MARKET REVIEW AND FORECAST

04.07.2015
Office Market Conditions in Context
Buildings with more than 10% vacancy make up 95% of vacant space.

- **Less than 10% Vacancy**
  - 20.3 M SF
  - 19.9 M occupied

- **More than 10% Vacancy**
  - 20.9 M SF
  - 8.6 M vacant
Significant Differences Exist Among High-Vacancy Buildings

Buildings w. More than 10% Vacancy

- 20.9 M SF
- 8.6 M vacant

Driildown by Building Class and Age

- Class A
  - 5.3 M vacant

- Class B
  - 3.3 M vacant
Each 1% of Current Office Occupancy is Worth $3.4 million in Local Taxes

- **$4.5 M**: Local tax revenue for a 100% occupied building
- **$3.3 M**: Local tax revenue for a 75% occupied building
- **$2.5 M**: Local tax revenue for a 50% occupied building
- **$1.1 M**: Local tax revenue for a 0% occupied building

Note: Assumes 100% occupancy = 400,000 SF of RBA in a building in the Crystal City submarket. Based on private sector for-profit tenancy.
The Challenge Ahead

• Office vacancy is 10% above its 15-year historical average.

• 4.4 million square feet (s.f.) of office space must be filled for the vacancy rate to reach 10%.

• The entire region is projected to add 3.6 million s.f. per year over the next two years.
Scenario 1: Regional Demand of 3.6 M s.f. per year

Office Demand in Millions of SF

Vacant Space

5% of region

10% of region

Pre-BRAC

Illustrative Performance Levels

+1.25% Occ.
Scenario 2: Regional Demand of 7.2 M s.f. per year

Illustrative Performance Levels

- Vacant Space
- Avg. Capture
- 2X Average
- Accelerated

Prime: +2.25% Occ.
When the Office Market Takes Off...

- Arlington 2005-07
- Houston EC 2012-14
- Seattle CBD 2010-12
- San Francisco CBD 2012-14

Net Absorption in Millions SF

Year 1, Year 2, Year 3
Office Market
Statistical Overview
Regional Net Office Absorption Has Been Slow to Rebound

Source: CoStar
Net Absorption Has Declined by 3 million s.f. in the Past 4 Years

Source: CoStar
Positive Net Absorption is Attributable to Newer Buildings

Source: CoStar
Federal Lease Holdings Have Declined by 2.4 million Square Feet

<table>
<thead>
<tr>
<th>Year</th>
<th>GSA Leases (in millions SF)</th>
<th>% of RBA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>10.6</td>
<td>27.0%</td>
</tr>
<tr>
<td>2012</td>
<td>9.4</td>
<td>23.7%</td>
</tr>
<tr>
<td>2013</td>
<td>9.0</td>
<td>21.9%</td>
</tr>
<tr>
<td>2014</td>
<td>8.2</td>
<td>20.0%</td>
</tr>
</tbody>
</table>

Source: GSA & CoStar
Factors Driving the Current Environment

• Federal repositioning continues to be a drag on the market and net new demand for office space has been flat.

• Workplace design efficiency and a more mobile workforce has lessened square footage requirements by 15-20% depending on the company.

• Historical advantages in lease and tax rates have declined in light of new TOD submarkets and aggressive incentives.
The Future of the Office Market
An Office Inventory in Transition

- Office product matches old norms of tenant base composition and workplace preferences.
- Federal repositioning
- Regional TOD submarkets
- Evolving tenant base
- Changing nature of work
- Range of products and spaces align with transitions in economy and workplace.

Past | Present | Future
--- | --- | ---
Office Space | Office Tenancy
Future Office Market Study
Selected Excerpts

• Adaptation of existing building stock is already happening (1.9 M s.f. in past three years).

• Legacy tenants still matter: the government and contractors occupy nearly 50% of office space.

• Tenants greater than 150K s.f. occupy 25% of the office space while making up 1% of companies.

• Tech-oriented companies in cybersecurity, education and healthcare applications are leading the flight-to-quality and tenant base diversification.
### Tenant-base Diversification

Selected sectors and companies

<table>
<thead>
<tr>
<th>Sector</th>
<th>Company</th>
<th>Jobs</th>
<th>Square Feet</th>
<th>Submarket</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education IT</td>
<td>Rosetta Stone</td>
<td>186</td>
<td>31,000</td>
<td>Rosslyn</td>
</tr>
<tr>
<td></td>
<td>Hobson’s</td>
<td>150</td>
<td>39,000</td>
<td>Clarendon</td>
</tr>
<tr>
<td></td>
<td>Common Application</td>
<td>110</td>
<td>22,000</td>
<td>Clarendon</td>
</tr>
<tr>
<td>Healthcare IT</td>
<td>Evolent Health</td>
<td>479</td>
<td>93,000</td>
<td>Ballston</td>
</tr>
<tr>
<td></td>
<td>Privia Health</td>
<td>75</td>
<td>11,000</td>
<td>Ballston</td>
</tr>
<tr>
<td>Cybersecurity</td>
<td>Decisive Analytics</td>
<td>120</td>
<td>24,000</td>
<td>Crystal City</td>
</tr>
<tr>
<td></td>
<td>Lunarline</td>
<td>100</td>
<td>Variable</td>
<td>Virginia Square</td>
</tr>
<tr>
<td></td>
<td>Distil.it</td>
<td>15</td>
<td>4,000</td>
<td>Ballston</td>
</tr>
<tr>
<td>Data Analytics</td>
<td>Applied Predictive</td>
<td>150</td>
<td>36,000</td>
<td>Ballston</td>
</tr>
<tr>
<td></td>
<td>Decision Lens</td>
<td>65</td>
<td>20,000</td>
<td>Ballston</td>
</tr>
<tr>
<td></td>
<td>Endgame</td>
<td>40</td>
<td>10,000</td>
<td>Clarendon</td>
</tr>
<tr>
<td>Energy</td>
<td>Opower</td>
<td>255</td>
<td>40,000</td>
<td>Courthouse</td>
</tr>
<tr>
<td></td>
<td>AES</td>
<td>450</td>
<td>120,000</td>
<td>Ballston</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>2,450</td>
<td>460,000</td>
<td></td>
</tr>
</tbody>
</table>
Arlington’s Largest Employers are Mainly Government Agencies and Contractors

<table>
<thead>
<tr>
<th>Jobs</th>
<th>Government</th>
<th>Jobs</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>20,000+</td>
<td>U.S. Department of Defense</td>
<td>5,000-9,999</td>
<td>Deloitte</td>
</tr>
<tr>
<td>5,000-9,999</td>
<td>U.S. Dept of Homeland Security</td>
<td>2,500-4,999</td>
<td>Accenture</td>
</tr>
<tr>
<td></td>
<td>U.S. Department of Justice</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>U.S. Department of State</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2,500-4,999</td>
<td>Arlington County School Board</td>
<td>1,500-2,499</td>
<td>Virginia Hospital Center Marriott International, Inc.</td>
</tr>
<tr>
<td></td>
<td>County of Arlington</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FDIC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,500-2,499</td>
<td>National Science Foundation</td>
<td>1,000-1,499</td>
<td>Booz Allen Hamilton</td>
</tr>
<tr>
<td></td>
<td>U.S. Environmental Protection Agency</td>
<td></td>
<td>Corporate Executive Board</td>
</tr>
<tr>
<td></td>
<td>General Services Administration</td>
<td></td>
<td>CACI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>600-999</td>
<td>Lockheed Martin Corporation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BNA Bloomberg</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Marymount University</td>
</tr>
</tbody>
</table>
Arlington Companies with the Greatest Number of Job Listings are in Government Contracting

Source: Arlington/Alexandria Work Investment Board
Top Job Listings by Occupation Indicate a Highly-Skilled Workforce Adaptable to a Tech-led Economy

- Management Analysts
- Network and Computer Systems Administrators
- Computer Systems Analysts
- Software Developers, Applications
- Information Security Analysts
- Web Developers
- Computer User Support Specialists
- Computer Systems Engineers/Architects
- Information Technology Project Managers

Source: Arlington/Alexandria Work Investment Board
Development Pipeline
# Development Pipeline Summary

<table>
<thead>
<tr>
<th>Stage</th>
<th>No. of Projects</th>
<th>Office SF</th>
<th>Retail SF</th>
<th>Other SF</th>
<th>Housing Units</th>
<th>Hotel Rooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under Construction</td>
<td>11</td>
<td>570,549</td>
<td>194,717</td>
<td>9,072</td>
<td>2,357</td>
<td>161</td>
</tr>
<tr>
<td>Near-term Construction Starts</td>
<td>8</td>
<td>214,954</td>
<td>26,533</td>
<td>118,781</td>
<td>1,149</td>
<td>168</td>
</tr>
<tr>
<td>Awaiting Market or Phasing</td>
<td>26</td>
<td>5,440,088</td>
<td>296,560</td>
<td>392,985</td>
<td>3,897</td>
<td>448</td>
</tr>
<tr>
<td>Zoning Review</td>
<td>13</td>
<td>3,448,814</td>
<td>458,637</td>
<td>0</td>
<td>3,192</td>
<td>410</td>
</tr>
<tr>
<td>Total Pipeline</td>
<td>72</td>
<td>10,291,976</td>
<td>1,111,727</td>
<td>520,838</td>
<td>12,859</td>
<td>1,187</td>
</tr>
</tbody>
</table>
Development Activity

SF Delivered (000s)

Office
Retail
Other
Residential
Hotel

PROJECTED
Occupancy Costs
Comparative Analysis
Arlington’s Closest Competitive Set includes Capitol Riverfront, NOMA, Downtown, and Bethesda

- Capitol Hill
- East End
- NOMA CBD
- Rosslyn
- Capitol Riverfront
- Ballston
- Crystal City
- Clarendon/Courthouse
- Bethesda
- Tysons Corner
- Reston

Distance from the Capitol

Occupancy Cost per SF

- $70
- $65
- $60
- $55
- $50
- $45
- $40
- $35
- $30

-5.0 0.0 5.0 10.0 15.0 20.0 25.0 30.0
Occupancy Costs are Fairly Consistent Across Arlington Submarkets

![Graph showing average occupancy cost per SF for different submarkets: Rosslyn, Ballston, Clarendon/Courthouse, and Crystal City, with categories: Real Estate, Other, Local Taxes, Corporate Taxes.](image-url)
Arlington is Typically Less Expensive than Comparable D.C. Submarkets Until Incentives Are Applied
Arlington is Typically More Expensive than other Virginia Submarkets, and about the Same Cost as Bethesda
THE WAY FORWARD

MARKET REVIEW AND FORECAST

April 7, 2015
GOAL:
Reduce office vacancy by half and diversify the Arlington economy over the next 36 months.
## Share of Economic Development Budget Dedicated to Tax Revenue Generation

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Annual Budget</th>
<th>% of Budget Dedicated</th>
<th>$ of Budget Dedicated</th>
<th>FTEs Dedicated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington D.C.</td>
<td>$45.7</td>
<td>80%</td>
<td>$36.5</td>
<td>86</td>
</tr>
<tr>
<td>Fairfax County</td>
<td>$7.6</td>
<td>90%</td>
<td>$6.8</td>
<td>40</td>
</tr>
<tr>
<td>Arlington County</td>
<td>$11.0</td>
<td>30%</td>
<td>$3.3</td>
<td>16</td>
</tr>
<tr>
<td>Prince William County</td>
<td>$2.5</td>
<td>90%</td>
<td>$2.3</td>
<td>12</td>
</tr>
</tbody>
</table>

- Includes 2 AED positions repositioned effective 03-09-15.
- Fairfax FTEs include 27 revenue-dedicated in Fairfax, 9 internationally, and 4 throughout the U.S.
### Selected Economic Development Tools

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Tool</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington D.C.</td>
<td>Qualified High Tech Company (QHTC)</td>
<td>Multi-million $ packages</td>
</tr>
<tr>
<td>Prince George’s County</td>
<td>Economic Development Fund</td>
<td>$50 million fund</td>
</tr>
<tr>
<td>Alexandria</td>
<td>Tax Abatement</td>
<td>$23 million for NSF</td>
</tr>
<tr>
<td>Loudoun County</td>
<td>Economic Development Fund</td>
<td>$1 million fund</td>
</tr>
</tbody>
</table>
WORK EFFORT:
Fill 4.5 million SF in Three Years

1.5 Million SF per YEAR
125,000 SF per MONTH
29,000 SF per WEEK
CHALLENGE:
Net absorption
-2.6 million SF
over the last 36 months
100% SOLUTION: Additional Investment of $3.95 Million Per Year for Next 3 Years

- $1,200,000 Business Development (10 FTE’s)
- $600,000 Marketing Investment
- $350,000 Tandem NSI
- $400,000 Tourism Promotion
- $1,400,000 Incentives Fund

Annual Return on Investment

- 1,350,000 square feet leased
- 4,000 jobs
- $20.6 million local revenue
50% SOLUTION: Additional Investment of $1.45 Million Per Year for Next 3 Years

- $600,000 Business Development (5 FTE’s)
- $300,000 Marketing Investment
- $350,000 Tandem NSI
- $200,000 Tourism Promotion

Annual Return on Investment

- 700,000 square feet
- 2,000 jobs
- $10.3 million local revenue
25% SOLUTION: Additional Investment of $700K Per Year for Next 3 Years

- $500,000 Business Development (4 FTEs)
- $200,000 Marketing Investment (Conferences & Missions)

Annual Return on Investment

- 350,000 square feet
- 1,000 jobs
- $ 5 million local revenue
Marketing to our Future Customers
What We Market

- Greatest concentration of federal research agencies
- Highly-educated workforce
- Among best schools in the nation
- Globally-attractive location
- High tech/cybersecurity clusters
- Dark fiber network
- Transportation/accessibility/walkability
- Small town charm and big city amenities
March 2015 & 2016

SXSW 2015

- Alexandria
- Startups
- Tech Companies
- Venture Funds

Austin
FACTS

- Largest Tech, Music and Digital Media Conference in USA
- 72,000 registrants
- Software, digital design,
- Big data, Solar
- Medtech Ed Tech,
- IBM, Capital One, TrackMaven, GrubHub, Graphiti,
- IdeaRocket, 3M, Accenture, Philips Electronics, Ericsson, Intent Media, Sols, Verizon, Gannett, Indeed, Infusion, Netspend, Nelson, and PwC

INVESTMENT

- $35,000 per year for three years

OUTCOMES

- Attract 36 companies over 36 months
- 3,600 jobs (~100 jobs/company)
- 550,000 sf (~15K sf/company)
Marketing

2013 INVESTMENT SUMMIT
Washington, DC | October 31 - November 1

National Harbor

- VEDP
- Prince George’s Co.
- Fairfax Co.
FACTS

- Global Investment Conference for Inbound FDI for the USA
- 2,500 attendees
- 1,300 Global Investors
- 80 international markets
- Global CEOs, International companies, Economic Development Agencies
- China, India, Australia, Austria, Brazil, Canada, France, Germany, Indonesia, Ireland, Israel, Italy, Japan, Mexico, The Netherlands, Norway, Spain, and the United Kingdom

INVESTMENT

- $20,000 per year for three years

OUTCOMES

- 12 companies over 36 months
- 600 jobs (~50 jobs/company)
- 125,000 sf (~11K sf/company)
- Attract $250 million in foreign investment in 36 months
FACTS

- International Retail Convention for the shopping center industry
- Over 34,000 attendees and 1,000 exhibitors
- Developers, brokerage firms, and national and international retailers
- Wegman’s, Target, Genesco, Ahold, Talbots, Restoration Hardware, Safeway, REI, Brooks Brothers, Consolidated Restaurants, Coach, Whole Foods, Kona Grill, Lego, Uniqlo

INVESTMENT

- $20,000 per year for three years

OUTCOMES

- Attract 24 retailers over the next 36 months
- 240 jobs (10 jobs/company)
- 240,000 sf (10K sf/company)
FACTS

- Premier corporate real estate executives conference
- Over 8,000 members worldwide, including 70% of the Fortune 100 and 50% of the Fortune 2000
- Companies include Accenture, Adobe, American Express, Avnet, BRG, Capital One, Capstan Advisors, Deloitte, eBay, Envirochrome, Haworth, Herman Miller, IHS, Mastercard, NetApp Inc., Oracle, Project Solutions Group, Raymond James, Robert Half, EMS Software, Azure Software

INVESTMENT

- $35,000 per year for three years

OUTCOMES

- Attract 8 corporate headquarters over 48 months.
- 8,000 employees (1k per company)
- 1.6 million square feet (200k s.f. per company)
Marketing

- London

- Nov. 2015 & 2016

- Destination DC
- China Tourism Partners
FACTS

- Top global travel & tourism show – leverage Brand USA presence
- More than 52,000 travel industry professionals
- International travel buyers, airlines, hotels, resorts, destination marketing organizations, travel agencies, and press/media
- Regions represented include Africa, Americas/Caribbean, Asia, Australia/Pacific, Europe, Middle East, UK & Ireland

INVESTMENT

- $20,000 per year for three years

OUTCOMES

- 12+ new international meetings/groups over 36 months;
- 20+ new relationships with tour & receptive operators;
- 7,200 total new room nights; $2..6 million in new visitor spending; $113,000 in new tax revenues
Targeted Industry Marketing Missions

Clean & Green
Portland, OR

Healthcare IT
Nashville, TN

Cyber Security
Raleigh, NC

Big Data
Silicon Valley, CA

Education Tech
New York, NY

Technology
Boston, MA

$10,000 per location
Strategy

Corporate Headquarters – Graham Holdings
Strategy

Regional Cooperation
Strategy
Connecting
Capacity Building for Entrepreneurs

- Create an ecosystem to recruit & support millennial workforce and innovative entrepreneurs with needed infrastructure:
  - Access to capital, investors, and venture funds
  - Technical assistance, training, and mentors
  - Networking and convening of peers