#### Waterfront Plan Costs, Revenues and Phasing

#### Waterfront Plan Costs

- The Waterfront Plan's recommended park, cultural, marine and shoreline improvements are estimated to cost up to \$39 million (in 2011 dollars).
  - About \$8 million would be spent to create a new 1 acre riverfront park what the Plan calls an expanded Point Lumley Park on the site of an existing parking lot.
  - Another \$8 million would transform the foot of King Street and the Old Dominion Boat Club parking lot into Fitzgerald Square, linking King Street to The Strand and creating a new public pier extending into the Potomac River.
  - The Plan contains recommendations for the Torpedo Factory area, for the Thompsons Alley area connecting the marina and Founders Park, and for Oronoco Bay Park that are expected to cost approximately \$2.5 million for each area.
- Flood mitigation is estimated to cost \$6.5 million and includes elevating the foot of King Street and The Strand where flooding is most frequent, as well as integrating a low flood wall into the proposed park improvements between King Street and Duke Street.
- Over the past month, City staff extensively validated the cost estimates for Waterfront Plan with government and private industry experts. The analysis included comparisons to recent and current waterfront projects at National Harbor, Washington DC, and Arlington.
- Numerous figures were double-checked and some figures were adjusted, but only a few changes were substantial:
  - About \$4.7 million was added to the contingency fund and engineering cost estimates. In the interests of being conservative, City staff chose to increase the contingency fund from 15% to 30% of total cost and increase the expected design/engineering cost from 15% to 20%.
  - The proposed civic/cultural building rose in price from \$1.6 million to \$3.6 million. Smaller or less expensive buildings are possible, as is a developer-funded structure (the land is owned by Robinson Terminal); the new estimate shows the cost of high quality 10,000 square foot building.
  - Completing flood mitigation at the same time as other improvements provide some cost savings.
- To provide greater detail about phasing alternatives, City staff divided the Waterfront into 10 "phasing locations." Public improvements that are logically completed at the same time were grouped into elements. The cost and relative timing of each element is estimated.
  - The timeframes for phasing are: 0-3 years, 4-6 years, and 7-15 years.
  - The phasing analysis anticipates that the initial flood mitigation work and the Point Lumley Park improvements would be completed in the first three years, the balance of flood mitigation and the Fitzgerald Square/Waterfront Park initiatives in years 4-6, and the balance of the recommended improvements in years 7-15. However, the

timing of the phasing elements is very flexible and can respond to opportunities that may occur. For example, if agreement is reached on the Old Dominion Boat Club parking lot issue, then the Fitzgerald Square and Waterfront Park initiatives could accelerate and Point Lumley Park initiatives could be scheduled later.

- The most frequent flooding, at the foot of King Street and nearby areas on Union Street and The Strand, would be addressed in the first phase. This would reduce flooding events from more than 150 per year to 10-15 per year. The floodwall, which provides additional protection to about the 10-year flood, would be started in the first phase and completed before the end of the second phase (by year 6).
- Public art and historic interpretation could occur in any phase, but will also be considered as part of any of the proposed improvements.
- Operating costs have been included in the cost/revenue calculation. The cost/revenue scenario contains an increase of \$1 million per year in operating costs over current levels by year 11. That figure would cover not only increased operating costs due to new facilities, but also an increased level of maintenance for existing parks, public spaces, and marina areas.
- The capital costs of the Plan include the purchase of a waterborne debris skimmer and the operating costs cover additional staff for its operation.

### Waterfront Plan Revenues

- At buildout, a redevelopment scenario with a mix of housing, hotel, and restaurant/retail yields a net tax revenue of \$4.8 million (in 2011 dollars). With a phased buildout over 15 years, cumulative tax revenues at the end of 15 years will total \$42 million.
- A redevelopment scenario that assumes that all redevelopment will be residential (with the exception of the Beachcomber and the Waterfront Park building) yields significantly lower revenues: \$1.4 million per year at buildout compared to \$4.8 million for the mixed redevelopment scenario.
- A redevelopment scenario that assumes the City would purchase the Robinson Terminal sites for open space would limit the potential tax revenues to two sources: redevelopment on the Cummings/Turner block and the Waterfront Park building. Net tax revenues would be reduced to about \$750,000 a year.
- On average, a hotel room yields about \$3,600 in net tax revenue annually while a housing unit of about twice the size yields \$1,200, despite the fact that a hotel room is about half the average size of an apartment or condo.
- City staff calculated potential revenues from a mix of new development on the three redevelopment sites: the Cummings/Turner block and Robinson Terminals North and South. The revenue scenario also includes a restaurant in a restored Beachcomber.
  - For analysis purposes, City staff used a development scenario that anticipates that half of both Robinson Terminals will develop as housing and half will develop as hotel. The scenario anticipates a mix of housing, office, retail and hotel on the Cummings/Turner block, with the majority of space being hotel.

- The development scenario used for revenue estimates includes 625 hotel rooms and 319 housing units; the scenario assumes housing units have twice the square footage as the average hotel room.
- Revenue estimates shared at the Planning Commission and City Council worksessions in early 2011 included a 33,000 square foot restaurant in Waterfront Park. City staff has recalculated new revenues using a much smaller restaurant of 11,000 square feet.
- The previous revenue estimates were based on a scenario that did not include redevelopment of the northern third of the Cummings/Turner block, including the buildings along Prince Street. The recalculated revenue estimates include redevelopment of those parcels.
- The mixed redevelopment scenario also anticipates that redevelopment will occur in three phases: 0-3 years, 4-6 years, and 7-15 years.
  - In years 0-3, anticipated redevelopment includes the Beachcomber, redevelopment of the Cummings warehouse at 220 South Union Street, and adaptive reuse of the historic buildings in that block.
  - In years 4-6, anticipated redevelopment includes Robinson Terminal North and the balance of the redevelopable properties in the Cummings/Turner block.
  - o In years 7-15, the anticipated redevelopment is Robinson Terminal South.
- Anticipated revenues comes from the real property tax on new development; meals, sales and BPOL taxes on new restaurants; and transient lodging, sales and BPOL taxes on new hotels. All assumptions about market conditions –such as room rates, occupancy rates, and restaurant sales per square foot – are conservative.

## Waterfront Plan Cost and Revenue Balance

The analysis of the financial impact of the Waterfront Plan is both simple but at the same time complex. Also, the variables are such that the analysis can only reasonably produce order of magnitude results, which is typical for land use related economic analyses of this kind. To answer the basic question: does the proposed Waterfront Plan pay for itself? The answer even with using conservative and reasonable assumptions, and without counting the overall quality of life benefits for City residents and businesses, is clearly yes, even without counting secondary or indirect benefits to existing businesses, and the resultant new tax revenues to the City government from the increased business activity. In order to arrive at that conclusion, there are several levels of analysis to consider. The following analyses use conservative and reasonable assumptions about the future. To the degree the assumptions vary from these, future results will vary.

First, the basic building blocks of the analysis need to be reviewed (in 2011 dollars). Based upon a detailed recent re-review of the costs and revenues, the cost of the public amenities (parks, piers, shore-line improvements, the civic building, and other elements is projected at \$39 million (excluding the \$6.5million in stand-alone flood mitigation elements which would need to be done even if there was no Waterfront Plan), operating costs are projected at full build out to be \$1.0 million per year, and at full build out the annual new net tax revenues that are eventually

generated total \$4.8 million. The net new tax revenues are likely to occur without the flood mitigation elements being implemented. With the projected early phased-in implementation projections of the construction of the public amenity elements of the Waterfront Plan contrasted with the projected multi-year phase in of the private development contemplated by the Waterfront Plan, net new tax revenues and expenditures of public funds for the public improvements, results do not match on a year-to-year basis. This is because capital expenditures to implement the Waterfront Plan occur earlier than the growth of the net new tax revenues generated by the proposed Waterfront Plan. In year 7, annual net new tax revenues from the private sector exceed the contemplated annual public expenditures, and continue to exceed that on an ongoing basis. By year 20, annual revenues are projected to exceed annual expenditures by \$3.8 million per year.

The second level of analysis, using the data above (i.e., again without the stand-alone flood mitigation elements), involves using the same expenditure and revenue data from the first analysis previously described, and applying economic factors such as expected inflation and the time value of money. This requires the taking of public costs of improvements in 2011 dollars, and the projected net new revenues in 2011 dollars, and inflating them to future dollars, and then discounting those numbers back to produce a net present value result. In effect it is a leveling of the playing field in taking dollars spent or received in different years and equalizing them back to today's dollars in regard to investment value. The result is labeled "Net Present Value" or "NPV". This is a common method of business financial analysis.

If one does the NPV analysis, the results are, when counting only direct net new tax revenues, that the Waterfront Plan pays for itself in about year 16. Although "underwater" on an NPV basis by \$7.5 million in year 15, the plan is \$22.8 million ahead by year 25 and \$36.8 million ahead by year 30. At the end of the day, the City's investment in the public elements of the Waterfront Plan produces a positive fiscal result. The Waterfront Plan can pay for itself.

An alternative analysis would be to include the \$6.5million (2011 dollars) in flood mitigation projects (which would have to be done even without the Waterfront Plan) into the above financial analyses. This increases the costs, but keeps the revenues unchanged. The results are that on a cash flow basis in today's dollars, and counting direct and not indirect benefits, the breakeven year on a cash flow basis increases to year 17. On a NPV basis the year 15 is negative by \$13.8 million, but by year 25 it is positive by \$16.4 million and by year 30, it is positive by \$30.4 million.

In conclusion, using a conservative analysis, the economics in regards to return on financial investment in the Waterfront Plan are positive over the long-term using conservative, reasonable analyses and assumptions. If elements of the Plan are changed (such as dropping the civic building as a Plan element), or the mix of uses changes, or the level of redevelopment changes, then the results described above would also change.

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# ALEXANDRIA WATERFRONT PLAN Phasing Locations







