MEMORANDUM

To: Alexandria Economic Development Partnership (AEDP)

Re: Potomac Yard Entertainment District Impact Analysis

Date: December 22, 2023

Alexandria Economic Development Partnership ("AEDP") hired HR&A Advisors ("HR&A", "Consultant") in June 2023 as a technical advisor to conduct an impact analysis assessing both the economic and fiscal impacts of planned development at Potomac Yard, with a particular focus on the difference in impact between two potential development scenarios.

This memo provides top-line results, by scenario, for the economic impact task included within the scope of work, which includes analysis of new jobs and business activity generated by planned future development within Potomac Yard. It considers the impact to the City of Alexandria and the Commonwealth of Virginia on both a one-time basis from construction and an ongoing basis from annual operations once built. Key takeaways from this analysis are provided here, with additional detail on methodology and findings provided in in the sections below.

- Development of an entertainment district would generate approximately **30,000 permanent jobs** for the Commonwealth of Virginia.
- An entertainment district is projected to generate roughly **2.5 times the economic output** of what would otherwise be built based on current development plans.

This memo also provides a methodology summary for the fiscal impact task included within the scope of work, which measures the net fiscal impact for all applicable sources of tax revenue (property, sales and use, personal income, business, admission, and hotel taxes, alongside special tax districts and stormwater fees). As with the economic impact analysis, it considers the impact to the City of Alexandria and Commonwealth of Virginia on both a one-time basis from construction and an ongoing basis from annual operations once built.

The Consultant used an industry-standard methodology, as detailed further in this memo, which is applied for similar projects across the United States. The Consultant is not involved in discussion or development of any financing structures contemplated for development of the project.

The information provided in this memo is based on proprietary Monumental Sports & Entertainment ("Monumental", "MSE") operations information shared by AEDP on October 31, 2023 that reflects 221 arena events and 115 performing arts venue events held annually.

*Note: Event totals represent anticipated market expectations based on current conditions. The 221 arena events include Wizards and Capitals events. The 115 performing arts venue events include 50 non-concert private events (i.e. parties, corporate events, banquets, graduations etc.)*
METHODOLOGY

Development Program

This study framed two potential development scenarios based on development program and construction timeline information provided by JBG Smith (“JBGS”) and Monumental: (1) a “Baseline” scenario that reflects planned development under current market conditions and site commitments with no arena, and (2) an “Arena + Accelerated Development” scenario that includes a new arena on the site as well as an accelerated build out of the district based on increased demand catalyzed by the entertainment uses.

- **Scenario 1: Baseline Development** (Completed 2030-2046)
  - Under the Baseline Development scenario, new development would occur only in the area in red on the map below (surrounding the new Potomac Yard-VT Metro Station) and would include residential, retail, and office space. The existing Potomac Yard Shopping Center would remain in place for the period considered in this analysis based on existing market conditions and site commitments.

- **Scenario 2: Arena + Accelerated Development**
  - **Arena/Entertainment and Phase 1 Uses** – Completed 2028-2029
    - Arena and Entertainment uses including the arena, performing arts venue, team facility, arena parking garage, and an office building (to include space for Monumental Sports corporate headquarters, Monumental Sports Network Studio, and Virginia Tech space) would be constructed in the area in red on the map below.
    - Other Phase I development of residential, retail, hotel, and conference uses would occur in the light blue area labeled “Private Development in Phase 1” of the map below.
  - **Additional Development** – Completed 2031-2036
    - Additional development also planned as part of the entertainment district would include residential, retail, hotel, and office development, and would be constructed in the light blue “future development” and dark blue “long-term future development” areas of the map below.
Table 1 | Proposed Development Program for Scenario 1 & 2 (Gross Square Feet, 000's)

<table>
<thead>
<tr>
<th>Parcel</th>
<th>Scenario 1: Baseline Development</th>
<th>Scenario 2: Arena + Accelerated Development</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Residential</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>Baseline</td>
<td>Arena + Phase 1</td>
</tr>
<tr>
<td>Residential</td>
<td>380</td>
<td>1,500</td>
</tr>
<tr>
<td>Office</td>
<td>840</td>
<td>200</td>
</tr>
<tr>
<td>Hotel</td>
<td>-</td>
<td>550</td>
</tr>
<tr>
<td>Academic</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td>Retail</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Conference</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td>Sports and Entertainment</td>
<td>-</td>
<td>1,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,320</strong></td>
<td><strong>3,550</strong></td>
</tr>
<tr>
<td>% of Total</td>
<td>100%</td>
<td>37%</td>
</tr>
</tbody>
</table>

Year of Completion: 2030-2046 | 2028-2029 | 2031-2036

Note: Development program represents current plans developed by JBG Smith based on existing zoning and approvals, expected market conditions, and demand under each scenario. Specific uses or square footages planned by JBG Smith may evolve over time as plans become further detailed and move through the development approvals process.
Note: This analysis considers net new activities. Under Scenario 1 (Baseline Development), the existing Potomac Yard Shopping Center would remain in place and the impacts it generates would continue. Though, these impacts would not be net new to Alexandria or Virginia, so it is not included as part of the development program included in this analysis. Scenario 2 accounts for the loss of existing impact of the shopping center once it is redeveloped.
Source: JBG Smith

Economic Impact
The Consultant utilized the IMPLAN input-output economic impact modeling tool to analyze the project's economic impacts from both construction and annual ongoing operations at full build-out of both scenarios and the phases of development associated with each. For each dollar of spending in the economy, IMPLAN traces the pattern of commodity purchases and sales between 546 industries within the specified geography. The IMPLAN model is an industry-standard modeling tool used to conduct economic impact analyses by leading public and private sector organizations across the United States.

The economic impact analysis estimates job creation, economic output, and wages/income paid to employees at the following levels:

- **Direct impacts**: resulting from project construction and operations spending
- **Indirect impacts**: resulting from industry-to-industry transactions from project construction and operations
- **Induced impacts**: resulting from employee spending in the economy, including employees of directly and indirectly affected businesses

Direct impacts spur the multiplier (indirect and induced) impacts as the direct activity flows through the economy.
**Fiscal Impact**

The Consultant considered the range of assessed local and state taxes, which are listed below, to evaluate one-time and ongoing net fiscal impacts associated with construction and operation of each development scenario. AEDP verified all local tax rates and fiscal assumptions. The analysis also accounted for fiscal costs associated with new development (e.g., student generation, increased public services, etc.).

- **Commonwealth of Virginia Taxes**
  - **Sales and Use Tax (state share)**
    - New retail spending on-site at new development within Potomac Yard
    - Off-site retail spending in Alexandria and Virginia generated by new development
  - **Personal Income Tax**
    - Income tax from employment on site (by projected Virginia residents), visiting/home team players, and visiting performers
  - **Business Income Tax**
    - New business activity based on the projected mix of uses and employment
  - **Hotel Tax (state share)**
    - Hotel taxes from new on-site hotels, as well as from visitors to new development at Potomac Yard (e.g., arena attendees) staying elsewhere in Virginia

- **City of Alexandria Taxes**
  - **Sales and Use Tax (local share, inclusive of Meals Tax)**
    - New retail spending on-site at new development within Potomac Yard
    - Off-site retail spending in Alexandria and Virginia generated by new development
  - **Admission Tax**
    - New on-site events at the arena, performing arts venue, and conference space
  - **Business Tax**
    - New business activity based on the projected mix of uses and employment
  - **Property Tax**
    - New development subject to property tax
  - **Hotel Tax (local share)**
    - Hotel taxes from new on-site hotels, as well as from visitors to new development at Potomac Yard (e.g., arena attendees) staying elsewhere in Alexandria
  - **Personal Property Tax – Car**
    - Cars owned by new residents generated by new development
  - **Potomac Yard Special Tax District**
    - New development subject to District tax
  - **Stormwater Fee**
    - New development subject to stormwater fee

**Additional Notes**

- **Public Benefits / Proffers** – This analysis excludes any considerations of public benefits or proffers that may be provided as part of this project, which would be confirmed as part of the development approvals process.
- **Revenue and cost escalations** – All revenues and costs are escalated at 2.0% annually over the 30-year term considered in this analysis, unless otherwise noted. All net present value (“NPV”) calculations apply a 4.08% discount rate, which reflects the discount rate used by the Commonwealth of Virginia.
ECONOMIC IMPACT FINDINGS

Note: The economic impact findings below provide information for one-time activity from construction as well as permanent ongoing activity (presented as annual impacts) for on-site activity. Construction impacts shown in Table 2 and Table 3 are separate from the ongoing impacts shown in Table 4, Table 5, and Table 6. All Virginia impacts are inclusive of Alexandria impacts. All data reflects direct, indirect, and induced impacts.

Potomac Yard Entertainment District One-Time Construction Impacts

Table 2 | One-Time Construction Jobs (Full-Time Equivalent Job Years*)

<table>
<thead>
<tr>
<th>Total Construction Jobs</th>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Phase 1 + Arena</th>
<th>Additional Development</th>
<th>Difference (Scenario 1 and 2)</th>
<th>Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexandria</td>
<td>3,450</td>
<td>2,535</td>
<td>1,135</td>
<td>1,400</td>
<td>2,190</td>
<td>7.3</td>
</tr>
<tr>
<td>Virginia</td>
<td>2,380</td>
<td>17,645</td>
<td>7,975</td>
<td>9,670</td>
<td>15,265</td>
<td>7.4</td>
</tr>
</tbody>
</table>

*Given the one-time nature of construction activity, employment impact is projected in job-years, which represent full employment for one person for one year. As an example, if a company employs 10 people to do construction work on a site over two years, then the total direct employment impact would equal to 20 job-years.

Table 3 | One-Time Construction Economic Output (Net Present Value, $2023)

<table>
<thead>
<tr>
<th>Total Construction Output</th>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Phase 1 + Arena</th>
<th>Additional Development</th>
<th>Difference (Scenario 1 and 2)</th>
<th>Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexandria</td>
<td>$60,000,000</td>
<td>$451,000,000</td>
<td>$211,000,000</td>
<td>$240,000,000</td>
<td>$391,000,000</td>
<td>7.5</td>
</tr>
<tr>
<td>Virginia</td>
<td>$727,000,000</td>
<td>$5,473,000,000</td>
<td>$2,575,000,000</td>
<td>$2,898,000,000</td>
<td>$5,471,960,000</td>
<td>7.5</td>
</tr>
</tbody>
</table>

Note: NPV analysis assumes a 4.08% discount rate, which is the discount rate used by the Commonwealth of Virginia. Construction costs for the arena and entertainment uses are escalated at 3.5% annually until projected “lock-in” of costs in 2024 and 2025 based on information provided by Clark Construction and JBGS; all other costs are inflated at a rate of 2% annually for all dollar values.

Potomac Yard Entertainment District Permanent Ongoing Impacts: Full Build Out Stabilized Year

Table 4 | Permanent Jobs (Full-Time Equivalent Jobs)

<table>
<thead>
<tr>
<th>Ongoing Jobs (Stabilized Year)</th>
<th>Scenario 2 Detailed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Scenario 1</td>
</tr>
<tr>
<td>Alexandria</td>
<td>9,190</td>
</tr>
<tr>
<td>Virginia</td>
<td>12,330</td>
</tr>
</tbody>
</table>

Note: The full build-out stabilized year for Scenario 1 is in 2047 and for Scenario 2 is in 2036, at which point all planned development will be in full operation. Portions of the development will be in full operation prior to full build out and those earlier impacts are reflected in the 30-year net present value results below in Table 6.

Table 5 | Permanent Annual Economic Output ($2023)

<table>
<thead>
<tr>
<th>Ongoing Output (Stabilized Year)</th>
<th>Scenario 2 Detailed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Scenario 1</td>
</tr>
<tr>
<td>Alexandria</td>
<td>$2,917,000,000</td>
</tr>
<tr>
<td>Virginia</td>
<td>$3,531,000,000</td>
</tr>
</tbody>
</table>
Permanent Ongoing Impacts: 30-Year Net Present Value

Table 6 | 30-Year Net Present Value (NPV) of Ongoing Economic Output ($2023)

<table>
<thead>
<tr>
<th></th>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Phase 1 + Arena</th>
<th>Additional Development</th>
<th>Difference (Scenario 1 and 2)</th>
<th>Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexandria</td>
<td>$29,700,000,000</td>
<td>$77,900,000,000</td>
<td>$15,900,000,000</td>
<td>$62,000,000,000</td>
<td>48,200,000,000</td>
<td>2.6</td>
</tr>
<tr>
<td>Virginia</td>
<td>$36,000,000,000</td>
<td>$93,800,000,000</td>
<td>$18,800,000,000</td>
<td>$75,000,000,000</td>
<td>57,800,000,000</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Note: NPV analysis reflects the timing of building completion by phase and accounts for ongoing permanent impact of development as new buildings are completed. The 30-year period of analysis reflected in results is 2023-2052. NPV analysis assumes a 4.08% discount rate, which is the discount rate used by the Commonwealth of Virginia, and 2% annual rate of inflation for all dollar values. NPV analysis accounts for projected timeline of development and the proposed phasing schedule.