

**UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF ILLINOIS  
EASTERN DIVISION**

<b>UNITED STATES SECURITIES and EXCHANGE COMMISSION,</b>	)	<b>No. 18 CV 5587</b>
	)	
<b>Plaintiff,</b>	)	
	)	
<b>v.</b>	)	<b>Magistrate Judge Young B. Kim</b>
	)	
<b>EQUITYBUILD, INC., EQUITYBUILD FINANCE, LLC, JEROME H. COHEN, and SHAUN D. COHEN,</b>	)	
	)	
<b>Defendants.</b>	)	<b>April 22<sup>nd</sup>, 2019</b>

**REPLY to MEMORANDUM REPORT and RECOMMENDATION**

Before the court was Receiver Kevin B. Duff’s first motion for court approval of the sale of certain real estate and for the avoidance of certain mortgages, liens, claims, and encumbrances. Non-party trustee Wilmington Trust, National Association (“Wilmington Trust”) and Defendants Jerome H. Cohen and Shaun D. Cohen (“the Cohens”) had objected to the Receiver’s motion. On April 8<sup>th</sup>, 2019, Honorable Judge Young Kim recommended that the Cohens’ objection be overruled. For the following reasons, the Cohens respectfully request the objection be reconsidered and sustained rather than overruled:

**BACKGROUND**

In his recommendation, Judge Kim responds to the objection with the following points:

- 1) The Cohens had notice in November of the Receiver’s intent to sell and the

process by which he intended to do so yet waiting until February to object.

- 2) The Cohens did not produce any evidence supporting the claim that the asking prices diverged, in some cases, significantly from the values.
- 3) The Receiver has broad powers, as was given in the Receivership Order,
- 4) The Cohens presented no evidence of their claim that the Receiver “is either not committed to fulfilling [his] obligation [to maximize the sale prices for the assets for the benefit of all invested parties] or does not possess the skillset to do so.”
- 5) The Cohens presented no evidence of their claim that a property manager or management company bidding on the building they are managing is a direct conflict of interest.
- 6) That the Cohens fail to consider the impact that the pending federal action for fraud and receivership involving the subject properties likely had on the valuations.

The Cohens respectfully submit to the court the following responses:

- 1) The Cohens were not actively represented by counsel at the time of the November hearings and spent the time thereafter searching for the resources to retain counsel. When the resources were unable to be obtained the Cohens then filed to be pro se litigants and had to learn the process of filing.
- 2) Evidence of the disparity between asking prices and values was supplied but more is supplied in Exhibits A and B to this response and other evidence is held by the Receiver.
- 3) The Receiver is not giving due regard to the true and proper value of the assets as evidenced in Exhibits A and B.

- 4) Property managers do in fact influence the value of property and, as such, have a conflict of interest. Evidence of that influence is attached in Exhibits C and D.
- 5) Judge Kim presents no evidence of any correlation between federal action involving a property's ownership and its valuation but claims the Cohen's objection is deficient because it fails to "consider the likely impact" of said action on valuation.

## **ARGUMENT**

### **I. THE COHENS WERE NOT ACTIVELY REPRESENTED BY COUNSEL AS OF THE NOVEMBER HEARINGS**

At the time of the hearings in November Lisa Bragança was counsel for the Cohens. As it became clear after these hearings that the court would not approve the payment of her fees, she stopped actively representing the Cohens and filed a motion to withdraw as counsel. Directly following the hearings, the Cohens began searching for both the resources to retain counsel and also counsel that would represent the Cohens pro bono. It became clear towards the end of January that neither could be found and moving forward the Cohens would be representing themselves as Pro Se litigants. As Pro Se litigants without any academic or experiential knowledge of both the law and court systems, the Cohens had to learn to read, understand, respond to motions and how to file their responses, etc. The objection filed in February was not reflective of some stalling tactic but rather was the result of a lengthy process of seeking counsel

and then learning the system when counsel could not be retained.

## **II. EVIDENCE OF THE DISPARITY BETWEEN ASKING PRICES AND VALUES WAS SUPPLIED BUT MORE IS SUPPLIED HERE**

In the Cohens' Objection, evidence was supplied in the form of a spreadsheet that had been built by Tyler DeRoo, the EquityBuild underwriter, at the behest of Ronald Bol, the EquityBuild COO, and using both appraisals and BPO's (Broker Price Opinions). The appraisals were done for loans on certain buildings and the BPO's were done by CRER on the remainder of the assets. All of these reports were housed in the database of EquityBuild which are now and have been under the control of the Receiver since Aug 17<sup>th</sup>, 2018. Exhibit A is this excel file. Attached, in Exhibit B, is the only appraisal the Cohens found they are in possession of that values one of the properties subject to the Receiver's motion which shows the Receiver has agreed to a price for the subject property that is set at an almost 50% discount to the property's then as-is appraised value. The property appraised was 6160-6212 S King Dr and the as-is value as of March 5<sup>th</sup>, 2018 was \$1,475,000. This property was financed with a construction loan held by the lender and work was actively being done to the property after the date of the appraisal raising the property's value still further. The Receiver is also in possession of documentation showing construction work that was completed at the subject property after Mach 5<sup>th</sup>, 2018. At the time the Receiver entered into the agreement of sale, the value of the building should have been approaching the once stabilized value of \$3,960,000 also since the construction project was funded and there would have been no cause for the construction being delayed. The value at the time the Receiver was appointed in August would have then been greater than the

appraised as-is value in March and likewise should have been even greater as of November and thereafter. The magistrate judge overruled the Cohens objection stating they failed to provide evidence to support their objection. The Receiver and CRER are in possession of the evidence yet Judge Kim recommends that the Cohens' request to be allowed to subpoena that evidence be denied saying it remains the Cohens' responsibility to secure and provide evidence. Judge Kim's response seeks to have things both ways. On the one hand, the Cohens are responsible for providing evidence to support their claim and on the other he denies them the access to that evidence. The Receiver has both possession of the appraisals and BPO reports and he controls access to the properties so that even if the Cohens were able and willing to fund the purchase of new reports, the Receiver's control of access to the properties make that impossible. The magistrate judge should not require the Cohens to support a claim with evidence while at the same time denying them access to that evidence.

### **III. THE RECEIVER IS NOT DISCHARGING HIS MANDATE OF GIVING DUE REGARD TO THE TRUE AND PROPER VALUE OF THE ASSETS**

As is shown in the argument to point II as well as in Exhibits A and B, at least one property, at 6160-6212 S Kind Dr, has an accepted bid price of nearly 50% less than the March 2018 as-is value. And, assuming the Receiver oversaw the continued construction of the asset for which a construction budget was being held in the hands of the lender, the value would be even higher than the March 2018 value thereby causing the unwarranted discount the property is being sold at to be substantially greater than 50%. While the Receiver does have broad powers "to sell or lease the

properties in the manner the Receiver feels most beneficial to the Receivership Estate and with due regard to the true and proper value of such real property.” The argument above as well as the attached in both Exhibits A and B prove the Receiver has not discharged his power with “due regard to the true and proper value” and is, in fact, fire selling the example property.

As to the charge that the Cohens presented no evidence of their claim that the Receiver “is either not committed to fulfilling [his] obligation [to maximize the sale prices for the assets for the benefit of all invested parties] or does not possess the skillset to do so”, again, the above argument as well as Exhibits of both A and B demonstrate the Cohens’ point against the Receiver. Additionally, the Magistrate Judge has denied the Cohens access to that evidence that would conclusively demonstrate the validity of the Cohens’ argument. Despite that, the appraisal in Exhibit B is further evidence in support of the Cohen's claim.

#### **IV. PROPERTY MANAGERS DO INFLUENCE THE VALUE OF PROPERTY AND, AS SUCH, HAVE A CONFLICT OF INTEREST**

The conflict of interest is obvious. If a party manages an asset and wants to purchase that asset and the asset price will be substantially and directly influenced by the manner in which the manager manages, there is an obvious conflict. The price of an apartment building is determined in large part by the Net Operating Income it produces. The party that most determines the Net Operating Income is the manager. If a manager wants to buy an asset it manages, it is in a position to drive down the price by using its influence over the Net Operating Income to achieve the desired price reduction. The critical question to be asked and answered to determine if a potential

conflict exists that should disqualify a current property manager as a purchaser of the building that manager manages is does property management influence property value. If it can be demonstrated that it does, a conflict is inherent and obvious. Exhibits C and D are comprised of academic research studies empirically proving the influence of property management on valuation. As the research papers shows quite clearly property management has a direct correlation to property value.

**V. NO EVIDENCE SUPPLIED SHOWING ANY CORRELATION  
BETWEEN FEDERAL ACTION AND PROPERTY VALUATION**

Property values are determined by many factors, principally location, condition and net operating income. There is no evidence to support a characterization that the pending legal action involving ownership has any impact on valuation. That action does not materially impact the location, condition or net operating income of any property and it does not introduce any cause for a fast sale that would demand a substantial discount to induce. Even if such a fast sale were justified, a discount approaching or exceeding 50% is a multiple of historical fast sale discounts.

**CONCLUSION**

For the foregoing reasons, the Cohens respectfully request that the court sustain the original objection and deny the Receiver's first Motion for court approval of the sale of the subject properties.


April 22<sup>nd</sup>, 2019

Respectfully submitted,

**DEFENDANTS JEROME H. COHEN AND  
SHAUN D. COHEN**

By:

Shaun D. Cohen



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By:

Jerome H. Cohen



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# Exhibit A

## EXHIBIT A

Building	Unit Count	BPO	Appraisal
	PM	As-Is	As-Is
6250 S Mozart	PSR		\$1,580,000
7255 S Euclid	PSR		\$1,230,000
6217 S Dorchester	WPD		\$2,250,000
4750 S Indiana	WPD		\$1,040,000
5618 S MLK	PSR		\$1,230,000
6558 S Vernon	PSR		\$1,190,000
1422 E 68th	WPD		\$560,000
2220 E 75th	WPD		\$640,000
7840 S Yates	WPD		\$660,000
2800 E 81st	WPD		\$630,000
4520 S Drexel	WPD		\$5,840,000
8209 S Ellis	PSR		\$740,000
8107 S Ellis	PSR		\$530,000
8214 S Ingleside	PSR		\$620,000
8000 S Justine	PSR		\$510,000
310 E 50th	PSR		\$450,000
1401 W 109th	PSR		\$126,000
6807 S Indiana	PSR		\$230,000
7760 S Coles	PSR		\$720,000
7304 S St Lawrence	PSR		\$500,000
5437 S Laflin	WPD		\$142,000
9610 S Woodlawn	PSR		\$145,000
6759 S Indiana	WPD		\$161,000
2129 W 71st	WPD		\$105,000
7109 S Calumet	PSR		\$2,245,000
4533 S Calumet	WPD		\$2,400,000
7752 S Muskegon	WPD	\$2,027,000	
7635 S East End	WPD	\$1,210,000	
7625 S East End	WPD	\$1,271,000	
7836 S South Shore	WPD	\$1,369,000	
7201 S Constance	PSR	\$1,325,000	
1700 W Juneway	PSR	\$2,972,000	
6951 S Merrill	WPD	\$2,135,000	
4611 S Drexel	WPD		\$4,400,000
8326-54 S Ellis	PSR		\$2,560,000

6356 S California	PSR		\$530,000
6357 S Talman	PSR		\$880,000
2736 W 64th	PSR		\$680,000
8201 S Kingston	WPD		\$510,000
7959 S Marquette	PSR		\$730,000
7701 S Essex	WPD		\$770,000
7656 S Kingston	PSR		\$760,000
7051 S Bennett	WPD		\$1,200,000
7442 S Calumet	WPD		\$900,000
7201 S Dorchester	PSR		\$700,000
816 E Marquette	WPD		\$760,000
4317 S Michigan	PSR		\$870,000
2453 E 75th	WPD		\$1,420,000
7600 Kingston	PSR		\$2,120,000
7750 S Essex	PSR		\$2,060,000
7546 S Saginaw	PSR		\$900,000
5450 S Indiana	WPD		\$2,500,000
7749 S Yates	WPD	\$2,177,000	
7024 S Paxton	WPD		\$2,170,000
7026 S Cornell	PSR		
5955 S Sacramento	PSR	\$640,893	
6001 S Sacramento	PSR	\$405,806	
7237 S Bennett	PSR	\$1,141,564	
638 N Avers	PSR		\$1,300,000
7844 S Ellis	WPD	\$2,615,000	
6801 S East End	PSR		
7616 S Phillips	PSR		
414 Walnut (Maywood)	PSR		
11117 S Longwood	PSR	\$3,500,000	
6437 S Kenwood	WPD	\$1,636,539	
7927-49 S Essex	PSR	\$1,800,000	
5001 S Drexel	WPD	\$3,455,989	
1131 E 79th Pl	WPD		
3030 E 79th St	WPD		
7502 S Eggleston	WPD		
7301 S Stewart	WPD		
2909 E 78th St	PSR		
8047 S Manistee	WPD		
7549 S Essex	WPD		
7110 S Cornell	WPD		

6751 S Merrill	PSR	
8100 S Essex	WPD	\$1,575,000
Bingham		
Tranche 1	WPD	
Tranche 2	WPD	

# Exhibit B

# APPRAISAL REPORT

6160-6212 SOUTH KING DRIVE  
6160-6212 South King Drive  
Chicago, Cook County, Illinois 60637  
CBRE, Inc. File No. 18-164CH-0506-1

Hayley VanDeusen  
Appraisal Services Representative  
APPRAISAL NATION  
500 Gregson Drive, Suite 120  
Cary, North Carolina 27511

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**CBRE**



VALUATION & ADVISORY SERVICES



321 N. Clark St. Ste. 3400  
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March 30, 2018

Hayley VanDeusen  
Appraisal Services Representative  
APPRAISAL NATION  
500 Gregson Drive, Suite 120  
Cary, North Carolina 27511

RE: Appraisal of 6160-6212 South King Drive  
6160-6212 South King Drive  
Chicago, Cook County, Illinois 60637  
CBRE, Inc. File No. 18-164CH-0506-1

Dear Ms. VanDeusen:

At your request and authorization, CBRE, Inc. has prepared an appraisal of the market value of the referenced property. Our analysis is presented in the following Appraisal Report.

The subject is a 2-story residential apartment building that will be renovated with construction commencing in April of 2018. The renovation will include combining multiple units and renovations will include tuckpointing, new windows throughout, new copper water lines and hot water tanks, laundry rooms, new 80% furnaces and air conditioning for each unit, new electrical service throughout, new drywall, kitchens with granite counters, stainless steel appliances (dishwasher, refrigerator, microwave and range/oven). Renovations will also feature new trim, doors, refinish hardwood flooring and bathrooms will get new vanities, mirrors, tile and granite counters. The improvements are situated on a 32,540 square foot site or 0.75 acres. The building renovation will begin in April of 2018 and is scheduled for completion in December of 2018. The current owner purchased the building in November of 2016 for \$1,750,000. After the completion of the renovation the building will contain 32 residential units with a mix of one, two and three bedroom units. The building will not contain any parking spaces.

Currently the building has three occupied units, however, they will be vacating within the next 30 days and the building will be vacant throughout the renovation.

The subject will market the units for market rate rentals as well as tenant vouchers through the Section-8 Housing Assistance Program (HAP). Under the Section-8 rent subsidy program, total rent for the tenant may not exceed 30% of the tenant's total housing income. We have projected market based rental rates in our analysis as the Section 8 program pays rental rates based on market rentals.

Hayley VanDeusen  
 March 30, 2018  
 Page 2

The subject is under renovation and is not stabilized. Therefore, we have also estimated the at completion of construction and at stabilized operation values.

Based on the analysis contained in the following report, the market value of the subject is concluded as follows:

<b>MARKET VALUE CONCLUSION</b>			
<b>Appraisal Premise</b>	<b>Interest Appraised</b>	<b>Date of Value</b>	<b>Value Conclusion</b>
As Is	Fee Simple Estate	March 5, 2018	\$1,475,000
As Complete	Fee Simple Estate	December 5, 2018	\$3,960,000
As Stabilized	Leased Fee Interest	March 5, 2019	\$4,030,000

Compiled by CBRE

The report, in its entirety, including all assumptions and limiting conditions, is an integral part of, and inseparable from, this letter.

The following appraisal sets forth the most pertinent data gathered, the techniques employed, and the reasoning leading to the opinion of value. The analyses, opinions and conclusions were developed based on, and this report has been prepared in conformance with, the guidelines and recommendations set forth in the Uniform Standards of Professional Appraisal Practice (USPAP), and the requirements of the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute. It also conforms to Title XI Regulations and the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) updated in 1994 and further updated by the Interagency Appraisal and Evaluation Guidelines promulgated in 2010.

The intended use and user of our report are specifically identified in our report as agreed upon in our contract for services and/or reliance language found in the report. As a condition to being granted the status of an intended user, any intended user who has not entered into a written agreement with CBRE in connection with its use of our report agrees to be bound by the terms and conditions of the agreement between CBRE and the client who ordered the report. No other use or user of the report is permitted by any other party for any other purpose. Dissemination of this report by any party to any non-intended users does not extend reliance to any such party, and CBRE will not be responsible for any unauthorized use of or reliance upon the report, its conclusions or contents (or any portion thereof).

According to Illinois Statute (225 ILCS 459/) Appraisal Management Company Registration Act, CBRE, Inc. must register and declare itself as an Appraisal Management Company. To remain in compliance with this Statute, the Client for this report is considered to be CBRE, Inc. According to Illinois Statute, "End-user client" means any person who utilizes or engages the services of an appraiser through an appraisal management company. In this instance, for state regulatory purposes only, the Direct Lending Partner, LLC and Arena Limited SPV, LLC is considered the end-user client. For all other purposes, the Direct Lending Partner, LLC and Arena Limited SPV, LLC is considered to be the Client as defined in the Uniform Standards of Professional Appraisal Practice. For state regulatory purposes, the Intended User of the report is CBRE, Inc., with the Direct Lending Partner, LLC and Arena Limited SPV, LLC named as an additional intended user. For all other purposes, the Direct Lending Partner, LLC and Arena Limited SPV, LLC is considered to be the intended user of this report. James O'Leary and John Konrath, MAI the appraisers, are salaried employees and received no separate appraisal fee for this assignment. CBRE, Inc.'s Illinois registration number is 558000129 and it expires on December 31, 2018.


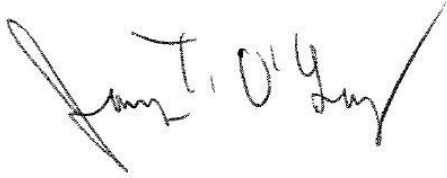


Hayley VanDeusen  
March 30, 2018  
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It has been a pleasure to assist you in this assignment. If you have any questions concerning the analysis, or if CBRE can be of further service, please contact us.

Respectfully submitted,

CBRE - VALUATION & ADVISORY SERVICES



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James O'Leary  
Senior Appraiser  
Certified General Appraiser  
State of Illinois License No. 553.001461  
Expires: September 30, 2019

Phone: (312) 861-7891  
Fax: (312) 935-1880

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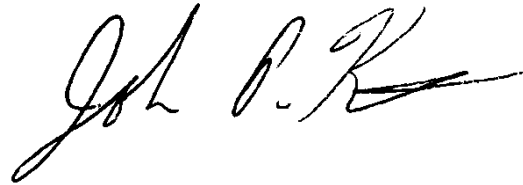
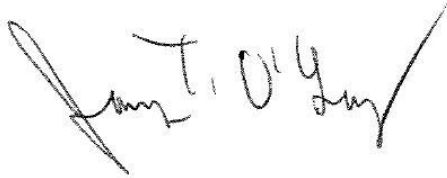
John Konrath, MAI  
Managing Director  
Certified General Appraiser  
State of Illinois License No. 553.001733  
Expires: September 30, 2019

Phone: (312) 233-8658  
Fax: (312) 935-1880

## Certification

We certify to the best of our knowledge and belief:

1. The statements of fact contained in this report are true and correct.
2. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are our personal, impartial and unbiased professional analyses, opinions, and conclusions.
3. We have no present or prospective interest in or bias with respect to the property that is the subject of this report and have no personal interest in or bias with respect to the parties involved with this assignment.
4. Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
5. Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
6. This appraisal assignment was not based upon a requested minimum valuation, a specific valuation, or the approval of a loan.
7. Our analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice, as well as the requirements of the State of Illinois.
8. The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute.
9. The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
10. As of the date of this report, John P. Konrath, MAI has completed the continuing education program for Designated Members of the Appraisal Institute.
11. As of the date of this report, Jim O'Leary has completed the Standards and Ethics Education Requirements for Candidates of the Appraisal Institute.
12. Jim O'Leary and John P. Konrath, MAI has not made a personal inspection of the property that is the subject of this report.
13. No one provided significant real property appraisal assistance to the persons signing this report.
14. Valuation & Advisory Services operates as an independent economic entity within CBRE, Inc. Although employees of other CBRE, Inc. divisions may be contacted as a part of our routine market research investigations, absolute client confidentiality and privacy were maintained at all times with regard to this assignment without conflict of interest.
15. Jim O'Leary and John P. Konrath, MAI have not provided any services, as an appraiser regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
16. Jim O'Leary and John Konrath, MAI, the appraisers, are salaried employees and received no separate appraisal fee for this assignment.



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James O'Leary  
Senior Appraiser  
Certified General Appraiser  
State of Illinois License No. 553.001461  
Expires: September 30, 2019

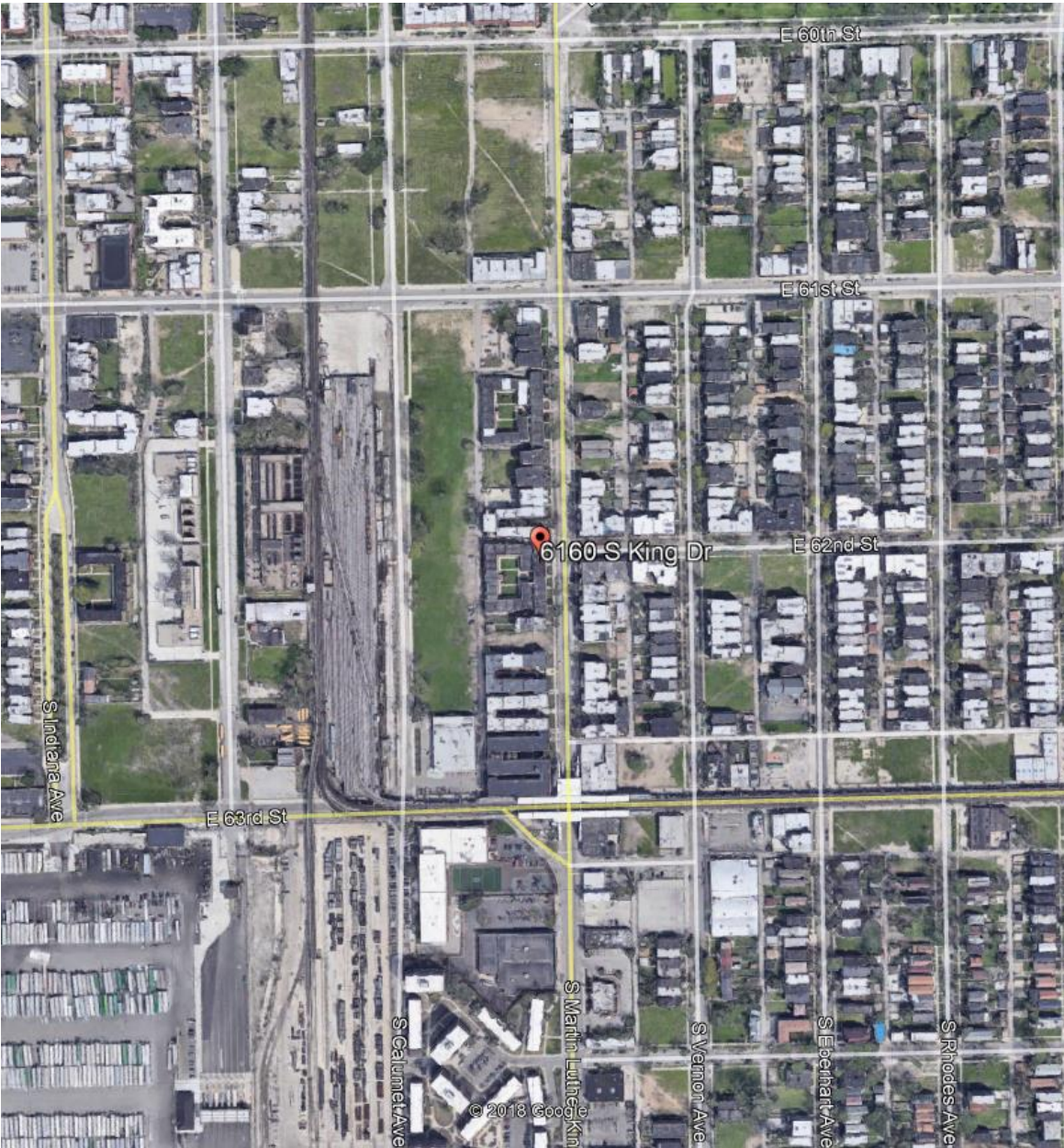
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# Subject Photographs



Aerial View



Exterior



Exterior



Exterior



Exterior



Interior



Kitchen



Bedroom



Bathroom



Basement



Rear



Interior



Kitchen

## Executive Summary

<b>Property Name</b>	6160-6212 South King Drive	
<b>Location</b>	6160-6212 South King Drive, Chicago, Cook County, Illinois 60637	
<b>Highest and Best Use</b>		
As If Vacant	Apartment	
As Improved	Apartment	
<b>Property Rights Appraised</b>	Leased Fee Interest	
<b>Date of Report</b>	March 30, 2018	
<b>Date of Inspection</b>	March 5, 2018	
<b>Estimated Exposure Time</b>	6 Months	
<b>Estimated Marketing Time</b>	6 Months	
<b>Land Area</b>	0.75 AC	32,540 SF
<b>Zoning</b>	RM-5 Residential Multi-Unit District	
<b>Improvements</b>		
Property Type	Apartment	(Multi-family Garden)
Number of Buildings	1	
Number of Stories	2	
Gross Building Area	34,578 SF	
Net Rentable Area	31,150 SF	
Number of Units	32	
Average Unit Size	973 SF	
Year Built	1912	Renovated: 2018
Condition	Good, Upon Renovation	
<b>Buyer Profile</b>	Investor-Regional	
<b>Financial Indicators</b>		
Current Occupancy	0.0%	
Stabilized Occupancy	96.0%	
Stabilized Credit Loss	2.5%	
Overall Capitalization Rate	7.25%	
<b>Pro Forma Operating Data</b>	<b>Total</b>	<b>Per Unit</b>
Effective Gross Income	\$423,338	\$13,229
Operating Expenses	\$131,506	\$4,110
Expense Ratio	31.06%	
Net Operating Income	\$291,831	\$9,120

<b>VALUATION</b>		<b>Total</b>	<b>Per Unit</b>
<b>Market Value As Is On</b>	<b>March 5, 2018</b>		
Sales Comparison Approach		\$1,550,000	\$48,438
Income Capitalization Approach		\$1,475,000	\$46,094
<b>Market Value As Complete On</b>	<b>December 22, 2018</b>		
Sales Comparison Approach		\$4,030,000	\$125,938
Income Capitalization Approach		\$3,960,000	\$123,750
<b>Market Value As Stabilized On</b>	<b>June 22, 2019</b>		
Sales Comparison Approach		\$4,100,000	\$128,125
Income Capitalization Approach		\$4,030,000	\$125,938
Insurable Value		\$3,148,000	\$98,375

<b>CONCLUDED MARKET VALUE</b>			
<b>Appraisal Premise</b>	<b>Interest Appraised</b>	<b>Date of Value</b>	<b>Value</b>
As Is	Fee Simple Estate	March 5, 2018	\$1,475,000
As Complete	Fee Simple Estate	December 22, 2018	\$3,960,000
As Stabilized	Leased Fee Interest	June 22, 2019	\$4,030,000

Compiled by CBRE

## **STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS (SWOT)**

### **Strengths/ Opportunities**

- The subject is a proposed renovation and is a prime candidate for renovation and revitalization.
- The subject is well located within the Chicago market area.
- Chicago remains a top-tier multi-family market frequently targeted by institutional investors.
- Investors continue to have access to relatively cheap capital for multi-family investments.
- Chicago job growth was positive and relatively significant over the past 12 months.

### **Weaknesses/ Threats**

- The renovation is expected to take approximately 9 months to complete increasing the risks associated with the investment.
- Many market indicators point toward continued rising interest rates in 2018.
- The subject building does not offer any parking spaces.



## EXTRAORDINARY ASSUMPTIONS

An extraordinary assumption is defined as “an assignment-specific assumption as of the effective date regarding uncertain information used in an analysis which, if found to be false, could alter the appraiser’s opinions or conclusions.”<sup>1</sup>

- The subject’s construction is not yet complete. The project construction is not expected to be completed until December of 2018. Our analysis and the conclusions contained in this report specifically assume ownership’s proposed construction cost and time required to complete estimates to be accurate. The use of this Extraordinary Assumption may have affected the assignment results.
- Our analysis assumes the subject’s proposed improvements to be completed in a workmanlike fashion per the plans/schedule and drawings provided. Our estimated as complete and as stabilized market value estimates are based on proposed building and site work which ownership provided. Any significant deviations from the plans/drawings or costs noted could materially affect the conclusions reached in this analysis. The use of this Extraordinary Assumption may have affected the assignment results.
- As the subject represents a property that is not yet complete (construction) nor stabilized and the “as complete” and “as stabilized” market values for the subject represent future dates, our analysis specifically assumes that no significant changes occur in the local market between the date of inspection and the estimated “as complete” and “as stabilized” dates of value. The use of this Extraordinary Assumption may have affected the assignment results.

## HYPOTHETICAL CONDITIONS

A hypothetical condition is defined as “a condition, directly related to a specific assignment, which is contrary to what is known by the appraiser to exist on the effective date of the assignment results, but is used for the purposes of analysis.”<sup>2</sup>

- None noted

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<sup>1</sup> The Appraisal Foundation, *USPAP, 2018-2019*

<sup>2</sup> The Appraisal Foundation, *USPAP, 2018-2019*

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# Introduction

## OWNERSHIP AND PROPERTY HISTORY

Title to the property is currently vested in the name of Equity Build, Inc, who acquired title to the property in November of 2016, as improved for \$1,750,000, as recorded in the Cook County Recorder of Deeds as document number 1633529067. This most recent sale transaction of the subject appears to have been arm’s length and reasonable based upon discussions with the buyer.

Our concluded as is value is slightly lower than the original purchase price and is takes into account the as stabilized value less the cost to construct and the profit that is sought on the renovation.

To the best of our knowledge, there has been no ownership transfer of the property during the previous three years. The property is not subject to any option agreements.

## INTENDED USE OF REPORT

This appraisal is to be used for mortgage loan underwriting, and no other use is permitted.

## INTENDED USER OF REPORT

This appraisal is to be used by Direct Lending Partner, LLC and Arena Limited SPV, LLC, and no other user may rely on our report unless as specifically indicated in the report.

Intended Users - the intended user is the person (or entity) who the appraiser intends will use the results of the appraisal. The client may provide the appraiser with information about other potential users of the appraisal, but the appraiser ultimately determines who the appropriate users are given the appraisal problem to be solved. Identifying the intended users is necessary so that the appraiser can report the opinions and conclusions developed in the appraisal in a manner that is clear and understandable to the intended users. Parties who receive or might receive a copy of the appraisal are not necessarily intended users. The appraiser’s responsibility is to the intended users identified in the report, not to all readers of the appraisal report.<sup>3</sup>

## PURPOSE OF THE APPRAISAL

The purpose of this appraisal is to estimate the market value of the subject property.

## DEFINITION OF VALUE

The current economic definition of market value agreed upon by agencies that regulate federal financial institutions in the U.S. (and used herein) is as follows:

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<sup>3</sup> Appraisal Institute, The Appraisal of Real Estate, 14th ed. (Chicago: Appraisal Institute, 2013), 50.

The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

1. buyer and seller are typically motivated;
2. both parties are well informed or well advised, and acting in what they consider their own best interests;
3. a reasonable time is allowed for exposure in the open market;
4. payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
5. the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.<sup>4</sup>

### INTEREST APPRAISED

The value estimated represents the fee simple estate (as is and as complete) and the leased fee (as stabilized) interests and are defined as follows:

*Fee Simple Estate* - Absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the governmental powers of taxation, eminent domain, police power and escheat.<sup>5</sup>

*Leased Fee Interest* - A freehold (ownership interest) where the possessory interest has been granted to another party by creation of a contractual landlord-tenant relationship (i.e., a lease).<sup>6</sup>

### SCOPE OF WORK

This Appraisal Report is intended to comply with the reporting requirements set forth under Standards Rule 2 of USPAP. The scope of the assignment relates to the extent and manner in which research is conducted, data is gathered and analysis is applied. CBRE, Inc. completed the following steps for this assignment:

#### Extent to Which the Property is Identified

The property is identified through the following sources:

- postal address
- assessor's records
- legal description

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<sup>4</sup> Interagency Appraisal and Evaluation Guidelines; December 10, 2010, Federal Register, Volume 75 Number 237, Page 77472.

<sup>5</sup> *Dictionary of Real Estate Appraisal*, 78.

<sup>6</sup> *Dictionary of Real Estate Appraisal*, 113.

**Extent to Which the Property is Inspected**

The extent of the inspection included the following: the subject site and the proposed plans and renderings per the summary package. This inspection sample was considered an adequate representation of the subject property and is the basis for our findings.

**Type and Extent of the Data Researched**

CBRE reviewed the following:

- applicable tax data
- zoning requirements
- flood zone status
- demographics
- income and expense data
- comparable data

**Type and Extent of Analysis Applied**

CBRE, Inc. analyzed the data gathered through the use of appropriate and accepted appraisal methodology to arrive at a probable value indication via each applicable approach to value. The steps required to complete each approach are discussed in the methodology section.

**Data Resources Utilized in the Analysis**

<b>DATA SOURCES</b>	
<i>Item:</i>	<i>Source(s):</i>
<b>Site Data</b>	
Size	Land Title Survey performed by R&R Surveyor LTD. dated 9/11/16
<b>Improved Data</b>	
Building Area	Land Title Survey performed by R&R Surveyor LTD. dated 9/11/16
No. Bldgs.	Inspection
Parking Spaces	None
Year Built/Developed	Landvision
<b>Economic Data</b>	
Deferred Maintenance:	N/A
Building Costs:	Owner provided
Income Data:	Owner pro forma projections
Expense Data:	Owner pro forma projections
<b>Other</b>	
RE Taxes	Cook County Assessor
Floodmap	FEMA
Compiled by CBRE	

## Area Analysis



Moody's Economy.com provides the following Chicago-Naperville-Arlington Heights, IL metro area economic summary as of November 2017. The full Moody's Economy.com report is presented in the Addenda.

CHICAGO-NAPERVILLE-ARLINGTON HEIGHTS, IL - ECONOMIC INDICATORS												
Indicators	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Gross Metro Product (C09\$ Bil)	403.1	411.2	412.0	419.2	426.7	431.9	439.1	449.4	456.8	460.0	470.7	481.0
% Change	1.6	2.0	0.2	1.8	1.8	1.2	1.7	2.3	1.7	0.7	2.3	2.2
Total Employment (Ths)	3,414.4	3,465.9	3,524.1	3,583.0	3,658.7	3,712.3	3,736.2	3,772.7	3,796.8	3,795.5	3,811.2	3,842.0
% Change	1.4	1.5	1.7	1.7	2.1	1.5	0.6	1.0	0.6	0.0	0.4	0.8
Unemployment Rate (%)	10.1	9.3	9.3	7.2	6.0	5.9	4.7	4.3	4.2	5.1	5.5	5.5
Personal Income Growth (%)	4.6	5.6	2.4	6.5	4.7	2.0	2.8	4.2	4.5	4.0	3.9	3.9
Median Household Income (\$ Ths)	57.9	58.6	59.9	61.2	63.1	65.8	67.6	69.7	72.0	74.1	76.2	78.4
Population (Ths)	7,294.2	7,315.8	7,331.9	7,335.5	7,324.0	7,304.5	7,297.3	7,296.9	7,301.2	7,302.1	7,302.0	7,306.5
% Change	0.3	0.3	0.2	0.0	-0.2	-0.3	-0.1	0.0	0.1	0.0	0.0	0.1
Net Migration (Ths)	-20.7	-21.4	-21.5	-37.7	-44.7	-55.3	-42.8	-36.0	-31.3	-34.6	-35.2	-30.3
Single-Family Permits (#)	2,427.0	3,120.0	4,090.0	4,435.0	4,467.0	4,581.0	4,809.1	8,430.6	11,143.2	11,334.3	11,980.3	12,263.9
Multifamily Permits (#)	2,855.0	3,127.0	3,782.0	6,879.0	7,129.0	10,491.0	9,669.8	5,723.1	6,962.3	7,737.3	8,687.3	9,283.5
Fhfa House Price (1995Q1=100)	152.2	147.8	150.2	157.7	164.5	170.8	178.4	183.2	187.5	192.4	199.0	207.2

Source: Moody's Economy.com

## RECENT PERFORMANCE

Chicago-Naperville-Arlington Heights is gaining steam after a shaky start to the year, but progress falls short of that nationally. Although employment growth has picked up over the last six months, job creation has been erratic. Windy City tourism has lost potency as a jobs engine, leaving healthcare, office-using industries, and transportation/warehousing to carry the load. Even though the labor force is contracting, the unemployment rate has risen by nearly a percentage point since May and now sits at 5.1%. Meanwhile, Chicago-Naperville-Arlington Heights's advantage in average hourly earnings growth has come to an end. Weak job gains and stunted wage growth have pressured personal income growth.

## TECH

White-collar services will extend their reach in Chicago-Naperville-Arlington Heights, reinforcing the area's reputation as an innovative, talent-rich business hub. A flurry of expansions and relocations will spur tech-related hiring, causing the urban core to lead Cook County and the metro division. Deerfield-based Walgreens Boots Alliance is adding 300 full-time tech positions to its online sales division downtown. Online grocer Peapod is relocating its headquarters from suburban Skokie to the city. The new location is expected to be complete next spring. Tech giant Siemens is expanding its footprint with a new digital research and development hub downtown. The addition of new professional, scientific and technical services positions will provide a needed boost to incomes and support the flourishing downtown real estate market.

## SPENDING

With local income growth on a weak trajectory and tax burdens increasing in Illinois and the City of Chicago, consumer industries will expand more slowly than in the past. Leisure/hospitality, which dominated job gains in 2015 and 2016, has come off the boil, and retail employment is falling briskly. Other indicators signal less support from visitors; hotel occupancy and room rates are down over the year. Locals are also pitching in less, which comes as no surprise, given Chicago-Naperville-Arlington Heights's out-migration and subpar disposable income growth. Chicagoans and other Illinois residents took home less spending money in 2016 than initially estimated, and income gains this year will fall short of the Midwest and U.S. averages.

## RESIDENTIAL

The apartment market is a bright spot in light of weak single-family housing. The Case-Shiller condo price index is advancing at a modest but steady rate that outpaces the rise in the single-family index. Multifamily starts have been volatile month to month, but construction over the past 12 months exceeds that in the preceding year and meets pre-crash norms. Builders have put up twice as many multifamily units as single-family homes in Chicago-Naperville-Arlington Heights in the past year, an unprecedented shift in the composition of residential construction. Slower

household formation will ultimately cap demand, but in the short term, there is room for builders to run.

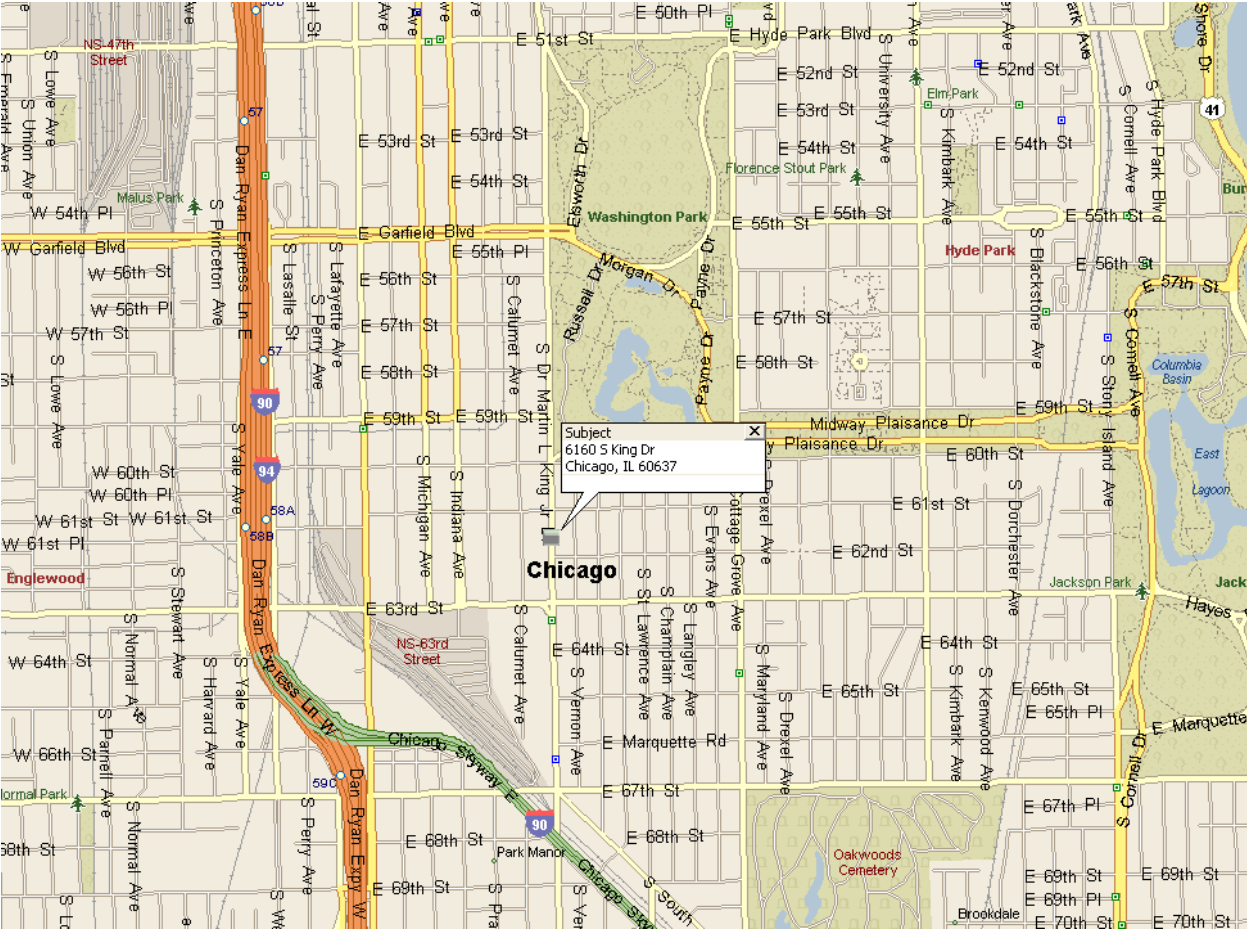
On a related note, the tax overhaul plans being debated in Washington bear close watch. The proposals significantly reduce the value of the mortgage interest and property tax deductions, which would suppress home values most in high-income, high-tax parts of the country such as Chicago-Naperville-Arlington Heights. Local single-family house prices are still 10% below their peak compared with 8% above nationally, and this aspect of the tax plan will weigh on the already-sluggish housing recovery.

## **CONCLUSION**

Chicago-Naperville-Arlington Heights will lose its edge over the rest of Illinois in coming quarters, but professional services will be the labor market's workhorse. Downtown Chicago will enjoy the bulk of the gains, with slower growth in areas outside of the city. Long term, Chicago-Naperville-Arlington Heights will underperform as fiscal crises and related population declines limit its potential.



# Neighborhood Analysis



## LOCATION

The subject property is located in the Washington Park neighborhood on the south side of Chicago, Illinois. The subject is located within the South Shore Apartment submarket, which consists primarily of the southern Chicago neighborhoods of South Loop, Washington Park, Kenwood, South Shore, and Hyde Park.

## BOUNDARIES

The neighborhood boundaries are detailed as follows:

North: 51<sup>st</sup> Street  
South: 63<sup>rd</sup> Street  
East: S. Cottage Grove Avenue  
West: Interstate Highway 90/94

**LAND USE**

The immediate area surrounding the subject consists primarily of multi-family uses. The uses along the major thoroughfares such as Garfield Boulevard contain a variety of commercial, street-level retail, and multi-family residential uses, and row houses typical of the Chicago landscape. The primary retail land use in the neighborhood is Grand Boulevard Plaza. Located at the northeast corner of as W. Garfield Boulevard and S. Wentworth Avenue, this 140,000-square foot neighborhood center was completed in 1983 and contains a Walgreens, Payless ShoeSource, and Gamestop.

The eastern third of the Washington Park neighborhood is home to the park which bears its namesake. Washington Park is comprised of some 372 acres which stretches from 51<sup>st</sup> Street to the north to 60<sup>th</sup> Street to the south between S. King Drive and S. Cottage Grove Avenue. The park has been the predominant use in the neighborhood since it's construction 1870. In addition to a 13-acre lake and multiple bike paths, the park contains 13 softball diamonds, 8 tennis courts, 4 baseball diamonds, four cricket fields, and a waterpark. In addition to athletic facilities, a number of institutions maintain buildings within the park including Walter H. Dyett High School, the DuSable Museum of African American History, and the U.S. Army National Guard.

The subject is also home to the south rail yard for the Chicago Transit Authority's Green Line elevated train system. The rail yard stretches from 61<sup>st</sup> to 63<sup>rd</sup> Streets along the west side of Calumet Avenue and is also a major employer in the neighborhood.

The street upon which the subject is located is considered a primary location with the immediate area consisting of walk-up apartment buildings of pre-war vintage and single-family homes generally located to the south. Larger, semi-institutional high rises are generally located to the east within one or two blocks of Lake Michigan in the Hyde Park neighborhood.

The immediate area contains mature single-family housing units of which 43.8% would be considered historic structures built before 1939. More than 66.6% of the homes within a one-mile radius were built prior to 1960 and the median year built is 1946. The median year built within a three and five radius is 1942 and 1945 respectively.

As the subject is located near the eastern boundary of the Washington Park neighborhood, home values are scattered and presents a wide range as homes to the west of the subject have significantly lower values than those to the east. The majority of the homes within a three-mile radius of the subject range in price from \$100,000 to \$300,000 and the average home price is \$227,864. Within a one mile radius the average home price is \$207,547, while within a five-mile radius the average is \$205,304.

## GROWTH PATTERNS

Due to the area's close proximity to the University of Chicago in Hyde Park, much of Washington Park's population and employment base are closely tied with their neighbors to the east.

Hyde Park is home to approximately 43,000 people, including more than 60 percent of the University of Chicago's faculty and a great majority of its students. Hyde Park is a culturally rich and diverse neighborhood seven miles south of downtown Chicago. Hyde Park encompasses two square miles of commercial and residential districts that extend from 47th Street on the north to 61st Street on the south and from Cottage Grove Avenue eastward to the shoreline of Lake Michigan. The history of Hyde Park and the University of Chicago are closely intertwined. The University opened its doors in 1892, a year before Hyde Park's initial building boom, which coincided with the World's Columbian Exposition.

Besides the undergraduate College, the four graduate divisions, and the six professional schools, there are libraries, laboratories, museums, clinics, and other institutions; nursery and K-12 schools; a continuing-studies program; and an academic press.

Nearly 2,200 full-time academic staff teach or conduct research at the University. There are 5,134 students in the undergraduate college, and 10,304 graduate students. There are also nearly 2,000 students enrolled in off-campus programs, including the Graduate School of Business campuses in London and Singapore.

In addition to the educational campus, Hyde Park is the home of the University of Chicago Hospitals. The Hospitals' University campus includes 27 buildings, with more than 12 miles of corridors and 67 acres of space for research, teaching, and patient care.

The Hospitals and the University are the largest employers on the South Side of Chicago. The Hospitals have approximately 5,000 employees, many of whom live in the Hyde Park area. Care is provided by more than 600 attending physicians, most are full-time University faculty members as well as 620 residents and fellows, and 1,000 nurses.

## ACCESS

The primary roadways within the neighborhood are 55<sup>th</sup> Street and Michigan Avenue. 55<sup>th</sup> Street bi-sects the neighborhood; providing primary east-west access to Interstate Highway 90/94 to the west and neighboring Hyde Park to the east. Michigan Avenue runs south to north and links the southern Chicago neighborhoods with the CBD and near north neighborhoods. Interstates 90/94 are the most convenient from 55<sup>th</sup> Street about one-half mile west of the subject. The neighborhood is also served by CTA's elevated train system. The closest "el" stop is the Green Line stop located at Martin Luther King Drive and 63<sup>rd</sup> Street, with an additional stops further north at Garfield Drive and 51<sup>st</sup> Street. The CTA's Red Line has a stop at Garfield Boulevard and Interstate Highway 90/94, providing 24-hour rail access to the neighborhood.

**DEMOGRAPHICS**

Selected neighborhood demographics in 1-, 3-, and 5-mile radii from the subject are shown in the following table:

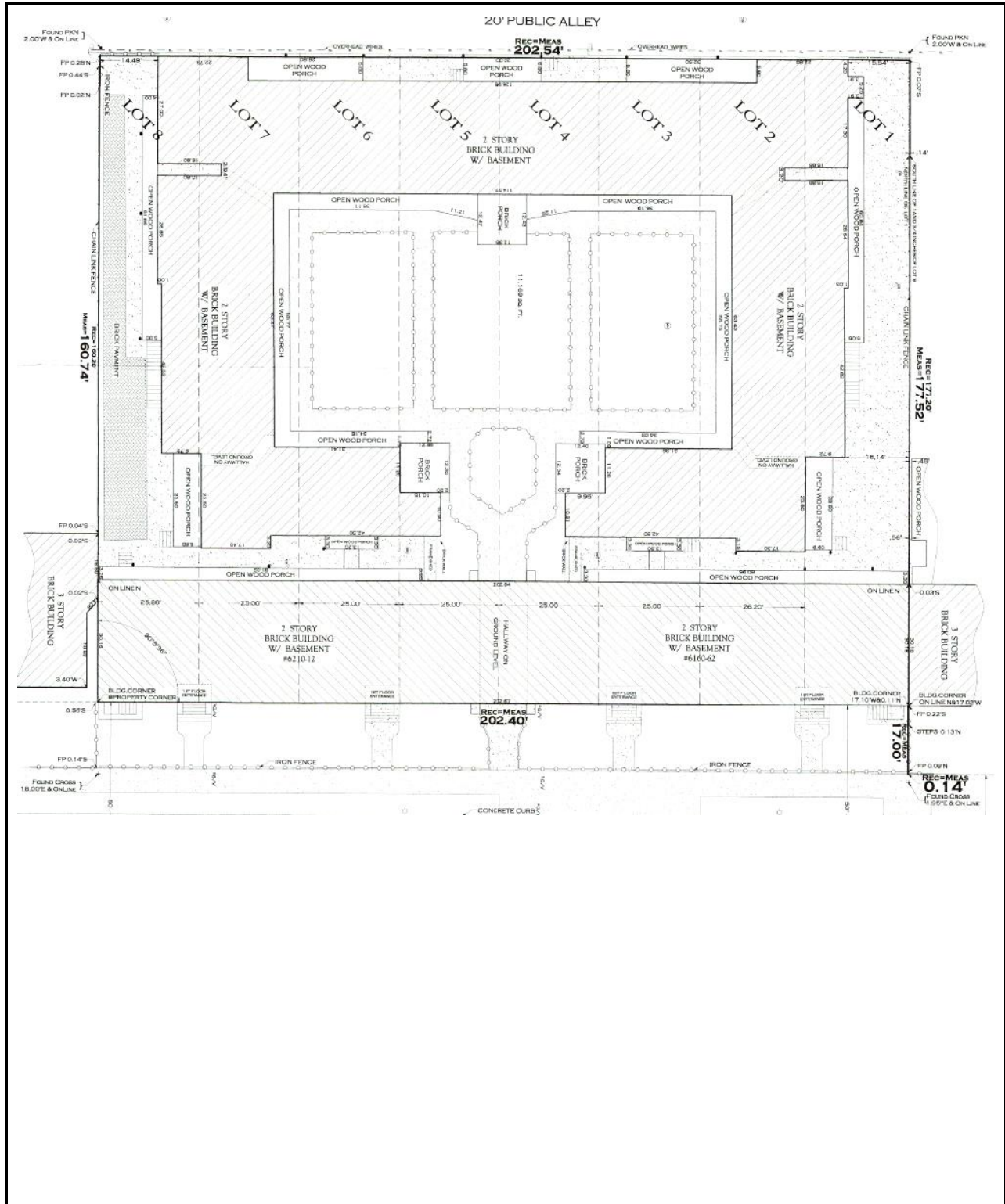
<b>SELECTED NEIGHBORHOOD DEMOGRAPHICS</b>			
6160 S King Drive Chicago, IL	1 Mile	3 Miles	5 Miles
<b>Population</b>			
2022 Total Population	35,639	306,641	722,574
2017 Total Population	34,563	302,111	712,679
2010 Total Population	32,597	294,638	695,240
2000 Total Population	38,691	352,981	800,407
Annual Growth 2017 - 2022	0.62%	0.30%	0.28%
Annual Growth 2010 - 2017	0.84%	0.36%	0.35%
Annual Growth 2000 - 2010	-1.70%	-1.79%	-1.40%
<b>Households</b>			
2022 Total Households	13,617	124,854	264,880
2017 Total Households	13,194	122,755	261,002
2010 Total Households	12,379	118,797	253,691
2000 Total Households	14,188	131,241	275,233
Annual Growth 2017 - 2022	0.63%	0.34%	0.30%
Annual Growth 2010 - 2017	0.92%	0.47%	0.41%
Annual Growth 2000 - 2010	-1.35%	-0.99%	-0.81%
<b>Income</b>			
2017 Median Household Income	\$20,377	\$29,956	\$35,084
2017 Average Household Income	\$35,519	\$49,936	\$51,716
2017 Per Capita Income	\$14,418	\$20,878	\$19,394
2017 Pop 25+ College Graduates	3,710	51,550	98,698
Age 25+ Percent College Graduates - 2017	18.3%	26.2%	21.5%
Source: ESRI			

The neighborhood has a lower/middle-income demographic with an average income of \$35,519 within a one-mile radius. Within a three and five-mile radius the average income is \$49,936 and \$51,716 respectively.

**CONCLUSION**

During the last five years, the area has seen some renovation of existing apartment buildings, as well as some renovation of existing retail uses. The market is in the stability stage of its life cycle. Recent development activity has been minimal. Population and household totals have decreased modestly within the neighborhood. This trend is anticipated to continue in the foreseeable future. Overall, the subject project is well located for a residential development, with transportation linkages within a reasonable distance.

PLAT MAP



## Site Analysis

The following chart summarizes the salient characteristics of the subject site.

<b>SITE SUMMARY</b>			
<b>Physical Description</b>			
Gross Site Area	0.75 Acres		32,540 Sq. Ft.
Net Site Area	0.75 Acres		32,540 Sq. Ft.
Primary Road Frontage	King Drive		202 Feet
Excess Land Area	None		n/a
Surplus Land Area	None		n/a
Shape	Rectangular		
Topography	Level		
Zoning District	RM-5 Residential Multi-Unit District		
Flood Map Panel No. & Date	17031C 0540J		19-Aug-08
Flood Zone	X		
Adjacent Land Uses	Commercial and residential uses		
Earthquake Zone	N/A		
<b>Comparative Analysis</b>			<b><u>Rating</u></b>
Visibility			Average
Functional Utility			Average
Traffic Volume			Average
Adequacy of Utilities			Assumed adequate
Landscaping			Average
Drainage			Assumed adequate
<b>Utilities</b>		<b><u>Provider</u></b>	<b><u>Adequacy</u></b>
Water		City of Chicago	Yes
Sewer		City of Chicago	Yes
Natural Gas		Nicor	Yes
Electricity		Commonwealth Edison	Yes
Telephone		AT&T, Comcast	Yes
Mass Transit		Pace, CTA	Yes
<b>Other</b>		<b><u>Yes</u></b>	<b><u>No</u></b>
Detrimental Easements			X
Encroachments			X
Deed Restrictions			X
Reciprocal Parking Rights			X
<b><u>Unknown</u></b>			
Source: Various sources compiled by CBRE			

## LOCATION

The subject site is located along the west side of King Drive. The street address is 6160-6212 South King Drive, Chicago, Cook County, Illinois.

**ASSESSOR’S PARCEL NUMBER**

The Cook County Tax Assessor’s parcel numbers are 20-15-317-039, 040.

**LAND AREA**

The site contains 0.75 acres or 32,540 square feet. The land area size was obtained from the Cook County Assessor's Office. The site is considered adequate in terms of size and utility. There is no unusable, excess or surplus land area.

**SHAPE AND FRONTAGE**

The site is rectangular in shape and has adequate frontage along King Drive.

**INGRESS/EGRESS**

Pedestrian ingress and egress is available to the site along King Drive and the rear public alleyway.

**TOPOGRAPHY AND DRAINAGE**

The site is generally level and at street grade. The topography of the site is not seen as an impediment to the development of the property. During our inspection of the site, we observed no drainage problems and assume that none exist.

**SOILS**

A soils analysis for the site has not been provided for the preparation of this appraisal. In the absence of a soils report, it is a specific assumption that the site has adequate soils to support the highest and best use.

**EASEMENTS AND ENCROACHMENTS**

There are no known easements or encroachments impacting the site that are considered to affect the marketability or highest and best use. It is recommended that the client/reader obtain a current title policy outlining all easements and encroachments on the property, if any, prior to making a business decision.

**COVENANTS, CONDITIONS AND RESTRICTIONS**

There are no known covenants, conditions or restrictions impacting the site that are considered to affect the marketability or highest and best use. It is recommended that the client/reader obtain a copy of the current covenants, conditions and restrictions, if any, prior to making a business decision.

**UTILITIES AND SERVICES**

The site is within the jurisdiction of Chicago and is provided all municipal services, including police and fire. Refuse garbage collection is provided via a private collector. All utilities are available to the site in adequate quality and quantity to service the highest and best use.

## **FLOOD ZONE**

According to flood hazard maps published by the Federal Emergency Management Agency (FEMA), the site is within Zone X, as indicated on Community Map Panel No. 17031C 0540J dated August 19, 2008. FEMA defines the flood zone as follows:

Zone X (unshaded) is a flood insurance rate zone used for areas outside the 0.2-percent-annual-chance floodplain. No Base Flood Elevations (BFEs) or depths are shown in this zone, and insurance purchase is not required.

## **ENVIRONMENTAL ISSUES**

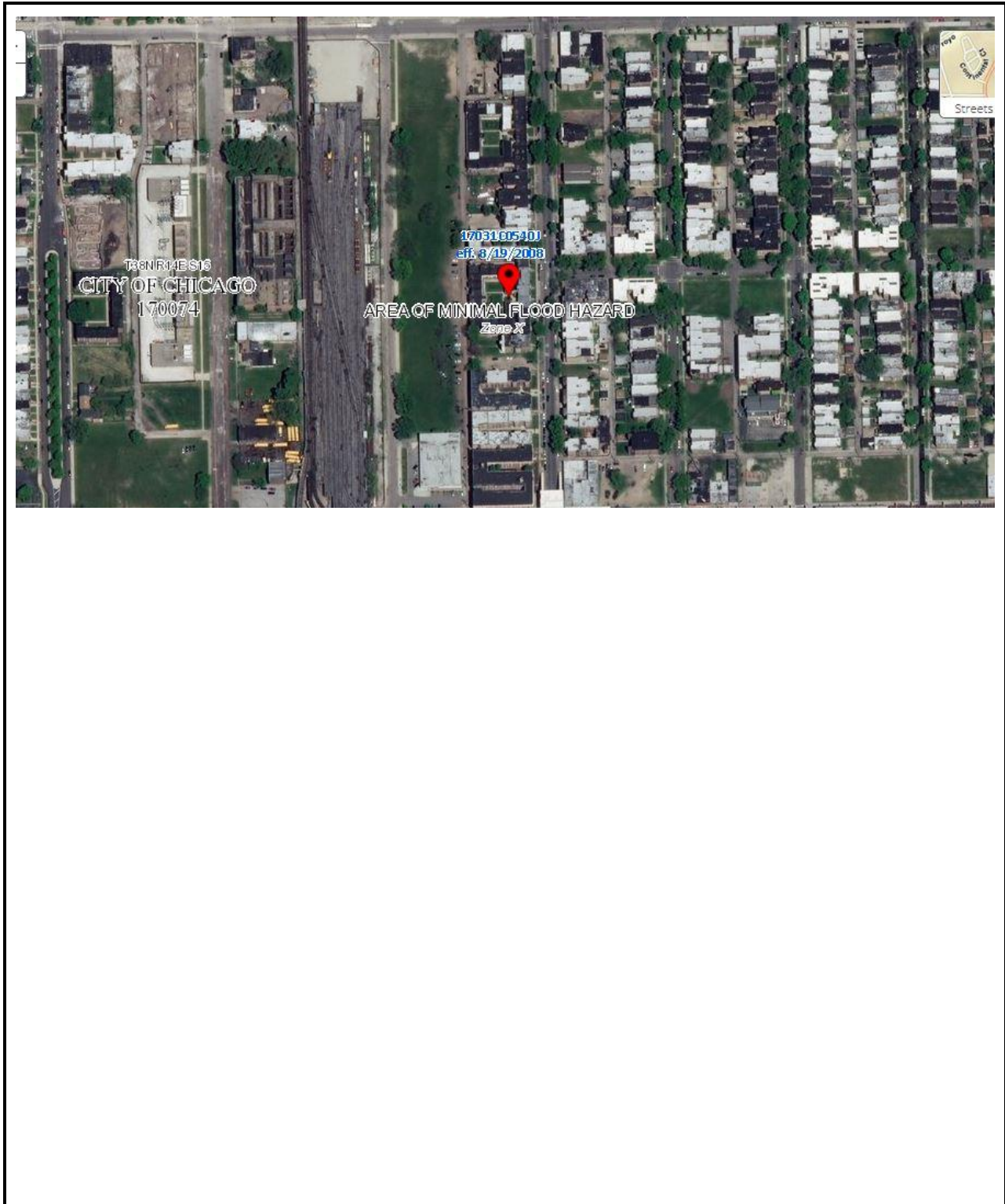
CBRE, Inc. is not qualified to detect the existence of potentially hazardous material or underground storage tanks which may be present on or near the site. The existence of hazardous materials or underground storage tanks may affect the value of the property. For this appraisal, CBRE, Inc. has specifically assumed that the property is not affected by any hazardous materials that may be present on or near the property.

## **CONCLUSION**

The site is well located and afforded average access and visibility from roadway frontage. The size of the site is typical for the area and use, and there are no known detrimental uses in the immediate vicinity. Overall, there are no known factors which are considered to prevent the site from development to its highest and best use, as if vacant, or adverse to the existing use of the site.



### FLOOD PLAIN MAP



## Improvements Analysis

The following chart shows a summary of the improvements.

IMPROVEMENTS SUMMARY		
Property Type	Apartment	(Multi-family Garden)
Number of Buildings	1	
Number of Stories	2	
Year Built	1912	Renovated: 2018
Gross Building Area	34,578 SF	
Net Rentable Area	31,150 SF	
Number of Units	32	
Average Unit Size	973 SF	
Site Coverage	53.1%	
Land-to-Building Ratio	0.94 : 1	
Floor Area Ratio (FAR)	1.06	
Development Density	42.8 Units/Acre	
Parking Spaces:	None	
Parking Ratio (spaces/unit)	0.00	

Source: Various sources compiled by CBRE

UNIT MIX					
Unit Mix/Type	Comments	No. Units	Percent of Total	Unit Size (SF)	NRA (SF)
1Bed/1Bath	1Bed/1Bath	12	37.5%	600	7,200
1Bed/1Bath-ADA	1Bed/1Bath-ADA	1	3.1%	1,025	1,025
2Bed/1.5Bath	2Bed/1.5Bath	2	6.3%	975	1,950
2Bed/1.5Bath	2Bed/1.5Bath	2	6.3%	1,025	2,050
2Bed/2Bath	2Bed/2Bath	9	28.1%	1,125	10,125
3Bed/2Bath	3Bed/2Bath	5	15.6%	1,455	7,275
3Bed/2BathL	3Bed/2BathL	1	3.1%	1,525	1,525
Total/Average:		32	100.0%	973	31,150

Source: Various sources compiled by CBRE

Upon completion, the subject will be a 32-unit multi-family building. The unit mix will include one, two and three bedroom units.

### YEAR BUILT

The subject was built in 1912 and the renovation will be complete in December of 2018.

### CONSTRUCTION CLASS

Building construction class is as follows:

- C - Masonry/concrete ext. walls & wood/steel roof & floor struct., exc. concrete slab on grade

The construction components are assumed to be in working condition and adequate for the building.

The overall quality of the facility is considered to be good to excellent after the renovation. However, CBRE, Inc. is not qualified to determine structural integrity and it is recommended that the client/reader retain the services of a qualified, independent engineer or contractor to determine the structural integrity of the improvements prior to making a business decision.

**FOUNDATION/FLOOR STRUCTURE**

The foundation is assumed to be of adequate load-bearing capacity to support the improvements. The floor structure is summarized as follows:

- Ground Floor:            Poured concrete foundation over a basement
  
- Other Floors:            Concrete flooring

**EXTERIOR WALLS**

The exterior wall structure is masonry and glass pane. The building will have vinyl double hung windows.

**ROOF COVER**

The building will have a new roof covering installed with decking replaced as needed.

**ELEVATOR/STAIR SYSTEM**

There are multiple sets of stairs for ingress and egress to the second-floor units.

**HVAC**

Each unit will control their own heat/air.

**UTILITIES**

Each unit will be individually metered for electrical usage and internet and cable. Current operations indicate the landlord will be responsible for water and sewer and trash costs to the individual units.

**SECURITY**

The building will have security cameras located throughout.

**LIFE SAFETY AND FIRE PROTECTION**

It is assumed the improvements have adequate fire alarm systems, fire exits, fire extinguishers, fire escapes and/or other fire protection measures to meet local fire marshal requirements. CBRE

is not qualified to determine adequate levels of safety & fire protection, whereby it is recommended that the client/reader review available permits, etc. prior to making a business decision.

## **UNIT AMENITIES**

### **Kitchens**

Each unit will feature a full appliance package including a gas range/oven, micro-hood, refrigerator and dishwasher all stainless steel. Additionally, each unit will have new kitchen cabinets, granite counters and refinished hardwood flooring.

### **Bathrooms**

The bathrooms within each unit feature combination tub/showers with ceramic tile wainscot as well as ceramic tile flooring. Additionally, each bathroom will be renovated with new fixtures including vanities with granite counter tops.

### **Interior Features**

Each unit will have refinished hardwood flooring throughout as well as freshly patched and painted walls.

### **Interior Lighting**

Each unit will feature new incandescent lighting in appropriate interior and exterior locations with ceiling and new wall mounted fixtures.

## **SITE AMENITIES**

### **Parking and Drives**

The building will not feature any parking.

### **Landscaping**

Landscaping will be minimal.

## **FUNCTIONAL UTILITY**

All of the floor plans are considered to feature functional layouts and the layout of the overall project is considered functional in utility. Therefore, the unit mix is also functional.

## **ADA COMPLIANCE**

The client/reader's attention is directed to the specific limiting conditions regarding ADA compliance.

**FURNITURE, FIXTURES AND EQUIPMENT**

The apartment units are rented on an unfurnished basis. However, the units will include appliances which are examples of personal property associated with and typically included in the sale of multifamily apartment complexes.

**ENVIRONMENTAL ISSUES**

CBRE is not qualified to detect the existence of any potentially hazardous materials such as lead paint, asbestos, urea formaldehyde foam insulation, or other potentially hazardous construction materials on or in the improvements. The existence of such substances may affect the value of the property. For the purpose of this assignment, we have specifically assumed that any hazardous materials that would cause a loss in value do not affect the subject. The environmental site assessment in the property condition report did not indicate any environmental issues.

**DEFERRED MAINTENANCE**

The buyer is planning a renovation of the building for which they have provided a budget that also addresses any current deferred maintenance items.

The total renovation budget as well as the profit, will be deducted from each approach in order to conclude the “as is” value for the subject.

**ECONOMIC AGE AND LIFE**

CBRE, Inc.’s estimate of the subject improvements effective age and remaining economic life is depicted in the following chart:

<b>ECONOMIC AGE AND LIFE</b>	
Actual Age	106 Years
Effective Age	20 Years
MVS Expected Life	55 Years
Remaining Economic Life	35 Years
Accrued Physical Incurable Depreciation	36.4%
Compiled by CBRE	

The remaining economic life is based upon our on-site observations and a comparative analysis of typical life expectancies as published by Marshall and Swift, LLC, in the Marshall Valuation Service cost guide. Our effective age estimate has taken into account the proposed renovation at the subject property.

**DEVELOPER BUDGETED COST**

The renovation budge is lengthy and has been presented in the addenda of the report. Below is just the total of the budget.

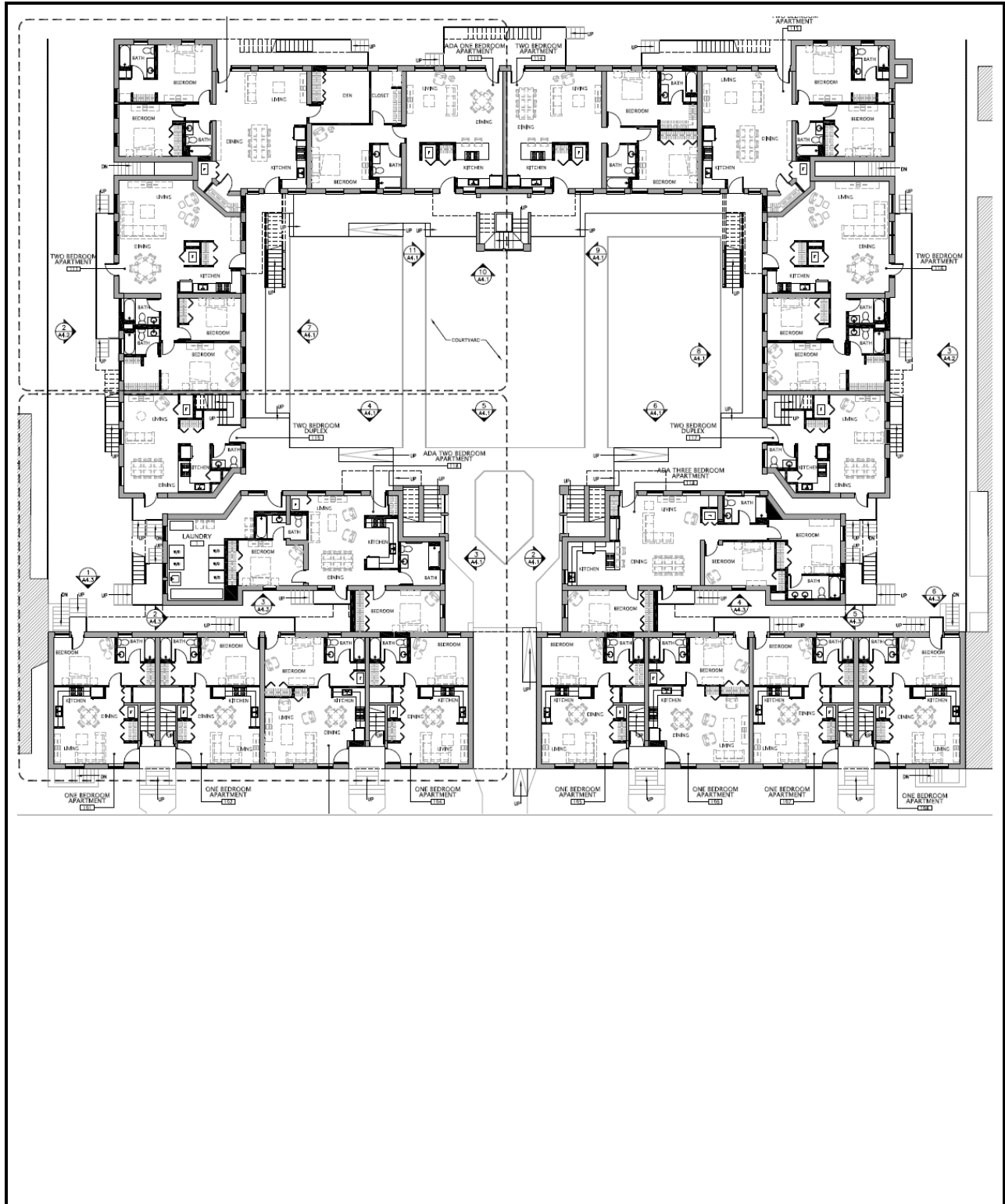
Description of Work	Total Contract	Previously Paid	Net Amount This Payment	Remaining Balance Due
<b>Demolition:</b> Demo per architectural drawing (includes dumpsters)	\$77,000.00			
<b>Concrete:</b> Pour	\$117,000.00			
<b>Tuck pointing:</b> Tuckpoint entire building where needed. Replace lintles where deflecting	\$48,000.00			
<b>Roof:</b> Complete tear off and installation of modified torch down rubber roofing (Includes plywood replacement up to 200sf and seal coating. Anything over 200sf will require change order approval.)	\$65,000.00			
<b>Soffit/Facia/Gutters/Downspouts:</b>	\$23,000.00			
<b>Framing/Rough Carpentry:</b> Frame all units per drawing specification	\$75,000.00			
<b>Decks and Porch Systems:</b> Build 18 stairwells and perimeter catwalk/porch	\$60,000.00			
<b>Windows:</b> Install and cap new vinyl windows on entire building	\$60,000.00			
<b>Plumbing:</b> New copper water lines, drains, HWT's for entire building	\$211,000.00			
<b>Plumbing Fxtures:</b> Install plumbing fixtures (kitchen and bath sinks, tubs, faucets, toilets and 36 -40 gal HWT's)	\$26,000.00			
<b>Underground Camera:</b>	\$1,500.00			
<b>Sewer and Water Service: Existing to remain</b>				
<b>HVAC Labor:</b> Install new 80% BTU furnace, duct work and coil. Install new 2-ton a/c condenser unit with line set per unit	\$195,000.00			
<b>Electrical Labor:</b> Install 2 -800amp services. Pipe in and wire entire building. Install outlets, switches and GFI's. Install light fixtures, ceiling fans and can lights	\$180,000.00			
<b>Electrical Material:</b> Light fixtures, ceiling fans and can lights	\$36,000.00			
<b>Drywall:</b> Install approx 4200 sheets of drywall	\$110,000.00			
<b>Insulation:</b> Batt insulate outside walls of entire building	\$53,000.00			
<b>Low Voltage:</b>	\$12,000.00			
<b>Paint:</b> Paint interior of house of each unit	\$72,000.00			
<b>Hardwood:</b> Install hardwood floors in each unit (except bath)	\$110,000.00			
<b>Tile:</b> Install tile in kitchen and baths and basement floor	\$53,000.00			
<b>Finish Carpentry/Trim:</b> Install trim, interior doors, exterior doors, crown moulding and hardware	\$96,000.00			
<b>Cabinets:</b> Kitchen cabinets and 36 bath vanities	\$43,000.00			
<b>Counter tops:</b> Granite in kitchens only in entire building	\$25,000.00			
<b>Mirrors:</b> Install Mirrors in bathrooms	\$2,500.00			
<b>Appliance:</b> SS Stove Fridge Microwave Package	\$40,000			
<b>Permits: TBD</b>	0			
	0			
<b>General Conditions:</b>	\$2,000.00			
<b>Contingency:</b>	\$17,000.00			
<b>General Contracting</b>	\$290,000.00			
<b>TOTALS</b>	\$2,100,000.00	\$0.00	\$0.00	\$0.00

The budgeted costs above amount to \$2,100,000 for the complete renovation. Later in our analysis we will calculate the profit expectation upon completion and renovation of the remaining units.

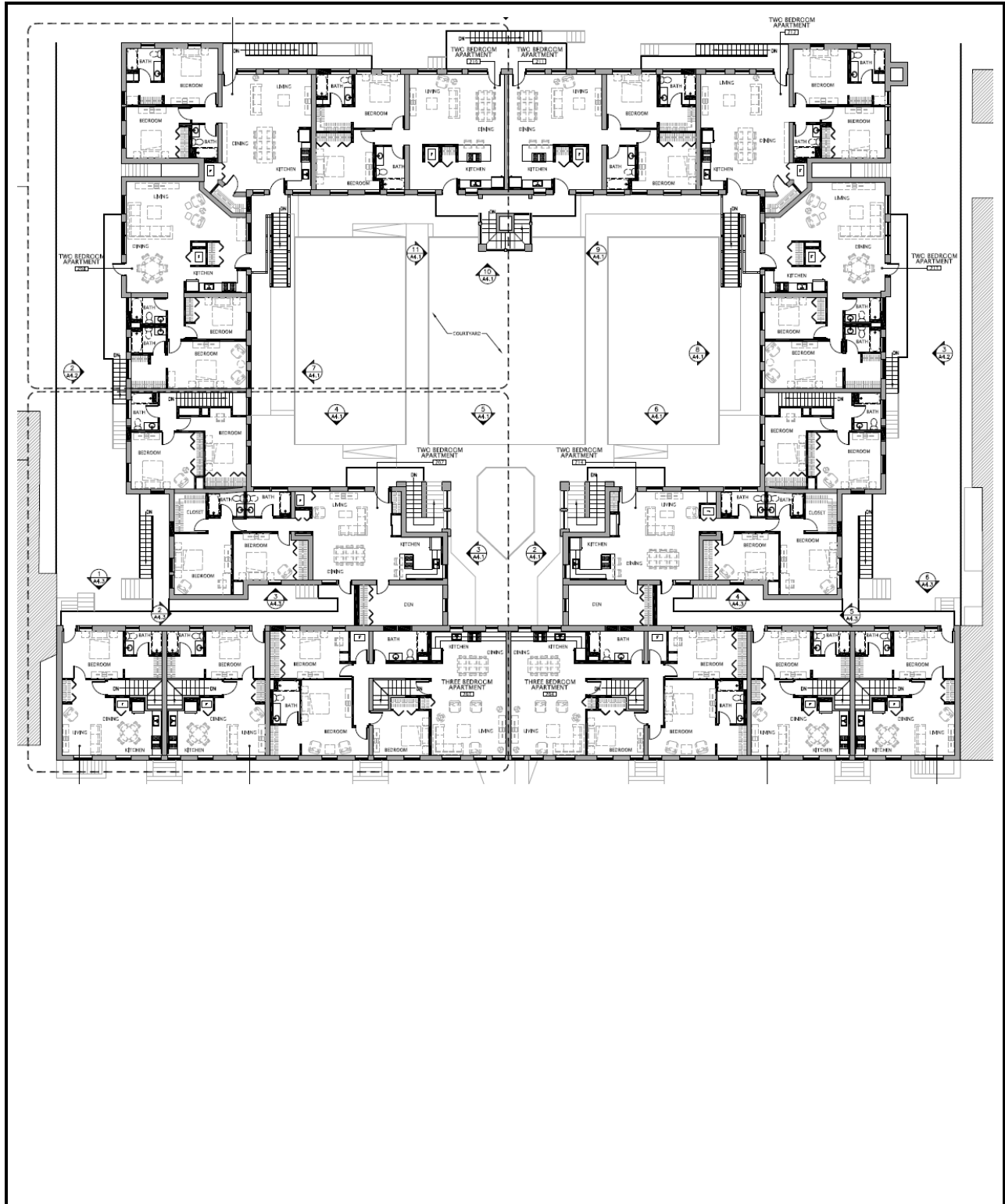
## CONCLUSION

The improvements are in above poor overall condition and will be in good/excellent condition after the renovation. Overall, there are no known factors that adversely impact the marketability of the improvements.

### LAYOUT FIRST FLOOR



### YOUR TITLE SECOND FLOOR





## Zoning

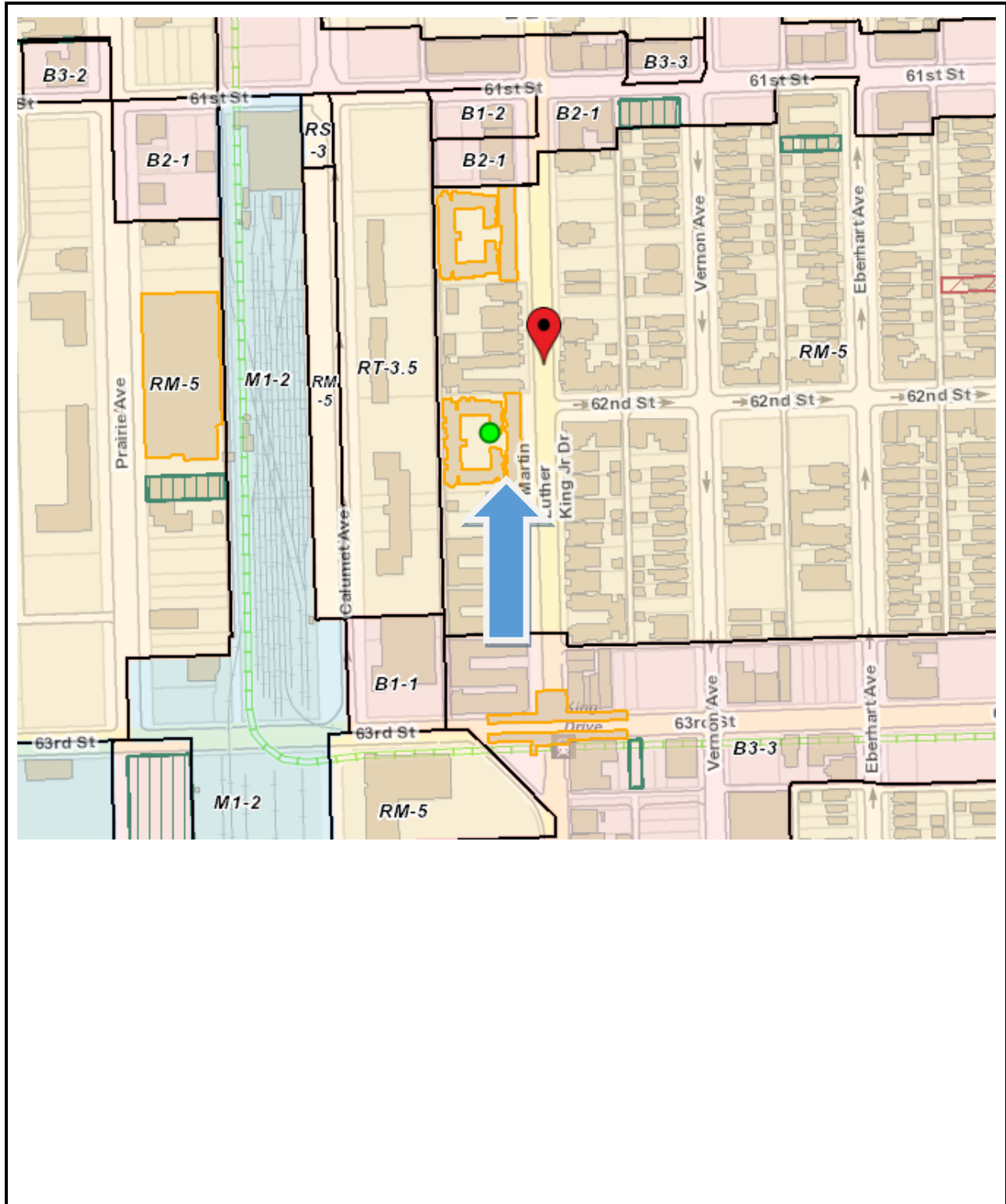
The following chart summarizes the subject’s zoning requirements.

<b>ZONING SUMMARY</b>	
Current Zoning	RM-5 Residential Multi-Unit District
Legally Conforming	No - See Comments
Uses Permitted	Single and Multiple Family Uses
Zoning Change	Not likely
<b>Category</b>	<b>Zoning Requirement</b>
Minimum Lot Size Per Dwelling Unit	1,650 Sq. Ft.
Minimum Lot Width	25 Feet
Maximum Height	45 Feet
Minimum Setbacks	
Front Yard	15 Feet or 12% of lot whichever is less
Street Side Yard	10 Feet
Interior Side Yard	10 Feet
Rear Yard	The greater of 5.25% of lot area or 10 feet
Maximum Bldg. Coverage	75%
Maximum FAR/Density	2.00:1, 400 feet/dwelling unit
Subject's Actual FAR	1.06 : 1
Subject's Actual Density	42.8 Units/Acre
Parking Requirements	1 space per dwelling unit
Subject's Actual Parking	None
Source: Planning & Zoning Dept.	

## ANALYSIS AND CONCLUSION

The improvements represent a legally-nonconforming use due to parking and setback requirements and, if damaged, may be restored without special permit application reportedly within 12 months. Additional information may be obtained from the appropriate governmental authority. For purposes of this appraisal, CBRE has assumed the information obtained is correct.

### ZONING MAP



### Tax and Assessment Data

The subject property is located in Chicago and is assessed by Cook County. Real estate in Cook County is assessed at different levels of the assessor’s estimated market value based on property class.

<b>COOK COUNTY ASSESSMENT RATIO SUMMARY</b>		
Major Property Class	Description	Assessment Ratio
1	Vacant Land	10%
2	Residential (single-family and six units or less)	10%
3	Apartment Buildings (More than six units)	10%
4	Not-for-Profit Property	25%
5a	Commercial Property (Office, Retail)	25%
5b	Industrial Property	25%
9	Apartment property rented to low-income & rehabbed	10%

Compiled by CBRE

In Cook County, assessed values are multiplied by the State Equalization Factor (required by the Illinois Department of Revenue to produce an average assessment ratio of 33% of the total of all properties in Cook County) and then by the tax rate in order to derive real estate taxes, which are payable one year in arrears, meaning that property owners pay taxes each year based on the prior year’s assessment and tax rates. The annual tax bill is due in two installments. The first installment is equal to 55% of the prior year’s tax total and is due in March. The second installment contains all of the adjustments as calculated by the various taxing authorities and is typically due in September but can be as late as November.

Cook County is on a triennial assessment cycle (properties are re-assessed on a mass basis every three years) with the following schedule:

<b>COOK COUNTY TRIENNIAL REASSESSMENT CYCLE</b>		
District	Last Reassessment	Next Reassessment
City of Chicago	2015	2018
North Suburbs	2016	2019
West and South Suburbs	2017	2020

Source: Cook County Assessor

Per the schedule noted above, the subject would be re-assessed for the 2018 pay 2019 real estate tax year with the first pass assessment being issued.

Real estate tax levels can and do change from year to year, even during years when the assessment does not change. This is due to annual changes in the equalization factor of the tax rate. As a general trend, taxes tend to fluctuate each year because of the tax rate and equalization factors. Assessments can increase modestly (depending on specific property activity like stabilization levels or occupancy issues), but generally remain flat between re-assessment

periods, and increases during re-assessment years reflecting the assessor’s opinion of value increases over the three-year period. The Cook County Assessor will consider all three approaches to value - cost, income and market sales.

<b>AD VALOREM TAX INFORMATION</b>					
Assessor's Market Value	Parcel Description	2016 Pay	2017 Pay	2018 Pay	Pro Forma-As Stabilized
20-15-317-039		\$480	\$480		
20-15-317-040		1,689,300	1,689,300		
<b>Subtotal</b>		<b>\$1,689,780</b>	<b>\$1,689,780</b>		<b>\$1,728,000</b>
<b>Assessed Value @</b>		<b>10%</b>	<b>10%</b>		<b>10%</b>
		\$168,978	\$168,978		\$172,800
State Equalization Factor		2.8032	2.8032		2.8032
Equalized Assessed Value		\$473,679	\$473,679		\$484,393
<b>General Tax Rate</b>	(per \$100 A.V.)	7.145000	7.359350		7.359350
<b>Total Taxes</b>		<b>\$33,844</b>	<b>\$34,860</b>		<b>\$35,648</b>
<b>Taxes Per Unit</b>		<b>\$1,058</b>	<b>\$1,089</b>		<b>\$1,114</b>

Source: Assessor's Office

The above noted assessments and resulting taxes for the subject in 2016 and 2017 reflect the property as an un-stabilized asset. In our analysis, what we are concerned with in the valuation of the subject property is the projected real estate tax liability for the subject property at full assessment as a fully improved and stabilized 32-unit walk-up apartment asset.

For the subject, as stabilized, we estimated a real estate tax liability of \$36,539, or \$1,142 per unit, which is the current projection of \$35,648 grown forward at 2.5% for 12 months. This figure is based on an estimated assigned market value (for real estate tax purposes) of \$1,728,000, an assessment ratio of 10% (based on subject’s classification as a Property Class 3 asset), the most recent equalization factor available (2.8032) and the most recent real estate tax rate available (2016 pay 2017 of \$7.145 per \$100 of EAV, grown at 3%). There are several assumptions in our calculated estimate that require support.

<b>SUMMARY OF CHICAGO POST-SALE MULTI-FAMILY ASSESSMENT LEVELS</b>							
<b>No.</b>	<b>Name</b>	<b>Date of Sale</b>	<b>Year Built</b>	<b>No. Units</b>	<b>Actual Sale Price</b>	<b>Post-Sale Assessor Market Value-2017</b>	<b>Assessor MV as a % of Sale Price</b>
1	1251-53 W Division	Aug-16	2013	6	\$3,580,000	\$1,702,500	47.6%
2	1342 W Randolph	Aug-16	2008/14	20	\$10,450,000	\$3,751,020	35.9%
3	1846 W Division	May-16	2013	12	\$7,400,000	\$2,130,452	28.8%
4	2942 N Lincoln	Apr-16	2006	7	\$3,925,000	\$1,285,130	32.7%
<b>Average</b>							<b>36.25%</b>
Compiled by CBRE							

Another assumption requiring support is our estimated assessor-assigned market value for real estate tax purposes of \$1,728,000. To estimate this figure, we looked at the relationship between the post-sale assigned assessed values for similar apartment complexes that have sold and the recorded sale prices for said properties. In other words, after a sale occurs, at what ratio to the recorded sale price does the assessor typically assign a market value for assessment and tax purposes. Our estimated assessor-assigned market value for real estate tax purposes represents 42.9% of the stabilized valuation for the subject property (\$4,030,000). In an effort to support this ratio, we present four (4) similar properties located in Chicago that transacted in 2016 and were constructed after 2006. The assigned assessor market values, post-sale, for these transactions are presented and analyzed as they relate to the recorded sale prices in an effort to extract a market-based ratio which can be cross-checked against the previously noted 42.9% ratio implied for the subject. The post-sale assessment comparables are presented in the table on the previous page.

After the four (4) transactions occurred, the local assessor assigned market values ranging from 28.8% to 47.6% of the recorded sale price in the 2016 assessment year. The average assigned market value ratio to sale price is 36.25%. Based on the ratios extracted from the sales, our market-extracted assessment level for the subject appears reasonable and in-line with the market.

## **CONCLUSION**

Based on the tax analysis presented, a stabilized real estate tax liability for the subject of \$36,539, or \$1,142 per unit as stabilized is estimated. For purposes of this analysis, CBRE, Inc. assumes that all taxes are current. Finally, we note that our estimated real estate tax liability for the subject is considered when estimating an appropriate capitalization rate for the property.

## Market Analysis

Primary data sources used for this market analysis includes REIS 4Q 2017, CBRE Econometric Advisors Report 4Q 2017 (Chicago), PwC Real Estate Investor Survey 4Q 2017 and demographic statistical information from Nielsen/Claritas.

### Property Identification

The subject is in the City West submarket (per Reis) and is considered a Class C apartment development. The property contains 5 residential units, it appeals to local investors, therefore, a discussion of local trends is warranted.

The City West Submarket encompasses the west area of Chicago and neighboring suburbs.

- Reis.Com – The City West Submarket
- CBRE Econometric Advisors – City West Submarket

### PwC Real Estate Investor Survey

The national apartment market remains a favorable play among investors despite an eight-year run that many anticipated would have come to end by now. One of the greatest attributes of this sector's strength is a growing propensity to rent instead of owning a home. According to the U.S. Census Bureau, the percentage of renters in the country increased from 34.0% in the third quarter of 1997 to 36.1% in the third quarter of 2017.

An increase in rental demand in the face of a surge in additions to supply continues to have a positive impact on apartment rental rates at many properties. This quarter, the average initial-year market rent change rate is 2.58% for the national apartment market. Even though this assumption slips 11 basis points this quarter, it sneaks past the average of 2.50% for the national warehouse market, which ranks as the top property pick among industry leaders in Emerging Trends in Real Estate® 2018.

While Reis forecasts the largest additions to supply in 2017, increasing the overall vacancy rate to 4.8% from 4.2% at year-end 2016, most surveyed investors believe the impact on vacancy and rent growth will be temporary. "We recognize supply issues, but foresee it getting better in 18 months or so," estimates an investor.

KEY 4Q17 SURVEY STATS*		
<b>Total Vacancy Assumption:</b>		
Average	6.0%	=
Range	3.0% to 10.0%	
<b>Months of Free Rent<sup>(1)</sup>:</b>		
Average	1	=
Range	0 to 2	
% of participants using	78.0%	=
<b>Market Conditions Favor:</b>		
Buyers	0.0%	=
Sellers	33.0%	▼
Neither	67.0%	▲
* ▼, ▲, = change from prior quarter (1) on a one-year lease		

The following table summarizes PwC's 4<sup>th</sup> Quarter 2017 national apartment market survey:

Table 30 NATIONAL APARTMENT MARKET Fourth Quarter 2017					
	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
<b>DISCOUNT RATE (IRR)<sup>a</sup></b>					
Range	5.50% – 10.00%	5.00% – 10.00%	5.50% – 10.00%	5.50% – 10.00%	5.25% – 14.00%
Average	7.26%	7.28%	7.30%	7.34%	8.17%
Change (Basis Points)		- 2	- 4	- 8	- 91
<b>OVERALL CAP RATE (OAR)<sup>a</sup></b>					
Range	3.50% – 7.50%	3.50% – 7.50%	3.50% – 7.50%	3.50% – 8.00%	3.75% – 10.00%
Average	5.32%	5.35%	5.25%	5.36%	5.72%
Change (Basis Points)		- 3	+ 6	- 4	- 40
<b>RESIDUAL CAP RATE</b>					
Range	4.25% – 7.75%	4.25% – 7.75%	4.25% – 7.50%	4.25% – 9.00%	4.50% – 9.75%
Average	5.74%	5.79%	5.71%	6.03%	6.17%
Change (Basis Points)		- 5	+ 3	- 29	- 43
<b>MARKET RENT CHANGE<sup>b</sup></b>					
Range	(1.00%) – 5.00%	(1.00%) – 5.00%	0.00% – 5.00%	0.00% – 8.00%	(2.00%) – 6.00%
Average	2.58%	2.69%	2.85%	2.83%	2.57%
Change (Basis Points)		- 11	- 27	- 25	+ 1
<b>EXPENSE CHANGE<sup>b</sup></b>					
Range	2.00% – 3.00%	2.00% – 3.00%	2.00% – 4.00%	1.00% – 4.00%	1.00% – 3.50%
Average	2.72%	2.72%	2.78%	2.74%	2.71%
Change (Basis Points)		0	- 6	- 2	+ 1
<b>MARKETING TIME<sup>c</sup></b>					
Range	1 – 9	1 – 9	1 – 9	1 – 9	0 – 18
Average	3.8	3.8	3.8	4.1	5.1
Change (▼, ▲, =)		=	=	▼	▼
a. Rate on unleveraged, all-cash transactions    b. Initial rate of change    c. In months					



### **CBRE Multi-Housing Outlook – Chicago**

The following three pages summarize CBRE Econometric Advisors 4<sup>th</sup> Quarter 2017 Multi-Housing Market Report for Chicago.

**CBRE** **Econometric Advisors**

# Apartment Outlook

## Chicago

**CBRE**

Q4 2017

### Chicago - Overview

The population of the Chicago area stands at 9.71 million, 3rd largest of the apartment markets we track. The average per capita income (according to recent data from Moody's Economy.com) is estimated to be \$57,650 - approximately 13% above the national average. Total employment stands at 4.78 million workers.

Key Statistics	Level	Rank	1-Quarter Change	
			Metro	All Mkts
Per Capita Income (\$000)	57.65	19		
Total Employment (mil.)	4.8	2	↑	↔
Total Inventory (units x 1000)	713	3	↑	↔
Vacancy Rate (%)	6.1	51	↓	↓
Rent Index (\$/unit)	1,478	18	↑	↑
			↓	↑

### Market Definition

The Chicago market is defined as Cook, DeKalb, DuPage, Grundy, Kane, Kendall, Lake, McHenry and Will counties in Illinois and Kenosha County in Wisconsin.

### Apartment Market Forecast

The short-term forecast calls for an overall increase in the number of workers through year-end 2019. Total net absorption is forecasted to be a positive 12,714 units, out-pacing supply during the same period. By year-end 2019, the annualized vacancy rate is expected to be 5.9% while rents are forecasted to grow - reaching \$1,489.22 compared to current market rents of \$1,478.22.

#### Chicago Forecast Summary: Q4 2017

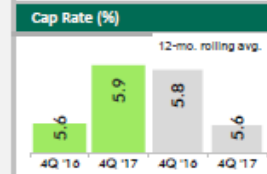
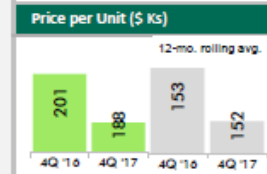
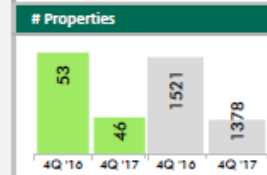
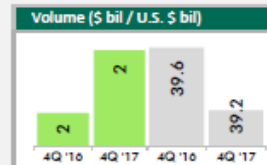
	Demand			Supply		Performance		
	New Jobs Total Emp.	Net Absorp (Units)	Absorp Rate (%)	Rentable Completions (Units)	Rate (%)	Vac Rate (%)	Rent Index (\$/Unit)	Rent Infl (%)
2017	35,200	1,579	0.2	7,423	1.1	5.4	1,478.22	-0.7
Q1	14,500	617	0.1	1,788	0.3	5.5	1,513.09	1.6
Q2	-600	6,639	1.0	1,605	0.2	4.8	1,548.37	2.3
Q3	6,300	-1,464	-0.2	1,476	0.2	5.2	1,532.26	-1.0
Q4	15,000	-4,213	-0.6	2,554	0.4	6.1	1,478.22	-3.5
2018F	38,700	9,556	1.4	8,621	1.2	6.0	1,486.29	0.5
2019F	14,100	3,158	0.5	2,849	0.4	5.9	1,489.22	0.2
<b>Historical Performance</b>								
Min	-280,800	-23,490	-3.7	299	0.0	3.2	608.71	-7.5
Max	162,300	17,850	2.9	13,031	1.9	8.1	1,548.37	10.0
Mean	30,500	3,137	0.5	4,035	0.6	5.0	1,001.47	3.0

Historical minimum, maximum, and average values for each variable are provided to put current market performance in perspective. The time period from which these values are calculated is 1980 (or the earliest year of available data) to the current year.

Historical and current apartment vacancy and rent data are provided by AXIOMetrics Inc.

### Capital Markets Summary

Chicago  
U.S.



Source: Real Capital Analytics, Inc. Transactions \$0 million and greater

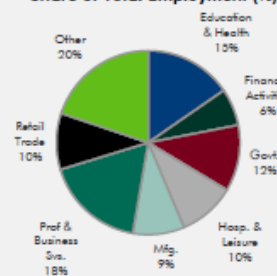
Q4 2017

**Total Employment Growth Rankings**

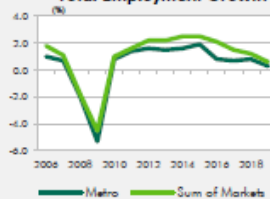
History	Growth (%)	Rank
1 year	0.7	59
2 year	0.8	57
5 year	1.3	49

Forecast	Growth (%)	Rank
1 year	0.8	48
2 year	0.6	40
5 year	0.6	42

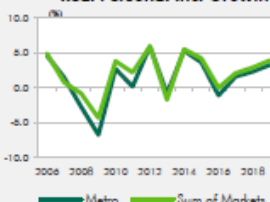
**Largest Employment Sectors Share of Total Employment (%)**



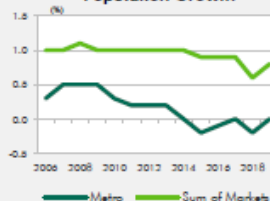
**Total Employment Growth**



**Real Personal Inc. Growth**



**Population Growth**



**The Chicago Economy**

Over the last five years, total employment in the Chicago area has grown at an average annual rate of 1.3% while across the U.S., employment has grown at an average annual rate of 1.8%. In the last 4 quarters, Chicago's employment has grown at an average annual rate of 0.7%. Our forecast predicts growth of 0.6% in the Chicago area in the next five years. Chicago's construction employment sector will post the best job performance over the next five years.

The table below presents the current employment levels for major industry groups as well as historical growth rates over the last five years, last 12 months, and the next five years.

**Employment Levels and Growth Rates: Chicago vs. Nation**

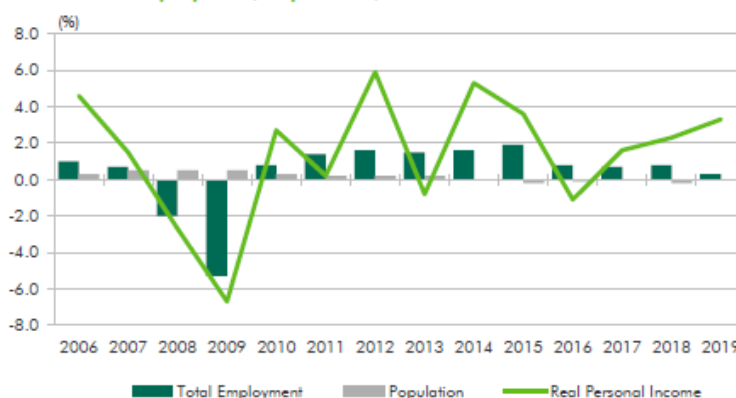
NAICS Category	Level (x 1000)	Location Quotient	Avg Annual Growth Rates (%)					
			Last 5 Years		Last 12 Mos.		Next 5 Years	
			Metro	U.S.	Metro	U.S.	Metro	U.S.
Agriculture & Mining	2	0.07	2.7	-3.0	0.0	9.2	0.0	1.1
Construction	176	0.78	3.2	4.1	2.4	2.9	2.1	2.3
Manufacturing	433	1.07	0.1	0.9	0.2	1.5	-0.8	-1.1
Wholesale Trade	251	1.30	0.8	0.9	0.6	1.1	0.4	0.7
Retail Trade	473	0.92	0.7	1.2	-0.7	-0.4	0.4	0.4
Transportation & Warehousing	218	1.31	2.8	2.8	0.9	1.7	0.0	0.0
Information	83	0.94	0.3	0.3	2.0	-1.9	0.2	0.2
Financial Activities	312	1.13	1.4	1.7	3.3	1.8	0.4	0.6
Prof. & Business Svcs.	840	1.24	2.1	2.9	1.6	2.6	1.4	1.5
Education & Health	735	0.97	1.6	2.2	0.7	2.0	0.7	1.2
Hospitality & Leisure	479	0.92	2.3	2.9	0.5	1.9	0.6	1.2
Other Services	201	1.07	0.8	1.3	2.1	1.6	0.3	0.4
Government	558	0.77	0.0	0.4	-1.1	0.2	0.4	0.6
<b>Total</b>	<b>4,776</b>	<b>n/a</b>	<b>1.3</b>	<b>1.8</b>	<b>0.7</b>	<b>1.4</b>	<b>0.6</b>	<b>0.8</b>

Source: Moody's Economy.com, CBRE EA

**Economic Drivers of Demand**

Population, personal income, and most importantly, total employment are the primary economic drivers of apartment demand. The graph below shows the annual growth rates of these variables from 2006 through year-end 2019.

**Total Employment, Population, and Real Personal Income Growth**



Q4 2017

### Chicago Annual History & Forecast

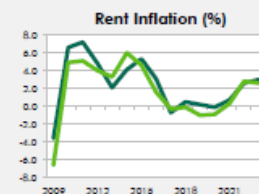
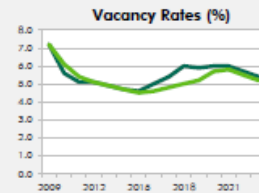
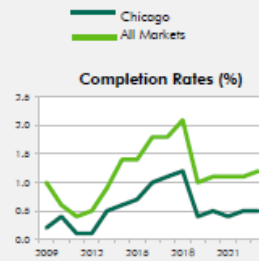
Presented below is our six-year forecast for the Chicago apartment market. Historical measures are provided back to 2009.

#### Chicago Annual History & Forecast: 2009 - 2023

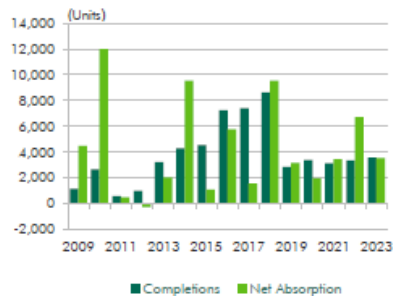
Year	Total Employment (x 1000)	Real Pers Income (\$ billions)	Rentable Inventory (units)	Rentable Completions (Units)	Vacancy Rate (%)	Net Absorption (units)	Rent Index (\$/unit)	Rent Inflation (%)
<b>History</b>								
2009	4,306	471.5	681,638	1,135	7.2	4,496	1,078.50	-3.6
2010	4,340	484.4	684,303	2,665	5.6	12,000	1,149.42	6.6
2011	4,401	485.6	684,898	595	5.1	502	1,232.01	7.2
2012	4,473	514.2	685,910	1,012	5.1	-255	1,291.70	4.8
2013	4,540	510.0	689,129	3,219	4.9	2,019	1,319.13	2.1
2014	4,611	537.2	693,409	4,280	4.7	9,555	1,372.58	4.1
2015	4,701	556.7	697,934	4,525	4.6	1,107	1,444.68	5.3
2016	4,740	550.7	705,185	7,251	5.0	5,773	1,489.13	3.1
2017	4,776	559.5	712,608	7,423	5.4	1,579	1,478.22	-0.7
<b>Forecast</b>								
2018	4,814	572.3	721,229	8,621	6.0	9,556	1,486.29	0.5
2019	4,828	591.5	724,078	2,849	5.9	3,158	1,489.22	0.2
2020	4,805	604.8	727,459	3,380	6.0	1,976	1,488.08	-0.1
2021	4,824	616.7	730,599	3,140	6.0	3,454	1,497.98	0.7
2022	4,911	633.9	733,967	3,367	5.7	6,697	1,536.84	2.6
2023	4,942	642.2	737,535	3,569	5.4	3,549	1,583.57	3.0

### Market Trends

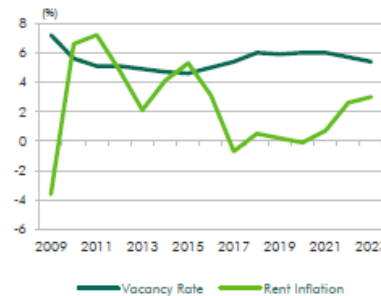
#### Chicago vs. All Markets



#### Completions vs. Net Absorption



#### Vacancy Rate vs. Rent Inflation



Total employment in the Chicago is projected to grow by 166,500 jobs during the 2017-2023 period. During the same time period, new supply is expected to average 4,154 units, while net absorption is expected to average 4,731 units, out-pacing new supply. Vacancy rates are expected to remain at 5.4%, while rents are forecasted to rise to \$1,583.57.

Historical and current apartment vacancy and rent data are provided by AXIOMetrics Inc.

Data as of 4th Quarter 2017

Page 3

The following table provides a snapshot of the Chicago MSA and the individual submarkets tracked in CBRE Econometric Advisor’s 4<sup>th</sup> Quarter 2017 Multi-Housing Market Report (subject is in the City West submarket).

**CHICAGO APARTMENT OVERVIEW – REIS.COM**

The Chicago Apartment Market is delineated into 25 distinct submarkets by REIS.com. As discussed earlier, the subject is located in the City West submarket. The subject is identified in the following Reis.com submarket map.



(The City West Submarket Map)

**Chicago MSA Overview**

The 474,511-unit market-rate, investment grade Chicago apartment market is in the middle of a development boom greater than any since the 1980s; yet, the vacancy rate is stable, and rents are moving up moderately. The market is benefitting from young “Millennials” flooding into the city of Chicago, from the surrounding area and less prosperous cities elsewhere in the Midwest. Unlike booming urban centers on the east and west coasts, Chicago, which experienced extensive

residential and industrial abandonment in past decades, has plenty of room to grow making demand, not supply, the constraint on the market.

## CHICAGO APARTMENT MARKET SUMMARY

Apartment market statistics for the Chicago MSA are detailed in the following table:

CHICAGO APARTMENT STATISTICS								
Category	2010	2011	2012	2013	2014	2015	2016	2017 Q4
Inventory (Units)	445,883	446,142	446,890	452,073	454,900	460,069	467,791	474,511
Completions (Units)	2,734	338	728	5,183	2,830	4,868	6,827	2,565
Vacancy %	5.6%	4.6%	3.9%	3.7%	3.4%	3.8%	4.1%	4.6%
Net Absorption (Units)	6,638	5,098	3,724	5,805	3,989	3,171	6,245	4,073
Asking Rent	\$1,068	\$1,086	\$1,113	\$1,146	\$1,185	\$1,231	\$1,295	\$1,371
Effective Rent	\$994	\$1,014	\$1,045	\$1,077	\$1,117	\$1,161	\$1,225	\$1,303

Source: 4th Quarter 2017 Reis Report

As of Fourth Quarter 2017, the metro area posted a vacancy rate of 4.6% which is a 100-basis point improvement from year end 2010 but 50 basis points above year end 2016. In 2010 absorption finished at 6,638 units, the highest level of absorption dating back to 1997. Absorption in 2011 was also strong with a positive 5,098 units, followed by 2012 with a positive 3,724 units. In 2013, absorption totaled a positive 5,805 units. During 2016, there were 6,245 units absorbed which is the highest level since 2010. Both asking and effective rents trended upward throughout 2011 to year end 2016.

Apartment statistics for the Chicago MSA by submarket are detailed below:

<b>CHICAGO APARTMENT STATISTICS BY SUBMARKET</b>			
Submarket	Inventory Units	Average Asking Rent	Vacancy
<b><u>City of Chicago Submarkets</u></b>			
Belmont-Montrose	19,071	\$1,404	3.6%
City West	27,123	\$1,540	8.2%
Gold Coast	34,823	\$2,548	8.9%
Lincoln Park	22,475	\$1,414	2.1%
Rogers Park/Uptown	24,950	\$977	4.0%
<b>South Shore</b>	<b>40,404</b>	<b>\$1,365</b>	<b>5.0%</b>
The Loop	19,032	\$2,231	7.2%
<b><u>Suburban Submarkets</u></b>			
SE Cook County	20,113	\$890	2.5%
SW Cook County	23,901	\$912	2.5%
Aurora/Naperville	20,638	\$1,277	3.6%
Downers Grove	13,662	\$1,158	3.2%
East Lake County	22,443	\$1,113	2.1%
Glen Ellyn/Wheaton	15,286	\$1,201	4.3%
Glendale Heights	16,429	\$1,402	3.3%
Glenview/Evanston	24,759	\$1,475	6.7%
Joliet	9,441	\$1,027	7.3%
Kane County	9,741	\$1,274	4.5%
McHenry County	5,368	\$1,062	4.1%
Oak Park	18,100	\$1,188	3.9%
O'Hare	12,753	\$1,101	4.1%
Palatine	14,106	\$1,288	3.9%
Schaumburg/Hoffman	19,948	\$1,194	3.9%
West Lake County	5,322	\$1,100	3.6%
Wheeling	20,050	\$1,310	2.8%
Woodridge/Lisle	14,573	\$1,182	3.9%
<b>TOTALS/AVERAGE</b>	<b>474,511</b>	<b>\$1,371</b>	<b>4.6%</b>
	Low	\$890	2.1%
	High	\$2,548	8.9%
Source: 4th Quarter 2017 Reis Report			

Overall, vacancy in the 25 submarkets varied from a low of 2.1% in the Lincoln Park submarket to a high of 8.9% in the Gold Coast submarket. The Loop and Gold Coast vacancy rates have been dramatically affected by new deliveries in the Chicago CBD along with the City West neighborhood. The vacancy rate within the City West submarket has decreased 320 basis points since its high of 11.4% in 2010, despite many new deliveries added.

The highest average asking rents in the city of Chicago is in the Gold Coast submarket at \$2,548 per month. The Loop submarket is next with asking rents of \$2,231 per unit. In the suburban submarkets, the highest asking rents are in the Glenview/Evanston submarket at \$1,475 per unit. The average asking rent in the Chicago MSA is \$1,371 per unit.

**MARKET TRENDS**

The table below presents the quarterly trends in rental rates and occupancy for the Chicago MSA since the Year End 2012:

<b>APARTMENT MARKET TRENDS</b>			
Date	Asking Rent	Effective Rent	Occupancy
	Per Unit	Per Unit	
1st Qtr 2012	\$1,088	\$1,019	95.6%
2nd Qtr 2012	\$1,100	\$1,033	95.8%
3rd Qtr 2012	\$1,111	\$1,043	96.0%
4th Qtr 2012	\$1,113	\$1,045	96.1%
1st Qtr 2013	\$1,121	\$1,053	96.3%
2nd Qtr 2013	\$1,127	\$1,059	96.4%
3rd Qtr 2013	\$1,139	\$1,071	96.3%
4th Qtr 2013	\$1,146	\$1,077	96.3%
1st Qtr 2014	\$1,157	\$1,089	96.4%
2nd Qtr 2014	\$1,166	\$1,098	96.5%
3rd Qtr 2014	\$1,166	\$1,098	96.5%
4th Qtr 2014	\$1,185	\$1,117	96.3%
1st Qtr 2015	\$1,188	\$1,121	96.5%
2nd Qtr 2015	\$1,203	\$1,135	96.4%
3rd Qtr 2015	\$1,214	\$1,145	96.4%
4th Qtr 2015	\$1,231	\$1,161	96.2%
1st Qtr 2016	\$1,235	\$1,169	96.2%
2nd Qtr 2016	\$1,255	\$1,187	96.1%
3rd Qtr 2016	\$1,265	\$1,197	96.3%
4th Qtr 2016	\$1,295	\$1,225	95.9%
1st Qtr 2017	\$1,303	\$1,235	95.9%
2nd Qtr 2017	\$1,332	\$1,264	95.7%
3rd Qtr 2017	\$1,347	\$1,275	95.5%
4th Qtr 2017	\$1,371	\$1,303	95.4%
2017*	\$1,358	\$1,285	95.3%
2018*	\$1,413	\$1,333	95.0%
2019*	\$1,456	\$1,370	94.7%
2020*	\$1,488	\$1,400	94.9%
2021*	\$1,514	\$1,425	95.1%

\*Projected

Source: 4th Quarter 2017 Reis Report

The current occupancy level of 95.4% is down 50 basis points from year end 2016. Most submarkets are experiencing increasing rental rates with decreasing concessions, thereby positive trends in effective rents. Most submarkets in the area are also experiencing positive absorption trends and increasing effective rents; although new deliveries will continue to be substantial in the Chicago CBD through 2017.



**SUPPLY/INVENTORY**

Most of the new development over the last few years has occurred in the city of Chicago. The following table presents the inventory level in the Chicago MSA since 2002:

<b>CHICAGO MSA INVENTORY LEVELS</b>	
	Units
Chicago MSA 2002	450,695
Chicago MSA 2003	451,038
Chicago MSA 2004	449,171
Chicago MSA 2005	443,989
Chicago MSA 2006	441,864
Chicago MSA 2007	439,683
Chicago MSA 2008	441,878
Chicago MSA 2009	443,609
Chicago MSA 2010	445,883
Chicago MSA 2011	446,142
Chicago MSA 2012	446,890
Chicago MSA 2013	452,073
Chicago MSA 2014	454,900
Chicago MSA 2015	460,069
Chicago MSA 2016	467,791
Chicago MSA 2017 - Q4	474,511

Source: 4th Quarter 2017 Reis Report

The Chicago market historically had apartments consistently being removed from the market due to condominium conversions in all submarkets. This coupled with the lack of appropriately zoned multi-family land tends to maintain stability in the Chicago apartment market. However, there have been substantial new units added in the city of Chicago and substantial new units will be delivered in the Chicago CBD in 2017.

**New Construction**

The new construction and inventory growth trends for the region and the subject’s submarket are highlighted in the following table.

<b>NEW CONSTRUCTION AND INVENTORY GROWTH TRENDS</b>				
	Chicago MSA		South Shore Submarket	
	New Construction	Inventory Growth	New Construction	Inventory Growth
2007	669	-0.5%	81	N/A
2008	2,195	0.5%	278	0.7%
2009	1,851	0.4%	0	0.0%
2010	3,110	0.5%	93	0.2%
2011	310	0.1%	0	0.0%
2012	710	0.2%	0	0.0%
2013	5,042	1.1%	286	0.7%
2014	3,306	0.7%	127	0.3%
2015	5,277	1.2%	182	0.5%
2016	6,790	1.5%	382	1.0%
2017 - Q4	6,720	0.3%	283	0.7%
2018*	7,934	1.7%	200	0.5%
2019*	6,333	1.3%	1,553	3.8%
2020*	922	0.2%	76	0.2%
2021*	1,174	0.2%	61	0.1%
2022*	877	0.2%	65	0.2%

\* Projected

Source: 4th Quarter 2017 Reis Report

New construction within the MSA has averaged 2,504 units between 2009 and 2016. In 2010, 3,110 units were constructed, the highest single year delivery recorded until 2013. Looking forward, new construction is projected to average 3,448 units through 2022.

New construction within the South Shore submarket has averaged 156 from 2008 through 2017. Currently REIS forecasts 391 units to be added on average through 2022.

**DEMAND**

The table below illustrates the historical and projected vacancy rates in the Chicago MSA and the subject’s submarket.

<b>VACANCY STATISTICS</b>						
	Chicago MSA			South Shore Submarket		
	Inventory	Vacant Units	Vacancy %	Inventory	Vacant Units	Vacancy %
2007	439,683	20,840	4.7%	38,773	1,977	5.1%
2008	441,878	24,043	5.4%	39,051	2,148	5.5%
2009	443,720	29,654	6.7%	39,051	2,421	6.2%
2010	446,141	25,218	5.7%	39,144	2,231	5.7%
2011	446,445	20,569	4.6%	39,144	1,957	5.0%
2012	447,116	17,610	3.9%	39,144	1,785	4.6%
2013	452,122	16,987	3.8%	39,430	1,640	4.2%
2014	455,486	16,058	3.5%	39,557	1,452	3.7%
2015	460,756	18,663	4.1%	39,739	1,510	3.8%
2016	467,507	19,179	4.1%	40,121	1,629	4.1%
2017 - Q4	471,267	21,074	4.5%	40,404	2,000	5.0%
2018*	482,340	24,357	5.0%	40,604	2,111	5.2%
2019*	488,718	26,733	5.5%	42,157	2,572	6.1%
2020*	489,640	25,692	5.2%	42,233	1,972	4.7%
2021*	490,814	25,153	5.1%	42,294	1,578	3.7%
2022*	491,691	24,539	5.0%	42,359	1,423	3.4%

\*Projected

Source: 4th Quarter 2017 Reis Report

Currently, the vacancy rate in the MSA stands at 4.6% which is a 210-basis improvement from 2009-year end. The vacancy rate in the MSA is expected to rise slightly to 5.5% in 2019 before declining to 5.0% by 2022.

As of Fourth Quarter 2017, the vacancy rate within the South Shore submarket stands at 5.0%. The vacancy rate in the submarket is expected to increase gradually to 6.1% by 2019. The vacancy rate within the MSA is projected to average 5.02% between 2017 and 2021. The vacancy rate in the submarket is projected to average 4.6% between 2018 and 2022.

The following table provides historical vacancy statistics for Class B/C product types in the subject's submarket, Reis did not provide any Class A breakdown:

<b>CLASS CUT VACANCY STATISTICS</b>						
	South Shore Submarket					
	CLASS A			CLASS B/C		
	Inventory	Vacant Units	Vacancy %	Inventory	Vacant Units	Vacancy %
2008	11,828	841	7.1%	27,223	1,308	4.8%
2009	11,828	618	5.2%	27,223	1,803	6.6%
2010	11,921	646	5.4%	27,223	1,584	5.8%
2011	11,921	695	5.8%	27,223	1,263	4.6%
2012	11,921	634	5.3%	27,223	1,151	4.2%
2013	12,207	625	5.1%	27,223	1,015	3.7%
2014	12,256	551	4.5%	27,301	900	3.3%
2015	12,438	694	5.6%	27,301	815	3.0%
2016	12,820	756	5.9%	27,301	873	3.2%
2017-Q3	13,103	984	7.5%	27,301	1,071	3.9%
2017 - Q4	13,103	989	7.5%	27,301	1,011	3.7%

Source: 4th Quarter 2017 Reis Report

In the subject South Shore submarket, REIS reported the Class A and B/C segment information, the bulk of vacant units are significantly higher in the Class A market segment. While the overall submarket has an 5.0% vacancy rate, the Class B/C product within the submarket reports a vacancy rate of 3.7%.

## RENTAL RATES

The table below shows the historical and projected average and effective rental rates in the Chicago MSA and the subject's submarket.

<b>RENTAL RATE TRENDS</b>										
	Chicago MSA					South Shore Submarket				
	Asking Rents	Effective Rent	\$ Spread	% Spread	Effective Rent % Change	Asking Rents	Effective Rent	\$ Spread	% Spread	Effective Rent % Change
2008	\$1,068	\$993	-\$75	-7.02%	1.4%	\$965	\$882	-\$83	-8.60%	N/A
2009	\$1,051	\$977	-\$74	-7.04%	-1.6%	\$952	\$867	-\$85	-8.93%	-1.7%
2010	\$1,068	\$1,000	-\$68	-6.37%	2.4%	\$947	\$865	-\$82	-8.66%	-0.2%
2011	\$1,087	\$1,020	-\$67	-6.16%	2.0%	\$969	\$886	-\$83	-8.57%	2.4%
2012	\$1,118	\$1,054	-\$64	-5.72%	3.3%	\$1,042	\$959	-\$83	-7.97%	8.2%
2013	\$1,151	\$1,086	-\$65	-5.65%	3.0%	\$1,045	\$965	-\$80	-7.66%	0.6%
2014	\$1,193	\$1,129	-\$64	-5.36%	4.0%	\$1,099	\$1,021	-\$78	-7.10%	5.8%
2015	\$1,245	\$1,179	-\$66	-5.30%	4.4%	\$1,176	\$1,092	-\$84	-7.14%	7.0%
2016	\$1,296	\$1,230	-\$66	-5.09%	4.3%	\$1,286	\$1,191	-\$95	-7.39%	9.1%
2017 - Q4	\$1,347	\$1,275	-\$72	-5.35%	3.7%	\$1,365	\$1,292	-\$73	-5.35%	8.5%
2018*	\$1,432	\$1,357	-\$75	-5.24%	5.6%	\$1,450	\$1,374	-\$76	-5.24%	6.3%
2019*	\$1,478	\$1,397	-\$81	-5.48%	2.9%	\$1,515	\$1,432	-\$83	-5.48%	4.2%
2020*	\$1,512	\$1,428	-\$84	-5.56%	2.2%	\$1,559	\$1,471	-\$88	-5.64%	2.7%
2021*	\$1,538	\$1,454	-\$84	-5.46%	1.8%	\$1,587	\$1,504	-\$83	-5.23%	2.2%

Source: 4th Quarter 2017 Reis Report

At present, the MSA's asking and effective rents are \$1,347 and \$1,275 respectively. Both asking and effective rents have had strong increases since 2009. As of the Fourth Quarter the spread is \$72 or -5.35%, down from -7.04% in the 2009. The submarket's asking and effective rents are \$1,365 and \$1,292 respectively. The spread is -\$73 or -5.35%.

In 2009, effective rents decreased -1.6% in the MSA and decreased by -1.7% in the South Shore submarket. Since that time effective rents have increased an average of 2.7% annually in the MSA and 4.4% in the submarket.

Moving forward, effective rental rates in the MSA are expected to grow an average of 3.0% between 2017 and 2021. The effective rent within the City West Market an average of 3.9%.

<b>CLASS CUT RENTAL STATISTICS</b>				
	<b>South Shore Submarket</b>			
	<b>CLASS A</b>		<b>CLASS B/C</b>	
	Asking Rent	Change %	Asking Rent	Change %
2008	\$1,187	N/A	\$869	N/A
2009	\$1,146	-3.5%	\$868	-0.1%
2010	\$1,150	0.3%	\$858	-1.2%
2011	\$1,162	1.0%	\$885	3.1%
2012	\$1,272	9.5%	\$941	6.3%
2013	\$1,249	-1.8%	\$954	1.4%
2014	\$1,325	6.1%	\$997	4.5%
2015	\$1,454	9.7%	\$1,049	5.2%
2016	\$1,624	11.7%	\$1,128	7.5%
2017-Q3	\$1,811	11.5%	\$1,143	1.3%
2017 - Q4	\$1,811	0.0%	\$1,150	0.6%

Source: 4th Quarter 2017 Reis Report

	<b>Effective Rent Growth (%)</b>									
	<b>Annual</b>				<b>Sequential Quarterly</b>				<b>Forecast</b>	
	2013	2014	2015	2016	1Q17	2Q17	3Q17F	4Q17F	2018F	2019F
Property										
Submarket	2.96%	3.05%	0.79%	1.03%	1.32%	0.49%	2.42%	4.64%	4.44%	3.60%
Market	1.4	3.6	2.6	2.4	0.4	3	0.7	-0.9	4	3.5

Source: AXIOMETRICS

As can be seen in the chart above the overall submarket effective rental rate growth has outpaced the overall Chicago market area in terms of growth for the fourth quarter of 2017.

## DEMOGRAPHIC ANALYSIS

Demand for residential properties is a direct function of demographic characteristics analyzed on the following pages.

### Housing, Population and Household Formation

The following table illustrates the population and household changes for the subject neighborhood.

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**POPULATION AND HOUSEHOLD PROJECTIONS**


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Population	1 Mile	3 Miles	5 Miles
2022 Total Population	35,639	306,641	722,574
2017 Total Population	34,563	302,111	712,679
2010 Total Population	32,597	294,638	695,240
2000 Total Population	38,691	352,981	800,407
Annual Growth 2017 - 2022	0.62%	0.30%	0.28%
Annual Growth 2010 - 2017	0.84%	0.36%	0.35%
Annual Growth 2000 - 2010	-1.70%	-1.79%	-1.40%
Households			
2022 Total Households	13,617	124,854	264,880
2017 Total Households	13,194	122,755	261,002
2010 Total Households	12,379	118,797	253,691
2000 Total Households	14,188	131,241	275,233
Annual Growth 2017 - 2022	0.63%	0.34%	0.30%
Annual Growth 2010 - 2017	0.92%	0.47%	0.41%
Annual Growth 2000 - 2010	-1.35%	-0.99%	-0.81%

Source: ESRI

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As shown, the subject's neighborhood is experiencing positive increases in both population and households.

### Income Distributions

Household income available for expenditure on housing and other consumer items is a primary factor in determining the price/rent level of housing demand in a market area. In the case of this study, projections of household income, particularly for renters, identifies in gross terms the market from which the subject submarket draws. The following table illustrates estimated household income distribution for the subject neighborhood.

<b>HOUSEHOLD INCOME DISTRIBUTION</b>			
Households by Income Distribution - 2017	1 Mile	3 Miles	5 Miles
<\$15000	38.43%	28.06%	23.29%
\$15000-\$24999	18.06%	15.61%	14.73%
\$25000-\$34999	11.34%	11.21%	11.87%
\$35000-\$49999	10.76%	12.69%	13.91%
\$50000-\$74999	9.50%	13.00%	15.13%
\$75000-\$99999	5.20%	7.04%	8.41%
\$100000-\$149999	4.36%	7.07%	7.92%
\$150000-\$199999	1.23%	2.77%	2.68%
\$200000+	1.12%	2.55%	2.07%

Source: ESRI

The following table illustrates the median and average household income levels for the subject neighborhood.

<b>HOUSEHOLD INCOME LEVELS</b>			
Income	1 Mile	3 Miles	5 Miles
2017 Median Household Income	\$20,377	\$29,956	\$35,084
2017 Average Household Income	\$35,519	\$49,936	\$51,716
2017 Per Capita Income	\$14,418	\$20,878	\$19,394

Source: ESRI

An analysis of the income data indicates that the submarket is generally comprised of middle-income economic cohort groups.

**Employment**

An employment breakdown typically indicates the working-class characteristics for a given market area. The specific employment population within the indicated radii of the subject is as follows:

<b>EMPLOYMENT BY INDUSTRY</b>			
Occupation	1 Mile	3 Miles	5 Miles
Agric/Forestry/Fishing/Hunting/Mining	0.12%	0.13%	0.17%
Construction	2.28%	2.27%	3.99%
Manufacturing	4.16%	5.06%	8.42%
Wholesale Trade	1.09%	1.64%	2.19%
Retail Trade	7.79%	7.91%	8.55%
Transportation/Warehousing/Utilities	7.90%	8.08%	8.18%
Information	2.00%	1.71%	1.47%
Estate/Rental/Leasing	7.52%	7.06%	6.10%
Prof/Scientific/Tech Services	3.38%	5.40%	4.64%
Mgmt of Companies/Enterprises	0.06%	0.05%	0.06%
Admin/Support/Waste Mgmt Svcs	7.36%	7.02%	7.39%
Educational Services	13.18%	14.27%	10.39%
Health Care/Social Assistance	24.10%	20.02%	16.67%
Arts/Entertainment/Recreation	3.27%	2.09%	1.81%
Accommodation/Food Services	8.43%	7.21%	9.95%
Other Services (excl Publ Adm)	3.86%	4.95%	5.06%
Public Administration	3.51%	5.14%	4.95%

Source: ESRI

The previous table illustrates the employment character of the submarket, indicating a predominantly moderate to middle-income employment profile, with the majority of the population holding retail, manufacturing, and health care related jobs.

**Outlook**

Based on this analysis, the immediate area surrounding the subject is projected to experience moderate, positive growth relative to households and population into the near future. Given the area demographics, it appears that demand for both comparable surrounding area apartment units and the subject will continue to be favorable.



## Absorption

## CHICAGO URBAN LEASE-UP PROPERTIES - ABSORPTION RATE SCHEDULE

Property	Submarket	Unit Count	Current Occupancy	Units Leased	Started Leasing	Months on Market/Reach Stabilization	Implied Absorption (Unit/Month)
845 N. State	Gold Coast	367	74.9%	275	June 1, 2015	5	55.0
Loews Tower	Streeterville	398	63.1%	251	March 1, 2015	8	31.4
Arkadia Tower	West Loop	351	91.5%	321	November 1, 2015	11	29.2
Jeff Jack	West Loop	190	97.9%	186	February 1, 2015	5	37.2
Circa 922	West Loop	105	95.2%	100	January 1, 2015	8	12.5
AMLI Lofts	South Loop	398	94.0%	374	May 15, 2014	14	26.7
73 E Lake	Loop	332	92.1%	306	May 1, 2014	13	23.5
OneEleven	Loop	504	93.0%	469	July 1, 2014	15	31.3
Eight O Five	River North	292	82.2%	240	April 1, 2015	7	34.3
The Scott Residences	Old Town	71	80.3%	57	July 1, 2014	5	11.4
1540 W Fullerton	Lincoln Park	24	100.0%	24	February 1, 2016	2	12.0
The Madison at Racine	West Loop	216	99.0%	214	October 1, 2014	8	26.8
City Hyde Park	Hyde Park	180	87.7%	158	December 1, 2015	13	12.2
Vue53	Hyde Park	267	100.0%	267	September 12, 2016	13	20.5
<b>Total/Average:</b>		<b>2,937</b>	<b>90.0%</b>	<b>2,522</b>	<b>Avg. Monthly Absorption</b>		<b>27.1</b>

Compiled by: CBRE

Typically, smaller buildings do not report absorption statistics, however, we have provided recently compiled data on larger projects as a point of reference for ownership projections. Considering the subject's location we would expect the subject's absorption trend to be similar to 1540 Fullerton or The Scott Residences of the absorption rate range noted. We have projected an estimate of 3 months to absorb the units. The subject property will pre-lease the units and open for occupancy December of 2018. We have projected that it will take the building 3 months to reach a stabilized level. The subject building consists of 32 units to reach a stabilized level of 95.0% the subject would have to lease approximately 30 units. Over a three-month period would result in the leasing of approximately 10.13 units per month or between 10 and 11 units per month. This is lower than the property shown above but also reflects the amount of new construction coming on line.

## Lease-Up Discount

### Residential Lease-Up Discount

<b>LEASE UP DISCOUNT SCHEDULE</b>			
<b>Month</b>	<b>1</b>	<b>2</b>	<b>3</b>
<b>AS-STABILIZED</b>			
Potential Rental Income	\$36,215	\$36,215	\$36,215
Vacancy & Credit Loss (%)	6.5%	6.5%	6.5%
Vacancy & Credit Loss (\$)	(\$2,354)	(\$2,354)	(\$2,354)
Net Rental Income	\$33,861	\$33,861	\$33,861
Other Income	\$390	\$390	\$390
Effective Gross Income	\$34,251	\$34,251	\$34,251
Total Expenses	(\$10,683)	(\$10,683)	(\$10,683)
Net Operating Income	\$23,567	\$23,567	\$23,567
<b>AS-IS</b>			
Potential Rental Income	\$36,215	\$36,215	\$36,215
Vacancy & Credit Loss (%)	100.0%	70.5%	38.5%
Vacancy & Credit Loss (\$)	(\$36,215)	(\$25,532)	(\$13,943)
Net Rental Income	\$0	\$10,683	\$22,272
Other Income	\$0	\$123	\$256
Effective Gross Income	\$0	\$10,806	\$22,528
Total Expenses (30% Variable)	(\$7,478)	(\$8,489)	(\$9,586)
Net Operating Income	(\$7,478)	\$2,317	\$12,942
NOI Differential	\$31,046	\$21,250	\$10,625
Tenant Improvements	\$0	\$0	\$0
Leasing Commissions	\$0	\$0	\$0
Sub-Total	\$31,046	\$21,250	\$10,625
Plus: Profit @ 15.00%	\$4,657	\$3,188	\$1,594
Total Lease-Up Cost	\$35,702	\$24,438	\$12,219
Discounted @ 0.00%	\$35,702	\$24,438	\$12,219

**Indicated Lease-Up Discount \$72,360**

**Rounded \$72,000**

Compiled by CBRE

In the above chart, we have discounted the lease-up deduction to the present value. Based on the foregoing, we project an overall lease-up period for the subject of 3-months. At a market-

extracted occupancy level of 95.0%, the subject needs to lease 30 units to reach stabilization or 10.13 units per month.

**Entrepreneurial Profit**

Finally, the developer would seek a return on the investment they are making. Typically, in the value add scenarios developers are looking for profits between 10% and 15% depending on the risk of the project and potential holding period until completion and stabilization. The property was previously purchased for \$1,750,000, after this purchase the developer plans to spend a reported \$2,100,000 on renovations for a total investment of \$385,000.

We have projected a slightly lower anticipated profit on the investment of 10.0% over a 12-month holding period until stabilization. This results in a profit of \$385,000. (\$1,750,000 purchase price + \$2,100,000 renovation costs = \$3,850,000 \* 10.0% profit = \$385,000).

**COMPETITIVE PROPERTIES**

Comparable properties were surveyed in order to identify the current occupancy within the competitive market. The comparable data is summarized in the following table:

<b>SUMMARY OF COMPARABLE APARTMENT RENTALS</b>		
Comp. No.	Name	Occupancy
1	6142 S King Drive	80%
2	5618-20 S King Drive	79%
3	963 E. 61st Street	94%
4	Drexel Terrace Apartments	97%
5	5656 S Indiana Ave	100%
6	609 E 60th Street	100%
Subject	6160-6212 South King Drive	0%
Compiled by CBRE		

The comparables surveyed reported occupancy levels between 79% and 100%. The average occupancy of the comparables surveyed is 93%. The subject’s competitive set as a whole is on par with that of the Chicago in terms of occupancy.

**SUBJECT ANALYSIS**

**Occupancy**

The subject’s occupancy is detailed in the following chart.

<b>OCCUPANCY</b>	
Year	% PGI
<b>CBRE Estimate</b>	<b>96%</b>
Compiled by CBRE	

Based on the foregoing analysis, CBRE, Inc.’s conclusion of stabilized occupancy for the subject is illustrated in the following table. This estimate considers both the physical and economic factors of the market.

<b>OCCUPANCY CONCLUSIONS</b>	
Chicago Area-CBRE	93.9%
Chicago Area-REIS	95.4%
Submarket-CBRE	93.5%
Submarket-REIS	95.0%
Rent Comparables	93.5%
<u>Subject's Current Occupancy</u>	<u>0.0%</u>
<u>Subject's Stabilized Occupancy</u>	<u>96.0%</u>
<u>Lease-up Period</u>	<u>3 Months</u>
Compiled by CBRE	

Although our concluded stabilized occupancy is similar to the overall market and above the subject’s submarket it is relevant when considered against the similar comparables. Given the subject’s location, and condition, we project the subject will perform near the overall market rate.

Our concluded stabilized occupancy is within the range indicated from the stabilized direct competitive properties identified.

**CONCLUSION**

Performance is forecast to be positive as occupancy has fully recovered and concessions are not present. While there are several proposed properties in the suburbs, it is unlikely that many will be able to maintain financing due to the high level of rents required to support the cost of new construction and significant barriers to entry from suburban municipalities. Within the Chicago CBD, new deliveries will be substantial in 2018 which could put downward pressure in achievable

rents unless there is a continued improvement in employment. Nonetheless, vacancy levels in the MSA are forecast to remain near 5.0% over the next several years.

## Highest and Best Use

In appraisal practice, the concept of highest and best use represents the premise upon which value is based. The four criteria the highest and best use must meet are:

- legally permissible;
- physically possible;
- financially feasible; and
- maximally productive.

The highest and best use analysis of the subject is discussed below.

### AS VACANT

#### Legally Permissible

The legally permissible uses were discussed in the Site Analysis and Zoning Sections.

#### Physically Possible

The subject is adequately served by utilities, and has an adequate shape and size, sufficient access, etc., to be a separately developable site. There are no known physical reasons why the subject site would not support any legally probable development (i.e. it appears adequate for development).

Existing structures on similar sites (and the existing improvements on the subject site) provides additional evidence for the physical possibility of development.

#### Financially Feasible

Potential uses of the site include high-density apartment development. The determination of financial feasibility is dependent primarily on the relationship of supply and demand for the legally probable land uses versus the cost to create the uses. As discussed in the Market Analysis, the subject apartment market is generally stabilized and new construction and renovations are present. Specifically, significant development of new apartment properties has occurred in the Chicago CBD over the past 24-months. The rental rate growth is occurring and the subject's immediate submarket has had positive growth for the past four years and positive growth predicted for the near future. Based on current market conditions, the development of the site, as if vacant, with an apartment project remains financially feasible.

#### Maximally Productive - Conclusion

The final test of highest and best use of the site as if vacant is that the use be maximally productive, yielding the highest return to the land.

Based on the information presented above and upon information contained in the market and neighborhood analysis, we conclude that the highest and best use of the subject as if vacant would be the development of an apartment property. More specifically, the subject would likely be developed at a density of around 400 to 600 units per acre (depending on efficiency units or

typical dwelling units), which is typical of similar projects in this market. The design would be characterized as vertical or high-rise style apartments. Our analysis of the subject and its respective market characteristics indicate the most likely buyer, as if vacant, would be a developer.

## **AS IMPROVED**

### **Legally Permissible**

The site has been improved with an office building that is currently being renovated and converted to an apartment development that will be a legally-conforming use.

### **Physically Possible**

The layout and positioning of the improvements are considered functional for apartment use. While it would be physically possible for a wide variety of uses, based on the legal restrictions and the design of the improvements, the continued use of the property for apartment users would be the most functional use.

### **Financially Feasible**

The financial feasibility of an apartment property is based on the amount of rent which can be generated, less operating expenses required to generate that income; if a residual amount existing, then the land is being put to a productive use. Based upon the income capitalization approach conclusion, the subject is capable of producing a positive net cash flow and continued utilization of the improvements for apartment purposes is considered financially feasible. The proposed renovation with high quality amenities and high-quality unit finishes as well as addressing common areas, indicates the return on the investment as renovated exceeds the current return.

### **Maximally Productive - Conclusion**

As shown in the applicable valuation sections, buildings that are similar to the subject have been acquired for renovation with high quality amenities and quality unit finishes. As seen in nearby properties that are included in our income analysis. Based on the foregoing, the highest and best use of the property, as improved, is consistent with the proposed use, as a renovated mixed-use apartment development.

## Appraisal Methodology

In appraisal practice, an approach to value is included or omitted based on its applicability to the property type being valued and the quality and quantity of information available.

### **COST APPROACH**

The cost approach is based on the proposition that the informed purchaser would pay no more for the subject than the cost to produce a substitute property with equivalent utility. This approach is particularly applicable when the property being appraised involves relatively new improvements that represent the highest and best use of the land, or when it is improved with relatively unique or specialized improvements for which there exist few sales or leases of comparable properties.

### **SALES COMPARISON APPROACH**

The sales comparison approach utilizes sales of comparable properties, adjusted for differences, to indicate a value for the subject. Valuation is typically accomplished using physical units of comparison such as price per square foot, price per unit, price per floor, etc., or economic units of comparison such as gross rent multiplier. Adjustments are applied to the physical units of comparison derived from the comparable sale. The unit of comparison chosen for the subject is then used to yield a total value. Economic units of comparison are not adjusted, but rather analyzed as to relevant differences, with the final estimate derived based on the general comparisons.

### **INCOME CAPITALIZATION APPROACH**

The income capitalization approach reflects the subject's income-producing capabilities. This approach is based on the assumption that value is created by the expectation of benefits to be derived in the future. Specifically estimated is the amount an investor would be willing to pay to receive an income stream plus reversion value from a property over a period of time. The two common valuation techniques associated with the income capitalization approach are direct capitalization and the discounted cash flow (DCF) analysis.

### **METHODOLOGY APPLICABLE TO THE SUBJECT**

In valuing the subject, only the sales comparison and income capitalization approaches are applicable and have been used. The cost approach is not applicable in the estimation of market value due to the overall age of the asset as well as the lack of reliance the market participants place on this approach. The exclusion of the cost approach is not considered to compromise the credibility of the results rendered herein.



## Insurable Value

Insurable value is defined as follows:

1. the value of an asset or asset group that is covered by an insurance policy; can be estimated by deducting costs of noninsurable items (e.g., land value) from market value.
2. value used by insurance companies as the basis for insurance. Often considered to be replacement or reproduction cost plus allowances for debris removal or demolition less deterioration and noninsurable items. Sometimes cash value or market value, but often entirely a cost concept.<sup>7</sup>
3. a type of value for insurance purposes.<sup>8</sup>

CBRE, Inc. has followed traditional appraisal standards to develop a reasonable calculation based upon industry practices and industry-accepted publications such as the Marshall Valuation Service. The methodology employed is a derivation of the cost approach and is not reliable for insurable value estimates. Actual construction costs and related estimates can vary greatly from this estimate.

The insurable value estimate presented herein is intended to reflect the value of the destructible portions of the subject, based on the replacement of physical items that are subject to loss from hazards (excluding indestructible items such as basement excavation, foundation, site work, land value and indirect costs). In the case of the subject, this estimate is based upon the base building costs (direct costs) as obtained via the Marshall Valuation Service cost guide, with appropriate deductions.

This analysis should not be relied upon to determine proper insurance coverage as only consultants considered experts in cost estimation and insurance underwriting are qualified to provide an insurable value. It is provided to aid the client/reader/user as part of their overall decision-making process and no representations or warranties are made by CBRE, Inc. regarding the accuracy of this estimate. It is strongly recommended that other sources be utilized to develop any estimate of insurable value.

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<sup>7</sup> Marshall & Swift/Boeckh, LLC, *Marshall Valuation Service*, (Los Angeles: Marshall & Swift/Boeckh, LLC, 2010), Sec 3, p 2.

<sup>8</sup> Appraisal Institute, *The Dictionary of Real Estate Appraisal*, 5<sup>th</sup> ed. (Chicago: Appraisal Institute, 2010), 102.

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**INSURABLE VALUE**


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Primary Building Type:	Apartment	Height per Story:	9'
Effective Age:	20 YRS	Number of Buildings:	1
Condition:	Good, Upon Renovation	Gross Building Area:	34,578 SF
Exterior Wall:	Masonry	Net Rentable Area:	31,150 SF
Number of Units:	32	Average Unit Size:	973 SF
Number of Stories:	2	Average Floor Area:	17,289 SF

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<b>MVS Sec/Page</b>	Sec. 12/Pg. 16
<b>Quality/Bldg. Class</b>	Avg/C
<b>Building Component</b>	Apartments
<b>Component Sq. Ft.</b>	34,578 SF
<b>Base Square Foot Cost</b>	\$74.37

**Square Foot Refinements**

Heating and Cooling	\$3.72
Sprinklers	
Subtotal	<u>\$78.09</u>

**Height and Size Refinements**

Number of Stories Multiplier	1.000
Height per Story Multiplier	1.000
Floor Area Multiplier	1.000
Subtotal	<u>\$78.09</u>

**Cost Multipliers**

Current Cost Multiplier	1.02
Local Multiplier	1.27

<b>Final Square Foot Cost</b>	<b>\$101.16</b>
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<b>Base Component Cost</b>	<b>\$3,497,834</b>
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<b>Base Building Cost</b>	(via Marshall Valuation Service cost data)	\$3,497,834
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<b>Insurable Exclusions</b>	10.0% of Total Building Cost	<u>(\$349,783)</u>
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<b>Indicated Insurable Value</b>	<b>\$3,148,051</b>
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<b>Rounded</b>	<b>\$3,148,000</b>
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<b>Value Per Unit</b>	<b>\$98,375</b>
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Compiled by CBRE

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## Sales Comparison Approach

The following map and table summarize the comparable data used in the valuation of the subject. A detailed description of each transaction is included in the addenda.



SUMMARY OF COMPARABLE APARTMENT SALES											
No.	Property Name	Transaction Type	Transaction Date	YOC / Reno'd	No. Units	Avg. Unit Size	Actual Sale Price	Adjusted Sale Price <sup>1</sup>	Price Per Unit <sup>1</sup>	NOI Per Unit	OAR
1	7001 S Chappel Ave, 7001 S Chappel Ave Chicago, IL 60649	Sale	Feb-18	1922	22	1,000	\$2,500,000	\$2,500,000	\$113,636	\$8,864	7.80%
2	1118-1128 E. Hyde Park Boulevard, 1118-1128 E. Hyde Park Boulevard Chicago, IL 60615	Sale	Nov-16	1927 / 2007	27	922	\$4,075,000	\$4,075,000	\$150,926	\$10,746	7.12%
3	5129 S. Ingleside Avenue, 5129 S. Ingleside Avenue Chicago, IL 60615	Sale	Sep-16	1914	13	1,085	\$1,360,000	\$1,360,000	\$104,615	\$8,064	7.71%
4	6100 S Ellis, 6100 S Ellis Avenue Chicago, IL 60637	Sale	Feb-16	1912	18	933	\$3,250,000	\$3,250,000	\$180,556	\$11,032	6.11%
	Subj. , Pro 6160-6212 South King Drive Forma Chicago, IL 60637	---	---	1912 / 2018	32	973	---	---	---	\$9,120	---

<sup>1</sup> Adjusted sale price for cash equivalency, lease-up and/or deferred maintenance (where applicable)  
 Compiled by CBRE

The sales utilized represent the best data available for comparison with the subject. They were selected from our research of comparable improved sales in the Chicago area focusing on buildings located on the south side of Chicago. These sales all represent apartment projects purchased in the last 24-months and are quality indicators of value for the subject property.

**DISCUSSION/ANALYSIS OF IMPROVED SALES**

**Improved Sale One**

This 22-unit walk-up apartment property is located at 7001 S Chappel Avenue in Chicago, Illinois. The property was constructed in 1922 and renovated in 2005. The property contains 22 total units all of which are 2 bedroom/2 bathroom units. The building was reportedly 100% occupied at the time of sale. The average unit size is 1,000 square feet. The units were renovated in 2005 and feature granite counter tops and stainless-steel appliances. In November 2016, Chappel Portfolio/RE LLC purchased the property from First Midwest Bank Trust for a reported consideration of \$2,500,000 or \$113,636 per unit. Based on the pro forma NOI of \$195,000, an OAR of 7.80% is indicated by this comparable.

Comparable 1 was adjusted upward for its inferior location and its older date of renovation.

**Improved Sale Two**

This 27-unit walk-up apartment property is located at 1118-1128 E. Hyde Park Boulevard in Chicago, Illinois. The property was constructed in 1927 and renovated during a condominium conversion in 2007. The property contains 37 total units and the comparable represents the unsold portion which has been continuously operated as rental units. The average unit size is 922 square feet. The amenities include 13 parking spaces and in-unit washer/dryers. In November 2016, 1128 E. Hyde Park Blvd LLC purchased the property from DMI Hyde Park LLC

for a reported consideration of \$4,075,000 or \$150,926 per unit. Based on the pro forma NOI of \$10,746 per unit, an OAR of 7.12% is indicated by this comparable.

Comparable 2 was adjusted downward for its superior location and parking.

### Improved Sale Three

This 13-unit apartment building is located at 5129 S. Ingleside Avenue in Chicago, Illinois. The property was constructed in 1914 and the average unit size is 1,085 square feet. The amenities include on-site laundry facilities. In September 2016, 5129 S Ingleside, LLC purchased the property from Chicago Title Land Trust Trust #114481-07 for a reported consideration of \$1,360,000 or \$104,615 per unit. Based on the pro forma NOI of \$8,064 per unit, an OAR of 7.71% is indicated by this comparable.

Comparable 3 was adjusted downward for its superior location and upward for its inferior condition.

### Improved Sale Four

6100 S Ellis Avenue is a three-story, walk-up apartment building located in Chicago, Illinois. The building features 18 units with a mix of one bedroom/one bathroom's units and two bedroom/one bathroom units. There are 12 one bedroom units and six two bedroom units. The seller and buyer are local investors and the property traded at a reported 6.11% cap rate based on an in-place net operating income of \$198,575. The average unit size is 933 square feet. The building was originally constructed in 1912 and had been renovated prior to purchase and the units had new cabinets, granite counters and stainless-steel appliances.

Comparable 4 was adjusted downward for its superior location adjacent to the University of Chicago.

## SUMMARY OF ADJUSTMENTS

Based on our comparative analysis, the following chart summarizes the adjustments warranted to each comparable.

<b>APARTMENT SALES ADJUSTMENT GRID</b>					
Comparable Number	1	2	3	4	Subj. Pro Forma
Transaction Type	Sale	Sale	Sale	Sale	---
Transaction Date	Feb-18	Nov-16	Sep-16	Feb-16	---
Year Built/Renovated	1922	1927 / 2007	1914	1912	1912
Property Type	Residential	Residential	Residential	Residential	Apartment
No. Units	22	27	13	18	32
Avg. Unit Size	1,000	922	1,085	933	973
Actual Sale Price	\$2,500,000	\$4,075,000	\$1,360,000	\$3,250,000	---
Adjusted Sale Price <sup>1</sup>	\$2,500,000	\$4,075,000	\$1,360,000	\$3,250,000	---
Price Per Unit <sup>1</sup>	\$113,636	\$150,926	\$104,615	\$180,556	---
NOI Per Unit	\$8,864	\$10,746	\$8,064	\$11,032	\$9,120
OAR	7.80%	7.12%	7.71%	6.11%	---
Adj. Price Per Unit	\$113,636	\$150,926	\$104,615	\$180,556	
Property Rights Conveyed	0%	0%	0%	0%	
Financing Terms <sup>1</sup>	0%	0%	0%	0%	
Conditions of Sale	0%	0%	0%	0%	
Market Conditions (Time)	0%	0%	0%	0%	
Subtotal - Price Per Unit	\$113,636	\$150,926	\$104,615	\$180,556	
Location	5%	-5%	-5%	-20%	
Project Size	0%	0%	0%	0%	
Age/Condition	5%	0%	20%	0%	
Quality of Construction	0%	0%	0%	0%	
Avg. Unit Size	0%	0%	0%	0%	
Project Amenities	0%	0%	0%	0%	
Parking	0%	-5%	0%	0%	
Other	0%	0%	0%	0%	
Total Other Adjustments	10%	-10%	15%	-20%	
<b>Indicated Value Per Unit</b>	<b>\$125,000</b>	<b>\$135,833</b>	<b>\$120,308</b>	<b>\$144,444</b>	
<i>Absolute Adjustment</i>	10%	10%	25%	20%	

<sup>1</sup> Adjusted for cash equivalency, lease-up and/or deferred maintenance (where applicable)  
Compiled by CBRE

The unadjusted per unit range is from \$104,615 to \$180,556 with an unadjusted average unit value of \$137,433. The adjusted per unit range is from \$120,308 to \$144,444 with an adjusted average unit value of \$131,396.

Overall, Comparables One and Two required the lowest overall (absolute) adjustments and occurred recently. Comparables One and Two represent the most similar properties.

The average unit size adjustment takes into account the fact that a larger unit typically results in higher income, however, it is somewhat offset as the smaller units typically achieve a higher rent on a per square foot basis.

## SALES COMPARISON APPROACH CONCLUSION

The following table presents the estimated value for the subject as indicated by the sales comparison approach.

<b>SALES COMPARISON APPROACH</b>				
<b>Total Units</b>	<b>X</b>	<b>Value Per Unit</b>	<b>=</b>	<b>Value</b>
32	X	\$125,000	=	\$4,000,000
32	X	\$135,000	=	\$4,320,000

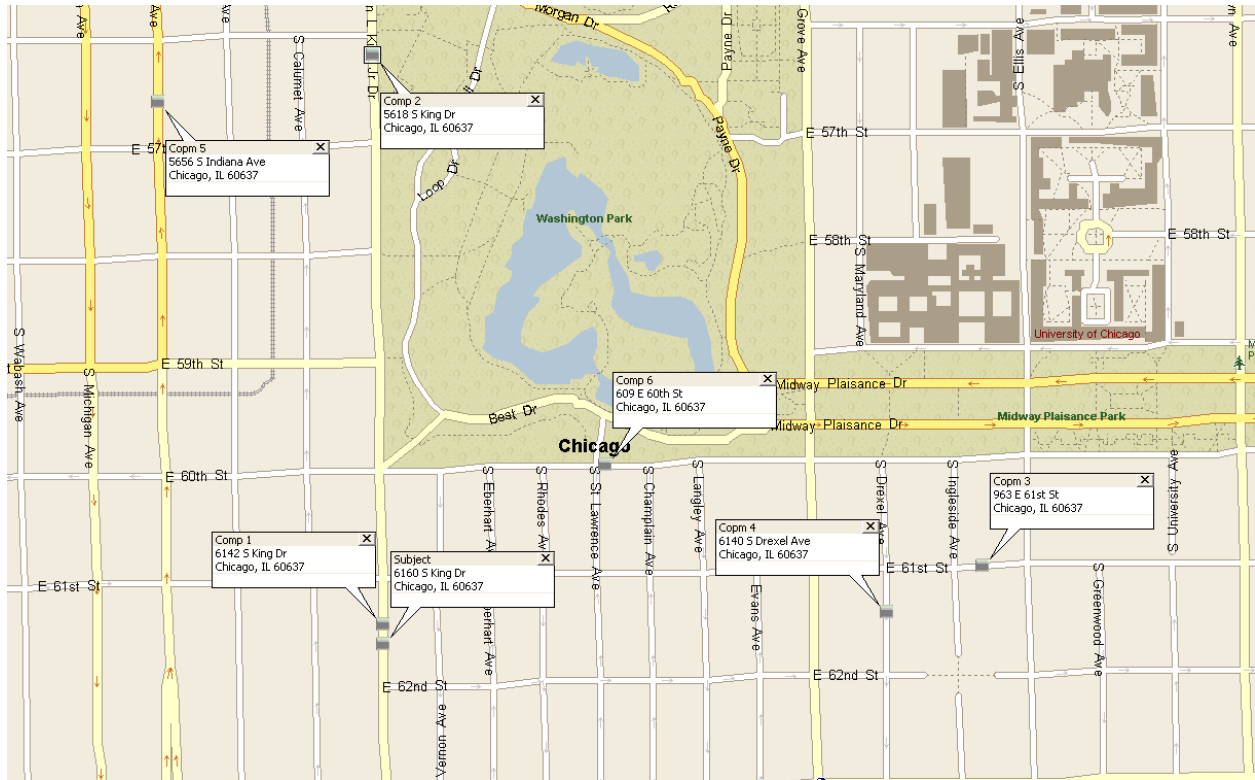
**VALUE CONCLUSION**

<b>Indicated Stabilized Value</b>	<b>\$4,100,000</b>
Lease-Up Discount	(\$72,000)
<b>Indicated As Complete Value</b>	<b>\$4,028,000</b>
<b>Rounded</b>	<b>\$4,030,000</b>
Construction Costs	(\$2,100,000)
Profit	(\$385,000)
<b>Indicated As Is Value</b>	<b>\$1,545,000</b>
<b>Rounded</b>	<b>\$1,550,000</b>
<b>Value Per Unit</b>	<b>\$48,438</b>

Compiled by CBRE

## Income Capitalization Approach

The following map and table summarize the primary comparable data used in the valuation of the subject. A detailed description of each transaction is included in the addenda.





<b>SUMMARY OF COMPARABLE APARTMENT RENTALS</b>						
<b>Comp. No.</b>	<b>Property Name and Location</b>	<b>YOC / Reno'd</b>	<b>Occ.</b>	<b>No. Units</b>	<b>Avg. Rent Per Unit</b>	<b>Quoted Rental Rate</b>
1	6142 S King Drive 6142 S King Drive, Chicago, IL	1913 / 2015	80%	15	\$1,147	\$1.25 PSF
2	5618-20 S King Drive 5618-20 S King Drive, Chicago, IL	1945 / 2016	79%	14	\$945	\$1.26 PSF
3	963 E. 61st Street 963 E. 61st Street, Chicago, IL	1912 / 2008	94%	18	\$1,317	\$1.41 PSF
4	Drexel Terrace Apartments 6140 S. Drexel Avenue, Chicago, IL	1959	97%	86	\$1,122	\$1.19 PSF
5	5656 S Indiana Ave 5656 S Indiana Ave, Chicago, IL	1893 / 2016	100%	18	\$1,142	\$1.49 PSF
6	609 E 60th Street 609 E 60th Street, Chicago, IL	1913 / 2017	100%	3	\$1,473	\$1.05 PSF
Subj.	6160-6212 South King Drive 6160-6212 South King Drive, Chicago, Illinois	1912 / 2018	0%	32	---	---

Compiled by CBRE

The rentals utilized represent the best data available for comparison with the subject. They were selected from our research within the north side of Chicago and are newer renovations with a focus on smaller of micro units.

**DISCUSSION/ANALYSIS OF RENT COMPARABLES**

**Rent Comparable One**

6142 S King Drive is a 15-unit multi-family apartment building located on the south side of Chicago. The building is currently 80% occupied and the unit mix consists of 2 bedroom/1 bathroom units as well as 3 bedroom/2 bathroom units. The building is a mix of market based and section 8 rentals. The property was renovated in 2016 and the units feature stainless steel appliances, tile and hardwood flooring and granite counter tops.

**Rent Comparable Two**

5618-5620 S King Drive is a 14-unit multi-family apartment building located on the south side of Chicago. The building is currently 78.6% occupied and the unit mix consists of all 1 bedroom/1 bathroom units. The building is a mix of market based rentals and section 8 rental subsidies.

**Rent Comparable Three**

This represents an 18-unit apartment property located at 963 E. 61st Street in Chicago, Illinois. The property as originally built in 1912 and was gut-rehabilitated in 2008 to condominium quality. Property amenities include laundry facilities. It features one and two-bedroom floor plans of approximately 800 and 1,200 square feet. The property was reportedly 100% occupied with average rents ranging between \$1,250 and \$1,450 per unit. Units are separately metered for gas and electricity usage while landlord pays for water, sewer and trash expenses.

**Rent Comparable Four**

Drexel Terrace Apartments is located at 6140 S. Drexel Avenue in Chicago, Illinois. This community was built in 1959 then significantly renovated between 2012 and 2015 and contains 86 apartments, with one, two, three, and four-bedroom models ranging in size from 597 to 1,405 square feet. The current asking rents range from \$911 to \$1,350 per unit and the occupancy rate at the time of the survey was 96.5%. The amenities include a resident lounge, fitness center, on-site parking (90 spaces - free), and on-site laundry facilities.

**Rent Comparable Five**

5656 S Indiana Avenue is an 18-unit multi-family apartment building located on the south side of Chicago. The building is currently 100% occupied and the unit mix consists of 1, 2 and 3 bedroom/1 bathroom units. The building is a mix of market based and section 8 rentals. The property was renovated in 2015/6 and the units feature stainless steel appliances, hardwood flooring and granite counter tops and in-unit washer/dryers. There is not parking available at the building.

**Rent Comparable Six**

609 E 60th Street is a 3-unit multi-family apartment building located on the south side of Chicago. The building is currently 100% occupied and the unit mix consists of 3 bedroom/2 bathroom units. The property was renovated in 2017 and the units feature stainless steel appliances, tile and hardwood flooring and granite counter tops as well as washer/dryer hook ups.

**SUBJECT RENTAL INFORMATION**

The following table shows the subject’s unit mix and quoted rental rates.

<b>SUBJECT RENTAL INFORMATION</b>					
Type	No. of Units	Unit Size (SF)	Unit Occ.	Dev Quoted \$/Unit	Rent Per SF
1Bed/1Bath	12	600 SF	0%	\$994	\$1.66
1Bed/1Bath-ADA	1	1,025 SF	0%	\$969	\$0.95
2Bed/1.5Bath	2	975 SF	0%	\$1,075	\$1.10
2Bed/1.5Bath	2	1,025 SF	0%	\$1,139	\$1.11
2Bed/2Bath	9	1,125 SF	0%	\$1,177	\$1.05
3Bed/2Bath	5	1,455 SF	0%	\$1,367	\$0.94
3Bed/2BathL	1	1,525 SF	0%	\$1,387	\$0.91
<b>Total/Average:</b>	<b>32</b>	<b>973 SF</b>	<b>0%</b>	<b>\$1,129</b>	<b>\$1.16</b>
Compiled by CBRE					

The developer projections are a blend of their projected market and section 8 rental rates.

**SECTION 8 2018 PAYMENT STANDARDS**

<b>Bedroom Size</b>	<b>2018 Payment Standard</b>
0	\$867
1	\$1,088
2	\$1,253
3	\$1,512
4	\$1,750
5	\$2,013
6	\$2,276
Compiled by CBRE	

Payment standards represent the maximum amount of subsidy that CHA can provide a family. However, CHA does not automatically approve this rent level for a given unit. CHA’s monthly rent subsidy depends on a number of factors, including these payment standards, the rents of other comparable unsubsidized rental units in the area and the income of the family.

**MARKET RENT ESTIMATE**

In order to estimate the market rates for the various floor plans, the subject unit types have been compared with similar units in the comparable projects. The following is a discussion of each unit type.

## One-Bedroom Units

<b>SUMMARY OF COMPARABLE RENTALS ONE BEDROOM UNITS</b>				
<b>Comparable</b>	<b>Plan Type</b>	<b>Size</b>	<b>Rental Rates</b>	
			<b>\$/Mo.</b>	<b>\$/SF</b>
<b>Subject (Developer Projected Rent)</b>	<b>1Bed/1Bath</b>	<b>600 SF</b>	<b>\$994</b>	<b>\$1.66</b>
<b>Subject (CBRE Projected Rent)</b>	<b>1Bed/1Bath</b>	<b>600 SF</b>	<b>\$995</b>	<b>\$1.66</b>
<b>Subject (Developer Projected Rent)</b>	<b>1Bed/1Bath-ADA</b>	<b>1,025 SF</b>	<b>\$969</b>	<b>\$0.95</b>
<b>Subject (CBRE Projected Rent)</b>	<b>1Bed/1Bath-ADA</b>	<b>1,025 SF</b>	<b>\$975</b>	<b>\$0.95</b>
5618-20 S King Drive	1Bed/1Bath-Garden	750 SF	\$750	\$1.00
5618-20 S King Drive	1Bed/1Bath	750 SF	\$900 - \$1,020	\$1.28
<b>Subject (CBRE Projected Rent)</b>	<b>1Bed/1Bath-ADA</b>	<b>1,025 SF</b>	<b>\$975</b>	<b>\$0.95</b>
<b>Subject (CBRE Projected Rent)</b>	<b>1Bed/1Bath</b>	<b>600 SF</b>	<b>\$995</b>	<b>\$1.66</b>
5656 S Indiana Ave	1Bed/1Bath	500 SF	\$900	\$1.80
Drexel Terrace Apartments	1BR/1BA	597 SF	\$911	\$1.53
963 E. 61st Street	1BR/1BA	800 SF	\$1,250	\$1.56
Compiled by CBRE				

The subject's projected one bedroom rental rates are within the range indicated from the comparable one bedroom units and this reflects the post renovation rents achievable. We have projected a rental rate of \$975 and \$995 per month. This projection on a per square foot basis and on a per month basis is within the range indicated from the comparables.

## Two-Bedroom Units

<b>SUMMARY OF COMPARABLE RENTALS TWO BEDROOM UNITS</b>				
<b>Comparable</b>	<b>Plan Type</b>	<b>Size</b>	<b>Rental Rates</b>	
			<b>\$/Mo.</b>	<b>\$/SF</b>
<b>Subject (Developer Projected Rent)</b>	<b>2Bed/1.5Bath</b>	<b>975 SF</b>	<b>\$1,075</b>	<b>\$1.10</b>
<b>Subject (CBRE Projected Rent)</b>	<b>2Bed/1.5Bath</b>	<b>975 SF</b>	<b>\$1,075</b>	<b>\$1.10</b>
<b>Subject (Developer Projected Rent)</b>	<b>2Bed/1.5Bath</b>	<b>1,025 SF</b>	<b>\$1,139</b>	<b>\$1.11</b>
<b>Subject (CBRE Projected Rent)</b>	<b>2Bed/1.5Bath</b>	<b>1,025 SF</b>	<b>\$1,150</b>	<b>\$1.12</b>
<b>Subject (Developer Projected Rent)</b>	<b>2Bed/2Bath</b>	<b>1,125 SF</b>	<b>\$1,177</b>	<b>\$1.05</b>
<b>Subject (CBRE Projected Rent)</b>	<b>2Bed/2Bath</b>	<b>1,125 SF</b>	<b>\$1,175</b>	<b>\$1.04</b>
6142 S King Drive	2Bed/1Bath	850 SF	\$873 - \$1,150	\$1.19
Drexel Terrace Apartments	2BR/1.5BA	801 SF	\$1,035	\$1.29
<b>Subject (CBRE Projected Rent)</b>	<b>2Bed/1.5Bath</b>	<b>975 SF</b>	<b>\$1,075</b>	<b>\$1.10</b>
Drexel Terrace Apartments	2BR/1BA	913 SF	\$1,124	\$1.23
<b>Subject (CBRE Projected Rent)</b>	<b>2Bed/1.5Bath</b>	<b>1,025 SF</b>	<b>\$1,150</b>	<b>\$1.12</b>
<b>Subject (CBRE Projected Rent)</b>	<b>2Bed/2Bath</b>	<b>1,125 SF</b>	<b>\$1,175</b>	<b>\$1.04</b>
5656 S Indiana Ave	2Bed/1Bath	900 SF	\$1,250	\$1.39
963 E. 61st Street	2BR/2BA	1,200 SF	\$1,450	\$1.21
Compiled by CBRE				

The subject's projected two-bedroom rental rates are within the range indicated from the comparable two bedroom units and this reflects the post renovation rents achievable. We have

projected a rental rate of \$1,075, \$1,150 and \$1,175 per month. This projection on a per square foot basis and on a per month basis is within the range indicated from the comparables.

### Three-Bedroom Units

SUMMARY OF COMPARABLE RENTALS THREE BEDROOM UNITS				
Comparable	Plan Type	Size	Rental Rates	
			\$/Mo.	\$/SF
<b>Subject (Developer Projected Rent)</b>	<b>3Bed/2Bath</b>	<b>1,455 SF</b>	<b>\$1,367</b>	<b>\$0.94</b>
<b>Subject (CBRE Projected Rent)</b>	<b>3Bed/2Bath</b>	<b>1,455 SF</b>	<b>\$1,375</b>	<b>\$0.95</b>
<b>Subject (Developer Projected Rent)</b>	<b>3Bed/2BathL</b>	<b>1,525 SF</b>	<b>\$1,387</b>	<b>\$0.91</b>
<b>Subject (CBRE Projected Rent)</b>	<b>3Bed/2BathL</b>	<b>1,525 SF</b>	<b>\$1,400</b>	<b>\$0.92</b>
Drexel Terrace Apartments	3BR/1BA	1,160 SF	\$1,199	\$1.03
Drexel Terrace Apartments	3BR/1.5BA	1,129 SF	\$1,224	\$1.08
6142 S King Drive	3Bed/2Bath	1,000 SF	\$1,230 - \$1,375	\$1.30
<b>Subject (CBRE Projected Rent)</b>	<b>3Bed/2Bath</b>	<b>1,455 SF</b>	<b>\$1,375</b>	<b>\$0.95</b>
5656 S Indiana Ave	3Bed/1Bath	900 SF	\$1,250 - \$1,300	\$1.42
<b>Subject (CBRE Projected Rent)</b>	<b>3Bed/2BathL</b>	<b>1,525 SF</b>	<b>\$1,400</b>	<b>\$0.92</b>
609 E 60th Street	3Bed2Bath	1,400 SF	\$1,450 - \$1,495	\$1.05

Compiled by CBRE

The subject's projected three-bedroom rental rates are within the range indicated from the comparable three bedroom units and this reflects the post renovation rents achievable. We have projected a rental rate of \$1,375 and \$1,400 per month. This projection on a per square foot basis and on a per month basis is within the range indicated from the comparables.

### MARKET RENT CONCLUSIONS

The following chart shows the market rent conclusions for the subject:

MARKET RENT CONCLUSIONS									
No. Units	Unit Type	Unit Size	Total SF	Monthly Rent			Annual Rent		Annual Total
				\$/Unit	\$/SF	PRI	\$/Unit	\$/SF	
12	1Bed/1Bath	600 SF	7,200 SF	\$995	\$1.66	\$11,940	\$11,940	\$19.90	\$143,280
1	1Bed/1Bath-ADA	1,025 SF	1,025 SF	\$975	\$0.95	\$975	\$11,700	\$11.41	\$11,700
2	2Bed/1.5Bath	975 SF	1,950 SF	\$1,075	\$1.10	\$2,150	\$12,900	\$13.23	\$25,800
2	2Bed/1.5Bath	1,025 SF	2,050 SF	\$1,150	\$1.12	\$2,300	\$13,800	\$13.46	\$27,600
9	2Bed/2Bath	1,125 SF	10,125 SF	\$1,175	\$1.04	\$10,575	\$14,100	\$12.53	\$126,900
5	3Bed/2Bath	1,455 SF	7,275 SF	\$1,375	\$0.95	\$6,875	\$16,500	\$11.34	\$82,500
1	3Bed/2BathL	1,525 SF	1,525 SF	\$1,400	\$0.92	\$1,400	\$16,800	\$11.02	\$16,800
32		973 SF	31,150 SF	\$1,132	\$1.16	\$36,215	\$13,581	\$13.95	\$434,580

Compiled by CBRE

## RENT ADJUSTMENTS

As noted, the rental rates for the subject units will not vary depending upon floor height or view amenities. Thus, no rent adjustments are required.

## RENT ROLL ANALYSIS

The rent roll analysis serves as a crosscheck to the estimate of market rent for the subject. The collections shown on the rent roll include rent premiums and/or discounts.

RENT ROLL ANALYSIS		
Revenue Component	Total Monthly Rent	Total Annual Rent
32 Total Units @ Market Rent-Current	\$36,215	\$434,580
32 Total Units @ Market Rent-Stabilized	\$37,301	\$447,617
Compiled by CBRE		

The above chart shows the market rent as if the property was renovated today and is then grown forward at 3% for 12 months until the property is fully renovated and stabilized.

## OPERATING HISTORY

The following table presents available operating data for the subject.

Year-Occupancy	OPERATING HISTORY					
	Year 1 Stabilized			CBRE Estimate 93.5%		
	Total	% EGI	\$/Unit	Total <sup>2</sup>	% EGI	\$/Unit
<b>Income</b>						
Net Rental Income	\$450,194	109.1%	\$14,069	\$418,522	98.9%	\$13,079
Vacancy	(22,510)	-5.5%	(703)	-	0.0%	-
Credit Loss	(21,384)	-5.2%	(668)	-	0.0%	-
Other Income	6,354	1.5%	199	4,815	1.1%	150
	-	0.0%	-	-	0.0%	-
RUBS/Utility Income	-	0.0%	-	-	0.0%	-
Effective Gross Income	\$412,654	100.0%	\$12,895	\$423,338	100.0%	\$13,229
<b>Expenses</b>						
Real Estate Taxes	\$35,369	8.6%	\$1,105	\$36,539	8.6%	\$1,142
Property Insurance	9,363	2.3%	293	9,840	2.3%	308
Utilities	19,182	4.6%	599	19,680	4.6%	615
Administrative & General	9,136	2.2%	286	9,020	2.1%	282
Repairs & Maintenance	26,560	6.4%	830	27,060	6.4%	846
Management Fee <sup>1</sup>	20,633	5.0%	645	21,167	5.0%	661
Reserves for Replacement	8,000	1.9%	250	8,200	1.9%	256
Operating Expenses	\$128,243	31.1%	\$4,008	\$131,506	31.1%	\$4,110
<b>Net Operating Income</b>	<b>\$284,411</b>	<b>68.9%</b>	<b>\$8,888</b>	<b>\$291,831</b>	<b>68.9%</b>	<b>\$9,120</b>
		5.0%			5.0%	

<sup>1</sup> (Mgmt. typically analyzed as a % of EGI)  
 Annualized Amounts Represent \_\_\_\_\_  
<sup>2</sup> (Some revenue categories may reflect net figures)

Source: Operating statements

In our analysis, we have only grown the rental income forward at 3.0% annually and have grown the expenses at 2.5% annually as well.

## LOSS TO LEASE

Within the local market, buyers and sellers sometimes recognize a reduction in potential rental income due to the difference between market and contract rental rates. For the subject, the buyer

has not projected any loss to lease expense, which is typical for smaller buildings. Therefore, we have not projected any loss to lease in our analysis.

### CONCESSIONS

Rent concessions are currently not prevalent in the local market nor are they present at the subject.

### VACANCY

The subject's estimated stabilized occupancy rate was previously discussed in the market analysis. The subject's vacancy is detailed as follows:

<b>VACANCY</b>		
Year	Total	% PGI
Year 1 Stabilized	-\$22,510	-5%
<b>CBRE Estimate</b>	<b>-\$17,383</b>	<b>4%</b>
<b>CBRE Estimate (Prospective)</b>	<b>-\$17,905</b>	<b>4%</b>
Compiled by CBRE		

### CREDIT LOSS

The credit loss estimate is an allowance for nonpayment of rent or other income. The subject's credit loss is detailed as follows:

<b>CREDIT LOSS</b>		
Year	Total	% PGI
Year 1 Stabilized	-\$21,384	-5.2%
<b>CBRE Estimate</b>	<b>-\$10,865</b>	<b>2.5%</b>
<b>CBRE Estimate (Prospective)</b>	<b>-\$11,190</b>	<b>2.5%</b>
Compiled by CBRE		

### OTHER INCOME

Other income is supplemental to that derived from leasing of the improvements. This includes categories such as forfeited deposits, vending machines, late charges, etc. The subject's income is detailed as follows:

<b>OTHER INCOME</b>		
Year	Total	\$/Unit
Year 1 Stabilized	\$6,354	\$199
<b>CBRE Estimate</b>	<b>\$5,000</b>	<b>\$156</b>
<b>CBRE Estimate (Prospective)</b>	<b>\$5,150</b>	<b>\$161</b>
Compiled by CBRE		

## EFFECTIVE GROSS INCOME

The subject's effective gross income is detailed as follows:

EFFECTIVE GROSS INCOME		
Year	Total	% Change
Year 1 Stabilized	\$412,654	N/A
<b>CBRE Estimate</b>	<b>\$411,007</b>	<b>0%</b>
<b>CBRE Estimate (Prospective)</b>	<b>\$423,338</b>	<b>3%</b>
Compiled by CBRE		

Our pro forma estimate is approximately 3% higher than the developer projection and is due to our lower credit loss projection.

## OPERATING EXPENSE ANALYSIS

### Expense Comparables

The following chart summarizes expenses obtained from recognized industry publications and/or comparable properties.

EXPENSE COMPARABLES				
Comparable Number	1	2	3	Subject-As Stabilized
Location	Chicago MSA	Chicago MSA	Chicago MSA	Chicago, IL
No. Units	61	12	27	32
Expense Year	2016-Pro Forma	2015	2015	Pro Forma
Revenues	\$/Unit	\$/Unit	\$/Unit	\$/Unit
Effective Gross Income	\$22,772	\$8,310	\$13,840	\$13,229
<b>Expenses</b>				
Real Estate Taxes	\$1,422	\$611	\$1,333	\$1,142
Property Insurance	300	328	460	308
Utilities	725	1,642	1,216	615
Administrative & General	250	53	103	282
Repairs & Maintenance	1,585	533	1,705	846
Management Fee <sup>1</sup>	797	250	906	661
Payroll	725	-	269	-
Advertising & Promotion	200	-	44	-
Reserves for Replacement	200	-	-	256
Operating Expenses	\$6,204	\$3,417	\$6,036	\$4,110
Operating Expense Ratio	27.2%	41.1%	43.6%	31.1%
<sup>1</sup> (Mgmt. typically analyzed as a % of EGI)	3.5%	3.0%	6.5%	5.0%
<sup>2</sup> The median total differs from the sum of the individual amounts.				
Compiled by CBRE				

A discussion of each expense category is presented on the following pages.

### Real Estate Taxes

The comparable data and projections for the subject are summarized as follows:



<b>REAL ESTATE TAXES</b>		
Year	Total	\$/Unit
Year 1 Stabilized	\$35,369	\$1,105
Expense Comparable 1	N/A	\$1,422
Expense Comparable 2	N/A	\$611
Expense Comparable 3	N/A	\$1,333
<b>CBRE Estimate</b>	<b>\$35,648</b>	<b>\$1,114</b>
<b>CBRE Estimate (Prospective)</b>	<b>\$36,539</b>	<b>\$1,142</b>
Compiled by CBRE		

The subject is under construction to be renovated and converted to a residential apartment building. The projection is in line with the Comparables and is explained in further detail in the tax section of the report.

### Property Insurance

Property insurance expenses typically include fire and extended coverage and owner’s liability coverage. The comparable data and projections for the subject are summarized as follows:

<b>PROPERTY INSURANCE</b>		
Year	Total	\$/Unit
Year 1 Stabilized	\$9,363	\$293
Expense Comparable 1	N/A	\$300
Expense Comparable 2	N/A	\$328
Expense Comparable 3	N/A	\$460
<b>CBRE Estimate</b>	<b>\$9,600</b>	<b>\$300</b>
<b>CBRE Estimate (Prospective)</b>	<b>\$9,840</b>	<b>\$308</b>
Compiled by CBRE		

The insurance projection is in line with the expense comparables and is in-line with developer projections.

### Utilities

Utility expenses include electricity, natural gas, water, trash and sewer. The comparable data and projections for the subject are summarized as follows:

<b>UTILITIES</b>		
Year	Total	\$/Unit
Year 1 Stabilized	\$19,182	\$599
Expense Comparable 1	N/A	\$725
Expense Comparable 2	N/A	\$1,642
Expense Comparable 3	N/A	\$1,216
<b>CBRE Estimate</b>	<b>\$19,200</b>	<b>\$600</b>
<b>CBRE Estimate (Prospective)</b>	<b>\$19,680</b>	<b>\$615</b>
Compiled by CBRE		

The utility projection is within the range from the expense comparables and is similar to the developer projection.

**Administrative & General**

Administrative expenses typically include legal costs, accounting, telephone, supplies, furniture, temporary help and items that are not provided by off-site management. The comparable data and projections for the subject are summarized as follows:

<b>ADMINISTRATIVE &amp; GENERAL</b>		
Year	Total	\$/Unit
Year 1 Stabilized	\$9,136	\$286
Expense Comparable 1	N/A	\$250
Expense Comparable 2	N/A	\$53
Expense Comparable 3	N/A	\$103
<b>CBRE Estimate</b>	<b>\$8,800</b>	<b>\$275</b>
<b>CBRE Estimate (Prospective)</b>	<b>\$9,020</b>	<b>\$282</b>
Compiled by CBRE		

The administrative and general projection is higher than the range of the expense comparables and is similar to the developer projection.

**Repairs and Maintenance**

Repairs and maintenance expenses typically include all outside maintenance service contracts and the cost of maintenance and repairs supplies. The comparable data and projections for the subject are summarized as follows:

<b>REPAIRS &amp; MAINTENANCE</b>		
Year	Total	\$/Unit
Year 1 Stabilized	\$26,560	\$830
Expense Comparable 1	N/A	\$1,585
Expense Comparable 2	N/A	\$533
Expense Comparable 3	N/A	\$1,705
<b>CBRE Estimate</b>	<b>\$26,400</b>	<b>\$825</b>
<b>CBRE Estimate (Prospective)</b>	<b>\$27,060</b>	<b>\$846</b>
Compiled by CBRE		

The repairs and maintenance projection is within the range of the expense comparables and is similar to the developer projected expense.

**Management Fee**

Management expenses are typically negotiated as a percentage of collected revenues (i.e., effective gross income). The comparable data and projections for the subject are summarized as follows:

<b>MANAGEMENT FEE</b>		
Year	Total	% EGI
Year 1 Stabilized	\$20,633	5.0%
<b>CBRE Estimate</b>	<b>\$20,550</b>	<b>5.0%</b>
<b>CBRE Estimate (Prospective)</b>	<b>\$21,167</b>	<b>5.0%</b>
Compiled by CBRE		

Professional management fees in the local market range from 3.0% to 7.0%. Given the subject's size and the competitiveness of the local market area, we believe an appropriate management expense for the subject would be towards the lower end of the range.

### Reserves for Replacement

Reserves for replacement have been estimated based on market parameters. The comparable data and projections for the subject are summarized as follows:

<b>RESERVES FOR REPLACEMENT</b>		
Year	Total	\$/Unit
Year 1 Stabilized	\$8,000	\$250
<b>CBRE Estimate</b>	<b>\$8,000</b>	<b>\$250</b>
<b>CBRE Estimate (Prospective)</b>	<b>\$8,200</b>	<b>\$256</b>
Compiled by CBRE		

### OPERATING EXPENSE CONCLUSION

The comparable data and projections for the subject are summarized as follows:

<b>OPERATING EXPENSES</b>		
Year	Total	\$/Unit
Year 1 Stabilized	\$128,243	\$4,008
Expense Comparable 1	N/A	\$6,204
Expense Comparable 2	N/A	\$3,417
Expense Comparable 3	N/A	\$6,036
<b>CBRE Estimate</b>	<b>\$128,199</b>	<b>\$4,006</b>
<b>CBRE Estimate (Prospective)</b>	<b>\$131,506</b>	<b>\$4,110</b>
Compiled by CBRE		

Our total stabilized operating expenses are estimated at \$4,110 per unit while the expense comparables range from \$3,417 to \$6,204 per unit. Our pro forma estimate is within the range displayed by the comparables. On an operating expense ratio (OER) basis, our estimate is 31.06% of EGI while the comparables indicate an OER range of 27.2% to 43.6%. Our estimate is within the OER range displayed by the comparables.

Considering the individual differences noted as well as our overall estimated expense figure, we believe our stabilized operating expense level for the subject to be reasonable and reflective of the market factors that affect a property similar to the subject.

**NET OPERATING INCOME CONCLUSION**

The comparable data and projections for the subject are summarized as follows:

<b>NET OPERATING INCOME</b>		
Year	Total	\$/Unit
Year 1 Stabilized	\$284,411	\$8,888
<b>CBRE Estimate</b>	<b>\$282,809</b>	<b>\$8,838</b>
<b>CBRE Estimate (Prospective)</b>	<b>\$291,831</b>	<b>\$9,120</b>
Compiled by CBRE		

Our pro forma estimate is approximately 2.6% higher than the developer projection.

**DIRECT CAPITALIZATION**

Direct capitalization is a method used to convert a single year’s estimated stabilized net operating income into a value indication. The following subsections represent different techniques for deriving an overall capitalization rate.

**Comparable Sales**

The overall capitalization rates (OARs) confirmed for the comparable sales analyzed in the sales comparison approach are as follows:

<b>COMPARABLE CAPITALIZATION RATES</b>			
Sale	Sale Date	Sale Price \$/Unit	OAR
1	Feb-18	\$113,636	7.80%
2	Nov-16	\$150,926	7.12%
3	Sep-16	\$104,615	7.71%
4	Feb-16	\$180,556	6.11%
<b>Indicated OAR:</b>		<b>6.11%-7.80%</b>	
Compiled by: CBRE			

The overall cap rates in the chart above range from 6.11% to 7.80% and are taken from the sales comparables in the sales comparable section. We have reconciled slightly below the range due to the strong market and location.

**Published Investor Surveys**

The results of the most recent investor surveys are summarized in the following chart.

<b>OVERALL CAPITALIZATION RATES</b>		
Investment Type	OAR Range	Average
<i>CBRE Apartments</i>		
Class A	3.50% - 7.50%	5.05%
Class B	3.75% - 8.00%	5.55%
Class C	4.25% - 10.50%	6.47%
<i>RealtyRates.com</i>		
Apartments	4.34% - 13.08%	8.55%
Garden/Suburban TH	4.34% - 11.80%	7.80%
Hi-Rise/Urban TH	5.28% - 13.08%	8.78%
Student Housing	4.97% - 12.61%	8.94%
<i>PwC Apartment</i>		
National Data	3.50% - 8.00%	5.40%
<b>Indicated OAR:</b>		<b>7.00%-7.50%</b>
Compiled by: CBRE		

### Market Participants

The results of recent interviews with knowledgeable real estate professionals are summarized in the following table.

<b>OVERALL CAPITALIZATION RATES</b>				
Respondent	Company	OAR	Income	Date of Survey
Broker	CBRE	7.50%-8.00%	Current w/bump	Mar-18
Broker	Kiser	7.00%-8.00%	Current w/bump	Jul-06
<b>Indicated OAR:</b>				<b>7.25%-7.75%</b>
Compiled by: CBRE				

The brokers indicated that a current cap rate would be 7.00% to 8.00%. The brokers surveyed also took into account the stabilized year of 2019.

### Band of Investment

The band of the investment technique has been utilized as a crosscheck to the foregoing techniques. The Mortgage Interest Rate and the Equity Dividend Rate (EDR) are based upon current market yields for similar investments. The analysis is shown in the following table.

<b>BAND OF INVESTMENT</b>			
Mortgage Interest Rate	4.00%		
Mortgage Term (Amortization Period)	25 Years		
Mortgage Ratio (Loan-to-Value)	75%		
Mortgage Constant (monthly payments)	0.06334		
Equity Dividend Rate (EDR)	10%		
Mortgage Requirement	75%	x	0.06334 = 0.04751
Equity Requirement	25%	x	0.10000 = 0.02500
	100%		0.07251
<b>Indicated OAR:</b>			<b>7.30%</b>
Compiled by: CBRE			

### Debt Coverage Ratio

The debt coverage ratio (DCR) is the ratio of net operating income to annual debt service and measures the ability of a given property to meet its debt service out of net operating income. Utilizing data obtained from knowledgeable mortgage finance professionals, the subject's projected NOI can be tested for reasonableness against the market's typical loan parameters to determine whether or not the DCR is positive. This analysis is shown in the following table.

<b>DEBT COVERAGE RATIO ANALYSIS</b>	
Estimated As Stabilized Value	\$4,030,000
Mortgage Ratio (Loan-to-Value)	75%
Estimated Mortgage Loan Amount	\$3,022,500
Mortgage Interest Rate	4.00%
Mortgage Term (Amortization Period)	25 Years
Mortgage Constant (monthly payments)	0.06334
Annual Debt Service (monthly payments)	\$191,446
Estimated NOI	\$291,831
Estimated Debt Coverage Ratio (DCR)	1.52
Market Debt DCR	1.30
Positive DCR? (Y or N)	Yes
Compiled by: CBRE	

### Capitalization Rate Conclusion

The following chart summarizes the OAR conclusions.

<b>OVERALL CAPITALIZATION RATE - CONCLUSION</b>	
Source	Indicated OAR
Comparable Sales	6.11%-7.80%
Published Surveys	7.00%-7.50%
Market Participants	7.25%-7.75%
Band of Investment	7.30%
<b>CBRE Estimate</b>	<b>7.25%</b>
Compiled by: CBRE	

In concluding an overall capitalization rate for the subject, primary reliance has been placed upon the rates extracted from the comparable sales and the broker opinions with secondary emphasis given to the published investor surveys and the band-of-investment analysis.

When deciding on a cap rate, multiple items were taken into account specifically the cap rate upon stabilization in 2019, which carries more risk as it is a prospective future date.

**Direct Capitalization Summary**

A summary of the direct capitalization is illustrated in the following chart.

<b>DIRECT CAPITALIZATION SUMMARY-AS STABILIZED</b>			
		<u>\$/Unit/Yr</u>	<u>Total</u>
<b>Income</b>			
Potential Rental Income		\$13,988.04	\$447,617
<b>Adjusted Rental Income</b>		\$13,988.04	447,617
Vacancy	4.00%	(559.52)	(17,905)
Credit Loss	2.50%	(349.70)	(11,190)
<b>Net Rental Income</b>		\$13,078.82	\$418,522
Other Income		160.94	5,150
Vacancy & Credit Loss	6.50%	(10.46)	(335)
<b>Effective Gross Income</b>		\$13,229.30	\$423,338
<b>Expenses</b>			
Real Estate Taxes		\$1,141.86	\$36,539
Property Insurance		307.50	9,840
Utilities		615.00	19,680
Administrative & General		281.88	9,020
Repairs & Maintenance		845.63	27,060
Management Fee	5.00%	661.46	21,167
Reserves for Replacement		256.25	8,200
<b>Operating Expenses</b>		<b>\$4,109.57</b>	<b>\$131,506</b>
<b>Operating Expense Ratio</b>			31.06%
<b>Net Operating Income</b>		<b>\$9,119.73</b>	<b>\$291,831</b>
<b>OAR</b>		/	<b>7.25%</b>
<b>Indicated Stabilized Value</b>			<b>\$4,025,259</b>
<b>Rounded</b>			<b>\$4,030,000</b>
Lease-Up Discount			(72,000)
<b>Indicated As Complete Value</b>			<b>3,958,000</b>
<b>Rounded</b>			<b>3,960,000</b>
Construction Costs			(2,100,000)
Profit			(385,000)
<b>Indicated As Is Value</b>			<b>1,475,000</b>
<b>Rounded</b>			<b>\$1,475,000</b>
<b>Value Per Unit</b>			<b>\$46,094</b>
Compiled by CBRE			



## Reconciliation of Value

The value indications from the approaches to value are summarized as follows:

<b>SUMMARY OF VALUE CONCLUSIONS</b>			
	As Is on March 5, 2018	As Complete on December 5, 2018	As Stabilized on March 5, 2019
Sales Comparison Approach	\$1,550,000	\$4,030,000	\$4,100,000
Income Capitalization Approach	\$1,475,000	\$3,960,000	\$4,030,000
Reconciled Value	\$1,475,000	\$3,960,000	\$4,030,000
Compiled by CBRE			

The cost approach typically gives a reliable value indication when there is strong support for the replacement cost estimate and when there is minimal depreciation. Considering the substantial amount of depreciation present in the property, the reliability of the cost approach is considered somewhat diminished. Therefore, the cost approach was not considered or utilized in the analysis of the valuation.

In the sales comparison approach, the subject is compared to similar properties that have been sold recently or for which listing prices or offers are known. The sales used in this analysis are considered highly comparable to the subject, and the required adjustments were based on reasonable and well-supported rationale. In addition, market participants are currently analyzing purchase prices on investment properties as they relate to available substitutes in the market. Therefore, the sales comparison approach is considered to provide a reliable value indication, but has been given secondary emphasis in the final value reconciliation.

The income capitalization approach is applicable to the subject since it is an income producing property leased in the open market. Market participants are primarily analyzing properties based on their income generating capability. Therefore, the income capitalization approach is considered a reasonable and substantiated value indicator and has been given primary emphasis in the final value estimate.

<b>MARKET VALUE CONCLUSION</b>			
Appraisal Premise	Interest Appraised	Date of Value	Value Conclusion
As Is	Fee Simple Estate	March 5, 2018	\$1,475,000
As Complete	Fee Simple Estate	December 5, 2018	\$3,960,000
As Stabilized	Leased Fee Interest	March 5, 2019	\$4,030,000
Compiled by CBRE			

## Assumptions and Limiting Conditions

1. CBRE, Inc. through its appraiser (collectively, "CBRE") has inspected through reasonable observation the subject property. However, it is not possible or reasonably practicable to personally inspect conditions beneath the soil and the entire interior and exterior of the improvements on the subject property. Therefore, no representation is made as to such matters.
2. The report, including its conclusions and any portion of such report (the "Report"), is as of the date set forth in the letter of transmittal and based upon the information, market, economic, and property conditions and projected levels of operation existing as of such date. The dollar amount of any conclusion as to value in the Report is based upon the purchasing power of the U.S. Dollar on such date. The Report is subject to change as a result of fluctuations in any of the foregoing. CBRE has no obligation to revise the Report to reflect any such fluctuations or other events or conditions which occur subsequent to such date.
3. Unless otherwise expressly noted in the Report, CBRE has assumed that:
  - (i) Title to the subject property is clear and marketable and that there are no recorded or unrecorded matters or exceptions to title that would adversely affect marketability or value. CBRE has not examined title records (including without limitation liens, encumbrances, easements, deed restrictions, and other conditions that may affect the title or use of the subject property) and makes no representations regarding title or its limitations on the use of the subject property. Insurance against financial loss that may arise out of defects in title should be sought from a qualified title insurance company.
  - (ii) Existing improvements on the subject property conform to applicable local, state, and federal building codes and ordinances, are structurally sound and seismically safe, and have been built and repaired in a workmanlike manner according to standard practices; all building systems (mechanical/electrical, HVAC, elevator, plumbing, etc.) are in good working order with no major deferred maintenance or repair required; and the roof and exterior are in good condition and free from intrusion by the elements. CBRE has not retained independent structural, mechanical, electrical, or civil engineers in connection with this appraisal and, therefore, makes no representations relative to the condition of improvements. CBRE appraisers are not engineers and are not qualified to judge matters of an engineering nature, and furthermore structural problems or building system problems may not be visible. It is expressly assumed that any purchaser would, as a precondition to closing a sale, obtain a satisfactory engineering report relative to the structural integrity of the property and the integrity of building systems.
  - (iii) Any proposed improvements, on or off-site, as well as any alterations or repairs considered will be completed in a workmanlike manner according to standard practices.
  - (iv) Hazardous materials are not present on the subject property. CBRE is not qualified to detect such substances. The presence of substances such as asbestos, urea formaldehyde foam insulation, contaminated groundwater, mold, or other potentially hazardous materials may affect the value of the property.
  - (v) No mineral deposit or subsurface rights of value exist with respect to the subject property, whether gas, liquid, or solid, and no air or development rights of value may be transferred. CBRE has not considered any rights associated with extraction or exploration of any resources, unless otherwise expressly noted in the Report.
  - (vi) There are no contemplated public initiatives, governmental development controls, rent controls, or changes in the present zoning ordinances or regulations governing use, density, or shape that would significantly affect the value of the subject property.
  - (vii) All required licenses, certificates of occupancy, consents, or other legislative or administrative authority from any local, state, nor national government or private entity or organization have been or can be readily obtained or renewed for any use on which the Report is based.
  - (viii) The subject property is managed and operated in a prudent and competent manner, neither inefficiently or super-efficiently.
  - (ix) The subject property and its use, management, and operation are in full compliance with all applicable federal, state, and local regulations, laws, and restrictions, including without limitation environmental laws, seismic hazards, flight patterns, decibel levels/noise envelopes, fire hazards, hillside ordinances, density, allowable uses, building codes, permits, and licenses.
  - (x) The subject property is in full compliance with the Americans with Disabilities Act (ADA). CBRE is not qualified to assess the subject property's compliance with the ADA, notwithstanding any discussion of possible readily achievable barrier removal construction items in the Report.

- (xi) All information regarding the areas and dimensions of the subject property furnished to CBRE are correct, and no encroachments exist. CBRE has neither undertaken any survey of the boundaries of the subject property nor reviewed or confirmed the accuracy of any legal description of the subject property.

Unless otherwise expressly noted in the Report, no issues regarding the foregoing were brought to CBRE's attention, and CBRE has no knowledge of any such facts affecting the subject property. If any information inconsistent with any of the foregoing assumptions is discovered, such information could have a substantial negative impact on the Report. Accordingly, if any such information is subsequently made known to CBRE, CBRE reserves the right to amend the Report, which may include the conclusions of the Report. CBRE assumes no responsibility for any conditions regarding the foregoing, or for any expertise or knowledge required to discover them. Any user of the Report is urged to retain an expert in the applicable field(s) for information regarding such conditions.

4. CBRE has assumed that all documents, data and information furnished by or behalf of the client, property owner, or owner's representative are accurate and correct, unless otherwise expressly noted in the Report. Such data and information include, without limitation, numerical street addresses, lot and block numbers, Assessor's Parcel Numbers, land dimensions, square footage area of the land, dimensions of the improvements, gross building areas, net rentable areas, usable areas, unit count, room count, rent schedules, income data, historical operating expenses, budgets, and related data. Any error in any of the above could have a substantial impact on the Report. Accordingly, if any such errors are subsequently made known to CBRE, CBRE reserves the right to amend the Report, which may include the conclusions of the Report. The client and intended user should carefully review all assumptions, data, relevant calculations, and conclusions of the Report and should immediately notify CBRE of any questions or errors within 30 days after the date of delivery of the Report.
5. CBRE assumes no responsibility (including any obligation to procure the same) for any documents, data or information not provided to CBRE, including without limitation any termite inspection, survey or occupancy permit.
6. All furnishings, equipment and business operations have been disregarded with only real property being considered in the Report, except as otherwise expressly stated and typically considered part of real property.
7. Any cash flows included in the analysis are forecasts of estimated future operating characteristics based upon the information and assumptions contained within the Report. Any projections of income, expenses and economic conditions utilized in the Report, including such cash flows, should be considered as only estimates of the expectations of future income and expenses as of the date of the Report and not predictions of the future. Actual results are affected by a number of factors outside the control of CBRE, including without limitation fluctuating economic, market, and property conditions. Actual results may ultimately differ from these projections, and CBRE does not warrant any such projections.
8. The Report contains professional opinions and is expressly not intended to serve as any warranty, assurance or guarantee of any particular value of the subject property. Other appraisers may reach different conclusions as to the value of the subject property. Furthermore, market value is highly related to exposure time, promotion effort, terms, motivation, and conclusions surrounding the offering of the subject property. The Report is for the sole purpose of providing the intended user with CBRE's independent professional opinion of the value of the subject property as of the date of the Report. Accordingly, CBRE shall not be liable for any losses that arise from any investment or lending decisions based upon the Report that the client, intended user, or any buyer, seller, investor, or lending institution may undertake related to the subject property, and CBRE has not been compensated to assume any of these risks. Nothing contained in the Report shall be construed as any direct or indirect recommendation of CBRE to buy, sell, hold, or finance the subject property.
9. No opinion is expressed on matters which may require legal expertise or specialized investigation or knowledge beyond that customarily employed by real estate appraisers. Any user of the Report is advised to retain experts in areas that fall outside the scope of the real estate appraisal profession for such matters.
10. CBRE assumes no responsibility for any costs or consequences arising due to the need, or the lack of need, for flood hazard insurance. An agent for the Federal Flood Insurance Program should be contacted to determine the actual need for Flood Hazard Insurance.
11. Acceptance or use of the Report constitutes full acceptance of these Assumptions and Limiting Conditions and any special assumptions set forth in the Report. It is the responsibility of the user of the Report to read in full, comprehend and thus become aware of all such assumptions and limiting conditions. CBRE assumes no responsibility for any situation arising out of the user's failure to become familiar with and understand the same.
12. The Report applies to the property as a whole only, and any pro ration or division of the title into fractional interests will invalidate such conclusions, unless the Report expressly assumes such pro ration or division of interests.

13. The allocations of the total value estimate in the Report between land and improvements apply only to the existing use of the subject property. The allocations of values for each of the land and improvements are not intended to be used with any other property or appraisal and are not valid for any such use.
14. The maps, plats, sketches, graphs, photographs, and exhibits included in this Report are for illustration purposes only and shall be utilized only to assist in visualizing matters discussed in the Report. No such items shall be removed, reproduced, or used apart from the Report.
15. The Report shall not be duplicated or provided to any unintended users in whole or in part without the written consent of CBRE, which consent CBRE may withhold in its sole discretion. Exempt from this restriction is duplication for the internal use of the intended user and its attorneys, accountants, or advisors for the sole benefit of the intended user. Also exempt from this restriction is transmission of the Report pursuant to any requirement of any court, governmental authority, or regulatory agency having jurisdiction over the intended user, provided that the Report and its contents shall not be published, in whole or in part, in any public document without the written consent of CBRE, which consent CBRE may withhold in its sole discretion. Finally, the Report shall not be made available to the public or otherwise used in any offering of the property or any security, as defined by applicable law. Any unintended user who may possess the Report is advised that it shall not rely upon the Report or its conclusions and that it should rely on its own appraisers, advisors and other consultants for any decision in connection with the subject property. CBRE shall have no liability or responsibility to any such unintended user.

**ADDENDA**

Addendum A

## **IMPROVED SALE DATA SHEETS**

**Sale Residential - Multi-unit Walk-up No. 1**

Property Name 7001 S Chappel Ave  
 Address 7001 S Chappel Ave  
 Chicago, IL 60649  
 United States

Government Tax Agency Cook  
 Govt./Tax ID N/A

**Unit Mix Detail**

Rate Timeframe	Monthly				
Unit Type	No.	%	Size (sf)	Rent	Rent / sf
2Bed/2Bath	22	100%	1,000	N/A	N/A
Totals/Avg	22			\$0	\$0.00

**Improvements**

Land Area	0.359 ac	Status	Existing
Net Rentable Area (NRA)	22,000 sf	Year Built	1922
Total # of Units	22 Units	Year Renovated	N/A
Average Unit Size	1,000 sf	Condition	N/A
Floor Count	3	Exterior Finish	Masonry
General Amenities	N/A		
Unit-Specific Amenities	N/A		

**Sale Summary**

Recorded Buyer	Chappel Portfolio/RE LLC	Marketing Time	N/A
True Buyer	N/A	Buyer Type	Private Investor
Recorded Seller	First Midwest Bank Trust	Seller Type	Private Investor
True Seller	N/A	Primary Verification	CoStar, Broker, Deed
Interest Transferred	N/A	Type	Sale
Current Use	N/A	Date	2/26/2018
Proposed Use	N/A	Sale Price	\$2,500,000
Listing Broker	Kiser Group	Financing	N/A
Selling Broker	N/A	Cash Equivalent	\$2,500,000
Doc #	1806629027	Capital Adjustment	\$0
		Adjusted Price	\$2,500,000

**Transaction Summary plus Five-Year CBRE View History**

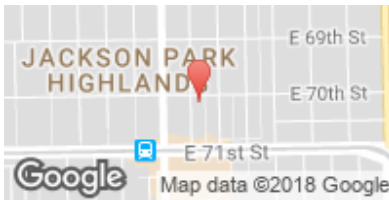
Transaction Date	Transaction Type	Buyer	Seller	Price	Cash Equivalent Price/unit and /sf
02/2018	Sale	Chappel Portfolio/RE LLC	First Midwest Bank Trust	\$2,500,000	\$113,636 / \$113.64

**Sale****Residential - Multi-unit Walk-up****No. 1****Units of Comparison**

Static Analysis Method	Trailing Actuals	Eff Gross Inc Mult (EGIM)	N/A
Buyer's Primary Analysis	Yield Capitalization Analysis	Op Exp Ratio (OER)	N/A
Net Initial Yield/Cap. Rate	7.80%	Adjusted Price / sf	\$113.64
Projected IRR	N/A	Adjusted Price / Unit	\$113,636
Actual Occupancy at Sale	100%		

**Financial**

Revenue Type	Trailing Actuals
Period Ending	2/26/2018
Source	Broker
Price	\$2,500,000
Potential Gross Income	N/A
Economic Occupancy	N/A
Economic Loss	N/A
Effective Gross Income	N/A
Expenses	N/A
Net Operating Income	\$195,000
NOI / sf	\$8.86
NOI / Unit	\$8,864
EGIM	N/A
OER	N/A
Net Initial Yield/Cap. Rate	7.80%

**Map & Comments**

This 22-unit walk-up apartment property is located at 7001 S Chappel Avenue in Chicago, Illinois. The property was constructed in 1922 and renovated in 2005. The property contains 22 total units all of which are 2 bedroom/2 bathroom units. The building was reportedly 100% occupied at the time of sale. The average unit size is 1,000 square feet. The units were renovated in 2005 and feature granite counter tops and stainless steel appliances. In November 2016, Chappel Portfolio/RE LLC purchased the property from First Midwest Bank Trust for a reported consideration of \$2,500,000 or \$113,636 per unit. Based on the pro forma NOI of \$195,000, an OAR of 7.80% is indicated by this comparable.



**Sale****Residential - Multi-unit Walk-up****No. 2**

Property Name 1118-1128 E. Hyde Park Boulevard  
 Address 1118-1128 E. Hyde Park Boulevard  
 Chicago, IL 60615  
 United States

Government Tax Agency Cook  
 Govt./Tax ID Individual, See Notes

**Unit Mix Detail**

Rate Timeframe	N/A				
Unit Type	No.	%	Size (sf)	Rent	Rent / sf
1BR/1BA	22	81%	850	N/A	N/A
3BR/1.5BA	2	7%	1,200	N/A	N/A
4BR/2BA	2	7%	1,200	N/A	N/A
4BR/3BA	1	4%	1,400	N/A	N/A
Totals/Avg	27			\$0	\$0.00

**Improvements**

Land Area	5.013 ac	Status	N/A
Net Rentable Area (NRA)	24,900 sf	Year Built	1927
Total # of Units	27 Units	Year Renovated	2007
Average Unit Size	922 sf	Condition	N/A
Floor Count	4	Exterior Finish	N/A
General Amenities	N/A		
Unit-Specific Amenities	N/A		

**Sale Summary**

Recorded Buyer	1128 E. Hyde Park Blvd LLC	Marketing Time	N/A
True Buyer	N/A	Buyer Type	N/A
Recorded Seller	DMI Hyde Park LLC	Seller Type	N/A
True Seller	N/A	Primary Verification	Broker, Public Records
Interest Transferred	N/A	Type	Sale
Current Use	N/A	Date	11/16/2016
Proposed Use	N/A	Sale Price	\$4,075,000
Listing Broker	Victor Ciancetta	Financing	N/A
Selling Broker	James J. Darrow	Cash Equivalent	\$4,075,000
Doc #	1632610066	Capital Adjustment	\$0
		Adjusted Price	\$4,075,000

**Transaction Summary plus Five-Year CBRE View History**

Transaction Date	Transaction Type	Buyer	Seller	Price	Cash Equivalent Price/unit and /sf
11/2016	Sale	1128 E. Hyde Park Blvd LLC	DMI Hyde Park LLC	\$4,075,000	\$150,926 / \$163.65

# Sale Residential - Multi-unit Walk-up No. 2

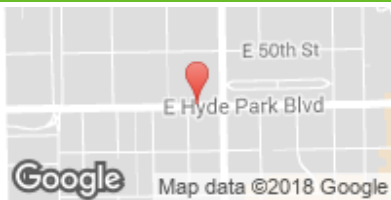
## Units of Comparison

Static Analysis Method	Pro Forma (Stabilized)	Eff Gross Inc Mult (EGIM)	11.74
Buyer's Primary Analysis	Static Capitalization Analysis	Op Exp Ratio (OER)	16.45%
Net Initial Yield/Cap. Rate	7.12%	Adjusted Price / sf	\$163.65
Projected IRR	N/A	Adjusted Price / Unit	\$150,926
Actual Occupancy at Sale	96%		

## Financial

	Pro Forma Stabilized
Revenue Type	
Period Ending	N/A
Source	Appraiser
Price	\$4,075,000
Potential Gross Income	N/A
Economic Occupancy	N/A
Economic Loss	N/A
Effective Gross Income	\$347,251
Expenses	\$57,111
Net Operating Income	\$290,140
NOI / sf	\$11.65
NOI / Unit	\$10,746
EGIM	11.74
OER	16.45%
Net Initial Yield/Cap. Rate	7.12%

## Map & Comments



This 27-unit walk-up apartment property is located at 1118-1128 E. Hyde Park Boulevard in Chicago, Illinois. The property was constructed in 1927 and renovated during a condominium conversion in 2007. The property contains 37 total units and the comparable represents the unsold portion which has been continuously operated as rental units. The average unit size is 922 square feet. The amenities include 13 parking spaces and in-unit washer/dryers. In November 2016, 1128 E. Hyde Park Blvd LLC purchased the property from DMI Hyde Park LLC for a reported consideration of \$4,075,000 or \$150,926 per unit. Based on the pro forma NOI of \$10,746 per unit, an OAR of 7.12% is indicated by this comparable.

**Sale****Residential - Multi-unit Walk-up****No. 3**

Property Name 5129 S. Ingleside Avenue  
 Address 5129 S. Ingleside Avenue  
 Chicago, IL 60615  
 United States

Government Tax Agency Cook  
 Govt./Tax ID 20-11-302-020

**Unit Mix Detail**

Rate Timeframe	N/A				
Unit Type	No.	%	Size (sf)	Rent	Rent / sf
2BR/1BA	6	46%	1,000	N/A	N/A
1BR/1BA	1	8%	1,100	N/A	N/A
2BR/1BA	5	38%	1,100	N/A	N/A
3BR/1BA	1	8%	1,500	N/A	N/A
Totals/Avg	13			\$0	\$0.00

**Improvements**

Land Area	N/A	Status	N/A
Net Rentable Area (NRA)	14,100 sf	Year Built	1914
Total # of Units	13 Units	Year Renovated	N/A
Average Unit Size	1,085 sf	Condition	N/A
Floor Count	3	Exterior Finish	N/A
General Amenities	N/A		
Unit-Specific Amenities	N/A		

**Sale Summary**

Recorded Buyer	5129 S Ingleside, LLC	Marketing Time	3 Month(s)
True Buyer	N/A	Buyer Type	N/A
Recorded Seller	Chicago Title Land Trust Trust #114481-07	Seller Type	N/A
True Seller	N/A	Primary Verification	Broker, Public Records
Interest Transferred	Fee Simple/Freehold	Type	Sale
Current Use	N/A	Date	9/29/2016
Proposed Use	N/A	Sale Price	\$1,360,000
Listing Broker	Mark A. Kishtow	Financing	Not Available
Selling Broker	Mark A. Kishtow	Cash Equivalent	\$1,360,000
Doc #	1628539177	Capital Adjustment	\$0
		Adjusted Price	\$1,360,000

**Transaction Summary plus Five-Year CBRE View History**

Transaction Date	Transaction Type	Buyer	Seller	Price	Cash Equivalent Price/unit and /sf
09/2016	Sale	5129 S Ingleside, LLC	Chicago Title Land Trust Trust #114481-07	\$1,360,000	\$104,615 / \$96.45

# Sale Residential - Multi-unit Walk-up No. 3

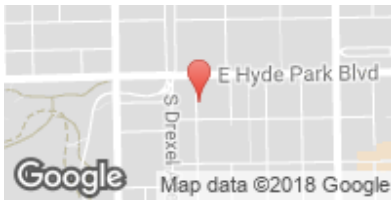
## Units of Comparison

Static Analysis Method	Pro Forma (Stabilized)	Eff Gross Inc Mult (EGIM)	8.81
Buyer's Primary Analysis	Static Capitalization Analysis	Op Exp Ratio (OER)	32.10%
Net Initial Yield/Cap. Rate	7.71%	Adjusted Price / sf	\$96.45
Projected IRR	N/A	Adjusted Price / Unit	\$104,615
Actual Occupancy at Sale	N/A		

## Financial

	Pro Forma Stabilized
Revenue Type	
Period Ending	N/A
Source	Appraiser
Price	\$1,360,000
Potential Gross Income	N/A
Economic Occupancy	N/A
Economic Loss	N/A
Effective Gross Income	\$154,379
Expenses	\$49,553
Net Operating Income	\$104,826
NOI / sf	\$7.43
NOI / Unit	\$8,064
EGIM	8.81
OER	32.10%
Net Initial Yield/Cap. Rate	7.71%

## Map & Comments



This 13-unit apartment building is located at 5129 S. Ingleside Avenue in Chicago, Illinois. The property was constructed in 1914 and the average unit size is 1,085 square feet. The amenities include on-site laundry facilities. In September 2016, 5129 S Ingleside, LLC purchased the property from Chicago Title Land Trust Trust #114481-07 for a reported consideration of \$1,360,000 or \$104,615 per unit. Based on the pro forma NOI of \$8,064 per unit, an OAR of 7.71% is indicated by this comparable.

**Sale****Residential - Multi-unit Walk-up****No. 4**

Property Name 6100 S Ellis  
 Address 6100 S Ellis Avenue  
 Chicago, IL 60637  
 United States

Government Tax Agency Cook  
 Govt./Tax ID N/A

**Unit Mix Detail**

Rate Timeframe N/A

Unit Type	No.	%	Size (sf)	Rent	Rent / sf
1Bed/1Bath	12	67%	800	N/A	N/A
2Bed/1Bath	6	33%	1,200	N/A	N/A
Totals/Avg	18			\$0	\$0.00

**Improvements**

Land Area	0.200 ac	Status	Existing
Net Rentable Area (NRA)	16,800 sf	Year Built	1912
Total # of Units	18 Units	Year Renovated	N/A
Average Unit Size	933 sf	Condition	N/A
Floor Count	3	Exterior Finish	Masonry
General Amenities	N/A		
Unit-Specific Amenities	N/A		

**Sale Summary**

Recorded Buyer	Irvin Watkins	Marketing Time	5 Month(s)
True Buyer	N/A	Buyer Type	Private Investor
Recorded Seller	963-73 East 61st Street	Seller Type	Private Investor
True Seller	Ascendance Partners, LLC	Primary Verification	CoStar, Deed, Broker
Interest Transferred	N/A	Type	Sale
Current Use	N/A	Date	2/19/2016
Proposed Use	N/A	Sale Price	\$3,250,000
Listing Broker	Kiser Group	Financing	N/A
Selling Broker	N/A	Cash Equivalent	\$3,250,000
Doc #	1605349341	Capital Adjustment	\$0
		Adjusted Price	\$3,250,000

**Transaction Summary plus Five-Year CBRE View History**

Transaction Date	Transaction Type	Buyer	Seller	Price	Cash Equivalent Price/unit and /sf
02/2016	Sale	Irvin Watkins	963-73 East 61st Street	\$3,250,000	\$180,556 / \$193.45

# Sale Residential - Multi-unit Walk-up No. 4

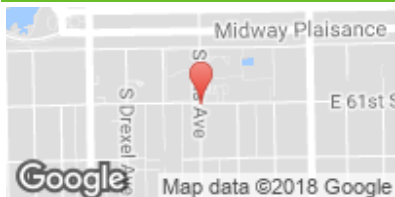
## Units of Comparison

Static Analysis Method	Trailing Actuals	Eff Gross Inc Mult (EGIM)	12.34
Buyer's Primary Analysis	Static Capitalization Analysis	Op Exp Ratio (OER)	N/A
Net Initial Yield/Cap. Rate	6.11%	Adjusted Price / sf	\$193.45
Projected IRR	N/A	Adjusted Price / Unit	\$180,556
Actual Occupancy at Sale	N/A		

## Financial

	Trailing Actuals
Revenue Type	
Period Ending	2/19/2016
Source	Broker
Price	\$3,250,000
Potential Gross Income	\$263,371
Economic Occupancy	N/A
Economic Loss	N/A
Effective Gross Income	\$263,371
Expenses	N/A
Net Operating Income	\$198,575
NOI / sf	\$11.82
NOI / Unit	\$11,032
EGIM	12.34
OER	N/A
Net Initial Yield/Cap. Rate	6.11%

## Map & Comments



6100 S Ellis Avenue is a three-story, walk-up apartment building located in Chicago, Illinois. The building features 18 units with a mix of one bedroom/one bathroom units and two bedroom/one bathroom units. There are 12 one bedroom units and six two bedroom units. The seller and buyer are local investors and the property traded at a reported 6.11% cap rate based on an in-place net operating income of \$198,575. The average unit size is 933 square feet. The building was originally constructed in 1912 and had been renovated prior to purchase and the units had new cabinets, granite counters and stainless steel appliances.

**Addendum B**

**RENT COMPARABLE DATA SHEETS**

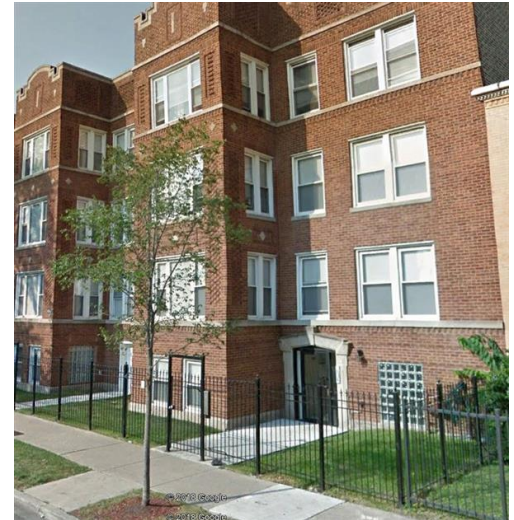
**Comparable****Residential - Multi-unit Walk-up****No. 1**

Property Name 6142 S King Drive  
 Address 6142 S King Drive  
 Chicago, IL 60637  
 United States

Government Tax Agency Cook  
 Govt./Tax ID N/A

**Unit Mix Detail**

Rate Timeframe	Monthly				
Unit Type	No.	%	Size (sf)	Rent	Rent / sf
2Bed/1Bath	8	53%	850	\$873-\$1,150	\$1.19
3Bed/2Bath	7	47%	1,000	\$1,230-\$1,375	\$1.30
Totals/Avg	15			\$1,147	\$1.25

**Improvements**

Land Area	0.396 ac	Status	Existing
Net Rentable Area (NRA)	13,800 sf	Year Built	1913
Total # of Units	15 Units	Year Renovated	2015
Average Unit Size	920 sf	Condition	N/A
Floor Count	3	Exterior Finish	Masonry
General Amenities	N/A		
Unit-Specific Amenities	N/A		

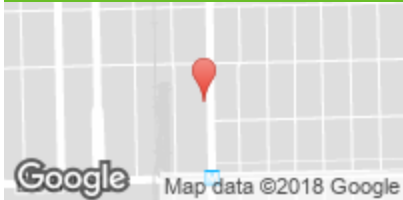
**Rental Survey**

Occupancy	80%	Utilities Included in Rent	Water, Sewer, Gas
Lease Term	12 Mo(s).	Rent Premiums	None
Tenant Profile	Professional	Concessions	None
Survey Date	03/2018	Owner	N/A
Survey Notes	N/A	Management	N/A



**Comparable Residential - Multi-unit Walk-up No. 1**

**Map & Comments**



6142 S King Drive is a 15 unit multi-family apartment building located on the south side of Chicago. The building is currently 80% occupied and the unit mix consists of 2 bedroom/1 bathroom units as well as 3 bedroom/2 bathroom units. The building is a mix of market based and section 8 rentals. The property was renovated in 2016 and the units feature stainless steel appliances, tile and hardwood flooring and granite counter tops.

**Comparable****Residential - Multi-unit Walk-up****No. 2**

Property Name 5618-20 S King Drive  
 Address 5618-20 S King Drive  
 Chicago, IL 60637  
 United States

Government Tax Agency 60637  
 Govt./Tax ID N/A

**Unit Mix Detail**

Rate Timeframe	Monthly				
Unit Type	No.	%	Size (sf)	Rent	Rent / sf
1Bed/1Bath	13	93%	750	\$900-\$1,020	\$1.28
1Bed/1Bath-Garden	1	7%	750	\$750	\$1.00
Totals/Avg	14			\$945	\$1.26

**Improvements**

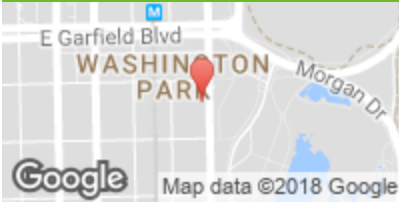
Land Area	0.128 ac	Status	Existing
Net Rentable Area (NRA)	10,500 sf	Year Built	1945
Total # of Units	14 Units	Year Renovated	2016
Average Unit Size	750 sf	Condition	N/A
Floor Count	3	Exterior Finish	Masonry
General Amenities	N/A		
Unit-Specific Amenities	N/A		

**Rental Survey**

Occupancy	79%	Utilities Included in Rent	Water, Sewer, Trash
Lease Term	12 Mo(s).	Rent Premiums	None
Tenant Profile	Professional	Concessions	None
Survey Date	03/2018	Owner	N/A
Survey Notes	N/A	Management	N/A

**Comparable Residential - Multi-unit Walk-up No. 2**

**Map & Comments**



5618-5620 S King Drive is a 14 unit multi-family apartment building located on the south side of Chicago. The building is currently 78.6% occupied and the unit mix consists of all 1 bedroom/1 bathroom units. The building is a mix of market based rentals and section 8 rental subsidies.

**Comparable****Residential - Multi-unit Walk-up****No. 3**

Property Name 963 E. 61st Street  
 Address 963 E. 61st Street  
 Chicago, IL 60637  
 United States

Government Tax Agency Cook  
 Govt./Tax ID 20-14-309-003

**Unit Mix Detail**

Rate Timeframe	N/A				
Unit Type	No.	%	Size (sf)	Rent	Rent / sf
1BR/1BA	12	67%	800	\$1,250	\$1.56
2BR/2BA	6	33%	1,200	\$1,450	\$1.21
Totals/Avg	18			\$1,317	\$1.41

**Improvements**

Land Area	N/A	Status	N/A
Net Rentable Area (NRA)	N/A	Year Built	1912
Total # of Units	18 Units	Year Renovated	2008
Average Unit Size	933 sf	Condition	Good
Floor Count	3	Exterior Finish	Masonry
General Amenities	Laundry Facility		
Unit-Specific Amenities	N/A		

**Rental Survey**

Occupancy	94%	Utilities Included in Rent	Water, Sewer, Trash
Lease Term	N/A	Rent Premiums	N/A
Tenant Profile	Students, Professionals	Concessions	None
Survey Date	06/2017	Owner	N/A
Survey Notes	Sep. Metered Gas & Electricity	Management	N/A

**Comparable Residential - Multi-unit Walk-up No. 3**

**Map & Comments**



This represents an 18-unit apartment property located at 963 E. 61st Street in Chicago, Illinois. The property was originally built in 1912 and was gut-rehabilitated in 2008 to condominium quality. Property amenities include laundry facilities. It features one and two-bedroom floor plans of approximately 800 and 1,200 square feet. The property was reportedly 100% occupied with average rents ranging between \$1,250 and \$1,450 per unit. Units are separately metered for gas and electricity usage while landlord pays for water, sewer and trash expenses.

## Comparable Residential - Multi-unit Walk-up No. 4

**Property Name** Drexel Terrace Apartments  
**Address** 6140 S. Drexel Avenue  
 Chicago, IL 60637  
 United States  
  
**Government Tax Agency** Cook  
**Govt./Tax ID** 20-14-307-016;20-14-307-020



### Unit Mix Detail

Rate Timeframe	N/A				
Unit Type	No.	%	Size (sf)	Rent	Rent / sf
1BR/1BA	17	20%	597	\$911	\$1.53
2BR/1.5BA	3	3%	801	\$1,035	\$1.29
2BR/1BA	30	35%	913	\$1,124	\$1.23
3BR/1.5BA	33	38%	1,129	\$1,224	\$1.08
3BR/1BA	2	2%	1,160	\$1,199	\$1.03
4BR/2BA	1	1%	1,405	\$1,350	\$0.96
<b>Totals/Avg</b>	<b>86</b>			<b>\$1,122</b>	<b>\$1.19</b>

### Improvements

Land Area	1.639 ac	Status	N/A
Gross Building Area (GBA)	80,054 sf	Year Built	1959
Total # of Units	86 Unit	Year Renovated	N/A
Average Unit Size	934 sf	Condition	Average
Floor Count	6	Exterior Finish	Masonry
General Amenities	Indoor Athletic Facility, Laundry Facility, On-Site Management, Pool		
Unit-Specific Amenities	Private Balcony / Patio, Refrigerator		

### Rental Survey

Occupancy	97%	Utilities Included in Rent	Heat, Water, Sewer, Trash
Lease Term	12 - 12 Mo(s).	Rent Premiums	None
Tenant Profile	Professional, Families	Concessions	None
Survey Date	10/2017	Owner	DMI Real Estate Group
Survey Notes	N/A	Management	DMI Management

**Comparable**

**Residential - Multi-unit Walk-up**

**No. 4**

**Map & Comments**

Drexel Terrace Apartments is located at 6140 S. Drexel Avenue in Chicago, Illinois. This community was built in 1959 then significantly renovated between 2012 and 2015 and contains 86 apartments, with one, two, three, and four-bedroom models ranging in size from 597 to 1,405 square feet. The current asking rents range from \$911 to \$1,350 per unit and the occupancy rate at the time of the survey was 96.5%. The amenities include a resident lounge, fitness center, on-site parking (90 spaces - free), and on-site laundry facilities.

**Comparable****Residential - Multi-unit Walk-up****No. 5**

Property Name 5656 S Indiana Ave  
 Address 5656 S Indiana Ave  
 Chicago, IL 60637  
 United States

Government Tax Agency Cook  
 Govt./Tax ID N/A

**Unit Mix Detail**

Rate Timeframe	Monthly				
Unit Type	No.	%	Size (sf)	Rent	Rent / sf
1Bed/1Bath	6	33%	500	\$900	\$1.80
2Bed/1Bath	6	33%	900	\$1,250	\$1.39
3Bed/1Bath	6	33%	900	\$1,250-\$1,300	\$1.42
Totals/Avg	18			\$1,142	\$1.49

**Improvements**

Land Area	0.188 ac	Status	Existing
Net Rentable Area (NRA)	13,800 sf	Year Built	1893
Total # of Units	18 Units	Year Renovated	2016
Average Unit Size	767 sf	Condition	N/A
Floor Count	3	Exterior Finish	Masonry
General Amenities	N/A		
Unit-Specific Amenities	N/A		

**Rental Survey**

Occupancy	100%	Utilities Included in Rent	Water, Sewer, Trash
Lease Term	12 Mo(s).	Rent Premiums	None
Tenant Profile	Professional	Concessions	None
Survey Date	03/2018	Owner	N/A
Survey Notes	N/A	Management	N/A



**Comparable Residential - Multi-unit Walk-up No. 5**

**Map & Comments**



5656 S Indiana Avenue is an 18 unit multi-family apartment building located on the south side of Chicago. The building is currently 100% occupied and the unit mix consists of 1, 2 and 3 bedroom/1 bathroom units. The building is a mix of market based and section 8 rentals. The property was renovated in 2015/6 and the units feature stainless steel appliances, hardwood flooring and granite counter tops and in-unit washer/dryers. There is not parking available at the building.

**Comparable****Residential - Multi-unit Walk-up****No. 6**

Property Name 609 E 60th Street  
 Address 609 E 60th Street  
 Chicago, IL 60637  
 United States

Government Tax Agency Cook  
 Govt./Tax ID N/A

**Unit Mix Detail**

Rate Timeframe Monthly

Unit Type	No.	%	Size (sf)	Rent	Rent / sf
3Bed2Bath	3	100%	1,400	\$1,450-\$1,495	\$1.05
Totals/Avg	3			\$1,473	\$1.05

**Improvements**

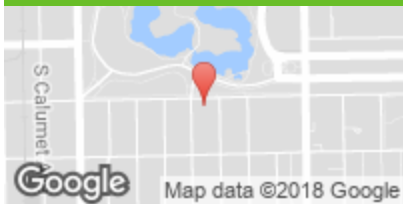
Land Area	N/A	Status	Existing
Net Rentable Area (NRA)	4,200 sf	Year Built	1913
Total # of Units	3 Units	Year Renovated	2017
Average Unit Size	1,400 sf	Condition	N/A
Floor Count	3	Exterior Finish	Masonry
General Amenities	N/A		
Unit-Specific Amenities	N/A		

**Rental Survey**

Occupancy	100%	Utilities Included in Rent	Water, Sewer, Trash
Lease Term	12 Mo(s).	Rent Premiums	None
Tenant Profile	Professional	Concessions	None
Survey Date	03/2018	Owner	N/A
Survey Notes	N/A	Management	N/A

**Comparable Residential - Multi-unit Walk-up No. 6**

**Map & Comments**



609 E 60th Street is a 3 unit multi-family apartment building located on the south side of Chicago. The building is currently 100% occupied and the unit mix consists of 3 bedroom/2 bathroom units. The property was renovated in 2017 and the units feature stainless steel appliances, tile and hardwood flooring and granite counter tops as well as washer/dryer hook ups.

Addendum C

**OPERATING DATA**

Income	T12	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Year Ending	3/31/2018	3/31/2019	3/31/2020	3/31/2021	3/31/2022	3/31/2023	3/31/2024	3/31/2025	3/31/2026	3/31/2027	3/31/2028
<b>Gross Potential Rent</b>	<b>\$0</b>	<b>\$200,308</b>	<b>\$450,194</b>	<b>\$459,769</b>	<b>\$473,562</b>	<b>\$487,769</b>	<b>\$502,402</b>	<b>\$517,475</b>	<b>\$532,999</b>	<b>\$548,989</b>	<b>\$565,458</b>
Vacancy/Loss	\$(245,022)	\$(71,288)	\$(22,510)	\$(22,988)	\$(23,678)	\$(24,388)	\$(25,120)	\$(25,874)	\$(26,650)	\$(27,449)	\$(28,273)
Gross Scheduled Rent	\$245,022	\$129,020	\$427,685	\$436,781	\$449,884	\$463,381	\$477,282	\$491,601	\$506,349	\$521,539	\$537,185
Less Uncollectables	\$(5,402)	\$(6,451)	\$(21,384)	\$(21,839)	\$(22,494)	\$(23,169)	\$(23,864)	\$(24,580)	\$(25,317)	\$(26,077)	\$(26,859)
Other Income	\$3,736	\$1,824	\$6,354	\$6,370	\$6,561	\$6,758	\$6,961	\$7,169	\$7,385	\$7,606	\$7,834
<b>Operating Income</b>	<b>\$243,357</b>	<b>\$124,393</b>	<b>\$412,655</b>	<b>\$421,312</b>	<b>\$433,951</b>	<b>\$446,970</b>	<b>\$460,379</b>	<b>\$474,190</b>	<b>\$488,416</b>	<b>\$503,068</b>	<b>\$518,160</b>
Expenses	T12	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Leasing Commissions	\$0	\$(14,346)	\$(8,598)	\$(5,770)	\$(5,943)	\$(6,121)	\$(6,305)	\$(6,494)	\$(6,689)	\$(6,890)	\$(7,096)
Real Estate Taxes	\$(30,118)	\$(34,339)	\$(35,369)	\$(36,430)	\$(37,523)	\$(38,649)	\$(39,809)	\$(41,003)	\$(42,233)	\$(43,500)	\$(44,805)
Insurance	\$(5,256)	\$(9,091)	\$(9,363)	\$(9,644)	\$(9,934)	\$(10,232)	\$(10,538)	\$(10,855)	\$(11,180)	\$(11,516)	\$(11,861)
Gas/Heat	\$(31,656)	\$(629)	\$(1,696)	\$(1,700)	\$(1,751)	\$(1,804)	\$(1,858)	\$(1,913)	\$(1,971)	\$(2,030)	\$(2,091)
Electric	\$(5,460)	\$(629)	\$(1,696)	\$(1,700)	\$(1,751)	\$(1,804)	\$(1,858)	\$(1,913)	\$(1,971)	\$(2,030)	\$(2,091)
Water	\$(30,260)	\$(5,858)	\$(15,790)	\$(15,828)	\$(16,303)	\$(16,792)	\$(17,296)	\$(17,815)	\$(18,349)	\$(18,900)	\$(19,467)
Trash	\$(2,486)	\$(944)	\$(2,544)	\$(2,550)	\$(2,627)	\$(2,705)	\$(2,786)	\$(2,870)	\$(2,956)	\$(3,045)	\$(3,136)
Snow Removal/Landscaping	\$0	\$(629)	\$(1,696)	\$(1,700)	\$(1,751)	\$(1,804)	\$(1,858)	\$(1,913)	\$(1,971)	\$(2,030)	\$(2,091)
Pest Control	\$(2,501)	\$(944)	\$(2,544)	\$(2,550)	\$(2,627)	\$(2,705)	\$(2,786)	\$(2,870)	\$(2,956)	\$(3,045)	\$(3,136)
Legal	\$0	\$(944)	\$(2,544)	\$(2,550)	\$(2,627)	\$(2,705)	\$(2,786)	\$(2,870)	\$(2,956)	\$(3,045)	\$(3,136)
Repairs & Maintenance	\$(9,425)	\$(19,200)	\$(19,776)	\$(20,369)	\$(20,980)	\$(21,610)	\$(22,258)	\$(22,926)	\$(23,614)	\$(24,322)	\$(25,052)
G&A	\$(952)	\$(6,400)	\$(6,592)	\$(6,790)	\$(6,993)	\$(7,203)	\$(7,419)	\$(7,642)	\$(7,871)	\$(8,107)	\$(8,351)
Management Fee 5%	\$(4,761)	\$(6,220)	\$(20,633)	\$(21,066)	\$(21,698)	\$(22,348)	\$(23,019)	\$(23,710)	\$(24,421)	\$(25,153)	\$(25,908)
<b>Operating Expenses</b>	<b>\$(122,875)</b>	<b>\$(100,173)</b>	<b>\$(128,840)</b>	<b>\$(128,648)</b>	<b>\$(132,507)</b>	<b>\$(136,482)</b>	<b>\$(140,577)</b>	<b>\$(144,794)</b>	<b>\$(149,138)</b>	<b>\$(153,612)</b>	<b>\$(158,220)</b>
% Operating Income	50.49%	80.53%	31.22%	30.54%	30.54%	30.54%	30.54%	30.54%	30.54%	30.54%	30.54%
<b>Net Operating Income</b>		<b>\$24,220</b>	<b>\$283,815</b>	<b>\$292,664</b>	<b>\$301,444</b>	<b>\$310,487</b>	<b>\$319,802</b>	<b>\$329,396</b>	<b>\$339,278</b>	<b>\$349,456</b>	<b>\$359,940</b>
Less: Reserves		\$0	-\$8,000	-\$8,000	-\$8,000	-\$8,000	-\$8,000	-\$8,000	-\$8,000	-\$8,000	-\$8,000
Less: Deferred Maintenance		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Net Income</b>	<b>\$120,482</b>	<b>\$24,220</b>	<b>\$275,815</b>	<b>\$284,664</b>	<b>\$293,444</b>	<b>\$302,487</b>	<b>\$311,802</b>	<b>\$321,396</b>	<b>\$331,278</b>	<b>\$341,456</b>	<b>\$351,940</b>
Cap Rate (Purchase Price)	6.88%	1.38%	15.76%	16.27%	16.77%	17.28%	17.82%	18.37%	18.93%	19.51%	20.11%

**Addendum D**

**LEGAL DESCRIPTION**

THE SOUTH 1 AND  $\frac{3}{4}$  INCHES OF LOT 9 IN BLOCK 1 IN ISAAC PFLAUM'S SUBDIVISION OF LOT 6 AND THAT PARTH OF LOT 12 LYING NORTH OF THE SOUTH LINE OF LOT 6 IN WILSON ,HEALD AND STEBBIN'S SUBDIVISION OF THE EAST  $\frac{1}{2}$  OF THE SOUTHWEST  $\frac{1}{4}$  OF SECTION 15;

Case: 1:18-cv-05587 Document #: 336-2 Filed: 04/22/19 Page 123 of 131 PageID #:5549

ALSO  
LOTS 1 THROUGH 8 (INCLUSIVE) IN BLOCK 1 OF DAVIDSON'S SUBDIVISION OF LOT 7 AND 8 AND PART OF LOT 12 OF WILSON ,HEALD AND STEBBIN'S SUBDIVISION OF THE EAST  $\frac{1}{2}$  OF THE SOUTHWEST  $\frac{1}{4}$  OF SECTION 15 , TOWNSHIP 38 NORTH, RANGE 14 EAST OF THE THIRD PRINCIPAL MERIDIAN IN COOK COUNTY, ILLINOIS,  
COMMONLY KNOWN AS: AVENUE 6162 - 6204 SOUTH MARTIN LUTHER KING DRIVE, CHICAGO, ILLINOIS.

TOTAL NET AREA: 32,540 SQUARE FEET

P.I.N. # 20-15-317-039-0000

20-15-317-040-0000

VICINITY MAP



Addendum E

**CLIENT CONTRACT INFORMATION**



## Vendor Contact Information:

Company: **Appraisal Nation**  
 500 Gregson Dr.Suite 120  
 Cary, NC, 27511

Phone: **1-866-735-0901**

Email: **order@appraisal-nation.com**

## General Information

Client: **Direct Lending Partner, LLC**  
 701 W Broad St Ste 200  
 Bethlehem, PA, 18018

Job Type: **+ 1. Commercial Narrative**

**Appraisal Report**

**2. Rush Fee**  
**3. As Is + ARV**

AMC License: **558.000056**  
 License Expiration Date: **2018/12/31**

Total Appraiser Fee: **\$3800.00**

Due Date: **03/14/2018**

Technology Fee: **\$10.00**

Rush Order: **Yes**

Appraiser Rush Fee: **\$0.00**

Process Status: **Accepted**

Assigned Date: **03/01/2018 12:49:56 pm**

FHA # **N/A**

File #: **ANS-270875**

Loan #: **n/a**

Inspection Date: **N/A**

Intended Use: **N/A**

Estimated Completion **N/A**  
 Date:

Purchase Price: **N/A**

Completed Date: **N/A**

Reference#: **N/A**

Property Characteristics: **N/A**

Lien Position: **N/A**

## Scope

Approaches to be included: **Income, Sales, Cost**

Inspection Requirements: **Exterior, Interior**

Value Type: **Fair Market Rental Value**

Value Qualifier: **As-Is, As-Complete, As-Stabilized**

Owner Interest: **Fee Simple**

Property Information 

Address 1: **6160-6212 South King Drive**

Address2: **N/A**

City: **Chicago**

State: **IL**

Zip Code: **60637**

County: **Cook**

Property Types: **N/A**

Legal: **N/A**

## Property Description

Approximate Building size: **N/A**

Approximate Land size: **N/A**

Building Age: **N/A**

Number of Stories: **N/A**

Number of Units: **N/A**

Gross Rental Income: **N/A**

Income Sales Cost: **N/A**

## Inspection Contacts and Access Information

Occupancy: **Owner**

Best Person to Contact: **Other**

Borrower: **Equity Build Inc A Florida**

Phone# **N/A**

**Corporation**

Work#: **N/A**

Cell# **N/A**

Email: **N/A**

Realtor/Other: **Tyler DeRoo**  
Realtor/Other Work#: **N/A**  
Realtor/Other Email: **tyler@equitybuild.com**

Realtor/Other Home #: **N/A**  
Realtor/Other Cell# **847-420-2095**

Technology Fee: **There is a third party tech fee of \$10.00 associated with this order. You will be required to pay this fee via credit card to the third party provider at the time of the report upload.**

Additional Comments: **N/A**

Addendum F

**QUALIFICATIONS**

## QUALIFICATIONS OF JAMES T. O'LEARY

### PROFESSIONAL EXPERIENCE:

Senior Appraiser – CBRE, Chicago, IL 2015  
Appraiser - Appraisal Research Counselors, Chicago, IL: 2009-2015  
Industrial Broker – Darwin Realty & Development, Elmhurst, IL: 2007 – 2009  
Appraiser – Schlitz Appraisal Services, LLC, Chicago, IL: 2001 – 2007  
Accountant – Arthur Andersen, LLP, Chicago, IL: 2000 – 2001

### EDUCATION:

Bachelor of Science in Accounting, Saint Xavier University, Chicago, IL

### COURSES IN REAL ESTATE:

Illinois I	Appraisal Standards & Ethics (MVCC)
Illinois II	Real Estate Appraisal (MVCC)
Illinois III	Residential Property Appraisal (MVCC)
Illinois IV	Appraisal Procedures (Appraisal Institute)
Illinois VI	Residential Report Writing (Appraisal Institute)
Illinois V	Basic Income Capitalization (Appraisal Institute)
Illinois E	General Applications (Appraisal Institute)
Illinois VII	Non Residential Report Writing (NAIFA)

### CERTIFICATION:

State of Illinois Certified General Real Estate Appraiser  
State of Illinois Licensed Real Estate Broker (Expired)

### EXPERIENCE:

Jim has a broad range of appraisal experience including vacant land, office, retail, and industrial properties. Experience includes reports for the purpose of mortgage lending, estate planning, ad valorem tax, and condemnation. Clients have included major financial institutions, corporations, government institutions, private investors and attorneys.

Prior to joining ARC and CBRE, Jim was an industrial real estate broker where he honed his industrial real estate knowledge working on a full range of brokerage services, including tenant representation, landlord representation, lease negotiation, sale/leaseback investment opportunities, land acquisition and development.

# State of Illinois

## Department of Financial and Professional Regulation Division of Real Estate

LICENSE NO.  
553.001461

The person, firm, or corporation whose name appears on this certificate has complied with the provisions of the Illinois Statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below:

EXPIRES:  
09/30/2019

CERTIFIED GENERAL REAL ESTATE APPRAISER



JAMES T O'LEARY  
10543 S CAMPBELL AVE  
CHICAGO, IL 60655



*Bryan A. Schneider*

BRYAN A. SCHNEIDER  
SECRETARY

*Kreg T. Allison*

KREG T. ALLISON  
DIRECTOR

The official status of this license can be verified at [www.idfpr.com](http://www.idfpr.com)

11916022



**QUALIFICATIONS OF**

**JOHN KONRATH, JR., MAI  
Managing Director**

CBRE Inc., Valuation and Advisory Services  
321 North Clark Street, 34<sup>th</sup> Floor  
Chicago, IL 60654  
(312) 233-8658  
John.konrath@cbre.com

**EDUCATIONAL**

Bachelors of Science Degree, Business & Communications  
Arizona State University, Tempe, Arizona

**CERTIFICATION**

State Certified General Real Estate Appraiser: Illinois (No. 553.001733)  
State Certified General Real Estate Appraiser: Wisconsin (No. 1825-10)  
State Certified General Real Estate Appraiser: Indiana (CG40801088)  
State Certified General Real Estate Appraiser: Missouri (2014012350)

**PROFESSIONAL**

Designated Member of the Appraisal Institute (MAI)

**EMPLOYMENT EXPERIENCE**

2003-2007	Konrath & Company Commercial Appraiser	Chicago, IL
2007-2009	Sovereign Bank Senior Commercial Appraiser	Los Angeles, CA
2009-2011	Pinnacle Appraisal Services, LLC President	Los Angeles, CA
2011-2014	Landauer Valuation & Advisory Managing Director	Chicago, IL
2014-Present	CBRE, Inc. Managing Director	Chicago, IL

Mr. Konrath has been active in the appraisal of commercial real estate for over 10 years, with valuation and consulting conducted on behalf of financial institutions, government agencies, corporations, individual investors and legal firms. He has extensive experience in portfolio management for institutional clients across the United States. Assignments have been completed for a wide variety of asset types including office, retail, multi-family residential, industrial, hospitality and mixed-use developments.

# State of Illinois

## Department of Financial and Professional Regulation Division of Real Estate

LICENSE NO.  
553.001733

The person, firm, or corporation whose name appears on this certificate has complied with the provisions of the Illinois Statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below:

EXPIRES:  
09/30/2019

CERTIFIED GENERAL REAL ESTATE APPRAISER



JOHN PAUL KONRATH  
1875 N HOYNE AVE  
CHICAGO, IL 60647



*Bryan A. Schneider*

BRYAN A. SCHNEIDER  
SECRETARY

*Kreg T. Allison*

KREG T. ALLISON  
DIRECTOR

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LICENSE NO.  
553.001733

Department of Financial and Professional Regulation  
Division of Real Estate



CERTIFIED GENERAL REAL  
ESTATE APPRAISER

JOHN PAUL KONRATH

EXPIRES:  
09/30/2019

*Bryan A. Schneider*

BRYAN A. SCHNEIDER  
SECRETARY

*Kreg T. Allison*

KREG T. ALLISON  
DIRECTOR

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# Exhibit C



# The effects of building management practices on residential property prices in Hong Kong

Received (in revised form): 6th November, 2008

## Yung Yau

is currently conducting research and lecturing in City University of Hong Kong. Before joining the university, he practiced building control in the Buildings Department, the Government of Hong Kong Special Administrative Region. His research interests include housing studies, urban renewal, heritage conservation, real estate economics and finance and building performance assessment.

## Daniel Chi Wing Ho

is a qualified building surveyor and a Fellow of both the Hong Kong Institute of Surveyors and the Royal Institution of Chartered Surveyors. He is currently an associate professor and the Head of the Department of Real Estate and Construction, The University of Hong Kong. His research interests and expertise are in facility performance assessment, development control and facility management.

**Correspondence:** Yung Yau, Department of Public and Social Administration, City University of Hong Kong, Tat Chee Avenue, Kowloon, Hong Kong; Tel: +852 2788 8958; Fax: +852 2788 8926

## Abstract

Building management and maintenance has gained its importance after a series of disastrous building-related incidents in Hong Kong. To facilitate the management of an apartment building, homeowners usually form an owners' association among themselves and/or appoint an external property management agent (PMA) to manage the building on their behalf. Empirical studies found that the involvement of these bodies was conducive to a better-performing built environment, and that premium was added to better-performing properties. Yet, these studies often took the formation of owners' association and engagement of external PMA in a building as dichotomous variables in exploratory models, and thus ignored the variations in the adopted building management practices in different buildings even with the same building management setting. Making use of the data collected from two previous research projects, a hedonic price analysis was carried out to study whether specific building management practices added value to the properties concerned. The analysis results indicated that properties in buildings with good documentations (eg keeping of as-built architectural drawings and incident records), thoughtful emergency planning (eg presence of emergency plan and regular fire drills) and property-all-risk insurance coverage were sold at a premium, *ceteris paribus*. Policy and practical implications then follow. *Journal of Building Appraisal* (2009) **4**, 157–167. doi:10.1057/jba.2008.42

## Keywords:

building management, apartment buildings, hedonic price model, Hong Kong

## INTRODUCTION

Recent literature such as Yiu (2007) and Yau (2008) has highlighted the long-lasting problem of building neglect in Hong Kong. Painful consequence of such neglect is best illustrated by the localised outbreak of the Severe Acute Respiratory Syndrome in Amoy

Gardens in 2003. In spite of this lesson, building-related incidents such as tragic fires and falling building fabrics are common in the city. To sustain a healthy and safe urban environment in Hong Kong, the local government launched two public consultations on the approaches to ensure that the building stock in the territory could be properly serviced and how a building care culture could be fostered (Housing, Planning and Lands Bureau, 2004, 2005). Yet, we need to understand the root of the current predicaments in building management and maintenance before a sensible solution can be devised.

Fong (1984) attributed the building problems to the high-rise high-density development pattern adopted in Hong Kong. In multi-storey residential or apartment buildings, communal areas (eg entrance lobbies and communal corridors) and facilities (eg water supply systems and fire service installations) are co-owned by individual homeowners, and all owners are jointly responsible for the management and maintenance of these shared parts (Niell, 1990; Bailey and Robertson, 1997; Yip and Forrest, 2002). However, Bengtsson (1998, 2001) and Walters (2002), founding on the game theory and concept of transaction cost respectively, expounded residents' participation or investment in the common good with regard to building management as unlikely.

To facilitate the coordination among individual homeowners in managing the shared parts of a building, some organisation for building management is needed. The Home Affairs Department (2001) suggested the homeowners to actively participate in the matters of building management by forming statutory owners' associations. At the same time, the homeowners can appoint external property management agents (PMAs) to manage the building on their behalf. While there is a growing body of research examining the effects of building management on building performance (eg Ho *et al.*, 2006, 2007) and residents' satisfaction (Paris, 2006), little work has focused on the relationship between property management and property price.

In this light, this study aims to fill up this research gap by investigating which building management practices add value to properties in Hong Kong. By means of hedonic price analysis, the transaction data of 189 apartment buildings in Hong Kong were studied. We found that property value was enhanced by practices like keeping as-built architectural drawings and incident records, taking out property-all-risk insurance for common areas, setting out emergency plans and conducting regular fire drills. The findings in this study have far-reaching practical and policy implications.

## LITERATURE REVIEW

### Roles of building management bodies

The significance of property or building management to building conditions and residents' wellbeings has been well documented. Given the design and construction are up to standard, buildings are usually of good performance when newly built. As a physical asset, a property is always subject to wear and tear (Hui, 2005). Therefore, proper maintenance and management is indispensable for keeping the building in serviceable conditions (DeCarlo, 1997; Choy, 1998; Chung, 1999). To facilitate the management of multi-storey buildings in Hong Kong, the Home Affairs Department advocated the formation of incorporated owners (IO) and the appointment of external PMAs. By virtue of the Building Management Ordinance (Chapter 344 of *the Laws of Hong Kong*), an IO is a legal entity set up to act legally on behalf of all owners of a multi-storey building or development. Unlike other types of owners' or residents' associations such as owners' committees and mutual aid committees, the formation and operations of an IO was backed up and, at the same time, bound by the ordinance and/or deed of mutual covenant

(Nield, 1990). The Building Management Ordinance confers the power to the IO to enforce the resolutions made in the general owner meetings (Home Affairs Department, 2001). Besides, IO is powered to monitor the services provided by the external PMA, and terminate the service contracts if the agent does not perform satisfactorily. On the whole, the regular meetings held by the IO provide a platform for the homeowners to air grievances, and facilitate decision making on building management issues (Kent *et al.*, 2002).

No matter whether an owners' association exists in an apartment building or not, homeowners can appoint an external PMA to manage the building on their behalf. The responsibilities of a PMA vary across buildings, and may include provision of security and cleansing services, and assisting homeowners in convening meetings and coordinating activities (Home Affairs Department, 2001). Besides, the external PMAs are responsible for keeping up physical conditions of buildings through preventive measures and routine maintenance. They also attend to the financial wellbeing of building management structure under their charge through fiscal planning and budget controls (Fong, 1984).

Buildings with statutory owners' associations were found to have fewer problems and better conditions for the building (Ng, 2004; Ho *et al.*, 2006; Wan *et al.*, 2006). Lai and Ho (2001) argued that external PMAs, with better know-how in using legal means, can help check the problem of unauthorised building works. On the contrary, a weak-principal–strong-agent situation may occur when powers are delegated to the management committee of an owners' association or an external PMA. Although the committee members should act on behalf of their principals (ie the homeowners), they may make decisions that are beneficial to themselves at the costs of other owners (Walters and Kent, 2000). Such kind of rent-seeking behaviour is best illustrated by the proliferation of corruption cases in building management in Hong Kong. The Independent Commission Against Corruption received 978, 822 and 972 corruption reports involving building management in 2005, 2006 and 2007, respectively (The Government of the Hong Kong Special Administrative Region, 2008). Among some 2,000 private-sector corruption reports received in 2007, 40 per cent were related to building maintenance works.

### **Building management and property value**

There has been plenty of research dedicated to the relationship between building characteristics and property price, especially in residential properties. For example, Vandell and Lane (1989) and Chau *et al.* (2004) discovered that properties with better designs attracted higher values. Robinson (1946) and Jimenez (1983) found that better-conditioned properties were rewarded with higher value. Nonetheless, the association between property value and building management has not been extensively investigated. Studying 15 residential developments in Hong Kong, Hastings *et al.* (2006) evidenced that the presence of PMA or statutory owners' association in a building was found to be a significant predictor of property value. Lau (2005) found that the properties managed by an external PMA had value added if that agent was certified under the ISO system.

Yet, these previous studies on the value enhancement effects of building management are not free from methodological flaws. For example, Hastings *et al.* (2006) took building management dichotomously in the exploratory model: using whether a statutory owners' association was formed and whether an external PMA was engaged as proxies of building management. Likewise, Lau (2005) only concerned whether the PMA was accredited by the ISO. These dichotomous definitions are misleading because even with the same building management structure, buildings could have different building management practices in place. That means the management practices or even outputs vary across buildings so it is not precise to use the existence of one particular type of building

management body as the sole indicator in building management studies. Value enhancement effects of individual management practices remain to be demonstrated because it is more insightful to know that which practices are valued by the market players and which are not.

## ANALYTICAL FRAMEWORK AND METHODOLOGY

As aforementioned, there is little in literature in terms of robust and detailed studies examining which management practices add values to the managed properties. In this regard, hedonic price model was adopted in this study for the exploratory analysis. According to Rosen's (1974) seminal work, hedonic price model can extract the implicit price of property attributes from property transaction prices. As such, it can be employed to estimate the value enhancement effects of various building management practices. With the loss of generality, the price of a property ( $P$ ) can be expressed as a function  $f(\cdot)$  of the physical characteristics of the property ( $X$ ), management practices executed in the building ( $M$ ), location-related factors ( $L$ ), the time when the property was transacted ( $T$ ) and unknown parameters ( $\varphi$ ), or mathematically

$$PRICE = f(X, L, M, T; \varphi) \quad (1)$$

### Model specification

Since the functional form of  $f(\cdot)$  is not known *a priori*, a semi-log specification with quadratic terms for continuous variables was used for estimation because this functional form has been widely supported (eg Hogarty, 1975; Bajic, 1993). The generic model in Equation (1) was thus specified as:

$$\begin{aligned} \ln PRICE_{it} = & \alpha_0 + \alpha_1 AGE_i + \alpha_2 AGE_i^2 + \alpha_3 FLOOR_i \\ & + \alpha_4 FLOOR_i^2 + \alpha_5 SIZE_i + \alpha_6 SIZE_i^2 \\ & + \alpha_7 UNIT_i + \alpha_8 UNIT_i^2 + \alpha_9 TKT_i \\ & + \alpha_{10} PE_i + \alpha_{11} MK_i + \alpha_{12} YMT_i + \alpha_{13} JD_i \\ & + \alpha_{14} TST_i + \alpha_{15} TH_i + \alpha_{16} NP_i + \alpha_{17} MTR_i \\ & + \alpha_{18} MTR_i^2 + \beta_1 GBP_i + \beta_2 BSP_i \\ & + \beta_3 FS\_PLAN_i + \beta_4 TPL_i + \beta_5 PAR_i \\ & + \beta_6 INCIDENT_i + \beta_7 SINK\_FUND_i \\ & + \beta_8 EMER\_PLAN_i + \beta_9 RES\_SURVEY_i \\ & + \beta_{10} FIRE\_DRILL_i + \beta_{11} FIRE\_DRILL_i^2 \\ & + \phi TIME_{it} + \varepsilon_i \end{aligned} \quad (2)$$

where  $\alpha_s$  ( $s=0,1,2, \dots, 18$ ),  $\beta_w$  ( $w=1,2, \dots, 11$ ) and  $\varphi$  (a vector of coefficients) are coefficients to be estimated, and  $\varepsilon$  is the stochastic term. The variables incorporated in Equation (2) are described in Table 1.

The first set of coefficients (ie  $\alpha_s$ ) measures the marginal effects of the inborn property characteristics such as building age, floor level, floor area, development scale, distance

**Table 1:** Descriptions of the variables used in Equation (2)

Variable	Description
$PRICE_{it}$	The transaction price of property $i$ at time $t$ (measured in HK\$ million)
$AGE_{it}$	The age of property $i$ at time $t$ , which equals the difference between the date of the issue of the occupation permit and the date of the transaction (measured in years)
$FLOOR_i$	The floor level of property $i$
$SIZE_i$	The gross floor area of property $i$ (measured in square feet)
$UNIT_i$	The number of domestic units present in the residential development comprising property $i$
$TKT_i$	A dummy variable which equals 1 if property $i$ is located in Tai Kok Tsui, and zero if otherwise
$PE_i$	A dummy variable which equals 1 if property $i$ is located in Prince Edward, and zero if otherwise
$MK_i$	A dummy variable which equals 1 if property $i$ is located in Mong Kok, and zero if otherwise
$YMT_i$	A dummy variable which equals 1 if property $i$ is located in Yau Ma Tei, and zero if otherwise
$JD_i$	A dummy variable which equals 1 if property $i$ is located in Jordan, and zero if otherwise
$TST_i$	A dummy variable which equals 1 if property $i$ is located in Tsim Sha Tsui, and zero if otherwise
$TH_i$	A dummy variable which equals 1 if property $i$ is located in Tin Hau, and zero if otherwise
$NP_i$	A dummy variable which equals 1 if property $i$ is located in North Point, and zero if otherwise
$MTR_i$	The distance between property $i$ and the nearest Mass Transit Railway station (measured in metres)
$GBP_i$	A dummy variable which equals 1 if a set of architectural drawings of the subject building has been kept by the building management body for record, and zero if otherwise
$BSP_i$	A dummy variable which equals 1 if a set of building service plans of the subject building has been kept by the building management body for record
$FS\_PLAN_i$	A dummy variable which equals 1 if a fire safety plan has been provided to the residents of the subject building, and zero if otherwise
$TPL_i$	A dummy variable which equals 1 if third-party liability insurance has been taken out for the common parts of the subject building, and zero if otherwise
$PAR_i$	A dummy variable which equals 1 if property-all-risk insurance has been taken out for the common parts of the subject building
$INCIDENT_i$	A dummy variable which equals 1 if incident records have been kept by the building management body, and zero if otherwise
$SINK\_FUND_i$	A dummy variable which equals 1 if there is remaining sinking fund available in the subject building, and zero if otherwise
$EMER\_PLAN_i$	A dummy variable which equals 1 if an emergency plan is in place for the subject building, and zero if otherwise
$RES\_SURVEY_i$	A dummy variable which equals 1 if regular resident surveys on the safety and hygienic conditions of the building are conducted, and zero if otherwise
$FIRE\_DRILL_i$	The number of fire drills conducted every month in the subject building
$TIME_{it}$	A monthly dummy variable that equals 1 when property $i$ was transacted at time $t$ , and zero if otherwise

from the mass transit system and location on property price. Regarding the locational dummies, properties situated in Quarry Bay were taken as the reference location or base. All these characteristics were controlled in the model. Besides, time dummies set on a monthly basis were used to control for the possible effect of time on the variations in property transaction price because panel data on property transactions were used and market conditions might change over time. Meanwhile, the second coefficient set (ie  $\beta_w$ ) measures the effects of marginal effects of various building management practices on property price. A total of ten building management practices were investigated in this study.

### Building management practices investigated

To facilitate building management and maintenance, documentations like keeping record plans, maintaining incident records and seeking feedbacks from the occupants on building conditions are essential. For example, a complete set of updated records or as-built drawings on architectural and building services designs is useful for future maintenance and renovation (Cheng, 1998; Home Affairs Department, 2001). It provides details of the systems used in a building, such as the capacity of its electricity supply system and the routing of its cables. This can make decision making during emergency maintenance easier. Also, record drawings are solid references for identifying unauthorised building works and other irregularities in a building.

In addition, keeping track of these incidents such as falling building fabrics, fires, and interruptions of power supply is advantageous for the homeowners and property managers of a building. A similar attitude towards the importance of incident records has been widely shared by researchers in the field of occupational safety (eg Koornneef and Hale, 1997; Hakkinen, 1999). The analyses based on these incident records provide building stakeholders with insights into the aspects of building management that warrant more attentions, and valuable information for property managers to prioritise improvement works.

As for residents' feedbacks, they are essential for the evaluation of the work of the building management bodies. Very often, the feedbacks in residential premises are obtained systematically from occupant surveys, which provide a formal channel for occupants to give comments to management. This evaluation mechanism is important for the continuous improvement of building performance (Zimring and Reizenstein, 1980). Upon observing and addressing the comments in the surveys, the management bodies concerned can help raise the satisfactory level of occupants and the conditions of the building.

Apart from documentations, emergency preparedness is another critical aspect of building management because we need to ensure that management is able to react calmly, and all occupants are able to evacuate orderly to safety in case of an emergency (Malhotra, 1987). To enhance the emergency preparedness of the management body in a building, an emergency or contingency plan should be formulated (Carighead, 2003). An emergency plan sets out what the building management body should do in the event of an emergency, and how they should handle and recover from it (Egbuji, 1999). At the same time, residents of an apartment building should familiarise themselves with the direction and routing of the means of escape in buildings and always be prepared for a quick evacuation (Information Services Department, 1997). This issue should not be ignored because buildings designed and constructed with excellent means of escape do not guarantee that their occupants would know where the exits are located. To aid in the familiarisation, evacuation plans should be provided to occupants and/or posted in conspicuous positions in the buildings. Besides, regular fire drills are indispensable to provide training or rehearsal to occupants (Home Affairs Department, 2001).

Lastly, building management system relies on the availability of financial resources for emergencies to be effective. For instance, it is very difficult to raise or collect money from every individual homeowner for the cost of emergency repair works in common areas of a building. Therefore, the availability of sinking fund in a building reduces the response time for emergencies and unexpected circumstances, guaranteeing the future upkeep of a building. Similarly, the Home Affairs Department (2001) recommended building management bodies to take out third-party liability and property-all-risk insurances for the common parts of their buildings. The first type of insurance indemnifies the homeowners from claims for compensation and associated legal costs as a result of personal injury to or the death of a third party caused by the negligence of the insured while the second type usually covers losses or damages to the common parts or facilities of a building due to fire, storm, flood or other malicious acts. With a view to lower premiums for the insurances, the homeowners are self-motivated to keep their buildings in serviceable conditions.

Since it is widely accepted that the building management practices investigated in this study have positive impacts on the building conditions, we envisage that these practices would be positively valued by the market players. Along this line of thought, we

hypothesise that all coefficients  $\beta_w$  ( $w=1, 2, \dots, 11$ ) should be statistically significant and positive.

## DATA DESCRIPTIONS

The investigation of the effects of various building management practices on property price was made possible with the Building Health and Hygiene Index and Building Safety and Conditions Index research projects funded by the Research Grants Council and the University of Hong Kong. In the two projects, the details of which can be found in Wong *et al.* (2006) and Ho *et al.* (2008), apartment buildings in Hong Kong were benchmarked with reference to their health and safety performance using a tailor-made assessment framework. The assessment covered different quality aspects, namely architectural design, building service provisions, external environment, operations and maintenance, and management arrangements. Therefore, information regarding the management practices in the assessed buildings is available for data analysis in this study.

In total, data of 189 apartment buildings in the Yau Tsim Mong and Eastern Districts assessed in 2004 and 2005 respectively were used for this study. There were altogether 3,057 transactions in the 189 buildings between January 2002 and December 2005. Information on the transaction prices and particulars of the transacted properties (eg age, floor level and floor area) was obtained from the Economic Property Research Centre. Descriptive statistics of the continuous variables are described in Table 2.

## ANALYSIS RESULTS AND DISCUSSION

The estimation results of the hedonic price analysis are shown in Table 3. The adjusted  $R$ -squared was about 0.74, indicating that about 74 per cent of the variations in property prices could be explained by the variations in the dependent variables. We found that all the control variables, namely *AGE*, *FLOOR*, *SIZE*, *UNIT* and *MTR*, had significant (at least at the 10 per cent level) non-linear effects on the transaction prices of the properties under investigation. Except for North Point, transaction prices in all districts deviated significantly with those in Quarry Bay, *ceteris paribus*.

As for the ten building management practices, six of them were found to significantly affect property prices. Keeping general building plans added 12.9 per cent premium to the concerned properties (significant at the 1 per cent level). Properties in buildings covered by property-all-risk insurance policies were sold at a price 3.6 per cent higher than those uncovered (significant at the 1 per cent level). Besides, 7.5 (significant at the 1 per cent level) and 2.1 per cent (significant at the 10 per cent level) of value were added to the transacted properties if incident records were documented and emergency plan was set out, respectively. Moreover, the analysis results indicate that the frequency of regular fire drills had a positive relationship with the property price (significant at the 10 per cent level), given that it exceeded 0.56 time per month. All the results above confirm with our

**Table 2:** Descriptive statistics of the continuous variables

Continuous variable	Maximum	Mean	Minimum	Standard deviation
PRICE (in HK\$ million)	9.18	1.20	$5 \times 10^{-3}$	0.79
AGE (in years)	47	25.21	3	9.65
FLOOR	40	10.92	1	6.91
SIZE (in square feet)	1,921	562.38	227.14	193.96
UNIT	12,896	518.15	3	1,660.44
MTR (in metres)	1,136.52	310.11	13.32	270.37
FIRE_DRILL (number of times per month)	1	0.17	0	0.36

**Table 3:** The regression results of the hedonic price models

Dependent variable: ln(PRICE)				
Independent variable	Coefficient	Standard error	t-statistic	p-value
Constant	-1.5659	0.0814	-19.2481	0.000***
AGE	0.0087	0.0037	2.3746	0.0176**
AGE <sup>2</sup>	-0.0006	7.34×10 <sup>-5</sup>	-7.8908	0.000***
FLOOR	0.0137	0.0022	6.1065	0.000***
FLOOR <sup>2</sup>	-0.0002	7.64×10 <sup>-5</sup>	-2.0824	0.0374**
SIZE	0.0030	0.0002	17.4200	0.000***
SIZE <sup>2</sup>	-8.89×10 <sup>-7</sup>	1.26×10 <sup>-7</sup>	-7.0708	0.000***
UNIT	0.0001	1.53×10 <sup>-5</sup>	8.8057	0.000***
UNIT <sup>2</sup>	-7.65×10 <sup>-9</sup>	1.04×10 <sup>-9</sup>	-7.3572	0.000***
TKT	-0.2489	0.0597	-4.1675	0.000***
PE	-0.1461	0.0309	-4.7288	0.000***
MK	-0.1246	0.0421	-2.9625	0.0031**
YMT	-0.0773	0.0296	-2.6083	0.0091**
JD	-0.1197	0.0366	-3.2671	0.0011**
TST	0.1553	0.0336	4.6192	0.000***
TH	0.0650	0.0254	2.5552	0.0107**
NP	-0.0070	0.0261	-0.2693	0.7877
MTR	0.0003	9.29×10 <sup>-5</sup>	3.1970	0.0014**
MTR <sup>2</sup>	-2.64×10 <sup>-7</sup>	1.01×10 <sup>-7</sup>	-2.6273	0.0087**
GBP	0.1286	0.0279	4.6112	0.000***
BSP	-0.0502	0.0151	-3.3192	0.0009**
FS_PLAN	-0.0148	0.0118	-1.2503	0.2113
TPL	0.0124	0.0189	0.6559	0.5119
PAR	0.0360	0.0126	2.8534	0.0044**
INCIDENT	0.0752	0.0170	4.4095	0.000***
SINK_FUND	0.0052	0.0140	0.3695	0.7118
EMER_PLAN	0.0212	0.0126	1.6844	0.0922*
RES_SURVEY	-0.0226	0.0152	-1.4860	0.1374
FIRE_DRILL	-0.3054	0.1648	-1.8531	0.0640*
FIRE_DRILL <sup>2</sup>	0.2718	0.1635	1.6624	0.0965*
Adjusted R-squared	0.7401		Durbin-Watson statistic	2.0202
F-statistics	115.5240		Akaike info criterion	0.3514
Prob(F-statistic)	0.0000		Number of observations	3,057

## Notes:

- 1.\*\*\*, \*\* and \* denote the estimated coefficients of the variables to be significant at the 1, 5 and 10 per cent level, respectively.
- 2.The results for the time dummies were omitted, but are available upon request.
- 3.All coefficients were estimated with White's Heteroskedasticity-consistent standard errors.

expectations. Nevertheless, practices like provision of fire safety plan to the residents, taking out of third-party liability insurance, availability of sinking fund and regular resident surveys did not have any significant impacts on the property transaction price. Moreover, it is difficult to explain why properties in buildings with building services plans documented were generally sold at a 5 per cent discount (significant at the 1 per cent level), *ceteris paribus*.

Based on the empirical findings, we may conclude that not all building management practices currently adopted are positively valued by the housing market. The analysis results give practitioners insights into which management practices are valued most by the market players, helping them to formulate better business strategies. Also, if the value enhancement through the building management practices is well publicised in the society, a building care culture can be fostered by market forces. Homeowners are more willing to



practice building management in their buildings with a view to the premium added to the value of their properties. On the other hand, warning signals are given to the public administrators if some management practices are considered essential by the government but were found to be insignificant determinant of property price. A gap exists between the government's aspirations and the market's valuation, and more resources should be directed to the education and promotion campaigns about the importance of these 'undervalued' practices. Alternatively, the government may need to think about making these practices mandatory or subsidising them.

Yet, some precautions should be taken in interpreting the relationships between property prices and building management practices. In spite of the wide varieties in the inborn characteristics of the buildings (eg age and development scale) under study, only properties in those buildings with transaction records were included in the sample. In fact, a total of 323 apartment buildings were assessed in the Building Health and Hygiene Index and Building Safety and Conditions Index projects. However, those buildings badly dilapidated had no transactions during the target study period so they were not included in the sample. In other words, potential sample selection bias may limit the generalisability of the research findings.

## CONCLUDING REMARKS

Although many people thought that buildings managed by owners' associations and/or external PMAs should perform better, Walters and Kent (2000) posited the opposite because the committee members in the owners' associations and the external PMAs tended to make decisions which were beneficial to themselves. Other than these agency problems, building management and maintenance is sometimes hindered by the inactive owners' association (Housing, Planning and Lands Bureau, 2005). Worse still, rivalry may exist within owners' associations (Housing, Planning and Lands Bureau, 2004) or between homeowners and external PMAs. This will only worsen rather than relieve the building management problems. In this light, simply using the formation of owners' association and appointment of external PMA as proxies for building management in empirical analyses could generate misleading results. Against this background, we offered a preliminary study on the property-value enhancement effects of various building management practices in Hong Kong. We found that practices such as keeping as-built architectural drawings and incident records, taking out property-all-risk insurance for common areas, setting out emergency plans and conducting regular fire drills added value to properties.

The analysis results give market players, housing management practitioners and public administrators' insights into which management practices are valued most by the market. Regardless of the valuable insights provided, this study should be regarded only a starting point for studying this research topic. Further research is recommended to explore how the levels or dimensions of building management practices affect property value. To put it another way, management practices under investigation in this study were taken as dichotomous variables so information of their dimensions was ignored. In fact, explanatory factors such as *TPL* and *PAR* can be represented or measured in some other dimensions. For instance, instead of simply considering whether insurance policies have been taken out or not, we can look into the value of insurance coverage. It is a similar situation for the sinking fund. As a result of this adjustment, we can know how the value enhancement effects vary with the value of the insurance cover or sinking fund. Moreover, the value enhancement study can be extended to cover management practices such as implementation of planned maintenance and cleansing of public areas.

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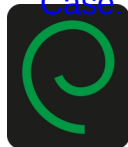
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Jinhuan Li Paavo Monkkonen

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# The value of property management services: an experiment

Property  
management  
services

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## Abstract

**Purpose** – Assessing the value of property management services is challenging because of collinearity between property quality and the quality of property management companies. In order to overcome this challenge and isolate the impact of property management services, the purpose of this paper is to use an experimental approach inspired by work in labor economics (Bertrand and Mullainathan, 2004) to measure the value of property management services for residential properties in Hong Kong.

**Design/methodology/approach** – The authors surveyed over 150 experts in the real estate industry and asked them to estimate the value of five hypothetical properties. In each survey, the authors randomly assign different property management companies, which we have ranked by levels of quality, to the properties. In this way the authors were able to test whether property management services significantly impact property prices and whether this impact varies across types of residential buildings.

**Findings** – Results show that property management does add value, especially to older and more dilapidated properties.

**Practical implications** – Findings suggest that there is money to be made by high-quality companies providing services for lower quality buildings.

**Originality/value** – The experimental survey methodology applied in this paper provides an innovative way to measure company value.

**Keywords** Hong Kong, Surveys, Property management, Performance measure, Asset valuation

**Paper type** Research paper

## 1. Introduction

The value of real estate, like other market goods, is reflected in a marketplace by its price. However, due to attributes of fixity and durability, a high sensitivity to spatial externalities, and a high cost relative to incomes, residential property is one of the most complex commodities in the world. The value of residential property varies according to the macro-economic environment as political, economic, and socio-demographic factors alter market dynamics (Markmin, 1994). In a micro perspective, Roulac (2007, p. 428) concludes that “a property’s value is determined by its use, specifically what people will pay for the right to the use of the property.” Micro-determinants include location attributes, structural attributes, and neighborhood attributes of a residential property are considered the major criteria that determine the value of this heterogeneous commodity (Butler, 1982). Yet, there is one attribute of residential property that is extremely important in cases of multi-owner properties, but the value of which has been largely ignored in the academic literature: property management.

Property management is crucial to the residential environment of high-rise and high density in Hong Kong (Yuen and Yeh, 2011), as almost all of the city’s residents live in



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multi-unit, multi-owner buildings. Multi-owner residential properties suffer from common problems – such as overuse of commonly owned spaces – as well as anti-commons problems – inefficient rates of redevelopment due to all owners having veto power (Hastings *et al.*, 2006). Many of these issues can be ameliorated by the outsourcing of property management services, especially in terms of regular maintenance to minimize the depreciation of the property. The importance of property management services became even clearer in Hong Kong with the SARS[1] outbreak in 2003. SARS raised people’s awareness of the importance of the day-to-day details of property management, especially environmental hygiene in public areas.

In spite of the importance of property management services for a large proportion of the world’s housing stock, there have been few efforts to measure its value quantitatively (with the notable exception of Hastings *et al.*, 2006). One reason for this limitation in the literature is the strong collinearity between the quality of a buildings property management company and its other characteristics, which makes it difficult to statistically separate the value of the property management services. Thus, this paper provides a new approach to the measurement of the value of property management services, an experiment. We create a number of brochures for fictitious properties and ask a large number of experts (over 150) to estimate their value. We randomly vary the property management company featured on the brochure, thus allowing us to identify the difference in value of companies. Not only does this provide us with an unbiased estimate of the value of different property management companies, it also allows us to test the hypothesis that property management is more important for older buildings.

## 2. Literature review

In the extensive body of literature that seeks to capture the determinants of residential property prices, the hedonic price model is the most widely used method. Developed by Rosen (1974), the hedonic modeling technique is based on the hypothesis that goods are valued for their many utility-bearing attributes, each of which has an implicit price. The technique is one of the workhorse models of urban economics and used frequently in the Hong Kong context (Mok *et al.*, 1995; So *et al.*, 1996; Tse and Love, 2000; Chau *et al.*, 2001). Generally, the relationship between the housing price (dependent variable) and its determinants (independent variables) is estimated using a regression model. This allows researchers to see whether a specific factor impacts property value, and by how much.

Hedonic models have been widely used to estimate the impacts of external amenities or disamenities on the price of housing, for example, high levels of airport noise or and air pollution were found to lead to a significant sales price discount (Mieszkowski and Saper, 1978; Brookshire *et al.*, 1982). One group of researchers has used a hedonic model to consider the property management services attribute, and they found it to impact price significantly (Hastings *et al.*, 2006). However, in spite of its widespread use, the hedonic model has a number of practical and some theoretical difficulties (Leishman, 2003). For example, it is data intensive, requiring several thousand observed housing transactions. Second, and more importantly, in order to assess the impact of attributes on property prices, there must be variation in the type of property an attribute is associated with. This is especially problematic for measuring the impact of property management services, as it is not the case that high-quality companies will manage low-cost properties.



### 3. Methodology: an experimental approach

In order to overcome the challenge of using a hedonic model to estimate the value of property management services, we use an experimental approach inspired by the work of researchers studying labor market discrimination (Bertrand and Mullainathan, 2004; Pager *et al.*, 2008). In order to test the prevalence of discrimination in labor markets, they created and applied to jobs with fictitious resumes that differed only by the name of the applicant, which they chose to be strongly identifiable as belonging to different racial and ethnic groups. By randomly choosing which name was placed on resumes sent out, they were able to see the difference in likelihood the applicant would be called for an interview.

We modify this approach to assess the implicit price of property management services for private residential properties. Based on market research we create a number of fictitious properties and for each we create a standard brochure for a unit. We then ask a large number of experts to estimate the value of these properties. We randomly vary the name of the company managing the property when surveying the experts. This approach not only gives us an unbiased estimate of the value of these different property management companies, it also enables us to investigate the changing importance of property management throughout the life cycle of a property. New residential properties are of higher quality and require less care thus are expected to benefit more from property management over time. Thus, the two main research questions we set out to answer are:

*RQ1.* Do property management services of different qualities impact property value?

*RQ2.* Do property management services of the same quality have different impacts on different grades of properties?

In order to test the two hypotheses, we must develop the two key independent variables; property management services of different qualities and different grades of properties. In both cases, the dependent variable is property value.

#### 3.1 *Measuring property management service quality*

In Hong Kong, the property management industry is regulated by a series of laws and ordinances and to some extent the basic provision of services is standardized. A number of institutions, such as the Hong Kong Quality Assurance Agency, the Federation of Hong Kong Industries, Hong Kong Productivity Council, and the Occupational Safety and Health Council have various certification programs and recognitions that attempt to measure the quality of property management service. Major areas are quality management systems, environmental protection, and occupational health and safety. We consider these parameters in choosing four companies that are representative of the range of possible property management service quality. Additionally, a major distinction in property management companies in Hong Kong is those that are owned by a real estate development company and of those that are only property management firms. We use this distinction as a further method of differentiating between company qualities.

We choose four real property management companies[2] as representative of four levels of quality and create one fictitious property management company as the control group. Table I presents the different characteristics of the four companies in

PM 32,3	Criteria	Property management			
		PMC-I	PMC-II	PMC-III	PMC-IV
216	Nature	Developer subsidiary	Agent	Developer subsidiary	Agent
	Reputation	High	High	Low	Low
	ISO certification	ISO 9001 ISO 10002 ISO 14001 ISO 18001 ISO 5001	ISO 9002 ISO 14001 ISO 18001	ISO 9002	Nil
	Industrial award (in 2011)	Hong Kong Eco-Business Awards Indoor Air Quality Certificate Business Superbrands Sing Tao's Excellent Services Brand Award	Hong Kong Environmental Excellence Awards Indoor Air Quality Certificate Power Smart Contest	Security Services Best Training Award Indoor Air Quality Certificate	Hong Kong Green Mark Certification Scheme
<b>Table I.</b> Formulation of property management services variable	Management portfolio	Comprehensive portfolio of various residential properties across the territory			
	<b>Note:</b>	PMC-V is a fictitious company thus of unknown, but presumably low, quality			

detail. Property Management Company I (PMC-I), is a wholly owned subsidiary of a well-established local real estate developer and is regarded as the market leader for its premium service. It has a series of ISO certifications and has won several recognitions in the industry. Property Management Company II (PMC-II) is solely a property management agency. It also has a number of ISO certifications and industry awards, though not as many as PMC-I. Property Management Company III (PMC-III) and Property Management Company IV (PMC-IV) are market players with standard levels of service provision. They have a moderate reputation and have strategically not sought to achieve standard certifications or industry recognitions. PMC-III is a subsidiary of a real estate developer whereas PMC-IV is not. The name and logo of a fifth PMC (PMC-V) was created by the authors as a fictitious control company.

All four real companies have large management portfolios and occupy substantial market share in spite of distinct business strategies. They are benchmarks of different levels of service quality in the market.

### 3.2 Measuring property grades

Three dimensions of property characteristics – location, property structure, and neighborhood – are used to generate fictitious properties of clearly different grades for valuation in the survey. In Hong Kong, where almost all properties are multi-unit buildings, location and age play a larger role in housing price than in other cities, and newer properties near the central business district are much more costly, whereas aging residential ones built in farther-flung areas are less expensive. After undertaking a survey of the market and literature on housing prices in Hong Kong (Mok *et al.*, 1995; So *et al.*, 1996; Tse and Love, 2000; Chau *et al.*, 2001) five fictitious residential properties of distinct grades were created considering location attributes such as distance to MTR and the city center, structural attributes such as age, area, layout, floor level,

orientation, and views, and neighborhood attributes such as proximity to amenities like a clubhouse or car park and whether the property is in an estate or not.

Table II presents a summary of the characteristics of the five grades of properties. The first one, Grand Garden, located in the mid-levels close to the center of Hong Kong Island is given the characteristics of a Grade A property. The second, Good View Terrace, is designed to be a Grade B property and located in Tsuen Wan an inner suburb of the New Territories. Sunrise Mansion, the Grade C property is located in a slightly more distance neighborhood, in Tseung Kwan O, the New Territories, and is 15 years old. The fourth property is located in Tuen Mun, New Territories, a very distant location. The fifth and oldest property at 25 years of age is called Trend Villas and located in Sham Shui Po, Kowloon; a fairly dilapidated part of the city.

The majority of the properties' attributes are identical so as to minimize the influence from factors other than property grades. According to the trends of real estate development in Hong Kong, properties 15 years old and younger are estate-type with a private clubhouse and car park. The size of the properties are all set at 558 square feet – a small to medium-size premises but the most common property size in the city. All units are on the 18th floor and orientated facing south – an important property attribute from the viewpoint of Chinese *Feng-shui*[3]. Unit layouts, the walking distance from MTR, and nearby facilities are set as identical for the five premises. Unit layouts are presented with floor plans and photos of different rooms and the view in the brochures described below.

### 3.3 Creating the survey instrument


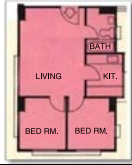

After developing the five different quality levels of property management services and five property grades, we combine them to make 25 possible residential premises. We create 25 brochures that show all the property attributes discussed above as well as the property management company's name and logo. Figure 1 is an example of one of the brochures.

Variable	A	B	Property grade		
			C	D	E
Property name	Grand Garden	Good View Terrace	Sunrise Mansion	Pleasant Court	Trend Villas
Location	Mid-levels, HK Island	Tsuen Wan, New Territories	Tseung Kwan O, New Territories	Tuen Mun, New Territories	Sham Shui Po, Kowloon
Age (years)	5	10	15	20	25
Type	Estate	Estate	Estate	Non-estate	Non-estate
Private clubhouse	Available	Available	Available	Not available	Not available
Car park	Available	Available	Available	Not available	Not available
Area-GFA			558 Sq. Ft.		
Floor level			18/F		
Orientation			Facing south		
Walking distance from MTR			5-10 minutes		
Nearby facilities		School, super market, public sports centre			
Layout		Drawings of floor plan			
Interior design	Real photos (including one living room, one dining room, two bedrooms, one kitchen, and one toilet)				

**Table II.**  
Formulation of property grading variable

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Property Information			
Property Name	Trend Villas		
Location	Sham Shui Po, Kowloon		
Property Age	25 years		
Property Type	Non-Estate-type (without private clubhouse and car park)		
Management	Far Well Management Services Company (PMC-V)		
Walking Distance	5-10 minutes		
Nearby Facilities	School, Super Market, Public Sports Centre		
Premise Particulars			
Floor	18 <sup>th</sup> Floor	Layout	
Area	558 Sq. Ft.		
Orientation	South		
Design			

**Figure 1.**  
Example of Brochure

We asked each survey respondent to review five different brochures corresponding to one of each property grade with a randomly determined management company and estimate a price for the premise based on the given information. The respondents were also asked to answer some questions about their age, education, monthly household income, and property ownership. An additional effort made to limit bias in the survey was to consider that, given the ordinal nature of the different property grades and property management company qualities, the sequence of the five premises presented to one respondent was also randomly ordered.

**4. Data collection and analysis**

Data were collected through a survey carried out from February 15, 2012, through March 30, 2012. Participants were either property sales agents or property management professionals from eight companies, including two real estate

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development firms, two property sales agencies, and four property management companies. These real estate practitioners are experts well suited to value properties. To avoid conflicts of interest, no overlap was allowed between the companies selected in the experiment and the employers of participants. The surveys were applied either via face-to-face interview or e-mail. 250 participants were randomly assigned one set of five brochures out of the 120 possible combinations.

Of the 250 surveys sent out, a total of 162 responses were successfully collected, among which 51 cases were carried out by face-to-face interview and the remaining 111 cases via e-mail. The responses resulted in the 25 premises being priced 810 times altogether or an average of about 32 times each. The mean estimated value of the premises is 3.3 million Hong Kong Dollars (HKD)[4], with a standard deviation of 1.7 million. As expected, the highest price – 7.5 million HKD – is for a Grade A property managed by PMC-I while the lowest price – 1.6 million HKD – is for a Grade E property managed by PMC-V, the fictitious company.

A matrix of estimated prices for the 25 premises is presented in Table III, including the mean, standard deviation, and sample size. For example, the cell horizontally belonged to Grade A and vertically managed by PMC-I stands for P-1 category, which has a mean estimated value of 6.5 million HKD and standard deviation of 0.4 million with the sample size of 33. In addition, the means and standard deviations of estimated values are summarized for each property grade and company.

When comparing estimates values by company, properties managed by higher quality companies have higher prices property value. The fact that the estimated value of properties managed by PMC-V is always ranked last thus indicates the four real companies to some extent play a role in the life span of the residential building and contribute to the property value exceeding the basic level. Particularly, if to assess them based on ISO qualifications and industrial recognition, such ranking is actually identical with the respective means of estimated property value.

The second hypothesis of the project is that property management service become more important for lower property grades. For better comparison, we divide mean prices by respective standard deviations for each property grade to see how the property value deviates under different qualities of management. These estimates are presented in Table IV. There is a clear trend of increasing price variance as the

All Premises	PMC-I	PMC-II	PMC-III	PMC-IV	PMC-V	By grade
	6.5	6.4	6.4	6.2	6.0	6.3
Mid-level (5 years)	(0.4)	(0.5)	(0.5)	(0.4)	(0.5)	(0.5)
	3.2	3.1	3.1	3.0	2.9	3.1
Tsuen Wan (10 years)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.3)
	3.1	2.9	2.8	2.8	2.7	2.9
TKO (15 years)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.3)
	2.5	2.4	2.2	2.1	2.0	2.3
Tuen Mun (20 years)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.3)
	2.3	2.2	2.0	2.0	1.9	2.1
Sham Shui Po	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.3)
	3.6	3.4	3.3	2.5	2.4	3.3
By company	(1.6)	(1.6)	(1.6)	(1.6)	(1.5)	(1.6)

**Notes:** Value is reported in millions of HKD. Standard deviations are in parentheses

**Table III.**  
Matrix of means and  
standard deviations of  
estimated property value

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grade of the property declines. Newer properties in good locations derive more of their value from location, structural attributes and neighborhood attributes, and property management services are less important. However, aging properties inevitably depreciate over time and for those located in less desirable districts, security and sanitary issues are of great concern. People seem to be willing to pay more for quality management.

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*4.1 Hypothesis testing*

Due to the experimental design of the survey, we are able to employ a simple *t*-test of difference in means in order to test the two hypotheses statistically. The first hypothesis is that different qualities of property management impact the value of an identical property. Table V presents the results of *t*-tests for each possible comparison.

**Table IV.**  
Comparison of the variance of estimated value

Property grade	A	B	C	D	E
Mean value	6.3	3.1	2.9	2.3	2.1
SD	0.5	0.3	0.2	0.3	0.3
Degree of variance	7.9	8.2	8.7	11.6	12.3

**Note:** Value is reported in millions of HKD

**Table V.**  
Pairwise comparisons of value of property management companies by property grade

	PMC-I	Percent difference in estimated property value			PMC-IV
		PMC-II	PMC-III		
<i>Grade A properties</i>					
PMC-II	2.3				
PMC-III	1.9	-0.4			
PMC-IV	5.1	2.7	3.1		
PMC-V	8.3*	5.8*	6.3*		3.0
<i>Grade B properties</i>					
PMC-II	3.0				
PMC-III	6.0*	2.9			
PMC-IV	8.0*	4.9*	1.9		
PMC-V	11.5*	8.3*	5.3*		3.3
<i>Grade C properties</i>					
PMC-II	6.5*				
PMC-III	9.1*	2.5			
PMC-IV	11.2*	4.5*	1.9		
PMC-V	14.8*	7.8*	5.2*		3.23
<i>Grade D properties</i>					
PMC-II	4.6*				
PMC-III	14.0*	9.0*			
PMC-IV	18.7*	13.5*	4.1		
PMC-V	22.2*	16.8*	7.2*		3.0
<i>Grade E properties</i>					
PMC-II	7.7*				
PMC-III	14.0*	5.9*			
PMC-IV	18.8*	10.2*	5.1*		
PMC-V	24.8*	15.8*	9.4*		4.1

**Note:** \*Difference of means is statistically significant at the 0.05 confidence level

For each property grade, we compare the difference in the estimated value of each of the five property management companies. We report the percent difference between each pair and whether this difference is statistically significant.

The first null hypothesis is therefore rejected partially. For properties of higher grade, i.e. newly built in a desirable location, the difference in values under different PMCs are mostly not statistically significant. For example, for Grade A properties, the value of services provided by the four real PMCs is statistically different from that of the fictitious company PMC-V, the four companies are not different from one another. However, for lower grades of property, there is a statistically significant difference between the value of properties managed by difference companies. The differences are large in many cases. The value of the middle grade of properties, Grade C, is up to 15 percent higher simply due to the quality of the property management company and for the lowest grade of property the value is up to 25 percent higher.

### 5. Sensitivity analysis: who values property management?

The data from the experimental survey can also tell us interesting information about the variation in the importance of property management among industry experts. In the survey, we asked five demographic and socio-economic questions of respondents; age, monthly household income, education level, and housing tenure. Table VI presents the difference in respondents' estimates of the value of properties and the results of *t*-tests used to test the significance of these differences. We expect older, richer, more highly educated homeowners to value property management more as they will likely have benefited more from these services over their lifetime.

Surprisingly, education and income do not significantly alter expert valuation of property management services. However, being a home owner does, as does being above the age of 34. Property owners better understand the importance of property management services and are willing to pay more for them, roughly 5 percent more. Those older than 34 also value property management services significantly more than younger people do, but only by about 3 percent. One noteworthy result is the large value of Grade C properties by owners; 8.1 million HKD. This is likely due to the age (about 15 years old) and other characteristics of these properties that make them the most common and desirable type of entry-level dwelling for middle-income people.

### 6. Conclusion

This paper uses a novel approach in order to determine the importance of property management services for the value of private residential properties in Hong Kong. We conduct an experiment similar to those that have been employed to test the importance of racial segregation in labor markets, in order to estimate the value of property

	Owner	Over age 34	High income <sup>a</sup>	High education <sup>b</sup>
Grade B	5.7*	3.3*	2.4	-0.5
Grade C	8.1*	3.3*	2.7	0.2
Grade D	4.5*	2.7	2.3	0.7
Grade E	4.0*	2.4	2.1	0.1
Average	5.4*	2.9*	2.5	0.2

**Notes:** <sup>a</sup>Median HH income > 38,000 HKD per month; <sup>b</sup>university degree or higher. \*Difference of means is statistically significant at 0.05 confidence level

**Table VI.**  
Difference of mean  
values by socioeconomic  
and demographic  
characteristics of  
respondents

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management services. Although hedonic price models have been used in this effort previously, they are limited in testing hypotheses about the value of property management, especially for properties of differing levels of quality, because higher quality PMCs only manage high-quality properties thus models suffer from collinearity. The experimental approach creates a new technique for future researches in examining property markets.

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Results show that property management does add value, especially to older and more dilapidated properties. These results are encouraging for property management professionals they show that criteria such as achievement of ISO certifications and industry awards matters. They also imply that there is room for the expansion of the business. Apparently, there is money to be made by high-quality companies providing services for lower quality buildings or for lower quality companies to increase their profile by improving services.

### Notes

1. Severe acute respiratory syndrome, a disease that spread first through residents of a single residential estate and later throughout the city (Wong, 2004).
2. For the purposes of confidentiality we do not name the companies used in the study here.
3. *Feng-shui* is a traditional Chinese practice often applied to the orientation of buildings and their layout in order to increase their positive energy.
4. The Hong Kong dollar is pegged to the US dollar with an exchange rate of 7.78 to one.

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