Exhibit A: Legal Description of the Subject Property
 - c. Petition for Annexation dated March 15, 2023 submitted by Mr. Richard Koenig of Housing Opportunity Development Corporation (HODC) and Ms. Lorraine Hocker representing the Lake County Housing Authority.
 - d. ALTA/NSPS Land Title Survey for Midlothian Manor, 22843 Lakewood Lane prepared by IG Consulting, Inc., dated prepared on August 17, 2022.
 - e. Site Plan including First Floor Plan-Alternate Option, Parking Lot and Stormwater Detention facility, Sheet B2.1, prepared by Cordogan Clark, dated August 18, 2022, and Aerial with Landscape plan prepared by the Applicant and submitted on July 12, 2023.
 - f. Landscape Plan Sheet A1.1 prepared by Cordogan Clark, dated August 18, 2022.
 - g. Engineering Improvement Plans for Midlothian Manor, Sheets 1-9, prepared by IG Consulting, Inc., dated prepared on November 22, 2021.
 - h. Site Photometric Plan for Midlothian Manor, prepared by Cree Lighting, 1 sheet, dated November 18, 2022, accompanied by Specification Sheets for OSQ Series LED Area/Flood Luminaires, last revised on July 18, 2022.
 - i. Storm Water Report and Calculations for Midlothian Manor, prepared by IG Consulting, Inc., dated prepared on December 6, 2022.
 - j. Traffic Impact Study for Midlothian Manor Affordable Housing Development, prepared by Kimley Horn, dated October 2022.

Staff Report
APPLICATION PZC 2023-09

Community Development Department
PZC Hearing Date: August 16, 2023

- k. Tree Survey and Tree Inventory for Midlothian Manor, prepared by IG Consulting, Inc., dated prepared on August 1, 2022 and July 22, 2022 respectively.
 - l. Current Elevation Photograph dated March 14, 2023 including cover letter and zoning application prepared by Mr. Richard Koenig of Housing Opportunity Development Corporation (HODC).
 - m. Proposed Building Elevations, Alternate Option prepared by Cordogan Clark, dated August 18, 2022.
 - n. Lake Zurich Market Study, prepared by HODC and submitted on August 7, 2023.
- 2. The entire 2.6-acre property shall be annexed into the Village of Lake Zurich and zoned within the R-6 Multiple-Family Residential District. The Developer shall agree to the dedication of any prescriptive right-of-way for the use of roadways at their current or future width.
- 3. Compliance with and satisfaction of the terms and conditions for annexation, zoning, subdivision, land development, as required by Village Code, including all those on- and off-site improvements, application and development impact fees and contributions to be set forth and approved within a binding annexation agreement undertaken between the developer and Village of Lake Zurich.
- 4. The developer, owner and operator of the facility, HODC, shall be responsible for the general upkeep of the site and private common areas including the parking lot, landscape material and stormwater management facilities. All required maintenance plans shall be prepared and approved by Village Staff prior to Final Plan approval.
- 5. The binding annexation agreement with the village shall contain provisions to install all the required improvements and providing surety for such improvements, in the form of a Letter of Credit as approved by the village. In addition to the requirements outlined in Chapter 5 of the Land Development Code entitled "Procedure for Subdivision Approval," specifically Section 10-5-7 entitled "Agreements and Guarantee of Improvements," such agreement shall additionally contain the following additional provisions:
 - a. Establishment of a back-up stormwater management Special Service Area (SSA) to ensure that these areas are cared for in the event of a future dissolution or the lack of required maintenance of the stormwater facilities by the developer, owner and operator of the facility or its successors.
 - b. Establishment of a permanent maintenance plan for the maintenance of the stormwater facilities on the subject property, with rights in the Village to maintain if the property owner fails to do so.
 - c. Construction of a sidewalk along the frontage of the property along Midlothian Road and North Lakewood Lane, with additional extension of the sidewalk along Midlothian Road to connect to the nearest existing public sidewalk located approximately 400 feet to the south along the frontage of Cedar Lake Assisted Living & Memory Care Center at 777 Church Street. Absence the construction of such sidewalk, the Applicant shall pay a fee in lieu of installing a sidewalk along the street frontages of the property to be collected and placed into an escrow account that will fund the construction and upkeep of sidewalks within the Village. Such fee shall be based upon the per square-foot cost

Staff Report
APPLICATION PZC 2023-09

Community Development Department
PZC Hearing Date: August 16, 2023

of a 5-foot wide sidewalk, the unit cost for which shall be determined by the Village at the time of issuance of the building permit, and collected at such time.

6. The interior yards coterminous with the adjacent residential properties shall be landscaped in a manner to provide year-round screening by use of evergreen and deciduous trees, shrubs and plant material, and shall also include a solid privacy fence of no greater than 6 feet in height within the interior yards. Such fence shall extend no higher than 3 feet if proposed to be located in a front or corner side yard with frontage along a street. All landscaping proposed along the remaining periphery of the site shall conform to the requirements of the landscape codes.
7. No patios or balconies shall be constructed or installed on the west elevation of the building so as to minimize any impact on the adjacent residential property. Additionally, no lighting fixtures shall be installed on the west elevation of the building.
8. Removal of the existing structures on the Subject Property shall occur upon the issuance of a demolition permit and prior to issuance of any building permit.
9. The Developer shall be responsible for payment of the all Impact Fees and as a condition of the approval of the Final Plan. Such Impact Fees shall be as follows:
 - a. The required school impact fee:
 - i. 1-2 bedroom - \$795.00 per unit
 - ii. 3 Bedrooms - \$1,275.00 per unit
 - b. The required park impact fee for Low Density Apartments (up to 15/acre)
 - i. 1-bedroom unit \$2,849.40 per unit
 - ii. 2-bedroom unit \$4,365.00 per unit
 - iii. 3-bedroom unit \$5,934.60 per unit
 - c. The required library impact fee: \$125.00 per unit

The school impact fees, park impact fees, and library impact fees are paid pro-rata and due at the time a building permit is issued for the applicable building and shall include the fees for all units contained within such building.

10. The development shall be in compliance with all other applicable codes and ordinances of the Village of Lake Zurich, including general and continuing compliance with Title 10 of the Village Code, the Land Development Code, and all of the engineering and land improvement requirements, standards and specifications set forth in Chapter 6 of said Land Development Code, unless otherwise approved or provided for in the final engineering plans for this Property.

Respectfully Submitted,

Sarosh Saher
 Community Development Director

Staff Report
APPLICATION PZC 2023-09

Community Development Department
PZC Hearing Date: August 16, 2023

LAKE ZURICH PLANNING & ZONING COMMISSION
FINAL FINDINGS & RECOMMENDATIONS

22843 North Lakewood Lane
June 21, 2023, July 19, 2023, August 16, 2023

The Planning & Zoning Commission recommends approval of Application PZC 2023-09, and the Planning & Zoning Commission adopts the findings as contained within the Staff Reports dated **June 21, 2023, July 19, 2023 and August 16, 2023** for this Application and subject to any changes or approval conditions as listed below:

1. Substantial conformance with the following documentation submitted as part of the application subject to revisions required by Village Staff and applicable governmental agencies:
 - a. Zoning Application dated March 14, 2023 including cover letter and zoning application prepared by Mr. Richard Koenig of Housing Opportunity Development Corporation (HODC) with application signed by Mr. Koenig as Applicant and Ms. Lorraine Hocker representing the Lake County Housing Authority.
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Staff Report
APPLICATION PZC 2023-09

Community Development Department
PZC Hearing Date: August 16, 2023

2. The entire 2.6-acre property shall be annexed into the Village of Lake Zurich and zoned within the R-6 Multiple-Family Residential District. The Developer shall agree to the dedication of any prescriptive right-of-way for the use of roadways at their current or future width.
3. Compliance with and satisfaction of the terms and conditions for annexation, zoning, subdivision, land development, as required by Village Code, including all those on- and off-site improvements, application and development impact fees and contributions to be set forth and approved within a binding annexation agreement undertaken between the developer and Village of Lake Zurich.
4. The developer, owner and operator of the facility, HODC, shall be responsible for the general upkeep of the site and private common areas including the parking lot, landscape material and stormwater management facilities. All required maintenance plans shall be prepared and approved by Village Staff prior to Final Plan approval.
5. The binding annexation agreement with the village shall contain provisions to install all the required improvements and providing surety for such improvements, in the form of a Letter of Credit as approved by the village. In addition to the requirements outlined in Chapter 5 of the Land Development Code entitled "Procedure for Subdivision Approval," specifically Section 10-5-7 entitled "Agreements and Guarantee of Improvements," such agreement shall additionally contain the following additional provisions:
 - a. Establishment of a back-up stormwater management Special Service Area (SSA) to ensure that these areas are cared for in the event of a future dissolution or the lack of required maintenance of the stormwater facilities by the developer, owner and operator of the facility or its successors.
 - b. Establishment of a permanent maintenance plan for the maintenance of the stormwater facilities on the subject property, with rights in the Village to maintain if the property owner fails to do so.
 - c. Construction of a sidewalk along the frontage of the property along Midlothian Road and North Lakewood Lane, with additional extension of the sidewalk along Midlothian Road to connect to the nearest existing public sidewalk located approximately 400 feet to the south along the frontage of Cedar Lake Assisted Living & Memory Care Center at 777 Church Street. Absence the construction of such sidewalk, the Applicant shall pay a fee in lieu of installing a sidewalk along the street frontages of the property to be collected and placed into an escrow account that will fund the construction and upkeep of sidewalks within the Village. Such fee shall be based upon the per square-foot cost of a 5-foot wide sidewalk, the unit cost for which shall be determined by the Village at the time of issuance of the building permit, and collected at such time.
6. The interior yards coterminous with the adjacent residential properties shall be landscaped in a manner to provide year-round screening by use of evergreen and deciduous trees, shrubs and plant material, and shall also include a solid privacy fence of no greater than 6 feet in height within the interior yards. Such fence shall extend no higher than 3 feet if proposed to be located in a front or corner side yard with frontage along a street. All

Staff Report
APPLICATION PZC 2023-09

Community Development Department
PZC Hearing Date: August 16, 2023

landscaping proposed along the remaining periphery of the site shall conform to the requirements of the landscape codes.

7. No patios or balconies shall be constructed or installed on the west elevation of the building so as to minimize any impact on the adjacent residential property. Additionally, no lighting fixtures shall be installed on the west elevation of the building.
8. Removal of the existing structures on the Subject Property shall occur upon the issuance of a demolition permit and prior to issuance of any building permit.
9. The Developer shall be responsible for payment of the all Impact Fees and as a condition of the approval of the Final Plan. Such Impact Fees shall be as follows:
 - a. The required school impact fee:
 - i. 1-2 bedroom - \$795.00 per unit
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 - iv. 2-bedroom unit \$4,365.00 per unit
 - v. 3-bedroom unit \$5,934.60 per unit
 - c. The required library impact fee: \$125.00 per unit

The school impact fees, park impact fees, and library impact fees are paid pro-rata and due at the time a building permit is issued for the applicable building and shall include the fees for all units contained within such building.

10. The development shall be in compliance with all other applicable codes and ordinances of the Village of Lake Zurich, including general and continuing compliance with Title 10 of the Village Code, the Land Development Code, and all of the engineering and land improvement requirements, standards and specifications set forth in Chapter 6 of said Land Development Code, unless otherwise approved or provided for in the final engineering plans for this Property.
- ☐ Without any further additions, changes, modifications and/or approval conditions.
- ☐ With the following additions, changes, modifications and/or approval conditions:

Planning & Zoning Commission Chairman

From: [Sara Larson Mercer](#)
To: [Sarosh Saher](#); [Richard Koenig](#)
Cc: [Beth Demes](#)
Subject: RE: Potential Thursday July 20th PZC Meeting
Date: Wednesday, August 2, 2023 11:54:30 AM
Attachments: [image001.png](#)
[Voith Effects of Concentrated LIHTC Development on surrounding house prices in Cook County.pdf](#)
[Hipp Impact of Affordable Housing on Housing and Crime - Orange County.pdf](#)
[Stacy and Davis Assessing impact of affordable housing on nearby property values - Alexandria VA.pdf](#)
[census commute.xlsx](#)
[census income.xlsx](#)
[census percent on rent.xlsx](#)
[census rents and incomes.xlsx](#)
[census rents.xlsx](#)
[ILHousingSearch.org - Search Results.pdf](#)
[U.S. Census Bureau QuickFacts - Lake Zurich village, Illinois.pdf](#)

Hi Sarosh,

Thanks for sending us these questions. I have attached some reference documents for the information that you are looking for. We will incorporate this information when responding to the questions at the PZC meeting, but thought you might want to look through some of the information in advance. Please let me know if you have any additional questions that come up in the interim.

Economic Analyses regarding Affordable Housing and Home Values: Shows that affordable housing can have net neutral effect or increase housing values.

- Voith. Journal of Housing Economics, Effects of Concentrated LIHTC Development on surrounding house prices, March 2022 about Cook County and home value increase
- Hipp. Livable Cities Lab Report, The Impact of Affordable Housing on Housing & Crime in Orange County, 2022
- Stacy and Davis. Urban Institute, Assessing the Impact of Affordable Housing on Nearby Project Values in Alexandria, Virginia, April 2022

Number of Vehicles: As with other buildings we manage, we anticipate one vehicle per unit so 24 total

Land Use details and statistics: We usually complete a more formal market study before we apply for IHDA funds, but here is the information that we have gathered to-date.

- Census commute
- Census Income
- Census Percent on rent
- Census rents and incomes
- Census rents
- ILHousingSearch.org – local Lake Zurich apartment availability
- U.S. Census Bureau QuickFacts for Lake Zurich

Best Wishes,
Sara

[Sara Larson Mercer](#), M.Arch | Community Development Manager | Housing Opportunity Development Corporation
 5340 Lincoln Avenue

Skokie IL, 60077

slarsonmercer@hodc.org
224-307-8328 (office phone)
224-645-0082 (cell phone)



From: Sarosh Saher <Sarosh.Saher@lakezurich.org>
Sent: Friday, July 28, 2023 2:46 PM
To: Sara Larson Mercer <slarsonmercer@hodc.org>; Richard Koenig <rkoenig@hodc.org>
Cc: Beth Demes <bdemes@hodc.org>
Subject: RE: Potential Thursday July 20th PZC Meeting

Hi Sara – thanks for reaching out. And, hello Beth.

Following the last meeting – some of the questions/issues that have been asked/raised that would be helpful to address:

- Were there any economic analyses (studies) done or are available to show whether values of property surrounding a low income apartment building in a suburban setting were affected one way or another.
- Vehicle ownership rates expected at your proposed development
- The community need for such a land use – while we are preparing a response on this issue, it may be helpful to address in your presentation

These are the questions/issues I've encountered thus far. If I come across others, I'll forward them to you.

In the meantime, please let me know if you have any questions.

Thanks.
Sarosh

Sarosh B. Saher, AICP

Community Development Director | Village of Lake Zurich | 505 Telser Road, Lake Zurich, IL 60047
sarosh.saher@lakezurich.org | Direct: 847-540-1754
Engage with Lake Zurich at LakeZurich.org/Connect

From: Sara Larson Mercer <slarsonmercer@hodc.org>

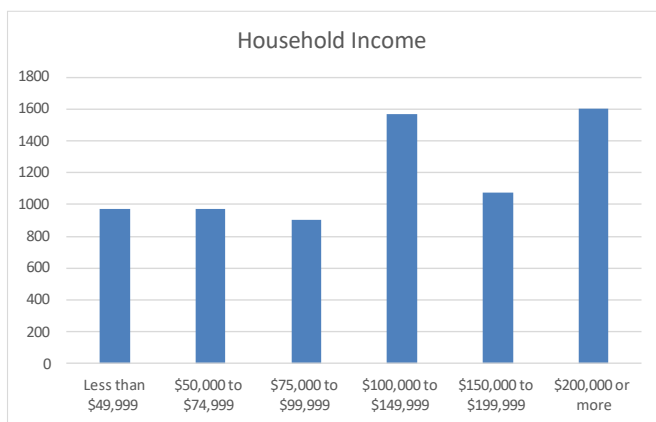
Submitted: August 7, 20223

Lake Zurich Housing Market Summary

Lake Zurich is located in southwest Lake County, Illinois, approximately 40 miles northwest of downtown Chicago. It is known for its scenic beauty, proximity to lakes, and highly rated school districts. The housing market in Lake Zurich tends to be competitive, with a range of housing options available. The purpose of this brief white paper is to summarize the housing market for Lake Zurich with a focus on the need for affordable housing.

Population: Lake Zurich has a population of 19,624 people in 2022 which is a 0.8% decrease from 2010 according to Census figures. This creates a total of 7,105 households. Just over 12% of the population is over 65. Over 74% of the population over 16 is in the labor force. There are a total of 7,262 housing units of which over 97% are occupied with less than 3% vacant according to Census figures. Over 80% of homes are owner-occupied (5,712) with less than 20% (1,392) renter-occupied.

Household Income: The median income of Lake Zurich residents is \$118,139 which is significantly higher than the U.S. median income of \$70,784 according to 2020 Census figures. Just 973 households (5.4%) earn less than \$50,000 per year and 2,849 (31.8%) earn less than \$100,000 annually. Over 22% of households (1,606) earn more than \$200,000 per year. Only 3.8% of the population lives in poverty based on Census data for 2020.



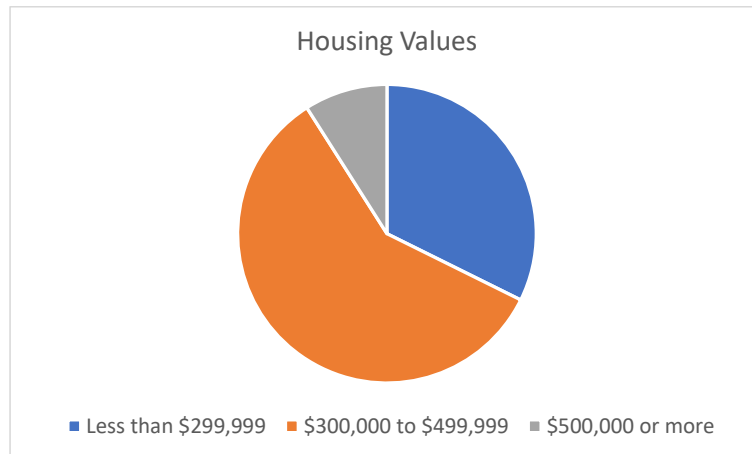
Transportation: Lake Zurich offers convenient access to major highways, including Route 12 and Route 22, making commuting to nearby employment centers relatively accessible for residents with cars. The average commute time is 30 minutes according to Census data. Lake Zurich does not have public transit options such as Pace Bus or Metro train service available within the village but almost all residents (99%) have vehicles.

Property Types: Lake Zurich offers a mix of housing options, including single-family homes, townhouses, and condominiums. Single-family detached homes are the most common property type at over 78% and they vary in size and architectural styles. Just 11% of the housing stock is

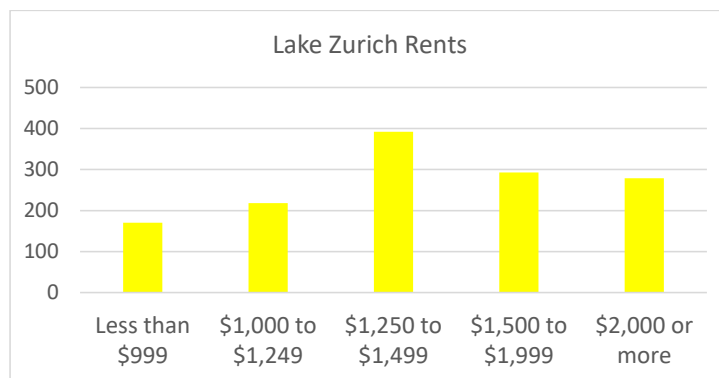
Submitted: August 7, 20223

in buildings containing more than 10 units. Most housing units are larger with 45% having more than 3 bedrooms, 46% having 2-3 bedrooms, and 8% with 1 bedroom or less.

Housing Prices: Housing prices in Lake Zurich vary depending on the size, location, condition, and amenities of the property. Generally, homes in Lake Zurich are considered to be in the mid to upper price range. The median home price in Lake Zurich is \$351,600 which is higher than the national average of \$244,900 according to 2020 Census data. Home prices have since increased by 17.8% in 2021 alone, according to the Freddie Mac House Price Index, and have continued to rise. As for housing prices, 32% of owner-occupied homes cost less than \$300,000, 59% of homes cost \$300,000-\$500,000 while 9% of homes in Lake Zurich are valued at more than \$1 million according to Census figures for 2020.



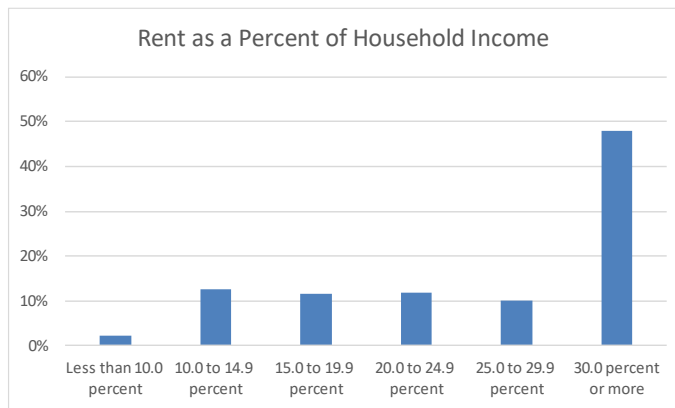
Rents: The average rental apartment in Lake Zurich costs \$1,673 per month based on 2020 Census figures. Just 170 units (12.5%) have rents less than \$1,000 per month while 279 units (20.6%) have rents exceeding \$2,000 per month. That leaves most of the units with rents between \$1,000-\$2,000/month.



Submitted: August 7, 20223

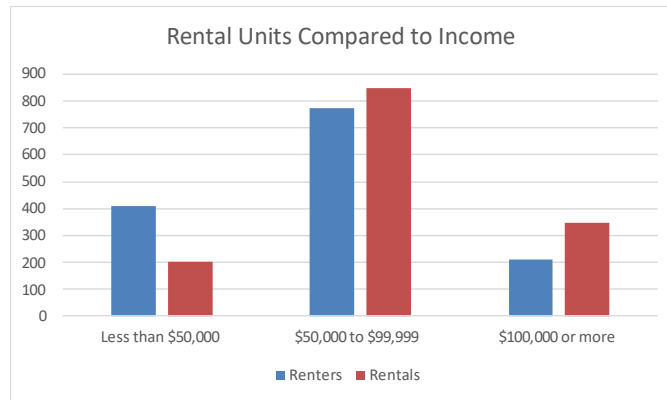
Demand: Lake Zurich is a very desirable area for families and professionals seeking a suburban lifestyle with good schools and access to recreational activities. The demand for housing in Lake Zurich is often driven by its location, quality of life, and proximity to major employment centers in the Chicago metropolitan area. Increasing housing costs and low vacancy rates indicate high desirability for households to live in Lake Zurich.

Affordability: Housing affordability is based on households spending less than 30% of their gross household income on housing costs, whether rent or mortgage, according to HUD. Of the nearly 1,400 renter households in Lake Zurich, nearly half (48%) pay above 30% of their income towards rent which means that a significant portion of renters are cost burdened.



One way to determine the affordability of a community is to compare housing prices at certain levels to household incomes that can afford those rental rates. Currently there are 408 households earning less than \$50,000 who should pay less than \$1000 vying for 201 rental units under \$1000, 774 households earning \$50,000-\$99,999 competing for 846 units renting for \$1,000-\$2,499, and 211 renter households earning over \$100,000 matched with 346 units over \$2,500 per month. This shows that there is a high need for rental units for residents making \$50,000 a year or below.

Submitted: August 7, 20223



Another measure of affordability is under the State of Illinois' Affordable Housing Planning and Appeals Act. AHPAA requires that all municipalities in the state have at least 10% of their housing stock as affordable or else create a plan to reach 10%. Based on the last available AHPAA figures, in 2016 Lake Zurich was at 12.5% which places it as one of the municipalities subject to or at-risk of being subject to AHPAA.

Summary: Lake Zurich is a highly desirable community with a strong housing market and households at a wide range of incomes. Like many suburban communities there is a mismatch between housing costs and income available for housing, especially for lower income renters.

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Effects of concentrated LIHTC development on surrounding house prices

Richard Voith^a, Jing Liu^a, Sean Zielenbach^b, Andrew Jakabovics^c, Brian An^d,
Seva Rodnyansky^e, Anthony W. Orlando^{f,*}, Raphael W. Bostic^g^a Econsult Solutions, 1435 Walnut Street, 4th Floor, Philadelphia, PA 19102, United States^b SZ Consulting, 1507 Russell Road, Alexandria, VA 22301, United States^c Enterprise Community Partners, 10 G Street NE, Suite 580, Washington, DC 20002, United States^d Georgia Institute of Technology, School of Public Policy, 685 Cherry St, Atlanta 30332, United States^e Occidental College, Urban & Environmental Policy Institute, 1882 Campus Road, Los Angeles, CA 90041, United States^f California State Polytechnic University, Pomona, Finance, Real Estate, & Law Department, 3801 West Temple Avenue, Pomona, CA 91768, United States^g Federal Reserve Bank of Atlanta, 1000 Peachtree Street NE, Atlanta, GA 30309, United States

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Housing prices

Spatial persistence

Neighborhood change

ABSTRACT

The Low-Income Housing Tax Credit is the largest supply-side housing subsidy in the United States, with more than \$8 billion worth of credits allocated per year. For a variety of reasons, LIHTC properties tend to be geographically concentrated in low-income urban communities. While numerous studies have examined the spillover effects of these properties on local property values, they have not accounted for the cumulative effects of clustering multiple LIHTC properties within an area. This paper examines the effects of introducing additional LIHTC developments in urban neighborhoods to determine whether the concentration of these affordable housing properties negatively affects local home values. We combine an interrupted time series model with a difference-in-difference approach to estimate the price effects in Chicago and surrounding Cook County, Illinois. We find some evidence that both stand-alone and clustered LIHTC developments generate positive price spillover effects on the surrounding neighborhoods; subsequent LIHTC projects do not affect prices negatively. The benefits are strongest within one quarter mile of the development, but smaller impacts prevail for up to a half mile from the LIHTC property. The positive impacts remain strong for at least 10 years after the initial development. The cumulative price effect is positive in both lower and higher-income areas and more significant in lower-income areas.

1. Introduction

Since its creation as part of the Tax Reform Act of 1986, the federal Low-Income Housing Tax Credit (LIHTC) has been the primary public subsidy for affordable housing in the United States. The credit provides an incentive for taxable entities to invest equity in rental properties in which most of the units are reserved for households making 60% or less of the area median income (AMI). Over the past 30+ years, LIHTC-related equity has facilitated the development, rehabilitation, and/or preservation of approximately three million units of affordable housing throughout the country. Many developers view the LIHTC program not only as a solution to the ongoing affordable housing shortage, but also as a critical tool in helping stabilize and revitalize distressed urban neighborhoods.

Over the past 15+ years, researchers have devoted considerable

attention to the spillover effects of LIHTC properties on surrounding communities. Most analyses (e.g., [Ellen et al 2007](#); [Baum-Snow & Marion 2009](#); [Diamond & McQuade 2019](#)) focus on the properties' effects on local home values. The studies generally find neutral to positive impacts, with some variation across different types of communities.

Unfortunately, these analyses generally have not addressed the cumulative effects of LIHTC properties over time. This longer-term assessment is important because of the propensity of developers to locate subsequent LIHTC properties in relatively close proximity to existing LIHTC developments. Several researchers have documented that LIHTC properties tend to be far more clustered than other affordable housing properties and even other residential units (e.g., [Oakley 2008](#); [Van Zandt & Mhatre 2009](#); [Dawkins 2013](#)). In Chicago, for instance, more than 90% of LIHTC properties designed for non-elderly tenants and placed in service between 1987 and 2016 are located within one-half

* Corresponding author.

E-mail address: aworlando@cupp.edu (A.W. Orlando).<https://doi.org/10.1016/j.jhe.2022.101838>

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mile of at least one other LIHTC property. It is reasonable to assume that the spillover effects of earlier properties both influence and are influenced by the presence of subsequent LIHTC properties within the same area.

With a median tenant household earning only \$17,943 in 2017 dollars (Office of Policy Development and Research 2019), LIHTC developments effectively concentrate low- and very low-income households within both individual properties and neighborhoods. Given the widely accepted axiom that concentrated poverty contributes to neighborhood economic distress and decline, it is important to understand the spillover ramifications of LIHTC clustering. Does the addition of subsequent LIHTC properties within a community worsen local conditions? Does it actually increase investment in the surrounding area? Or does it have little impact on local home prices? The answer has direct implications for developers and policymakers concerned about stabilizing and revitalizing urban neighborhoods, building wealth among local homeowners, and incorporating equity-seeking objectives into the LIHTC allocation process.

Our study offers an initial response to these questions. We examine the extent to which the development of subsequent LIHTC properties in Chicago-area neighborhoods affects the price of surrounding single-family homes. We document the generally positive effect that an initial LIHTC development has on surrounding property values and then analyze whether the addition of a second or third LIHTC property in close proximity augments or counteracts those effects. We assess whether the clustering effects vary across different types of communities.

We find that the development of subsequent LIHTC properties within a community does not lower surrounding values. In short, more development is not worse and often may be better – at least for local property values. The average positive spillover impacts are greatest in the region's lowest-income neighborhoods but are present in more affluent areas as well. Similarly, impacts are consistently positive in communities with both higher and lower percentages of Black residents. These findings help alleviate concerns about bringing more affordable housing into low-income communities of color and suggest that continued investment in LIHTC properties can and does play a critical and beneficial role in neighborhood revitalization strategies.

2. Context

2.1. Clustering of LIHTC properties

LIHTC properties tend to be located in a relatively small subset of urban neighborhoods. More than 55% are in census tracts with a poverty rate of at least 20%. The average LIHTC unit sits in a tract whose poverty rate is six percentage points higher than the average rate for tracts with only unsubsidized rental units (Ellen, Horn, & Kuai 2018). LIHTC developments are noticeably more concentrated than other multi-family residential units in the nation's 10 largest metropolitan areas (Dawkins 2013).

This geographic concentration stems in large part from the scoring criteria used in LIHTC allocation decisions. Allocating authorities typically prioritize properties located in Qualified Census Tracts (QCTs), those with high levels of economic distress. In Illinois, for instance, a QCT is one in which at least 25% of residents live in poverty and/or half or more of resident households earn 60% or less of AMI. Baum-Snow and Marion (2009) found that developers are more likely than not to concentrate LIHTC-financed units in QCTs, and that LIHTC properties in QCTs contain an average of six more units than properties in tracts just below the QCT threshold. Oakley (2008) found the strongest predictors of a LIHTC property's location to be the presence of QCTs, the presence of existing LIHTC developments in the area, and the proximity of other LIHTC developments.

Of course, there is considerable variation among QCTs and other low-income communities. Some have very distressed (and potentially

weakening) real estate markets, while others have recently experienced property value appreciation or appear to be on the verge of noticeable improvements. A LIHTC developer may have an incentive to invest in a comparatively stronger micro-market where real estate values are trending upward, since those are likely to be areas with a declining supply of affordable housing for low-income residents. At the same time, Oakley's research suggests a predilection among developers toward locating new LIHTC properties in communities where LIHTC developments already exist. The success of an existing LIHTC property – measured in terms of occupancy and public acceptance, among other indicators – presumably serves as a good indicator of an area's ability to absorb another such development.

These realities complicate efforts to tease out the spillover effects of LIHTC developments. In theory, some of the initial LIHTC developments could have helped catalyze subsequent investment; part of the price appreciation could result from the LIHTC intervention. In certain Chicago communities, for instance, early LIHTC projects represented some of the only investment that had occurred in their communities for several years (Bostic et al 2020). On the other hand, if LIHTC developers deliberately have chosen to build or rehabilitate properties in already improving neighborhoods, then it is harder to attribute subsequent price appreciation to the LIHTC intervention. Any observed LIHTC spillover effects may be skewed high due to selection bias.

Moreover, in areas with multiple LIHTC properties, the effects of the later developments likely will be influenced by the effects of the prior ones. In such areas, observed increases in local land values subsequent to the introduction of another LIHTC property could be a result of pre-existing price trends and other conditions possibly due to the previously developed LIHTC(s), not the LIHTC property itself.

It is not clear to what extent recent market dynamics factor into developers' locational decisions. The LIHTC program limits the amount of rent a developer can charge. To obtain an allocation of LIHTCs, developers must commit to making a majority of their units affordable to households at or below 60% of AMI and maintaining that affordability for at least 15 years. This effectively constrains the developer's economic return on the property during the mandated affordability period, decoupling rent trends from local real estate price trends and limiting a LIHTC property's near-term appreciation potential. For all but the most patient (and speculative) developers, 15 years would seem to be an unrealistically long time to justify a location decision. There is no guarantee that today's improving neighborhood will be equally or more desirable in the future, as local dynamics and unforeseen external shocks can have marked effects on a community's fortunes.

Because of the affordability and rent restrictions for LIHTC-subsidized units, a developer's profitability depends largely on its ability to minimize up-front and ongoing project costs and to maintain high residential occupancy rates. Consequently, the developer has a strong economic incentive to invest in markets with large numbers of income-qualifying households, a shortage of quality affordable rental housing opportunities, and relatively low land values. Locating in such areas ensures strong demand for the residential units and minimizes up-front acquisition costs and ongoing property tax expenses. Poor but appreciating markets could be more appealing than stagnant or declining areas because of the potential loss of naturally affordable units, but less appealing due to their relatively higher land acquisition and tax costs.

Other, non-economic factors may play into developers' calculations as well. Nonprofit organizations – acting either independently or in joint ventures – historically have comprised at least 20% of LIHTC developers. Many of these mission-driven entities have no intention of selling the property once the LIHTC affordability restrictions expire, but rather hope to maintain the property in perpetuity as affordable housing. It is unlikely that their project development decisions would be driven mainly by local market dynamics. In fact, they may deliberately focus their LIHTC efforts on comparatively distressed and declining areas to maximize the number of units they can develop, to eliminate a major source of local problems (a noted drug house, for instance), and/or to

help bring scarce investment dollars into the area.

Finally, LIHTC properties tend to have relatively longer development timelines than unsubsidized projects, partly due to the complexities of assembling multiple funding sources. Developers often have multiple potential LIHTC projects in their pipeline at any given time and tend to select the one(s) most likely to be funded in any given LIHTC allocation round. The relative readiness of a project or its particular unit composition therefore could result in the prioritization of projects in comparatively weaker QCTs.

2.2. Properties' spillover effects on their communities

Several studies have assessed the extent of LIHTC spillover impact over the past few decades. Most have found that the developments have an overall neutral to positive effect on their surrounding areas. Multiple studies documented non-adverse effects of LIHTC properties on surrounding property values and physical conditions (Green, Malpezzi, & Seah 2002; Young 2016; Edmiston 2018). In Cleveland, Dallas, New York City, Portland (OR), and Seattle, LIHTC developments have brought about notable price increases in surrounding single-family homes and other properties (Johnson & Bednarz 2002; Schwartz et al 2006; Furman Center 2006; Ellen & Voicu 2007; Ellen et al 2007; Ezzet-Lofstrom & Murdock 2007; Woo, Joh, & Van Zandt 2016).

Both the extent and the types of spillover effects vary across communities. For example, a national analysis of price trends of homes within one kilometer of LIHTC developments placed in service from 1987 through 2005 found notably higher increases in poor neighborhoods than in stable and gentrifying communities (Baum-Snow & Marion 2009). A more recent analysis (Diamond & McQuade 2019) of price trends in 129 counties across 15 states found that property values within 1/10 mile of newly constructed or rehabilitated LIHTC developments in low-income neighborhoods increased by 6.5% over 10 years, while values of homes within the same distance band of LIHTC developments in moderate and upper-income, majority-white communities fell by 2.5%.

Even while acknowledging the tendency of LIHTC developments to be geographically concentrated, the previous analyses of the projects' spillover impacts have treated the impacts of individual LIHTC properties independently. Several studies have factored the number of units within a property into their assessments. In many cases, "bigger is better" with respect to neighborhood revitalization – larger properties have more pronounced spillover effects – although large developments can have negative effects in particular areas (Dillman, Horn, & Verrilli 2017). Multiple researchers have raised concerns about potentially negative price effects associated with the over-concentration of subsidized housing in certain communities, particularly those in the suburbs (Deng 2010; Scally & Koenig 2012; Dillman, Horn, & Verrilli 2017). None of these studies addressed the marginal impacts of additional developments, however. On the flip side, there is some evidence, at least in one city (Denver), that higher numbers of small, scattered-site public housing developments within a neighborhood contributed to increased surrounding home values (Santiago et al 2001).

To the best of our knowledge, there have not been any analyses focusing specifically on the sequential or additive effects of clustering LIHTC developments, and whether that concentration of low-income properties has a different effect in different types of neighborhoods. There also has not been any formal examination of the extent to which observed spillover effects are driven by locational selection bias. Baum-Snow and Marion (2009) documented some of the endogenous factors contributing to site selection – QCT eligibility and the relative gentrification of the surrounding community, for instance – but ultimately focused mainly on the different levels of spillover impact across different micro-markets.

3. Our approach

We are ultimately concerned with the interactive effects of multiple LIHTC properties in a community. Specifically, how do subsequent developments influence the spillover price effects of already existing developments? To address that question, we include specific variables noting the presence and number of other LIHTC developments in each community. We impose the restriction that pre-development and post-development impacts are equal across project areas.¹ We track the development of projects over time and assume the impacts of initial developments within a given distance band are similar. We then assume the impacts of a second development are the same across all areas with two developments, and so forth. Our model focuses on average differences in prices across distance bands, both prior and subsequent to the introduction of a LIHTC property.

Our model employs a combination of an interrupted time series (ITS) and a difference-in-difference (DID) approach. The ITS approach compares pre-development real estate price trends with post-development prices and trends while controlling for overall market-wide movements in real estate prices. The DID approach identifies price changes over time and through spatial variation. We expect price impacts to decline as the distance from the development in question increases.

We compare average home prices in the areas surrounding LIHTC properties ("LIHTC neighborhoods") with the expected values of such properties in areas without any nearby LIHTC developments ("non-LIHTC neighborhoods"). Our primary "control group," therefore, consists of properties in areas that are not within the specified distance bands of any LIHTC project. We also examine the extent to which observed price trends in LIHTC neighborhoods differ depending on the number of LIHTC projects in the neighborhood. In other words, how does the price trend in a neighborhood with multiple developments compare to the trend in a neighborhood with just one LIHTC property? Are trends in neighborhoods with three or more LIHTC properties different from those with only two developments?

The effects of a LIHTC development may be comparatively short-lived, may extend for multiple years, and/or may fluctuate over time. Determining the additive effects of a subsequent project requires an understanding of the duration of the previous project's effects. Whereas most analyses to date have tracked surrounding property values for only about three years after the LIHTC development was placed in service, we track the spillover effects for up to 15 years.

Because we cannot account for all the variation across the different neighborhoods where LIHTC properties are located, we include census tract fixed effects and market-wide temporal fixed effects in our model. The latter enables us to capture common shocks in the overall residential real estate market, particularly the sharp downturn from mid-2007 through 2010. Instead of incorporating neighborhood income and racial differences into our model, we apply the model separately to distinct types of neighborhoods. We compare LIHTC price effects in lower- versus higher-income neighborhoods, using the bottom third and the top two thirds of Cook County census tracts, respectively, based on their 2012-2016 median income levels.² We also apply the model separately to neighborhoods in the top tercile of Black residents and

¹ This is necessary because the number of parameters in an unrestricted framework becomes hopelessly large. Even with a dataset encompassing all property transactions over multiple decades, only a small proportion of LIHTC properties are in areas with a sufficient number of home sale transactions to allow for statistically significant impact measurements in each time period. As a result, we estimate an average treatment effect across project areas, recognizing that there will likely be heterogeneity in responses (which we investigate across race and income later in the paper).

² As discussed below, these results are robust to income classifications from different years. Here, we focus on a more recent classification, as more LIHTC investment occurs later in the sample period.

those where the share of Black residents falls in the bottom two terciles. In addition to helping control for potentially important sources of variation in price changes, the stratifications by income and race allow us to test our initial assumption that the average pre and post effects are the same across project locations.

We acknowledge the potential endogeneity issues affecting our analysis. Yet without more detailed developer- and property-specific information, it is impossible to determine which factors drove the developers' LIHTC site selection calculus and how developers weighted those factors in their decision. Similarly, we are unable to determine what particular aspects of the LIHTC developments bring about the observed changes in surrounding property values. We leave both these issues for future analysis.

3.1. Focus on Chicago

Like many of the previous LIHTC analyses, we focus our study on a single geographic area. We examine the properties' spillover price effects in Chicago and surrounding Cook County, Illinois. Chicago has several features that lend itself to this type of study. Chicago is the nation's third largest city and has a long and rich history of community-based activism and development. It also has considerable racial, ethnic, and socio-economic variation, which allows for an examination of price trends across different types of neighborhoods.

Focusing solely on Cook County enables us to control for broader political and economic trends as well as state differences in LIHTC allocation processes and procedures. It provides us with a sufficiently large sample size while allowing us to manage the complexity associated with calculating overlapping distance bands and limited resources. Although our more localized approach potentially limits the generalizability of the findings, it has the crucial virtue of ensuring the results' internal validity. We do not have to control for the often significant political, economic, and other differences that exist across regions. Perhaps most importantly, we view our analysis as an initial study of the possible accretive effects of affordable housing concentration. We hope that this pilot can and will be replicated elsewhere.

3.2. Model specification

Our model identifies pre- and post-development price effects over time and distance for each LIHTC property.³ We focus on home prices

$$\ln(P_{itk}) = \sum_{d \in D} \alpha_{0d} Pre_{itd} + \sum_{d \in D} \alpha_{1d} Post1_{itd} + \sum_{d \in D} \alpha_{2d} Post2_{itd} + \sum_{d \in D} \alpha_{3d} Post3_{itd} + \beta X_{it} + \varepsilon_k + \tau_t + \mu_{itk} \quad (2)$$

within 1/4 mile of the LIHTC development and within 1/4 to 1/2 mile.⁴ We map the distance from each sold home to every LIHTC development each year. We create pre-development and post-development variables to measure price changes within the different distance bands before and after each LIHTC development was placed in service.

Our full ITS/DID model allows for variation on multiple key measures: (1) distance bands from a LIHTC property; (2) number of LIHTC developments within a given distance band; and (3) period of time a transaction occurred before or after the initial LIHTC project was placed in service. To demonstrate the usefulness of this approach, we build the model in three steps, demonstrating each of these contributions in turn.

First, we present a simple "LIHTC Existence" DID model that is

commonly used in the literature to estimate the difference between geographic units in the observed changes between pre- and post-treatment coefficients. In this exercise, we examine price changes in communities that have one or more LIHTC properties compared to changes in communities that have no LIHTC developments.⁵ Equation 1 specifies this model:

$$\ln(P_{itk}) = \sum_{d \in D} \alpha_{0d} Pre_{itd} + \sum_{d \in D} \alpha_{1d} Post1_{itd} + \beta X_{it} + \varepsilon_k + \tau_t + \mu_{itk} \quad (1)$$

where:

- $\ln(P_{itk})$ is the natural log of the price of house i at time t in Census tract k ;
- D is a set of distance bands d , where $D = \{0-1/4 \text{ miles}, 1/4-1/2 \text{ miles}\}$
- Pre_{itd} is a dummy variable equal to 1 if the transaction of house i in distance band d at time t is prior to the construction of a LIHTC project;
- $Post1_{itd}$ is a dummy variable equal to 1 if the transaction of house i in distance band d at time t is after the construction of the first LIHTC project;
- X_{it} is a vector of property traits of house i at time t ;⁶
- ε_k is a vector of k tract-specific fixed effects;
- τ_t is a vector of t year-specific fixed effects; and
- μ_{itk} is a random error variable.

The "average treatment effect" in this type of DID model is the average difference between the coefficients for the Pre and Post1 variables within a given distance band across LIHTC projects. Note how this approach differs from the most basic DID approach, where the Pre variable is omitted from the regression. In that approach, the Post1 variable can measure the treatment effect by itself because it is estimated relative to the omitted Pre years. By explicitly including the Pre variable, we add an extra calculation: We must manually calculate the difference between Pre and Post1. This extra step will become useful later when we want to investigate how these trends evolve over time.

Next, we expand the model to distinguish between multiple developments that create overlapping distance bands, such that house i might be "treated" by more than one development as it falls in this intersection. To capture these overlapping treatments, we include variables indicating the number of LIHTC properties within the different distance bands. Equation 2 specifies this "concentration" model:

where:

- $Post1_{itd}$ is a dummy variable equal to 1 if the transaction of house i in distance band d at time t is after the construction of at least one LIHTC project;
- $Post2_{itd}$ is a dummy variable equal to 1 if the transaction of house i in

⁵ We considered examining price trends in communities with one LIHTC development and no other LIHTC properties within one half mile for the entire sample period. Unfortunately, there are too few of these neighborhoods for analysis (only 40 of the 430 non-elderly LIHTC projects (9.3%) developed since 1987). Moreover, of those 40 projects, only 33 were developed during the period encompassed by our transaction dataset (1997-2016), and merely 20 have both pre and post observations in all distance bands.

⁶ These property traits include total square footage, living area square footage, lot size square footage, floor-area ratio (FAR), age at sale, air conditioning (dummy), fireplace (dummy), number of stories, building structure, and seasonal dummies (spring, summer, fall).

$$\ln(P_{itk}) = \sum_{d=1}^D \sum_{s=0}^0 \alpha_{ods} Pre_{ids} + \sum_{d=1}^D \sum_{u=0}^U \alpha_{idu} Post1_{idu} + \sum_{d=1}^D \sum_{v=0}^V \alpha_{2dv} Post2_{idv} + \sum_{d=1}^D \sum_{w=0}^W \alpha_{3dw} Post3_{idw} + \beta X_{it} + \varepsilon_k + \tau_t + \mu_{ik} \quad (3)$$

distance band d at time t is after the construction of at least two LIHTC projects; and $Post3_{idw}$ is a dummy variable equal to 1 if the transaction of house i in distance band d at time t is after the construction of at least three LIHTC projects.

Again, the average treatment effects are differences: Treatment1 is the difference between Pre and Post1, Treatment2 is the difference between Pre and (Post1 + Post2), and Treatment3 is the difference between Pre and (Post1 + Post2 + Post3). This approach captures the cumulative effect of clustering multiple projects in a particular neighborhood. In contrast, each Post variable individually isolates the marginal contribution of each new LIHTC development, as it adds incrementally to the preceding price trends.⁷

Finally, we incorporate the ITS approach into this DID model by allowing the treatment effects to vary over time.⁸ We add variables to reflect the years between subsequent home sales and subsequent LIHTC developments – i.e., a separate variable for the number of years that a transaction occurred after the second / third project. We include these as a series of year dummy variables representing the potentially non-linear impact of time before and after a given LIHTC development. Equation 3 specifies this “time-varying concentration” model:

Table 1
Key Characteristics of Sampled LIHTC Developments & Their Census Tracts

	Tracts with Any LIHTC Properties	Tracts with Only 1 LIHTC Property	Tracts with 2+ LIHTC Properties	Tracts with No LIHTC Properties
Total Census Tracts	242	144	98	1,077
Tract Median HH income	\$33,679	\$40,412	\$27,019	\$56,440
Tract Median Vacancy Rate	12.4%	11.5%	15.4%	8.6%
Tract Median Poverty Rate	29.5%	23.1%	33.9%	12.7%
Tract Median % African-American	58.0%	21.5%	89.2%	4.4%
Tract Median Contract Rent	\$803	\$835	\$758	\$886
Tract Median Home Value	\$129,400	\$156,900	\$115,600	\$224,200
Average Number of Units within LIHTC Properties	94	144	89	N/A

Note: Census tract data are based on American Community Survey 2012-2016 5-year estimates.

⁷ Note that the model could be respecified so that Post1, Post2, and Post3 represent the effects of exactly 1, 2, or 3 or more LIHTC developments. The coefficients shown in (3) above can be calculated from this alternative specification to yield numerically identical results.

⁸ This is similar to the new DID approach that is becoming standard in the literature pioneered by Goodman-Bacon (2021) and Callaway and Sant’Anna (2021).

In this third model, s , u , v , and w denote the number of years the transaction occurred before the initial LIHTC project was developed, after the initial LIHTC project was developed, after the second LIHTC project was developed, and after the third LIHTC project was developed, respectively, within distance band d . In the year that a project is placed into service, $s = u = v = w = 0$. In the pre-period, $s = [\theta, 0]$, with a maximal value of $\theta = -17$ years per the data. In the post-period, $u = [0, U]$, $v = [0, V]$, and $w = [0, W]$, with maximal values of $U = 15$ years, $V = 10$ years, and $W = 10$ years, respectively. We cluster standard errors based on the 77 community areas in Chicago, recognizing that the residuals may potentially be correlated by geography.⁹

This “time-varying concentration” model enables us to capture the longitudinal price trend before and after the initial LIHTC development, as well as the additional price impact from any subsequent development (s). It allows us to tease out separate average impacts associated with the first, second, and third (or more) LIHTC developments within a neighborhood. When we apply the model to data segmented by community income level, we can assess how spillover impacts differ across neighborhoods.

4. Data

We obtained data from HUD on each of the 508 LIHTC properties placed in service in Cook County between 1987 and 2014.¹⁰ In building our database, we included the property’s street address, the year it was placed in service, and its total number of units. We excluded properties designed exclusively for senior citizens, since most are not clustered with other LIHTC developments. After also excluding properties for which data were incomplete, we had a sample of 430 LIHTC developments – 390 of which are located within ½ mile of at least one other LIHTC property. While this subsample may undercount the number of nearby LIHTC properties for some transactions in our dataset, we have no reason to believe that the omitted developments have a systematically biased effect on property values upward or downward. Table 1 provides a basic overview of the characteristics of these properties and their neighborhoods, distinguishing between areas with only one LIHTC property and those with multiple developments.

The areas with multiple LIHTC properties tend to be within the city of Chicago, in neighborhoods with comparatively high poverty rates, high proportions of Black residents, and low household incomes. Only 8% of the overlapping LIHTC properties are in census tracts whose median incomes are in the upper third of all Cook County tracts. Figure 1 maps the location of all 430 properties, with green dots marking the non-overlapping properties and orange dots indicating the overlapping ones.

We obtained data on all Cook County single-family residential property sales from 1997 to 2016 from DataQuick Information Systems and CoreLogic.¹¹ There were 602,498 arm’s length sales (those with independent buyers and sellers) with complete data during that period. Table 2 shows how the number of transactions and the mean and median sales price increased from 1997 to 2007, declined sharply during the

⁹ We treat suburban Cook County as a single additional community area for clustering purposes.

¹⁰ Because the program was created in 1986, there are no projects built before 1987.

¹¹ These transactions include both attached and detached single-family properties.

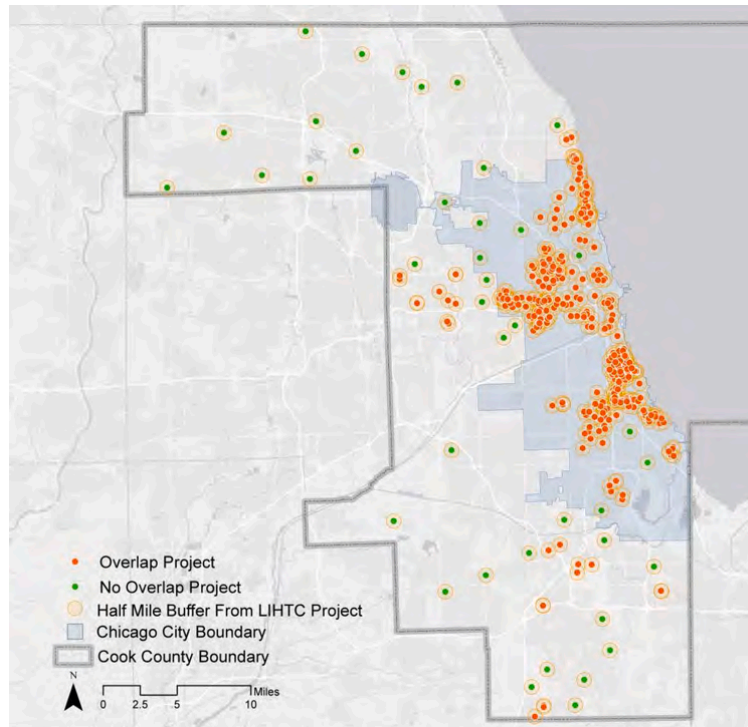


Fig. 1. Map of Sampled LIHTC Properties and Surrounding 1/2 Mile Radius

Notes: Dots represent Low-Income Housing Tax Credit properties in Cook County, IL, from 1997 to 2016 with half-mile circles representing the catchment areas for our model estimating the effect on surrounding housing prices.

Table 2
Single-Family Residential Property Transactions in Cook County, 1997-2016

Year	Observations	Mean Price (\$)	Median Price (\$)
1997	12,986	169,714	141,500
1998	35,058	189,765	155,000
1999	39,446	201,900	162,500
2000	36,476	222,312	176,000
2001	36,318	243,878	195,000
2002	36,975	258,851	211,000
2003	38,602	296,335	240,000
2004	46,255	312,204	255,000
2005	50,486	343,833	280,000
2006	32,987	374,531	300,000
2007	26,554	410,097	317,500
2008	17,704	403,092	301,000
2009	16,298	332,394	250,000
2010	17,927	317,491	230,000
2011	16,919	316,694	218,000
2012	20,165	310,906	220,000
2013	25,920	335,864	242,000
2014	27,833	346,446	250,000
2015	32,919	348,179	255,000
2016	34,670	342,595	255,000
Total	602,498	228,000	228,000

Notes: Data obtained from DataQuick Information Systems and CoreLogic.

Great Recession, and then began recovering after a few years. Overall, nominal values of single-family residential properties roughly doubled over the 19 years. These fluctuations underscore the importance of using

a difference-in-differences approach to avoid mistaking countywide trends for local effects of LIHTC development.

We geo-coded the location of each transaction to calculate the distance between the sold home and nearby LIHTC developments. About 11% of all property sales took place within 1/2 mile of a non-overlapping LIHTC development, whereas 7% occurred within 1/2 mile of overlapping developments. Many LIHTC developments were placed in service subsequent to a given home sale, so that the sold home may initially have fallen within the 1/2-mile ring of only one LIHTC development but ultimately ended up within the rings of multiple LIHTC projects.

Comparing these transactions—those that are not near LIHTC developments, and those near 1, 2, or 3 or more LIHTC developments—is at the heart of our empirical strategy. Thus, it is important to understand the differences between these groups. In Table 3, we break down the mean and median property prices based on the transaction sales time relative to the construction of LIHTC properties: pre vs post LIHTC project construction. Over the 20-year period, there were more than 30,509 transactions within 1/4 mile of a LIHTC property and 66,184 transactions within the 1/4-to-1/2-mile band. First, we see that properties are about 9% less valuable, on average, within 1/4 mile of a LIHTC development than prices of housing within the 1/4 - 1/2 mile band. This is consistent with previous evidence suggesting that LIHTC properties are more likely to be built in lower-income neighborhoods. Our hybrid ITS/DID model controls for this difference, and Census tract fixed effects further isolate the treatment effects from many of the factors that differentiate neighborhoods. We separately apply the model to low-

R. Voith et al.

Journal of Housing Economics 56 (2022) 101838

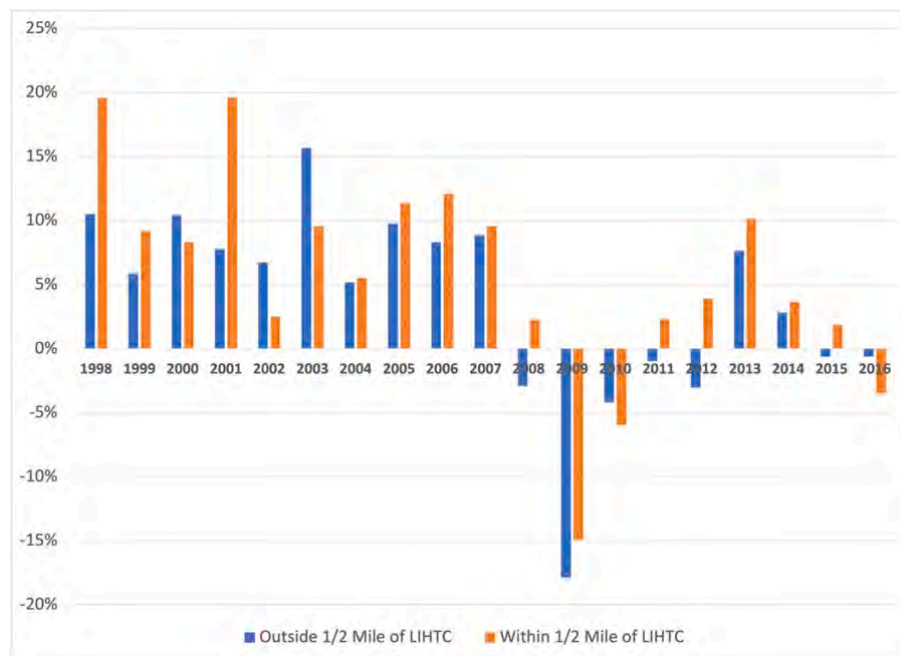
Table 3
Residential Prices Near LIHTC Properties, Pre vs. Post Development

Distance Band	LIHTCs Near	Number of Transactions	Mean Price (\$)	Standard Deviation (\$)	Median Price (\$)
1/4 Mile	Prior to LIHTC	9,390	292,627	257,073	220,000
	1 LIHTC	14,648	323,873	311,849	227,000
	2 LIHTCs	4,120	259,258	232,006	199,000
	3+ LIHTCs	2,341	270,209	234,680	224,000
	Near				
1/2 Mile	Prior to LIHTC	18,851	321,262	287,920	245,000
	1 LIHTC	27,511	351,245	371,460	237,000
	2 LIHTCs	9,320	295,169	275,793	210,000
	3+ LIHTCs	10,502	289,933	263,916	220,000
	Near				

Notes: Observations are single-family residential property sales from 1997 to 2016 within 1/4 mile of and within the 1/4-to-1/2-mile distance from a Low-Income Housing Tax Credit (LIHTC) development in Cook County, IL. "LIHTC Near" indicates transactions within the distance band before or after 1, 2, or 3+ LIHTC developments are placed in service. Data obtained from DataQuick and CoreLogic.

income and high-income neighborhoods to test the income variation directly. Second, relative to prices prior to the completion of the initial LIHTC property, home values appear to increase after the first LIHTC property is placed in service, decline after completion of the second LIHTC development, and increase again after the third LIHTC project is completed. Our model investigates whether these differences truly reflect changes that occur within a given neighborhood after the LIHTC property is placed in service.

Finally, it is useful to consider how prices are changing within these different neighborhoods from year to year. Figure 2 compares the annual mean price growth rates of transactions within 1/2 mile of LIHTC projects to the annual mean price growth rates of transactions outside of this 1/2-mile distance band. There is a lot of variation, but in the majority of years, there appears to be higher appreciation within the distance band. This is consistent with previous evidence showing that, particularly in the 1990s and the first half of the 2000s, LIHTC properties tended to be placed into service in low-income, but appreciating markets. Freeman (2004) found that LIHTC properties throughout the country were in neighborhoods with considerably higher poverty rates, lower median incomes, and lower median home values than the typical urban neighborhood. Yet while the median home value increased by 35.3% from 1990-2000 in all metropolitan neighborhoods, it increased by 44.3% in LIHTC neighborhoods during that period. In Chicago, home values in low-income neighborhoods – those with proportionally greater concentrations of LIHTC developments – rose by as much as 190% from 2000 through mid-2007 (Institute for Housing Studies 2015).

**Fig. 2.** Annual Price Growth Rates for Single-Family Residential Transactions within or not within 1/2 Mile of LIHTC Projects, 1997-2016

Notes: Means are calculated using single-family residential property sales from 1997 to 2016, including both attached and detached houses. Data obtained from DataQuick and CoreLogic.

R. Voith et al.

Journal of Housing Economics 56 (2022) 101838

Table 4
LIHTC Pricing Model Without Time Varying Impacts

Measures	Distance from LIHTC Property	Model 1		Model 2	
		Coefficient	T Stat	Coefficient	T Stat
Pre	0 - 1/4 Mile	-0.084***	-4.42	-0.085***	-4.44
Post1		0.020	1.30	0.015	0.97
Post2				-0.012	-0.46
Post3				0.042+	1.81
Treatment1		0.103***	-5.44	0.100***	5.29
Treatment2	1/4 Mile - 1/2 Mile			0.089**	3.18
Treatment3				0.131***	4.87
Pre		-0.025	-1.22	-0.025	-0.22
Post1		0.000	0.02	-0.007	-0.40
Post2				0.015	0.71
Post3				0.022	1.40
Treatment1		0.025	-1.31	0.018	0.77
Treatment2				0.033	1.10
Treatment3				0.055+	1.69
Constant		11.620	0.40	11.550	0.40
Number of Observations		602,498		602,498	
R Bar2		0.738		0.738	

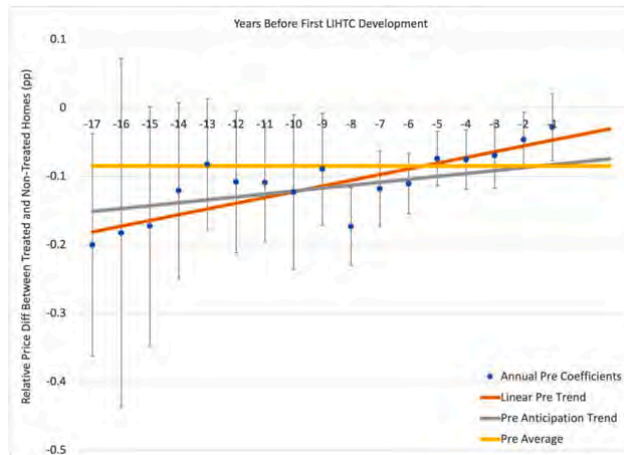
Note: Regressions control for Census tract fixed effects, year fixed effects, and the following property traits: total square footage, living area square footage, lot size square footage, floor-area ratio (FAR), age at sale, air conditioning (dummy), fireplace (dummy), number of stories, building structure, and seasonal dummies (spring, summer, fall). Treatment1, Treatment2, and Treatment3 are calculated manually from the differences in the regression coefficients, as described in the Model Specification section. +p<0.1, *p<0.05, **p<0.01, ***p<0.001

neighborhood and property-level characteristics, we find that home values in LIHTC neighborhoods were lower than the values in comparable non-LIHTC neighborhoods prior to the development of the initial LIHTC property. Values for homes within 1/4 mile of a LIHTC site were 8.1% lower than the control groups, as indicated by the Pre coefficient in column 3, while values within the 1/4-to-1/2-mile band around a site were 2.5% lower, though only the shorter distance band is statistically significant from zero.¹²

Once the initial LIHTC developments were placed into service, surrounding prices jumped. Relative to non-LIHTC neighborhoods, the average sale prices of homes in the 1/4-mile band were 2.0% higher, as indicated by the Post1 coefficient, and the average sale prices in the 1/4-to-1/2-mile band had pulled even with the non-LIHTC neighborhoods. By subtracting the Pre from the Post1 coefficient, we can conclude that the introduction of the initial LIHTC property boosted surrounding home values by approximately 10.8 and 2.5 percentage points in these two bands, respectively, relative to expectations. (See the Treatment1 line in Table 4.) Again, the change in values is statistically significant within the 1/4 mile band. These positive impacts echo those of other analyses highlighted earlier, and as expected, they dissipate with distance.¹³

5.2. Model 2: hybrid difference-in-difference with concentration of LIHTC projects

We then tease out the price impacts of subsequent LIHTC developments within the different distance bands, incorporating Post2 and

**Fig. 3.** Pre-LIHTC Temporal Patterns Within 1/4-Mile Band

Notes: Graphic representation of time-varying Pre coefficients from Equation 3, indicating the path of difference in housing prices near LIHTC projects before the first project is built. The bars associated with each point estimate indicate 95% confidence intervals for each yearly impact. The full set of coefficients is reported in Appendix A.

5. Findings

5.1. Model 1: difference-in-difference of LIHTC existence

To identify a baseline effect, we initially apply our regression model using only Pre and Post1 variables for each of the two distance bands. In this way, we determine the aggregate impact of all LIHTC projects on houses within the different surrounding distance bands, regardless of when the projects were placed in service. In this formulation, Post1 is an indicator of whether any LIHTC projects are in close proximity to the sold homes.

As Table 4 shows, Cook County's LIHTC properties have had a positive effect on surrounding home values. Controlling for various

Post3 variables into our initial model. We show the results in the "Model 2" columns of Table 4. We find no evidence that the aggregate property value effects decreased when additional LIHTC properties were introduced within the distance band. For example, the introduction of a

¹² Throughout the paper, we translate the coefficients from the model by converting from natural logarithms back to percentages, i.e. $e^{-0.084} - 1 = 8.1\%$. There consequently may be some minor differences between the percentages reported in the text and the coefficients reported in the tables.

¹³ As we discussed on pages 8-10, these findings could be skewed high due to endogeneity bias (i.e. the selection of project sites partly because of positive existing price trends). Such a critique would apply to most LIHTC studies, however.

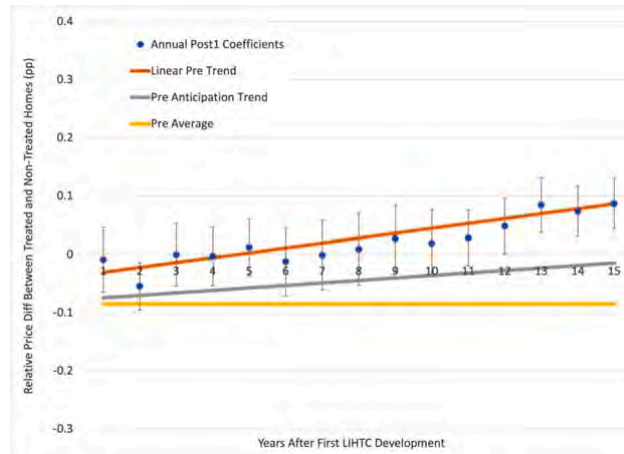


Fig. 4. Temporal Patterns Within 1/4-Mile Band After 1st LIHTC Development

Notes: Graphic representation of time-varying Post1 coefficients from Equation 3, indicating the path of difference in housing prices near LIHTC projects after the first project is built. The full set of coefficients is reported in [Appendix A](#).

second and then a third or more subsequent LIHTC properties increased home prices by an aggregate 3.1 percentage points relative to the first property's effect within 1/4 mile of that development and by an additional 3.8 percentage points within 1/2 mile, though most of these impacts are not statistically different from zero.¹⁴ Again, these increases are relative to the expected price trends without those additional properties.

Subtracting the Pre coefficient from the sum of the respective Post coefficients, as described earlier, reveals the total treatment effect. Collectively, homes located within 1/4 mile of three or more LIHTC properties experienced an aggregate 14.0 percentage point appreciation in value relative to expectations, and homes in the 1/4-to-1/2-mile band experienced a total 5.7 percentage point appreciation.

Note that while the individual Post variables are not statistically significant, the differences between the Post and Pre variables are. We therefore can be confident in the finding that the introduction of one or more LIHTC developments has a positive effect on local prices, but we cannot be wholly confident in the specific additive benefits of a second or third LIHTC property. As a result, we conservatively interpret the results as indicating only that subsequent developments did *not lower* property values.

5.3. Model 3: hybrid DID/ITS model with time-varying impacts

Finally, our most flexible model decomposes these average pre- and post-effects by year, showing how they change over time. Since the 1/4-mile distance band is the most significant in Model 2, we focus on those results in the graphs below. Before the first LIHTC development is completed, [Figure 3](#) shows the Pre coefficients as blue dots. The yellow line shows the average of these coefficients, which is the -0.085 Pre coefficient reported in Model 2. This is one potential baseline we use in visualizing the treatment effect. However, to a casual observer, prices generally appear to have been trending upward in the eight years prior to the time the first LIHTC property is placed in service. Therefore,

following standard difference-in-differences protocol, we test for the existence of a pre-trend by interacting the Pre variable with a linear time trend.¹⁵ We do this in two ways. First, following previous literature and anecdotal evidence from the industry, we assume that the LIHTC development is not a surprise to the market at $t = 0$. Rather, as planning, permits, and construction occur, the market anticipates the new property, and therefore the final four Pre coefficients are indicating an anticipation effect. We therefore indicate the pre-trend *before* this anticipation effect with the shallow, upward-sloping gray line. Some readers may not believe that markets are efficient enough to anticipate new development in this way. To address this concern, our second approach assumes that there is no anticipation effect and therefore uses all 17 pre-LIHTC years to construct the pre-trend, reflected in the steeper, upward-sloping orange line. In both cases, the model indicates that there is no statistically significant pre-trend in the 1/4-mile distance band.¹⁶ However, since there is no standard practice to deal with these annual fluctuations, reasonable econometricians can disagree.

¹⁵ We provide the full table of coefficients in [Appendix B](#), both for the simple Pre/Post model and for the model testing all three levels of LIHTC concentration.

¹⁶ Part of the upward price trend in the years preceding the introduction of the first LIHTC development may be associated with an anticipation effect. Each of our models uses the *completion* date of the project as the beginning of the post-period because we do not have data on the date at which the project's development was *announced*. There is a significant theoretical and empirical literature demonstrating the forward-looking nature of real estate markets. For example, [Chen, Wilkoff, and Yoshida \(2021\)](#) show that housing prices reflect positive news, such as a new office headquarters bringing valuable jobs into a neighborhood, long before the headquarters is built. Therefore, it is possible for prices to begin reacting to the new LIHTC property once news of that planned development becomes widely known. In California, it typically takes 22.8 months from the start of a LIHTC property's construction to its completion ([State of California 2014](#)). Based on our conversations with officials at the National Council of State Housing Agencies, the California's timing is generally representative of other markets throughout the country. And since it typically takes at least 16 months to obtain the permits and package the financing necessary to begin construction ([Millar, Oliner, & Sichel 2016](#)), it is possible that the anticipation period could extend three to four years. If one allows for an anticipation effect, there is even less evidence of a pre-trend in the 1/4th mile band.

¹⁴ This comes from adding the Post2 and Post3 coefficients.

R. Voith et al.

Journal of Housing Economics 56 (2022) 101838

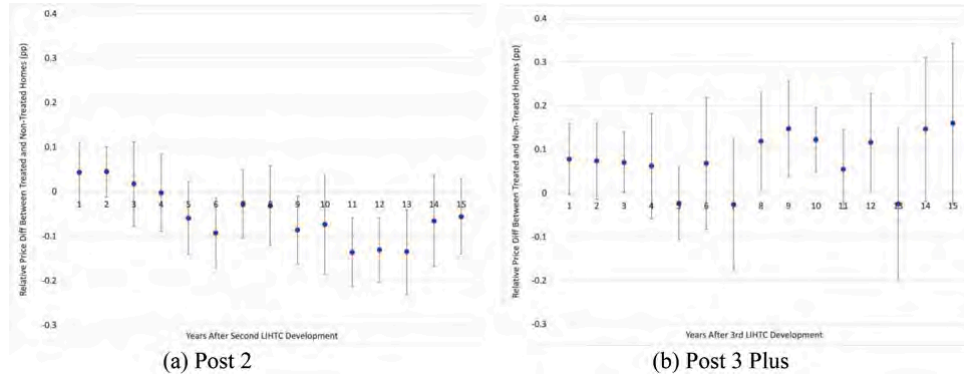


Fig. 5. Temporal Patterns Within 1/4-Mile Band After 2nd and 3rd LIHTC Developments

Notes: Graphic representation of time-varying Post2 and Post3 coefficients from Equation 3, indicating the path of difference in housing prices near LIHTC projects after the second and third projects are built. The full set of coefficients is reported in Appendix A.

Table 5
Difference in Observed Housing Price Trends: Higher vs. Lower Black Share & Income

Measures	Distance from LIHTC Property	Higher Black Percentage Coefficient	Higher Black Percentage T Stat	Lower Black Percentage Coefficient	Lower Black Percentage T Stat	Higher Income Coefficient	Higher Income T Stat	Lower Income Coefficient	Lower Income T Stat
Pre	0 - 1/4 Mile	-0.057*	-2.15	-0.116***	-4.76	-0.055+	-1.99	-0.068**	-3.008
Post1		0.021	1.33	-0.019	-0.943	0.029*	2.168	0.017	0.860
Post2		-0.020	-1.04	-0.038	-0.805	-0.070**	-2.83	-0.003	-0.113
Post3		0.010	0.38	0.018	0.316	0.057	0.55	0.027	1.175
Treatment1		0.077*	2.36	0.097***	4.25	0.084*	2.56	0.085***	3.56
Treatment2		0.057*	2.63	0.060	1.36	0.014	0.50	0.082*	2.41
Treatment3		0.067+	1.79	0.077**	2.91	0.071	0.64	0.109***	3.72
Pre	1/4 Mile - 1/2 Mile	0.003	0.21	-0.056*	-2.28	0.000	-0.003	-0.028	1.16
Post1		0.006	0.61	-0.038	-1.60	0.015	1.29	-0.015	0.65
Post2		-0.001	-0.09	0.007	0.23	-0.019	-0.841	0.031	1.28
Post3		0.010	0.38	-0.001	-0.04	0.024	0.661	0.012	0.718
Treatment1		0.004	0.29	0.017	0.63	0.015	0.79	0.013	0.44
Treatment2		0.002	0.09	0.024	0.64	-0.003	-0.10	0.044	1.23
Treatment3		0.024	0.70	0.024	0.70	0.021	0.42	0.056	1.44
Constant		11.934***	250.33	12.899***	278.82	11.776	182.362	11.361	1.51
Number of Observations		131,053		471,445		509,388		93,110	
R Bar2		0.551		0.732		0.751		0.709	

Note: Regressions control for Census tract fixed effects, year fixed effects, and the following property traits: total square footage, living area square footage, lot size square footage, floor-area ratio (FAR), age at sale, air conditioning (dummy), fireplace (dummy), number of stories, building structure, and seasonal dummies (spring, summer, fall). Treatment1, Treatment2, and Treatment3 are calculated manually from the differences in the regression coefficients, as described in the Model Specification section. +p<0.1, *p<0.05, **p<0.01, ***p<0.001

Therefore, we will consider all three cases when we visualize our treatment effects. In the foregoing analysis, we will focus on *marginal* treatment effects, i.e. the incremental impact of each additional project, not the *total* treatment effects, which would require unrealistically strict assumptions about *when* each project is completed in order to sum the marginal effects at an annual frequency.

After the first LIHTC development is completed, the Post1 coefficients in Equation 3 indicate the price performance of the treated houses, relative to the non-treated houses. In order to determine a time-varying treatment effect, we must compare this post-LIHTC performance to a pre-LIHTC baseline. In Figure 4, we show the Post1 coefficients, again as blue dots, compared to all three baselines that we constructed in Figure 3. The yellow line extends the Pre average as a constant; this is the standard DID approach. The distance between the blue dots and the yellow line indicate the treatment effect using this baseline. They are positive and increasing over time, and the confidence intervals of the coefficients are generally above the baseline. The gray line is a more conservative approach, extending the pre-anticipation trend (despite the fact that it is statistically insignificant in the pre-LIHTC period). Again,

the treatment effects—the distance between the blue dots and gray line—are positive and increasing over time, and the confidence intervals are generally above the extrapolated baseline. Finally, the most conservative approach extends the full (insignificant) pre-trend, which we show with the orange line. The blue dots fluctuate around this line closely, ending the 15-year Post1 period nearly identical to the pre-trend projection. Under this approach, there is no statistically significant treatment effect, either positive or negative. Considering all of these approaches, we can conclude that the potential time-varying effects of the first LIHTC development range between zero and significantly positive. There is no evidence of negative effects over the long run.

For the second and third LIHTC project completed within a 1/4 mile of the treated houses, we focus on the marginal effect of each project *in addition* to the first LIHTC effect graphed above. We cannot add them together without making an assumption about *when* the second and third projects are completed, i.e. during which of the above Post1 years. Therefore, we do not calculate total treatment effects from this cumulative concentration, and we do not extend the baselines from the Post1 graph. Instead, Figure 5a shows the Post2 coefficients as blue dots that

R. Voith et al.

Journal of Housing Economics 56 (2022) 101838

Table A1

Time-varying treatment effects after LIHTC developments for housing prices within varying distance bands

Year	1/4 Mile Post1			1/2 Mile Post1		
	Post1	Post 2	Post3_plus	Post1	Post 2	Post3_plus
1	0.081*	0.153***	0.138**	0.002	0.036	0.053*
2	0.036	0.155***	0.134**	0.022	0.035	0.021
3	0.090**	0.127*	0.130**	0.043	0.045	-0.020
4	0.088**	0.107*	0.122+	0.023	0.058+	0.041
5	0.103**	0.051	0.037	-0.020	0.009	0.020
6	0.078*	0.018	0.129+	0.003	0.003	0.018
7	0.090**	0.083+	0.035	-0.009	-0.001	-0.004
8	0.100**	0.079+	0.179*	-0.004	-0.015	0.008
9	0.117***	0.024	0.208***	-0.004	0.015	0.041
10	0.110**	0.036	0.183***	-0.001	0.003	0.056+
11	0.119***	-0.026	0.115	0.014	0.021+	0.118***
12	0.139***	-0.020	0.177**	0.040	-0.005	0.086***
13	0.176***	-0.024	0.037	0.046+	-0.019	0.101**
14	0.164***	0.044*	0.207**	0.059+	-0.002	0.074*
15	0.177***	0.055**	0.221+	0.061+	-0.015	0.181**

Note: Regressions control for Census tract fixed effects, year fixed effects, and the following property traits: total square footage, living area square footage, lot size square footage, floor-area ratio (FAR), age at sale, air conditioning (dummy), fireplace (dummy), number of stories, building structure, and seasonal dummies (spring, summer, fall). +p<0.1, *p<0.05, **p<0.01, ***p<0.001

Table A2

Time-varying pre and post trend after LIHTC developments for housing prices within varying distance bands

Year	Pre		Post1		Post2		Post3_plus	
	1/4 Mile	1/2 Mile	1/4 Mile	1/2 Mile	1/4 Mile	1/2 Mile	1/4 Mile	1/2 Mile
-17	-0.200*	-0.0487						
-16	-0.183	-0.0516						
-15	-0.173	-0.0966**						
-14	-0.121	-0.108**						
-13	-0.0828	-0.0626						
-12	-0.109*	-0.0672*						
-11	-0.109*	-0.0531						
-10	-0.123*	-0.0429						
-9	-0.0898*	-0.0513*						
-8	-0.173***	-0.0600*						
-7	-0.119***	-0.0459						
-6	-0.111***	-0.0246						
-5	-0.0745***	-0.0193						
-4	-0.0757***	-0.00419						
-3	-0.0698**	0.000312						
-2	-0.0465*	-0.00335						
-1	-0.0284	-0.000897						
0	0	0	0	0	0	0	0	0
1			-0.00967	-0.023	0.0428	0.0175	0.0775	0.0413*
2			-0.0553**	-0.00357	0.0451	0.0166	0.073	0.00976
3			-0.000742	0.0178	0.0167	0.0265	0.0691	-0.0318
4			-0.00273	-0.00185	-0.00329	0.0395	0.0613	0.0295
5			0.0121	-0.0454	-0.059	-0.00976	-0.0234	0.00842
6			-0.0128	-0.0224	-0.0922*	-0.0158	0.0684	0.0059
7			-0.0011	-0.034	-0.0273	-0.0195	-0.0259	-0.0156
8			0.00877	-0.0291	-0.031	-0.0338	0.119*	-0.00326
9			0.0258	-0.0295	-0.0859*	-0.00355	0.147*	0.0296
10			0.019	-0.0266	-0.0736	-0.0156	0.122**	0.0442
11			0.0281	-0.0117	-0.136***	0.00201	0.0543	0.106***
12			0.048	0.0147	-0.131***	-0.024	0.116*	0.0747*
13			0.0848***	0.0208	-0.134**	-0.0381	-0.0241	0.0890*
14			0.0733**	0.0341	-0.0657	-0.0211	0.146	0.0625
15			0.0863***	0.0359	-0.0556	-0.0333	0.16	0.170***

Note: Regressions control for Census tract fixed effects, year fixed effects, and the following property traits: total square footage, living area square footage, lot size square footage, floor-area ratio (FAR), age at sale, air conditioning (dummy), fireplace (dummy), number of stories, building structure, and seasonal dummies (spring, summer, fall). +p<0.1, *p<0.05, **p<0.01, ***p<0.001

signify its *incremental* effect relative to Post1, not relative to any cumulative baseline. Although these marginal effects begin positive, we cannot reject the null hypothesis, and they trend downward until $t = 13$ and then rebound afterward. These negative effects are only significant in years $t = 6, 11, 12$, and 13 . Therefore, the potential time-varying treatment effects of the second LIHTC project are mixed, ranging from insignificantly positive to significantly negative.

To determine whether this is a signal about the effects of LIHTC

concentration or merely a noisy fluctuation, we add a third LIHTC development in Figure 5b. The effects are mostly positive and increasing, despite a few noisy fluctuations. These positive effects are significant in years $t = 3, 8, 9, 10$, and 12 . Thus, considering Post1, Post2, and Post3 together as the full effects of LIHTC concentration, we find little evidence for sustained negative long-term effects. As we found after the first LIHTC project, most of the total treatment effects of concentrated development range from zero to very positive.

Table A3

Time-Varying Pre and Post Trend After LIHTC Developments For Housing Prices Within Varying Distance Bands – Lower Income Community

Year	Pre		Post1		Post2		Post3_plus	
	1/4 Mile	1/2 Mile	1/4 Mile	1/2 Mile	1/4 Mile	1/2 Mile	1/4 Mile	1/2 Mile
-17	-0.129	0.174						
-16	-0.325	0.00473						
-15	-0.211	-0.0638						
-14	-0.128	-0.127						
-13	-0.0834	-0.117*						
-12	-0.157*	-0.056						
-11	-0.0926	-0.0756						
-10	-0.174	-0.0501						
-9	-0.0641	-0.0549						
-8	-0.167***	-0.0706						
-7	-0.103**	-0.0676						
-6	-0.0948**	-0.0451						
-5	-0.054	-0.0361						
-4	-0.0368	0.00863						
-3	-0.0609	-0.0119						
-2	-0.0351	-0.0163						
-1	0.00435	0.00158						
0	0	0	0	0	0	0	0	0
1			0.0103	-0.00665	0.0616	0.0237	0.0696	0.0255
2			-0.0616	0.0179	0.0571	0.0521	0.0776	0.0264
3			0.0276	0.0384	0.0471	0.0522	0.0729	-0.0326
4			0.0113	-0.00511	0.0334	0.0771*	0.0623	0.0477*
5			0.0174	-0.0711*	-0.029	0.0137	-0.0315	0.0219
6			-0.0253	-0.0425	-0.0654	0.0208	0.0653	0.0218
7			0.00678	-0.0347	0.00593	0.00623	-0.0243	-0.00941
8			0.0189	-0.0338	-0.0119	-0.00718	0.105	-0.00935
9			0.0108	-0.0294	-0.054	0.0283	0.161*	0.0408
10			0.00314	-0.0361	-0.0575	0.0231	0.138**	0.0302
11			0.0165	-0.0187	-0.131**	0.0347	0.0513	0.0966**
12			0.0233	-0.00313	-0.130**	0.0219	0.115	0.053
13			0.0713*	-0.0245	-0.132*	-0.0217	-0.0129	0.0514
14			0.0623*	-0.00893	-0.0726	0.0105	0.12	0.0408
15			0.0603*	-0.019	-0.0457	-0.0116	0.0972	0.134**

Note: Regressions control for Census tract fixed effects, year fixed effects, and the following property traits: total square footage, living area square footage, lot size square footage, floor-area ratio (FAR), age at sale, air conditioning (dummy), fireplace (dummy), number of stories, building structure, and seasonal dummies (spring, summer, fall). +p<0.1, *p<0.05, **p<0.01, ***p<0.001

5.4. Higher v. lower income communities

As we noted in our review of the literature, most previous LIHTC research has identified variations in the extent of LIHTC spillovers in different types of neighborhoods. The effects tend to be greater in lower-income communities than higher-income ones. In several cases, researchers have identified negative price effects of LIHTC properties in more affluent areas.

Unlike studies such as that of Diamond and McQuade (2019), we found positive and significant LIHTC price effects price effects within ¼ mile of the development in both lower- and higher-income communities.¹⁷ As illustrated in the four rightmost columns in Table 5, the net price effect of one development is essentially the same (see Treatment 1) in the two types of neighborhoods within both the ¼ mile and ½ mile bands.

The neighborhood variation becomes much more pronounced when LIHTC developments are clustered. The effect of having multiple developments in proximity is substantially more positive in lower-income

neighborhoods than in higher-income ones. Adding a second and then a third or more LIHTC developments to the initial property (so there are now at least three properties in the area) increases values within ¼ mile by another 2.4 percentage points in lower-income areas. This result is statistically significant. In contrast, that same activity in higher-income areas results in a relative 1.3 percentage point decline in values, though the result is statistically insignificant. Put differently, clustering three or more LIHTC properties within 1/4 mile generates an aggregate 11.5 percentage point increase in home values in lower-income areas but only a 7.4 percentage point boost in higher-income communities—and this latter impact is not statistically significant. (Again, this increase is relative to similar communities with no LIHTC developments.)¹⁸ The time-varying coefficients for Model 3 are reported in Tables A3 and A4. Though they fluctuate over time, it is clear that the lower-income communities tend to have lower pre coefficients and similar post coefficients, generating the average treatment effects in Table 5.

5.5. Predominantly black communities

The Chicago area historically has been one of the most racially segregated metropolitan areas in the country (Sampson 2012). There are very few neighborhoods in the city that have substantial proportions of more than one racial group. In many census tracts on Chicago's south and west sides, the population is 99% or more Black. Given the extent to which race influences Chicago neighborhood dynamics, we stratified

¹⁷ We ranked all census tracts in Cook County by their median income, as reported in the 2012-2016 ACS. We define “higher-income” areas as tracts in the top two thirds, and “lower-income” as the bottom third. This classification creates a large enough sample size for the “higher-income,” as there are few LIHTC properties in the top third alone. The results are robust to different years of income classification. We use 2012-2016 because most LIHTC investment is concentrated near the end of the sample period. If we use earlier data for this classification, we risk mistakenly assigning communities to a category that they no longer occupy when the LIHTC project is actually built—and therefore, they will bias any estimates about how LIHTC projects affect that category of communities.

¹⁸ Not surprisingly, the puzzling decline in relative values associated with the introduction of a second LIHTC development persists in both markets, particularly within ¼ mile.

Table A4

Time-Varying Pre and Post Trend After LIHTC Developments For Housing Prices Within Varying Distance Bands – Higher Income Community

Year	Pre		Post1		Post2		Post3_plus	
	1/4 Mile	1/2 Mile	1/4 Mile	1/2 Mile	1/4 Mile	1/2 Mile	1/4 Mile	1/2 Mile
-17	-0.176	-0.0804						
-16	-0.0452	-0.024						
-15	-0.0633	-0.0643*						
-14	-0.0282	-0.0574*						
-13	-0.0199	-0.00905						
-12	-0.00626	-0.0306						
-11	-0.0601	0.00384						
-10	-0.00711	0.00406						
-9	-0.0601	-0.0272						
-8	-0.122**	-0.0361						
-7	-0.082	0.00129						
-6	-0.0718*	0.0136						
-5	-0.0497	0.0113						
-4	-0.0729*	-0.00297						
-3	-0.0354	0.0229						
-2	-0.0399	0.0237						
-1	-0.062	0.0109						
0	0	0	0	0	0	0	0	0
1			-0.0152	-0.0228	-0.00382	0.0082	-0.0327	0.0783
2			-0.00526	0.00295	0.0348	-0.0142	0.132	-0.0634
3			0.0000126	0.0158	-0.102	0.00513	-0.0495	0.0351
4			0.0306	0.0203	-0.202*	0.00685	0.263	-0.0442
5			0.044	0.01	-0.129	-0.00285	0.0109	-0.0466
6			0.0581	0.0349	-0.118**	-0.0556	0.131	-0.0594
7			0.0407	0.00771	-0.181***	-0.0382	0.00321	-0.0218
8			0.0278	0.0172	-0.00554	-0.0678	0.178	0.0243
9			0.0864*	0.013	-0.126	-0.0591	-0.0318	-0.023
10			0.0840*	0.0176	-0.154	-0.0853	-0.252	0.104
11			0.0488	0.0029	0.0368	-0.0349	0.226*	0.145**
12			0.0759	0.0117	-0.0505	-0.0997**	0.274*	0.165**
13			0.0475	0.0489	-0.11	-0.0222	-0.203	0.206***
14			0.0323	0.0585*	0.155	-0.0677	0.484***	0.103
15			0.0135	0.0634	-0.280*	-0.0917	0.277*	0.246***

Note: Regressions control for Census tract fixed effects, year fixed effects, and the following property traits: total square footage, living area square footage, lot size square footage, floor-area ratio (FAR), age at sale, air conditioning (dummy), fireplace (dummy), number of stories, building structure, and seasonal dummies (spring, summer, fall). +p<0.1, *p<0.05, **p<0.01, ***p<0.001

our sample by the proportion of Blacks living in the community. Following our income methodology above, we stratified communities into terciles, with the higher Black share designated by the top tercile and the lower Black percentage designated by the bottom two terciles.¹⁹

As shown in Table 5, LIHTC price effects are consistently positive across all levels of LIHTC concentration, both distance bands, and both predominantly Black and less Black neighborhoods. Consistent with our previous findings, the price effects are larger and more statistically significant nearest the LIHTC development. The affordable housing properties have generally similar effects across the two types of neighborhoods, but those effects are slightly larger in communities where Blacks comprise a smaller share of the population.²⁰ This finding indicates that both the presence and concentration of LIHTC properties benefit neighborhoods regardless of their racial composition. The time-varying coefficients from Model 3 are reported in Tables A5 and A6, which again indicate fluctuation from year to year. We do not detect noticeably different trends, though, between the two types of neighborhoods, confirming the results from Model 2.

Discussion and conclusion

We find evidence that LIHTC developments in Cook County, IL, have had positive impacts on surrounding house prices. Those impacts have

been greater in areas where LIHTC properties are concentrated, though the differences between subsequent developments is not statistically significant; thus, we can conclude that concentration of multiple properties did not lower property values overall. Though there is some evidence that property values decline after the second LIHTC project is completed, this impact is not statistically different from the pre-LIHTC baseline, and it is not large enough to outweigh the positive impacts of the first and third project. Given the inherent clustering patterns of LIHTC developments in Chicago and other urban areas throughout the country, it is important to tease out and quantify the cumulative impacts of these properties. Our work builds on previous studies that have documented the program's clustering patterns in low-income, low-opportunity neighborhoods in metropolitan areas (see Diamond & McQuade 2019; Ellen, Horn, & Kuai 2018; Van Zandt & Mhatre 2009; and Koschinsky 2009, among others).

While nobody appears to have specifically analyzed the additive effects of LIHTC clustering, several scholars have assumed that such concentration, particularly in certain neighborhoods, could have negative spillover effects on crime and surrounding property values (e.g., Deng 2010; Nguyen 2005; Van Zandt & Mhatre 2009). With considerable research having documented the effects of neighborhood conditions on resident wellbeing (e.g., Chetty et al. 2016, and Chetty & Hendren 2016), some researchers and policy-makers have argued that concentrating additional subsidized housing properties in comparatively high-poverty neighborhoods will negatively affect short-and long-term economic and other outcomes for local residents.

Our study refutes the first set of assumptions by documenting the positive spillover price effects that LIHTC projects have brought to neighborhoods throughout the Chicago area at all levels of neighborhood concentration. The addition of a second LIHTC development has a

¹⁹ Due to the strong relationship between income and racial segregation, this categorization is similar to the lower-income and higher-income communities, respectively, in our previous income breakdown.

²⁰ Again, we note the presence of a relative decline in price trends in communities with just two LIHTC properties.

Table A5

Time-Varying Pre and Post Trend After LIHTC Developments For Housing Prices Within Varying Distance Bands – Lower Black Population Percentage Community

Year	Pre		Post1		Post2		Post3_plus	
	1/4 Mile	1/2 Mile	1/4 Mile	1/2 Mile	1/4 Mile	1/2 Mile	1/4 Mile	1/2 Mile
-17	-0.193	-0.0637						
-16	-0.228	-0.0558						
-15	-0.203	-0.117**						
-14	-0.158*	-0.134***						
-13	-0.0753	-0.0852*						
-12	-0.088	-0.0895**						
-11	-0.138*	-0.0598						
-10	-0.155*	-0.0605						
-9	-0.146**	-0.0578*						
-8	-0.209***	-0.0667*						
-7	-0.128***	-0.0622						
-6	-0.117***	-0.0542						
-5	-0.0816***	-0.0329						
-4	-0.0952**	-0.0502*						
-3	-0.107***	-0.048						
-2	-0.0704***	-0.0433						
-1	-0.0644*	-0.0477						
0	0	0	0	0	0	0	0	0
1			-0.0142	-0.0607**	-0.000704	0.0196	-0.0681	0.0780**
2			-0.0592**	-0.0346	0.0329	-0.00907	0.0299	0.0017
3			-0.0218	-0.0153	0.0307	0.0256	-0.0341	0.00993
4			-0.0219	-0.0243	-0.0269	0.0108	-0.0893	0.0383
5			-0.0101	-0.0597	-0.0637	-0.0133	-0.197*	0.00646
6			-0.0173	-0.0599	-0.198***	-0.0753	0.127	-0.046
7			-0.0521	-0.0679	-0.123	-0.0850*	0.126	-0.0424
8			-0.0393	-0.0606	-0.102	-0.0802**	0.232	-0.0549
9			-0.0432	-0.0655	-0.162***	-0.0936**	0.199*	-0.0684
10			-0.0243	-0.0609	-0.106	-0.0667*	0.113	-0.001
11			-0.0132	-0.0327	-0.0912	-0.03	0.0546	0.0421
12			0.0223	0.00701	-0.0826	-0.0475	-0.00168	0.0431
13			0.0469	0.0145	-0.172*	0.00118	0.0809	0.0438
14			0.0147	-0.0116	-0.0414	-0.0354	0.311	0.0186
15			0.0318	-0.0198	0.0839	0.0058	0.509***	0.140***

Note: Regressions control for Census tract fixed effects, year fixed effects, and the following property traits: total square footage, living area square footage, lot size square footage, floor-area ratio (FAR), age at sale, air conditioning (dummy), fireplace (dummy), number of stories, building structure, and seasonal dummies (spring, summer, fall). +p<0.1, *p<0.05, **p<0.01, ***p<0.001

slightly negative effect within 1/4 mile, but that effect is only statistically significant by using the more conservative baselines that we generated by extrapolating an increasing linear trend from the pre-LIHTC period. Regardless of the baseline we choose, however, this negative marginal effect does not change the positive overall treatment effect of the LIHTC properties. Furthermore, that negative effect disappears and becomes even more positive with the addition of a third development. And while we found spillover benefits throughout the county, in both lower-income and relatively higher-income areas, the largest and most consistent impacts were in lower-income neighborhoods. The impacts were also positive and significant in communities with different proportions of Black residents. These findings support community developers' contention that LIHTC properties simultaneously can help alleviate the shortage of affordable housing and help stabilize and ultimately improve economically distressed neighborhoods.

While our findings are potentially significant for researchers, practitioners, and policy-makers, they come with three caveats. First, we have focused only on Chicago and surrounding Cook County. The area has substantial variations in income and demographic characteristics, and it contains well-defined neighborhoods and a long history of community development and activism. These and other factors may limit the generalizability of the findings; after all, studies in different markets have found negative spillover effects from LIHTC properties, particularly in more affluent neighborhoods. It will be important to conduct similar analyses in other markets to understand whether the clustering of LIHTC developments has consistently positive effects, or whether locality-specific factors shape the type and extent of the spillover outcomes. Such knowledge would help policymakers and practitioners determine where best to leverage LIHTC resources for maximum

neighborhood development benefits.

Second, our analysis focuses solely on LIHTC properties' effects on surrounding housing prices. We assume that changes in values reflect various improvements within a community, but it is not clear what those specific improvements are and how they result in greater demand for property in the area. Understanding that process and the underlying relationships and dynamics driving it likely will require a more mixed-method approach that combines quantitative analysis with interviews of local developers, property managers, residents, investors, and other key actors knowledgeable about the local dynamics.

Third, as with most LIHTC studies, there remains the possibility of endogeneity for which we could not control with our current data. With richer data or a different methodology, it might be possible to test this possibility further and make the results more robust for the purposes of causal inference. This is an important avenue for future research to explore.

Given these limitations, we found little evidence that the concentrated development of LIHTC properties has had negative housing price impacts in higher-income Chicago and Cook County neighborhoods. This underscores the importance of a balanced approach to funding affordable housing investments across a wide variety of communities. Further development of such properties in higher-opportunity neighborhoods has the potential to help lower-income households reap the benefits of living in more affluent areas.

Author statement

All authors participated in all stages of the research project.

Table A6

Time-Varying Pre and Post Trend After LIHTC Developments For Housing Prices Within Varying Distance Bands – Higher Black Population Percentage Community

Year	Pre		Post1		Post2		Post3_plus	
	1/4 Mile	1/2 Mile	1/4 Mile	1/2 Mile	1/4 Mile	1/2 Mile	1/4 Mile	1/2 Mile
-17	-0.224	0.0736						
-16	-0.0589	-0.0496						
-15	-0.14	-0.0582						
-14	-0.101	-0.028						
-13	-0.137	-0.0431						
-12	-0.185*	-0.042						
-11	-0.071	-0.0684						
-10	-0.064	-0.017						
-9	0.0167	-0.0695*						
-8	-0.134**	-0.0784*						
-7	-0.109*	-0.043						
-6	-0.120*	0.00382						
-5	-0.0821	-0.0186						
-4	-0.0682	0.0428						
-3	-0.0317	0.0469*						
-2	-0.032	0.0111						
-1	0.00194	0.0352						
0	0	0	0	0	0	0	0	0
1			-0.0453	0.00224	0.00957	-0.0193	0.0554	-0.000442
2			-0.0945**	0.00932	-0.0197	-0.018	0.0102	-0.00476
3			-0.0231	0.0354	-0.0599	-0.0182	0.0271	-0.0813*
4			-0.0125	-0.00307	-0.0222	0.0173	0.0367	0.00806
5			-0.000626	-0.0623*	-0.0816	-0.0385	-0.0555	-0.0076
6			-0.0448	-0.00144	-0.0931**	0.000248	-0.0131	-0.0000599
7			0.00162	-0.015	-0.028	0.0104	-0.114	-0.0388
8			0.0268	-0.00928	-0.035	-0.0187	0.0288	-0.00377
9			0.0697**	-0.0107	-0.0934*	0.00211	0.0741	0.029
10			0.0432	0.00182	-0.0727	-0.017	0.0636	0.0275
11			0.0507	0.00158	-0.164**	0.00853	0.0204	0.0789**
12			0.0491*	0.01	-0.150**	-0.0126	0.0587	0.0309
13			0.101***	0.0133	-0.121**	-0.0402	-0.108	0.0705
14			0.0997**	0.0640*	-0.0566	-0.00188	0.0794	0.0236
15			0.101**	0.0705**	-0.111**	-0.0255	0.0912	0.136*

Note: Regressions control for Census tract fixed effects, year fixed effects, and the following property traits: total square footage, living area square footage, lot size square footage, floor-area ratio (FAR), age at sale, air conditioning (dummy), fireplace (dummy), number of stories, building structure, and seasonal dummies (spring, summer, fall). +p<0.1, *p<0.05, **p<0.01, ***p<0.001

Table B1

Hybrid ITS/DID Model with Pre-Trend Interaction Variables

Measures	Distance from LIHTC Property	Simple Model		Concentration Model	
		Coefficient	T Stat	Coefficient	T Stat
Pre	0 - 1/4 Mile	-0.058**	-3.04	-0.055**	-3.12
Pre-Trend		0.011	1.42	0.011	1.43
Post1		0.021	1.44	0.021	1.64
Post1-Trend		0.001	0.95	0.002	1.19
Post2				-0.011	-0.45
Post2-Trend	1/4 Mile - 1/2 Mile			0.004	1.61
Post3				0.044	1.96
Post3-Trend				0.004	1.42
Pre		-0.002	-0.08	0.001	0.07
Pre-Trend		0.009**	3.19	0.009**	3.31
Post1		0.000	0.03	-0.005	-0.27
Post1-Trend		0.001	0.83	0.002	1.02
Post2				0.017	0.81
Post2-Trend				0.002	0.97
Post3				0.023	1.37
Post3-Trend				0.003	1.35
Constant		11.537	0.76	11.537	
Number of Observations		602,498		602,498	
R Bar2		0.738		0.738	

Note: Regressions control for Census tract fixed effects, year fixed effects, and the following property traits: total square footage, living area square footage, lot size square footage, floor-area ratio (FAR), age at sale, air conditioning (dummy), fireplace (dummy), number of stories, building structure, and seasonal dummies (spring, summer, fall). +p<0.1, *p<0.05, **p<0.01, ***p<0.001

Appendix A. Complete model results

Our Model 3 estimates the difference in housing prices between the treatment and control groups, year by year, for up to 17 years preceding a new LIHTC development and 15 years afterward. The full set of coefficients is too cumbersome to report in the main text, but we have provided it below for those who are interested (Table A2-A6). These results are particularly useful in calculating treatment effects by year (Table A1, Table A2, Table A3, Table A4, Table A5, Table A6), which is visualized as Figure 3. This is an important confirmation of the robustness of our difference-in-difference methodology.

Appendix B. Pre-trend tests

Our most complete specification, Model 3, gives some indication of increasing coefficients during the Pre period, as shown in Figure 2 and numerically listed in Appendix A. Here, we present standard tests for a pre-trend, as the difference-in-differences literature typically requires. In both specifications below, the average Pre coefficients are interacted with a linear time trend to create the Pre-Trend variables. Regardless of whether we include one Post variable or different Post variables for each incremental LIHTC development in a given neighborhood, we find that there is a statistically significant positive trend in the 1/2-mile band but not in the 1/4-mile band. We discuss these findings in the Model 3 subsection of the Findings section in the main text of the paper. [Tab B1](#)

R. Voith et al.

Journal of Housing Economics 56 (2022) 101838

References

- Baum-Snow, N., Marion, J., 2009. The effects of low income housing tax credit developments on neighborhoods. *J. Public Econ.* 93, 654–666. <https://doi.org/10.1016/j.jpubeco.2009.01.001>.
- edited by Bostic, R., Jakabovics, A., Voith, R., Zielenbach, S., 2020. Mixed-income LIHTC developments in Chicago: a first look at their income characteristics and spillover impacts. In: Joseph, M., Khare Amy, T. (Eds.), *What Works to Promote Inclusive, Equitable Mixed-Income Communities*. Federal Reserve Bank of San Francisco, forthcoming. <https://case.edu/socialwork/nimc/sites/case.edu.nimc/files/2019-04/Mixed-Income%20LIHTC%20Developments%20in%20Chicago%20Bostic%20et%20al.pdf>.
- Callaway, B., Santa'Anna, P.H.C., 2021. Difference-in-differences with multiple time periods. *J. Econometr.* 225 (2), 200–230.
- Chen, Y., Wilkoff, S., 2021. Amazon is coming to town: private information and housing market efficiency. Working Pap. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3762672.
- Chetty, R., Hendren, N., 2016. The impacts of neighborhoods on intergenerational mobility I: childhood exposure effects. *Natl. Bur. Econ. Res. Work. Pap. Ser. No. 23001* <https://doi.org/10.3386/w23001>.
- Chetty, R., Hendren, N., Katz, L.F., 2016. The effects of exposure to better neighborhoods on children: new evidence from the moving to opportunity experiment. *Am. Econ. Rev.* 106, 855–902.
- Dawkins, Casey J., 2013. Exploring the spatial distribution of low-income housing tax credit properties. *J. Am. Plan. Assoc.* 73 (3), 222–234.
- Diamond, R., McQuade, T., 2019. Who wants affordable housing in their backyard? An equilibrium analysis of low-income property development. *J. Polit. Econ.* 127 (3), 1063–1117.
- Dillman, Keri-Nicole, Horn, Keren Mertens, Verilli, Ann, Mar. 2017. The what, where, and when of housing policy's neighborhood effects. *Housing Policy Debate* 27 (#2), 282–305.
- Edmiston, Kelly D., 2018. Low-income housing tax credit developments and neighborhood property conditions. *Fed. Reserve Bank Kansas City Work. Pap.* 11-10. Dec. 2011; revised Mar.
- Ellen, I.G., Horn, K.M., Kuai, Y., 2018. Gateway to opportunity? Disparities in neighborhood conditions among low-income housing tax credit residents. *Hous. Policy Debate* 28, 572–591. <https://doi.org/10.1080/10511482.2017.1413584>.
- Ellen, I.G., Schwartz, A.E., Voicu, I., Schill, M.H., 2007. Does federally subsidized rental housing depress neighborhood property values? *J. Policy Anal. Manage.* 26, 257–280.
- Ellen, I.G., Voicu, I., 2007. The impact of low income housing tax credit housing on surrounding neighborhoods: evidence from New York City (Working Paper No. 07-02). NYU Furman Center for Real Estate and Urban Policy, New York, NY.
- Ezzet-Lofstrom, R., Murdoch, J., 2007. The effect of low income housing tax credit units on residential property values in Dallas county (SSRN Scholarly Paper No. ID 976038). *Soc. Sci. Res. Netw.*, Rochester, NY.
- Freeman, Lance, March 2004. Siting affordable housing: location and neighborhood trends of low income housing tax credit developments in the 1990s. *Brook. Census 2000 Surv. Ser.* available at <https://www.brookings.edu/research/siting-affordable-housing-location-and-neighborhood-trends-of-low-income-housing-tax-credit-developments-in-the-1990s/>.
- Furman Center for Real Estate and Urban Policy, July 2006. The impact of subsidized housing investment on New York City's neighborhoods. Working Pap. 06-02 available at <https://furmancenter.org/files/publications/Impactofsubsidizedhousingcombined0602.001.pdf>.
- Goodman-Bacon, A., 2021. Difference-in-differences with variation in treatment timing. *J. Econometr.* 225 (2), 254–277.
- Green, Richard K., Malpezzi, Stephen, Seah, Kiat-Ying, June 2002. Low-Income Housing Tax Credit Housing Developments and Property Values. University of Wisconsin Center for Urban Land Economics Research paper available at <https://medinamn.us/wp-content/uploads/2014/04/Low-Income-Housing-Tax-Credit-Housing-Developments-and-Property-Values-UW-Study.pdf>.
- Institute for Housing Studies at DePaul University, "Years later, some Chicago home prices are stuck in 2000," (May 18, 2015); available at <https://www.housingstudies.org/blog/years-later-some-chicago-home-prices-are-stuck-200/>.
- Johnson, J., Bednarz, B., 2002. Neighborhood Effects of the Low Income Housing Tax Credit Program: Final Report. US Department of Housing and Urban Development, Washington, DC.
- Koschinsky, Julia, 2009. Spatial heterogeneity in spillover effects of assisted and unassisted rental housing. *J. Urban Affairs* 31 (#3), 319–347.
- Oakley, Deidre, May 2008. Locational patterns of low-income housing tax credit developments: a sociospatial analysis of four metropolitan areas. *Urban Affairs Rev.* 43 (#5), 599–628.
- Office of Policy Development and Research, 2019. Understanding Whom the LIHTC Program Serves: Data on Tenants in LIHTC Units as of December 31, 2017. US Department of Housing & Urban Development, Washington available at <https://www.huduser.gov/portal/sites/default/files/pdf/LIHTC-TenantReport-2017.pdf>.
- Millar, Jonathan N., Oliner, Stephen D., Sichel, Daniel E., 2016. Time-to-plan lags for commercial construction projects. *Reg. Sci. Urban Econom.* 59, 75–89.
- Nguyen, Mai Thi, August 2005. Does affordable housing detrimentally affect property values? A review of the literature. *Journal of Planning Literature* 20 (#1), 15–26.
- Sampson, R.J., 2012. *Great American City: Chicago and the Enduring Neighborhood Effect*. University of Chicago Press.
- Santiago, Anna M., Galster, George C., Tatian, Peter, 2001. Assessing the property value impacts of the dispersed housing subsidy program in Denver. *J. Policy Anal. Manage.* 20 (1), 65–88.
- Schwartz, A.E., Ellen, I.G., Voicu, I., Schill, M.H., 2006. The external effects of place-based subsidized housing. *Reg. Sci. Urban Econom.* 36, 679–707. <https://doi.org/10.1016/j.regsciurbeco.2006.04.002>.
- State of California. 2014. "Affordable housing cost study," https://www.novoco.com/sites/default/files/atoms/files/ca_development-cost-study_101314.pdf.
- Van Zandt, Shannon, Mhatre, Pratik C., 2009. Growing pains: perpetuating inequality through the production of low-income housing in the Dallas/Fort Worth Metroplex. *Urban Geogr.* 30 (#5), 490–513.
- Woo, Ayoung, Joh, Kenneth, Zandt, Shannon Van, Sep. 2016. Unpacking the impacts of the low-income housing tax credit program on nearby property values. *Urban Stud.* 53 (#12), 2488–2510.
- Young, C., 2016. There doesn't go the neighborhood: low-income housing has no impact on nearby home values [WWW Document]. Trulias Blog. URL: <https://www.trulias.com/blog/trends/low-income-housing/> (accessed 5.3.17).

THE IMPACT OF AFFORDABLE HOUSING ON HOUSING & CRIME IN ORANGE COUNTY

John Hipp, Clarissa Iliff, Emily Owens, George Tita and Seth Williams
Department of Criminology, Law and Society
School of Social Ecology
University of California – Irvine

Produced by the Livable Cities Lab



L I V A B L E
C I T I E S L A B

INTRO

Orange County is facing a critical housing shortage. It is estimated that 65,000 housing units are needed to meet current demand (Orange County Business Council <https://ocbc.org/whos-really-blame-ocs-housing-affordability-crisis/>). This shortage cuts across all categories of housing but is especially acute within the affordable housing sector. There are a number of reasons why the supply of affordable housing is not keeping up with demand. Some are recent, such as increasing material and labor costs along with a disruption in the supply-chain. Some are more endemic, such as long lead times and the high costs associated with the permitting and approval process. The fear that affordable housing will destroy local property values and/or increase crime remains one of the more entrenched barriers to development.

Careful research has shown this not to be the case across a diverse set of communities in America (Galster 2002; Center for Housing Policy 2009; Albright, Derickson and Massey 2013). Two recently published articles found the same: Stacy and Davis (2022) looked at the impact on property values in Alexandria, VA and found a small but statistically significant positive impact on property values. Similarly Voith et al. (2022) have positive spillover effects on surrounding property values in Chicago, IL and Cook County, IL. Closer to home, study participants in San Diego, CA reported having serious concerns over the siting affordable housing in their community, believing that it would both increase crime and reduce property values. But again, no empirical evidence was found to warrant such concerns (Abdel-Samad, et al. 2020.) However, some remain unconvinced of results from other places arguing that, in this case, Orange County, is sufficiently different that such research sheds no light on the local reality.

This research does not and cannot comment on the complexities of why it takes so long to build housing, or why it is so expensive. This research examines two simple questions: First, what happens to local housing values following the placement of affordable housing in Orange County? Second, what happens to local levels of crime following the placement of affordable housing in Orange County?

DEFINING AFFORDABLE HOUSING

The category of housing defined as “affordable housing” for the purpose of this research is described as rental housing units that serve Orange County households that fall within the 30%-120% Average Median Income (AMI) category. This equates to an annual income of roughly \$26,000 - \$83,000 based on 2019 standards. Our data includes housing units that serve special needs populations, homeless, disabled, other, that might fall below the 30% AMI threshold including housing for what is generally described as permanent supportive housing units. Emergency, temporary, transitional and other specialized categories of shelter/housing is excluded from our study.

WHERE IS AFFORDABLE HOUSING IN ORANGE COUNTY?

We worked closely with the local housing authorities (County, Anaheim, Garden Grove, and Santa Ana) in order to locate affordable housing. The City of Irvine and several other public sources maintain publicly accessible lists that identify affordable housing opportunities

throughout the County or within specific jurisdictions. The list we created was shared with local developers of affordable housing including American Family Housing, Community Development Partners, Jamboree Housing, and National CORE to review the database of affordable properties.

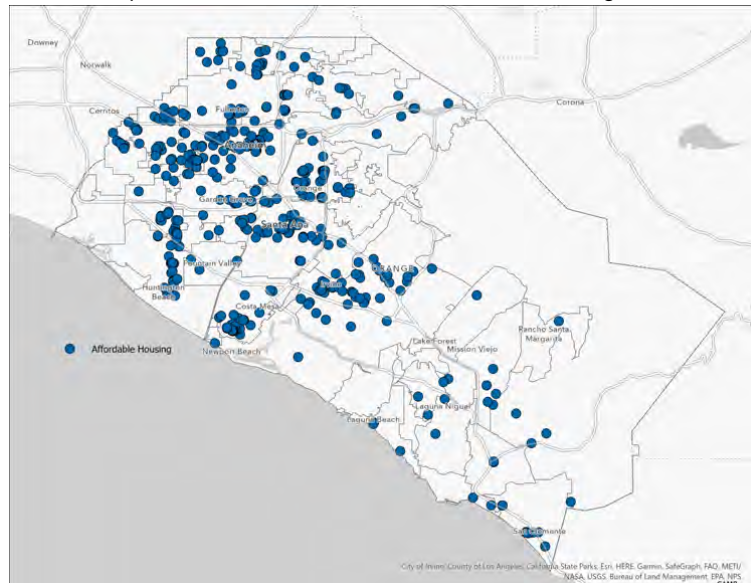
This resulted in additional locations being added to our master list. Finally, the list was augmented by conducting a web search for housing that accepted income-based housing vouchers from other sites including <https://affordablehousingonline.com/>.

The augmented list was again vetted by our partners in the Housing Authority and Development community resulting in a list of 371 distinct affordable housing units used in the data analysis.

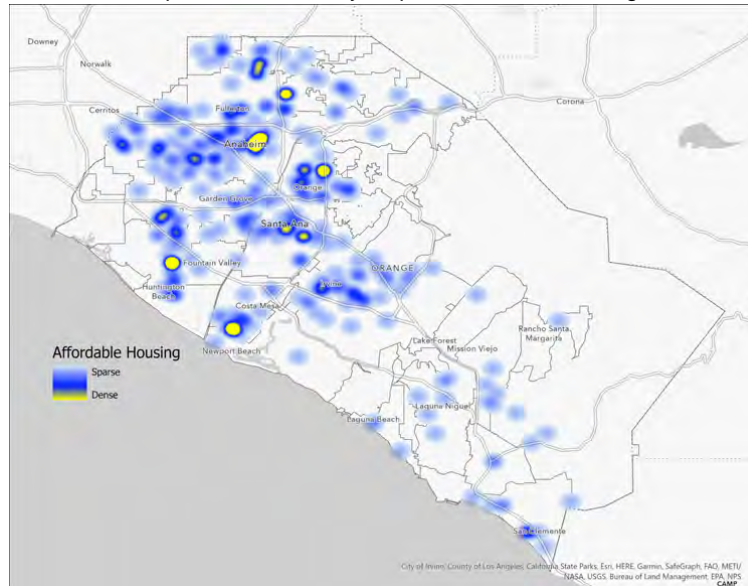
Map 1 displays the location of each unit and Map 2 uses the locations to demonstrate the density of affordable housing throughout Orange County. Affordable housing is located in most populated areas of the county, but areas of density emerge primarily in the northern sections of the county.

The density map is an effective way to support the importance of the effort to “de-concentrate” affordable housing away from highly impacted areas.

Map 1 – Locations of Individual Affordable Housing Units



Map 2- Kernel Density Map of Affordable Housing



DEMOGRAPHIC AND ECONOMIC DATA

Table 1 presents demographic and economic measures from the 2010 American Community Survey at the level of census block groups for both places with affordable housing and those without. On average, places with affordable housing have a larger Hispanic population, lower median household income, fewer homes valued over \$750,000. However, 18%, or nearly 50 of the census block groups with affordable housing, are places where average home values are \$750,000 or greater.

Still, as shown by both the maps and the summary data, affordable housing is located in areas on the lower end of the economic scale and whose residents are disproportionately members of groups that do not identify as Non-Hispanic White.

TABLE 1 – Social and Economic Characteristics of Orange County Block Groups (2010)

	Without Affordable Housing		With Affordable Housing	
	Average	SD	Average	SD
Hispanic (%)	28.98%	0.25	46.42%	0.28
Non-Hispanic White (%)	47.29%	0.26	30.20%	0.22
Non-Hispanic African American (%)	1.50%	0.03	2.13%	0.03
Non-Hispanic Asian (%)	18.73%	0.17	18.06%	0.16
Non-Hispanic Two or More Races (%)	2.86%	0.03	2.29%	0.03
Non-Hispanic Other (%)	3.29%	0.03	2.91%	0.03
Median Household Income	\$104,063	\$42,648.58	\$71,645.95	\$30,586.66
Moved in the Last Year (%)	11.34%	9.20%	13.09%	9.88%
Average Household Size, Overall	3.07	0.85	3.23	0.91
Average Household Size, Owner	3.03	0.89	3.36	1.10
Average Household Size, Renter	3.34	1.23	3.16	1.05
Median Rent	\$2,018	\$568.93	\$1,559	\$376.00

English-Only Speaking (%)	59.90%	24.64%	43.27%	23.28%
Value Under \$100,000	3.76%	10.96%	8.38%	21.13%
Value (\$100,000 - \$150,000)	0.95%	4.22%	1.61%	7.81%
Value (\$150,000 - \$200,000)	1.02%	4.15%	1.21%	4.58%
Value (\$200,000 - \$300,000)	3.66%	10.30%	4.96%	10.85%
Value (\$300,000 - \$400,000)	6.76%	11.59%	9.65%	15.96%
Value (\$400,000 - \$500,000)	11.85%	15.66%	15.81%	18.26%
Value (\$500,000 - \$750,000)	35.94%	25.89%	39.74%	27.20%
Value (\$750,000 - \$1,000,000)	19.84%	21.25%	11.11%	15.99%
Value (\$1,000,000 - \$1,500,000)	8.95%	14.62%	4.42%	11.35%
Value (\$1,500,000 - \$2,000,000)	3.01%	7.84%	1.04%	4.20%
Value (\$2,000,000+)	4.25%	13.21%	2.07%	8.72%
Number of Block Groups	1548		271	

HOUSING VALUES

WHAT DID WE DO?

In order to evaluate claims that affordable housing will reduce local property values, we obtained data on all residential home sales in Orange County between 2001 and 2020. We focused our analysis on homes sold within two miles of affordable housing developments and within three years before or after the development's opening date. We focused on neighborhoods where we observed active development of affordable housing from 2001 to 2020 - every neighborhood in our sample had homes sold both before and after the opening of an affordable housing development. There were a total of 1,158,258 residential properties bought and sold around 229 affordable housing developments in our analysis sample.

We focused on two measures of home values: the total sales price, and the price per square foot. We also made two adjustments to these values in order to make meaningful comparisons before and after the affordable housing development opened. First, we adjusted the value of the sales price to account for inflation, translating all prices into 2020 values. Second, we conducted a statistical procedure to separate the impact of the affordable housing development from other changes in the Orange County housing market that are unrelated to any specific neighborhood conditions. This is particularly important given the influence of the 2008 recession, when median home values fell to 57% of their 2005 value, and the post-2018 period where the yearly growth rate in median home sales price has doubled, in real terms, every year.

In practice, this involves identifying all homes located more than three miles from any affordable housing site in our sample. We then estimated the average sales price, and price per square foot, of these homes in each of the 228 months from Jan 2002 to December 2021. Finally, we returned to our analysis sample, and subtracted the relevant average “more than three miles away” sales price from each price of each home sold within 2 miles of an affordable housing development in order to create an “adjusted sales price.” Changes in this adjusted sales price reflect the change in local home values around affordable housing that do not depend on changes in the overall tightness of the Orange County housing market.

WHAT DID WE FIND?

Based on this adjusted home value, we find that, on average, the observed sales price of the homes nearby (as shown in Figure A1) increased following the citing of affordable housing. Within one-fifth ($\frac{1}{5}$) of a mile of the development, the observed home sales price increased by about \$15,800 (when considering average home size, this is roughly \$9.45 per square foot). Similarly, among homes sold about $\frac{1}{2}$ mile away, the observed increase in sales price was about \$14,200 (or \$5.56 per square foot), whereas homes sold one mile away increased by \$13,500 (or \$2.99 per square foot). This is generally not consistent with concerns about affordable housing depressing home values.

Figure H1 shows the relationship between affordable housing and local home sales prices in more detail, tracing the average home sales price before and after an affordable housing site opens, adjusted for county housing trends, for homes adjacent to, and further away from, the development site.

Prior to the development, homes less than $\frac{1}{5}$ of a mile from the development site were sold for at least \$30,000 below typical Orange County prices, and values increased by about \$10,000 for every tenth of a mile further from the location. Homes sold between one and 2 miles from the site of a future affordable housing project were similar in value to the rest of Orange County. In the three years following the opening of the affordable project, however, homes within $\frac{1}{5}$ of a mile of the site all increased in value, with the biggest increase observed in the homes closest to the project. We observe a general increase of roughly \$10,000 in home values within 1.5 miles of the development, which slowly tapers off as we move further and further away.

Real estate professionals often focus on price per square foot to reflect the desirability of housing, which directly accounts for the impact of living space on total sales price. Figure H2

converts figure H1 into price per square foot. We conclude that this more robust measure of home value does not suggest that affordable housing depresses neighborhood quality. Homes immediately adjacent to affordable housing projects increase in value by roughly \$15 per square foot, and by approximately \$2-\$5 per square foot about $\frac{2}{3}$ of a mile away. We observe no substantial or consistent difference in the price per square foot on homes sold more than $\frac{3}{4}$ of a mile from affordable housing.

DOES THE NEIGHBORHOOD MATTER?

Placing affordable housing in already affordable neighborhoods may impact the local environment in a different way than affordable housing introduced into a higher income neighborhood. In order to evaluate claims that affordable housing may be particularly detrimental to the quality of higher income places, we examined the neighborhood poverty rates in around all successfully places affordable housing developments in Orange County, and selected the developments in the top 25% of poverty rates (the highest poverty rates) and the bottom 25% of poverty rates (the lowest poverty rates). On average, affordable housing developments places in the top 25% were in neighborhoods with a 26% poverty rate, and places in the bottom 25% had a 6.2% poverty rate.

We then repeated our analysis of overall adjusted sales price and adjusted price per square foot in neighborhoods with the lowest and highest levels of poverty where affordable housing has been placed. As shown in figures H3 and H4, opening affordable housing in places with higher poverty rates has a modest positive impact on the value of surrounding homes. Relative to the rest of Orange County, the affordable housing opened in the highest poverty rate places was associated with a \$15 increase in price per square foot in the immediate vicinity of the development, which falls to a roughly \$5 increase in price per square foot up to two miles away.

Figure H5 reveals that, on average, home values increase in more affluent in areas following the opening of affordable housing. The only exception is the for homes that are adjacent to affordable housing and sold in the three years after a development opens, sold for about \$15,000 less than homes sold in the three years before. However, Figure H6 reveals that this decrease in sales price is offset by an increase in price per square foot of \$15. Thus, the supposed negative impact on sales price is simply an artifact of the size of the homes that sold before versus after the opening of affordable housing. While the houses that sold prior to the opening were larger, the homes that sold following were smaller but more valuable as measured by square footage. The increase in value per square foot is found across the study area. The \$15 increase in the sales price per square foot of nearby homes decreases to a roughly \$3 increase in price per square foot, relative to the rest of the county, more than $\frac{2}{3}$ of a mile away.

Overall, the data on actual home sales do not support the claim that affordable housing depresses local home values. We also do not find evidence that placing affordable housing in relatively wealthier neighborhoods has a substantially different effect on the price per square foot of nearby homes than affordable housing in higher poverty neighborhoods. Homes that have the highest increase in value are located within $\frac{2}{3}$ of a mile of the opening affordable housing development.

CRIME

WHAT DID WE DO?

We made a significant effort to collect crime data from as many cities in the county as possible. The earlier crime data for this study were collected as part of the Southern California Crime Study (SCCS) (<https://ilssc.soceco.uci.edu/southern-california-crime-study/>). In that study, the researchers made an effort to contact each police agency in the Southern California region^[1] and request address-level incident crime data for the years 2005-2012.^[2] Many of the agencies were willing to share their data with us. The data come from crime reports officially coded and reported by the police departments.

We classified crime events into six Uniform Crime Report (UCR) categories: homicide, aggravated assault, robbery, burglary, motor vehicle theft, and larceny. Crime events were geocoded for each city separately to latitude-longitude point locations using ArcGIS 10.2, and subsequently aggregated to blocks. The average geocoding match rate was 97.2% across the cities. These data have been used in several prior studies (Kubrin and Hipp 2016; Hipp and Kubrin 2017).

The LCL research team and its partners from the Orange County United Way and Jamboree Housing then made attempts to update the original data set by reconnecting with all local law enforcement agencies in Orange County. The data request mimicked the original request for crime times and locational data. The research team used the same process to geocode the data, though many agencies provided data that was already geocoded to the precise location of the event. Table 2 presents the agency and years from which we have the crime data.

Table 2. Crime Data by Year and Law Enforcement Agency

City Name	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Aliso Viejo	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Anaheim								X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brea											X	X	X	X	X	X	X	X	X	X	X
Buena Park										X	X	X	X	X							
Costa Mesa																X	X	X	X	X	X
Cypress																					X
Dana Point	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Fountain Valley																X	X	X	X	X	X
Fullerton							X	X	X	X	X	X	X	X	X						
Garden Grove						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Huntington Beach						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Irvine					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
La Habra						X	X	X	X	X	X	X	X	X	X						
La Palma															X	X	X	X	X	X	X
Laguna Beach									X	X	X	X	X	X	X						
Laguna Hills	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Laguna Niguel	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Laguna Woods	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Lake Forest	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Los Alamitos																					
Mission Viejo	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Newport Beach	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
Orange										X	X	X	X	X	X	X					
Placentia																				X	X
Rancho Santa Margarita	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Rossmore	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
San Clemente	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
San Juan Capistrano	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Santa Ana	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Seal Beach	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
Stanton	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Tustin						X	X	X	X	X	X	X	X	X	X						
Villa Park	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Westminster							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yorba Linda	X	X	X	X	X	X	X	X	X	X	X	X	X								

After aggregating the crime data to census blocks, we joined the data to the locations for affordable housing placement. We computed the distance around each housing placement and determined the distance of each block from the housing up to one mile. Based on the year of the housing placement, we determined the amount of crime within a block during the year of placement, and then each of the three years before and after placement.

Our analyses compared the amount of crime in blocks both before and after the housing placement. We assessed these differences for two violent crimes: aggravated assault and robbery. We also assessed these differences for three property crimes: burglary, motor vehicle theft, and larceny (theft). For these analyses, we determined which blocks were within three different buffers of the housing placement: within 1/5 of a mile; between 1/5 and 1/2 mile; and between 1/2 and 1 mile.

[1] We define the region as including five counties: San Bernardino, Riverside, Los Angeles, Orange and San Diego.

[2] 61.8% of the cities have data for all or seven of the eight years in this range. For remaining cities, coverage varies year to year.

WHAT DID WE FIND?

Regarding the two violent crimes, we found no evidence of an increase after the placement of housing. In Figure C1 we see that the number of aggravated assaults in blocks within 1/5 of a mile actually decline very slightly after placement, whereas there is effectively no difference at longer distances. In Figure C2 for robberies, the number of robberies actually slightly declines after placement at all distances from the housing. Turning to the property crimes, Figure C3 for burglaries tells the same story: the number of burglaries after placement actually slightly declines at all distances from the housing. The one exception is in Figure C4, where the number of motor vehicle thefts slightly increases after placement at all distances. This is a very modest effect, as the average block experiences an additional 1/10 of a motor vehicle theft after placement. In Figure C5 there is no change in larcenies after placement within 1/5 of a mile, and very slight increases at longer distances.

DOES NEIGHBORHOOD MATTER?

We also assessed whether the poverty level of the neighborhood impacted the relationship between affordable housing placement and changes in crime. For these models we aggregated the violent crimes into one measure, and the property crimes into another. In Figure C6 we see no evidence that violent crimes increase after placement in high poverty neighborhoods. There are actually slightly fewer violent crimes within 1/5 of a mile, and little difference at longer distances. There is some evidence of an increase in property crime in high poverty neighborhoods after placement as seen in Figure C7. The average block within 1/5 mile has about one more property crime every two years, and blocks from 1/5 to 1/2 mile have about one more property crime every three years.

In low poverty tracts, it appears that there is little change in crime after placement of housing. Figure C8 shows that there is actually a very slight drop in violent crimes within 1/5 to 1/2 mile of housing after placement, but no difference at other distances. In Figure C9 we see that for blocks within 1/5 mile of a placement there is about 0.1 more property crimes per year—that is, one more property crime every 10 years. There is no change for blocks from 1/5 to 1/2 mile, and blocks from 1/2 to 1 mile have about one more property crime every 5 years.

CONCLUSIONS

The siting of affordable housing does not negatively affect housing prices in Orange County. In fact, we see modest increases in both sales prices and price per square footage county wide, with the most pronounced impact in places categorized with higher rates of poverty.

The siting of affordable housing reduces most types of crime, especially violent crime. The overall impact is best described as "null", as the changes in crime are measured in a fraction of a single crime per year.

Prior to collecting and analyzing the data, we completed a literature review of similar studies conducted in other parts of the United States. The results from our analysis for Orange County add to what has been found elsewhere: The placement of affordable housing does not negatively impact the surrounding community, and in many ways, it enhances both local property values and increases public safety.

REFERENCES

Abdel-Samad, Mounah, Williams, M. Adams, B., and K. DeConnick. 2020. "Community Perceptions of Affordable Housing in San Diego." https://crs.sdsu.edu/resources/files/community_perceptions_of_affordable_housing_in_san_diego_research_report_dec2020.pdf

Albright, Len, E.S. Derickson and Douglas S. Massey 2013. "Do Affordable Housing Projects Harm Suburban Communities? Crime, Property Values, and Taxes in Mount Laurel, NU. City and Community.12:89-112.

Center for Housing Policy. 2009. "Don't Put it Here!: Does Affordable Housing Cause Nearby Property Values to Decline?" Washington, DC: Center for Housing Policy.

Galster, George. 2002. "A Review of Existing Research on the Effects of Federally Assisted Housing Programs on Neighboring Residential Property Values." Detroit:Wayne State University.

Hipp, John R. and Charis E. Kubrin. 2017. "From Bad to Worse: How Changing Inequality in Nearby Areas Impacts Local Crime." Russell Sage Foundation Journal 3:129-151.

Kubrin, Charis E. and John R. Hipp. 2016. "Do Fringe Banks Create Fringe Neighborhoods? Examining the Spatial Relationship between Fringe Banking and Neighborhood Crime Rates." Justice Quarterly 33:755-784.

Stacy, Christina and Christopher Davis. 2022. "Assessing the Impact of Affordable housing on Nearby Property values in Alexandria, Virginia." <https://www.medfordoregon.gov/files/assets/>

public/planning/documents/6-steps/learningresources/all-attachments/other-assessing-the-impact-of-affordable-housing-on-nearby-property-values-urban-land-institute.pdf

Voith, Richard, Liu, J., Zielenbach, S., Jakobovics, Andrea., An, B., Rodnyansky, S.W., Orlando, W., and Raphael W. Bostic. 2022. "Effects of Concentrated LIHTC Development on Surrounding House Prices." Journal of Housing Economics. <https://www.sciencedirect.com/science/article/pii/S1051137722000134>

Figure A1 – Summary of Housing Overall Housing Prices and Distance to Affordable Housing

Distance	Home Sale Price Difference after Affordable Housing Established
.2 Miles	\$15,817.42 (\$132.73)
½ Mile	\$14,259.58 (\$53.01)
1 Mile	\$13,514.58 (\$17.82)
2 Miles	\$10,685.99 (\$35.85)

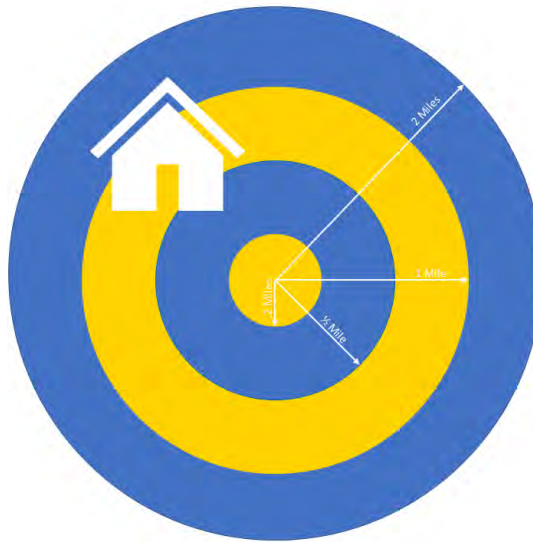


Figure H1. Overall Housing Prices



Figure H2. Price Per Square Foot Overall

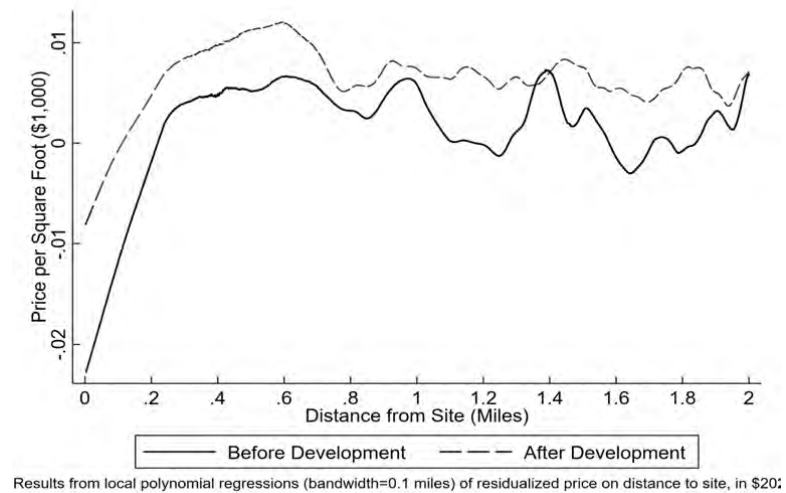


Figure H3 - Housing Prices – High Poverty Tracts

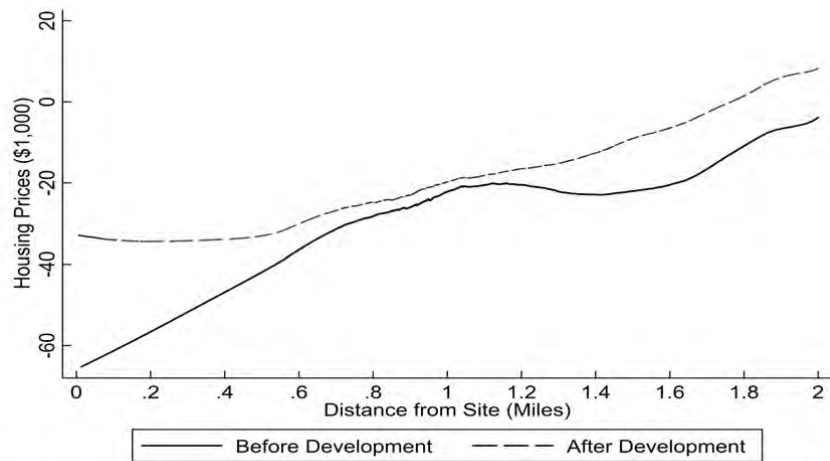


Figure H4 - Price Per Square Foot - High Poverty Tracts

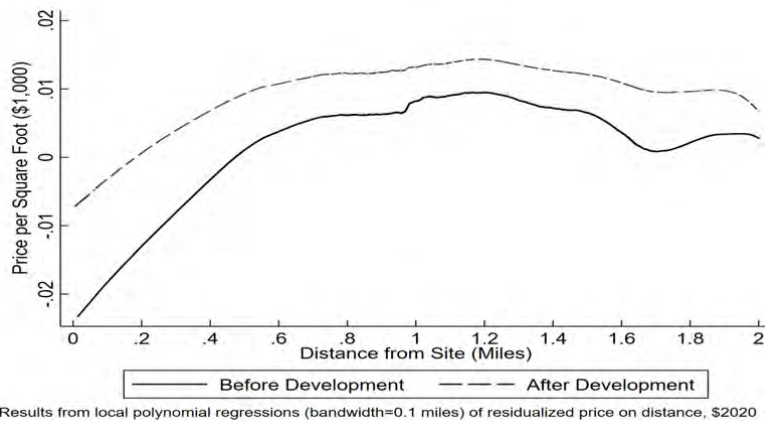


Figure H5 - Housing Prices – Low Poverty Tracts

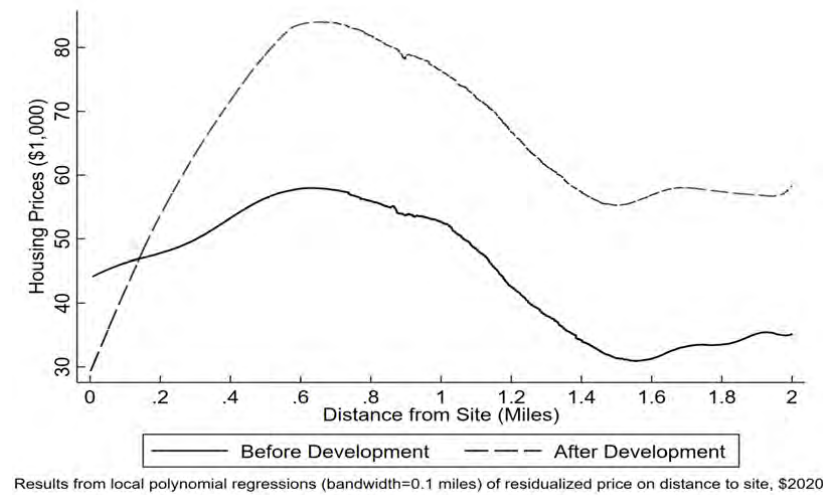


Figure H6 - Price Per Square Foot - Low Poverty Tracts

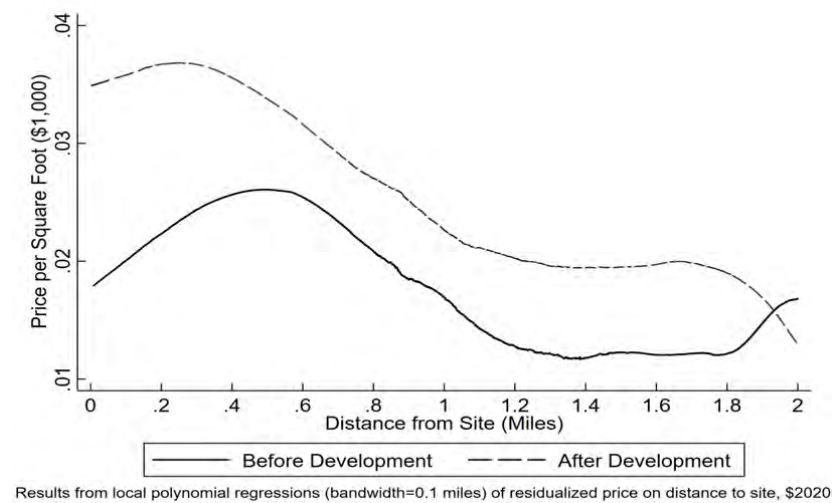


Figure C1 – Aggravated Assaults, Overall

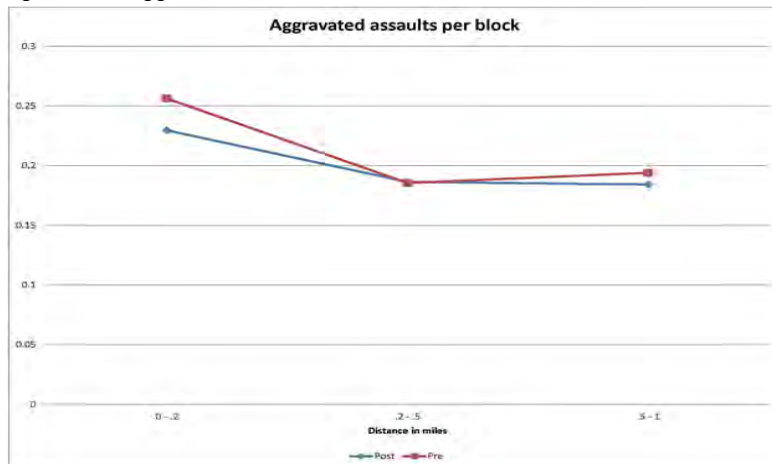


Figure C2 – Robberies, Overall

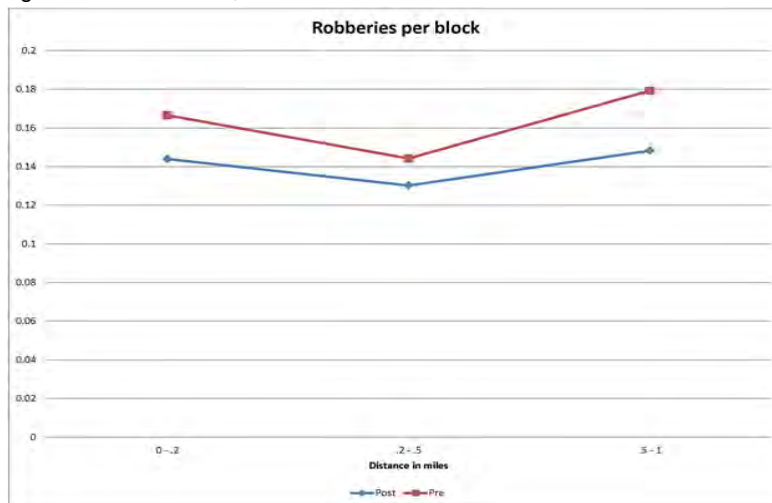


Figure C3 – Burglaries, Overall

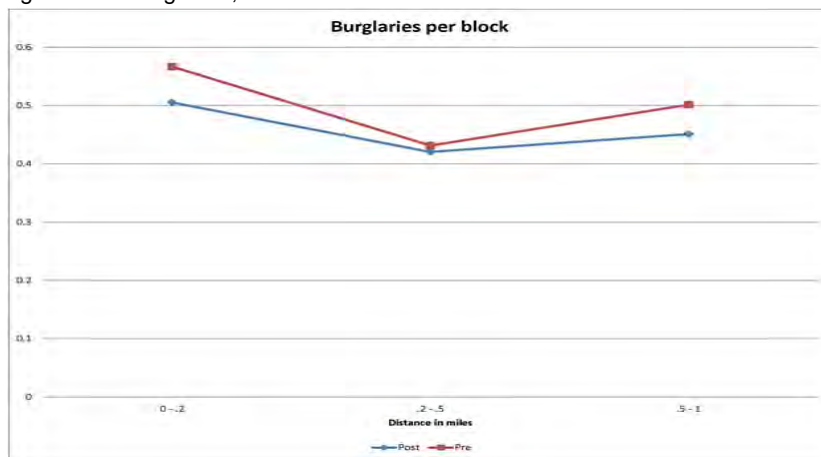


Figure C4 – Motor Vehicle Theft, Overall

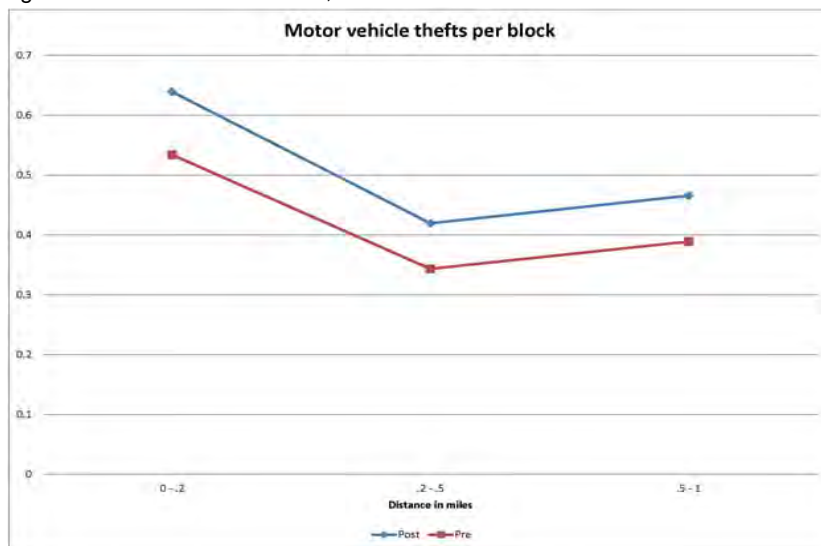


Figure C5 – Larceny, Overall

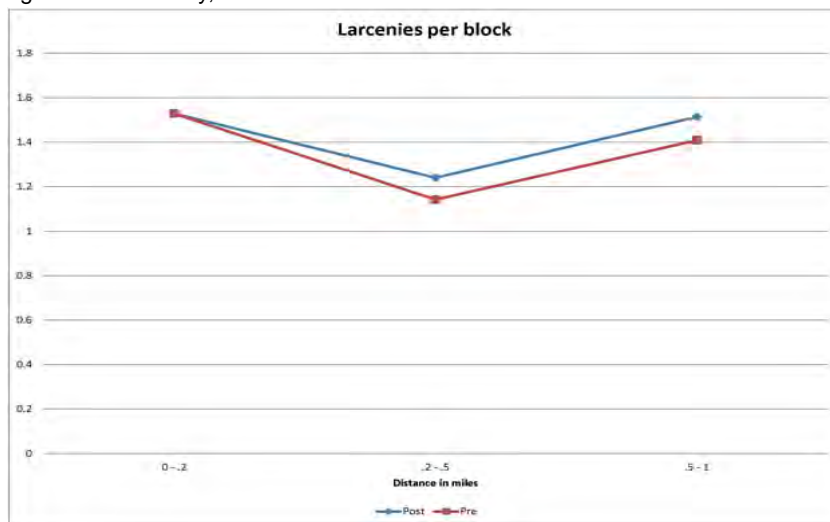


Figure C6 – Violent Crimes in Higher Poverty Places

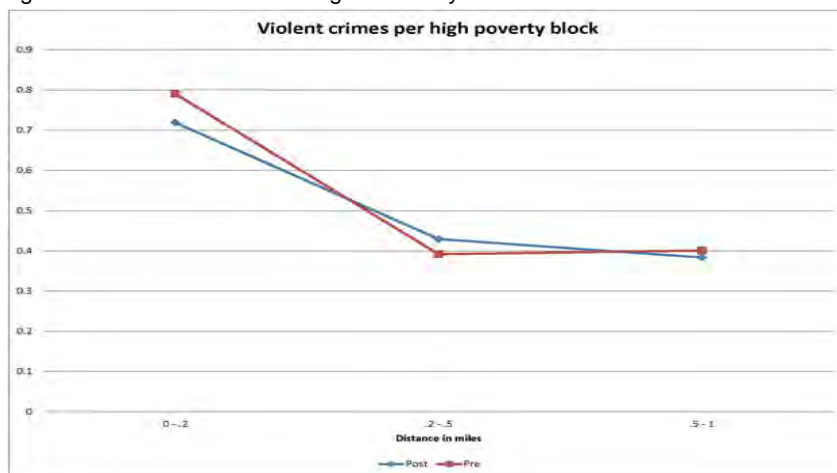


Figure C7 – Property Crimes in Higher Poverty Places

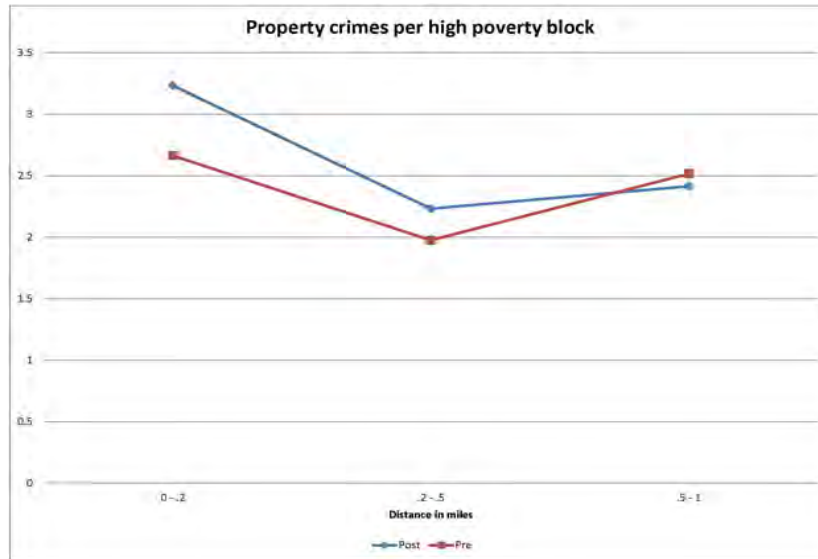


Figure C8 – Violent Crimes, Lower Poverty Places

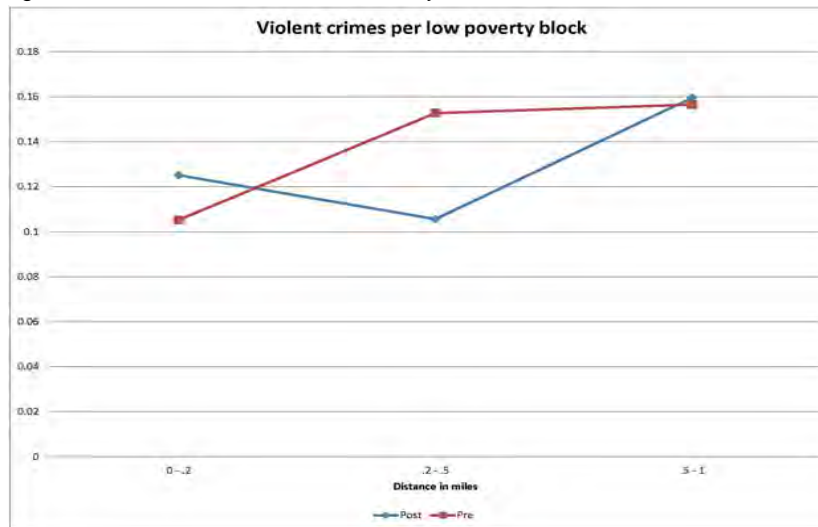
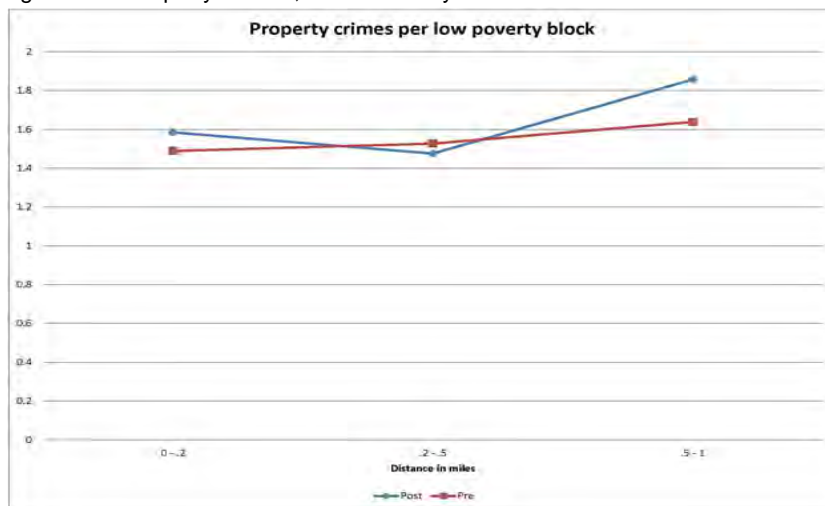


Figure C9 – Property Crimes, Lower Poverty Places



METROPOLITAN HOUSING AND COMMUNITIES POLICY CENTER



Assessing the Impact of Affordable Housing on Nearby Property Values in Alexandria, Virginia

Christina Stacy and Christopher Davis

April 2022

Stable, affordable housing provides benefits to both people with low incomes and local economies overall. For individuals, it reduces homelessness, lifts people out of poverty, and improves health outcomes (Lubell, Crain, and Cohen 2007). It also improves youth educational outcomes and long-term earnings and reduces the likelihood of later adult incarceration (Andersson et al. 2016; Fischer 2015; Cunningham and McDonald 2012). Affordable housing can help maintain health, daily functioning, quality of life, and maximum independence for adults as they age (Spillman 2012). And it supports employment growth and stability, because low-wage workers are less willing to travel long distances for minimum wage jobs (Altali 2017; Chakrabarti 2014).

Despite these benefits, property owners who live near proposed affordable housing developments often oppose such projects, citing fear that the developments will cause their property values to decline (Scally 2014). However, empirical research provides little evidence that subsidized housing depresses neighborhood property values (Ellen et al, 2007; Galster 2002; Center for Housing Policy 2009). Projects financed through the Low-Income Housing Tax Credit (LIHTC), the largest affordable housing financing program in the United States, have been associated with an immediate positive increase of 3.8

Data provided by Zillow through the Zillow Transaction and Assessment Dataset (ZTRAX). More information on accessing the data can be found at <http://www.zillow.com/ztrax>. The results and opinions in this brief are those of the authors and do not reflect the position of Zillow Group.

Dr. Christina Stacy is a voluntary member of the Alexandria Housing Development Corporation, an affordable housing nonprofit developer in Alexandria, Virginia.

percentage points in nearby property values (Ellen et al. 2007). Another study found that LIHTC properties, on average, revitalize low-income neighborhoods, increasing house prices by 6.5 percent, lowering crime rates, and attracting racially and income-diverse populations (Diamond and McQuade 2016). However, some studies have found that LIHTC developments in higher-income areas are associated with house price declines (Diamond and McQuade 2016; Woo, Joh, and Van Zandt 2016). Other types of affordable developments, such as those funded by new markets tax credits, have not been found to depress property values and can increase property values under certain conditions (Theodos et al. 2021).

It is unclear what conditions and which types of affordable housing developments affect property values differentially, and many local governments require their own analyses to help inform community debates. To add to this knowledge base, we use Zillow's assessor and real estate database to estimate the relationship between affordable housing developments in Alexandria, Virginia, and sales prices of nearby single-family homes, duplexes, cooperatives, and residential condominiums between 2000 and 2020 (Zillow 2021). We use a repeat sales model that estimates the change in sales prices before and after an affordable housing development is built near a home. The model compares those changes with changes in the sales prices of other residential units in Alexandria, thus isolating the relationship between the development and changes in property values.

We find that affordable units in the city of Alexandria are associated with a small but statistically significant *increase* in property values of 0.09 percent within 1/16 of a mile of a development, on average—a distance comparable to a typical urban block. These results are robust to other radii and comparison groups, such as comparing homes within a block with homes within a few blocks or comparing homes within a block with homes between half a mile and one mile away. When we remove set-asides—defined as affordable housing units within market-rate developments—the coefficient increases to 0.11 percent, confirming that set-asides are not driving these results. And when we split the effects by the baseline income of neighborhoods to see whether affordable housing construction in lower-income neighborhoods is driving the results, we find the opposite of prior research: in Alexandria, affordable housing in higher-income neighborhoods has a positive and highly significant effect on surrounding home values, as does affordable housing in lower-income neighborhoods. This calls into question prior findings that affordable housing in high-income areas necessarily causes nearby property values to decline.

The positive relationship between affordable units and nearby home sales in Alexandria may reflect strong local oversight and the close relationship between the city and affordable housing developers. Various municipal measures help ensure that new or preserved developments fulfill strict requirements for design, development, maintenance, and operation. Other cities have shared that they are unhappy with affordable housing in their jurisdictions, which they believe is because they have little local oversight over the developments.¹ Alexandria's close partnerships with affordable housing developers and oversight of affordable housing may explain the positive effects found here.

These findings show that multifamily affordable housing developments in Alexandria do not cause a decline in nearby property values, as some fear, but are actually associated with a small but statistically

significant increase in nearby values. This should ease residents' concerns about their impact on neighborhoods and bolster support for increased development.

Background

Alexandria, Virginia, a suburb of Washington, DC, had an estimated population of 159,200 in 2020. The city lost 78 percent of its market-rate affordable units—defined as nonsubsidized rental units affordable to households earning 60 percent of the area median income (AMI)—between 2000 and 2020.² 2019 estimates generated by the Urban Institute predict that the city will need an additional 13,600 housing units to accommodate household growth from 2015 to 2030 (Turner et al. 2019), and most of those units need to be affordable to middle- and low-income households.

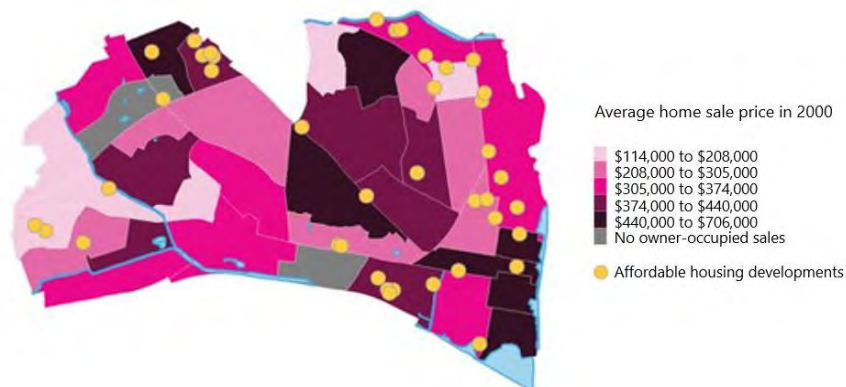
However, producing and preserving affordable units can be a challenge as some residents oppose their development on the grounds that it will depress their property values.³ To explore whether this is true, we estimate the relationship between the development of 40 multifamily affordable housing developments that began providing subsidized rental units between 2000 and 2020 and nearby property values.

The developments included in our analysis are shown in figure 1 and table 1. This list includes 6 public housing developments, 18 market-rate developments that include affordable set-asides, and 16 developments that were built or preserved by affordable housing developers and include all affordable units. Some of the developments were new construction; others were converted to affordable housing or preserved through redevelopment in partnership with a market-rate developer.

Affordability levels in the developments range from units affordable to families whose incomes are between 0 and 30 percent of AMI to those affordable to families with incomes between 60 and 80 percent of AMI. The number of affordable units in each development ranges from 2 to 244 and accounts for 1 to 100 percent of the total units in the development. To account for this range, our model uses the number of affordable units as the treatment variable, rather than the number of developments.

FIGURE 1

**Multifamily Affordable Housing Developments in Alexandria, Virginia, between 2000 and 2020,
Overlaid with Average Home Sale Price in 2000**



Source: Authors' calculations from city of Alexandria administrative data and Zillow ZTRAX home sales data (Zillow 2021). Home sale price is inflation-adjusted to 2020 dollars.

TABLE 1

Multifamily Affordable Housing Developments in Alexandria, Virginia, Where Assistance Began between 2000 and 2020

Project name	Year assistance began	Set-asides	Public housing	Origin	Level of affordability of affordable units (percent of AMI)	Committed affordable units	Total units in complex	Percent affordable
Potomac West Apartments	2001	No	No	Conversion to affordable housing	60-80	45	60	75%
Lynhaven Apartments	2002	No	No	Conversion to affordable housing	50-60	28	28	100%
Chatham Square	2004	No	Yes	Preservation through redevelopment	0-30	52	151	34%
Northampton Place	2005	Yes	No	New construction	60	12	275	4%
BWR/Reynolds	2005	No	Yes	New construction	0-30	18	18	100%
BWR/Whiting	2005	No	Yes	New construction	0-30	24	24	100%
Beverly Park Apartments	2005	No	No	Conversion to affordable housing	60	33	33	100%
Arbelo Apartments	2006	No	No	Conversion to affordable housing	60	34	34	100%
Lacy Court Apartments	2006	No	No	Conversion to affordable housing	40-60	44	44	100%
ParcView Apartments	2006	No	No	Conversion to affordable housing	60	120	149	81%
Carlyle Place	2007	Yes	No	New construction	60	13	326	4%
BWR/Braddock	2007	No	Yes	New construction	0-30	6	6	100%
Halstead Tower	2007	Yes	No	New construction	60	9	174	5%
Meridian at Eisenhower Station	2007	Yes	No	New construction	60	15	369	4%
The Alexander	2007	Yes	No	New construction	60	13	275	5%
Longview Terrace	2007	No	No	Conversion to affordable housing	60	41	41	100%
The Tuscany Apartments	2007	Yes	No	New construction	60	2	104	2%
The Station at Potomac Yard	2009	No	No	New construction	60-80	64	64	100%
Alexandria Crossing at Old Dominion	2009	No	Yes	New construction	0-30	36	54	67%

Project name	Year assistance began	Set-asides	Public housing	Origin	Level of affordability of affordable units (percent of AMI)	Committed affordable units	Total units in complex	Percent affordable
Alexandria Crossing at West Glebe	2009	No	Yes	New construction	0-30	48	48	100%
Del Ray Central	2010	Yes	No	New construction	60	9	141	6%
Beasley Square	2011	No	No	New construction	60	8	8	100%
Post Carlyle Square II	2012	Yes	No	New construction	60	6	344	2%
Old Town Commons	2013	No	Partial	Preservation through redevelopment	0-30	134	379	35%
Station 650 at Potomac Yard	2015	Yes	No	New construction	60	8	186	4%
The Bradley	2015	Yes	No	New construction	60	10	159	6%
Notch 8	2015	Yes	No	New construction	60	12	252	5%
Parc Meridian at Eisenhower Station	2016	Yes	No	New construction	60	33	505	7%
Jackson Crossing	2016	No	No	New construction	60	78	78	100%
Southern Towers	2016	Yes	No	Conversion to affordable housing	55-60	105	2,184	5%
The Thornton	2018	Yes	No	New construction	60	24	443	5%
St. James Plaza	2018	No	No	New construction	40-60	93	93	100%
Silverado Alexandria Memory Care	2018	Yes	No	New construction	0-80	2	66	3%
Gables Old Town North	2019	Yes	No	New construction	60	9	232	4%
Ellsworth Apartments	2019	No	No	Conversion to affordable housing	50-60	20	20	100%
The Nexus at West Alex	2019	No	No	New construction	40-60	74	74	100%
Parkstone	2020	No	No	Conversion to affordable housing	60-80	244	326	75%
The Foundry	2020	Yes	No	New construction	60-80	5	520	1%
Denizen Apartments at Eisenhower Square	2020	Yes	No	New construction	60	13	336	4%
The Bloom	2020	No	No	New construction	40-60	97	97	100%

Source: City of Alexandria administrative data.

TABLE 2

Descriptive Statistics of Census Tracts with and without Affordable Units in Alexandria, Virginia

	Never had affordable housing units between 2000 and 2020	Had affordable housing units between 2000 and 2020	Had affordable set-aside units between 2000 and 2020	Had affordable units that were not set-asides between 2000 and 2020
Population	2,978	4,408	3,078	4,705
Median household income	\$86,360	\$69,783	\$56,662	\$72,718
Unemployment	2.70%	3.43%	3.81%	3.34%
Percentage in poverty	7.22%	11.15%	10.01%	11.41%
Share of people of color	44.93%	53.63%	52.10%	53.86%

Sources: Authors' calculations from city of Alexandria administrative data and the 2000 Census.

Notes: Numbers reflect weighted averages, weighted by the total number of affordable units in the census tract between 2000 and 2020.

Methods

Our primary analysis uses an analytic sample that includes properties that were sold more than once between 2000 and 2020 within the city of Alexandria and properties that were sold more than once outside of the city that were also within 1 mile of an affordable housing development in our sample (i.e., properties just outside the city's borders located near affordable housing developments). We drop sales that were greater than \$10 million since they appear to be data errors rather than true sales.

The main model estimates the linear relationship between the natural log of sales prices within 1/16 of a mile of each affordable housing development, before and after the year the assistance began—compared with all other properties in the city that sold more than once—while controlling for housing characteristics by incorporating a fixed effect, or dummy variable, for each property. This “repeat sales” model strives to eliminate omitted variable bias by examining multiple sales of the same properties over time. This controls for attributes about each property that do not change over time. We also control for changes in the housing market at the city level to account for overall trends in the housing market.

The treatment variable in the regression is the number of affordable units in each development. This allows us to weight the development by size (or number of affordable units) and allows developments with more affordable units to count for more than ones with a small number of affordable units.

To examine the spatial impacts, we also estimate mutually exclusive treatment effects for each 1/16-mile ring around a project, up to 1 mile. This analysis allows us to observe the geographic relationship between affordable housing and nearby property values over space. If a property is within 1 mile of more than one development, our model counts the affordable units in both of those developments in the treatment variable.

Finally, we conduct a series of checks to ensure that our results are robust to alternative treatment and control radii. This includes increasing the size of each treatment variable and including a development window control two years before and after the development opened to account for anticipatory effects and to give residents time to move in.

Data

We use two main sources of data for this analysis: administrative data from the city of Alexandria about multifamily affordable housing developments that began assistance between 2000 and 2020 and sales data from the Zillow Transaction and Assessment Dataset (ZTRAX) (Zillow 2021). These data are available from 2000 to 2020 and contain multiple characteristics related to sales and building parcels, including the number of units, year the building was built, size of the parcel, sale amount, and sale type.

Results

We find that affordable housing units in Alexandria are associated with an increase in property values of 0.09 percent within 1/16 of a mile of a development, on average (table 3). This effect is statistically significant at the 1 percent level, roughly meaning that there is a 99 percent chance of a positive value.

TABLE 3

The Relationship between Affordable Housing and Property Values

Average treatment effects for affordable housing on property values within 1/16 of a mile of a development

	ln sales price
Affordable housing units	0.09%*** (0.03%)
Number of observations	57,998
Adjusted R-squared	0.46

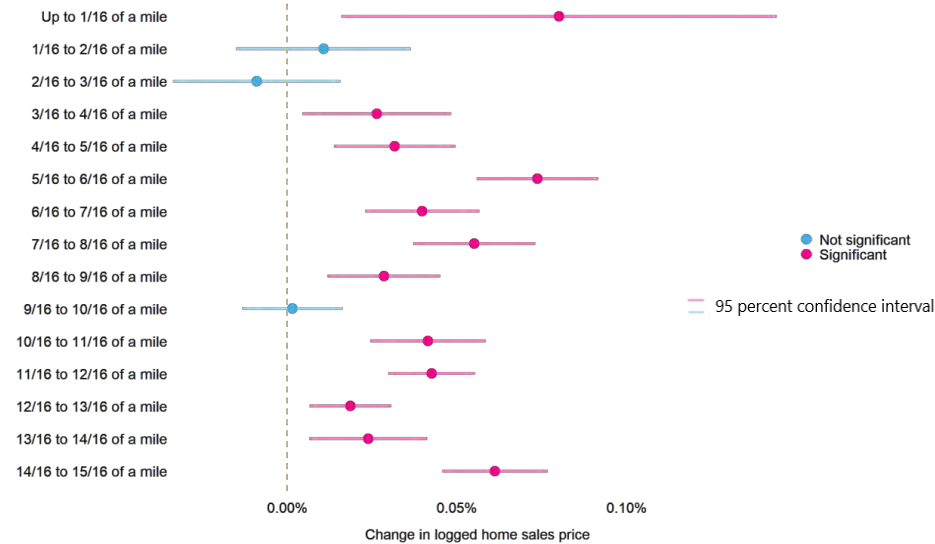
Source: Authors' calculations from ZTRAX (Zillow 2021) and city of Alexandria administrative data.

Notes: Impact estimates show the effect of affordable housing units and developments on nearby property values. We estimate changes in sales prices using a repeat sales model over all property sales within 1 mile of an affordable housing development. Dollars are adjusted to inflation for 2021. Standard errors (listed in parentheses) are heteroskedastic robust and are clustered at the property level. All regressions include property and quarter fixed effects.

*** p < 0.01; ** p < 0.05; * p < 0.10

Over space, affordable housing units are associated with a positive and statistically significant effect on properties within 1/16 of a mile of a unit but have no effect on properties between 1/16 of a mile and 3/16 of a mile (figure 2). Affordable housing units are associated with an increase in property values for each 1/16-mile ring after that, but at a much lower level, suggesting that those coefficients reflect the placement of the units in growing neighborhoods rather than representing the true impact of an affordable unit.

FIGURE 2

The Relationship between Affordable Housing Units and Property Values over Space*Distance to affordable housing development*

Source: Authors' calculations from ZTRAX (Zillow 2021) and city of Alexandria administrative data.

Notes: Impact estimates show the effect of affordable housing units and developments on nearby property values. We estimate changes in sales prices using a repeat sales model over all property sales within 1 mile of an affordable housing development. Dollars are adjusted to inflation for 2021. Confidence intervals at the 95 percent level (shown as lines) are heteroskedastic robust and are clustered at the property level. All regressions include property and quarter fixed effects. Coefficients shown in red are statistically significant at the 5 percent level, and coefficients shown in blue are not significant.

Removing Set-Asides

Because affordable units in set-asides often account for a small portion of the overall number of units, the market-rate units in set-aside buildings may bias our results. To ensure that this is not the case, we re-run our analysis removing set-asides.

We find that the relationship between affordable units and nearby properties after removing set-asides is even larger than it is when we include them (table 4). Affordable units that are not set-asides are associated with an increase in property values of 0.11 percent within 1/16 of a mile of a development, on average. Again, this may be due to the close relationship between the city and affordable housing developers in Alexandria, which ensures that affordable housing developments excluding set-asides are amenities rather than disamenities to the neighborhood.

TABLE 4

The Relationship between Affordable Housing and Property Values, Removing Set-Asides*Average treatment effects for affordable housing on property values within 1/16 of a mile of a development*

	In sales price
Affordable housing units that were not set-asides	0.11%*** (0.03%)
Number of observations	57,998
Adjusted R-squared	0.460

Source: Authors' calculations from ZTRAX (Zillow 2021) and city of Alexandria administrative data.

Notes: Impact estimates show the effect of affordable housing units and developments on nearby property values. We estimate changes in sales prices using a repeat sales model over all property sales within 1 mile of an affordable housing development. Dollars are adjusted to inflation for 2021. Standard errors (listed in parentheses) are heteroskedastic robust and are clustered at the property level. All regressions include property and quarter fixed effects. ***p<0.01; **p<0.05; * p<0.10.

Variation by Census Tract Income Level

Previous literature has found that affordable housing in higher-income neighborhoods has a different effect on nearby property values than does affordable housing in low-income neighborhoods. To see whether this is true in Alexandria, we re-run our analysis with the treatment variable split by whether the affordable housing units were in census tracts that had household median incomes above or below the median income in Alexandria, as determined by the 2000 Census (table 5).

We find that affordable housing units in above-median-income census tracts are associated with a 0.06 percent increase in property values, and affordable housing units in below-median-income tracts are associated with a 0.17 percent increase in nearby property values. This is counter to prior findings in the literature that show that affordable housing in high-income neighborhoods reduces nearby property values. In Alexandria, affordable housing units in both higher-income and lower-income neighborhoods are associated with statistically significant increases in nearby property values.

TABLE 5

The Relationship between Affordable Housing and Property Values, Split by Household Median Income in Census Tract of Affordable Housing Development

	In sales price
Affordable housing units in census tracts with household median incomes below the median	0.17%* (0.101%)
Affordable housing units in census tracts with household median incomes above the median	0.06%*** (0.03%)
Number of observations	57,998
Adjusted R-squared	0.460

Source: Author calculations from ZTRAX (Zillow 2021), city of Alexandria administrative data, and the 2000 Census.

Other Robustness Checks

We run a number of additional regressions to ensure that our results are robust to various specifications and models. This includes using alternative treatment radii and alternative comparison group radii, as well as including a five-year development window for each opening date.

Specifically, we estimate the relationship between affordable housing developments and property values located within 1/16 of a mile of the development—our preferred specification, since effects are likely very localized—but also within 1/8 of a mile, 1/4 of a mile, and 1/2 of a mile. We also estimate the relationship between properties within 1/8 of a mile, controlling for those between 1/8 of a mile and 1/2 of a mile, in case there are spillover or displacement effects within that distance. In other words, we compare changes in property values within 1/8 of a mile with changes in property values farther than 1/2 a mile from the development.

Table 6 shows the results of these robustness checks. The findings are consistent throughout and follow theory (i.e., they are positive and significant and generally decline with distance), showing that our results are robust to these alternative specifications.

TABLE 6

Robustness Check Results for Varying Distances

In sales price, by varying distances from an affordable housing development

	1/16 of a mile (main model)	1/8 of a mile	1/4 of a mile	1/2 of a mile	1/8 of a mile, controlling for 1/8 to 1/2 of a mile
Affordable housing units	0.09%*** (0.03%)	0.03%** (0.01%)	0.01%** (0.007%)	0.03%*** (0.004%)	0.02%* (0.01%)
Observations	57,998	57,998	57,998	57,998	57,998
R-squared	0.460	0.460	0.460	0.461	0.461

Source: Authors' calculations from ZTRAX (Zillow 2021) and city of Alexandria administrative data.

Notes: Impact estimates show the effect of affordable housing units and developments on nearby property values. We estimate changes in sales prices using a repeat sales model over all property sales within 1 mile of an affordable housing development. Dollars are adjusted to inflation for 2021. Standard errors (listed in parentheses) are heteroskedastic robust and are clustered at the property level. All regressions include property and quarter fixed effects. ***p<0.01; **p<0.05; * p<0.10.

We also undertake robustness checks where we control for a five-year window around the opening of the affordable housing development to account for anticipatory effects and any construction effects that are likely to have a short-term impact on nearby properties (table 7). These results are again consistent and actually larger than our main results, suggesting that controlling for this predevelopment window and move-in period correlates affordable housing developments with even larger increases in nearby property values.

TABLE 7

Robustness Check Results, Varying Distances and Controlling for a Five-Year Development Window*In sales price, by varying distances from an affordable housing development*

	1/16 of a mile (main model)	1/8 of a mile	1/4 of a mile	1/2 of a mile	1/8 of a mile, controlling for 1/8 to 1/2 of a mile
Effects controlling for five-year development window	0.16%*** (0.044%)	0.03%* (0.018%)	0.02% (0.010%)	0.04%*** (0.005%)	0.03% (0.018%)
Five-year development window	0.20%*** (0.047%)	-0.01% (0.009%)	-0.01% (0.005%)	0.003% (0.003%)	-0.01% (.009%)
Observations	57,998	57,998	57,998	57,998	57,998
R-squared	0.460	0.460	0.460	0.461	0.461

Source: Authors' calculations from ZTRAX (Zillow 2021) and city of Alexandria administrative data.

Notes: Impact estimates show the effect of affordable housing units and developments on nearby property values. We estimate changes in sales prices using a repeat sales model over all property sales within 1 mile of an affordable housing development. Dollars are adjusted to inflation for 2021. Standard errors (listed in parentheses) are heteroskedastic robust and are clustered at the property level. All regressions include property and quarter fixed effects. ***p<0.01; **p<0.05; * p<0.10.

Conclusion

Although the impact of affordable housing on nearby property values is not the primary reason to build affordable housing, individuals often cite it as a reason to oppose such developments. This analysis adds to the current research on the topic, showing that affordable housing developments in the city of Alexandria, Virginia, not only do not reduce property values but also are associated with a small but statistically significant *increase* in values.

Alexandria's positive results overall could reflect a combination of strict requirements for design, development, maintenance, and operation of affordable housing, as well as a cadre of sophisticated local and regional developers including nonprofit housing developers working in the city's real estate market. They could also reflect ongoing oversight from local, state, federal, and private lenders and investors, as well as the city's commitment to diversity and inclusion, which helps incorporate new and preserved affordable housing developments into the fabric of Alexandria neighborhoods.

Given the known benefits of affordable housing on housing stability, access to opportunity, the economy as a whole, and the overall health of households with low incomes, these results support the development of additional affordable housing in the city of Alexandria.

Appendix A. Supplemental Tables and Figures

TABLE A.1

**Number of Property Sales by Distance from an Affordable Housing Development
2000–2020**

Distance to affordable housing development	Number of sales
0 to 1/16 of a mile	1,832
1/16 to 2/16 of a mile	7,513
2/16 to 3/16 of a mile	11,517
3/16 to 4/16 of a mile	14,637
4/16 to 5/16 of a mile	18,009
5/16 to 6/16 of a mile	20,370
6/16 to 7/16 of a mile	24,334
7/16 to 8/16 of a mile	25,100
8/16 to 9/16 of a mile	24,867
9/16 to 10/16 of a mile	29,251
10/16 to 11/16 of a mile	27,322
11/16 to 12/16 of a mile	28,173
12/16 to 13/16 of a mile	33,656
13/16 to 14/16 of a mile	34,964
14/16 to 15/16 of a mile	34,632
15/16 to 1 mile	36,050

Source: Authors' calculations from ZTRAX (Zillow 2021) and city of Alexandria administrative data. Sales above \$10 million are excluded from this analysis.

Notes: The number of sales includes homes located between the distances shown in the first column, not for all sales between the affordable housing development and the larger distance.

TABLE A.2

Descriptive Statistics of Property Sales by Distance*2000 and 2020*

	Minimum	Mean	Median	Maximum	Count
Within 1 mile, 2000	\$2,040	\$337,126	\$297,320	\$4,784,986	2,944
Within 1 mile, 2020	\$1,268	\$605,314	\$527,043	\$5,035,610	4,525
Within 1/16 of a mile, 2000	\$70,598	\$276,443	\$289,139	\$502,031	45
Within 1/16 of a mile, 2020	\$59,071	\$672,892	\$641,845	\$3,913,686	68

Source: Authors' calculations from ZTRAX (Zillow 2021) and city of Alexandria administrative data. Sales above \$10 million are excluded from this analysis.

Notes

- ¹ Urban Institute presentation with a city council from a midsized Southern city.
- ² Office of Housing, City of Alexandria.
- ³ Authors' discussion with local leaders and developers.

References

- Andersson, Fredrik, John C. Haltiwanger, Mark J. Kutzbach, Giordano E. Palloni, Henry O. Pollakowski, and Daniel H. Weinberg. 2016. "Childhood Housing and Adult Earnings: A Between-Siblings Analysis of Housing Vouchers and Public Housing." Working Paper 22721. Cambridge, MA: National Bureau of Economic Research.
- Altali, Wael, Jonathan Hillman, and Sarah Tekleab. 2017. *Assessing Affordable Housing Availability and its Effects on Employers' Ability to Recruit and Retain Employees in Greater Boston*. Boston: Northeastern University and Massachusetts Housing Partnership.
- Center for Housing Policy. 2009. *Don't Put it Here!: Does Affordable Housing Cause Nearby Property Values to Decline?* Washington, DC: Center for Housing Policy.
- Chakrabarti, Ritashree, and Junfu Zhang. 2014. "Unaffordable Housing and Local Employment Growth: Evidence from California Municipalities." *Urban Studies* 52 (6): 1134–51.
- Cunningham, Mary, and Graham MacDonald. 2012. *Housing as a Platform for Improving Education Outcomes among Low-Income Children*. Washington, DC: What Works Collaborative.
- Diamond, Rebecca, and Timothy McQuade. 2019. "Who Wants Affordable Housing in their Backyard? An Equilibrium Analysis of Low-Income Property Development." *Journal of Political Economy* 127 (3).
- Ellen, Ingrid Gould, Michael H. Schill, Amy Ellen Schwartz, and Ioan Voicu. 2007. "Does Federally Subsidized Rental Housing Depress Neighborhood Property Values?" *Journal of Policy Analysis and Management: The Journal of the Association for Public Policy Analysis and Management* 26 (2): 257–80.
- Fischer, Will. 2015. *Research Shows Housing Vouchers Reduce Hardship and Provide Platform for Long-Term Gains among Children*. Washington, DC: Center on Budget and Policy Priorities.
- Galster, George. 2002. "A Review of Existing Research on the Effects of Federally Assisted Housing Programs on Neighboring Residential Property Values." Detroit: Wayne State University.
- Jeffrey Lubell, Rosalyn Crain, and Rebecca Cohen. 2007. *Framing the Issues— the Positive Impacts of Affordable Housing on Health*. Washington, DC: Center for Housing Policy.
- Scally, Corianne Payton. 2014. "Who, Why, and How Communities Oppose Affordable Housing." Montclair, NJ: Shelterforce.
- Spillman, Brenda C., Jennifer Biess, and Graham MacDonald. 2012. *Housing as a Platform for Improving Outcomes for Older Renters*. Washington, DC: Urban Institute, 2012.
- Theodos Brett, Christina Stacy, Daniel Teles, Christopher Davis, and Ananya Hariharan. 2020. *How Does the NMTC Program Affect Local Housing Markets?* Washington, DC: Urban Institute.
- Turner, Margery Austin, Leah Hendey, Maya Brennan, Peter Tatian, Kathryn Reynolds, Aaron Shroyer, Sarah Stochak, Martha Fedorowicz, Steven Martin, and Yipeng Su. 2019. *Meeting the Washington Region's Future Housing Needs*. Washington, DC: Urban Institute.
- Woo, Ayoung, Kenneth Joh, and Shannon Van Zandt. 2016. "Unpacking the Impacts of the Low-Income Housing Tax Credit Program on Nearby Property Values." *Urban Studies* 53 (12): 2488–510.
- Zillow. 2021. Zillow Transaction and Assessment Dataset (ZTRAX). <http://www.zillow.com/ztrax>.

Errata

This brief was updated on April 22, 2022, to acknowledge data sourcing from Zillow.

About the Authors

Christina Plerhoples Stacy is a principal research associate in the Metropolitan Housing and Communities Policy Center at the Urban Institute, where she specializes in urban economics, equity, and inclusion. Her work focuses on the intersection of economics and urban spaces and how housing, transportation, local economies, health, and crime interact. Dr. Stacy is a voluntary member of the Alexandria Housing Development Corporation, an affordable housing nonprofit developer in Alexandria, Virginia.

Christopher Davis is a data scientist in the Metropolitan Housing and Communities Policy Center. He is interested in the impact housing inequities have on health, poverty, and career opportunity in disadvantaged communities. Before joining Urban, Davis was a budget analyst at the Department of Finance in California, overseeing environmental protection issues.

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500 L'Enfant Plaza SW
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Please note that new Connecticut county level geographies are not available within the map.

 An official website of the United States government




QuickFacts

Lake Zurich village, Illinois

QuickFacts provides statistics for all states and counties, and for cities and towns with a *population of 5,000 or more*.

Table

All Topics	Lake Zurich village, Illinois
Population Estimates, July 1, 2022, (V2022)	19,624
 PEOPLE	
Population	
Population Estimates, July 1, 2022, (V2022)	19,624
Population estimates base, April 1, 2020, (V2022)	19,792
Population, percent change - April 1, 2020 (estimates base) to July 1, 2022, (V2022)	-0.8%
Population, Census, April 1, 2020	19,759
Population, Census, April 1, 2010	19,631
Age and Sex	
Persons under 5 years, percent	5.6%
Persons under 18 years, percent	22.9%
Persons 65 years and over, percent	12.6%
Female persons, percent	50.8%
Race and Hispanic Origin	
White alone, percent	86.7%
Black or African American alone, percent (a)	1.0%
American Indian and Alaska Native alone, percent (a)	0.0%
Asian alone, percent (a)	8.3%
Native Hawaiian and Other Pacific Islander alone, percent (a)	0.0%
Two or More Races, percent	3.7%
Hispanic or Latino, percent (b)	3.9%
White alone, not Hispanic or Latino, percent	84.5%
Population Characteristics	
Veterans, 2017-2021	662
Foreign born persons, percent, 2017-2021	16.2%
Housing	
Housing units, July 1, 2022, (V2022)	X
Owner-occupied housing unit rate, 2017-2021	80.4%
Median value of owner-occupied housing units, 2017-2021	\$351,600
Median selected monthly owner costs -with a mortgage, 2017-2021	\$2,469
Median selected monthly owner costs -without a mortgage, 2017-2021	\$977
Median gross rent, 2017-2021	\$1,673
Building permits, 2022	X
Families & Living Arrangements	
Households, 2017-2021	7,105
Persons per household, 2017-2021	2.76
Living in same house 1 year ago, percent of persons age 1 year+, 2017-2021	90.5%
Language other than English spoken at home, percent of persons age 5 years+, 2017-2021	20.3%
Computer and Internet Use	
Households with a computer, percent, 2017-2021	97.5%
Households with a broadband Internet subscription, percent, 2017-2021	96.7%
Education	
High school graduate or higher, percent of persons age 25 years+, 2017-2021	
Bachelor's degree or higher, percent of persons age 25 years+, 2017-2021	

Is this page helpful?



Yes



No

Health	
With a disability, under age 65 years, percent, 2017-2021	3.4%
Persons without health insurance, under age 65 years, percent	3.1%
Economy	
In civilian labor force, total, percent of population age 16 years+, 2017-2021	74.1%
In civilian labor force, female, percent of population age 16 years+, 2017-2021	69.2%
Total accommodation and food services sales, 2017 (\$1,000) (c)	65,452
Total health care and social assistance receipts/revenue, 2017 (\$1,000) (c)	84,804
Total transportation and warehousing receipts/revenue, 2017 (\$1,000) (c)	4,130
Total retail sales, 2017 (\$1,000) (c)	65,048
Total retail sales per capita, 2017 (c)	38,479
Transportation	
Mean travel time to work (minutes), workers age 16 years+, 2017-2021	30.3
Income & Poverty	
Median household income (in 2021 dollars), 2017-2021	118,139
Per capita income in past 12 months (in 2021 dollars), 2017-2021	\$53,169
Persons in poverty, percent	3.8%
BUSINESSES	
Businesses	
Total employer establishments, 2021	X
Total employment, 2021	X
Total annual payroll, 2021 (\$1,000)	X
Total employment, percent change, 2020-2021	X
Total nonemployer establishments, 2019	X
All employer firms, Reference year 2017	890
Men-owned employer firms, Reference year 2017	509
Women-owned employer firms, Reference year 2017	117
Minority-owned employer firms, Reference year 2017	137
Nonminority-owned employer firms, Reference year 2017	594
Veteran-owned employer firms, Reference year 2017	S
Nonveteran-owned employer firms, Reference year 2017	723
GEOGRAPHY	
Geography	
Population per square mile, 2020	2,877.0
Population per square mile, 2010	2,901.7
Land area in square miles, 2020	6.87
Land area in square miles, 2010	6.77
FIPS Code	1741742

Is this page helpful?



Table: ACSST5Y2021.S0801

COMMUTING CHARACTERISTICS BY SEX		United States [®] Census Bureau
Note: The table shown may have been modified by user selections. Some information may be missing.		
DATA NOTES		
TABLE ID:	S0801	
SURVEY/PROGRAM:	American Community Survey	
VINTAGE:	2021	
DATASET:	ACSST5Y2021	
PRODUCT:	ACS 5-Year Estimates Subject Tables	
UNIVERSE:	None	
FTP URL:	None	
API URL:	https://api.census.gov/data/2021/acs/acs5/subject	
USER SELECTIONS		
GEOS	Lake Zurich village; Illinois	
EXCLUDED COLUMNS	None	
APPLIED FILTERS	None	
APPLIED SORTS	None	
PIVOT & GROUPING		
PIVOT COLUMNS	None	
PIVOT MODE	Off	
ROW GROUPS	None	
VALUE COLUMNS	None	
WEB ADDRESS	https://data.census.gov/table?q=Lake+Zurich+village;+Illinois+commute&tid=ACSST5Y2021.S0801	
TABLE NOTES	Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.	

Table: ACSST5Y2021.S0801

	<p>Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section.</p> <p>Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.</p>
	Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates
	Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented
	The 12 selected states are Connecticut, Maine, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and Wisconsin.
	Workers include members of the Armed Forces and civilians who were at work last week.
	When information is missing or inconsistent, the Census Bureau logically assigns an acceptable value using the response to a related question or questions. If a logical assignment is not possible, data are filled using a statistical process called allocation, which uses a similar individual or household to provide a donor value. The "Allocated" section is the number of respondents who received an allocated value for a particular subject.
	Several means of transportation to work categories were updated in 2019. For more information, see: Change to Means of Transportation .
	The 2017-2021 American Community Survey (ACS) data generally reflect the March 2020 Office of Management and Budget (OMB) delineations of metropolitan and micropolitan statistical areas. In certain instances, the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB delineation lists due to differences in the effective dates of the geographic entities.
	Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Table: ACSST5Y2021.S0801

	<p>Explanation of Symbols:- The estimate could not be computed because there were an insufficient number of sample observations. For a ratio of medians estimate, one or both of the median estimates falls in the lowest interval or highest interval of an open-ended distribution. For a 5-year median estimate, the margin of error associated with a median was larger than the median itself. N The estimate or margin of error cannot be displayed because there were an insufficient number of sample cases in the selected geographic area. (X) The estimate or margin of error is not applicable or not available. median- The median falls in the lowest interval of an open-ended distribution (for example "2,500-") median+ The median falls in the highest interval of an open-ended distribution (for example "250,000+"). ** The margin of error could not be computed because there were an insufficient number of sample observations. *** The margin of error could not be computed because the median falls in the lowest interval or highest interval of an open-ended distribution. **** A margin of error is not appropriate because the corresponding estimate is controlled to an independent population or housing estimate. Effectively, the corresponding estimate has no sampling error and the margin of error may be treated as zero.</p>
COLUMN NOTES	None

Table: ACSST5Y2021.S0801

	Lake Zurich village, Illinois					
	Total		Male		Female	
Label	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Workers 16 years and over	11,028	±390	5,670	±325	5,358	±338
MEANS OF TRANSPORTATION TO WORK						
Car, truck, or van	80.3%	±2.3	76.0%	±3.4	84.7%	±3.2
Drove alone	76.4%	±2.9	73.1%	±3.4	79.8%	±4.8
Carpooled	3.9%	±1.5	2.9%	±1.1	4.9%	±2.7
In 2-person carpool	3.2%	±1.2	2.7%	±1.1	3.8%	±2.2
In 3-person carpool	0.5%	±0.8	0.2%	±0.4	0.8%	±1.3
In 4-or-more person carpool	0.2%	±0.2	0.0%	±0.6	0.3%	±0.4
Workers per car, truck, or van	1.03	±0.01	1.02	±0.01	1.03	±0.02
Public transportation (excluding taxicab)	4.0%	±1.0	5.4%	±1.5	2.5%	±1.3
Walked	0.5%	±0.5	0.4%	±0.4	0.6%	±0.9
Bicycle	0.0%	±0.3	0.0%	±0.6	0.0%	±0.6
Taxicab, motorcycle, or other means	1.2%	±0.8	2.3%	±1.5	0.0%	±0.6
Worked from home	14.1%	±2.2	15.9%	±3.1	12.2%	±3.1
PLACE OF WORK						
Worked in state of residence	98.9%	±0.7	97.9%	±1.4	100.0%	±0.6
Worked in county of residence	59.7%	±3.8	53.8%	±5.3	65.9%	±5.5
Worked outside county of residence	39.3%	±3.7	44.1%	±5.0	34.1%	±5.5
Worked outside state of residence	1.1%	±0.7	2.1%	±1.4	0.0%	±0.6
Living in a place	100.0%	±0.3	100.0%	±0.6	100.0%	±0.6
Worked in place of residence	27.7%	±3.3	27.9%	±4.4	27.5%	±4.0
Worked outside place of residence	72.3%	±3.3	72.1%	±4.4	72.5%	±4.0
Not living in a place	0.0%	±0.3	0.0%	±0.6	0.0%	±0.6
Living in 12 selected states	0.0%	±0.3	0.0%	±0.6	0.0%	±0.6
Worked in minor civil division of residence	0.0%	±0.3	0.0%	±0.6	0.0%	±0.6
Worked outside minor civil division of residence	0.0%	±0.3	0.0%	±0.6	0.0%	±0.6
Not living in 12 selected states	100.0%	±0.3	100.0%	±0.6	100.0%	±0.6
Workers 16 years and over who did not work from home	9,475	±411	4,770	±317	4,705	±366
TIME OF DEPARTURE TO GO TO WORK						
12:00 a.m. to 4:59 a.m.	2.3%	±1.1	4.2%	±2.1	0.4%	±0.4
5:00 a.m. to 5:29 a.m.	2.7%	±1.2	4.8%	±2.2	0.7%	±0.9
5:30 a.m. to 5:59 a.m.	4.1%	±1.1	7.3%	±2.1	0.9%	±0.7
6:00 a.m. to 6:29 a.m.	6.2%	±1.7	6.8%	±2.4	5.6%	±2.1
6:30 a.m. to 6:59 a.m.	13.0%	±2.1	14.7%	±3.5	11.2%	±2.6

Table: ACSST5Y2021.S0801

Lake Zurich village, Illinois						
	Total		Male		Female	
Label	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
7:00 a.m. to 7:29 a.m.	16.0%	±2.7	17.2%	±4.0	14.8%	±4.4
7:30 a.m. to 7:59 a.m.	11.6%	±2.2	12.3%	±3.6	10.9%	±2.9
8:00 a.m. to 8:29 a.m.	16.0%	±2.7	15.7%	±3.8	16.3%	±4.3
8:30 a.m. to 8:59 a.m.	8.4%	±2.9	3.7%	±1.9	13.2%	±5.3
9:00 a.m. to 11:59 p.m.	19.7%	±2.7	13.4%	±3.1	26.1%	±4.9
TRAVEL TIME TO WORK						
Less than 10 minutes	9.7%	±2.0	8.8%	±2.7	10.6%	±3.1
10 to 14 minutes	12.6%	±2.5	6.6%	±2.3	18.7%	±4.4
15 to 19 minutes	10.5%	±2.6	10.1%	±3.3	10.9%	±4.1
20 to 24 minutes	9.5%	±1.9	5.4%	±2.0	13.7%	±3.9
25 to 29 minutes	6.2%	±1.8	7.1%	±2.8	5.4%	±2.1
30 to 34 minutes	18.5%	±3.7	18.7%	±4.6	18.4%	±5.0
35 to 44 minutes	9.5%	±2.1	13.4%	±3.5	5.6%	±1.9
45 to 59 minutes	11.3%	±2.1	14.7%	±3.7	7.8%	±2.7
60 or more minutes	12.1%	±2.3	15.2%	±3.5	8.9%	±3.2
Mean travel time to work (minutes)	30.3	±1.6	34.6	±2.2	25.9	±2.1
VEHICLES AVAILABLE						
Workers 16 years and over in households	11,028	±390	5,670	±325	5,358	±338
No vehicle available	0.3%	±0.4	0.4%	±0.5	0.3%	±0.4
1 vehicle available	9.6%	±3.0	7.3%	±2.1	12.1%	±5.2
2 vehicles available	53.0%	±5.1	54.3%	±5.3	51.7%	±6.4
3 or more vehicles available	37.0%	±4.3	38.0%	±5.0	35.9%	±4.8
PERCENT ALLOCATED						
Means of transportation to work	12.4%	(X)	(X)	(X)	(X)	(X)
Private vehicle occupancy	15.3%	(X)	(X)	(X)	(X)	(X)
Place of work	17.1%	(X)	(X)	(X)	(X)	(X)
Time of departure to go to work	24.7%	(X)	(X)	(X)	(X)	(X)
Travel time to work	17.1%	(X)	(X)	(X)	(X)	(X)
Vehicles available	0.3%	(X)	(X)	(X)	(X)	(X)

Table: ACSST5Y2021.S1901

INCOME IN THE PAST 12 MONTHS (IN 2021 INFLATION-ADJUSTED DOLLARS)		United States [®] Census Bureau
Note: The table shown may have been modified by user selections. Some information may be missing.		
DATA NOTES		
TABLE ID:	S1901	
SURVEY/PROGRAM:	American Community Survey	
VINTAGE:	2021	
DATASET:	ACSST5Y2021	
PRODUCT:	ACS 5-Year Estimates Subject Tables	
UNIVERSE:	None	
FTP URL:	None	
API URL:	https://api.census.gov/data/2021/acs/acs5/subject	
USER SELECTIONS		
GEOS	Lake Zurich village; Illinois	
TOPICS	Income and Poverty	
EXCLUDED COLUMNS	None	
APPLIED FILTERS	None	
APPLIED SORTS	None	
PIVOT & GROUPING		
PIVOT COLUMNS	None	
PIVOT MODE	Off	
ROW GROUPS	None	
VALUE COLUMNS	None	
WEB ADDRESS	https://data.census.gov/table?q=Lake+Zurich+village;+Illinois&t=Income+and+Poverty&tid=ACSST5Y2021.S1901	

Table: ACSST5Y2021.S1901

TABLE NOTES	Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.
	Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section. Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.
	Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates
	Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented
	When information is missing or inconsistent, the Census Bureau logically assigns an acceptable value using the response to a related question or questions. If a logical assignment is not possible, data are filled using a statistical process called allocation, which uses a similar individual or household to provide a donor value. The "Allocated" section is the number of respondents who received an allocated value for a particular subject.
	Between 2018 and 2019 the American Community Survey retirement income question changed. These changes resulted in an increase in both the number of households reporting retirement income and higher aggregate retirement income at the national level. For more information see Changes to the Retirement Income Question .
	The categories for relationship to householder were revised in 2019. For more information see Revisions to the Relationship to Household item.
	The 2017-2021 American Community Survey (ACS) data generally reflect the March 2020 Office of Management and Budget (OMB) delineations of metropolitan and micropolitan statistical areas. In certain instances, the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB delineation lists due to differences in the effective dates of the geographic entities.
	Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

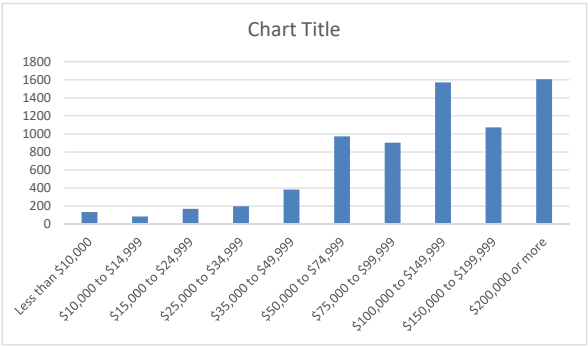
Table: ACSST5Y2021.S1901

	<p>Explanation of Symbols:- The estimate could not be computed because there were an insufficient number of sample observations. For a ratio of medians estimate, one or both of the median estimates falls in the lowest interval or highest interval of an open-ended distribution. For a 5-year median estimate, the margin of error associated with a median was larger than the median itself. N The estimate or margin of error cannot be displayed because there were an insufficient number of sample cases in the selected geographic area. (X) The estimate or margin of error is not applicable or not available. median- The median falls in the lowest interval of an open-ended distribution (for example "2,500-") median+ The median falls in the highest interval of an open-ended distribution (for example "250,000+"). ** The margin of error could not be computed because there were an insufficient number of sample observations. *** The margin of error could not be computed because the median falls in the lowest interval or highest interval of an open-ended distribution. ***** A margin of error is not appropriate because the corresponding estimate is controlled to an independent population or housing estimate. Effectively, the corresponding estimate has no sampling error and the margin of error may be treated as zero.</p>
COLUMN NOTES	None

Table: ACSSTSY2021.S1901

Lake Zurich village, Illinois								
	Households		Families		Married-couple families		Nonfamily households	
Label	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total	7,105	±280	5,673	±237	4,815	±229	1,432	±321
Less than \$10,000	1.90%	±1.1	0.70%	±0.6	0.40%	±0.4	6.80%	±4.5
\$10,000 to \$14,999	1.20%	±1.0	1.50%	±1.3	1.50%	±1.5	0.00%	±2.2
\$15,000 to \$24,999	2.40%	±1.3	1.30%	±0.7	0.90%	±0.6	7.30%	±6.3
\$25,000 to \$34,999	2.80%	±1.2	2.50%	±1.3	0.80%	±0.7	9.30%	±5.1
\$35,000 to \$49,999	5.40%	±1.8	3.30%	±1.6	2.10%	±1.3	11.10%	±4.8
\$50,000 to \$74,999	13.70%	±4.0	10.50%	±2.7	8.80%	±2.9	25.90%	±13.9
\$75,000 to \$99,999	12.70%	±2.9	12.70%	±3.2	12.80%	±3.5	12.80%	±6.9
\$100,000 to \$149,999	22.10%	±3.2	24.80%	±3.6	25.30%	±4.1	10.50%	±5.9
\$150,000 to \$199,999	15.10%	±3.0	16.40%	±3.2	19.00%	±3.5	9.30%	±6.5
\$200,000 or more	22.60%	±3.4	26.40%	±3.7	28.50%	±4.0	7.10%	±4.6
Median income (dollars)	118,139	±6,315	132,804	±12,874	141,967	±10,922	56,635	±11,724
Mean income (dollars)	146,589	±10,071	161,622	±11,135	N	N	82,780	±13,829
PERCENT ALLOCATED								
Household income in the past 12 months	34.9%	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Family income in the past 12 months	(X)	(X)	36.2%	(X)	(X)	(X)	(X)	(X)
Nonfamily income in the past 12 months	(X)	(X)	(X)	(X)	(X)	(X)	29.5%	(X)

		Lake Zurich village, Illinois
		Households
Label	#	Estimate
Total		7,105
Less than \$10,000	135	1.90%
\$10,000 to \$14,999	85	1.20%
\$15,000 to \$24,999	171	2.40%
\$25,000 to \$34,999	199	2.80%
\$35,000 to \$49,999	384	5.40%
\$50,000 to \$74,999	973	13.70%
\$75,000 to \$99,999	902	12.70%
\$100,000 to \$149,999	1570	22.10%
\$150,000 to \$199,999	1073	15.10%
\$200,000 or more	1606	22.60%
Median income (dollars)		118,139
Mean income (dollars)		146,589
PERCENT ALLOCATED		
Household income in the past 12 months		34.90%



		Lake Zurich village, Illinois
		Households
Label	#	Estimate

Total		7,105
Less than \$10,000	135	1.90%
\$10,000 to \$14,999	85	1.20%
\$15,000 to \$24,999	171	2.40%
\$25,000 to \$34,999	199	2.80%
Less than \$49,999	973	5.40%
\$50,000 to \$74,999	973	13.70%
\$75,000 to \$99,999	902	12.70%
\$100,000 to \$149,999	1570	22.10%
\$150,000 to \$199,999	1073	15.10%
\$200,000 or more	1606	22.60%
Median income (dollars)		118,139
Mean income (dollars)		146,589
PERCENT ALLOCATED		
Household income in the past 12 months		34.90%

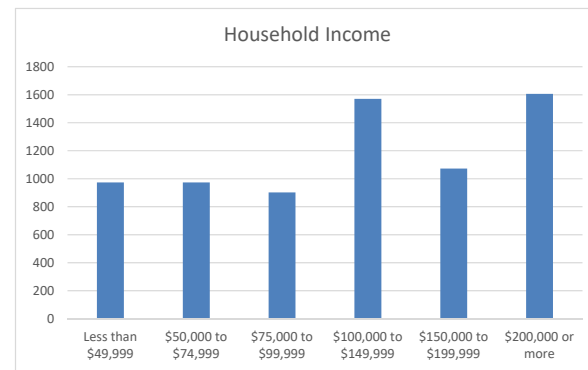


Table: ACSDT5YSPT2021.B25070

GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS		United States [®] Census Bureau
Note: The table shown may have been modified by user selections. Some information may be missing.		
DATA NOTES		
TABLE ID:	B25070	
SURVEY/PROGRAM:	American Community Survey	
VINTAGE:	2021	
DATASET:	ACSDT5YSPT2021	
PRODUCT:	ACS 5-Year Estimates Selected Population Detailed Tables	
UNIVERSE:	Renter-occupied housing units	
FTP URL:	None	
API URL:	https://api.census.gov/data/2021/acs/acs5/spt	
USER SELECTIONS		
GEOS	Lake Zurich village; Illinois	
TOPICS	Renter Costs; Income (Households, Families, Individuals)	
EXCLUDED COLUMNS	None	
APPLIED FILTERS	None	
APPLIED SORTS	None	
PIVOT & GROUPING		
PIVOT COLUMNS	None	
PIVOT MODE	Off	
ROW GROUPS	None	
VALUE COLUMNS	None	
WEB ADDRESS	https://data.census.gov/table?q=Lake+Zurich+village;+Illinois&t=Income+(Households,+Families,+Individuals):Renter+Costs&tid=ACSDT5YSPT2021.B25070	

Table: ACSDT5YSPT2021.B25070

TABLE NOTES	Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.
	Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section. Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.
	Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates
	Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented
	The 2017-2021 American Community Survey (ACS) data generally reflect the March 2020 Office of Management and Budget (OMB) delineations of metropolitan and micropolitan statistical areas. In certain instances, the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB delineation lists due to differences in the effective dates of the geographic entities.
	Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.
	Explanation of Symbols:- The estimate could not be computed because there were an insufficient number of sample observations. For a ratio of medians estimate, one or both of the median estimates falls in the lowest interval or highest interval of an open-ended distribution. For a 5-year median estimate, the margin of error associated with a median was larger than the median itself.N The estimate or margin of error cannot be displayed because there were an insufficient number of sample cases in the selected geographic area. (X) The estimate or margin of error is not applicable or not available.median- The median falls in the lowest interval of an open-ended distribution (for example "2,500-")median+ The median falls in the highest interval of an open-ended distribution (for example "250,000+").** The margin of error could not be computed because there were an insufficient number of sample observations.*** The margin of error could not be computed because the median falls in the lowest interval or highest interval of an open-ended distribution.***** A margin of error is not appropriate because the corresponding estimate is controlled to an independent population or housing estimate. Effectively, the corresponding estimate has no sampling error and the margin of error may be treated as zero.

Table: ACSDT5YSPT2021.B25070

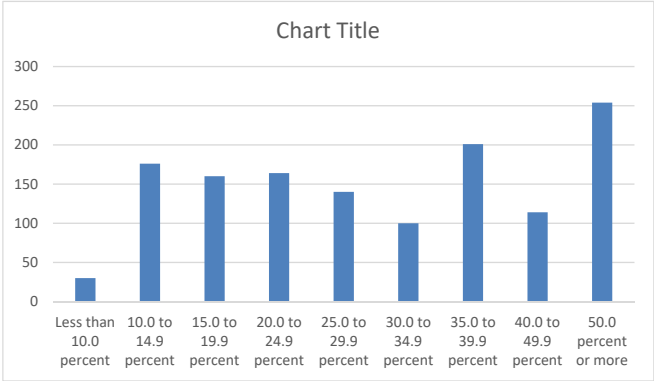
COLUMN NOTES	None

Table: ACSDT5YSPT2021.B25070

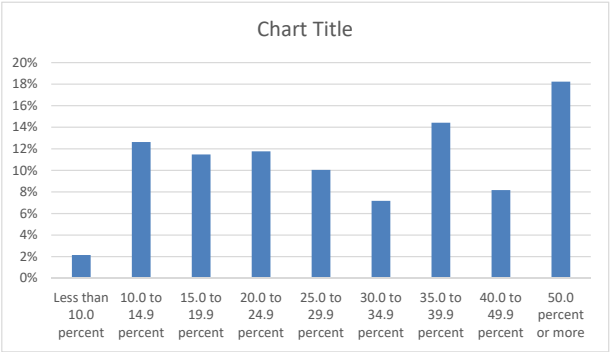
	Lake Zurich village; Illinois	
	Total population	
Label	Estimate	Margin of Error
Total:	1,393	±326
Less than 10.0 percent	30	±22
10.0 to 14.9 percent	176	±96
15.0 to 19.9 percent	160	±105
20.0 to 24.9 percent	164	±92
25.0 to 29.9 percent	140	±79
30.0 to 34.9 percent	100	±79
35.0 to 39.9 percent	201	±254
40.0 to 49.9 percent	114	±55
50.0 percent or more	254	±139
Not computed	54	±62

	Lake Zurich village; Illinois
	Total population
Label	Estimate

Total:	1,393
Less than 10.0 percent	30
10.0 to 14.9 percent	176
15.0 to 19.9 percent	160
20.0 to 24.9 percent	164
25.0 to 29.9 percent	140
30.0 to 34.9 percent	100
35.0 to 39.9 percent	201
40.0 to 49.9 percent	114
50.0 percent or more	254
Not computed	54



		Lake Zurich village; Illinois
		Total population
Label		Estimate
Total:		1,393
Less than 10.0 percent	2%	30
10.0 to 14.9 percent	13%	176
15.0 to 19.9 percent	11%	160
20.0 to 24.9 percent	12%	164
25.0 to 29.9 percent	10%	140
30.0 to 34.9 percent	7%	100
35.0 to 39.9 percent	14%	201
40.0 to 49.9 percent	8%	114
50.0 percent or more	18%	254
Not computed		54



	Lake Zurich village; Illinois	
	Total population	
Label	Estimate	

Total:		1,393
Less than 10.0 percent	2%	30
10.0 to 14.9 percent	13%	176
15.0 to 19.9 percent	11%	160
20.0 to 24.9 percent	12%	164
25.0 to 29.9 percent	10%	140
30.0 percent or more	48%	
30.0 to 34.9 percent	7%	100
35.0 to 39.9 percent	14%	201
40.0 to 49.9 percent	8%	114
50.0 percent or more	18%	254
Not computed		54

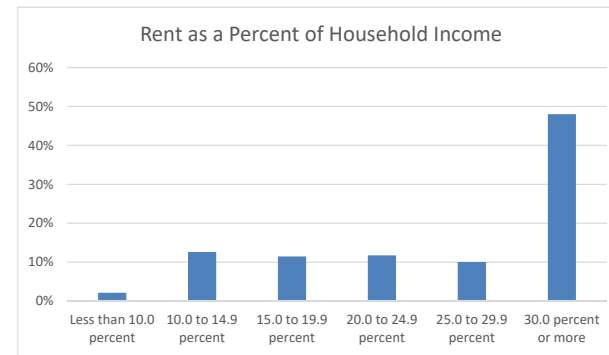


Table: ACSST5Y2021.S2503

FINANCIAL CHARACTERISTICS		United States [®] Census Bureau
Note: The table shown may have been modified by user selections. Some information may be missing.		
DATA NOTES		
TABLE ID:	S2503	
SURVEY/PROGRAM:	American Community Survey	
VINTAGE:	2021	
DATASET:	ACSST5Y2021	
PRODUCT:	ACS 5-Year Estimates Subject Tables	
UNIVERSE:	None	
FTP URL:	None	
API URL:	https://api.census.gov/data/2021/acs/acs5/subject	
USER SELECTIONS		
GEOS	Lake Zurich village; Illinois	
TOPICS	Income (Households, Families, Individuals)	
EXCLUDED COLUMNS	None	
APPLIED FILTERS	None	
APPLIED SORTS	None	
PIVOT & GROUPING		
PIVOT COLUMNS	None	
PIVOT MODE	Off	
ROW GROUPS	None	
VALUE COLUMNS	None	
WEB ADDRESS	https://data.census.gov/table?q=Lake+Zurich+village;+Illinois+rent+by+income&tid=ACSST5Y2021.S2503	

Table: ACSST5Y2021.S2503

TABLE NOTES	Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.
	Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section. Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.
	Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates
	Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented
	For occupied housing units and renter-occupied housing units, the median monthly housing costs excludes renter-occupied housing units for which no cash rent is paid.
	The 2017-2021 American Community Survey (ACS) data generally reflect the March 2020 Office of Management and Budget (OMB) delineations of metropolitan and micropolitan statistical areas. In certain instances, the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB delineation lists due to differences in the effective dates of the geographic entities.
	Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Table: ACSST5Y2021.S2503

	<p>Explanation of Symbols:- The estimate could not be computed because there were an insufficient number of sample observations. For a ratio of medians estimate, one or both of the median estimates falls in the lowest interval or highest interval of an open-ended distribution. For a 5-year median estimate, the margin of error associated with a median was larger than the median itself. N The estimate or margin of error cannot be displayed because there were an insufficient number of sample cases in the selected geographic area. (X) The estimate or margin of error is not applicable or not available. median- The median falls in the lowest interval of an open-ended distribution (for example "2,500-") median+ The median falls in the highest interval of an open-ended distribution (for example "250,000+"). ** The margin of error could not be computed because there were an insufficient number of sample observations. *** The margin of error could not be computed because the median falls in the lowest interval or highest interval of an open-ended distribution. **** A margin of error is not appropriate because the corresponding estimate is controlled to an independent population or housing estimate. Effectively, the corresponding estimate has no sampling error and the margin of error may be treated as zero.</p>
COLUMN NOTES	None

Table: ACS5Y2021.S2503

Lake Zurich village, Illinois												
Occupied housing units			Percent occupied housing units		Owner-occupied housing units		Percent owner-occupied housing units		Renter-occupied housing units		Percent renter-occupied housing units	
Label	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Occupied housing units	7,305,1280		7,305,1280		5,712,1283		5,712,1283		1,393,1326		1,393,1326	
HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2021 INFLATION-ADJUSTED DOLLARS)												
Less than \$5,000	70,158		1.00%±0.8		45,145		0.80%±0.8		25,129		1.80%±2.2	
\$5,000 to \$9,999	65,146		0.90%±0.7		50,140		0.90%±0.7		15,125		1.10%±1.8	
\$10,000 to \$14,999	85,174		1.20%±1.0		80,139		0.50%±0.7		55,162		3.90%±4.7	
\$15,000 to \$19,999	61,142		0.90%±0.6		33,125		0.60%±0.4		28,134		2.00%±2.5	
\$20,000 to \$24,999	111,196		1.60%±1.3		44,131		0.80%±0.5		67,193		4.80%±6.6	
\$25,000 to \$34,999	202,183		2.80%±1.2		95,148		1.70%±0.8		107,174		7.70%±8.4	
\$35,000 to \$49,999	385,1134		5.40%±1.8		274,1104		4.80%±1.8		111,180		8.00%±5.8	
\$50,000 to \$74,999	975,1310		13.70%±4.0		508,1131		8.90%±2.2		467,1303		33.50%±16.8	
\$75,000 to \$99,999	902,1206		12.70%±2.9		752,1182		13.20%±3.3		149,1204		10.70%±8.4	
\$100,000 to \$149,999	1,572,1234		22.10%±3.2		1,414,1227		24.80%±3.7		158,183		11.30%±6.4	
\$150,000 or more	2,677,2235		37.70%±3.9		2,466,1236		43.20%±3.8		211,157		15.10%±6.9	
Median household income (dollars)	118,139,16,315		118,139,16,315		132,991,111,504		132,991,111,504		58,686,117,881		58,686,117,881	
MONTHLY HOUSING COSTS												
Less than \$300	0,119		0.00%±0.5		0,119		0.00%±0.6		0,119		0.00%±2.3	
\$300 to \$499	69,150		1.00%±0.7		54,144		0.90%±0.8		15,125		1.10%±1.8	
\$500 to \$799	440,1149		6.20%±2.1		406,1135		7.10%±2.3		34,133		2.40%±2.5	
\$800 to \$999	550,1190		7.70%±2.6		439,1176		7.70%±2.9		111,180		8.00%±5.7	
\$1,000 to \$1,499	1,462,1276		20.60%±3.8		1,121,1236		19.60%±3.9		341,1344		24.50%±11.7	
\$1,500 to \$1,999	1,325,1292		18.60%±3.7		820,1167		14.40%±2.8		505,1275		36.30%±14.8	
\$2,000 to \$2,499	1,136,1176		16.00%±2.7		896,1171		15.70%±3.1		240,1307		17.20%±7.4	
\$2,500 to \$2,999	886,1158		12.50%±2.3		821,1157		14.40%±2.8		65,143		4.70%±3.1	
\$3,000 or more	1,196,1202		16.80%±3.0		1,155,1196		20.20%±3.5		41,146		2.90%±3.4	
No cash rent	41,159		0.60%±0.8	(X)	(X)		(X)		41,159		2.90%±4.3	
Median (dollars)	1,823,1161		1,823,1161		2,009,1153		2,009,1153		1,675,1120		1,675,1120	
MONTHLY HOUSING COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS												
Less than \$20,000	196,187		2.80%±1.3		127,167		2.20%±1.2		69,152		5.00%±4.0	
Less than 20 percent	0,119		0.00%±0.5		0,119		0.00%±0.6		0,119		0.00%±2.3	
20 to 29 percent	0,119		0.00%±0.5		0,119		0.00%±0.6		0,119		0.00%±2.3	
30 percent or more	196,187		2.80%±1.3		127,167		2.20%±1.2		69,152		5.00%±4.0	
\$20,000 to \$34,999	313,1117		4.40%±1.6		139,157		2.40%±1.0		174,1117		12.50%±7.6	
Less than 20 percent	0,119		0.10%±0.2		0,119		0.20%±0.2		0,119		0.00%±2.3	
20 to 29 percent	0,119		0.00%±0.5		0,119		0.00%±0.6		0,119		0.00%±2.3	
30 percent or more	304,1118		4.30%±1.6		130,156		2.30%±1.0		174,1117		12.50%±7.6	
\$35,000 to \$49,999	385,1134		5.40%±1.8		274,1104		4.80%±1.8		111,180		8.00%±5.8	
Less than 20 percent	74,159		1.00%±0.8		74,159		1.30%±1.0		0,119		0.00%±2.3	
20 to 29 percent	82,168		1.20%±1.0		37,131		0.60%±0.5		45,141		3.20%±4.5	
30 percent or more	229,1116		3.20%±1.6		163,1106		2.90%±1.9		66,147		4.70%±3.4	
\$50,000 to \$74,999	975,1310		13.70%±4.0		508,1131		8.90%±2.2		467,1303		33.50%±16.8	
Less than 20 percent	137,166		1.90%±0.9		111,158		1.90%±1.0		26,131		1.90%±2.1	
20 to 29 percent	286,1119		4.00%±1.7		161,184		2.80%±1.5		125,183		9.00%±6.3	
30 percent or more	552,1281		7.80%±3.8		236,1100		4.10%±1.7		316,1271		22.70%±16.4	
\$75,000 or more	5,151,1283		72.50%±4.6		4,633,1293		81.10%±3.2		518,1189		37.20%±14.6	
Less than 20 percent	3,347,1312		47.20%±4.5		3,007,1300		52.60%±4.2		340,1142		24.40%±10.8	
20 to 29 percent	1,299,1222		18.30%±3.2		1,165,1195		20.40%±3.4		134,152		9.60%±7.4	
30 percent or more	505,1149		7.10%±2.1		461,1136		8.10%±2.5		44,147		3.20%±3.5	
Zero or negative income	44,144		0.60%±0.6		31,157		0.50%±0.7		13,122		0.90%±1.6	
No cash rent	41,159		0.60%±0.8	(X)	(X)		(X)		41,159		2.90%±4.3	

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1

	Renter-occupied housing units
Label	Estimate

Occupied housing units	1,393
HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2021 INFLATION-ADJUSTED DOLLARS)	
Less than \$5,000	25
\$5,000 to \$9,999	15
\$10,000 to \$14,999	55
\$15,000 to \$19,999	28
\$20,000 to \$24,999	67
\$25,000 to \$34,999	107
\$35,000 to \$49,999	111
\$50,000 to \$74,999	467
\$75,000 to \$99,999	149
\$100,000 to \$149,999	158
\$150,000 or more	211
Median household income (dollars)	58,686
MONTHLY HOUSING COSTS	
Less than \$300	0
\$300 to \$499	15
\$500 to \$799	34
\$800 to \$999	111
\$1,000 to \$1,499	341
\$1,500 to \$1,999	505
\$2,000 to \$2,499	240
\$2,500 to \$2,999	65
\$3,000 or more	41
No cash rent	41
Median (dollars)	1,673
MONTHLY HOUSING COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS	

Less than \$20,000	69
Less than 20 percent	0
20 to 29 percent	0
30 percent or more	69
\$20,000 to \$34,999	174
Less than 20 percent	0
20 to 29 percent	0
30 percent or more	174
\$35,000 to \$49,999	111
Less than 20 percent	0
20 to 29 percent	45
30 percent or more	66
\$50,000 to \$74,999	467
Less than 20 percent	26
20 to 29 percent	125
30 percent or more	316
\$75,000 or more	518
Less than 20 percent	340
20 to 29 percent	134
30 percent or more	44
Zero or negative income	13
No cash rent	41

	Renter-occupied housing units
Label	Estimate

Occupied housing units 1,393

HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2021 INFLATION-ADJUSTED DOLLARS)

			Renters	Rentals	
Less than \$5,000	25	Less than \$50,000	408	201	Less than \$1000
\$5,000 to \$9,999	15	\$50,000 to \$99,999	774	846	\$1,000 to \$2,499
\$10,000 to \$14,999	55	\$100,000 or more	211	346	\$2,500 or more
\$15,000 to \$19,999	28				
\$20,000 to \$24,999	67				
\$25,000 to \$34,999	107				
\$35,000 to \$49,999	111				
\$50,000 to \$74,999	467				
\$75,000 to \$99,999	149				
\$100,000 to \$149,999	158				
\$150,000 or more	211				

MONTHLY HOUSING COSTS

Less than \$300	41
\$300 to \$499	15
\$500 to \$799	34
\$800 to \$999	111
\$1,000 to \$1,499	341
\$1,500 to \$1,999	505
\$2,000 to \$2,499	240
\$2,500 to \$2,999	65
\$3,000 or more	41

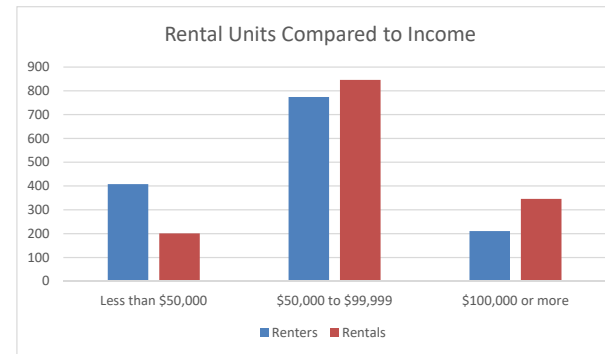


Table: ACSDT5Y2021.B25056

CONTRACT RENT		United States [®] Census Bureau
Note: The table shown may have been modified by user selections. Some information may be missing.		
DATA NOTES		
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SURVEY/PROGRAM:	American Community Survey	
VINTAGE:	2021	
DATASET:	ACSDT5Y2021	
PRODUCT:	ACS 5-Year Estimates Detailed Tables	
UNIVERSE:	Renter-occupied housing units	
FTP URL:	None	
API URL:	https://api.census.gov/data/2021/acs/acs5	
USER SELECTIONS		
GEOS	Lake Zurich village; Illinois	
TOPICS	Renter Costs	
EXCLUDED COLUMNS	None	
APPLIED FILTERS	None	
APPLIED SORTS	None	
PIVOT & GROUPING		
PIVOT COLUMNS	None	
PIVOT MODE	Off	
ROW GROUPS	None	
VALUE COLUMNS	None	
WEB ADDRESS	https://data.census.gov/table?q=Lake+Zurich+village;+Illinois&t=Renter+Costs&tid=ACSDT5Y2021.B25056	

Table: ACSDT5Y2021.B25056

TABLE NOTES	Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.
	Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section. Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.
	Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates
	Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented
	The 2017-2021 American Community Survey (ACS) data generally reflect the March 2020 Office of Management and Budget (OMB) delineations of metropolitan and micropolitan statistical areas. In certain instances, the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB delineation lists due to differences in the effective dates of the geographic entities.
	Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.
	Explanation of Symbols:- The estimate could not be computed because there were an insufficient number of sample observations. For a ratio of medians estimate, one or both of the median estimates falls in the lowest interval or highest interval of an open-ended distribution. For a 5-year median estimate, the margin of error associated with a median was larger than the median itself.N The estimate or margin of error cannot be displayed because there were an insufficient number of sample cases in the selected geographic area. (X) The estimate or margin of error is not applicable or not available.median- The median falls in the lowest interval of an open-ended distribution (for example "2,500-")median+ The median falls in the highest interval of an open-ended distribution (for example "250,000+").** The margin of error could not be computed because there were an insufficient number of sample observations.*** The margin of error could not be computed because the median falls in the lowest interval or highest interval of an open-ended distribution.***** A margin of error is not appropriate because the corresponding estimate is controlled to an independent population or housing estimate. Effectively, the corresponding estimate has no sampling error and the margin of error may be treated as zero.

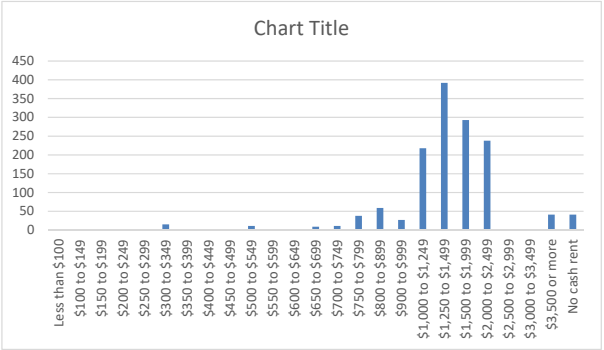
Table: ACSDT5Y2021.B25056

COLUMN NOTES	None

Table: ACSDT5Y2021.B25056

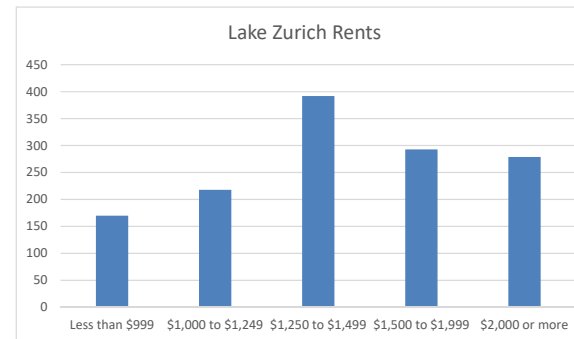
	Lake Zurich village, Illinois	
Label	Estimate	Margin of Error
Total:	1,393	±326
With cash rent:	1,352	±326
Less than \$100	0	±19
\$100 to \$149	0	±19
\$150 to \$199	0	±19
\$200 to \$249	0	±19
\$250 to \$299	0	±19
\$300 to \$349	15	±25
\$350 to \$399	0	±19
\$400 to \$449	0	±19
\$450 to \$499	0	±19
\$500 to \$549	11	±19
\$550 to \$599	0	±19
\$600 to \$649	0	±19
\$650 to \$699	9	±13
\$700 to \$749	11	±18
\$750 to \$799	38	±38
\$800 to \$899	59	±64
\$900 to \$999	27	±32
\$1,000 to \$1,249	218	±91
\$1,250 to \$1,499	392	±265
\$1,500 to \$1,999	293	±131
\$2,000 to \$2,499	238	±112
\$2,500 to \$2,999	0	±19
\$3,000 to \$3,499	0	±19
\$3,500 or more	41	±46
No cash rent	41	±59

	Lake Zurich village, Illinois	
Label	Estimate	Margin of Error
Total:	1,393	±326
With cash rent:	1,352	±326
Less than \$100	0	±19
\$100 to \$149	0	±19
\$150 to \$199	0	±19
\$200 to \$249	0	±19
\$250 to \$299	0	±19
\$300 to \$349	15	±25
\$350 to \$399	0	±19
\$400 to \$449	0	±19
\$450 to \$499	0	±19
\$500 to \$549	11	±19
\$550 to \$599	0	±19
\$600 to \$649	0	±19
\$650 to \$699	9	±13
\$700 to \$749	11	±18
\$750 to \$799	38	±38
\$800 to \$899	59	±64
\$900 to \$999	27	±32
\$1,000 to \$1,249	218	±91
\$1,250 to \$1,499	392	±265
\$1,500 to \$1,999	293	±131
\$2,000 to \$2,499	238	±112
\$2,500 to \$2,999	0	±19
\$3,000 to \$3,499	0	±19
\$3,500 or more	41	±46
No cash rent	41	±59



	Lake Zurich village, Illinois
Label	Estimate

Total:	1,393
With cash rent:	1,352
Less than \$100	0
\$100 to \$149	0
\$150 to \$199	0
\$200 to \$249	0
\$250 to \$299	0
\$300 to \$349	15
\$350 to \$399	0
\$400 to \$449	0
\$450 to \$499	0
\$500 to \$549	11
\$550 to \$599	0
\$600 to \$649	0
\$650 to \$699	9
\$700 to \$749	11
\$750 to \$799	38
\$800 to \$899	59
\$900 to \$999	27
Less than \$999	170
\$1,000 to \$1,249	218
\$1,250 to \$1,499	392
\$1,500 to \$1,999	293
\$2,000 or more	279
\$2,000 to \$2,499	238
\$2,500 to \$2,999	0
\$3,000 to \$3,499	0
\$3,500 or more	41
No cash rent	41



Less than \$999	170	973
\$1,000 to \$1,249	218	
\$1,250 to \$1,499	392	
\$1,500 to \$1,999	293	
\$2,000 or more	279	5151
Less than \$49,999	973	
\$50,000 to \$74,99	973	
\$75,000 to \$99,99	902	
\$100,000 to \$149,	1570	
\$150,000 or more	2679	

INFORMATION ABOUT NOVEL CORONAVIRUS (COVID-19) *Get the latest information about coronavirus and the Illinois Department of Health preparations here - <http://www.dph.illinois.gov/topics-services/diseases-and-conditions/diseases-a-z-list/coronavirus>*

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Protect yourself from scams! Verify the identity of a landlord **BEFORE** you complete an application to protect against identify theft. **NEVER** wire or send money using an app and only pay after you have verified they have a right to rent the unit! [Find out how](#) to detect a scam and report a listing.

It is imperative that persons searching for housing speak with the landlord and/or property management company and thoroughly inspect the property and surroundings prior to signing any contracts to verify the current status and condition of any property. Read the [full disclaimer](#).


8 properties In Lake Zurich

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  10    	Liberty Lake Apartments 201 S. Buesching Rd. Lake Zurich, IL 60047	\$0 - \$1,260 Income Based Rent 
  1     	Liberty Lake Apartments 201 S Buesching Rd Lake Zurich, IL 60047	\$0 - \$1,613 Income Based Rent 
  1     	Liberty Lake Apartments 201 S Buesching Rd Lake Zurich, IL 60047	\$0 - \$1,121 Income Based Rent 

<div> <div>☆ □</div> <div> 1 </div> <div> </div> </div> <div> 1 Bed • 1 Bath • Apartments </div> <div> 847-438-6111 </div>	<div> Liberty Lake Apartments 201 S Buesching Rd Lake Zurich, IL 60047 </div> <div> \$0 - \$1,449 Income Based Rent ⓘ </div> <div> full listing → </div>
<div> <div>☆ □</div> <div> 1 </div> <div> </div> </div> <div> 1 Bed • 1 Bath • Apartments </div> <div> 847-726-1444 </div>	<div> Zurich Meadows Apartments 250 Mohawk Trail Lake Zurich, IL 60047 Handicap Accessible Units Seniors only. Not licensed. </div> <div> \$730 - \$1,000 Income Based Rent ⓘ </div> <div> full listing → </div>
<div> <div>☆ □</div> <div> 1 </div> <div> </div> </div> <div> 1 Bed • 1 Bath • Apartments </div> <div> 847-726-1444 </div>	<div> Zurich Meadows Apartments 250 Mohawk Trail Lake Zurich, IL 60047 Seniors only. Not licensed. </div> <div> \$730 - \$1,000 Income Based Rent ⓘ </div> <div> full listing → </div>

Page 108 of 118 General Attachment: 4B-Midlo ... Report 2023-08-16 packet.pdf (Page 108 of 118)

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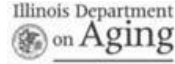
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Affordable Housing in a Community – IL Requirements

Generally, the promotion and approval of affordable housing stock in a municipality is an objective embodied in Illinois law, both in Article 11 of the Municipal Code (zoning authority) and in the Affordable Housing Planning and Appeal Act ("AHPAA" or "Act").

The Village of Lake Zurich is currently an exempt local government under the Affordable Housing Planning and Appeal Act (AHPAA). An "Exempt Local Government" is any Local Government in which at least 10% of its total year-round housing units are Affordable Housing, as determined by the Authority pursuant to Section 20 of the Act.

The Village of Lake Zurich currently satisfies the 10% State goal (with affordable housing stock at 12.5%), but remains in an "at-risk" category established by the Illinois Housing Development Authority. Municipalities with above 10% but less than 20% affordable housing are categorized by the Illinois Housing Development Authority as "at risk" of being subject to the AHPAA, if there is a chance that their affordable housing percentage could fall below 10% due to various circumstances such as increase in regular housing stock, changes in the existing affordable housing stock due to change in ownership, etc.

The Act requires non-exempt municipalities (those with less than 10% affordable housing units from their total housing stock) to meet and be subject to the following criteria:

- prepare an affordable housing plan designed to ensure the future development of affordable housing.
- It also gives developers the right to appeal zoning/development decisions of non-exempt municipalities to a state appeals board if they contend certain conditions have been imposed that are unreasonable for them to construct affordable housing.
- The Illinois Attorney General has the power to enforce the requirements of the Act against local governments.

Affordable Housing and Property Values

The Illinois Housing Development Authority (IHDA) in its handbook entitled "Affordable Housing Planning and Appeal Act: 2018 Non-Exempt Local Government Handbook". In relevant part, regarding the continuation of the exempt status of a municipality, the Authority has included the following in its FAQ on the Act:

Does affordable housing have a negative impact on property values?

In recent years, researchers have produced numerous studies with rigorous analytic methodologies to better understand the impact that affordable housing developments have on surrounding property values, local community safety and services. A review of the literature on the subject conducted in 2016 indicated that most studies do not find a negative impact related to affordable housing developments. [Young, Cheryl. "There Doesn't Go the Neighborhood: Low-Income Housing Has No Impact on Nearby Home Values" in Trulia Research/ Affordability web report - <https://www.trulia.com/research/low-income-housing>] The literature review also showed that affordable housing sited in economically strong communities and dispersed across metropolitan regions are the most successful and have the least negative impacts.

Another study focused on affordable housing developments in suburban New Jersey, which has a State policy similar to the Affordable Housing Planning and Appeal Act, found that affordable housing development was not associated with increased crime, decreased property values or increased taxes. [Len Albright, Elizabeth S. Derickson and Douglas S. Massey. "Do Affordable Housing Projects Harm Suburban Communities? Crime, Property Values, and Property Taxes in Mt. Laurel, New Jersey" in *City & Community* (2013; 12: 2).]

Public Hearing Sign posting requirements

The requirements for posting a sign on a property are contained within Section 9-14-3 Public Hearings and Meetings, Paragraph 4.b. below:

b. Posting On Subject Property By Manager: If a specific parcel is the subject of application, then the village manager shall give notice by posting a sign on the subject property. The sign must be at least six (6) square feet in area; must include the words "Zoning Application Pending" and a telephone number to be called for additional information; and must be posted on the property, facing the street, at least fifteen (15) days prior to the date set for a hearing on the application. The village manager shall remove the notice from the property only after the conclusion of the hearing.

The preceding paragraph provides for the posting a minimum of one sign on the Subject Property facing the street among other requirements. The provisions do not specify a number of signs per lot of record or per postal address or per number of street addresses.

The Subject Property comprises two contiguous tracts of land making up one parcel or one zoning lot as defined in the zoning code (Chapter 24 Usage and Definitions). By definition:

PARCEL: All contiguous land in one ownership.

LOT: A parcel of land legally described as distinct portion or piece of land of record. See definitions of lot of record and lot, zoning. Unless the context indicates otherwise, all references in this Zoning Code to a "lot" shall be deemed to mean a "zoning lot".

LOT, ZONING: A tract of land consisting of one or more lots of record, or parts thereof, under single ownership or control, located entirely within a block and occupied by, or designated by its owner or developer at the time of filing for any zoning approval or building permit as a tract to be developed for, a principal building and its accessory buildings, or a principal use, together with such open spaces and yards as are designed and arranged, or required under this Zoning Code, to be used with such building or use. Notwithstanding the foregoing, sale of individual lots of record underlying individual dwelling units in a townhouse or two-family dwelling, following issuance of a certificate of occupancy for such dwelling, shall not prevent treatment of the tract of land underlying such dwelling as a zoning lot and all applicable bulk, space, and yard requirements shall be applied with respect to such dwelling and such zoning lot rather than with respect to individually owned dwelling units and lots of record.

Therefore, by the definitions above, the two tracts of land being contiguous and under single ownership comprise the Subject Property, and the placing of one sign on the corner of the Subject Property, facing the street and being placed at least fifteen (15) days prior to the date set for a hearing on the application has met the requirements of our municipal code.

The village also published a notice of public hearing in the local newspapers and mailed a copy via regular mail to the addresses of all owners of property within 250 feet of the Subject Property, both completed no less than 15 days prior to the date of the hearing.

Lake Zurich is a non-home rule community and is required to follow minimum state statutes for such matters. State statute provides no legal requirement to post a sign for a zoning hearing.

From: [Kyle Kordell](#)
To: [Saroosh Saher](#)
Subject: Brian Reider: possible Annexation and rezoning on the Midlothian Manner Properties
Date: Monday, July 24, 2023 9:15:18 AM
Attachments: [page 1.jp2](#)
[page 2.jp2](#)

More public feedback below, unsure if you've seen this already from Brian Reider.

Kyle

From: BRIAN REIDER <cbreider@sbcglobal.net>
Sent: Friday, July 21, 2023 8:38:29 AM
To: Ray Keller <Ray.Keller@lakezurich.org>; Kathleen Johnson <kathleen.johnson@lakezurich.org>
Subject: VLZ possible Annexation and rezoning on the Midlothian Manner Properties

Dear Mr Kelly,

The attached letter explains my opposition to the Village of Lake Zurich annexation and rezoning of Midlothian Manner properties.

I ask that you would read and share the attached 2 page letter as well as my personal note to the Planning and Zoning Commission Board Members as well as the Village Trustees. Thank you.

On a more personal note...

As you read in the attached letter at the bottom of this email you will read that I live at 23975 N. Gabriel Dr in Lake Zurich. I have lived in Lake Zurich since 2005.

My property is located at the corner of Lakewood Lane and Gabriel Dr.

My property is located on the North side of Lakewood Lane and 4 houses west from Midlothian Manner.

When looking out my kitchen window and also standing on my back yard deck I have a clear view of the northwest side of Midlothian Manner building and property. Right now the view is decent enough and would not affect my property value, but if the Village of Lake Zurich decides to move forward to annex and rezone Midlothian Manner properties and go with the applicant's plans to build an apartment building which would be built east to west on the property...I as well as many of my neighbors would see nothing else but a huge "EYE SOAR" of a building. This in turn causes me deep concern that our property values would go down...

The proposed plan to build a apartment complex, parking lot and retention pond on a this parcel of property just does not fit nor does it make sense. The corner on which Midlothian Manner property is located is on a busy intersection and has gotten busier as years have gone by.

There are no crosswalks or sidewalks at the intersection. Even if you would add sidewalks and cross walks it would help little from the danger of children walking or riding bikes trying to cross or walk down these roads. Families and their children need more space and a much more safe environment to live.

I oppose the annexation and rezoning of Midlothian Manner Properties.

Respectfully,

Cheryl Reider

July 17, 2023

Mr. Ray Keller, Village Manager

Planning and Zoning Commission Members: Orlando Stratman,
William Riley, Antonio Castillo, Ildiko Schultz, Joe Gianni,
Sean Glowacz, Jake Marx and Scott Morrison,

Village Trustees: Dan Bobrowski, Mary Beth Euker, Mark
Spacone, Roger Sugrue, William Riley and Greg Weider
70 East Main Street
Lake Zurich, IL 60047

Re: Notice of Impairment of Rights and Financial
Harm
Arising from the proposed annexation, zoning change
and redevelopment of:
22843 W N Lakewood Lane, Lake Zurich, IL (PIN 14-
16-056-000) and
22795 W N Lakewood Lane, Lake Zurich, IL (PIN 14-
16-057-000).

Dear Mr. Keller, Members of the Planning and Zoning
Commission Board Members and Lake Zurich Village Trustees:

Please consider this letter as legal notice that I believe that, in
the event that the Village of Lake Zurich were to annex, re-zone
(change the zoning from R-1 Rural Single Family Residential to
Lake Zurich's R-6 Multi-Family Residential) and re-develop the
above referenced Midlothian Manor properties, I, as a
neighboring property owner would suffer significant and
irreparable harm both, in terms of my rights to use and enjoy my
property and R-1 District, as well as, as well as would incur
significant financial harm including, but not limited to, the
impairment to the value of my property.

I also believe that the proposed redevelopment would create
additional and adverse health/safety issues to the surrounding
properties due to its location including, but not limited to, traffic
congestion and ingress/degress activity (eastbound N Lakewood
traffic already backs up past the entrance to the property), safety
risk due to the lack of sidewalks on neighboring properties and
safety risk due to the lack of crosswalks at an already dangerous

intersection (Midlothian/Church and North Lakewood/Oakwood).

I believe that the proposed redevelopment, in addition to being unnecessary based on Lake Zurich's existing housing demographics, is also adverse to the overall Purpose of the Unified Development Ordinance, Lake Zurich's own Zoning Ordinances, Land Use Patterns and to the existing public infrastructure of the immediate area. The proposed plan is not only in direct conflict with Lake Zurich's own Zoning Ordinances and Requirements for the development of this already developed property but, it is also in direct conflict with my currently existing rights to use and enjoy my property in accordance with the existing R-1 Rural Residential Zoning District in which I, and the above referenced property are both currently located within.

I respectfully request that Lake Zurich provide at least an equal level of deference to the immediate area residents as it appears to be providing to the developer to further this project and that the Village of Lake Zurich and the Individual Board Members conform with Lake Zurich's own Zoning Ordinances, Requirements, Processes and not act in an

Page 2 – Notice of Impairment of Rights and Financial Harm
July 17, 2023

adverse manner to Lake Zurich's Zoning Ordinances, Requirements, Processes and the rights of the surrounding property owners.

Respectfully,

Signature Cheryl Reider
Printed Name Cheryl Reider
Street Address 23975 N. Gabriel Dr.
City State Zip Lake Zurich IL 60047

From: [Sarosh Saher](#)
To: [Janet VAN DER BOSCH](#)
Subject: RE: request to be heard at next Zoning Meeting
Date: Wednesday, July 26, 2023 9:38:00 AM

Mrs. VanDerBosch – the requirements for obtaining public testimony are contained within the Lake Zurich Municipal Code. Public comment is obtained either through writing in advance of a hearing, or verbally at the hearing during the time allotted by the Chairman of the PZC.

However, please be aware that opportunity for public comment was provided on June 21 and July 17. The public comment portion of the public hearing process was completed by the PZC on July 19. The PZC continued the public hearing to its next meeting in August for the express purpose of allowing the PZC to review the available hearing information and to give the Petitioner an opportunity to respond to the additional documents, information and comments submitted by members of the public at both the June 21 public hearing, the July 19th continued public hearing and all the written documentation submitted by the public in advance of and during these meeting dates.

I hope this helps.

Thank you.
Sarosh

Sarosh B. Saher, AICP

Community Development Director | Village of Lake Zurich | 505 Telser Road, Lake Zurich, IL 60047
sarosh.saher@lakezurich.org | Direct: 847-540-1754
Engage with Lake Zurich at LakeZurich.org/Connect

From: Janet VAN DER BOSCH <janet.vanderbosch@comcast.net>
Sent: Monday, July 24, 2023 4:15 PM
To: Sarosh Saher <Sarosh.Saher@lakezurich.org>
Subject: RE: request to be heard at next Zoning Meeting

Good afternoon,

The Lake Zurich website is unclear as to how to proceed to submit a request to be heard at the next Zoning Meeting.

Can you please reply with the necessary process?

Thank you,

Mrs. VanDerBosch



At the Heart of Community

PLANNING AND ZONING COMMISSION

70 East Main Street
Lake Zurich, Illinois 60047

Phone (847) 540-1696
Fax (847) 726-2182
LakeZurich.org

August 9, 2023

By email transmission: larrywschaedel@gmail.com

Mr. Larry Schaedel
24144 N. Gabriel Drive
Lake Zurich, IL 60047

Mr. Schaedel:

I serve as Chair of the Lake Zurich Planning and Zoning Commission. I am in receipt of your letter dated July 28, 2023 designated "Request to Subpoena Information from Petitioner(s) Related to the Annexation, Rezoning and Redevelopment of 22843 and 22795 North Lakewood Lane, Lake Zurich, IL. 60047".

You state in your letter that "pursuant to Chapter 14, 9-14-3, D and other applicable section of the Village of Lake Zurich's Zoning Ordinances, the Proximate Owners of the property surrounding Midlothian Manor properties request that the Village of Lake Zurich Subpoena the following records and information that we believe is directly relevant and material to the proposed annexation, rezoning and redevelopment of the property and for which the Planning and Zoning Committee is relying upon the representation of the Petitioner as a basis for consideration and potentially approval of the proposed project."

At this stage of these proceedings regarding Petitioner's presentation and the completion of the public testimony, comments and questions following that presentation, further requests for documents or to command the appearance of certain persons at future hearings for possible questions are untimely and inconsistent with the procedures already publicly established by the Commission.

In response to your request for a subpoena, please be advised that upon further review of our Village Codes, we are advised by Village legal counsel that there is no express subpoena power in the law for use by the Planning and Zoning Commission. The Village Code section you have cited creates a right "[t]o have subpoenas issued by the body in charge of the hearing as may be provided by state law ...". The subpoena request here therefore would be based on dubious legal authority at best.

Further, this public hearing began with the Petitioner making and completing his presentation. There was then extensive public feedback and testimony allowed over

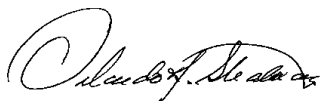
Mr. Larry Schaedel
August 9, 2023

multiple days of hearing. Whether further information and proceedings are sought by subpoena or by request, that portion of our hearing process has been completed. Without repeating the detailed information already shared with you by Village legal counsel, I will reiterate that our Planning and Zoning Commission has now conducted public hearings open to full, extended audience comment and questions on two separate occasions. The Commission allowed hours and hours of public comment and testimony. The Commission extended the public hearing expressly to ensure a full opportunity for all interested parties to be heard. The Commission has received and reviewed multiple letters, written objections, detailed arguments and Notices of Impairment from you and area property owners. All persons were allowed to speak and ask questions at the public hearings. As the chair I was very careful to ensure that all interested persons were allowed that opportunity. All information, documents, questions and testimony from the public are now complete and being reviewed by the Commission.

After allowing all interested persons to speak and concluding that portion of the public hearing for public testimony and questions at the Commission's July meeting, the Commission determined in open session the next order of its business. In open session, the Commission stated that the Commission and staff will now proceed to review all written and oral information gathered to date in preparation for the next meeting in August. In open session, the Commission then notified the Petitioner he will be given a reasonable opportunity, as part of a fair and orderly process, to answer those questions raised by the public and to respond to information offered by the public at the outset of the next meeting, at the continued hearing. The Commission will then ask any further questions that it may have. When the Commission is then ready to make its recommendations regarding this Petition, it will proceed with any decision making.

Any further request then at this point, to once again open up the hearing for general public comment and testimony in this matter, whether by subpoena or otherwise, is contrary to the procedures established by the Commission and now untimely.

Sincerely,



Orlando Stratman, Chairman
Planning and Zoning Commission
Village of Lake Zurich

Copy to:
Ray Keller, Village Manager
Sarosh Saher, Community Development Director
Scott Uhler, Village Attorney