



**EAST MIDTOWN LANDMARK TDR
CONTRIBUTION RATE MARKET STUDY**

FOR:

New York City Economic Development Corporation
110 William Street
New York, NY 10038

BY:

Landauer Valuation & Advisory
A division of Newmark Grubb Knight Frank
125 Park Avenue
New York, New York 10017



December 22, 2016

New York City Economic Development Corporation
110 William Street
New York, NY 10038

Attn: Ms. Hester Muis
Senior Vice President

Re: East Midtown Landmark TDR Contribution Rate Market Study

Dear Ms. Muis:

In accordance with your request, we have prepared a market study, as of December 31, 2015, of land sales and excess transferrable development rights (TDR) sales within the East Midtown Study Area. The study area is an approximate 73-block district bounded to the north by 57th Street, to the south by 39th Street, to the east by 150 feet east of Fifth Avenue, and to the west by 250 feet east of Third Avenue (see map of the study area in the attached report).

The purpose of this market study is to assist the NYC Economic Development Corporation, acting on behalf of the Department of City Planning (DCP), to determine an appropriate contribution rate into a proposed City-controlled public realm improvement fund from the sale of development rights of landmarked properties pursuant to a proposed re-zoning of the East Midtown Study Area. The market study is also intended to assist the DCP establish a minimum sale price of TDRs that will be used for the purpose of calculating the required contributions to the public realm improvement fund.

The East Midtown office district is one of the largest job centers in New York City and, arguably, the best business address in the world. It contains more than 70 million square feet of office space and hosts more than 250,000 jobs and numerous Fortune 500 Companies. However, the long-term competitiveness of this office district is threatened by:

- An aging office building stock
- Limited recent office development
- Pedestrian Network Challenges
- Challenges of current zoning

“Mayor deBlasio established the East Midtown Steering Committee in May 2014 to develop a new planning framework for the future that will inform re-zoning, capital commitments, funding mechanisms and other policy decisions affecting East Midtown’s commercial core.”¹ The

¹ Website of Gale Brewer, Manhattan Borough President. http://manhattanbp.nyc.gov/html/land_use/east.midtown-report.shtml



Ms. Hester Muis
December 22, 2016
Page 2

principle land use and density recommendations of the Steering Committee include the following:^{2 3}

“Sites in East Midtown should be entitled to achieve increasingly higher maximum Floor Area Ratios (FARs) depending on the number of site-specific criteria that are present. The criteria fall into two categories: (1) connectivity or immediate proximity to transit; and (2) extra air and light as a result of a variety of factors such as frontage on wide streets and avenues.

Additional FAR should be earned – first by making specified transit improvements (especially to the extent that they are set forth in the Zoning Resolution pursuant to an area-wide plan), and then either through plaza bonuses and/or through air rights transfers from designated Landmarks in East Midtown (“Landmark TDR”).

Designated Landmarks in the area should be permitted to transfer their existing unused air rights throughout the entire district.

Landmark TDR should be permitted as-of-right under the Zoning Resolution, and a significant percentage of the sale of each transfer would be made as a contribution into an “Improvement Fund” for wide-area public realm improvements, with a per square foot minimum contribution.

Overbuilt sites (where FAR exceeds that now allowed by zoning) should have the ability to build back to their existing FAR as-of-right without transfers or bonuses, if they contribute into the Improvement Fund at a prescribed rate.

All of the above should be as-of-right if done in accordance with prior plans approved under the Uniform Land Use Review Procedure (ULURP) addressing both transit and the public realm.

To encourage predominantly office buildings through these new mechanisms, sites should be subject to a hotel Special Permit, and a maximum amount of permitted residential floor area in connection with both new development and reuse of older office buildings.

New development taking advantage of the added FAR should also be required to meet a higher environmental standard.”

² “East Midtown Steering Committee Final Report,” October, 2015, p.2

³ We have used a considerable number of quotations from the “East Midtown Steering Committee Final Report, October 2015”, which we footnoted, to describe the recommendations of the East Midtown Steering Committee.



Ms. Hester Muis
December 22, 2016
Page 2

This report focuses on the proposal to allow landmarked buildings to transfer their excess development rights to any receiving site within the proposed re-zoning area on an as-of-right basis. Our market study consists of an analysis of commercial land sales and transferrable development rights that were transacted within and outside the Study Area between 2005 and 2015. All sale prices on a per-square-foot-of-developable-area basis were adjusted to 2015 land market conditions. The sales were categorized by use (hotel and office) and submarket.

Respectfully submitted
Landauer Valuation & Advisory,

A handwritten signature in blue ink that reads "Robert H. Mayer". The signature is written in a cursive style.

Robert H. Mayer, MAI
Managing Director
NYS Certification # 46000020549



TABLE OF CONTENTS

SUBJECT OF THE MARKET STUDY 1
PURPOSE AND INTENDED USE OF THE MARKET STUDY 1
CLIENT AND INTENDED USER OF THE MARKET STUDY 1
EFFECTIVE DATE OF MARKET STUDY 1
DATE OF INSPECTION..... 1
SCOPE OF WORK 1
OVERVIEW OF THE PROPOSED EAST MIDTOWN REZONING SUBDISTRICT 3
PROPOSED 2012 EAST MIDTOWN SUBDISTRICT REZONING AMENDMENT 6
THE 2015 STEERING COMMITTEE PROPOSAL..... 7
METHODOLOGY 9
LAND SALES..... 9
TDR SALES 12
SUMMARY 13

ADDENDA 14
EXHIBIT 1 - COMMERCIAL (OFFICE AND HOTEL) LAND SALES 15
EXHIBIT 2 - OFFICE LAND SALES 18
EXHIBIT 3 - HOTEL LAND SALES..... 20
EXHIBIT 4 - TDR SALES 23
EXHIBIT 5 –PROFESSIONAL QUALIFICATIONS 25



SUBJECT OF THE MARKET STUDY

The subject of this market study is the East Midtown Study Area. The Study Area is an approximate 73-block district bounded to the north by 57th Street, to the south by 39th Street, to the east by 150 feet east of Fifth Avenue, and to the west by 250 feet east of Third Avenue (see map of the Study Area on the next page).

PURPOSE AND INTENDED USE OF THE MARKET STUDY

The purpose of this market study is to assist the NYC Economic Development Corporation, acting on behalf of the Department of City Planning, to determine an appropriate contribution rate into a proposed City-controlled public realm improvement fund from the sale of development rights of landmarked properties pursuant to a proposed re-zoning of the East Midtown Study Area. The market study is also intended to assist the DCP establish a minimum sale price of TDRs that will be used for the purpose calculating the required contributions to the public realm improvement fund.

CLIENT AND INTENDED USER OF THE MARKET STUDY

New York City Economic Development Corporation on behalf of the New York City Department of City Planning.

EFFECTIVE DATE OF MARKET STUDY

This market study is based on market conditions existing as of December 31, 2015.

DATE OF INSPECTION

The appraiser did not inspect every block of the subject East Midtown Subdistrict Study Area for this report, but he is familiar with the Study Area and has viewed most of it during the last year.

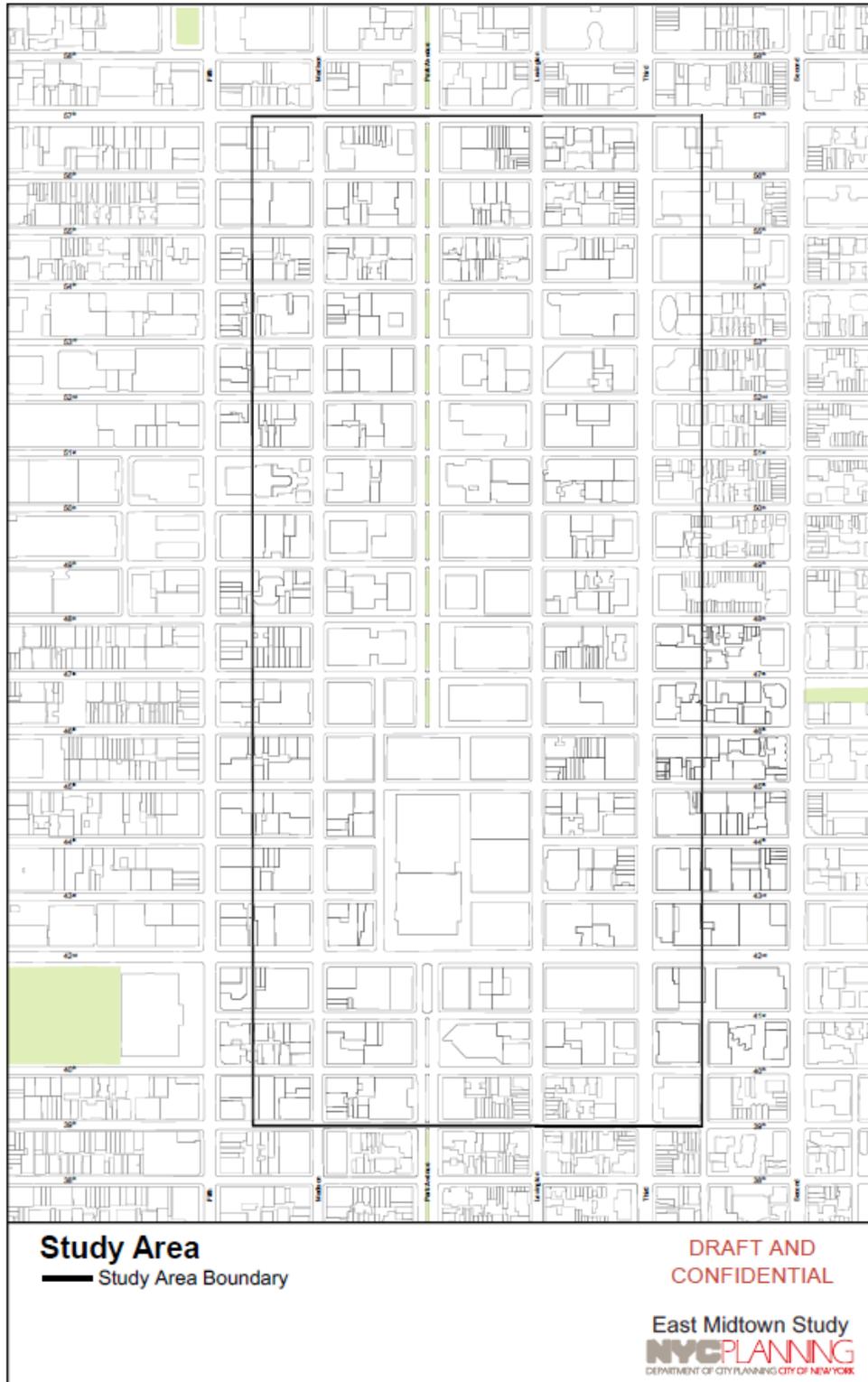
SCOPE OF WORK

The Scope of Work of this market study includes:

- Visually inspecting the blocks within the study area;
- Reviewing the “East Midtown Steering Committee Final Report,” dated October 2015⁴;
- Collecting and analyzing 11 years of land sales data for commercial (office and hotel) development from within and surrounding the study area;
- Collecting and analyzing 11 years of sales of TDRs for commercial (office and hotel) use from within and surrounding the study area;
- Verifying market data directly with buyers, sellers, brokers, and other sources (ACRIS, CoStar and others) regarded as reliable;
- Adjusting sale prices to 2015 dollars;
- Presenting land sales and TDR sales with their sale prices adjusted to 2015 dollars.

Other steps taken to complete this assignment are described in individual sections of the report.

⁴ Committee Co-Chairs: Gale A. Brewer, Manhattan Borough President, and Daniel Garodnick, City Council Member, District 4



Source: Department of City Planning City of New York



EAST MIDTOWN MARKET OVERVIEW

The East Midtown Subdistrict is one of the largest job centers in New York City and, arguably, the best business address in the world. It contains more than 70 million square feet of office space, more than 200,000 jobs and numerous Fortune 500 Companies.

The Steering Committee's Study Area is slightly larger than the study area specified by the client for this report. The Committee's Study Area extends to Fifth Avenue on the west and to Second Avenue on the east, while this report's study area ends midblock between Fifth Avenue and Madison Avenue on the west and between Third Avenue and Second Avenue on the east. The Steering Committee's Study Area encompasses 90 blocks. Its land area, excluding streets, is 8.2 million square feet, or approximately 190 acres. There are 830 separate tax lots containing a total of 118 million square feet of building floor area. This yields a current overall FAR of approximately 14.3, which underscores the fact that East Midtown is largely built-out under current zoning. The Committee's Study Area contains 87 million square feet (74 percent) of office space, 6 million square feet (5 percent) of retail space and 10 million square feet (8 percent) of residential space with approximately 12,000 units. Office and other commercial spaces predominate, occupying over 90 percent of all floor area in the district.

The East Midtown Study Area encompasses all or parts of the following office submarkets: Eastside, Grand Central, Park Avenue and the Plaza District. The total office inventory of these four submarkets was approximately 124 million square feet as of the fourth quarter of 2015. Average asking rents in the four submarkets ranged from \$69.67 per square foot in the Eastside submarket to \$114.08 in the Plaza submarket, at the upper end of the range of asking rents in all of Midtown, whose average asking rent was \$80.97 per square foot.⁵

While the current office market indicators are relatively strong, the long-term competitiveness of this office district is threatened by:

- An aging office building stock
- Limited recent office development
- Pedestrian Network Challenges
- Challenges of current zoning
- Competitor cities doing more to modernize their office cores
- And perhaps most significantly, the development of Hudson Yards on Manhattan's far West Side, whose office inventory will be state of the art.

The focal point of the East Midtown Study Area is Grand Central Terminal, one of the City's major transportation hubs and famous civic spaces. Located around the Terminal and to the north, are some of the city's most iconic office buildings, such as Lever House and the Chrysler Building lining the major avenues - Park, Madison and Lexington – along with a mix of other landmarks, civic structures, office buildings and hotels.

⁵ Source of Midtown office statistics: "Research, Midtown Manhattan 4Q15 Office Market," Published by Newmark Grubb Knight Frank Research



The area's transportation network is currently being expanded through two major public infrastructure projects: East Side Access and the Second Avenue subway. East Side Access will enable Long Island commuters one-seat access to East Midtown through the construction of a new below-grade station adjacent to Grand Central (expected completion in 2020). Additionally, the Second Avenue subway - whose first phase (from 63rd Street to 96th Street) is currently under construction - is expected to alleviate congestion on the Lexington Avenue subway line when construction is completed in 2017.

The East Midtown Study Area contains approximately 400 buildings, of which more than 300 are over 50 years old. With much of the area's existing office stock aging, the area has also seen little recent development of new office stock which could act as a replacement. Even compared to recent decades, "new construction has lagged in East Midtown. While 35 office buildings were built in the 1980s, only seven were built in the past ten years."⁶

"Prime tenants prefer large, unencumbered floorplates of at least 15,000 square feet and preferably 25,000 square feet. Sites that can accommodate these footprints are both expensive and hard to come by given the district's built-out character: East Midtown has an overall built Floor Area Ratio (FAR) of 14.3 with prevailing base zoning density of 15 on the avenues and 12 FAR on mid-block side streets. It is more difficult to build the high-prestige towers that corporate headquarters and other large anchor tenants prefer compared to opportunities in West Midtown and Hudson Yards, where the as-of-right FARs are significantly higher and/or available sites are larger."⁷

Given the age of the office stock, many buildings have outdated features, such as low floor-to-ceiling heights and interior columns that cannot be corrected through renovation. Increasingly unable to meet modern tenant needs through renovation for up-to-date technology infrastructure and other amenities, these older buildings are becoming increasingly unattractive to the highest rent-paying tenants and, therefore, susceptible to conversion to hotel and residential uses that is reducing the Class A office stock. Examples of the area's outdated office buildings that have converted to other uses include the Library Hotel at 299 Madison Avenue and the Marriott Courtyard at 866 Third Avenue (hotels), as well as the 5 condo at 5 East 44th Street (residential).

Given the area's concentration of existing regional rail infrastructure and the current expansion of this network already underway, a pronounced trend in this direction would not be desirable from the City's economic development perspective.

With quite a few buildings in East Midtown built before 1961 (when floor area ratios were first instituted), the area contains approximately 2.3 million square feet more than what is permitted under today's zoning. While many of the older buildings contain outdated features, the lower amount of square footage that could be constructed in a new building on the site creates a large disincentive for new construction.

⁶ East Midtown Steering Committee Final Report, October 2015, p. 22.

⁷ East Midtown Steering Committee Final Report, October 2015, p. 22.



The area also contains few remaining development sites where built FAR is less than half the permitted base FAR. Of the possible development sites that do exist, few would accommodate a major new office building. Current plans for development in the area bear this out. Of the sites currently cleared for new development, none are planned for office construction, as the sites are considered too small to hold a new office building. The one major new Class A office development that is going forward is One Vanderbilt, occupying the full block between East 42nd Street and East 43rd Street and between Madison Avenue and Vanderbilt Avenue. It was made possible by the creation of a new special zoning subdistrict that will require the payment of \$250 million into a public realm capital improvement fund. Another major Class A office development, 425 Park Avenue, would retain 25 percent of the floor area of the existing building and rebuild the remainder, in order to retain its current density.

While boasting some of the City's most iconic public and civic spaces, the area faces a number of challenges to creating an above- and below-grade pedestrian network fully matching the area's role as one of the premier office districts in the world.

The Grand Central subway station - one of the busiest in the entire subway system, has numerous pedestrian circulation issues and, due to platform crowding, long dwell times for the Lexington line which make the station one of the bottlenecks of the subway system. Additional issues affecting transfers and platform access exist in the subway stations to the north.

Above-grade, the sidewalks of Madison and Lexington Avenues are quite narrow (12-13 feet wide) given the scale of pedestrian use they handle.

The area has a limited selection of publicly-accessible open spaces. Further, while the area contains a number of privately-owned public spaces (POPS), it contains no significant publicly-controlled open spaces unlike other commercial areas of the City.

Additionally, Vanderbilt Avenue, once the major taxi access point to Grand Central Terminal has seen its use drop as taxis have been moved away from the building due to security concerns. The street does not match its iconic location next to the Terminal in terms of public amenity and prestige.

The City is concerned that existing zoning regulations are not appropriate for the area's current needs and may impede the area's continued status as a premier office district.

In 1982, the City concluded that development in Midtown should be encouraged to the west beyond Sixth Avenue and around Times Square, and created the Special Midtown District. As part of this project, East Midtown was proposed as an area for 'Stabilization' while the area west of Sixth Avenue was marked for 'Growth'. To accomplish this many of the midblock areas of the East Midtown area were downzoned from 15.0 to 12.0 FAR. Additionally, the area around Lexington Avenue in the mid-50s was rezoned to a mix of 10.0 and 12.0 FAR.

The creation of the Grand Central Subdistrict of the Special Midtown District in 1992 was intended to encourage the transfer of development rights from Grand Central and other area landmarks to surrounding development sites and the creation of an improved pedestrian realm in



the area. The maximum permitted FAR by using the transfer is 21.6 FAR but requires a zoning special permit from the City Planning Commission that finds that a significant pedestrian improvement is being provided as part of the project. Only one building (383 Madison Avenue) has taken advantage of this provision since its adoption, and more than 1.2 million square feet of development rights remains unused on the Grand Central lot. (Additionally, 1.0 FAR transfers are permitted through a certification process in the Core and a larger area. The provision has been used three times but because of the small size of the transfer, has not significantly diminished the supply of unused Grand Central development rights.) Of concern is the complexity of the process required to achieve the full 21.6 maximum FAR, which includes lengthy case-by-case negotiation with the MTA over the scope of the pedestrian network improvements. Additionally, the limited size of the subdistrict's core affords limited transfer opportunities to possible development sites.

Three other methods exist to obtain higher floor area ratios. First, subway station improvement bonuses are permitted for sites directly adjacent to subway entrances (up to 20% more than the permitted base FAR) through the provision of an improvement to the subway network. Existing City landmarks can transfer their remaining development rights to sites that are adjacent or across streets, with no limit to the FAR permitted on the receiving site. Both of these bonuses are only permitted through special permits granted by the City Planning Commission. Finally, in the portions of the area not within the Grand Central Subdistrict, small bonuses of 1.0 FAR are permitted through the provision of public plazas.

At present, the City believes these bonus mechanisms do not provide enough incentive to replace existing outdated buildings with new construction. Most of the existing mechanisms require complex review procedures and negotiations which limit the desire of property owners to undertake them. The problem is exacerbated for those buildings built before 1961 which do not comply with today's current permitted FAR, since they cannot reconstruct and maintain their existing floor area, except by retaining 25 percent of the existing structure, a result which does not allow for optimal new construction.

In comparison to the office cores of London, Tokyo and Chicago, East Midtown is not performing well with regard to the provision of up-to-date office space. Because many of these competitor cities have made it a major policy focus to encourage the replacement of outdated office space with new office construction in their traditional office cores, the office buildings in these competitor cities are significantly less old on average than in East Midtown.

In comparison to these places, where the replaced outdated office buildings are typically less than 10 to 15 stories, East Midtown's existing high density makes replacement especially challenging.

PROPOSED 2012 EAST MIDTOWN SUBDISTRICT REZONING AMENDMENT

To address many of the issues regarding commercial development in the East Midtown area, the Bloomberg administration proposed a zoning amendment in 2012 to establish an East Midtown Subdistrict (the "Subdistrict") within the Special Midtown District. The proposal was ultimately rejected by the City Council.



The proposed zoning amendment introduced two as-of-right zoning mechanisms to permit increases above the base FAR for Qualifying Sites within the Subdistrict with full avenue frontage, a minimum site size of 25,000 square feet, and that provided all their floor area as commercial use. The two zoning mechanisms are:

1. District Improvement Bonus (DIB): Increases in FAR above the as-of-right maximum through contribution to a fund for the enhancement of area-wide pedestrian network improvements. The additional floor area would be granted by chair certification similar to the existing Hudson Yards District Improvement Bonus.
2. Landmark Transfer: Increases in FAR above the as-of-right maximum in the Grand Central area through floor area transfers from landmark buildings. The additional floor area would also be granted by chair certification.

One of the main reasons that the Bloomberg plan was rejected is that the City would sell air rights at a fixed price per square foot through the DIB mechanism. The owners of the district's landmarks felt that the City would be competing with them unfairly by pricing the DIBs below market. The 2015 Steering Committee's proposal addresses this issue of the Bloomberg plan as well as others.

THE 2015 STEERING COMMITTEE PROPOSAL

The principal recommendations of the Committee's proposal are summarized in the transmittal letter of this report. The recommendations regarding the transfer of TDRs are discussed in this section.

The Committee's report points out that "East Midtown provides a particular opportunity to align preservation and development interests. After deducting what is built from what is allowed under zoning, there are approximately 3.5 million square feet of unused development rights associated with 19 of the buildings designated as Landmarks by the Landmarks Preservation Commission (LPC). The district's potential Landmarks yield another 350,000 square feet of unused development rights associated with 12 buildings, creating a Landmark TDR pool of nearly four million square feet."⁸ The Landmarks that hold the huge majority of unused development rights available for transfer are: Grand Central Terminal, Saint Patrick's Cathedral, St. Bartholomew's Church, Lever House and Central Synagogue.

TDRs may be transferred to an adjacent property that has 10 feet or more of common boundary. "Under City regulations, designated Landmarks can also transfer their excess development rights across a street or an intersection subject to an LPC-approved plan for the designated Landmark's long-term maintenance."⁹ "Within the East Midtown Study Area, almost 90 percent of the available unused FAR from designated Landmarks has nowhere to go due to surrounding development."⁹ To remedy this situation, the Steering Committee recommended that, "All

⁸ Ibid, p.29.



designated Landmarks with unused development rights in East Midtown should be able to transfer these rights to receiving sites of any size throughout the district.”⁹ (The 2012 Bloomberg plan set a minimum size for the receiving site.)

“Use of Landmark TDRs should be as-of-right in East Midtown, conditioned only on a restoration and long-term maintenance plan of the sending site approved by the LPC.” The current requirement to obtain a Special Permit discourages Landmark TDR transfers, even to adjacent sites.

“All transfers of Landmark TDR should be subject to a contribution to a fund dedicated to the district-wide improvement of the public realm of East Midtown.”¹⁰ This provision overcomes the objection of the previous proposal where the City sold the air rights at a fixed price. Under this proposal, the owners of the landmarked granting site and the developer’s receiving site will negotiate the price of the air rights. The City will fund the district-wide public realm improvement fund by collecting a percentage (20% to 40% was estimated by the Committee) of the sale price. One of the purposes of this report’s analysis of land and TDR sale prices is to assist the Economic Development Corporation to recommend the percentage.

The Steering Committee Report justifies its recommendation for as-of-right TDR transfers coupled with a contribution to a Public Realm Capital Improvement Fund as follows: “The current Special Permit requirement (under Zoning Resolution Section 74-79) is largely justified by the need to ensure that immediate impacts of the density transfer are addressed on the micro-level. The proposed regime is for as-of-right transfers with the generation of Improvement Fund revenue to address impacts by improving the public realm of the entire district in conformance with an overall Concept Plan. Without an ample Improvement Fund, Landmark TDR would logically need to be by Special Permit to address its impacts. It would thus be subject to the delay, uncertainties, and extra costs associated with the Special Permit process, greatly reducing the demand for and value of Landmark TDRs – perhaps as much as, if not more than, the set-aside for an Improvement Fund.”¹⁰ The Committee defends the size of the contribution to the Improvement Fund by saying that, “the designated Landmark owners would be granted a rarely exercised privilege (i.e. to date only in connection with the Theater District and the High Line) that would generate millions of square feet of development in an area that can accommodate that additional development only if significant improvements are carried out. The Steering Committee’s other Earned FAR categories are similarly constructed, as they are tied to improvements to transit and above ground public realm.”¹¹

⁹ Ibid, p. 30.
¹⁰ Ibid, p. 31.



METHODOLOGY

For this analysis, we have researched the commercial land and TDR sales that were transacted within the East Midtown Study Area between 2005 and 2015. We segregated the sales based on the planned uses (office or hotel) of the development site, in the case of the land sales, or the receiving site, in the case of TDR sales. Because of the relatively small number of sales within the Study Area, we expanded our research to include a separate analysis of commercial land sales within all of the Special Midtown Zoning District and commercial TDR sales throughout Manhattan, below 59th Street.

We adjusted all sale prices to 2015 dollars based on our estimate of the growth of land prices during the study period. The following table summarizes the estimated monthly increase in land prices during the 2005-to-2015 study period and the cumulative adjustments.

Adjustments for Changes in Market Conditions from 2005 to 2015

	No. of Months	Adjustment/Month	Cumulative Adjustment
1/05-12/05	12	1.5%	99.5%
1/06-8/07	32	1.0%	81.5%
9/07-8/08	12	0.5%	49.5%
9/08	1	-30.0%	43.5%
10/08-6/10	21	0.0%	73.5%
7/10-12/12	30	0.5%	73.5%
1/13-6/13	6	1.0%	58.5%
7/13-12/13	6	1.5%	52.5%
1/14-9/15	21	2.0%	43.5%
10/15-12/15	3	0.5%	1.5%

Many of the land sales were sites that contained building improvements that were demolished after the sale. Those sales were adjusted upward to account for the cost of demolition at the rate of between \$15 and \$25 per square foot of building area in order to approximate the buyer’s cost to obtain a vacant, unimproved development site. We tracked and adjusted to 2015 dollars both land sales and TDR sales during the study period.

LAND SALES

All Commercial Land Sales

The following table is a summary by year of the commercial sales that were transacted from 2005 to 2015 within the Study Area and in Manhattan outside the Study Area. With only 12 commercial land sales that occurred within the Study Area during that period, we felt that the additional 105 commercial sales in the expanded area would provide a fuller picture of commercial land values during the 11-year period. The overall weighted average sale price per square foot was higher within the Study Area (\$717 per square foot) than outside the Study Area (\$685 per square foot). The lowest land sales prices were \$407 per square foot within the Study Area and \$228 per square foot outside the Study Area. The table is followed by a graphic illustration of the annual trends of the two data sets. Although on a year-to-year basis, prices



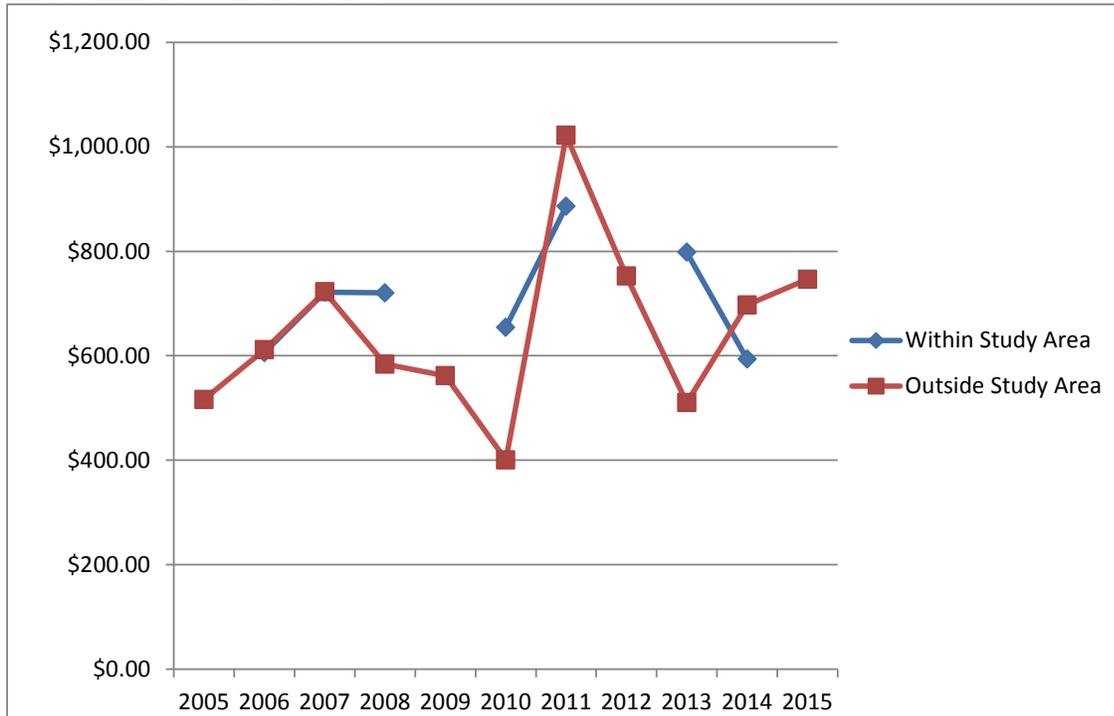
outside the Study Area varied greatly, the general trend over the 11-year period was upward. The number of land sales within the Study Area was too small to indicate a meaningful trend, but in general the sale prices fell within the range of the sale prices outside the Study Area. A detailed list of the land sale transactions is presented in Exhibit 1 of the Addenda.

All Commercial (Office and Hotel) Land Sales

Commercial Land Sales Within Study Area				Commercial Land Sales Outside Study Area		
SF FAR	Sale Price In 2015 Dollars*	Sale Price per SF In 2015 Dollars		SF FAR	Sale Price In 2015 Dollars*	Sale Price per SF In 2015 Dollars
			2005	197,613	\$102,036,274	\$516.34
218,888	\$132,655,511	\$606.04	2006	1,377,985	\$842,372,027	\$611.31
181,872	\$131,309,333	\$721.99	2007	1,475,828	\$1,066,194,965	\$722.44
50,210	\$36,168,171	\$720.34	2008	789,242	\$460,797,448	\$583.85
			2009	75,380	\$42,332,500	\$561.59
166,122	\$108,707,137	\$654.38	2010	94,063	\$37,691,250	\$400.70
213,990	\$189,671,158	\$886.36	2011	516,318	\$527,713,413	\$1,022.07
			2012	2,083,930	\$1,568,866,129	\$752.84
23,750	\$18,953,722	\$798.05	2013	1,069,449	\$545,733,545	\$510.29
35,625	\$21,141,001	\$593.43	2014	2,285,857	\$1,594,039,517	\$697.35
			2015	649,325	\$484,733,888	\$746.52
890,457	\$638,606,034			10,614,989	\$7,272,510,956	
	Wtd. Average	\$717.17		Wtd. Average	\$685.12	
	Lowest	\$407.43		Lowest	\$227.85	

*The recorded sale price was adjusted upward to 2015 dollars based on the estimated general growth of land values between the year of the sale and December 31, 2015.

All Commercial Land Sales





Office Land Sales

We divided the list of all commercial land sales by the intended use of the development site, whether office or hotel. The small number of office land sales during the 11-year period (5 within the Study Area and 15 outside the Study Area) illustrates the strength of the residential market during the analysis period and the difficulties of developing commercial land with office buildings. A summary of the annual average prices of office land sales is presented in the following table. As with all commercial land sales, the overall average price per square foot of office land sales (excluding hotel land sales) was higher within the Study Area (\$808 per square foot) than outside the Study Area (\$750 per square foot). The lowest office land sale prices were \$407 per square foot within the Study Area and \$322 per square foot outside the Study Area. A detailed list of the office land sale transactions is presented in Exhibit 2 of the Addenda.

Office Land Sales

Commercial Land Sales Within Study Area				Commercial Land Sales Outside Study Area		
SF FAR	Sale Price In 2015 Dollars*	Sale Price per SF In 2015 Dollars		SF FAR	Sale Price In 2015 Dollars*	Sale Price per SF In 2015 Dollars
			2005			
131,516	96,494,894	\$733.71	2006	851,000	536,946,434	\$630.96
150,240	114,595,740	\$762.75	2007	607,216	454,557,750	\$748.59
			2008			
			2009	75,380	42,332,500	\$561.59
			2010			
213,990	189,671,158	\$886.36	2011	140,844	180,127,500	\$1,278.91
			2012	183,920	181,721,250	\$988.05
			2013	250,049	124,365,000	\$497.36
			2014	772,720	625,262,910	\$809.17
			2015	210,710	173,550,000	\$823.64
495,746	\$400,761,791			3,091,839	\$2,318,863,344	
	Wtd. Average	\$808.40			Wtd. Average	\$749.99
	Lowest	\$407.43			Lowest	\$321.75

*The recorded sale price was adjusted upward to 2015 dollars based on the estimated general growth of land values between the year of the sale and December 31, 2015.

Hotel Land Sales

There were many more hotel land sales than office land sales during the 11-year study period, although most of them were outside the East Midtown Study Area. Seven sales were transacted within the Study Area, and 90 were transacted outside the Study Area. A summary of the annual average prices of hotel land sales is presented in the following table. The overall average price per square foot of hotel land sales was lower within the Study Area (\$603 per square foot) than outside the Study Area (\$658 per square foot). The lowest hotel land sale prices were \$414 per square foot within the Study Area and \$228 per square foot outside the Study Area. A detailed list of the hotel land sale transactions is presented in Exhibit 3 of the Addenda.



Hotel Land Sales

Commercial Land Sales Within Study Area				Commercial Land Sales Outside Study Area		
SF FAR	Sale Price In 2015 Dollars*	Sale Price per SF In 2015 Dollars		SF FAR	Sale Price In 2015 Dollars*	Sale Price per SF In 2015 Dollars
			2005	197,613	102,036,274	\$516.34
87,372	36,160,617	\$413.87	2006	526,985	305,425,593	\$579.57
31,632	16,713,594	\$528.38	2007	868,612	611,637,215	\$704.15
50,210	36,168,171	\$720.34	2008	789,242	460,797,448	\$583.85
			2009			
166,122	108,707,137	\$654.38	2010	94,063	37,691,250	\$400.70
			2011	375,474	347,585,913	\$925.73
			2012	1,900,010	1,387,144,879	\$730.07
23,750	18,953,722	\$798.05	2013	819,400	421,368,545	\$514.24
35,625	21,141,001	\$593.43	2014	1,513,137	968,776,607	\$640.24
			2015	438,615	311,183,888	\$709.47
394,711	\$237,844,243			7,523,150	\$4,953,647,612	
	Wtd. Average	\$602.58			Wtd. Average	\$658.45
	Lowest	\$413.87			Lowest	\$227.85

*The recorded sale price was adjusted upward to 2015 dollars based on the estimated general growth of land values between the year of the sale and December 31, 2015.

TDR SALES

The following table summarizes commercial TDR sales transacted from 2005 to 2015 within the Study Area and outside the Study Area. There were only four commercial TDR sales involving two receiving sites within the Study Area during that time period. One of the sales, occurring in 2006, involved an office development site at 510 Madison Avenue. Three of the sales, occurring in 2013, involved a hotel development site at 138 East 50th Street. Our survey of TDR sales outside the Study Area includes 28 sales during the 11-year period. They include 14 Theater District transfers. Although 10 of the Theater District TDR transfers went to residential projects, they are all relevant to this analysis because they are similar to the proposed Midtown East landmark TDR transfers in that the TDRs can be moved to development sites across a broad designated area as opposed to only adjacent properties. Due to the small number of transactions, the average price of TDR sales within the Study Area (\$301 per square foot) is not very meaningful as an indicator of value for the entire Study Area. Furthermore, Extell Development Company was the buyer in half of the non-Theater District TDR sale transactions. Gary Barnett's firm is a sophisticated market player that is known for paying below-market prices. The average price of the TDR sale prices outside the Study Area is \$374 per square foot. The lowest TDR sale prices were \$243 per square foot within the Study Area and \$224 outside the Study Area.



TDR Sales

Commercial TDR Sales Within Study Area			TDR Sales Outside Study Area			
SF FAR	Sale Price In 2015 Dollars	Sale Price per SF In 2015 Dollars		SF FAR	Sale Price In 2015 Dollars*	Sale Price per SF In 2015 Dollars
			2005	22,725	\$16,931,250	\$745.05
30,667	\$10,303,947	\$335.99	2006	149,330	\$37,713,091	\$252.55
			2007	151,825	\$47,455,988	\$312.57
			2008	176,047	\$56,465,105	\$320.74
			2009			
			2010	67,617	\$20,785,655	\$307.40
			2011	77,305	\$40,207,585	\$520.12
			2012	24,100	\$8,838,675	\$366.75
81,987	\$23,614,273	\$288.02	2013	21,065	\$9,602,669	\$455.86
			2014	344,769	\$157,087,341	\$455.63
			2015	59,832	\$13,933,377	\$232.88
112,654	\$33,918,220			1,094,615	\$409,020,735	
	Wtd. Average	\$301.08			Wtd. Average	\$373.67
	Lowest	\$243.15			Lowest	\$224.27

*The recorded sale price was adjusted upward to 2015 dollars based on the estimated general growth of land values between the year of the sale and December 31, 2015.

SUMMARY

The following table summarizes our findings.

Summary of Commercial Land and TDR Sales Adjusted to 2015 Dollars

	Land Sales			TDR Sales		
	No. of Sales	Average	Lowest	No. of Sales	Average	Lowest
Office and Hotel Sales						
Within Study Area	12	\$717	\$407	4	\$301	\$243
Outside Study Area	105	\$685	\$228	28*	\$374	\$224
Office Sales						
Within Study Area	5	\$808	\$407			
Outside Study Area	15	\$750	\$322			
Hotel						
Within Study Area	7	\$603	\$414			
Outside Study Area	90	\$658	\$228			

*The 28 TDR sales outside the Study Area include 10 sales intended for residential use.



ADDENDA



EXHIBIT 1
COMMERCIAL (OFFICE AND HOTEL) LAND SALES



Commercial (Office and Hotel) Land Sale

Sales Outside the East Midtown Study Area							Sale Price		Sale Price per SF
Address	Block/Lots	Use	Lot Area (SF)	Sale Date	SF FAR	Sale Price	In 2015 Dollars	In 2015 Dollars	
5-9 Rector Street/50 Trinity Place	19-24	Hotel	3,758	1/19/2012	56.370	\$15,000,000	\$24,600,000	\$436.40	
140 West 28th Street	803-62,65	Hotel	12,202	2/2/2012	122.020	\$35,706,250	\$58,558,250	\$479.91	
516, 518 & 520 Fifth Avenue	1259-33, 34 & 35	Hotel/Retail	10,625	3/9/2012	159.375	\$134,360,275	\$219,679,050	\$1,378.38	
585-587 Eighth Avenue	762-38	Hotel	7,413	4/30/2012	74.130	\$19,792,650	\$32,163,056	\$433.87	
507 West 33rd Street	705-29	Office	7,900	5/23/12	79.000	\$30,000,000	\$48,900,000	\$618.99	
11 East 31st Street	861/10,11	Hotel	4,312	6/21/2012	43.120	\$13,500,000	\$22,072,500	\$511.89	
107 East Broadway	282-24	Office	1,738	7/16/2012	10.968	\$2,730,000	\$4,436,250	\$404.47	
305 West 46th Street	1037-26,28,30,33,34	Hotel	24,884	7/31/2012	258.426	\$112,458,625	\$182,745,266	\$707.15	
220 West 41st Street	1012-42	Hotel	8,295	8/20/2012	99.540	\$35,675,000	\$57,258,375	\$575.23	
701 Seventh Avenue	1000-1	Hotel/Retail	16,066	10/16/2012	224.924	\$253,000,000	\$403,535,000	\$1,794.09	
1205-1227 Broadway	831-14, 62, 64, 68	Hotel	36,147	11/20/2012	361.470	\$91,243,725	\$145,077,523	\$401.35	
439-443 West 54th Street	1064-9,10	Hotel	7,771	11/26/2012	32.638	\$10,811,950	\$17,191,001	\$526.71	
59-61 West 36th Street	838-10,83	Hotel	10,813	12/17/2012	122.944	\$35,005,800	\$55,484,193	\$451.30	
25-27 West 38th Street	840-26,27	Hotel	4,247	12/17/2012	42.470	\$12,366,000	\$19,600,110	\$461.50	
320-328 West 36th Street	759-26,27,55	Hotel	13,426	12/18/2012	134.260	\$34,342,800	\$54,433,338	\$405.43	
98-100 Greenwich Street	53-38	Hotel	4,537	12/19/2012	68.055	\$19,527,425	\$30,950,969	\$454.79	
30 West 46th Street	1261-54	Hotel	6,024	12/24/2012	72.288	\$30,000,000	\$47,550,000	\$657.79	
152-154 Leroy Street	601-12	Hotel	5,596	12/27/2012	27.980	\$10,250,000	\$16,246,250	\$580.64	
862 Washington Street	646-19,20	Office	15,178	12/31/2012	93.952	\$81,000,000	\$128,385,000	\$1,366.50	
530-538 West 58th Street	1086-48,50	Hotel	10,042	4/19/2013	62.763	\$17,970,650	\$27,764,654	\$442.38	
16-18 East 30th Street	859/75	Hotel	3,703	5/2/2013	37.030	\$13,341,225	\$20,478,780	\$553.03	
112-118 West 25th Street	800-49	Hotel	15,639	8/7/2013	224.547	\$68,671,425	\$103,693,852	\$461.79	
432-434 West 31st St	728-50,55	Hotel	4,825	8/28/2013	57.900	\$15,689,510	\$24,397,188	\$421.37	
532 West 30th Street	701-59	Office	2,469	9/17/2013	16.049	\$9,000,000	\$13,365,000	\$832.76	
450 Eleventh Avenue	708-65	Hotel	9,875	9/24/2013	98.750	\$35,283,750	\$52,219,950	\$528.81	
517 West 35th Street	707-20	Office	23,400	10/1/2013	234.000	\$75,000,000	\$111,000,000	\$474.36	
337 West 36th Street	760-20	Hotel	2,468	10/9/2013	24.680	\$7,436,900	\$11,006,612	\$445.97	
292 Fifth Avenue	832/44	Hotel	4,217	10/31/2013	42.170	\$10,888,200	\$15,951,213	\$378.26	
511-515 West 35th Street	707-26,41,45	Hotel/Retail	17,281	12/19/2013	172.810	\$88,000,000	\$126,280,000	\$730.74	
346 West 40th Street	763-67	Hotel	9,875	12/20/2013	98.750	\$27,579,300	\$39,576,296	\$400.77	
96-102 Varick Street	477-35,42,44,73,74,75,76	Hotel	14,686	1/3/2014	146.860	\$88,544,200	\$127,060,927	\$865.18	
140-148 West 28th Street	803-62,65	Hotel	12,202	1/13/2014	171.018	\$43,595,138	\$62,123,072	\$363.25	
11 West 37th Street	839-33	Hotel	2,469	1/31/2014	24.690	\$8,000,375	\$11,640,546	\$471.47	
**24-26 West 39th Street	840/62,63	Hotel	2,173	2/14/2014	36.322	\$21,688,708	\$31,448,627	\$865.83	
326-330 West 37th Street	760-58,59,60	Hotel	7,406	2/24/2014	74.060	\$31,000,000	\$43,865,000	\$592.29	
6-10 Water Street/3-7 Moore Street	8-51	Hotel	3,889	3/13/2014	92.228	\$44,780,000	\$62,020,300	\$672.47	
44-46 West 37th Street	838-74	Hotel	3,950	3/21/2014	39.500	\$9,282,000	\$12,762,750	\$323.11	
560 Seventh Avenue	1012-29	Hotel	9,876	4/3/2014	98.760	\$63,550,200	\$87,381,525	\$884.79	
120-122 Water Street	39-40,41	Hotel	2,877	4/11/2014	43.155	\$15,332,025	\$21,004,874	\$486.73	
501 West 34th Street	706-17,20,29,35,36	Office	67,397	4/29/2014	673.970	\$438,000,000	\$593,490,000	\$880.59	
3 West 30th Street	832-37	Hotel	2,469	5/28/2014	24.690	\$10,064,875	\$13,436,608	\$544.21	
23-25 West 35th Street	837-27,28	Hotel	4,346	6/12/2014	43.460	\$19,595,000	\$26,061,350	\$599.66	
4-6 West 37th Street	838-54,55	Hotel	4,246	6/25/2014	46.659	\$20,583,625	\$27,067,467	\$580.11	
105-109 West 28th Street	804-30,31,32	Hotel	6,353	7/8/2014	63.530	\$22,182,175	\$29,169,560	\$459.15	
334-344 West 36th Street	759-61	Hotel	12,344	8/6/2014	123.440	\$52,216,100	\$67,619,850	\$547.80	
540-544 West 26th Street	697-56	Office	19,750	8/18/2014	98.750	\$24,726,000	\$31,772,910	\$321.75	
345-353 West 38th Street	762-6	Hotel	24,687	10/21/2014	246.870	\$113,360,975	\$141,134,414	\$571.70	
134-142 Bowery	470-53,55,57,58,59	Hotel	12,833	10/30/2014	76.998	\$45,866,000	\$56,644,510	\$735.66	
333 West 38th Street	762-16	Hotel	2,475	11/7/2014	24.750	\$10,817,625	\$13,305,679	\$537.60	
319-321 West 38th Street	762-1001-1016	Hotel	4,542	12/17/2014	45.420	\$23,792,125	\$28,550,550	\$628.59	
304 Mulberry Street	521-3,9	Hotel	13,596	12/19/2014	90.727	\$88,732,500	\$106,479,000	\$1,173.62	
1185 Broadway	830/17,24	Hotel	18,166	1/8/2015	181.660	\$101,709,950	\$121,543,390	\$669.07	
306 West 40th Street	763-45	Hotel	2,472	1/9/2015	24.720	\$16,420,615	\$19,622,635	\$793.80	
338-340 West 39th Street	762-61	Hotel	4,937	1/15/2015	49.370	\$22,500,000	\$26,662,500	\$540.05	
138-142 West 32nd Street	807-62,64	Hotel	2,940	1/29/2015	35.280	\$18,946,875	\$22,262,578	\$631.03	
2-8 Pike Street	282-58	Office	9,825	4/6/2015	58.950	\$18,750,000	\$21,281,250	\$361.01	
308 West 40th Street	763-46	Hotel	2,469	5/12/2015	17.410	\$10,817,625	\$12,061,652	\$692.80	
58 Watts Street	477-72	Hotel	1,645	7/2/2015	16.450	\$17,538,000	\$18,502,590	\$1,124.78	
219 Hudson St / 489-493 Canal St	594-108	Hotel	4,270	9/21/2015	25.705	\$13,250,000	\$13,515,000	\$525.77	
120-122 Water Street	39-40,41	Hotel	2,877	10/1/2015	43.155	\$20,457,025	\$20,763,880	\$481.15	
100 West 37th Street/993 Sixth Ave	812-45	Hotel	2,991	10/2/2015	44.865	\$54,347,500	\$56,249,663	\$1,253.75	
427 Tenth Avenue	705/39	Office	15,176	12/15/2015	151.760	\$152,268,750	\$152,268,750	\$1,003.35	
						10,614,989	\$4,876,603,384	\$7,272,510,956	
								\$685.12	
								Wtd. Avg.	
							Lowest	\$227.85	



EXHIBIT 2
OFFICE LAND SALES



Office Land Sales

Sales Within the East Midtown Study Area							Sale Price	Sale Price per SF
Block/Lots	Use	Lot Area (SF)	Sale Date	SF FAR	Sale Price	In 2015 Dollars	In 2015 Dollars	
510 Madison Avenue	1288/56,57,62	Office	9,270	2/7/2006	131,516	\$53,459,775	\$96,494,894	\$733.71
327 Madison Avenue	1277/52	Office	6,666	4/12/2007	99,990	\$61,317,675	\$94,122,631	\$941.32
48-50 East 43rd Street	1277/46	Office	3,350	4/12/2007	50,250	\$13,337,530	\$20,473,109	\$407.43
36 East 51st Street	1286/43	Office	5,020	1/18/2011	60,240	\$30,950,000	\$52,769,750	\$875.99
51 East 42nd Street	1277/27	Office	10,250	11/30/2011	153,750	\$82,970,550	\$136,901,408	\$890.42
Totals					495,746	\$242,035,530	\$400,761,791	\$808.40
							Lowest	\$407.43
Sales Outside the East Midtown Study Area							Sale Price	Sale Price per SF
Block/Lots	Use	Lot Area (SF)	Sale Date	SF FAR	Sale Price	In 2015 Dollars	In 2015 Dollars	
640-658 Eighth Avenue	1013/1,2,59,61,6	Office	37,891	7/5/2006	851,000	\$305,952,384	\$536,946,434	\$630.96
920-928 Eighth Avenue	1026/1,3,4,8,55,59-61,64,101-103	Office	46,483	2/1/2007	517,336	\$228,750,000	\$387,731,250	\$749.48
315 East 46th Street	1339/9,10,11	Office	7,490	8/31/2007	89,880	\$44,700,000	\$66,826,500	\$743.51
318 East 48th Street	1340/43	Office	7,538	10/10/2009	75,380	\$29,500,000	\$42,332,500	\$561.59
511-519 West 21st Street	693-23	Office	19,750	12/22/2011	98,750	\$54,500,000	\$89,652,500	\$907.87
837 Washington Street	645-25	Office	10,325	12/27/2011	42,094	\$55,000,000	\$90,475,000	\$2,149.36
**507 West 33rd Street	705-29	Office	7,900	5/23/12	79,000	\$30,000,000	\$48,900,000	\$618.99
107 East Broadway	282-24	Office	1,738	7/16/2012	10,968	\$2,730,000	\$4,436,250	\$404.47
862 Washington Street	646-19,20	Office	15,178	12/31/2012	93,952	\$81,000,000	\$128,385,000	\$1,366.50
532 West 30th Street	701-59	Office	2,469	9/17/2013	16,049	\$9,000,000	\$13,365,000	\$832.76
517 West 35th Street	707-20	Office	23,400	10/1/2013	234,000	\$75,000,000	\$111,000,000	\$474.36
501 West 34th Street	706-17,20,29,35,36	Office	67,397	4/29/2014	673,970	\$438,000,000	\$593,490,000	\$880.59
540-544 West 26th Street	697-56	Office	19,750	8/18/2014	98,750	\$24,726,000	\$31,772,910	\$321.75
2-8 Pike Street	282-58	Office	9,825	4/6/2015	58,950	\$18,750,000	\$21,281,250	\$361.01
427 Tenth Avenue	705/39	Office	15,176	12/15/2015	151,760	\$152,268,750	\$152,268,750	\$1,003.35
					3,091,839	\$1,549,877,134	\$2,318,863,344	\$749.99
							Lowest	\$321.75
								Wtd. Avg.



EXHIBIT 3
HOTEL LAND SALES



Hotel Land Sales

Sales Within East Midtown Study Area							Sale Price		Sale Price per SF
Address	Block/Lots	Use	Lot Area (SF)	Sale Date	SF FAR	Sale Price	In 2015 Dollars	In 2015 Dollars	
206-210 East 52nd Street	1325/48,50	Hotel	6,000	8/15/2006	87,372	\$22,390,475	\$36,160,617	\$413.87	
451-457 Lexington Avenue	1299/51	Hotel	2,510	12/10/2007	31,632	\$11,331,250	\$16,713,594	\$528.38	
231 East 43rd Street	1317/19	Hotel	5,021	3/14/2008	50,210	\$24,772,720	\$36,168,171	\$720.34	
678-684 Lexington Avenue	1311/14-16, 112-115	Hotel	7,281	3/1/2010	87,372	\$34,165,677	\$59,277,450	\$678.45	
16 East 46th Street	1281/61	Hotel	5,250	11/30/2010	78,750	\$28,906,250	\$49,429,688	\$627.68	
966 Third Avenue	1312/39	Hotel	2,375	9/12/2013	23,750	\$12,678,075	\$18,953,722	\$798.05	
710 Third Avenue	1299/37	Hotel	2,375	12/12/2014	35,625	\$17,400,001	\$21,141,001	\$593.43	
Totals						394,711	\$151,644,448	\$237,844,243	\$602.58
								Wtd. Avg.	\$413.87
							Lowest		\$413.87

Hotel Land Sales

Sales Outside East Midtown Study Area							Sale Price		Sale Price per SF
Address	Block/Lots	Use	Lot Area (SF)	Sale Date	SF FAR	Sale Price	In 2015 Dollars	In 2015 Dollars	
25 Cooper Sq.	461/1	Hotel	2,500	7/20/2005	15,000	\$6,800,000	\$12,852,000	\$856.80	
99 Washington St.	53/2	Hotel	5,165	9/7/2005	77,475	\$17,525,510	\$32,860,331	\$424.14	
5-9 Rector St.	19/24	Hotel	3,758	9/22/2005	72,426	\$15,936,110	\$29,720,845	\$410.36	
93 Bowery	303/15	Hotel	5,452	11/8/2005	32,712	\$14,419,023	\$26,603,097	\$813.25	
309 West 39th St.	763/28	Hotel	7,406	3/30/2006	74,060	\$15,189,950	\$27,114,061	\$366.11	
153 Elizabeth St.	479/29	Hotel	3,825	4/11/2006	21,424	\$5,982,175	\$10,678,182	\$498.42	
108 West 72nd Street	1009/39	Hotel	2,008	6/8/2006	30,120	\$17,495,325	\$30,879,249	\$1,025.21	
98 Greenwich St.	53/38	Hotel	4,537	6/28/2006	68,055	\$15,911,455	\$27,924,604	\$410.32	
585 Eighth Ave.	762/38	Hotel	7,413	6/28/2006	74,130	\$20,615,465	\$36,180,141	\$488.06	
57 West 35th St.	837/9	Hotel	4,906	7/25/2006	49,060	\$13,532,000	\$23,613,340	\$481.32	
431 West 33rd Street	731/22	Hotel	7,406	7/25/2006	74,063	\$9,670,400	\$16,874,848	\$227.85	
136 West 42nd St.	994/47,49,148	Hotel	7,173	9/27/2006	136,073	\$76,615,170	\$132,161,168	\$971.25	
63 West 35th Street	837/6	Hotel	7,406	2/17/2007	98,750	\$77,128,370	\$129,961,303	\$1,316.06	
180 Ludlow St.	412/48-50	Hotel	6,806	3/14/2007	40,836	\$10,170,430	\$17,035,470	\$417.17	
161 Front St.	72/12	Hotel	3,020	3/19/2007	45,300	\$10,700,000	\$17,922,500	\$395.64	
428 Tenth Ave.	732/1	Hotel	10,287	4/13/2007	102,868	\$16,000,000	\$24,640,000	\$239.53	
20 West 56th St.	1271/51	Hotel	2,511	4/19/2007	20,088	\$7,611,000	\$11,720,940	\$583.48	
300 Eighth Ave.	1034/33,34,36,37	Hotel	30,109	7/18/2007	258,026	\$135,289,295	\$203,610,389	\$789.11	
239 Fifth Ave.	857/4	Hotel	5,200	7/18/2007	64,797	\$26,812,000	\$40,352,060	\$622.75	
80 Sixth Ave.	227/50,52 & 56	Hotel	11,335	7/31/2007	73,678	\$33,530,799	\$50,463,852	\$684.93	
16-18 West 21st St.	693/23	Hotel	19,750	8/6/2007	138,270	\$66,140,000	\$99,540,700	\$719.90	
35 Cooper Sq.	461/6, 7, 8	Hotel	4,822	9/17/2007	26,000	\$11,000,000	\$16,390,000	\$630.38	
370 Canal St.	211/2, 29, 30	Hotel	10,622	1/25/2008	147,032	\$83,500,000	\$122,745,000	\$834.82	
431 West 33rd St.	731/22	Hotel	7,406	1/29/2008	74,063	\$24,000,000	\$35,280,000	\$476.35	
32 Pearl St.	8/39, 51	Hotel	9,487	2/19/2008	142,305	\$54,950,000	\$80,501,750	\$565.70	
30 West 31st St.	832/62 & 63	Hotel	4,938	3/7/2008	49,380	\$14,954,109	\$21,907,770	\$443.66	
60 West 36th St.	837/78	Hotel	4,444	3/14/2008	57,602	\$18,458,800	\$26,949,848	\$467.86	
32 West 29th St.	830/67	Hotel	4,351	6/10/2008	43,510	\$15,050,000	\$21,822,500	\$501.55	
309 West 39th St.	763/28	Hotel	7,406	7/2/2008	160,338	\$59,000,000	\$85,255,000	\$531.72	
152 Delancey St.	348/34, 36 & 37	Hotel	6,825	7/21/2008	40,950	\$16,066,375	\$23,135,580	\$564.97	
431 West 33rd St.	731/22	Hotel	7,406	7/26/2008	74,063	\$30,000,000	\$43,200,000	\$583.29	
325-327 West 33rd St.	757/17	Hotel	7,406	9/16/2010	94,063	\$21,850,000	\$37,691,250	\$400.70	
523-525 Greenwich St.	597-5	Hotel	5,000	5/31/2011	50,000	\$12,874,475	\$21,629,118	\$432.58	
131-139 West 45th Street	998-15,16,17,116	Hotel	9,498	7/7/2011	113,979	\$134,810,800	\$225,808,090	\$1,981.14	
312-318 West 37th Street	760-51	Hotel	9,974	8/1/2011	99,740	\$20,800,000	\$34,736,000	\$348.27	
120-122 West 41st Street	993-43	Hotel	3,950	11/10/2011	47,400	\$19,750,000	\$32,883,750	\$693.75	
38 West 36th Street	837-67,68,69,70	Hotel	6,436	12/8/2011	64,355	\$19,714,518	\$32,528,955	\$505.46	



5-9 Rector Street/50 Trinity Place	19-24	Hotel	3,758	1/19/2012	56,370	\$15,000,000	\$24,600,000	\$436.40
140 West 28th Street	803-62,65	Hotel	12,202	2/2/2012	122,020	\$35,706,250	\$58,558,250	\$479.91
516, 518 & 520 Fifth Avenue	1259-33, 34 & 35	Hotel/Retail	10,625	3/9/2012	159,375	\$134,360,275	\$219,679,050	\$1,378.38
585-587 Eighth Avenue	762-38	Hotel	7,413	4/30/2012	74,130	\$19,792,650	\$32,163,056	\$433.87
11 East 31st Street	861/10,11	Hotel	4,312	6/21/2012	43,120	\$13,500,000	\$22,072,500	\$511.89
305 West 46th Street	1037-26,28,30,33,34	Hotel	24,884	7/31/2012	258,426	\$112,458,625	\$182,745,266	\$707.15
220 West 41st Street	1012-42	Hotel	8,295	8/20/2012	99,540	\$35,675,000	\$57,258,375	\$575.23
701 Seventh Avenue	1000-1	Hotel/Retail	16,066	10/16/2012	224,924	\$253,000,000	\$403,535,000	\$1,794.09
1205-1227 Broadway	831-14, 62, 64, 68	Hotel	36,147	11/20/2012	361,470	\$91,243,725	\$145,077,523	\$401.35
439-443 West 54th Street	1064-9,10	Hotel	7,771	11/26/2012	32,638	\$10,811,950	\$17,191,001	\$526.71
59-61 West 36th Street	838-10,83	Hotel	10,813	12/17/2012	122,944	\$35,005,800	\$55,484,193	\$451.30
25-27 West 38th Street	840-26,27	Hotel	4,247	12/17/2012	42,470	\$12,366,000	\$19,600,110	\$461.50
320-328 West 36th Street	759-26,27,55	Hotel	13,426	12/18/2012	134,260	\$34,342,800	\$54,433,338	\$405.43
98-100 Greenwich Street	53-38	Hotel	4,537	12/19/2012	68,055	\$19,527,425	\$30,950,969	\$454.79
30 West 46th Street	1261-54	Hotel	6,024	12/24/2012	72,288	\$30,000,000	\$47,550,000	\$657.79
152-154 Leroy Street	601-12	Hotel	5,596	12/27/2012	27,980	\$10,250,000	\$16,246,250	\$580.64
530-538 West 58th Street	1086-48,50	Hotel	10,042	4/19/2013	62,763	\$17,970,650	\$27,764,654	\$442.38
16-18 East 30th Street	859/75	Hotel	3,703	5/2/2013	37,030	\$13,341,225	\$20,478,780	\$553.03
112-118 West 25th Street	800-49	Hotel	15,639	8/7/2013	224,547	\$68,671,425	\$103,693,852	\$461.79
432-434 West 31st St	728-50,55	Hotel	4,825	8/28/2013	57,900	\$15,689,510	\$24,397,188	\$421.37
450 Eleventh Avenue	708-65	Hotel	9,875	9/24/2013	98,750	\$35,283,750	\$52,219,950	\$528.81
337 West 36th Street	760-20	Hotel	2,468	10/9/2013	24,680	\$7,436,900	\$11,006,612	\$445.97
292 Fifth Avenue	832/44	Hotel	4,217	10/31/2013	42,170	\$10,888,200	\$15,951,213	\$378.26
511-515 West 35th Street	707-26,41,45	Hotel/Retail	17,281	12/19/2013	172,810	\$88,000,000	\$126,280,000	\$730.74
346 West 40th Street	763-67	Hotel	9,875	12/20/2013	98,750	\$27,579,300	\$39,576,296	\$400.77
96-102 Varick Street	477-35,42,44,73,74,75,76	Hotel	14,686	1/3/2014	146,860	\$88,544,200	\$127,060,927	\$865.18
140-148 West 28th Street	803-62,65	Hotel	12,202	1/13/2014	171,018	\$43,595,138	\$62,123,072	\$363.25
11 West 37th Street	839-33	Hotel	2,469	1/31/2014	24,690	\$8,000,375	\$11,640,546	\$471.47
**24-26 West 39th Street	840/62,63	Hotel	2,173	2/14/2014	36,322	\$21,688,708	\$31,448,627	\$865.83
326-330 West 37th Street	760-58,59,60	Hotel	7,406	2/24/2014	74,060	\$31,000,000	\$43,865,000	\$592.29
6-10 Water Street/3-7 Moore Street	8-51	Hotel	3,889	3/13/2014	92,228	\$44,780,000	\$62,020,300	\$672.47
44-46 West 37th Street	838-74	Hotel	3,950	3/21/2014	39,500	\$9,282,000	\$12,762,750	\$323.11
560 Seventh Avenue	1012-29	Hotel	9,876	4/3/2014	98,760	\$63,550,200	\$87,381,525	\$884.79
120-122 Water Street	39-40,41	Hotel	2,877	4/11/2014	43,155	\$15,332,025	\$21,004,874	\$486.73
3 West 30th Street	832-37	Hotel	2,469	5/28/2014	24,690	\$10,064,875	\$13,436,608	\$544.21
23-25 West 35th Street	837-27,28	Hotel	4,346	6/12/2014	43,460	\$19,595,000	\$26,061,350	\$599.66
4-6 West 37th Street	838-54,55	Hotel	4,246	6/25/2014	46,659	\$20,583,625	\$27,067,467	\$580.11
105-109 West 28th Street	804-30,31,32	Hotel	6,353	7/8/2014	63,530	\$22,182,175	\$29,169,560	\$459.15
334-344 West 36th Street	759-61	Hotel	12,344	8/6/2014	123,440	\$52,216,100	\$67,619,850	\$547.80
345-353 West 38th Street	762-6	Hotel	24,687	10/21/2014	246,870	\$113,360,975	\$141,134,414	\$571.70
134-142 Bowery	470-53,55,57,58,59	Hotel	12,833	10/30/2014	76,998	\$45,866,000	\$56,644,510	\$735.66
333 West 38th Street	762-16	Hotel	2,475	11/7/2014	24,750	\$10,817,625	\$13,305,679	\$537.60
319-321 West 38th Street	762-1001-1016	Hotel	4,542	12/17/2014	45,420	\$23,792,125	\$28,550,550	\$628.59
304 Mulberry Street	521-3,9	Hotel	13,596	12/19/2014	90,727	\$88,732,500	\$106,479,000	\$1,173.62
1185 Broadway	830/17,24	Hotel	18,166	1/8/2015	181,660	\$101,709,950	\$121,543,390	\$669.07
306 West 40th Street	763-45	Hotel	2,472	1/9/2015	24,720	\$16,420,615	\$19,622,635	\$793.80
338-340 West 39th Street	762-61	Hotel	4,937	1/15/2015	49,370	\$22,500,000	\$26,662,500	\$540.05
138-142 West 32nd Street	807-62,64	Hotel	2,940	1/29/2015	35,280	\$18,946,875	\$22,262,578	\$631.03
308 West 40th Street	763-46	Hotel	2,469	5/12/2015	17,410	\$10,817,625	\$12,061,652	\$692.80
58 Watts Street	477-72	Hotel	1,645	7/2/2015	16,450	\$17,538,000	\$18,502,590	\$1,124.78
219 Hudson Street / 489-493 Canal Street	594-108	Hotel	4,270	9/21/2015	25,705	\$13,250,000	\$13,515,000	\$525.77
120-122 Water Street	39-40,41	Hotel	2,877	10/1/2015	43,155	\$20,457,025	\$20,763,880	\$481.15
100 West 37th Street/993 Sixth Avenue	812-45	Hotel	2,991	10/2/2015	44,865	\$54,347,500	\$56,249,663	\$1,253.75
					7,523,150	\$3,326,726,250	\$4,953,647,612	\$658.45
							Lowest	Wtd. Avg. \$227.85



EXHIBIT 4
TDR SALES



TDR Sales							
Commercial TDR Sales Within East Midtown Study Area							
Address of Granting Site	Address of Receiving Site	Use	Sale Date	SF FAR	Sale Price	Adj. Sale Price In 2015 Dollars	Price/ SF FAR In 2015 Dollars
12 E 53rd St	510 Madison Avenue	Office	11/15/06	30,667	\$6,439,967	10,303,947	\$335.99
143 East 49th Street	138 East 50th Street	Hotel	8/15/13	22,596	\$3,675,000	5,494,125	\$243.15
155 East 49th Street	138 East 50th Street	Hotel	8/15/13	28,686	\$5,020,500	7,505,648	\$261.65
145 East 49th Street	138 East 50th Street	Hotel	8/15/13	30,705	\$7,100,000	10,614,500	\$345.69
				112,654		33,918,220	\$301.08
							Wtd. Avg.
						Lowest	\$243.15

TDR Sales							
TDR Sales Outside the East Midtown Study Area							
Address of Granting Site	Address of Receiving Site	Use	Sale Date	SF FAR	Sale Price	Sale Price In 2015 Dollars	Price/ SF FAR In 2015 Dollars
1409 6th Ave	105 West 57th Street	Office	5/5/05	22,725	\$8,750,000	16,931,250	\$745.05
302 W 45th St (Matin Beck Theater)	253 West 46th Street	Residential/Retail	6/20/06	29,104	\$3,783,520	6,640,078	\$228.15
145 W 45th St	137 West 45th Street	Hotel	9/19/06	6,047	\$1,512,000	2,653,560	\$438.82
302 W 45th St (Martin Beck Theater)	253 West 46th Street	Residential/Retail	10/6/06	28,901	\$3,757,500	6,481,688	\$224.27
302 W 45th St (Martin Beck Theater)	231 West 54th Street	Residential Condo	10/27/06	7,438	\$1,115,700	1,913,426	\$257.25
246 W 44th St (St. James Theater)	231 West 54th Street	Residential Condo	10/27/06	77,840	\$11,676,000	20,024,340	\$257.25
37 W 46th St.	47-57 West 46th St & 44-52 West 47th St.	Office	3/15/07	14,600	\$2,975,000	4,968,250	\$340.29
29 W 46th St	47-57 West 46th St & 44-52 West 47th St.	Office	3/15/07	13,858	\$3,450,000	5,761,500	\$415.75
59 West 46th St	47-57 West 46th St & 44-52 West 47th St.	Office	5/2/07	50,575	\$10,000,000	15,350,000	\$303.51
246 W 44th St (St. James Theater)	131 West 45th Street	Hotel	5/17/07	9,489	\$1,660,575	2,532,377	\$266.88
302 W 45th St (Matin Beck Theater)	131 West 45th Street	Hotel	5/17/07	8,483	\$1,464,525	2,233,401	\$263.28
235 W 44th St (Broadhurst Theater)	131 West 45th Street	Hotel	6/21/07	54,820	\$10,964,000	16,610,460	\$303.00
21-27 W 46th St.	47-57 West 46th St & 44-52 West 47th St.	Office	3/20/08	5,774	\$1,319,000	1,925,740	\$333.52
222 W 45th St (Booth Theater)	910 Eighth Avenue	Office	5/12/08	157,636	\$33,310,560	48,466,865	\$307.46
54 W 47th St.	47th St.	Office	10/10/08	12,637	\$3,500,000	6,072,500	\$480.53
104 West 40th St	1041 Avenue of the Americas	Office	12/22/10	67,617	\$12,191,000	20,785,655	\$307.40
235 W 44th St (Broadhurst Theater)	120 West 57th Street	Hotel	10/4/11	18,075	\$4,067,000	6,730,885	\$372.39
235 W 44th St (Broadhurst Theater)	120 West 41st Street	Hotel	11/10/11	9,480	\$3,792,000	6,256,800	\$660.00
21 West 52nd Street	18 West 53rd Street	Residential Cond/Hotel	12/20/11	49,750	\$16,597,500	27,219,900	\$547.13
222 West 45th Street	237 West 54th Street	Hotel	2/9/12	24,100	\$5,422,500	8,838,675	\$366.75
63-65 West 36th Street	59 West 36th Street and 62 West 37th Street	Hotel	4/17/13	21,065	\$6,215,320	9,602,669	\$455.86
245 W 44th St (Majestic Theater)	242 West 53rd Street	Residential Rental/Retail	5/7/14	57,210	\$17,163,000	23,255,865	\$406.50
235 W 44th St (Broadhurst Theater)	242 West 53rd Street	Residential Rental/Retail	5/7/14	1,182	\$355,000	481,025	\$406.96
236 W 45th St (Plymouth Theater)	721 Seventh Avenue	Retail +	3/26/14	34,688	\$14,181,000	18,931,635	\$545.77
222 W 45th St (Booth Theater)	721 Seventh Avenue	Retail +	3/26/14	10,300	\$4,211,000	5,621,685	\$545.79
678 Fifth Avenue	49-55 West 53rd Street and 48 West 54th Street	Residential/Hotel/Retail	9/10/14	210,000	\$71,112,300	90,668,183	\$431.75
45-47 West 53rd Street	49-55 West 53rd Street and 48 West 54th Street	Residential/Hotel/Retail	9/10/14	31,389	\$14,218,783	18,128,948	\$577.56
20 West 44th Street	520 Fifth Avenue	Residential/Hotel/Retail	8/18/15	59,832	\$13,462,200	13,933,377	\$232.88
				1,094,615		\$409,020,735	\$373.67
							Wtd. Avg.
						Lowest	\$224.27



EXHIBIT 5
PROFESSIONAL QUALIFICATIONS



QUALIFICATIONS OF ROBERT H. MAYER, MAI

ROBERT H. MAYER, MAI

Managing Director – Landauer Valuation and Advisory
A Division of Newmark Grubb Knight Frank

CURRENT RESPONSIBILITIES

Robert H. Mayer is Managing Director of the Litigation Support Group of Landauer Valuation and Advisory, a division of Newmark Grubb Knight Frank. He focuses on valuations and consulting for litigation support, condemnation, rental redetermination, estates, financing and real estate transaction negotiations. Mr. Mayer specializes in the valuation of land and air rights and valuations to support just compensation in condemnation proceedings. He performs complicated financial modeling of existing and potential developments. He has appeared as Expert Witness for a variety of purposes, including value disputes, eminent domain appropriations and insurance litigation.

Recent successful cases in which he was involved include the properties condemned for the construction of the Fulton Street Transportation Center, the New York Times Building and the extension of the Number 7 Subway line. Mr. Mayer valued the excess development rights above Grand Central Terminal and developed a pricing mechanism that the Hudson Yards Development Corporation adopted in selling the development rights above the Eastern Rail Yards.

CAREER SUMMARY

Prior to joining Landauer, Mr. Mayer was Senior Appraiser at Michael M. Axler and Associates, Inc. where he provided valuation and consulting services to clients in connection with real estate transactions and financing. He managed a wide variety of projects, including the preparation of appraisals in support of tax certiorari proceedings and bankruptcy.

Before his tenure with Axler, Mr. Mayer was an appraiser at KTR Valuation and Consulting Services, LLC. He prepared appraisal and market studies for mortgage, estate, acquisitions, sales and corporate purposes.

EDUCATION

- BS in Finance from the Wharton School at the University of Pennsylvania
- Diploma in Real Estate Investment from the Real Estate Institute of New York University
- Continuing Education Courses

PROFESSIONAL DESIGNATIONS/AFFILIATIONS

- Member of the Appraisal Institute (MAI)
- Certified as a General Real Estate Appraiser by the Department of State, State of New York, ID #46000020549
- Licensed Real Estate Salesperson, State of New York



- Member of the Wharton Club of New York, Wharton Real Estate Institutional Real Estate Network, Wharton Real Estate Investors Affinity Group

GOVERNMENT CLIENT LIST

New York State Thruway Authority; New York City Economic Development Corporation; Federal Deposit Insurance Corporation, Metropolitan Transportation Authority; Union City (NJ) Redevelopment Agency; Jersey City Redevelopment Agency; Hudson Yards Development Corp; Metropolitan Transportation Authority; Internal Revenue Service; New York State Department of Transportation

ATTORNEY CLIENT LIST

Goldstein Rikon & Rikon, P.C.; Bachner, Tally, Polevoy, Misher; Herrick, Feinstein LLP; Hofheimer, Gartlir & Gross; Opton, Handler, Gottlieb, Feiler, Landau & Hirsch; Bondy & Schloss; McDermott, Will & Emery; Kramer Levin Naftalis & Frankel LLP.; Morrison Cohen Singer & Weinstein LLP; Carter, Ledyard & Milburn LLP; Certilman, Balin, Adler & Hyman LLP

BANK AND FINANCIAL COMPANY LIST

Bank Leumi Trust Company of New York; Bank of New York; Citibank NA; East River Savings Bank; Bank of America; Credit Lyonnais; Dime Savings Bank; Flushing Savings Bank; New York State Teacher's Insurance Annuity Association; Israel Discount Bank; Greater New York Savings Bank; National Bank of Canada; National Westminster Bank; NationsCredit; Crossland Savings; Republic Bank for Savings; Riggs Bank; Emigrant Savings Bank; Crossland Savings Bank; European-American Bank; Fleet Bank; River Bank; Westdeutsche Immobilien Bank, Deutsche Bank, Washington Mutual Bank; Lehman Brothers; J.P. Morgan Chase Bank; Merrill Lynch; Paine Webber; Heller Financial; American Capital Resources; Midland Loan Services; Belgravia; RECOLL; American Property Financial; Crimii Mae; Connecticut Mutual; Massachusetts Mutual; Citigroup

CORPORATE CLIENT LIST

Harlan Company; Greenthal Realty; Northcorp Realty; Carnivale Handbag Corp; The New School University; Brevard Owner Corp.; Jackson's Bistro and Jazz Club; Anthony Lepore (Ferarra's), Bari Restaurant Equipment Corp., Manhattan Church of Christ, American Continental Properties; Vornado Realty Trust