# Subsidized Housing Spatial Study

For the Institute for Housing Studies

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# Project Summary

In May of 2007, DePaul University Real Estate Center conducted a study outlining the state of rental housing in Cook County. The report concluded that given current and future trends, over 75,000 units of affordable rental housing must be preserved or created by 2020 to meet forecasted demand. A major source of affordable housing is of course those buildings subsidized through various government programs. This project looks at the buildings built through the Section 8 and Low Income Tax Credit programs. Specifically it will look at the locations of buildings in these programs whose contracts are expiring. Both programs have clauses that allow the buildings owners to leave the program and are therefore not subject to rent limits. Depending on the location of these buildings this may make the units unaffordable to moderate and low income residents. This report identifies the locations of the buildings that are at risk of losing affordability and to asses, which communities may be most impacted.

This study used data provided by the Institute for Housing Studies via the Department of Housing and Urban Development and the Illinois Assisted Housing Action Research Project (IHARP) located at the University of Illinois Chicago. Using GIS this report located and identified buildings in each program that were at risk of leaving the program.

This study found that the largest concentrations of Section 8 properties that were expiring by 2015 were located along the lakefront on both the north and south sides. Specifically, the community areas of Grand Boulevard, Washington Park, Kenwood, Hyde Park, Woodlawn, Greater Grand Crossing, Uptown and the Near North Side all had concentrations of The last large concentration of expiring section 8 contracts exists on the West Side in the community areas of North Lawndale, West Garfield park, East Garfield Park, and the Near West Side.

Of the LIHTC buildings, there were greater concentrations of expiring buildings in the South and West side communities of, East Garfield Park, Douglas, Grand Boulevard, Washington Park, Englewood, Auburn Gresham and the Near West Side.

There are generally two major reasons why buildings leave the program; financial incentive, or building deterioration. Buildings located in "hot markets" or where the market dictates high rents, may be at risk since owners may be able to collect higher rents on the open market than if they are in the program. HUD addresses this issue with their "Mark Up to Market" program where owners can seek rent increases if they can prove market rents in their area is higher than rent limits established by HUD. However, this program does create costs on the owner as the application process for this program is quite lengthy. Generally, more data is needed on the specific buildings to identify if they are in a market where they have financial incentive to leave the program. Additional financial data on the building is required to determine this. The condition of the buildings, rehab needs, status of their mortgage, as well as cash flow statements, will influence if the building will stay in the Section 8 or LIHTC programs, perhaps even more than the rental market. In addition, data on building conditions can identify if the building is at risk of losing its subsidy and therefore its affordability. HUD may revoke the Section 8 subsidy if the building is not in good condition and is unsafe for the

residents. Further analysis is needed to determine if any of the buildings approaching their contract expiration are in poor condition.

This study, while valuable represents only one method of identifying buildings that may be at risk of losing affordability. Further study and analysis is recommended to establish a more balanced picture of the current situation.

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# **Introduction**

In May of 2007, DePaul University Real Estate Center conducted a study outlining the state of rental housing in Cook County. The report concluded that given current and future trends, over 75,000 units of affordable rental housing must be preserved or created by 2020 to meet forecasted demand. With the support of the MacArthur Foundation DePaul University, government agencies, and non-profit organizations formed the Preservation Compact to address the need to preserve affordable rental housing in Cook County. The DePaul Real Estate Center formed the Institute for Housing Studies (IHS) as the Universities representative in the Compact. The IHS has two roles in the Compact. First, the Institute established the Data Clearinghouse to support researchers and organizations that are dealing with affordable housing issues. The second role is the director of the Interagency Council. This body is made of representatives of Chicago Department of Housing (DOH), the Illinois Housing Development Authority (IHDA), and the Department of Housing and Urban Development (HUD). This group uses data from the Data Clearinghouse to better utilize the existing resources in rental housing preservation. The goal is to identify the most "at risk" buildings and work across agencies to find solutions to building preservation. Ideally this will streamline preservation activities and eliminate waste generally affiliated with government bureaucracies.

The Interagency Council primarily focuses on government programs that subsidize the production of affordable housing; namely the federal project based Section 8 properties and Low Income Housing Tax Credit Properties. Both of these subsidy programs are the largest reason for affordable rental housing across the country and are tremendous asset to any community dealing with affordability issues.

This report will hopefully will shed light on the potential areas where properties in these programs are at risk of leaving and will therefore become unaffordable for its residents.

The following report is organized by the following sections: needs assessment, system requirements, data acquisition/dictionary, data analysis, results, and summary and recommendations. The needs assessment provides a more specific background on the reason for this report and some general background on the topic. The system requirements and data acquisition sections outline the general processes involved in data collection and analysis. It also includes a data dictionary for the various files involved in the project. The data analysis results sections provide the findings of the report, including graphic representations of the data. Finally the summary, conclusions and recommendations section sums up the implications of the results, future research needs, and recommendations for the future.

# **Needs Assessment**

This project will specifically look at the buildings built through the Section 8 and Low Income Tax Credit programs. Specifically it will look at the locations of buildings in these programs whose contracts are expiring. Both programs have clauses that allow the buildings owners to leave the program and are therefore not subject to rent limits. Depending on the location of these buildings this may make the units unaffordable to moderate and low income residents. These buildings are of the most interest to the Institute for Housing studies. This report will identify the locations of the buildings that are at risk of losing affordability and to asses which communities may be most impacted. The following is a brief description of each program as well as prior research on the Section 8 and Low Income Housing Tax Credit programs.

The programs that are today known as the project based Section 8 program was authorized by Congress in 1960's and 1970's and led to the creation of 1.5 million units of assisted housing. These 1.5 million units can be divided into two groups: the older inventory and the newer inventory. The older inventory of properties was financed by a mortgage subsidy program that allowed property owners to prepay their lower-rate mortgages. This program covered the difference between a market-rate mortgage and below-market-rate-mortgage. Over 700,000 units were built under this program. The newer inventory is compromised of the units that were built under Section 8. This part of the program works by looking at what the tenant can afford, which is usually 30% of their income verses the agreed upon rent of the unit. This part of the program covers the differences occurred when comparing those two. Today, both inventories fall under the Section 8 program.(Finkel, 2006)

A recent report from HUD, "Multifamily Properties; Opting In, Opting Out and Remaining Affordable" outlined the characteristics of properties joining or remaining in the Section 8 program and those choosing to leave the program.

The study concluded that the properties that opted out were generally in a neighborhood with higher median incomes, rents, and lower poverty and vacancy rates than those that choose to stay in the program. It also concluded that opt-outs occurred in more suburban and metropolitan/central city locations than in non-metropolitan areas. Opt-in properties are usually studio or one-bedroom units, while opt-outs or foreclosure/enforcement (those under scrutiny from HUD,) properties are those that have two to three bedrooms. The units designed for large families with four or more bedrooms are more likely to be in foreclosure/enforcement cases. It was also found that the older inventory of buildings that choose to stay in the program had the worst physical conditions. The study also concluded that units that were being run by nonprofit organizations were the almost guaranteed to stay in the program because of their missionary beliefs to simply provide affordable housing.

The result of this study displays many faults of the Section 8 housing program. There are less and less units available for them due to owners' failure to make payment, or that the conditions have become so deteriorated that HUD had to step in to force the owners to make changes. Additionally, units are lost due to market conditions and the

possibility for owners to make large profits. Nonprofits owners are of course likely to stay in the program.

A 2000 study prepared for HUD, "Case Studies of the Conversion of Project-Based Assistance to Tenant-Based Assistance," describes the experiences of residents who were given tenant-based assistance when the owners of their developments pre-paid their mortgages or chose to "opt out" of project-based assistance. The project aimed to identify characteristics and situations of the developments that are converting identity factors. These factors influence the decision of households receiving vouchers on whether to stay or move from developments that convert, and finally describe outcomes for tenants who got vouchers and those who moved and stayed, such as housing and neighborhood satisfaction and changes in rent (Locke et al, 2000).

The study concluded that the reasons for opting out varied, but like the previously described study, were based largely on market conditions. Affordability was not always lost, due to the fact the tenants were given vouchers to assist in rent payments, but many had to or choose to move to new neighborhoods. Those that moved generally had higher neighborhood satisfaction (ibid). However affordability was also lost in some cases as the specific units were no longer receiving the project based subsidy and were therefore unaffordable more many low to moderate income families.

The Low-Income Housing Tax Credit was created in 1968 by the Tax Reform Act. This policy was created by the federal government to promote construction of affordable rental units. Like Section 8, LIHTC buildings must remain affordable to moderate income individuals for a set amount of time, usually 15-30 years. In an analysis of this policy, "The Low-Income Housing Tax Credit as an Aid to Housing Finance: How Well Has It Worked?," McClure studies how this program has affected affordable housing.

McClure begins with a review of the program. The main intent was to try to get owners and developers that had "affordable housing" to keep it affordable (2000: 92). The main requirements for a property is that it must be either "at least 20%... occupied by households whose income is less than 50% of the metropolitan area's median family income..." or "at least 40% of the units are occupied by households whose income is less than 60% of the metropolitan area's median family income" (McClure, 2000: 93).

McClure also states several short falls in the policy. One of the largest flaws is the strict requirements for developers and that it becomes difficult to remain in the program (2000: 94). In other cases, the program did not provide enough incentive to save the affordability of the housing (2000: 98).

A key finding of the study was the trends in location of the properties. 80% of these units are located in urban areas and among these, 54% are in central cities and 26% are in the surrounding suburbs (2000: 98). McClure also concludes that one-third of all units are located in areas that are 50% minority. Finally, he concludes that the program may have created a bias as to who is helping. He cites a study by Nelson (1994), which claims that the majority of the monies go to helping people who are on the top end of the legal requirement, leaving the bottom most part of the scale not assisted by this program (2000: 99).

Finally, McClure talks about the role of nonprofit sponsored properties. He concludes that nonprofits are the most vulnerable to losing their property in spite of the tax credit. This is because of the nature of a nonprofit. He argues that Nonprofits "...tend

to take on projects in high-cost, low-income areas" (2000: 100). This results in nonprofits cutting corners in order to sustain, resulting in disqualification from the tax credit.

These studies indicate at the very least, preserving the affordable units supported through these programs in Chicago will be a challenge. They also indicate while national level research is relatively comprehensive, research on the local situation is lacking and it is not clear if local conditions will mirror national trends. This research will shed light on the state of subsidized rental housing in Chicago.

## **Data Acquisition**

The files that we have obtained for our project contain the entities' attributes that are needed to find the answers to our need to know questions. The attributes will allow us to map the entities proposed in each question. The following section contains a data dictionary, and general comments on the quality of the data and some of its constraints.

# **Data Dictionary**

File Name: Chicago Opt Outs.shp

Description of File: This file contains all the properties that opted out of the section 8

program. They range from 1995 to 2005.

Source of Data: Illinois Assisted Housing Action Research Project (IHARP)

Processing Steps if any: Geocoding

Spatial Object Type: Point

Attributes:

- Type of Termination: The reason why the property left the program either opt-out, enforcement, or foreclosure termination.
- Opt Out Fiscal Year (FY): The year the property opted out of the program.
- Real Estate Management System (REMS) Status: The status of the property that is used in the REMS database.
- Expiration Date: The year the property's contract expires.
- Project Name: The name of the property.
- Units: The number of units that each property had.
- Street: The address of the property.
- City: The city the property resides in.
- State: The state the property resides in.
- Zip Code: The zip code the property resides in.

Data Format: Shapefile

File Name: City LIHTC buildings.shp

Description of File: This file contains all the properties that received a low-income housing tax credit for their properties. These properties house low-income residents with a possibility of having section 8 vouchers.

Source of Data: Illinois Assisted Housing Action Research Project (IHARP)

Processing Steps if any: Geocoding

Spatial Object Type: Point

Attributes:

- Development Name: The name of the property.
- Address: The address of the property.
- City: The city that the property resides in.
- State: The state that property resides in.

- County: The County that the property resides in.
- Zip code: The zip code that the property resides in.
- Developer: The name of the company that developed the property.
- Developer Type: The status of the development, either not for profit or for profit.
- Property Description: The type of building. Choices are Multi-Family(MF), Single Room Occupancy(SRO), Co-Op(Cooperative Corporation), Single-Family(SF), Assisted Living(AL), and Supportive Living Facility(SLF).
- Construction Type: The type of work that was done to the property either rehab or new.
- Year Funded: The year that the property got funding or received the low income housing tax credit.
- Total Units: The total number of units within the property.
- LIHTC Units: The number of units that are allocated for low-income residents or section 8 vouchers.
- Date Put in Service: The date that the property was put in service, where residents could live in it.
- Status: The status of the property's contract options including active, expired, not put in service, or pending.

Data Format: Shapefile

File Name:Section8properties.shp

Description: This file is list of all the section 8 properties that are currently in use in

Chicago.

Source of Data: Illinois Assisted Housing Action Research Project (IHARP) and

Department of Housing and Urban Development

Processing Steps: Geocoding Spatial Object Type: Point

#### Attributes:

- Property Name: The name of the property.
- Address: The address of the property.
- City: The city that the property is located in.
- State: The state the property is located in.
- Program Type: The type of subsidy program that the property is in.
- TRACS Overall Expiration Date: The expiration date of contract.
- Past Overall Expiration Date: The expiration date of any past contracts.
- Total Assisted Unit Count: The total number of units in the property that are given a subsidy.
- Total Unit Count: The total number of units within the property.

Data Format: Shapefile

File Name: Community\_Area

Description: File of Chicago Community areas

Source of Data: DePaul University Egan Urban Center and US Census Processing Steps: combining census data and geographic information

Spatial Object Type: Polygon

#### Attributes:

- ComArea\_ID: Number of community area
- Community: Name of Community Area
- Area: Area of community area
- Perimeter: perimeter of community area
- Median Rent: Median rent of all rental units in community area

Data Format: shapefile

# **Data Quality and Constraints**

Each data set present unique opportunities for analysis. The fitness for use was generally good, but still there were some challenges.

Data Set: Chicago\_OptOuts

This data represents buildings that previously opted out of the Section 8 program. It identifies, there location, reason for leaving, and date the left the program. The data is complete as of 2006. It is possible that buildings have opted out since and are therefore not reflected in this data set. Also, it is possible that this data does not reflect the exact state of the development. For instance, an owner of a building may have opted out and sold the building whose new owner was able to acquire a project-based subsidy on the project.

Data Set: Section 8 Prop

This data set has an appropriate scale, and indicates were the Section 8 properties are located. This dataset is accurate as of September 2007. It is possible that some buildings have opted out of the program but are not reflected in this data set. While this is possible, it is unlikely that many of these properties have opted out. The data is logically consistent and complete.

Data Set: City LIHTC buildings

This data, similar to the Section 8 prop, has appropriate scale and indicated where they were located. It is for the most part accurate, some of buildings could not be located by the address locator file but it was only a couple. It is also accurate and complete as of September 2007 and may not reflect new developments.

Data Set: Community\_Area

The data is the appropriate scale. The accuracy varies. The geographic data and representation is accurate as far as size, shape and name. However, the data taken from the census is from 2000 and does not reflect changes that have since occurred. The data is not complete as we would like, it only includes census data from community areas that have Section 8 and LIHTC building in them.

There were a series of data problems and constraints. As noted above, parts of the data were not current and cannot be deemed as completely accurate. Additionally, the data sets came from numerous sources which caused some problems with quality. For instance, when geocoding, the addresses were not entered very well which made it difficult to geocode. We were also not able to find more recent accurate data on rent prices by Chicago Community Area. This would be a better indicator of rental markets that are "hot" or where market rents are higher than the Federal regulated rents limits received by owners of Section 8 and LIHTC buildings.

# **System Requirements**

The following is a brief description of the system requirements and process needed to conduct analysis on the data as well as how the data interacts with each other. It includes a table with the functions performed for each research question. Additionally there is an Entity Relationship model that demonstrates how the entities in this study (buildings, community areas) interact with each other in database.

	Function				
	Data	Data			
Need to know Questions	Collection	Management	Data Manipulation	Analysis	Visualization
				query,	
Location of Buildings in each	data		Georeference, quality	overlay,	
community area	Transfer	store/retrieval	/ assessment.	measurement	choropleth,
				query,	
Location of Section 8 buildings	data		Georeference, quality	overlay,	Graduated
with expiring contracts	Transfer	store/retrieval	/ assessment.	measurement	symbol
				query,	
Location of LIHTC buildings 15	data		Georeference, quality	overlay,	Graduated
year opt-out option	Transfer	store/retrieval	/ assessment.	measurement	symbol
				query,	choropleth,
Location of Building in "Hot	data		georeference, quality	overlay,	Graduated
Markets"	Transfer	store/retrieval	/ assessment.	measurement	symbol

13

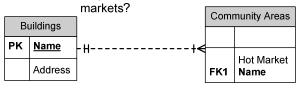
Where are the subsidized buildings in each community area?



Where are the buildings with expiring section 8 contracts?

	Buildings		Community	munity Areas
Pł	Name	-H		
	Address Expiring Contracts		FK1	Name

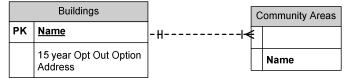
Where are the buildings that are located in hot



Where are the buildings that are at risk of losing affordability due to building conditions?

Buildings				
PK	<u>Name</u>			
	Address Conditions Score			

Where are the buildings that are approaching the 15 year opt out option?

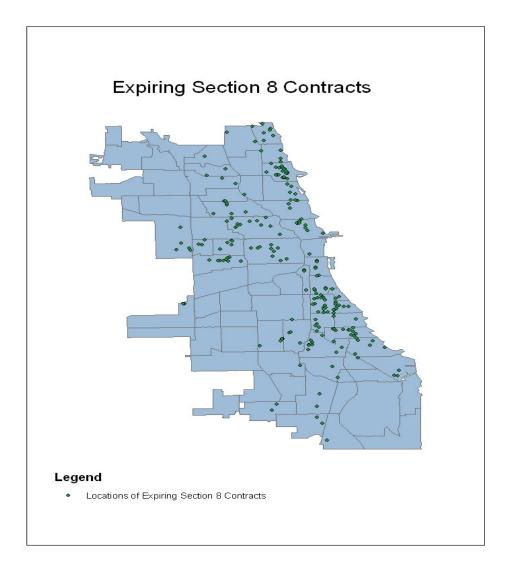


The relationship between the two entities is that the many buildings belong to one community area.

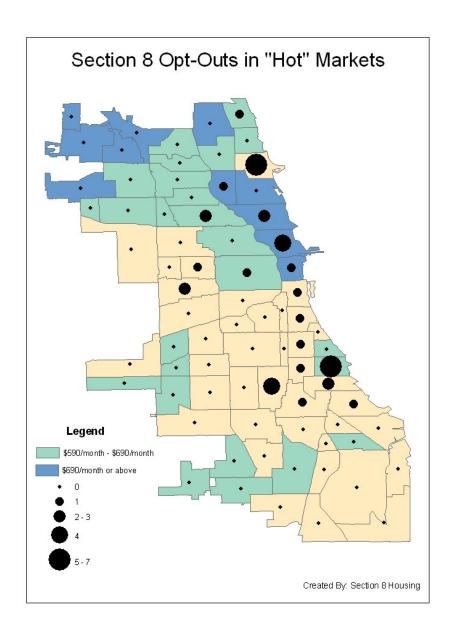
# **Data Analysis and Results**

The following analysis is based on the results of operations performed by GIS. The building data sets were overlayed on geographic data of Chicago community areas. Operations were conducted to identify the locations of the Section 8 buildings and the LIHTC buildings in each community area. Additional operations were performed to identify the buildings with expiring contracts as well as additional neighborhood characteristics.

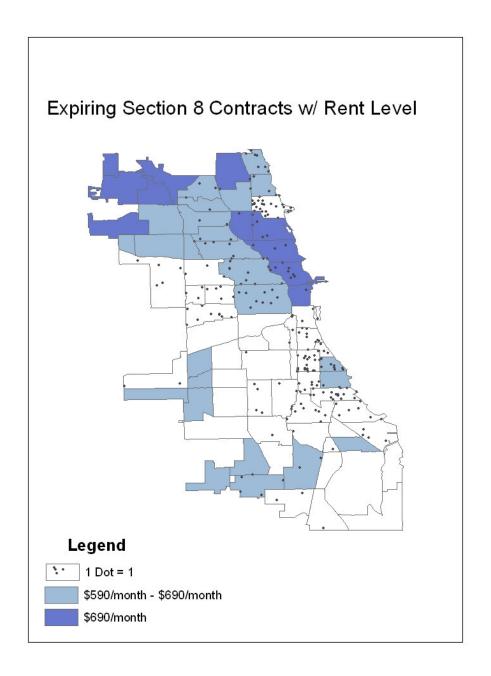
The Expiring Section 8 Contracts map shows the locations of all the expiring Section 8 properties. The largest concentrations were found to be located on the South Side in the community areas of Grand Boulevard, Washington Park, Kenwood, Hyde Park, Woodlawn, and Greater Grand Crossing. Another large concentration of buildings with expiring section 8 contracts is seen on the North side in the community area of Uptown. The last large concentration of expiring section 8 contracts exists on the West Side in the community areas of North Lawndale, West Garfield Park, East Garfield Park, and the Near West Side. It is important to note that a large number of the expiring Section 8 contracts lie along the lakefront on the North and South sides. Due to overwhelming value of lakefront property this could affect the expiring properties' renewal of section 8 contracts. The North side properties are more vulnerable to not renewing than the south side properties due to the value of the land on the North Side. The specific area of Hyde Park is also susceptible to not renewing due to the gentrification that is taking place there as well.



The next map is Section 8 Opt-outs by in "hot" markets. These buildings are ones that previously opted out of the Section 8 program. In this case, "hot markets" are defined as those community areas with median rents (2000) that are above the rent limits established by HUD, where owners could potentially collect higher rents if they were not part of these programs. The limits established by HUD vary by unit size; therefore, the figure used in this analysis is \$690, which is the median rent limit of all unit sizes. Additionally we identified community areas with rents within \$100 of the rent limits since the median rents are based on 2000 figures and it is likely that these areas experienced at least a degree of rent increases. Uptown and Hyde Park had between five and seven properties that opted out.



The map entitled, Section 8 Buildings with Rent Levels displays the amount of buildings in Community Areas Approaching Expirations Dates in the year 2015, with the rent levels to determine if the buildings are in "hot markets." It is a dot density map to indicate general trends within the community area. The greatest concentration of expiring buildings is in Uptown which by this measure is not a hot market, although all neighboring markets are "hot." There are concentrations in Lincoln Park and the Near North side of expiring buildings, which in these markets indicates there might be financial influences on the owner to leave the program. Other concentrations in Grand Boulevard, Woodlawn, and Greater Grand Crossing will probably not be influenced by market conditions.

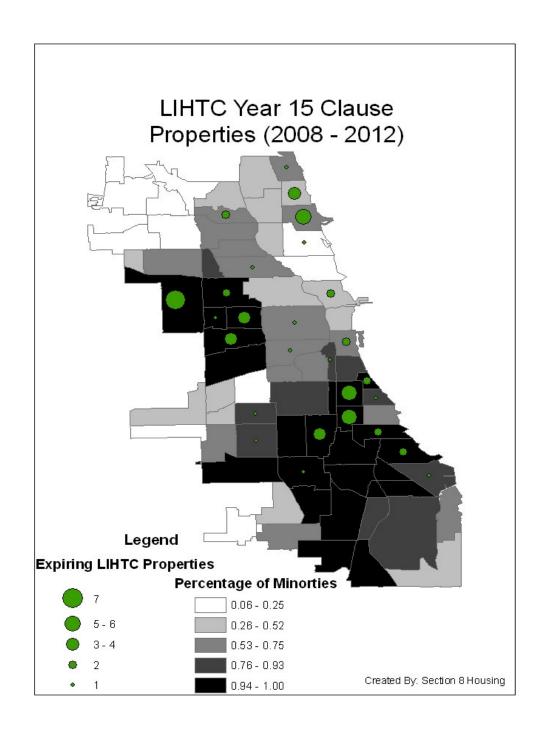


The LIHTC maps yielded some interesting results. Two maps were created in order to explain this policy. The LIHTC properties all reach what has been coined the "Year 15 Clause" which states that property owners could opt out of LIHTC program after 15 years of being in the program. The two maps were generated to show two distinct time periods—four years from 2008 (2012) and then 10 years from now (2018).

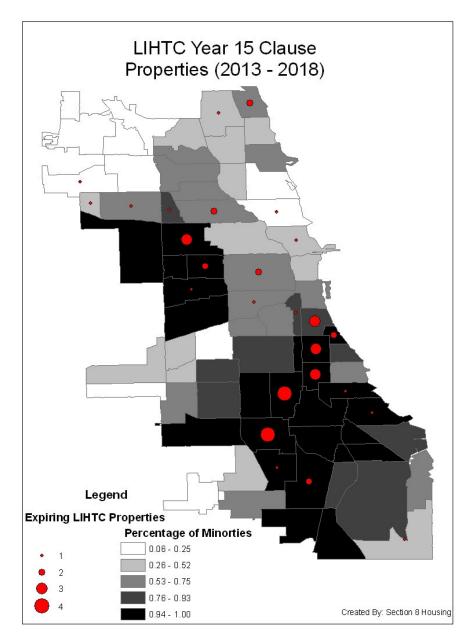
These time periods were decided in order to give a glimpse into the future of which properties were going to be expiring within 4 years from now and then 10 years from now. The maps are also displaying the percent minority in each of the community

area. This was to test how consistent policy implementers were consistent with the program aim to place LIHTC properties in minority communities.

The first map displays the properties that are expiring by 2012. This shows that a significant amount of properties that will expire by 2012 will be in Austin, Humboldt Park North Lawndale East Garfield Park, Uptown, Albany Park, Edge Water Washington Park and Woodlawn. The distribution of these properties is consistently in at least 50% and up minority communities. This suggests that the policy is following the ethnicity requirement set for it.



The second map is of properties expiring in 2018. They are generally distributed in Humboldt Park, East Garfield Park, Douglas, Grand Boulevard, Washington Park, Englewood, Auburn Gresham, Rogers Park and the Near West Side. These communities are also still within a 50% or greater margin minority population.



## **Summary and Recommendations**

It is clear from the results that some community areas could potentially face issues of buildings leaving these programs and losing many affordable housing options for its residents. The north side community areas of Lincoln Park, Near North Side, Lakeview, Uptown as well as the South Side community areas of Grand Boulevard, Washington Park, Englewood, all may have to deal with the issue of buildings leaving the Section 8 and LIHTC programs.

There are generally two major reasons why buildings leave the program; financial incentive, or building deterioration. Buildings located in "hot markets" or where the market dictates high rents, may be at risk since owners may be able to collect higher rents on the open market than if they are in the program. HUD addresses this issue with their "Mark Up to Market" program where owners can seek rent increases if they can prove market rents in their area is higher than rent limits established by HUD. However, this program does create costs on the owner as the application process for this program is quite lengthy. Generally, more data is needed on the specific buildings to identify if they are in a market where they have financial incentive to leave the program. Additional financial data on the building is required to determine this. The condition of the buildings, rehab needs, status of their mortgage, as well as cash flow statements, will influence if the building will stay in the Section 8 or LIHTC programs, perhaps even more than the rental market. In addition, data on building conditions can identify if the building is at risk of losing its subsidy and therefore its affordability. HUD may revoke the Section 8 subsidy if the building is not in good condition and is unsafe for the residents. Further analysis is needed to determine if any of the buildings approaching their contract expiration are in poor condition.

This study, while valuable represents only one method of identifying buildings that may be at risk of losing affordability. Further study and analysis is recommended to establish a more balanced picture of the current situation.

# **Technical Appendices**

# Appendix A- Contacts and Sources of Data

- Marc Smith Director, Institute for Housing Studies
- Illinois Assisted Housing Action Research Project (IHARP)
- DePaul University Egan Urban Center
- United States Census 2000

# Appendix B

- Finkel, Meryl, et al. "Multifamily Properties: Opting In, Opting Out, and Remaining Affordable." Prepared for Department of Housing and Urban Development, 2006. Accessed http://www.huduser.org/Publications/pdf/opting\_in.pdf
- McClure, Krik. "The Low-Income Housing Tax Credit as an Aid to Housing Finance: How Well Has It Worked?," Housing Policy Debate, Volume 11 Issue 1, 2000.
- Locke, Gretchen, et al. "Case Studies of the Conversion of Project-Based Assistance to Tenant-Based Assistance." Prepared for Department of Housing and Urban Development, 2000. Accessed <a href="http://www.huduser.org/Publications/pdf/project.pdf">http://www.huduser.org/Publications/pdf/project.pdf</a>
- The Real Estate Center at DePaul University, et al. <u>The State of Rental Housing in Cook County Current Conditions and Forecast</u>. Chicago: The Grillo Group Inc., 2007.