

City of Alexandria, Virginia

MEMORANDUM

DATE: NOVEMBER 18, 2011

TO: MAYOR WILLIAM D. EUILLE AND MEMBERS OF CITY COUNCIL

FROM: BRUCE JOHNSON, ACTING CITY MANAGER

SUBJECT: ANALYSIS OF THE REPORT OF THE CITIZENS FOR AN ALTERNATIVE ALEXANDRIA WATERFRONT PLAN

When the Citizens for an Alternative Alexandria Waterfront Plan (CAAWP) presented their proposal for the waterfront, I requested that City staff conduct an analysis of the CAAWP proposal for use by the Waterfront Plan Work Group, City Council, and the community. That work has been completed, and the results of the analysis are attached.

Staff's findings are focused in three key areas, as identified in my request:

- **Financial feasibility.** CAAWP's own calculation of the cost of their proposal—\$80 to \$109 million—would be approximately twice that of the City's draft Waterfront Plan. The CAAWP revenue estimate is based on unrealistic assumptions about the ability of small museums to attract large numbers of visitors, sustain themselves through admission fees, and spur economic activity throughout a community. Because staff's analysis revealed that the potential revenue would be a fraction of the CAAWP estimate, City taxpayers would bear the cost of implementing the CAAWP proposal.
- **Legal defensibility.** The CAAWP plan relies on two strategies to reduce the City's purchase price of waterfront land: 1) "downzoning" the waterfront warehouses, which does reduce their value, but is legally indefensible; and 2) transferring development rights from the waterfront to another neighborhood (or jurisdiction). This strategy is extremely difficult to implement under Virginia law but, more importantly, presents issues of fairness, as the Waterfront community would reap the benefits at the expense of another Alexandria neighborhood, which would bear the impacts of increased density. Transferring density to another state, or even to another Virginia jurisdiction, is not possible.
- **Response to change.** The CAAWP proposal contains few new revenue sources to help pay for new Waterfront parks. It requires all new businesses to be located in existing buildings; does not strengthen the City's ability to manage the redevelopment that does occur, and offers none of the activities for families and children that our residents have asked for. To myself and staff, the intent, and certainly the effect, of the CAAWP proposal is to try to minimize change, rather than direct and manage change.

In reviewing the CAAWP proposal, City staff found many recommendations that are in agreement with the Alexandria draft Waterfront plan. These include preservation of historic structures; the inclusion of hotels, restaurants and retail; the creation of open space between The Strand and the river; and the need for more detailed engineering of the flood mitigation proposal.

We have met with CAAWP representatives during the last month, primarily to share information regarding the basis for their various recommendations, and the group has indicated that they are open to discussion and reconsideration of certain aspects of their proposal. Further discussion may be beneficial and City staff is, of course, very happy to meet with any resident who is interested in a Waterfront Plan that benefits and serves all of Alexandria's residents.

City of Alexandria, Virginia

MEMORANDUM

DATE: NOVEMBER 18, 2011

TO: BRUCE JOHNSON, ACTING CITY MANAGER

FROM: JAMES BANKS, CITY ATTORNEY
FAROLL HAMER, DIRECTOR, PLANNING AND ZONING
LAURA TRIGGS, ACTING CHIEF FINANCIAL OFFICER
LANCE MALLAMO, DIRECTOR, OFFICE OF HISTORIC ALEXANDRIA

SUBJECT: ANALYSIS OF THE REPORT OF THE CITIZENS FOR AN ALTERNATIVE
ALEXANDRIA WATERFRONT PLAN

Summary

Alexandria is indeed fortunate to have citizens who are willing to invest so much time and thought into developing their ideas for the future of Alexandria's waterfront. The City's Waterfront Committee, the Planning Commission, the Waterfront Plan Work Group and many others have contributed and are contributing their views and ideas for the waterfront. With the preparation of their report, Citizens for an Alternative Alexandria Waterfront Plan has added their perspective to the ideas the City received from the many Alexandrians who participated in the planning process over the past 2 years. All of these ideas deserve serious consideration.

CAAWP's report focuses almost exclusively on the three redevelopment sites, which comprise about 8.5 acres. CAAWP does not appear to be raising objections to the vast majority of the draft Waterfront Plan's recommendations for the balance of the waterfront, which covers more than 350 of the 362 acres in the Waterfront Plan area.

The main element of difference, which has been clear for some time, is the amount and type of private development, if any, on the last three potential development sites. The draft Waterfront Plan proposes redevelopment densities consistent with the 1982 Settlement Agreements with Robinson Terminal and the National Park Service and proposes to add hotels as a permitted land use. CAAWP recommends that the City acquire with City funds all (or a large portions) of the redevelopment sites for parks, a small maritime museum, and possibly other features.

While there are many statements throughout the report that might merit a staff response, this memorandum will focus on the key elements of the CAAWP proposal in the subject areas that the Acting City Manager's memorandum highlighted: financial feasibility, legal defensibility, and response to change. Staff also highlights a number of areas where CAAWP agrees, or partially agrees with the recommendations in the draft Waterfront Plan.

In June of 2011, City staff presented to City Council an analysis of the costs and potential revenues from four Waterfront scenarios, including the draft Waterfront Plan and a “Parks and Museums” alternative that was intended to illustrate some of the ideas that were being suggested. CAAWP indicated at the time that their preferred approach would involve a much more modest investment in museums and cultural facilities, and their report reflects this preferred approach.

Findings

- Financial feasibility, including projected costs and revenue sources:
 - Costs: CAAWP estimates that its proposal would cost \$80 to 109 million, or about twice the cost of the draft Waterfront Plan.
 - Revenues: CAAWP suggests that a 10,000 square foot museum can generate similar revenues as the private development in the draft Waterfront Plan. City staff believes that the potential revenue from CAAWP’s proposal is about a tenth of what CAAWP estimates.
 - Budget impact: With few new revenue sources, CAAWP’s proposal would rely on City-issued bonds and city-wide taxpayer support for the two decades it would take to repay the bonds. Adding \$100 million to the Alexandria’s debt burden now is unrealistic in light of the City’s current and projected total debt.
 - Feasibility of implementation: Given the realities of the fiscal situation, the City would not be able to implement a Waterfront Plan that does not include new revenue sources. It is not practical to expect that the City will find tens of millions of dollars for years for Waterfront improvements when there are so many other City wide needs. In staff’s analysis, a Waterfront Plan without new revenue sources is a plan for little to no change to the status quo except for whatever by-right development that would occur.
- Legal defensibility
 - CAAWP suggests that the City downzone the waterfront warehouses to make them more affordable for purchase as open space or museum. This approach is not legally defensible.
 - CAAWP suggests that a transfer of development rights (TDR) program could be used to create open space. The use of TDRs in Virginia is highly constrained by state law. Moreover, TDR programs can be controversial because one neighborhood receives the negative impacts of increased density while the benefits accrue to a different neighborhood.
 - CAAWP suggests that TDR rights could be transferred out-of-state. It is not within the realm of possibility that one state would accept increased density without offsetting benefits so Alexandria could have a lower density development.

- Response to change
 - Most Alexandrians recognize that some change is coming to the Waterfront and want a new plan that improves the City's ability manage and shape that change to make sure that citizens' hopes and needs are met. While the CAAWP report calls for some land to be acquired by the City, it does not strengthen the community's ability to manage change on land the City does not acquire.
 - CAAWP's report calls for all new business to be located in existing buildings, offers little for residents who asked for more activities for families and children, and takes the position that a pleasure boat marina is not an appropriate waterfront use.
- Notable areas of agreement include: support for commercial boat operators; support for public space improvements at the foot of King through negotiating a solution with the Old Dominion Boat Club; support for hotels, restaurants and retail as part of the Waterfront land use mix; support for reuse of the Beachcomber as a restaurant; agreement to proceed to more detailed engineering for the flood mitigation project; and agreement about the critical importance of preserving historic buildings.

CITY STAFF REVIEW OF CAAWP REPORT

Summary of CAAWP Proposal

CAAWP's proposal is expressed in four scenarios. All of the scenarios (see page 158) contain a 60-room hotel, 90 housing units of 1,400 square feet each, a new 10,000 square foot maritime museum, 50,000 square feet of restaurant space, and 36,000 square feet of retail space – all of which is estimated by CAAWP to generate \$4.9 million in annual revenue.

- Scenario 1: The City purchases all three redevelopment sites and sells 35% for private development. CAAWP estimates this scenario would cost the City \$109 million.
- Scenario 2: The City acquires just the Robinson Terminals. CAAWP estimates this scenario would cost the City \$85 million.
- Scenario 3: The City acquires Robinson Terminal South and the eastern portion of Robinson Terminal North. CAAWP estimates this scenario would cost the City \$79.9 million.
- Scenario 4: The City acquires Robinson Terminal South and the eastern portion of Robinson Terminal North and 1 Duke Street (the Art League warehouse). CAAWP estimates this scenario would cost the City \$81 million.

Financial Feasibility

Financial issues are in three major categories: costs, revenues, and impact on the City's budget.

Cost Estimates

- In most cases, CAAWP uses the same cost estimates as the draft Waterfront Plan for elements that appear in both proposals. A major exception is the cost of the flood mitigation project, which is \$6.8 million in the draft Waterfront Plan and \$3 million in the CAAWP report. CAAWP representatives note that the City is basing its flood mitigation cost estimate on an engineering study for flood walls along the river's edge. They believe the City's proposal to integrate the flood walls into the landscape will result in substantial cost savings. Staff believes the \$6.8 million cost estimate is the best available until more detailed engineering work is completed.
- Land cost is a major element of a "parks and museums" alternative, and there is mutual recognition that assessed value may be quite different from the actual market purchase price of the redevelopment sites. Staff believes that the purchase price of the redevelopment sites would likely be more, not less, than the assessed value.
 - CAAWP has suggested that there could be high environmental remediation costs on one or more of the properties which could lower a purchase price. Staff notes that if remediation costs reduce the purchase price of land, completing the environmental remediation would likely offset any savings.
 - CAAWP and others have noted that two recent sales of waterfront properties – 106 South Union Street (Virtue Feed & Grain) and the Sheet Metal Workers Building – have had sales prices that were below the assessed values as of January

1 prior to the sale date. Real property assessments take into account not only the size and location of the property but also the highest and best use, the legally permissible use, the income stream generated by the property (if leased) and market transactions of similar properties. In determining the market value, another requirement of an assessed value is that the property be assessed equitably with similar properties. While neither Virtue nor the Sheet Metal Workers Building have redevelopment value, all three redevelopment sites have considerable redevelopment potential and the purchaser will be most likely willing to pay a higher price for the rights to redevelop those sites to their highest and best use.

- There are two different estimates of museum capital costs in the CAAWP report: on page 157, the report describes a 9,000 square foot museum costing \$200 per square foot with 4,500 square feet of exhibition space costing \$150 per square foot (for a total of about \$2.5 million); on page 159 the report notes that \$10 million has been included in CAAWP's budget to cover the cost of the museum. Staff's research and experience is that \$200 per square foot is far too low for construction costs.
- The estimate of \$2.5 million per year in annual operating costs for a 9,000 to 10,000 square foot museum is inexplicable, unless it also includes operating, maintenance, and programming of the adjacent open space, piers, and possibly some historic ships. The \$2.5 million figure is about the same as the annual operating budget of the considerably larger Chesapeake Bay Maritime Museum, which is on 18 acres and comprises 10 exhibit buildings, 5 docks, and a working boatyard.

Revenue Estimates

- Compared to the draft Waterfront Plan, CAAWP assumes significantly lower revenue from new hotel rooms. This is consistent with their recommendation that new hotel rooms be limited to one 60-room hotel. Staff believes that a successful 60-room hotel is unrealistic. Hotel industry experts agree that a hotel of this size is quite challenging to operate profitably because it must include many of the same core functions as a larger hotel but fewer rooms to generate profits. A small hotel would also have fewer resources for things like underground parking, streetscape improvements, and high quality architecture. The Morrison House is not a useful comparable since it is owned by a hotel group with two other hotels in Old Town, allowing core costs to be shared.
- CAAWP estimates that the Waterfront could receive \$5 million in grants or donations over the life of the Plan. The draft Waterfront Plan suggests that grants should be pursued but are too uncertain to estimate. City staff believes \$5 million is a challenging figure, given the federal and State budget climate and the economic environment.
- The other sources of revenue in CAAWP's report that differ from the draft Waterfront Plan are related to the museum. They include anticipated revenues from museum admission fees as well as anticipated tax revenues from spending by museum visitors on restaurants, hotel rooms, etc. Staff believes these revenues are overstated by as much as \$3 million.
 - The CAAWP report estimates \$3.3 million in revenue from museum-related activities (\$2.5 million in admission fees, \$807,184 in additional revenue from

increased tourism induced by the museum) based on the assumption that the museum will have 500,000 annual visitors (page 159).

- The report also cites a figure of 400,000 visitors annually to the Torpedo Factory Art Center (page 157) and recommends this data be used as basis for revenue potential for a 10,000 square foot museum (page 158).
 - The data for annual visitation to the Torpedo Factory comes from door counts and admission is free. Any estimate of how many of these entries qualifies as a “visit” comparable to a paid museum visit would have a high margin of error.
 - The Torpedo Factory is a 76,000 square foot building; if visitation is proportional, the estimated visitors for proposed 10,000 square foot museum would be about 50,000 with an estimated revenue of \$330,718 (\$250,000 from the \$5 admission fee and \$80,718 in additional revenue), approximately 10% of the CAAWP’s projections.
- Using resources provided through the American Association of Museums (AAM), the Office of Historic Alexandria (OHA) prepared a museum benchmarking analysis to provide estimates of the impact of the new Alexandria waterfront museum facility envisioned by CAAWP.
 - A museum featuring 10,000 sq. ft. of interior space is termed a historic attraction, with estimated attendance of less than 12,000. This lines up with AAM statistics that identify attendance at the average U.S. history museum at about 10,000 annually, with a historic house/site attracting about 11,700 visitors annually. Such museum would typically be closed at least two days per week. For analysis purposes, City staff is willing to assume a 10,000 square foot museum could achieve up to 50,000 visitors annually, based upon visitation at Alexandria’s history museums (see Attachment 1).
 - K-12 school visitation for a museum sized at 10,000 sq. ft. is estimated at 5 percent, or 2,500 students, resulting in 45 school bus visits over a 180 day period. Tour bus visitation is estimated by ACVA and OHA at about 10 percent, or 5,000 visitors, arriving in 115 buses over a 260 day period.
 - Earned income for a museum sized at 10,000 sq. ft. is estimated at just over \$2 per visitor, including admissions, retail sales, programming and private meeting/party rentals. Servicing expenses per visitor would be estimated at about \$13 each and building maintenance expenses would about \$1 per sq. ft. It is also estimated that there would be 3 full time staff, supplemented by about 20 volunteers and 8 part time/seasonal staff.
 - If 500,000 visitors per year is desired, the AAM also has benchmarks for these types of museums, which are called major destination museums and which are typically 300,000 square feet in size.
 - More detail of the AAM benchmarking analysis is in Attachment 2, “Analysis of the Impact of CAAWP’s Proposed Waterfront Museum.”

- The combined admission to all eight of the City’s museums was 192,708 in 2011. Staff has surveyed a number of maritime and/or history museums in eastern United States cities including Savannah, Charleston, Hampton Roads, Annapolis, and Portsmouth, New Hampshire. The Savannah Ships of the Sea Maritime Museum is 10,000 square feet and has 12,000 visitors annually (and an admission price of \$8 for adults). The Chesapeake Bay Maritime Museum in St. Michaels, described above, has up to 65,000 visitors on a complex of 18 acres and 10 buildings. See Attachment 3.
- The Nauticus/Hampton Roads Naval Museum complex attracts 350,000 to 500,000 visitors per year. It is home to the schooner Virginia and the Battleship Wisconsin. The building is 120,000 square feet. The Nauticus staff attributes most of their visitation to the Battleship Wisconsin and to the “cruise and celebration center” which is a hub for arrivals and departures of cruise ships and has 80,000 square feet of event space.
- An alternative argument is that a new museum could capture most or all of the Torpedo Factory’s visitors since it would be a few blocks away. The Archaeology Museum is inside the Torpedo Factory and is therefore a gauge of the ability of a nearby small museum to attract Torpedo Factory visitors. The Archaeology Museum attracts about 10 percent (42,724 in 2011) of the Torpedo Factory’s reported door count.
- The cost of City General Fund operating support for its museums range from \$485,000 for the Archaeology Museum to \$16,000 for the Friendship Firehouse Museum. For instance, the Fort Ward Museum, which attracted 40,363 visits in FY2011, has an operating cost of \$7.15 per visitor.
- If the new museum is primarily attracting visitors who are *already* visiting Alexandria’s waterfront attractions, such as the Torpedo Factory, then the increase in visitor spending due solely to the new museum is much less.
- City staff has prepared a revision to its June “Parks and Museums” alternative to incorporate most of the elements from the CAAWP report (see Attachment 4). The scenario assumes a 10,000 square foot museum can attract 50,000 visitors who will pay \$5 admission. The scenario also uses the American Association of Museums’ operating costs of \$13 per visitor plus \$1 per square foot. The net revenue from the CAAWP proposal as revised is about \$230,000 per year, compared to an estimated net revenue from the draft Waterfront Plan of about \$3.6 million to implement the parks, piers, art and history recommendations of the plan.
- The Alexandria Convention and Visitors Association makes the point that the impacts of a museum, in most cases, are greater than other uses. For example, a 150 room hotel operating at 75 percent occupancy generates 112 arrivals per day (conservatively assuming only one night stay per guest), with maximum arrivals of 150. This is about the same as a museum with about 41,000 visitors per year. A museum with 500,000 visitors annually generates 1,369 arrivals per day. As museum visitation is highly seasonal, this would likely be 5,000 per day in peak season. If this volume were to occur, it would create much more of an impact on

traffic and parking. More detail of ACVA's analysis is in Attachment 2: "Analysis of the Impact of CAAWP's Proposed Waterfront Museum."

- Staff's analysis that a new City-funded museum would be costly also suggests that, if a non-profit museum were to locate on the waterfront and be successful, that museum would likely need to have an endowment or other material resources sufficient to acquire the necessary land and construct its facility. It would also need multiple sources of revenue in addition to admission fees to support museum operations on an ongoing basis. Given the large cost of acquiring and developing the Robinson Terminal site for a museum, it would be very difficult, if not impossible, for the museum advocated for by CAAWP to be economically viable without a material taxpayer subsidy by the City or without for-profit museum sponsor, a major endowment or foundation source of funding.

Capital Budget Impact

- CAAWP's own estimate of the cost of their proposal is \$80-109 million, which is low because it is based on the assumption that the land can be purchased for its assessed value. At this time, a better estimate is not available, and City staff is not criticizing CAAWP for using assessed value, merely pointing out that the actual purchase price will be much higher.
- Because the CAAWP proposal eliminates most new revenue sources from the draft Waterfront Plan, and because the alternative funding sources have limited potential, the main option for funding the CAAWP plan is for the City to issue bonds to be repaid from general tax revenues (pages 147-148). Adding \$100 million to the City's bond debt is highly problematic.
 - The City current has outstanding debt of \$480 million and the CIP anticipates \$800 million in borrowing over the next 10 years.
 - Bond rating agencies have placed a "negative outlook" on the City, constraining the City's ability to exceed the levels of indebtedness already planned.
 - The City is currently very close to its debt ceiling, a policy guideline expressed as a percent of the value of its assessable base. The City will exceed debt ceiling policy guideline in the next few years to fund the Potomac Yard Metro Rail Station, which is feasible because there are dedicated revenue sources from Potomac Yard to support the cost of the station. The potential future demands for capital funds are significant and include schools, transportation, and public safety needs – as well as parks and open space City-wide.
- CAAWP suggests increasing the real estate transfer tax rate (page 146). However, the City of Alexandria, as do most jurisdictions in the state, currently levies a recordation tax (transfer tax) at the maximum rate allowed by the State, which is 1/3 of the State's recordation tax.
- Staff is very concerned that City will not be able to implement a Waterfront Plan that does not include new revenue sources. It is not practical to expect that the City will find tens of millions of dollars for Waterfront improvements when there are so many other

City-wide needs. In staff's analysis, a Waterfront Plan without new revenue resources is not a viable plan.

Legal Defensibility

There are two factors affecting the cost to acquire some or all of the three waterfront redevelopment sites: value based on current use, and value of the redevelopment potential. All of the sites have, under current zoning, additional redevelopment potential of about 350,000 square feet. The sites also have additional potential value in the sense that they can support more valuable land uses than the current use, which is primarily warehouse.

If the City did not have to pay for the value of the redevelopment potential, it could acquire the properties at a lower cost. Within the CAAWP report there are implicit and explicit suggestions that the City take actions to reduce the value of the land to make them more affordable or take actions to preserve the land by using methods that do not require purchasing them. This section of the memo explains why that is not legally defensible or practical.

CAAWP's report raises *transfer of development rights* (TDR) as a potential tool for reducing the purchase price of one or more of the redevelopment sites. They note (page 141) that "the City traded the Fickling School site from Smoot Lumber to the Watergate and developed Founders Park." CAAWP suggests "the City could use a process known as transfer of development rights to land owners or developers in other parts of the City, the Commonwealth of Virginia or even across state lines where increased development is more appropriate."

Section 15.2-2316.2 of the Virginia State Code authorizes Virginia localities to adopt an ordinance allowing the transfer of development rights within their jurisdiction. If the City were to adopt a TDR program, it would be required to include the designation of sending areas and receiving areas that have been analyzed to determine whether the infrastructure in the receiving area is sufficient to accept the transferred density. Additionally, the locality is prohibited from requiring the transfer of development rights as a condition of development.

Transfer of development rights across jurisdiction or state lines is extraordinarily unlikely. In addition to the considerable legal hurdles, there is no incentive for another jurisdiction – within Virginia or in another state – to offer additional density to developers to encourage or require them to preserve open space on Alexandria's waterfront.

Even within a jurisdiction, TDR programs can be controversial as one neighborhood receives the negative impacts of increased density while the benefits accrue to a different neighborhood. If a developer in another part of the City is spending millions of dollars on waterfront open space, there will be little money remaining to pay for amenities in the part of the City where he is developing. Moreover, because waterfront property is so valuable, it would require a considerable increase in density elsewhere in the City to compensate for lost development potential at the waterfront.

CAAWP indicates that it opposes the use of eminent domain for the acquisition of the Old Dominion Boat Club parking lot for open space. Eminent domain is a tool available to every

local government, but it is a tool that no local government likes to use. For the last seven years, the City has sought to negotiate a mutually acceptable solution to the ODBC parking lot with ODBC's negotiating committee.

The remaining option that CAAWP has proposed for reducing the purchase price of the redevelopment parcels is by downzoning the land. If, for example, the City were to lower the FAR for office development on the Robinson Terminal sites from the current W-1 allowable FAR, or were to allow only public parks or civic uses, either example would be considered a downzoning of the property. There are significant legal restrictions on the City's ability to downzone.

The CAAWP report, on page 190, suggests downzoning is an option, and others have raised the idea as well, so the City would like to be clear about the legal issues involved.

Whether a downzoning is legally permissible depends on whether the zoning action is considered by the Court to be part of a "comprehensive" or "piecemeal" zoning action. A comprehensive downzoning may be permissible but a piecemeal downzoning is not allowed. There is no bright line test in the case law as to whether a rezoning is comprehensive or piecemeal; however, the courts often consider downzonings to be piecemeal and many are not upheld. If the downzoning action is considered to be part of a comprehensive plan, then the action will likely be upheld if the Court finds that the locality's reasonableness in making the decision is fairly debatable (the evidence would lead objective and reasonable persons to reach different conclusions). In Alexandria, for example, in 1992, properties across the city were downzoned at the same time in what was considered a comprehensive rezoning of the entire city. On the other hand, when a downzoning is considered to be piecemeal, the locality has a much higher burden to meet; the new lower zoning will be upheld only if there is a fraud, a change in circumstances, or a mistake in the prior zoning.

In the hypothetical case of a "downzoning" of private development sites as part of the pending Waterfront Plan, the action would need to be taken as part of an overall master plan discussion of the entire area. It would still likely be considered a piecemeal rezoning because most of the area is built and the zoning on those parcels would not be changing, so only a few undeveloped sites would be affected. Zoning efforts that appear to affect a large area but effectively only apply to a small number of parcels have been considered by the Courts to be a piecemeal downzoning and deemed illegal.

Response to Change

From the first day of the Waterfront planning process, Alexandrians saw opportunity in the prospect of change. They talked about new and varied kinds of public spaces, more activities for families and children, more history and art, more options for waterfront dining, and more events and programming. They also expressed their concern that the City needs stronger tools to manage and shape the change that is coming, to make sure that it meets the needs and hopes of Alexandrians. What staff did not hear: Alexandrians asking for the Waterfront to stay as it is.

Among the other elements of the CAAWP report that suggest a strong desire to limit change:

- Calls for all new businesses to be in existing buildings (page 14).
- Does not respond to Alexandrians' request for more activities for families and children, especially in the Strand area. Although the report suggests that the waterfront should be "vibrant," it does not mention any new activities that they would like to see in Waterfront area parks other than the museum. The CAAWP proposal for a park at the foot of Prince Street, for example, calls for a "quiet" park that is a "contemplative" space (page 129).
- States that a pleasure boat marina is not an appropriate waterfront activity (page 89).
- "No change" includes leaving the current zoning in place – zoning that allows 650,000 square feet of development without requirements that the new development contribute to new parks, to public art, and to the other improvements in the Plan.

As noted under Financial Feasibility, staff believes that a Waterfront Plan without new revenue resources is not a viable plan. Furthermore, the CAAWP approach would not enable the City to direct and manage change.

Notable Areas of Agreement

Among the recommendations in the CAAWP report are numerous recommendations that agree with the draft Waterfront Plan. These include:

- Agreement to provide for existing and future commercial boat operations. *The draft Waterfront Plan increases docking capacity for commercial boat operations.*
- Agreement to complete more detailed engineering of the flood mitigation proposal. While CAAWP expresses concern about including flood mitigation in the Waterfront Plan prior to completing the engineering work, they appear to agree that flood mitigation should be pursued further.
- CAAWP agrees that the foot of King Street should be more attractive and "should be redesigned so that pedestrians can safely and easily walk along the waterfront from the City Dock to Waterfront Park but does not believe that eminent domain should be used to acquire the ODBC parking lot and instead supports "a more cooperative and negotiated approach that recognizes the long waterfront history of this civic-minded organization" (page 88). *The draft Waterfront Plan also recommends that conversion of the ODBC parking lot into public space should be accomplished "through negotiation with ODBC" (page 62).*
- CAAWP agrees that hotels, restaurants, and retail should be part of the Waterfront land use mix. CAAWP would limit hotels to one 60-room hotel; the restaurant and retail square footage is the same as the draft Waterfront Plan.
- CAAWP supports reuse of the Beachcomber as a restaurant. CAAWP is concerned, however, that the draft Waterfront Plan says "if financially feasible."

- CAAWP recommends that a park be created in the location of Prince Street between the Strand and the river (page 128). *The draft Waterfront Plan also contains this recommendation (pages 22, 25, 116, and 132).*
- CAAWP calls for the preservation of all historic structures, and City staff believe that the draft Waterfront Plan contains the strongest language necessary to ensure that this happens. *CAAWP expresses concern that the draft Plan “recommends” that historic buildings be preserved, but staff notes that no stronger language is necessary since the Plan’s recommendations are backed up by additional City requirements for historic preservation in the Old and Historic District which includes the Potomac River Waterfront area.*

Continued Dialog

CAAWP representatives and City staff have met three of times in the past month. The purpose of these meetings has been to exchange the information about the basis for the recommendations in the draft Waterfront Plan and in the CAAWP report. This dialog has been fruitful and further discussion may be beneficial. CAAWP has indicated that they are open to reconsidering certain aspects of the report, such as the mix of funding sources.

City of Alexandria/Office of Historic Alexandria Museums

Square Footage, Visitation and City Financial Support FY 2011

City of Alexandria Museum Name	Sq. Ft. of Site	FY 2011 City Support	FY 2011 Visitation
Alexandria Archaeology Museum *	4,700	\$ 484,579	42,724
Alexandria Black History Museum	4,437	\$ 273,504	11,093
Friendship Firehouse Museum	1,081	\$ 15,956	2,745
Fort Ward Museum	6,590	\$ 288,659	40,363
Gadsby's Tavern Museum	9,485	\$ 370,324	24,235
Stabler Leadbeater Apothecary Museum	3,984	\$ 54,111	11,447
The Lyceum, Alexandria's History Museum	7,626	\$ 410,520	23,703
Waterfront History Center & Museum Store **	2,000	0	36,398
Capital Facilities Maintenance Fund	-	\$ 350,000	0
Total			192,708

** includes staff administering all Archaeology programs*

*** located in temporary donated space*

Analysis of the Impact of CAAWP's Proposed Waterfront Museum

Office of Historic Alexandria & Alexandria Convention and Visitors Association

November 2011

Analysis of the Office of Historic Alexandria

Using resources provided through the American Association of Museums (AAM), the Office of Historic Alexandria (OHA) has prepared a museum benchmarking analysis to provide estimates of the impact of the new Alexandria waterfront museum facility envisioned by CAAWP. This analysis compares the metrics of median and quartile values for selected institutions that have shared data with the AAM nationwide; that is, in the 25th, 50th, and 75th percentiles. The ratios are automatically calculated by the system and are designed to provide more accurate comparisons, especially when comparing museums of significantly different size. Ratios of this kind are sometimes referred to as *performance indicators* or *key performance indicators* (KPIs).

The museum proposed by CAAWP sized at 10,000 sq. ft., attracting approximately 500,000 annual visitations, with \$2.5 M in admission revenue, would be distinctly unusual. A museum attracting such a large number of annual visitors would be above the 90th percentile – that is, attracting more visitors than 90 percent of similar museums around the country. An institution of this magnitude would be a **major destination museum**, and would typically be sized at about 300,000 sq. ft. of interior space. Earned income, including admissions, programming, retail sales, and restaurant and banquet revenues for a museum of that size would be estimated at \$25 per visitor, with a visitor service expense of about \$100 each. Revenue from private sources and donations would be estimated at about \$36 per visitor, with the remainder coming from investment/endowment income, public or governmental sources, or through its operation as a for-profit museum. Rarely do museums sustain operations through earned income (including admission/rental fees or retail operations.) In recent years, several museums of this type, both non and for-profit, have supplemented operating revenue sources through construction of ancillary facilities such as event centers, hotels, and even condominium residences immediately adjacent to the museum facility.

Such a museum could be expected to attract K-12 school visitation at about 30percent, or 150,000 students annually, who would arrive in about 2,500 school buses spread over 180 days, averaged at about 14 buses per day. Tour bus visitation, estimated by ACVA and OHA at 10 percent would attract 50,000 annual visitors, adding about 1,136 buses spread over 360 days, or about 3 buses per day, assuming the museum is closed for 5 holidays per year. These figures are not adjusted for peak seasonal visitation, and do not include summer youth visits through camps or other youth programs

A museum in the 90th percentile would also be staffed by approximately 130 full-time employees, 400-450 volunteers and additional part-time and seasonal staff as needed. Staff costs for such a museum would be estimated at about 70-75percent of museum operating costs, with annual maintenance expenses of about \$14.50 per sq. ft.

Alternatively, a museum featuring 10,000 sq. ft. of interior space appears to be at about the 10th percentile, and is termed a historic *attraction*, with estimated attendance at the history attraction of less than 12,000. This lines up with AAM statistics that identify attendance at the average U.S. history museum at about 10,000 annually, with a historic house/site attracting about 11,700 visitors annually. Such museum would typically be closed at least two days per week.

K-12 school visitation for a museum sized at 10,000 sq. ft. is estimated at 5percent, or 500 students, resulting in 9 school bus visits over a 180 day period. Tour bus visitation is estimated by ACVA and OHA at about 10percent, or 1,000 visitors, arriving in 23 buses over a 260 period.

A location at Robinson Terminal North, several blocks north of the Torpedo Factory, may have a serious impact on the estimated visitation for such a small facility. OHA's operation of a Waterfront Museum near the Canal Center, established by City Council in 1986, attracted only 3,000 visitors by 1992, and was closed by the City the following year.

Earned income for a museum sized at 10,000 sq. ft. is estimated at just over \$2 per visitor, including admissions, retail sales, programming and private meeting/party rentals. Servicing expenses per visitor would be estimated at about \$13 each and building maintenance expenses would about \$1 per sq. ft. It is also estimated that there would be 3 full time staff, supplemented by about 20 volunteers and 8 part time/seasonal staff.

Although Alexandrians are known for their generosity and philanthropic support, the City's history museums and attractions have not witnessed major benefactors in recent years, probably due to the poor national economy and wealth of charitable organizations in the region. Donations and private funding revenue sources for a museum sized at 10,000 sq. ft. could be expected to attract about \$1.50 per visitor annually. This is in line with AAM's national statistics and OHA's experience with City operated museums. Investment/endowment income and/or public sector support would be needed to fill the gap between operational expenses and identified revenues.

Another view on the impact of a new waterfront museum is to evaluate the new facility at the 40th percentile museum benchmark. This scenario would envision a facility of about 50,000 sq. ft., with building maintenance expenses of about \$3.50 per sq. ft.

A museum facility of that size would generate about 50,000 visitors annually, with earned income from admissions, programming, retail sales, food service and catering rentals of about \$7.50 per visitor. Private donations and support are estimated to add about \$7 in support of each visitor. Visitor servicing costs are estimated at \$35 for each visitor. The facility would most likely be closed two days per week.

K-12 school visitation for a museum attracting 50,000 visitors is estimated at about 8percent of total admissions, or 4,000 hundred students. This would result in about 67 school bus trips spread over the 180 day school bus period (peak visitation would most probably occur with 8 week periods in both Spring and Fall). Tour bus visits, estimated by ACVA and OHA at 10 percent annually, would result in 113 additional buses, spread over 260 days.

Considering all three of the scenarios described above, OHA recommends consideration of a hybrid museum based on the unique attributes of Alexandria's waterfront location. Based on the proximity of the nation's capital and lure of Alexandria's current status as a tourist and heritage destination, it may be assumed that a smaller museum or the History Center recommended in the Waterfront History Plan, of 10,000 sq. ft could each attract 50,000 visitors annually. This is a bit higher, but still in line with OHA's FY 2011 attendance figures and facility square footage at the seven City-operated museums. This approach allows optimizing revenue opportunities per visitor, while reducing maintenance expenses per square foot.

In comparing the impact of the proposed Waterfront Museum versus the History Center recommended in the Waterfront History Plan, several differences emerge. OHA would expect that the History Center would also generate about 50,000 annual visits but without the significant impacts a museum can bring. Instead, the History Center concept acts to educate and orient existing visitors to Alexandria arriving at the Waterfront, and then directs them to the educational and interpretive facilities already available within the City's current museums and historic sites. Through the use of an orientation film, interpretive panels on City museums and attractions, and small changing exhibits sponsored by existing museums, the History Center's primary purpose would be to provide a short overview of Alexandria's unusual and diverse heritage, the vast opportunities available for further exploration and enjoyment, and then to disperse heritage tourists Citywide to other attractions within and away from the waterfront.

As such, the History Center would not seek or attract the typical museum visitor/school/tour programming essential to most museum operations, but rather would influence their visits to existing museum facilities of particular interest. In many ways the CAAWP's planned museum exhibits appear to mirror those projected for a History Center, but they are far from the same. Although the History Center may have rotating small exhibits or collections items on display from time to time, the goal of the center will instead focus on directing a new generation of savvy heritage tourists to the authentic history experience that can already be found, albeit with limited information, within the City of Alexandria.

Ultimately, OHA expects that this approach will supplement museum resources and programs already in place, rather than further diluting visitation to current museums and historic sites Citywide. This will not only enhance the overall visitor experience to Alexandria, but is expected to provide improved enjoyment of history resources, at reduced costs, to residents as well.

Analysis by the Alexandria Convention and Visitors Association

The economic impact of museums depends on whether the venue generates its own audience.

Museums and other ticketed activities contribute to the tourism economy of Alexandria either as a "destination" or as an "attraction."

A "destination" museum generates its own audience, adding to the total number of visitors that come to the city. A destination museum typically has content of national recognition or interest.

It would have the resources to generate its own publicity outside of Alexandria, and would pay for advertising that attracts visitors to the museum as the primary reason for visiting Alexandria.

A museum that generates its own audience can take credit for all of the spending of those visitors within the city – including hotels, meals, and shopping. A museum that draws from the existing pool can take credit only for the spending that occurs within the property.

An “attraction” is a component of what draws visitors to Alexandria – but it uses the visitor pool rather than generating it. Attractions contribute to the economy by increasing the amount of time visitors stay, and by adding to visitor spending through the spending that is done at the location, as well as the benefits of employment and business taxes that are paid by the organization. But, an “attraction” does not generate hotel, meals, and retail spending.

Of course, all museums and ticketed activities have a combination of visitors who came to Alexandria primarily to visit that museum, and those who were visiting for other reasons and included the museum on their itinerary.

Comparison to the Torpedo Factory Art Center

The 2010 *Study of the Torpedo Factory Art Center* by MAI documents that door counting equipment at three entrances of the Art Center estimated 518,471 visits in 2008. MAI analysts removed the estimated number of entrances by tenants, employees and elementary school children visiting the Archaeology Museum to report the number of “visits” to the Art Center as 394,300. Analysts did not estimate and remove the entrances from Art League students taking classes in the building, or passive entrances to use restrooms or access the Marina.

The economic impact of the Art Center was calculated using a seventeen year old survey of visitors that determined 83 percent of visitors were from out of town. When calculating the economic impact of the Art Center, analysts took the total number of out of town visitors to the Art Center and multiplied total average visitor spending. The resulting estimated “economic impact” totaled \$55 million for lodging, food, and other purchases in the City of Alexandria with tax revenue of \$1.8 million.

The analysis fails to acknowledge that some unknown percentage (probably the vast majority) of these visits were not generated by the Art Center as a primary reason for visiting Alexandria.

By way of example, if you estimate that 25 percent of the Art Center’s out of town visitors were motivated by the Art Center to visit Alexandria, the tax revenue generated would be only \$450,000.

Would a new museum be comparable to the Torpedo Factory Art Center?

It is unlikely that the visitation to the Art Center would translate entirely to a museum at Robinson Terminal North.

- The Art Center does not charge admission.

- The location is not very close. Most of Alexandria’s existing museums are closer. Even the Archaeology Museum, located within the Art Center, attracts only 10 percent of the visitors.
- The content is very different, not only in theme, but also in the type of experience. The Art Center has a compelling demonstration and retail quality and the new museum would be exhibition.

Comparative Impacts

The ACVA maintains its position that a museum on the waterfront could be a desirable asset to attract visitors to the City. Our position does not recommend the development of a museum because the impacts, in most cases, are greater than other uses.

For example, a 150 room hotel operating at 75 percent occupancy generates 112 arrivals per day (conservatively assuming only one night stay per guest), with maximum arrivals of 150. A museum with 500,000 visitors annually generates 1,369 arrivals per day. As museum visitation is highly seasonal, this would likely be 5,000 per day in peak season.

For the museum to have less traffic impact than the hotel, 92 percent of museum visitors would have to arrive via public or pedestrian transportation. In likelihood, 30 percent would arrive by group transportation for more than 3,000 motor coaches and school buses accessing the site annually.

Conclusion

The City’s Waterfront Plan does not preclude the development of a museum on the waterfront. And, a nationally recognized museum could have the transformative quality envisioned by the alternative plan.

However, a museum of the size and scope described in the report would be unlikely to attract 500,000 visitors and the resulting spending would likely not be new money to the economy.

Comparable Maritime and History Museums

Source: Museum websites and City interviews of museum staff, 2011

	Annual Visitation	Museum Size and/or Features	Admission (adult)	Annual Budget	Do admissions cover operating costs?
Ships of the Sea Maritime Museum, Savannah, GA	20,000	10,000 sf + 1.8 acre garden	\$8	\$360,000	No
Chesapeake Bay Maritime Museum, St. Michaels, MD	50-65,000	18 acres/35 buildings/85 boats	\$13	\$2.8 million	No
The Charleston Museum, Charleston, SC	110,000	Museum + historic house	\$10-\$22	\$10-\$22	No
USS Albacore Museum, Portsmouth, NH	25,000	1,800 sf + submarine	\$5	n/a	No
Annapolis Maritime Museum, Annapolis, MD	12,000	7,000 sf + docks	donations	\$450,000	No
Nauticus - The National Maritime Center and Hampton Roads Naval Museum, Hampton Roads, VA	350,000 to 500,000	120,000 sf plus Schooner Virginia, Battleship Wisconsin, and the Half Moone Cruide and Celebration	\$13.95 (Naval museum is free)	\$6 million	No
Calvert Maritime Museum, Solomons, MD	70,000	9 acre waterfront facility; 29,000 sf of exhibit space	\$7	\$1.5 to \$2.5 million	No
Battleship Cove, the World's Largest Naval Exhibit, Fall River, MA	90,000	2 acres and 5 ships, carousel	\$15	\$2.5 million	No

Comparing Net Revenue from draft Waterfront Plan and CAAWP Proposal

	draft Waterfront Plan	CAAWP (all scenarios)	City "Parks and Museums" Alternative revised per CAAWP (10,000 sf museum)
Net new redevelopment RE taxes	\$2,213,054	\$326,797	\$326,797
Sales tax from retail	\$83,633	\$135,000	\$88,770
Meals taxes	\$701,960	\$700,000	\$700,000
Sales tax and BPOL from restaurants	\$210,588	\$210,000	\$210,000
Transient Lodging Tax (new hotel rooms)	\$1,154,636	\$199,290	\$199,290
Hotel sales tax and BPOL	\$217,635	\$38,435	\$38,435
Museum admission revenues	n/a	\$2,500,000	\$250,000
Museum operating costs	n/a	(\$2,500,000)	(\$660,000)
Additional revenues from increased tourism/museum	n/a	\$807,184	\$80,718
Increased maintenance of entire Waterfront	(\$1,000,000)	(\$1,000,000)	(\$1,000,000)
Net annual revenues	\$3,581,506	\$1,416,706	\$234,010

City staff has included in this chart two charges against net revenue: annual operating cost for CAAWP's proposed museum and the draft Waterfront Plan's proposal to increase Waterfront area maintenance by \$1 million per year.

City staff believes CAAWP's proposed museum could attract about 1/10 of the 500,000 annual visitors that CAAWP assumes. City staff's revision of CAAWP's revenue projection is due to the difference in anticipated museum visitation.