2014

2004

10 YEARS AND GROWING

SUCCESS BUILT ON TRANSIT

RKG ASSOCIATES INC

COMMISSIONED BY:

Urban Land Institute Washington

NoMA CONNECTED

FROM THE DESK OF

ULI Washington Chair Matt Klein, President, Akridge

ULI Washington is pleased to be a partner with the NoMa BID in the development of this analysis. ULI believes that strong infrastructure is key to national and metropolitan prosperity. The choices that are made about infrastructure today will reverberate far into the future. ULI engages in infrastructure conversations around the world, from roads to transit, from water systems to electrical grids. Our members, who include private sector developers, public sector leaders, governments, transit service providers, advocates and others, explore ways to achieve outcomes that maximize the value of existing neighborhoods.

In the 1990s, a forward-thinking partnership realized that the NoMa area's significant land use potential was limited by its lack of a transit station along the line that traversed the area. That partnership, comprised of area property owners and developers — including ULI National Trustee James Curtis — business leaders, and forward-thinking government officials, helped to organize the effort for the station and leverage the private investment for the station. The financial collaboration that occurred between the federal government, the District of Columbia, and local landowners helped build the new infill transit station that has been instrumental in the neighborhood's revitalization.

As is evident from the vibrant, engaged community that exists here today, the vision developed in the 1990s was correct. The NoMa example provides an impetus for other areas of our region and the country to explore and implement future infill transit stations. In northern Virginia, a new Potomac Yard Metrorail Station is being contemplated to support the travel needs of the current and future residents and workers in the Potomac Yard/Del Ray area.

Just last month, a new station called Assembly Square was opened by the MBTA transit agency in Somerville, MA, the first new station on Boston's T network in 26 years. Financing for the Assembly Square station included a $15 million contribution from Federal Realty Investment Trust, the developer of a large-scale, mixed-use development project adjacent to the station that will contain residential units, retail and office space, and a hotel. A new station opened in 2011 on the San Francisco BART line and Chicago opened two infill stations in 2012.

We applaud the early thinkers who had the vision to pursue the infill station development, thank them for providing a new and effective infrastructure model for the future, and look forward to the next 10 years of continued development and enhancement of the NoMa neighborhood.

Sincerely,

Matt Klein | *President, Akridge*

Chairman, ULI Washington

FROM THE DESK OF

NoMa BID Board Chair Doug Firstenberg, Principal, StonebridgeCarras

It is hard to imagine that it has already been ten years since the NoMa-Gallaudet U Metro Station first opened. The growth it has spurred in NoMa over this time is simply astounding. There was no doubt that the station would have a great impact but RKG Associates' study: *NoMa – Gallaudet U Metro Station: Success Built on Transit* provides amazing numbers:

- nearly $330 million of cumulative direct fiscal impact on the District of Columbia through 2014 and projects a nearly $1 billion of cumulative impact through 2019;
- creation of more than 29,000 jobs; and
- delivering economic output of more than $4.7 billion.

The study demonstrates what many property owners have felt since, quite literally, buying the NoMa vision; namely, that under the right conditions relatively modest public investments in transit-oriented development can stimulate private investment and enable growth at a scale that has significant impact on the future of a mature, world class city like the District of Columbia.

Today, NoMa is home to many tenants of national significance and we are proud of the smart organizations that choose to be in NoMa. The range is amazing from a a thriving media and tech cluster with NPR, CNN, Sirius XM and Google; to a think-tank and policy cluster with the World Resources Institute, Mathematica Policy Research, NeighborWorks America and the Center on Budget and Policy Priorities; to dynamic associations like the American Psychological Association and the National Association of Counties; and leading federal agencies such as the US Department of Justice, the Securities and Exchange Commission, the Consumer Financial Protection Board, Federal Energy Regulatory Commission and the Bureau of Alcohol, Tobacco, Firearms and Explosives.

These tenants are drawn to the new, environmentally sustainable buildings, the centrality of NoMa, great local and regional transit access and the mixed-use vibrancy of the neighborhood. The people who choose to live in the new buildings in NoMa are extraordinarily dynamic as they are:

- well educated – 95% have college degrees;
- high wage earners – more than 60 percent have incomes over $80,000; and
- a little newer to the job market – the average age is just over 30.

They come to NoMa for a quality of life, great buildings, the convenience of a walkable neighborhood where they do not need to depend on a car, and excitement to be in this growing community at the heart of the District.

What began as a bold, untried idea for an infill Metro Station just over 15 years ago has spawned a vibrant new neighborhood; a true mixed-use urban center in a previously underserved section of the District. To the many that helped to make this happen – thank you. It is inspiring to see the results. To those of you who have not been here in a while, I invite you to walk down First Street, NE at lunchtime one day and experience the lively NoMa neighborhood for yourself.

Sincerely,

Doug Firstenberg | *Principal, StonebridgeCarras*
Chairman, NoMa BID Board of Directors

NoMa–Gallaudet U Metro Station: Success Built on Transit

Executive Summary

In observance of the 10th anniversary of the opening of the NoMa – Gallaudet U Metro Station, our firm, RKG Associates, Inc. was engaged by ULI Washington and the NoMa Business Improvement District (NoMa BID) to conduct an economic analysis to describe and quantify the impacts of this unique investment in transit-oriented development (TOD). A study of this project is important from a local perspective in terms of the economic impact of the relatively modest public sector TOD investments in the NoMa – Gallaudet U Metro Station. It is important from the local, national and global perspectives to improve understanding of the conditions that are a precedent to a successful TOD investment.

Our study found a strong correlation between the NoMa – Gallaudet U Metro Station and the tremendous growth that has occurred in NoMa since 2004.

Indeed, the $4.7 billion of total economic output ($2.2 billion in cumulative construction output and $2.5 billion in permanent output in 2014), $330 million of municipal revenue and millions of square feet of development that has come since 2004 would not have been possible without the investment in the NoMa – Gallaudet U Metro Station. We concluded from our research that development catalyzed by the NoMa – Gallaudet U Metro Station has been one of the District of Columbia's most important new economic drivers over the past decade.

The area studied in this report (north of K Street, NE in the NoMa BID referred to as the NoMa Station Impact Study Area) is depicted on page 4 of the full report. RKG determined through developer and property owner interviews that proximity to the NoMa – Gallaudet U Metro Station TOD investment was a principal developer consideration in initiating these projects. Projects in the NoMa Station Impact Study Area and spurred by the NoMa – Gallaudet U Metro Station include approximately 3.8 million SF of office space, 183,000 SF of retail, 3,057 residential units and 622 hotel rooms. (Many other projects may also be influenced by proximity to the NoMa Gallaudet – U Metro Station but are outside the scope of this analysis.) Significantly too, over the next five years (2015-2019), another 2.4 million SF of office space, 285,000 SF of retail, and 2,624 new residential units are projected for delivery in the same area.

Using a combination of project-specific data and generally-accepted industry standards to drive the IMPLAN V.3 econometric model, RKG Associates estimates total employment, earnings and gross economic output associated with projects in the NoMa Station Impact Study Area as follows:

- Economic Output – Total economic output for all construction and permanent employment account for over $4.7 billion in all industries since 2004 ($2.2 billion in cumulative construction output and $2.5 billion in permanent output in 2014).

- Construction Spending – $1.7 billion in direct construction spending, not including parking and infrastructure improvements.

- Labor Earnings – Total labor earnings of over $1.1 billion have been generated by construction activity since 2004. In 2014, permanent labor earnings have reached almost $1.9 billion.

- Employment – Approximately 14,338 direct, indirect and induced jobs were created between 2004 and 2014 as a result of the NoMa construction spending. In addition, another 15,168 permanent jobs (direct, indirect and induced jobs) have been created as of 2014, resulting in a total job impact of 29,506 jobs.

NoMa–Gallaudet U Metro Station: Success Built on Transit

Executive Summary

In addition to studying economic output, we found that the construction of the NoMa – Gallaudet U Metro Station resulted in approximately $330 million in total cumulative municipal revenue to the District from 2006 through 2014, reflecting:

- $247 million in cumulative real property tax revenues; $46 million in estimated annual revenues in 2014
- $41 million in cumulative sales tax revenues; $7.3 million in estimated annual revenues in 2014
- $27 million in cumulative resident income taxes; $11 million in estimated annual revenues in 2014

We anticipate that municipal revenues from the NoMa Station Impact Study Area will continue to grow at a rapid pace. In the period from 2015 to 2019, projected annual municipal revenues (not including one-time revenues such as construction and other permits or certain recurring revenues like parking fees) are likely to increase from $68 million to $152 annually. Overall, during the period from to 2006 through 2019 the NoMa Station Impact Study Area is expected to yield nearly $1 billion in total cumulative revenue to the District.

RKG
ASSOCIATES INC

FULL REPORT

NoMa-Gallaudet U Metro Station: Success Built on Transit

Municipal Revenue and Economic Impact Analysis

RKG ASSOCIATES INC

COMMISSIONED BY:

ULI Urban Land Institute Washington

NoMa CONNECTED

NoMa-Gallaudet U Metro Station: Success Built on Transit

Municipal Revenue and Economic Impact Analysis

A. INTRODUCTION

RKG Associates, Inc. was retained by ULI Washington and the NoMa Business Improvement District (NoMa BID) to conduct a revenue and economic impact analysis of the area in NoMa most directly developed as a result of the construction and opening in 2004 of the infill NoMa – Gallaudet U Metro Station (referred to as the NoMa Station Impact Study Area, or Study Area, and depicted on page 4).

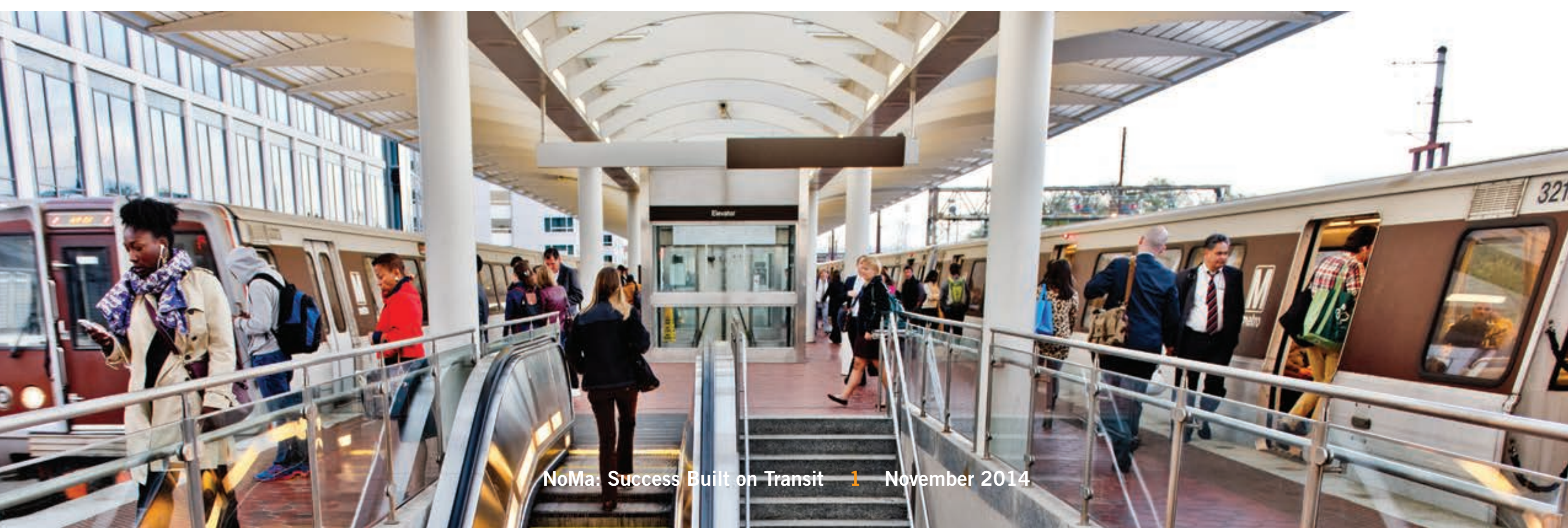
The impact analysis examines and quantifies certain municipal revenues and economic impacts accruing to the District of Columbia as a result of new development in the NoMa Station Impact Study Area following the construction of the NoMa – Gallaudet U Metro Station. RKG Associates measured major revenue sources with direct benefit to the District of Columbia. While there are other sources of municipal revenues and other areas developed in part based on proximity to the NoMa – Gallaudet U Metro Station, these revenues are less consequential in measuring the revenue impact of this development on the District's economic output and fiscal health. Revenues measured include real property tax, local sales and restaurant taxes, hotel taxes, business franchise taxes, resident income taxes and personal property taxes. All municipal tax calculations contained herein utilize information obtained from the DC Office of the Chief Financial Officer and other sources as noted.

The purpose of the economic impact analysis is to measure the employment, earnings and gross regional product changes in the District economy resulting from new development activity most directly undertaken as a result of the construction of the NoMa – Gallaudet U Metro Station.

B. NOMA AREA HISTORICAL CONTEXT

The 10-year anniversary of the completion of the NoMa – Gallaudet U Metro Station presents a timely opportunity to reflect on the impact of the station and look to the future of the rapidly growing NoMa neighborhood. NoMa – Gallaudet U was the first infill station in the Metro system, closing a 2-mile gap between Union Station and Rhode Island Avenue on the busy Red Line. In its first 10 years, it has been an extraordinary catalyst for economic growth, and a national and international example of how to use public-private partnerships to implement major infrastructure investments and catalyze development.

The origins of the funding for the NoMa – Gallaudet U Metro Station can be traced back to the National Capital Revitalization Act, signed by President Clinton in 1997. Action 29 of this Act called for the construction of a Metro station in the area where the NoMa – Gallaudet U Metro Station is today. Ultimately, the station was uniquely financed through a public-



private partnership among the District of Columbia government ($54 million), federal government ($31 million), a special assessment on local property owners ($25 million bonded for assessment over 30 years) and donation of $10 million in land by adjacent property owners. This funding also covered the elevated portion of the Metropolitan Branch Trail (MBT) that runs alongside the Metro tracks today.

Since the opening of the station in November 2004, the area around it has transformed from mostly parking lots and industrial buildings into a vibrant mix of Class A office, retail and residential. The Bureau of Alcohol, Tobacco, Firearms and Explosives began construction on its new headquarters adjacent to the station in 2004 and became NoMa's first anchor tenant less than four years later. Likewise, the first new Class A office building post-Metro station, 1200 First Street, NE, at the corner of First and M Streets, NE, was finished in 2007. Shortly thereafter, the massive 2.5 million SF Constitution Square project, the first LEED Platinum Neighborhood Development project in the Washington region, delivered its first phases (100 percent preleased) and the Harris Teeter at First and M Street, NE opened in December 2010.

These three key initial developments were followed by many more, all-in-all totaling more than 8 million SF of new mixed-use development north of K Street, NE, since 2005, including almost 4,000 new residential units in the last four years alone.

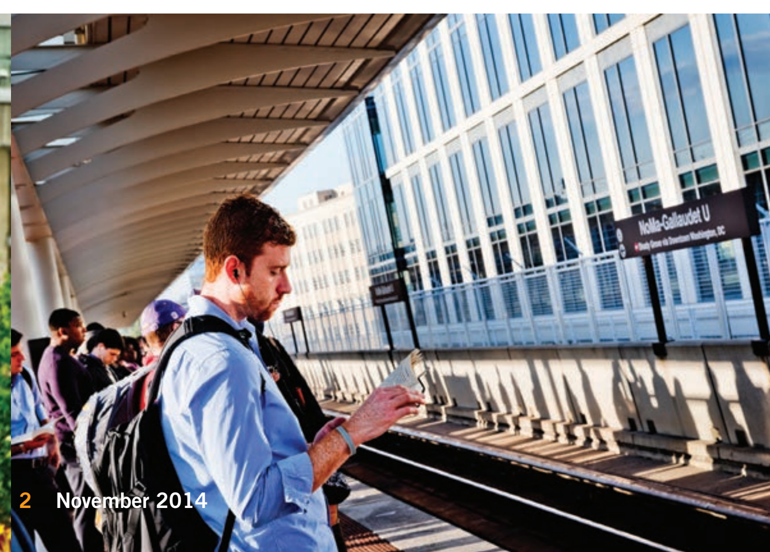
Today, NoMa is more than 50 percent built out, with notable tenants including NPR, Google, the American Psychological Association, Department of Justice, Consumer Financial Protection Bureau, Mathematica Policy Research, and NeighborWorks America. The NoMa – Gallaudet U Station and MBT are drivers of growth in the neighborhood. In 2012, the station was renamed to NoMa – Gallaudet U, acknowledging the vibrancy and stature of the new neighborhood that had sprung up here and the importance of Gallaudet University, which has been in its location on Florida Avenue, NE for 150 years.

The last 10 years have seen significant growth in the area around the station west of the train tracks that run through NoMa. The next few years will bring significant redevelopment east of the station. Union Market has already become a regional destination, and more than 2.5 million SF of development is planned in the Florida/Union Market area. Growth in the neighborhood and of ridership originating and terminating at NoMa – Gallaudet U (average weekday exits of 9,500 passengers in September 2014, more than quadruple the 2005 average of 2,200) has even led to a Washington Metropolitan Area Transit Authority study of a new pedestrian tunnel ending near Third and N Streets, NE, to improve access to the station from the east side of the railroad tracks.

In light of 10 years of remarkable growth and the growing national and international importance of transit-oriented development, ULI Washington and the NoMa BID initiated this study of the fiscal and economic impacts that this public-private partnership has had on the District of Columbia. RKG Associates, Inc. has investigated these impacts, giving numbers to the life visible in the neighborhood every day.

C. NOMA MARKET CONTEXT

The ability of transit-oriented development (TOD) to attract and sustain commercial and residential development is well documented, as well as its efficiency benefits in general. TOD typically includes a mix of residential, office, retail and/or other amenities integrated into a walkable neighborhood and located within a half-mile of a public transit station or other forms of public transportation. Benefits of TOD are



reduced household driving, increased transit ridership, improved access to jobs and economic opportunity for working families, expanded mobility choices that reduce dependence on the automobile, and reduced transportation costs that free up household income for other purposes. Of interest to investors is the potential for added value created through increased and/or sustained property values where transit investments have occurred.

As an element of our NoMa Metro Station economic impact analysis, we contacted and interviewed developers, property owners, and businesses within the NoMa Station Impact Study Area in order to assess the influence of TOD on their decision to invest. Through these confidential interviews and other research, we were able to assess the impact of the station investment and market forces on development in the NoMa Station Impact Study Area.

The NoMa Metro Station was a product of a public/private partnership formed with the express purpose of creating a TOD neighborhood in an otherwise underutilized area through the development of an infill transit station. The funding package for the NoMa – Gallaudet U Station totaled $120 million, $35 million of which comprised private sector investment in money and land. This fact alone is an indicator of the importance of strategically located transit to private developers and their customers.[1]

Other factors were also at play in NoMa that facilitated its redevelopment. Ten years ago, the area was dominated by surface parking lots and vacant properties, but its location just a few blocks from the U.S. Capitol was a great asset. Much of the area is zoned C-3-C and is in a Transferrable Development Right receiving zone. This designation allows for up to a 10 FAR and 130-foot building height. Projects require only very limited plan approval, and there are no set-asides for inclusionary zoning. The flexibility in zoning allows for a certainty of outcome for investors that does not exist with most other District properties.

Federal guidelines also strongly encourage the location of government buildings and the leasing of federal office space "in sustainable locations to help ensure that workers and the visiting public have convenient, safe transportation options to reach federal facilities, which in turn will help to reduce the greenhouse gas emissions that result from worker and visitor commuting and will better integrate the federal presence into the surrounding community. Additionally, this improved access will lower transportation costs for workers and visitors and can provide communities with employment centers that can help drive economic development."[2] This, and proximity to the U.S. Capitol and other federal buildings, most likely accounts for the fact that the federal government occupies 56% of the leased office space in the NoMa Station Impact Study Area. It is noteworthy, though, that over the last few years, the trend in NoMa favors private sector leases and the neighborhood is now nearly 40 percent private office.[3]

We found that private developers also focus on TOD as part of their business plans. At least one major investor in the NoMa Station Impact Study Area develops exclusively in transit areas as a rule. TOD investors also note that apartments near transit command rent premiums of 10 to 20 percent over comparable properties in non-transit areas, signifying a high demand quotient. Location near transit is also a strong incentive for hotel investors as well, since both business and leisure travelers prefer the convenience of transit and not having to navigate the

[1] NoMa: The Neighborhood That Transit Built, Urban Land Institute, 2012.
[2] Implementing Instructions – Sustainable Locations for Federal Facilities, General Services Administration, 2011.
[3] Delta Associates, November 2014

city by automobile or use taxis. The consensus among stakeholders is that transit was a strong determinant in their investment decision, but the unique characteristics of real estate development and demand drivers in the District were also significant influences.

D. IMPACT STUDY AREA DESCRIPTION

The NoMa Station Impact Study Area geography subject to analysis in this report comprises the area north of K Street, NE, that is contained within the NoMa BID boundaries. This area was reasoned to be the most heavily influenced from a TOD perspective by the NoMa – Gallaudet U Metro Station. The area within the NoMa BID that is south of K Street is excluded because it was significantly developed prior to 2004, and is served by Metrorail, MARC, VRE, and Amtrak transit lines with terminals at Union Station. It is therefore only marginally influenced by the NoMa – Gallaudet U Metro Station from a TOD perspective.

The NoMa Station Impact Study Area is depicted in the map below.

NOMA STATION IMPACT STUDY AREA

Development sites Existing sites

E. REAL ESTATE DEVELOPMENT SUMMARY

A data summary of development and land use characteristics of the NoMa Station Impact Study Area is presented in Table 1 and includes both existing and proposed development. Since the completion of the NoMa – Gallaudet U Metro Station, approximately 3.8 million SF of office space, 183,000 SF of retail, 3,057 residential units and 622 hotel rooms have been constructed and delivered. Over the next five years (2015-2019), another 2.4 million SF of office space, 285,000 SF of retail, 2,624 new residential units are projected for delivery.

Of the approximately 3.8 million SF of office space that was delivered in the NoMa Metro Impact Study Area from late 2005 through 2014, all but 422,000 SF is privately owned and operated. As of Q2 2014, an estimated 82% was occupied, according to CoStar Realty Information Inc. The largest single owner/ tenant is the federal government, which occupies 1.4 million SF of leased space and the 422,000 SF federally owned Bureau of Alcohol, Tobacco, Firearms and Explosives headquarters building, for a total of 1.8 million SF. The second largest tenant block category is the private sector, which occupies 1.2 million SF.

Retail and restaurants occupy a total of approximately 138,000 SF of ground floor space in office, hotel and residential buildings in the area. Food and beverage establishments occupy approximately 75,000 SF, followed by grocery (Harris Teeter) at 50,000 SF, a CVS Pharmacy at 9,000 SF, and other assorted retailers and services.

Two hotels delivered in the NoMa Station Impact Study Area in 2009/2010, comprised of a Courtyard by Marriott with 218 guest rooms and a Hilton Garden Inn with 204 rooms. A Hyatt Place hotel delivered in late 2014, adding 200 guest rooms to the lodging inventory. Data concerning historic, fiscal, and economic impacts of the hotels do not include Hyatt Place, since it was not fully operational until June 2014. Residential product began to deliver in 2010, and a total of 3,057 multifamily dwelling units have been delivered since then. This includes 400 units newly delivered in August 2014. The NoMa BID reported that 2,302 units were occupied in August 2014, based on monthly surveys of property managers.

Table 1

DEVELOPMENT AND LAND USE SUMMARY (2005-2014)

NoMa Station Impact Study Area

SUMMARY OF RECENT ACTIVITY

Development Delivered 2005 - 2014	
Office:	3,772,623 Square Feet
Retail:	183,381 Square Feet
Hotel:	622 Guest Rooms
Residential:	3,057 Units

SUMMARY OF PROJECTED ACTIVITY

Development Expected 2015 - 2019	
Office:	2,414,700 Square Feet
Retail:	285,100 Square Feet
Hotel:	
Residential:	2,624 Units

MAJOR TENANTS 2014

Office	Bldg. SF	Retail	Bldg. SF	Hotel	Rooms
Federal Government:	1,776,164 SF	Restaurants	50,882 SF	Courtyard by Marriott	218 Rooms
Nonprofits:	1,136,594 SF	Nightclub	24,000 SF	Hilton Garden Inn	204 Rooms
Private Companies:	140,024 SF	Grocery	50,019 SF		
District Government	121,560 SF	Drug Store	9,047 SF		
		Miscellaneous	4,760 SF		
TOTAL	3,174,342 SF	TOTAL	138,708 SF	TOTAL	422 Rooms

DELIVERY BY YEAR 2005-2014

Land Use Type	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Office Square Feet	408,400	0	697,000	0	345,000	1,358,223	0	271,000	693,000	0
Retail Square Feet	5,000	0	25,000	0	15,000	107,038	0	14,050	8,193	9,100
Hotel Rooms	0	0	0	0	218	204	0	0	0	0
Residential Units	0	0	0	0	0	950	0	724	669	714
TOTAL SF	413,400	0	722,000	0	360,000	1,465,261	0	285,050	701,193	9,100

PROJECTED DELIVERY BY YEAR 2015-2019

Land Use Type	2015	2016	2017	2018	2019
Office Square Feet	0	740,000	1,047,700	0	1,196,000
Retail Square Feet	0	129,000	145,100	5,000	11,000
Hotel Rooms	200	0	0	0	0
Residential Units	0	1,267	1,132	225	346
TOTAL SF	0	869,000	1,192,800	5,000	1,207,000

F. TAX REVENUE IMPACTS AND PROJECTIONS

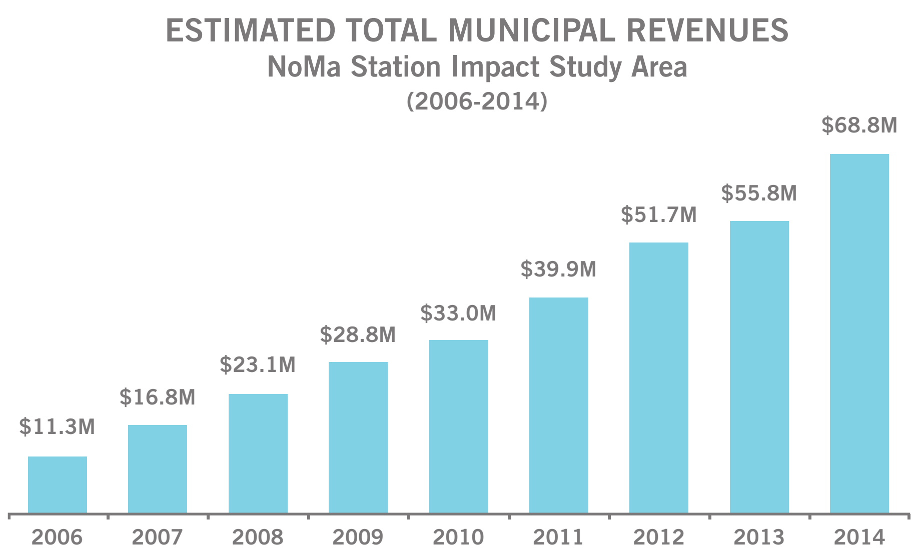
1. Municipal Tax Revenue Overview

In 2006, combined tax revenues in the NoMa Station Impact Study Area were estimated at $11.3 million. In 2014, total annually recurring municipal revenues were estimated at $68.8 million, increasing over 500% (Figure 1). Cumulative municipal revenues accrued over this period are estimated to equal approximately $330 million.

Development within the NoMa Station Impact Study Area has generated steadily increasing municipal revenues to the District of Columbia from a variety of sources through real property improvements, escalations in property values, various business activities, and the incomes of new residents. For example, commercial office buildings can generate net new real property tax at 65% of construction completion, and then are taxed on construction value on completion. Subsequent to building stabilization and lease up, the property will be reassessed based on its income valuation. In the case of the NoMa BID, the ownership of several new buildings was transferred prior to lease up, which further enhanced their value.

Sales taxes on retail merchandise and food and beverage sold in restaurants are also significant sources of revenue. Since 2006, 17 food and beverage establishments have taken up residence in the NoMa Station Impact Study Area, along with a Harris Teeter grocery store, a CVS Pharmacy, and Unleashed by Petco, a pet supplies store, among others. Two hotels opened in the NoMa Station Impact Study Area during this period (plus a third that was delivered in late 2014), that are subject to a District hotel tax. These establishments, along with white-collar businesses occupying office space, also pay municipal taxes on business income and tangible property such as furniture, fixtures and equipment. In addition, new housing in NoMa accommodates residents who are subject to municipal taxes on their personal income. The methodology by which individual municipal revenue streams are estimated is described in the following sections.

Figure 1



Source: RKG Associates 2014

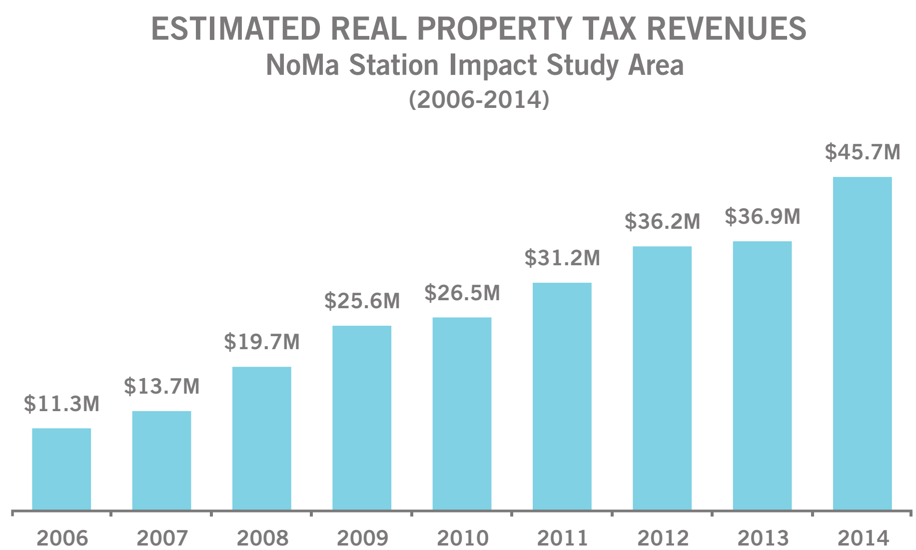
2. Real Property Taxes

The steady increases in property assessments and associated taxes reflect both the addition of improvements and the value appreciation of unimproved properties within the NoMa Station Impact Study Area. Real property taxes are the single largest source of tax revenues to the District government for the NoMa Station Impact Study Area, and were estimated to equal approximately $11.3 million in 2006, increasing to $45.7 million in 2014. Total cumulative real property tax revenues generated during this period are estimated to equal $247 million, or 74% of cumulative total tax revenues, during the study period (Figure 2).

Real property is taxed based on its classification, which is the grouping of properties based on similar use. Properties in different classes are taxed at different rates, which is the amount of tax on each $100 of the assessed value of the property. The tax rate for residential real property, including multifamily, is $0.85 per $100. The tax rate for commercial real property, including hotels and motels, is $1.65 for the first $3 million of assessed value and $1.85 for assessed value more than $3 million. Since unimproved land carries a commercial zoning designation, it is taxed at the commercial rate until such time it is developed for residential use.

Estimates of real property tax revenues were derived from two sources. The first is the DC Office of Tax and Revenue Real Property Assessment Database, which shows actual real property taxes, by property, paid to the District on an annual basis. Although a significant amount of real property tax revenue data was obtained from this source, tax payment information was available only as far back as the most recent subdivision of each property. In these instances, we used historic property assessment data to calculate estimated taxes based on assessed value.

Figure 2



Source: DC Office of Tax and Revenue; NoMa BID; RKG Associates 2014

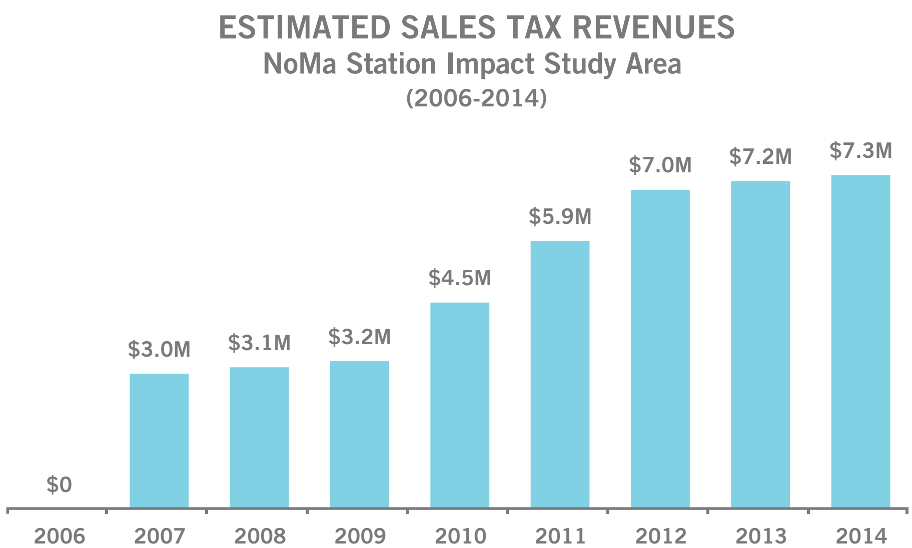
3. Sales Taxes

The findings of the analysis of sales tax revenues show annual tax revenues of $3 million commencing in 2007, increasing to $7.3 million in 2014. Total cumulative sales tax revenues generated during this period are estimated to equal $41 million (Figure 3).

Taxes are imposed on tangible merchandise and selected services sold or rented at retail establishments in the District of Columbia. Groceries, prescription and non-prescription drugs are among those items exempt from the sales tax. The District levies a general tax rate for retail merchandise at 5.75% and a rate of 10% for restaurant meals and liquor sales consumed on the premises at drinking establishments.

Sales tax revenues for the NoMa Station Impact Study Area are derived by estimating the sales per square foot for specific retail categories, which were obtained from several sources including ESRI Business Services, the Urban Land Institute and the Washington, DC Economic Partnership (WDCEP). Sales per square foot estimates used for this analysis range from $306 for pet supplies stores, to $584 for limited service restaurants, to $750 for health and personal care stores (pharmacy), to over $1,500 for nightclubs. Sales per square foot were annually adjusted based on the Consumer Price Index.

Figure 3



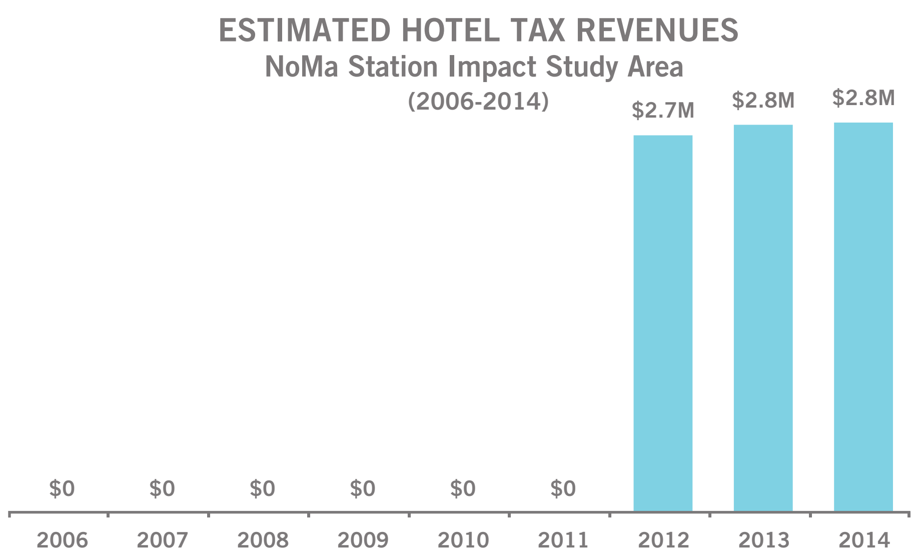
Source: ESRI Business Services; Urban Land Institute; WDCEP; NoMa BID; RKG Associates 2014

4. Hotel Occupancy Taxes

The NoMa Station Impact Study Area currently has three hotel properties in full operation totaling 622 guest rooms. The most recent delivery, the Hyatt Place with 200 guest rooms delivered in June 2014, and is only factored into the projected revenues (under Section 8) starting in 2015, in its first full year of operation at stabilization. Revenues from transient lodging are taxed at a rate of 14.5%.

Although the operating characteristics for specific lodging properties is typically closely held information, the consultant estimates hotel tax revenues to the District in the range of $2.7 to $2.8 million annually for the two NoMa BID hotels starting in 2012. Annual hotel tax revenues are projected to reach $3.5 million when the new hotel is fully stabilized, in 2014 dollars. Total cumulative hotel tax revenues during the NoMa Station Impact Study Area period are estimated at roughly $8.2 million (Figure 4).

Figure 4



Source: ESRI Business Services; Urban Land Institute; WDCEP; RKG Associates 2014

5. Business Franchise Taxes

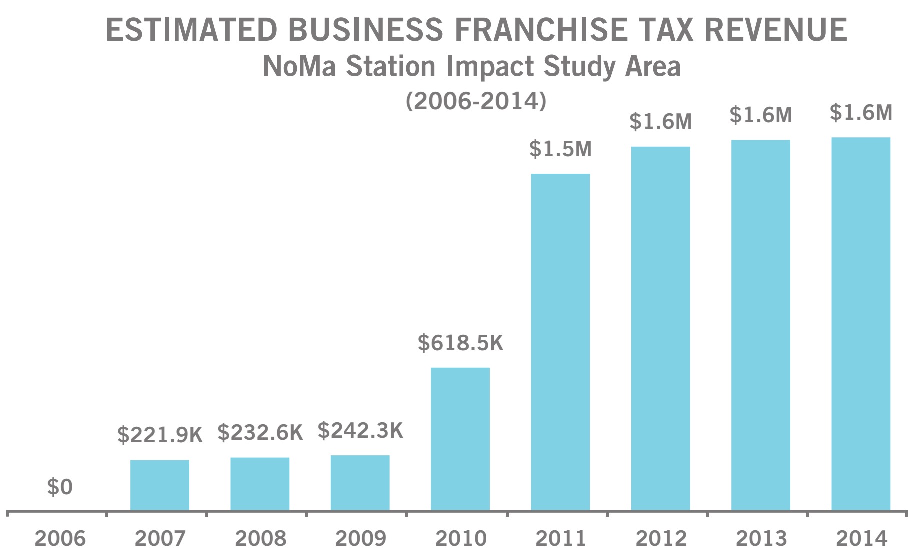
The findings of the analysis of business franchise tax revenues show annual tax revenues of approximately $222,000 commencing in 2007, increasing to $1.6 million in 2014. Total cumulative business franchise tax revenues generated during this period are estimated to equal $7.5 million (Figure 5).

All corporations engaging in a trade, business or profession in the District of Columbia are subject to a franchise tax at the rate of 9.975% of taxable income. Taxable income is net profit after expenses. It is calculated based on the following assumptions:

- Retail - 7.5%
- Hotels - 5%
- Professional Service Businesses – (the number of employees is multiplied by an estimated sales output of $150,000 per employee and a taxable profit of 10%).

Sources for these assumptions include Forbes, the U.S. Bureau of Labor Statistics, and the consultant's institutional knowledge based on previous studies. Government and nonprofits are exempt from business franchise taxes.

Figure 5



Source: Forbes; Bureau of Labor Statistics; NoMa BID; RKG Associates 2014

6. Personal Property Taxes

The District imposes a personal property tax on commercial enterprises based on depreciated value of furniture and equipment at various schedules. The personal property tax is calculated based on 3% of the proportion of real property taxes allocated to the amount of space occupied by taxable entities, as derived from the 2013 Comprehensive Annual Financial Report. Total cumulative personal property tax revenues within the study area are estimated to equal approximately $510,000.

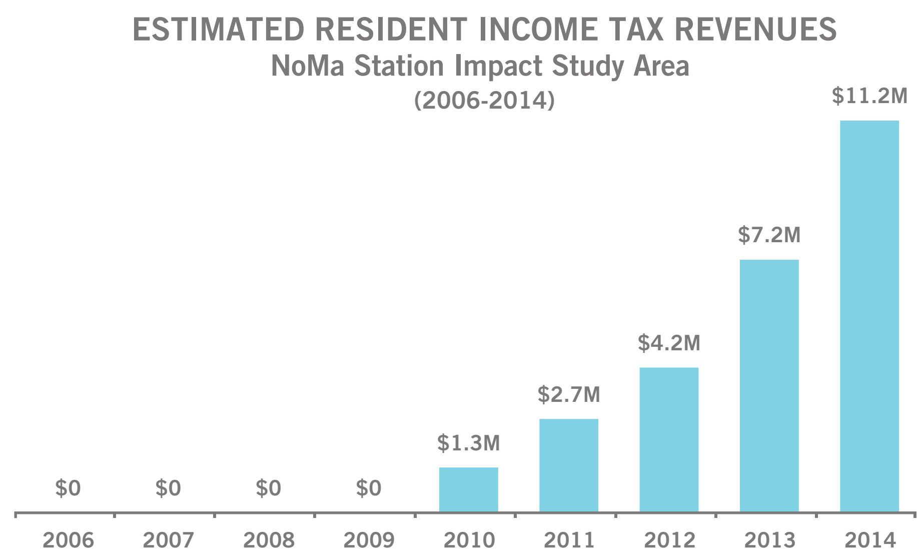
7. Resident Income Taxes

The findings of the analysis of resident income tax revenues show annual tax revenues of approximately $1.3 million commencing in 2010, increasing to $11.2 million in 2014. Total cumulative resident income tax revenues generated during this period are estimated to equal $26.6 million (Figure 6).

Individuals who are domiciled in the District at any time during the tax year are subject to income taxes. The occupied unit count of 2,302 in 2014 reflects numbers based on property manager surveys for August 2014, and the occupied unit count of 1,530 for 2013 reflects January 2013 numbers based on surveys of property managers at that time.

Income taxes are estimated on the assumption that the occupants are primarily renters, as there are presently very few occupied condominiums in the NoMa Station Impact Study Area. Average household incomes are derived from Site to Do Business data for the NoMa Station Impact Study Area showing average household incomes at $80,322 in 2010 and $87,036 in 2013. The years 2011, 2012 and 2014 reflect proportional increases calculated by the consultant. A standard deduction of $4,100 is applied to each household as well as dependents, who are considered to be residents of 20 years of age or younger. Income taxes per household are estimated to range from $4,298 in 2010 to $4,880 in 2014.

Figure 6



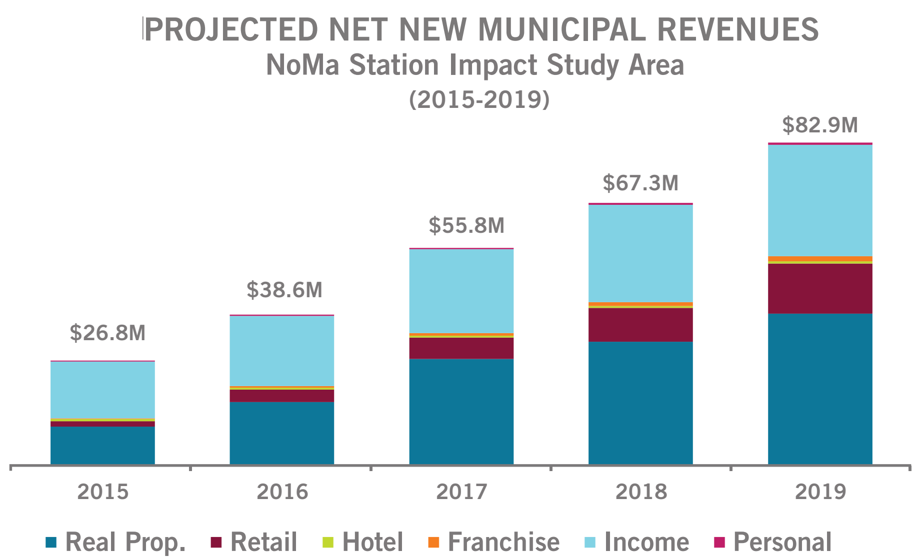
Source: Site to Do Business; NoMa BID; RKG Associates 2014

8. Revenue Impacts of Projected Development (2015-2019)

Additional new development that is projected to occur in the NoMa Station Impact Study Area will increase new municipal revenues from all sources as new developments are brought on line and become operational. Projected new development includes: approximately 2.4 million SF of office space; 285,100 SF of retail space; a new hotel with 200 guest rooms; and, 2,624 new residential units (Table 1).

Net new revenues from development in this period are projected to equal approximately $26.8 million in 2015, increasing to $82.9 million in 2019, and totaling $271.4 million in cumulative revenues during the 5-year projection period, expressed in 2014 dollars (Figure 7). Net new municipal revenues will be generated from real property, sales, franchise, income, and personal property taxes. Figure 7 illustrates the large proportion of municipal revenues generated through real property and resident income taxes, with significant revenues generated through retail sales taxes.

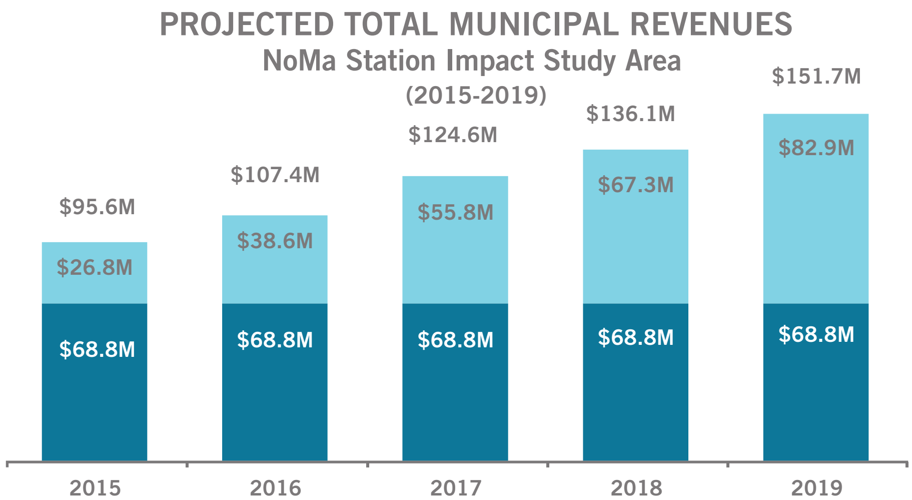
Figure 7



Source: NoMa BID; RKG Associates 2014

When the municipal revenue stream from 2006 forward is factored in, the totality of the fiscal impact of development in the NoMa Station Impact Study Area can be measured. Figure 8 shows municipal revenues for existing (dark blue) and future (light blue) development, estimated to equal $151.7 million in 2019, in 2014 dollars. By 2019, the projected cumulative municipal revenues generated from the NoMa Station Impact Study Area are estimated to be over $602 million in 2014 dollars. It is also important to note that property sales and naturally occurring escalations in values are likely to drive this figure higher.

Figure 8



Source: NoMa BID; RKG Associates 2014

G. ECONOMIC IMPACTS

1. Introduction

Economic impacts are a measure of employment, earnings, direct output and indirect output associated with commercial activities of employers, workers and residents within a specific geography. Economic analysis examines impacts associated with the construction of improvements, as well as the operations of businesses, organizations, and government, and the support of local businesses from residents in the subject area.

For this economic impact analysis, RKG obtained information from a variety of sources, including research conducted by the NoMa BID, in order to estimate annual building construction spending and permanent employment levels within the NoMa Station Impact Study Area since 2004. These direct numbers were then used to drive a series of simulations using IMPLAN V.3 econometric model. IMPLAN V.3 measures the direct, indirect and induced impacts associated with a specific economic event (e.g., new job creation, a change in wages paid, etc.) or industry investment (e.g., construction of a new highway or industrial plant).

2. IMPLAN V.3 Model

IMPLAN V.3 is a widely accepted and utilized software model in use since 1972, in connection with the Rural Development Act of 1972. At the heart of the model is an input-output dollar flow matrix. For a specified region, the input-output table accounts for all dollar flows between different sectors of the economy. Using this information, IMPLAN models the way a dollar injected into one sector is spent and re-spent in other sectors of the economy, generating waves of economic activity, or so-called “economic multiplier” effects. The model uses national industry data and county-level economic data to generate a series of multipliers, which in turn estimate the total economic implications of economic activity. At the heart of the model is a national input-output dollar flow table called the

Social Accounting Matrix (SAM). Unlike other static input-output models, which just measure the purchasing relationships between industry and household sectors, SAM also measures the economic relationships between government, industry, and household sectors, allowing IMPLAN to model transfer payments such as unemployment insurance to estimate the economic impacts. For this analysis, RKG Associates obtained the IMPLAN model data for the Washington, DC, economy for the most current data year of 2012. The model has the ability to project impacts into the future by making inflation adjustments.

3. Construction Impacts

Construction-related impacts are driven by projected annual spending on a variety of building construction activities within the NoMa Station Impact Study Area. Typically, once construction is completed much of the economic impacts will end. As such, employment, wages and output will ebb and flow depending on the amount of spending in any given year. The construction period for this study was 2004 to 2014 and is summarized in Table 2.[3]

Table 2

ESTIMATED CONSTRUCTION SPENDING (2004-2014)
NoMa Station Impact Study Area

Development Name	Development Address	Office (SF)	Retail (SF)	Residential (units)	Hotel (rooms)	Total Estimated Construction Costs
One NoMa Station	131 M St, NE	408,400	5,000	0	0	$ 107,405,041
ATF Headquarters	99 New York Ave, NE	422,000	8,000	0	0	$ 111,717,870
Capitol Plaza	1200 First St, NE	275,000	17,000	0	0	$ 75,864,228
Courtyard Marriott	1325 Second St, NE	0	10,000	0	218	$ 41,267,400
Mathematica	1100 First St, NE	345,000	5,000	0	0	$ 90,933,150
Constitution Sq I	1225 First St, NE	0	10,000	0	204	$ 38,617,200
Constitution Sq I	1275 First St, NE	330,000	15,000	0	0	$ 89,634,105
Constitution Sq I	145 N St, NE	575,000	15,000	0	0	$ 153,287,310
Sentinel Square I	90 K St NE	402,223	10,438	0	0	$ 107,213,042
Flats 130	130 M St, NE & 1215 First St, NE	0	3,000	643	0	$ 101,648,460
Union Place I - Loree Grand	250 K St, NE	0	3,600	212	0	$ 55,380,880
The Washington Center	1005 Third St NE	0	51,000	95	0	$ 30,211,000
Constitution Sq I	1201 First St, NE	0	50,000	0	0	$ 7,762,700
Trilogy NoMa - Cirq	151 & 201 Q Street NE	0	1,250	255	0	$ 54,851,590
Archstone First & M	1160 First St, NE	0	2,800	469	0	$ 74,141,723
Sentinel Square II	1050 First St NE	271,000	10,000	0	0	$ 73,006,329
Three Constitution Square	175 N Street NE	363,000	8,193	0	0	$ 96,439,282
NPR Headquarters	1111 North Capitol St, NE	330,000	0	0	0	$ 85,736,970
Camdem NoMa	60 L St, NE	0	0	321	0	$ 61,664,243
Trilogy NoMa - ESQUE	200 Q Street NE, Washington, DC	0	0	218	0	$ 45,433,450
Trilogy NoMa - Linq	150 Q Street, NE	0	0	130	0	$ 25,866,960
N Street NoMa: Hyatt Place	33 New York Ave NE	0	0	0	200	$ 41,646,000
Elevation at Washington	100 Florida Ave NE	0	5,000	400	0	$ 76,840,178
2M	2 M Street, NE	0	4,100	314	0	$ 60,319,540
Total - All Building Construction		3,721,623	234,381	3,057	622	$ 1,706,888,651

Source: District of Columbia Tax Assessor; Marshall & Swift Valuation Service; HVS

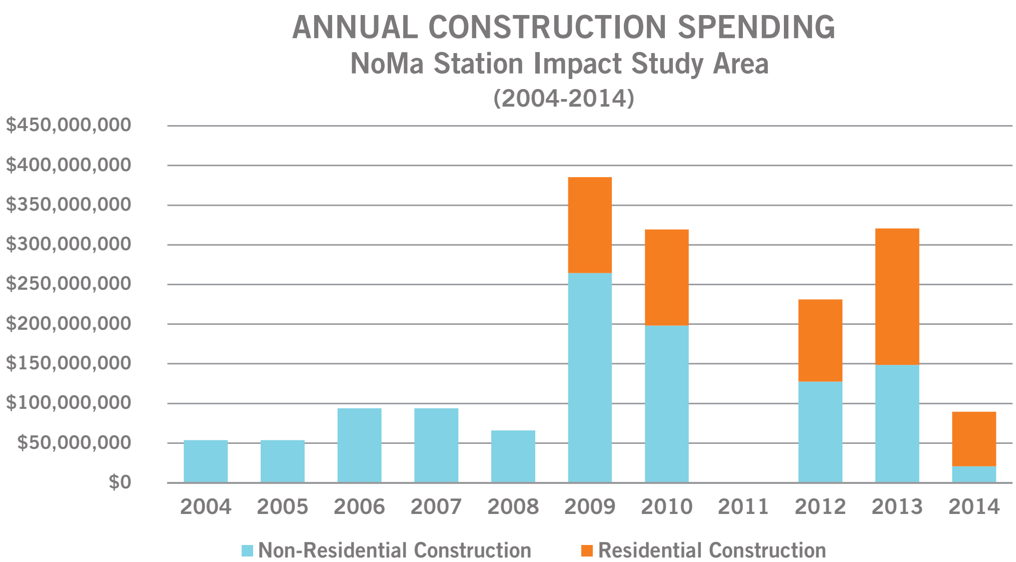
[3] The construction activities included in this analysis are only related to the new building construction. Other construction spending related to parking and infrastructure could not be obtained.

a. Direct Construction Spending

Starting with the construction of One NoMa Station in 2004 and 2005, RKG estimates that over $1.7 billion in new building construction has occurred within the NoMa Station Impact Study Area over the past decade. Estimates were derived using the Marshall & Swift building construction cost estimating manual and confirmed through interviews with local real estate developers active within the NoMa Station Impact Study Area. It was assumed that on average each building had a 2-year construction schedule and the spending was split evenly between those two years ending on the year the building was delivered. Total new construction activity has resulted in 24 new buildings containing over 3.8 million SF of office space, 234,381 SF of retail space, 3,057 residential units and 622 hotel rooms (Table 2).

With the exception of 2011, when there was no new construction activity, there has been a steady level of construction north of K Street, NE, ranging from a low of $53.7 million in 2004 to a high of over $385.4 million in 2009. In order to drive the IMPLAN model, RKG segmented the annual spending into two distinct categories reflecting nonresidential building construction and residential construction. Both categories possess slightly different input/output coefficients and economic impacts. Comparatively, there has been over $1.1 billion in non-residential construction (e.g. office, retail, hotels, etc.) and approximately $586.4 million in residential construction since 2004 (Figure 9).

Figure 9



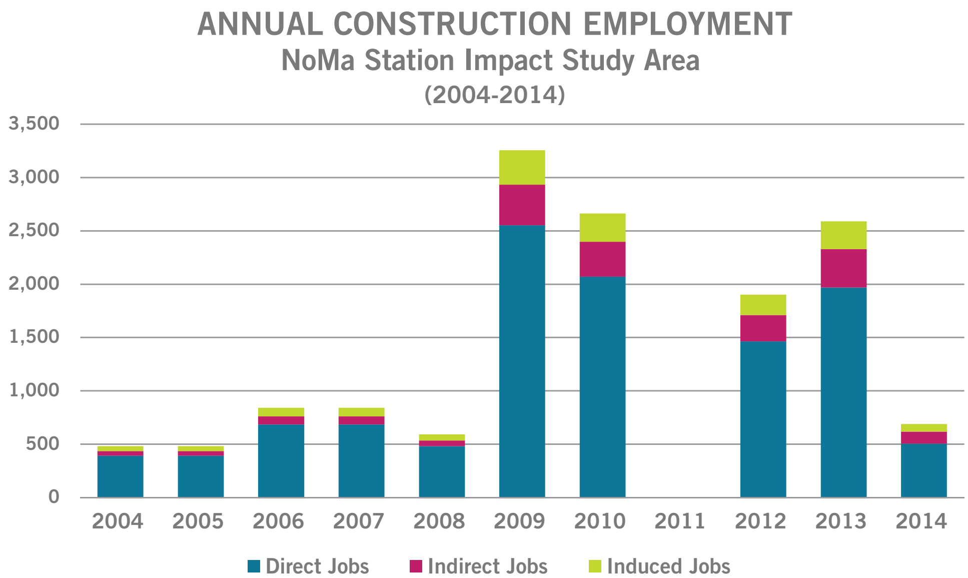
Source: DC Property Assessor's Office and RKG Associates, Inc.,

b. Construction Employment Impacts

The direct employment resulting from the above construction activity equals approximately 11,195 jobs over the 10-year construction period according to the IMPLAN model simulation. The peak year of construction occurred in 2009 when over 3,250 direct construction jobs were created (Figure 10).

In addition to direct construction jobs, there have been nearly 3,100 indirect and induced jobs created as a result of the direct construction spending. These additional jobs are often referred to as the "multiplier effect" and occur as multiple rounds of spending occur within the local economy. In total, the IMPLAN model simulation indicates that approximately 14,338 direct, indirect and induced jobs were created between 2004 and 2014 as a result of construction spending within the NoMa Station Impact Study Area.

Figure 10



Source: DC Property Assessor's Office and RKG Associates, Inc., 2014

c. Construction Labor Income Impacts

Labor income includes all forms of employment income, including employee compensation (wages and benefits) and proprietor income. The direct labor income resulting from the construction jobs is estimated at $854.8 million (in 2014 dollars) over the 10-year construction period. For all jobs created from these activities (direct, indirect and induced), total labor income is estimated at nearly $1.1 billion.

d. Construction Output Impacts

Output represents the value of all industry production. In IMPLAN these are annual production estimates for the year of the data set and are in producer prices. For manufacturers, this would be sales plus or minus a change in inventory. For service sectors, production equals sales and for retail and wholesale trade, output equals gross margin and not gross sales.

IMPLAN projects total economic output related to construction for the NoMa Station Impact Study Area to equal $2.2 billion (in 2014 dollars) over the 2004-2014 NoMa Station Impact Study Area period based on the original direct construction investment of $1.7 billion.

4. Operating Impacts

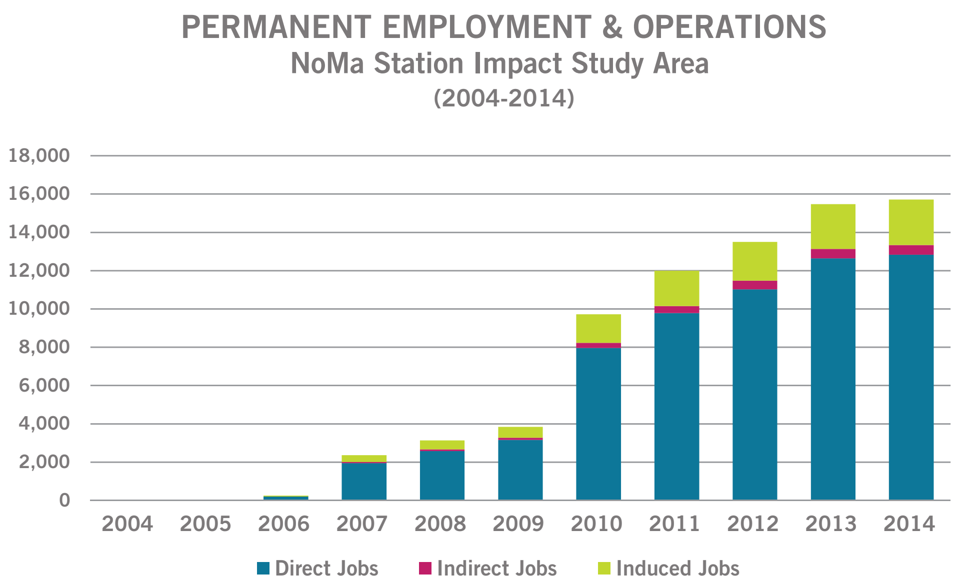
Operating impacts include the annual operations of various tenants occupying new building space within the NoMa Station Impact Study Area following the completion of construction. The operating impacts are directly related to the type of business functions occurring, when they were initiated and their level of occupancy. In other words, a federal government tenant that occupies 100,000 SF of office space for the past five years will generate a different economic impact than a private architecture firm occupying 10,000 SF for just that past 18 months. As such, RKG Associates utilized building occupancy and tenant information compiled by CoStar and provided by the NoMa BID, as well as other market data, to create a building occupancy scenario over for the NoMa Station Impact Study Area over the past 10 years.

The NoMa Station Impact Study Area is dominated by office tenants, primarily federal and local government (1.8 million SF), nonprofit (352,000 SF) and other office tenants (748,000 SF). In total, the NoMa BID estimates that roughly 3.17 million SF (85.6%) of the 3.8 million SF of office space constructed is currently occupied. In addition to office space, the NoMa Station Impact Study Area has over 138,000 of occupied retail space and 622 hotel rooms.

a. Permanent Employment Impacts

The direct employment resulting from the above occupancy is estimated at approximately 12,270 in 2014. According to RKG's estimates, roughly 90% of this employment is office employees, 7% retail workers and 3% hotel staff. In addition to employment in Figure 11, the IMPLAN model estimates that indirect and induced jobs resulting from these operations equal another 2,898 jobs for a total employment impact of 15,168 in 2014 (Figure 11).

Figure 11



Source: IMPLAN v.3 and RKG Associates, Inc., 2014

Permanent employment in the NoMa Station Impact Study Area has steadily increased annually as new buildings have been constructed and occupancy has increased. The most significant increase occurred in 2010 when, predominantly as a result of the delivery of Phase One of Constitution Square, total employment jumped from roughly 3,800 to nearly 9,500 jobs. Since 2010, employment has continued to increase by 60%.

b. Permanent Earning Impacts

The IMPLAN v.3 model estimates the impact of permanent earnings to equal $1.69 billion in 2014, with another $198 million in earnings associated with indirect and induced employment, totaling $1.89 billion in 2014 dollars (Figure 12). Similar to employment, the NoMa Station Impact Study Area experienced a rapid increase in earnings in 2010 due to employment gains.

Overall, each job created in the NoMa Station Impact Study Area has an estimated economic value of $124,000 per year, largely reflective of the higher compensation level of District employees, but also includes proprietor income. This earnings average is greatly enhanced by a large percentage (41%) of federal government jobs in the NoMa Station Impact Study Area.

Figure 12

Source: IMPLAN v.3 and RKG Associates, Inc., 2014

c. Permanent Output Impacts

IMPLAN projects total economic output related to permanent operations for the NoMa Station Impact Study Area to equal $2.5 billion (in 2014 dollars) in 2014, with direct economic output accounting for $2 billion or 82% off the total economic activity.

5. Summary NoMa Metro Impact Study Area Economic Impacts

In summary, redevelopment of the NoMa Station Impact Study Area has been one of the District of Columbia's most significant economic drivers over the past decade. Including construction spending, which started with the completion of the NoMa – Gallaudet U Metro Station in 2004, it is estimated that the total employment, earnings and gross economic output associated with this project include:

- *Construction Spending* - $1.7 billion in direct construction spending, not including parking and infrastructure improvements.

- *Employment* - Approximately 14,338 direct, indirect and induced jobs were created between 2004 and 2014 as a result of the NoMa construction spending. In addition, another 15,168 permanent jobs (direct, indirect and induced jobs) have been created as of 2014, resulting in a total job impact of 29,506 jobs.

- *Labor Earnings* - Total labor earnings of over $1.1 billion have been generated by construction activity since 2004. In 2014, permanent labor earnings have reached almost $1.9 billion.

- *Economic Output* - Total economic output for construction and permanent employment account for over $4.7 billion in all industries. Total economic output of roughly $2.2 billion has been generated by construction activity since 2004. In 2014, permanent employment operations accounted for more than $2.5 billion.

H. CONCLUSION

The story of the NoMa – Gallaudet U Station investment is a testament to the ability of transit, under the right conditions, to attract meaningful investment and cause remarkable growth. The District has already realized a net increase of almost $58 million in annually recurring municipal revenues from 2006, and will likely see that figure more than double in the next five years as new office buildings, stores, restaurants, and residences are completed. The area will continue to add new jobs where few existed prior to 2006. As noted above, the fiscal and economic benefits that have accrued to the District through the development of real estate within the NoMa Station Impact Study Area have been a significant driver of the District's economic success over the last ten years. With projected growth continuing over the next ten years, the NoMa Station Impact Study Area will continue to increase its importance as an economic engine in Washington, D.C.

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