

# City of Alexandria, Virginia

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## MEMORANDUM

**DATE:** JUNE 14, 2011  
**TO:** THE HONORABLE MAYOR AND MEMBERS OF CITY COUNCIL  
**FROM:** FAROLL HAMER, DIRECTOR, PLANNING AND ZONING  
**RE:** WATERFRONT PLAN COSTS AND REVENUES

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This memorandum reviews the derivation of the cost and revenue estimates for the Waterfront Plan, including:

- the Planning Commission's recommended Waterfront Plan
- Alternative 1: Parks and museum emphasis
- Alternative 2: Expenditures are the same as the Planning Commission recommendation, but revenue is based on the development that can be approved under current zoning without a special use permit
- Alternative 3: Expenditures are the same as the Planning Commission recommendation, but revenue is based on the development that can be approved under current zoning with a special use permit

Attached to this memorandum are the following:

- Attachment 1: details about the parameters and assumptions used in making the cost and revenue estimates
- Summary table: development scenarios, revenues, and costs
- Illustrations: slides from the June 11, 2011 Council worksession powerpoint presentation illustrating the options.
- Revenues: For each of the *four* development alternatives, a table showing revenues by source, including assumptions
- Costs: for each of the *two* public expenditure alternatives, a table showing costs by location, phase and type

## Waterfront Plan Revenues

- Revenue parameters and assumptions are detailed in Attachment 1.
- Revenue is estimated solely from net tax increases due to new development in the following categories: real property, sales tax, meals tax, BPOL tax, and transient lodging tax. The positive impact of new waterfront development, parks, and/or cultural attractions on existing development value or on the sales of existing businesses, is not included.
- At buildout, the *Planning Commission recommendation*, with a mix of housing, hotel, and restaurant/retail yields a net tax revenue of \$3.8 million. With a phased buildout over 15 years, cumulative tax revenues at the end of 25 years will total \$51 million (in 2011 dollars).
- At buildout, *Alternative 1 – Parks and Museums* yields a net increase in tax revenue of \$164,000. This assumes that the Beachcomber becomes a restaurant and that the private cultural intuitions pay property tax.
- At buildout, *Alternative 2 – Current zoning with no SUP* yields a net increase of \$977,000 per year. This is insufficient to cover the planned increase of \$1 million per year in operating and maintenance costs.
- At buildout, *Alternative 3 – Current zoning with SUP* yields a net increase of \$1.5 million per year. This is sufficient to cover the planned increase of \$1 million per year in operating and maintenance costs, but the remaining funds would not be sufficient to cover the capital cost of the plan.
- 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.
- All revenues above are in 2011 dollars. Staff prepared a “net present value” analysis of the Planning Commission’s recommendation, based upon the phasing program contained in the draft plan’s supplemental materials. This analysis shows that cash flow becomes positive in year 21. It is not useful to prepare net present value analyses of the other alternatives, since none of these options yield revenues that can support the planned improvements.

## Waterfront Plan Costs

Cost parameters and assumptions are discussed in more detail in Attachment 1.

### Costs for the Planning Commission Recommendation, Alternative 2 and Alternative 3

- The Planning Commission recommendation and Alternatives 2 and 3 are assumed to have the same level of public expenditures on flood mitigation, parks, shoreline improvements, piers, etc.
- The Waterfront Plan’s recommended park, cultural, marine and shoreline improvements are estimated to cost up to \$44 million. The differences between the February draft plan and the Planning Commission’s recommendation:
  - Added the cost of Windmill Hill Park bulkhead repair

- Reduced costs of piers and costs related to the parking lot/restaurant building in Waterfront Park, which is no longer in the plan.
- 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.
- 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 – the increase would occur over the first decade as the plan is implemented.
- The capital costs of the Plan include the purchase of a waterborne debris skimmer and the operating costs cover additional staff for its operation.
- Alternatives 2 and 3 assume the same costs (and the same improvements) as the Planning Commission recommendation.

### **Additional Costs for Alternative 1: Parks and Museums Recommendation**

- *Alternative 1 – Parks and Museums* assumed City acquisition of both Robinson Terminal properties and the majority of the Cummings/Turner block (the Cummings warehouse (the Art League), the Turner shopping strip (Mystic, et al), and two historic warehouses on South Union Street. Current assessed values were used to estimate acquisition cost but market price is likely to be higher.
- The Parks and Museums alternative was calculated to add \$150 million to the cost of the Planning Commission recommendation for a total cost of \$227 million. The elements of the additional costs are:
  - \$55 million to acquire the two Robinson Terminals and construct the planned parks. This does not include the cost of the performing arts center on Robinson Terminal North.
  - \$53 million for an 87,000 square foot performing arts center. Of course, smaller centers can be constructed: a 32,000 sf center would be about \$19 million.
  - \$20 million to purchase the two historic warehouses on the Cummings/Turner block and restore them for use as a history center and a new Archaeology Museum.
  - \$22 million to purchase two lots in the Cummings/Turner block and to construct a new building to house a maritime museum, the Seaport Foundation, and the Art League.
- Once properties are purchased, buildings demolished, and sites prepared, the actual construction of the parks is a relatively minor element of the Parks and Museums alternative. The new parks are assumed to be of the same general character as Founders Park and are estimated to cost about \$7 million.

## Attachment 1:

# Waterfront Plan Cost and Revenue Parameters and Assumptions

### Revenues

- Real Property Tax:
  - Real property tax rate: \$0.978 per \$100 assessed value. This was the tax rate for FY2011. Updating to the FY2012 tax rate does not change the total significantly.
  - The calculation of real property tax increase is of the *net* increase – over and above the real property taxes paid by the redevelopment sites today.
  - The future assessed value of land and improvement is based on the current average assessed values of comparable City properties.
- Sales Tax
  - Sales tax rate is the current sales tax rate.
  - Assumed retail sales/sf based upon King Street Retail Study.
- Meals tax
  - Meals tax rate is the current meals tax rate
  - Assumed restaurant sales/sf is conservative and based upon averages for Old Town/Waterfront area restaurants as well as discussions with retail experts.
- BPOL Tax
  - Estimated by Alexandria OMB based upon averages for similar businesses.
- Transient Lodging Tax
  - Transient lodging tax rate is the current rate.
  - Assumed room rate is 2010 City average.
  - Assumed occupancy rate is 3 points below 2010 City average.

### Development Parameters

- Planning Commission recommendation: 450 hotel rooms; 340,000 sf housing; 50,000 sf of restaurant; 35,000 sf other (office, retail, restaurant).
- Alternative 1 – Parks and Museums: none (The scenario assumes the Beachcomber is a restaurant but it could be a cultural use instead).
- Alternative 2 – Current zoning with no SUP: Townhouses on Robinson Terminal North and South, mixed use on Cummings/Turner: 275,000 sf of housing and 33,000 sf other (office, restaurant, retail).
- Alternative 3 – Current zoning with SUP: Townhouses on Robinson Terminal North; multifamily, office and retail on Robinson Terminal South; mixed use on

Cummings/Turner: 410,000 sf housing; 150,000 sf office; 12,000 other (restaurant, retail).

### Costs

- Initial cost estimates were developed using information prepared for the City by three private sector engineering and landscape architecture firms. The cost estimates for flood mitigation come from the *Flood Mitigation Study* prepared by URS; cost estimates related to shoreline improvements, bulkhead repair, and pier construction were prepared by Moffat & Nichol engineers; and cost estimates for parks, plazas, landscaping, and other elements for the public realm were prepared by AECOM. Each of these firms is an expert in their respective fields with multiple examples of similar projects that have been designed and implemented.
- Building construction and historic building restoration costs were developed by City architects and confirmed with multiple private sector sources.
- City staff extensively validated the initial cost estimates for the 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 as well as National Park Service projects.
- Park costs were calculated for each of the individual planned elements ( $x$  square feet of new plaza,  $y$  number of new trees and shrubs, etc.) rather than applying a generic cost/square foot for the entire park.
- Because of the potential high cost of permitting and construction in a waterfront area, staff has included a much larger than normal estimate for contingency and design/engineering. The cost estimate includes a 30% contingency fund and the expected design/engineering cost is 20%.
- The new cultural space in the *Parks and Museums* alternative totals 170,000 square feet. New museum or performing arts space averages \$500/sf and staff confirmed this by reviewing the construction costs of multiple recently-built museums. Lower construction costs were used for the Art League and Seaport Foundation, as much of the square footage is of a workshop nature.
- The cost estimates for Fitzgerald Square include some funds for providing alternative facilities for the Old Dominion Boat Club. Discussions between the City and ODBC are continuing, and the cost estimates should not be interpreted as reflecting anything but a placeholder figure. However, these are described in the spreadsheet as the cost of providing replacement vehicle and boat parking and a replacement boat ramp.

# Summary of Waterfront Plan Costs and Revenues

For the Four Plan Alternatives Present to City Council on June 11, 2011

Planning Commission Recommendation	Alt 1: Parks and Museums	Alt 2: Current Zoning, No SUP	Alt 3: Current Zoning with SUP
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## Development Scenarios for Each Alternative

Residential	340,000 sf	0	275,000 sf	410,000 sf
Hotel (rooms)	450 rooms	0	0	0
Other commercial (office, restaurant, retail)	85,000 sf	3,660 sf	34,000 sf	165,000 sf
<b>Total</b>	<b>788,000 sf</b>	<b>3,660 sf</b>	<b>309,000 sf</b>	<b>575,000 sf</b>

In rooms or thousands of square feet. The scenarios reflect likely development, which may not achieve the maximum permitted.

## Net Tax Revenues

Net increase in real property tax revenues	\$2,213,054	\$127,112	\$973,364	\$1,661,201
Retail sales tax revenues	\$83,633	\$0	\$18,788	\$13,856
Meals tax revenues	\$701,960	\$51,240	\$121,380	\$109,900
Total of sales and BPOL tax revenues from restaurants	\$210,588	\$15,372	\$36,414	\$32,970
Total transient lodging tax revenues	\$1,154,636	\$0	\$0	\$0
Sales tax revenues from transient lodging	\$161,211	\$0	\$0	\$0
Subtotal	\$4,525,082	\$193,724	\$1,149,945	\$1,817,927
Assume 15% for general city services	-\$678,762	-\$29,059	-\$172,492	-\$272,689
<b>Net Tax Revenues</b>	<b>\$3,846,320</b>	<b>\$164,666</b>	<b>\$977,453</b>	<b>\$1,545,238</b>

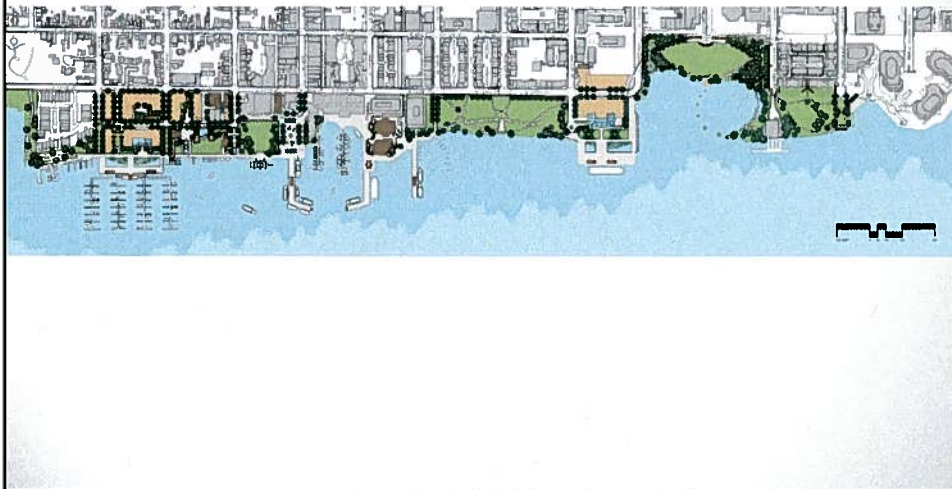
## Plan Costs

Parks, shoreline improvements, public spaces, piers, etc	\$25,600,000	\$66,000,000	\$25,600,000	\$25,600,000
Flood mitigation*	\$4,300,000	\$4,300,000	\$4,300,000	\$4,300,000
Contingency (30%)	\$9,000,000	\$21,000,000	\$9,000,000	\$9,000,000
Museums, performing arts center, cultural institutions, etc	\$3,600,000	\$98,000,000	\$3,600,000	\$3,600,000
Plus design and engineering (20%)	\$8,500,000	\$38,000,000	\$8,500,000	\$8,500,000
<b>Total costs</b>	<b>\$51,000,000</b>	<b>\$227,300,000</b>	<b>\$51,000,000</b>	<b>\$51,000,000</b>

\* Flood mitigation plus contingency and design/engineering is \$6.7 million

## Planning Commission Recommendation

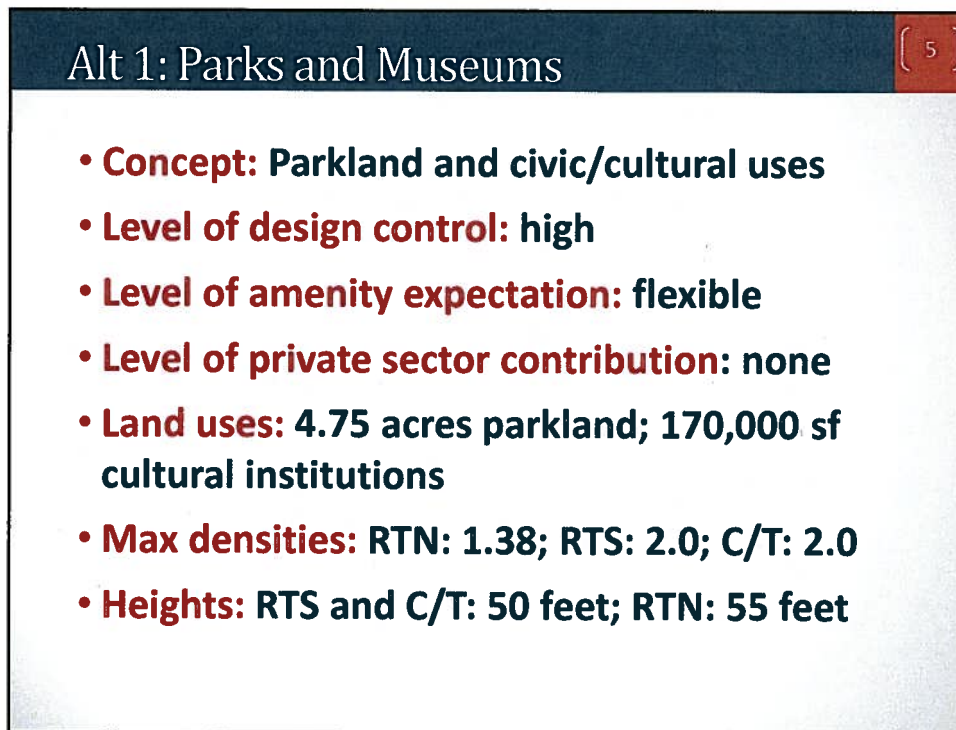
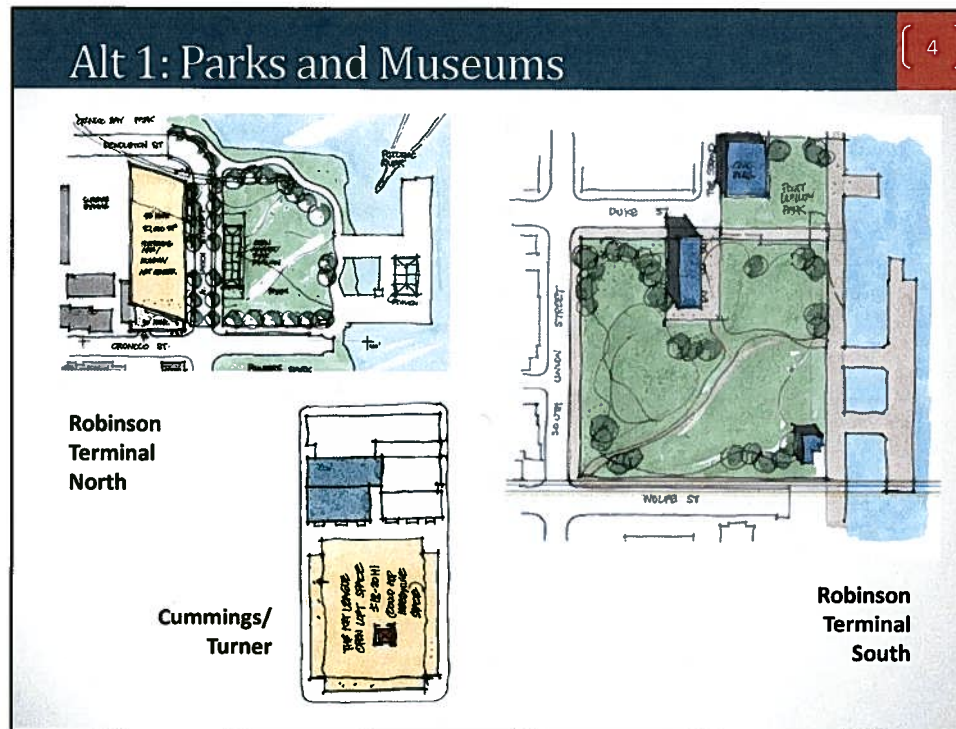
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## Planning Commission Recommendation

3

- **Concept:** private development compatible with active and public waterfront; high expectations for contributions to public amenities
- **Level of design control:** high
- **Level of amenity expectation:** high, detailed
- **Level of private sector contribution:** highest
- **Land uses:** hotel (40%), residential (40%), other (20%). Active ground floor uses in key locations.
- **Max densities:** RTN: 1.69; RTS: 2.32; C/T: 3.0
- **Heights:** RTS and C/T: 50 feet; RTN: 30-45-66 feet
- **Architecture:** Inspired by 18<sup>th</sup>/19<sup>th</sup> Century Alexandria waterfront





Alt 2: Current Zoning, no SUP

6



Alt 2: Current Zoning, no SUP

7

- **Concept:** low density option under current zoning
- **Level of design control:** low
- **Level of amenity expectation:** low
- **Level of private sector contribution:** low
- **Land uses:** Townhouses or mixed use
- **Densities:** RTN & RTS: 1.0; C/T: 1.25
- **Heights:** 30 feet

### Alt 3: Current Zoning with SUP

8



### Alt 3: Current Zoning with SUP

9

- **Concept:** maximize density with current zoning
- **Level of design control:** medium
- **Level of amenity expectation:** medium
- **Level of private sector contribution:** limited
- **Land uses:** Taller townhouses or mixed use with retail/restaurant
- **Densities:** RTN: 1.38; RTS and C/T: 2.0
- **Heights:** 50 feet

### Alt 3: Current Zoning with SUP

8



### Alt 3: Current Zoning with SUP

9

- **Concept:** maximize density with current zoning
- **Level of design control:** medium
- **Level of amenity expectation:** medium
- **Level of private sector contribution:** limited
- **Land uses:** Taller townhouses or mixed use with retail/restaurant
- **Densities:** RTN: 1.38; RTS and C/T: 2.0
- **Heights:** 50 feet

## Revenues from Planning Commission Recommendation

### Real Property Tax

Redevelopment parcels: square feet of land	359,892
Value of Land, per square foot	\$180
Redevelopment parcels: square feet of planned improvements	788,050
Value of Improvements, per square foot	\$265
Upon Redevelopment, Total Value of Land and Improvements	\$273,613,810
Real property tax rate (per \$100 value)	\$0.978
Real property tax revenues	\$2,675,943
Minus current tax revenues from redevelopment parcels	-\$462,889
Net increase in real property tax revenues	\$2,213,054

### Sales Tax from Retail

Amount of total development anticipated to be retail (sf)	22,302
Annual revenues per square foot	\$375.00
Total retail revenues	\$8,363,250
Sales tax rate	\$0.01
Retail sales tax revenues	\$83,633

### Meals Tax

Amount of total development anticipated to be restaurant (sf)	50,140
Annual revenues per square foot	\$350.00
Total annual restaurant revenues	\$17,549,000
Meals tax rate	\$0.04
Meals tax revenues	\$701,960

### Sales Tax and BPOL from Restaurants

Total annual restaurant revenues	\$17,549,000
BPOL rate (per \$100 value)	\$0.20
BPOL tax revenues	\$35,098
Sales tax rate	1%
Sales tax revenues from restaurants	\$175,490
Total of sales and BPOL tax revenues from restaurants	\$210,588

### Transient Lodging Tax

Amount of total development anticipated to be hotel (rooms)	450
Room rate	\$151
Occupancy rate	65%
Revenues	\$16,121,138
Transient lodging tax rate	\$0.065
Transient lodging tax revenues	\$1,047,874
Room nights	106,763
Room night tax rate (per room night)	\$1
Room night tax revenues	\$106,763
Total transient lodging tax revenues	\$1,154,636

### Sales Tax and BPOL from Hotels

Transient Lodging revenues	\$16,121,138
BPOL rate (per \$100 value)	\$0.35
BPOL tax revenues	\$56,424
Sales tax rate	1%
Sales tax revenues from transient lodging	\$161,211

### Totals

Net increase in real property tax revenues	\$2,213,054
Retail sales tax revenues	\$83,633
Meals tax revenues	\$701,960
Total of sales and BPOL tax revenues from restaurants	\$210,588
Total transient lodging tax revenues	\$1,154,636
Sales tax revenues from transient lodging	\$161,211
Grand Total	\$4,525,082

Assume 15% for general city services (for new development only)	-\$678,762
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<b>Net Tax Revenues</b>	<b>\$3,846,320</b>
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#### Notes:

788,050 is an estimated figure for total redevelopment on the three development sites developed for this scenario. Deduction for general city services does not include increased park operating costs.

**Revenues from Alternative 1: Parks & Museums**

**Real Property Tax**

Redevelopment parcels: square feet of land	83,602
Value of Land, per square foot	\$180
Redevelopment parcels: square feet of planned improvements	170,864
Value of Improvements, per square foot	\$265
Upon Redevelopment, Total Value of Land and Improvements	\$60,327,320
Real property tax rate (per \$100 value)	\$0.978
Real property tax revenues	\$590,001
Minus current tax revenues from redevelopment parcels	-\$462,889
Net increase in real property tax revenues	\$127,112

**Sales Tax from Retail**

Amount of total development anticipated to be retail (sf)	0
Annual revenues per square foot	\$375.00
Total retail revenues	\$0
Sales tax rate	\$0.01
Retail sales tax revenues	\$0

**Meals Tax**

Amount of total development anticipated to be restaurant (sf)	3,660
Annual revenues per square foot	\$350.00
Total annual restaurant revenues	\$1,281,000
Meals tax rate	\$0.04
Meals tax revenues	\$51,240

**Sales Tax and BPOL from Restaurants**

Total annual restaurant revenues	\$1,281,000
BPOL rate (per \$100 value)	\$0.20
BPOL tax revenues	\$2,562
Sales tax rate	1%
Sales tax revenues from restaurants	\$12,810
Total of sales and BPOL tax revenues from restaurants	\$15,372

**Transient Lodging Tax**

Amount of total development anticipated to be hotel (rooms)	0
Room rate	\$151
Occupancy rate	65%
Revenues	\$0
Transient lodging tax rate	\$0.065
Transient lodging tax revenues	\$0
Room nights	0
Room night tax rate (per room night)	\$1
Room night tax revenues	\$0
Total transient lodging tax revenues	\$0

**Sales Tax and BPOL from Hotels**

Transient Lodging revenues	\$0
BPOL rate (per \$100 value)	\$0.35
BPOL tax revenues	\$0
Sales tax rate	1%
Sales tax revenues from transient lodging	\$0

**Totals**

Net increase in real property tax revenues	\$127,112
Retail sales tax revenues	\$0
Meals tax revenues	\$51,240
Total of sales and BPOL tax revenues from restaurants	\$15,372
Total transient lodging tax revenues	\$0
Sales tax revenues from transient lodging	\$0
Grand Total	\$193,724

Assume 15% for general city services (for new development only)	-\$29,059
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<b>Net Tax Revenues</b>	<b>\$164,666</b>
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**Notes:**

Deduction for general city services does not include increased park and museum operating costs.

**Revenues from Alternative 2: Current Zoning, No SUP**

**Real Property Tax**

Redevelopment parcels: square feet of land	359,892
Value of Land, per square foot	\$180
Redevelopment parcels: square feet of planned improvements	309,719
Value of Improvements, per square foot	\$265
Upon Redevelopment, Total Value of Land and Improvements	\$146,856,095
Real property tax rate (per \$100 value)	\$0.978
Real property tax revenues	\$1,436,253
Minus current tax revenues from redevelopment parcels	-\$462,889
Net increase in real property tax revenues	\$973,364

**Sales Tax from Retail**

Amount of total development anticipated to be retail (sf)	5,010
Annual revenues per square foot	\$375.00
Total retail revenues	\$1,878,750
Sales tax rate	\$0.01
Retail sales tax revenues	\$18,788

**Meals Tax**

Amount of total development anticipated to be restaurant (sf)	8,670
Annual revenues per square foot	\$350.00
Total annual restaurant revenues	\$3,034,500
Meals tax rate	\$0.04
Meals tax revenues	\$121,380

**Sales Tax and BPOL from Restaurants**

Total annual restaurant revenues	\$3,034,500
BPOL rate (per \$100 value)	\$0.20
BPOL tax revenues	\$6,069
Sales tax rate	1%
Sales tax revenues from restaurants	\$30,345
Total of sales and BPOL tax revenues from restaurants	\$36,414

**Transient Lodging Tax**

Amount of total development anticipated to be hotel (rooms)	0
Room rate	\$151
Occupancy rate	65%
Revenues	\$0
Transient lodging tax rate	\$0.065
Transient lodging tax revenues	\$0
Room nights	0
Room night tax rate (per room night)	\$1
Room night tax revenues	\$0
Total transient lodging tax revenues	\$0

**Sales Tax and BPOL from Hotels**

Transient Lodging revenues	\$0
BPOL rate (per \$100 value)	\$0.35
BPOL tax revenues	\$0
Sales tax rate	1%
Sales tax revenues from transient lodging	\$0

**Totals**

Net increase in real property tax revenues	\$973,364
Retail sales tax revenues	\$18,788
Meals tax revenues	\$121,380
Total of sales and BPOL tax revenues from restaurants	\$36,414
Total transient lodging tax revenues	\$0
Sales tax revenues from transient lodging	\$0
Grand Total	\$1,149,945

Assume 15% for general city services (for new development only)	-\$172,492
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<b>Net Tax Revenues</b>	<b>\$977,453</b>
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**Notes:**

Deduction for general city services would likely be higher for this scenario because of the much higher concentration of housing; the deduction does not include increased park operating costs.

### Revenues from Alternative 3: Current Zoning with SUP

#### Real Property Tax

Redevelopment parcels: square feet of land	359,892
Value of Land, per square foot	\$180
Redevelopment parcels: square feet of planned improvements	575,119
Value of Improvements, per square foot	\$265
Upon Redevelopment, Total Value of Land and Improvements	\$217,187,095
Real property tax rate (per \$100 value)	\$0.978
Real property tax revenues	\$2,124,090
Minus current tax revenues from redevelopment parcels	-\$462,889
Net increase in real property tax revenues	\$1,661,201

#### Sales Tax from Retail

Amount of total development anticipated to be retail (sf)	3,695
Annual revenues per square foot	\$375.00
Total retail revenues	\$1,385,625
Sales tax rate	\$0.01
Retail sales tax revenues	\$13,856

#### Meals Tax

Amount of total development anticipated to be restaurant (sf)	7,850
Annual revenues per square foot	\$350.00
Total annual restaurant revenues	\$2,747,500
Meals tax rate	\$0.04
Meals tax revenues	\$109,900

#### Sales Tax and BPOL from Restaurants

Total annual restaurant revenues	\$2,747,500
BPOL rate (per \$100 value)	\$0.20
BPOL tax revenues	\$5,495
Sales tax rate	1%
Sales tax revenues from restaurants	\$27,475
Total of sales and BPOL tax revenues from restaurants	\$32,970

#### Transient Lodging Tax

Amount of total development anticipated to be hotel (rooms)	0
Room rate	\$151
Occupancy rate	65%
Revenues	\$0
Transient lodging tax rate	\$0.065
Transient lodging tax revenues	\$0
Room nights	0
Room night tax rate (per room night)	\$1
Room night tax revenues	\$0
Total transient lodging tax revenues	\$0

#### Sales Tax and BPOL from Hotels

Transient Lodging revenues	\$0
BPOL rate (per \$100 value)	\$0.35
BPOL tax revenues	\$0
Sales tax rate	1%
Sales tax revenues from transient lodging	\$0

#### Totals

Net increase in real property tax revenues	\$1,661,201
Retail sales tax revenues	\$13,856
Meals tax revenues	\$109,900
Total of sales and BPOL tax revenues from restaurants	\$32,970
Total transient lodging tax revenues	\$0
Sales tax revenues from transient lodging	\$0
Grand Total	\$1,817,927

Assume 15% for general city services (for new development only)	-\$272,689
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<b>Net Tax Revenues</b>	<b>\$1,545,238</b>
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#### Notes:

Deduction for general city services would likely be higher for this scenario because of the much higher concentration of housing; the deduction does not include increased park operating costs.

# Waterfront Plan Cost Estimates - Alternative 1 - Parks and Museums

Last updated June 14 2011

Name	Boundaries of Phasing Location
Rivergate	From the Tide Lock to Madison Street
Oronoco	Madison Street to Pendleton Street
Robinson North	Pendleton Street to Oronoco Street
Founders	Oronoco Street to Queen Street
Thompsons	Queen Street to Cameron Street
Torpedo	Cameron Street to ODBC club house
Fitzgerald	ODBC club house to Wales Alley
Waterfront Park	Wales Alley to Prince Street
Point Lumley	Prince Street to Duke Street
Robinson South	Duke Street to Wolfe Street
Windmill Hill Park	Wilkes Street to Franklin Street

Waterfront Plan	Flood Mitigation	Total
\$1,015,600	\$0	\$1,015,600
\$2,498,100	\$0	\$2,498,100
\$68,255,480	\$0	\$68,255,480
\$709,400	\$0	\$709,400
\$2,534,900	\$22,500	\$2,557,400
\$1,500,000	\$0	\$1,500,000
\$5,392,400	\$1,088,454	\$6,480,853
\$1,889,550	\$1,620,884	\$3,510,434
\$49,933,193	\$1,620,884	\$51,554,077
\$24,555,506	\$0	\$24,555,506
\$5,500,000	\$0	\$5,500,000

WATERFRONT PLAN Anticipated Phasing (year)		
0-3	4-6	7-15
\$0	\$0	\$1,015,600
\$0	\$0	\$2,498,100
\$0	\$51,974,420	\$0
\$0	\$0	\$709,400
\$1,599,100	\$0	\$935,800
\$120,000	\$1,380,000	\$0
\$0	\$5,392,400	\$0
\$0	\$1,889,550	\$0
\$5,995,164	\$45,558,913	\$0
\$0	\$0	\$24,555,506
\$0	\$0	\$5,500,000

Waterfront Plan	Flood Mitigation	Total
\$66,250,796	\$4,352,722	\$70,603,518
\$19,875,239	\$1,305,817	\$21,181,055
\$97,533,333		\$97,533,333
\$36,731,873	\$1,131,708	\$37,863,581
\$220,391,241	\$6,790,247	\$227,181,488

WATERFRONT PLAN Anticipated Phasing (year)		
0-3	4-6	7-15
\$7,714,264	\$103,637,802	\$35,214,406
\$2,314,279	\$31,091,340	\$10,564,322
\$2,005,709	\$26,945,828	\$3,600,000
\$12,034,252	\$161,674,971	\$59,254,473

Waterfront Plan	Flood Mitigation	Total
\$388,000	\$0	\$388,000
\$339,600	\$0	\$339,600
\$288,000	\$0	\$288,000
privately funded	privately funded	privately funded
\$270,000	\$0	\$270,000
\$1,068,100	\$0	\$1,068,100
\$852,000	\$0	\$852,000
\$308,000	\$0	\$308,000
privately funded	\$0	privately funded
\$51,974,420	\$0	\$51,974,420
\$16,281,060	\$0	\$16,281,060
\$69,400	\$0	\$69,400
\$640,000	\$0	\$640,000
privately funded	\$0	privately funded

Waterfront Plan	Flood Mitigation	Total
\$388,000	\$0	\$388,000
\$339,600	\$0	\$339,600
\$288,000	\$0	\$288,000
privately funded	privately funded	privately funded
\$270,000	\$0	\$270,000
\$1,068,100	\$0	\$1,068,100
\$852,000	\$0	\$852,000
\$308,000	\$0	\$308,000
privately funded	\$0	privately funded
\$51,974,420	\$0	\$51,974,420
\$16,281,060	\$0	\$16,281,060
\$69,400	\$0	\$69,400
\$640,000	\$0	\$640,000
privately funded	\$0	privately funded

WATERFRONT PLAN Anticipated Phasing (year)		
0-3	4-6	7-15
\$0	\$0	\$388,000
\$0	\$0	\$339,600
\$0	\$0	\$288,000
\$0	\$0	\$270,000
\$0	\$1,068,100	\$0
\$0	\$0	\$852,000
\$0	\$0	\$308,000
\$0	\$0	\$51,974,420
\$0	\$16,281,060	\$0
\$0	\$0	\$69,400
\$0	\$0	\$640,000

## Elements of the Phasing Program

Rivergate	1	Enhanced landscaping; relocation of footpath to be closer to shoreline
Rivergate	2	Construct kayak launch and view "steps" at the foot of Montgomery Street
Rivergate	3	Shoreline naturalization, from rowing facility to "steps" at the foot of Montgomery Street
Rivergate	4	Implement history and art recommendations for the Rivergate/Tide Lock area
Oronoco	1	Rebuild and extend curved boardwalk
Oronoco	2	Regrade central lawn, provide overlooks, new paths, and new landscaping
Oronoco	3	Shoreline naturalization, from Pendleton Street to boardwalk; stage structure at water's edge; floating islands and riparian plantings
Oronoco	4	Re-create "Ralph's Gut" marsh to recall historic shoreline, demonstrate wetlands, etc.
Oronoco	5	Boxcars, play features, public art and historic interpretation, additional park user services (bike racks, etc)
Robinson North	1	Performing Arts/Museum/Flex Space
Robinson North	1	West's Point Park
Founders	1	Landscaping enhancement and turf repair
Founders	2	Shoreline naturalization, from Oronoco Street to Queen Street
Founders	3	Implement history and art recommendations



Thompsons	1	Thompsons Alley bulkhead renovation, wider promenade between Founders Park, additional commercial docking locations; screening of alley from promenade
Thompsons	2	Public realm improvements for Food Court/Chart House area, including deck over "alley" and dining terraces at the entrance to both buildings
Thompsons	3	Potential future replacement of existing pleasure boat pier/slips with a third commercial pier.

Torpedo	1	Repair bulkhead; improvements to railing and furniture.
Torpedo	2	Extend Cameron Street pier (either beyond the pierhead line or along shore)
Torpedo	3	Public art and historic interpretation
Torpedo	4	Support changes identified by the Torpedo Factory

Fitzgerald	1	Demolish ODBC parking lot
Fitzgerald	2	Flood mitigation including elevating King Street and the Strand; repave, creating a pedestrian-oriented plaza or square in the unit block of King Street; Trolley and bus lane retained and marked with bollards
Fitzgerald	3	Construct new/repared bulkhead and esplanade between ODBC building and Waterfront Park
Fitzgerald	4	Construct Fitzgerald Square, including floodwall elements
Fitzgerald	5	Construct short King Street pier from Fitzgerald Square to pierhead line
Fitzgerald	6	Complete King Street pier beyond the pierhead line
Fitzgerald	7	Public art and historic interpretation for Fitzgerald Square and the King Street pier, such as iconic sculpture recalling ferry arch and historic ship docked at the foot of King Street

Waterfront Park	1a	Replace ODBC parking lot; construct ODBC replacement boat parking near existing lot near Cameron Run Regional Park (no new parking will be located in Waterfront Park)
Waterfront Park	1b	Flood wall elements, integrated into design as a terrace
Waterfront Park	2	Complete physical improvements to Waterfront Park, including plantings and a small stage
Waterfront Park	3	If desired, construct boat ramp at foot of Prince Street
Waterfront Park	4	Public art and historic interpretation for Waterfront Park; additional play features and services for park users

Point Lumley	1	Complete purchase of waterside parking lot in the 200 block of the Strand
Point Lumley	2	Complete bulkhead and waterside promenade, except for Alexandria Marine Supply property
Point Lumley	3a	Complete park improvements, except for Alexandria Marine Supply property
Point Lumley	3b	Flood wall elements, integrated into design of park
Point Lumley	4	Purchase and restore 204 & 206 S Union for History Center
Point Lumley	5	Construct park services building on Alexandria Marine Supply site
Point Lumley	6	Purchase debris skimmer, trailer, etc.
Point Lumley	7	New Art League Building on Cummings warehouse site
Point Lumley	8	Seaport Foundation/Maritime Museum

Robinson South	1	New Robinson South Park
Windmill Hill Park	3	Bulkhead and shoreline replacement and repair

This alternative adds costs to the Planning Commission recommendation. The additional costs are in reverse type.

	\$1,599,100	\$22,500	\$1,621,600
commercial boat funded	\$935,800	\$0	\$935,800
		\$0	commercial boat funded

	\$120,000	\$0	\$120,000
privately funded	\$1,380,000	\$0	\$1,380,000
mixed		privately funded	privately funded
		mixed	mixed

	\$96,000	\$0	\$96,000
	\$0	\$480,622	\$480,622
	\$1,200,000	\$0	\$1,200,000
	\$1,980,400	\$607,832	\$2,588,232
	\$736,000	\$0	\$736,000
	\$1,380,000	\$0	\$1,380,000
privately funded		privately funded	privately funded

	\$708,000	\$0	\$708,000
	\$0	\$1,620,884	\$1,620,884
	\$904,800	\$0	\$904,800
	\$276,750	\$0	\$276,750
privately funded		privately funded	privately funded

open space fund		open space fund	open space fund
	\$2,000,000	\$0	\$2,000,000
	\$1,958,280	\$0	\$1,958,280
	\$0	\$1,620,884	\$1,620,884
	\$13,289,450	\$0	\$13,289,450
	\$2,557,481	\$0	\$2,557,481
	\$416,000	\$0	\$416,000
	\$16,148,907	\$0	\$16,148,907
	\$13,563,075	\$0	\$13,563,075

	\$24,555,506	\$0	\$24,555,506
	\$5,500,000	\$0	\$5,500,000

	\$1,599,100		
			\$935,800

	\$120,000		
		\$1,380,000	

		\$96,000	
			\$1,200,000
			\$1,980,400
			\$736,000
			\$1,380,000

		\$708,000	
			\$904,800
			\$276,750

	\$2,000,000		
	\$1,958,280		
	\$1,620,884		
		\$13,289,450	
		\$2,557,481	
	\$416,000		
		\$16,148,907	
		\$13,563,075	

		\$24,555,506	
			\$5,500,000

# Waterfront Plan Cost Estimates - Planning Commission Recommendation

## PLANNING COMMISSION RECOMMENDATION

Name	Boundaries of Phasing Location
Rivergate	From the Tide Lock to Madison Street
Oronoco	Madison Street to Pendleton Street
Robinson North	Pendleton Street to Oronoco Street
Founders	Oronoco Street to Queen Street
Thompsons	Queen Street to Cameron Street
Torpedo	Cameron Street to ODBC club house
Fitzgerald	ODBC club house to Wales Alley
Waterfront Park	Wales Alley to Prince Street
Point Lumley	Prince Street to Duke Street
Robinson South	Duke Street to Wolfe Street
Windmill Hill Park	Wilkes Street to Franklin Street

Waterfront Plan	Flood Mitigation	Total
\$1,015,600	\$0	\$1,015,600
\$2,498,100	\$0	\$2,498,100
developer	developer	developer
\$709,400	\$0	\$709,400
\$2,534,900	\$22,500	\$2,557,400
\$1,700,000	\$0	\$1,700,000
\$5,392,400	\$1,088,454	\$6,480,854
\$1,889,550	\$1,620,884	\$3,510,434
\$7,974,280	\$1,620,884	\$9,595,164
developer	developer	developer
\$5,500,000	\$0	\$5,500,000

**Cost Summary**  
 Construction total (not including civic building)  
 Contingency (30%)  
 Point Lumley Park Civic building or equivalent  
 Plus design and engineering (20%)  
 Grand total:

Waterfront Plan	Flood Mitigation	Total
\$25,614,230	\$4,352,723	\$29,966,952
\$7,684,269	\$1,305,817	\$8,990,086
\$3,600,000		\$3,600,000
\$7,379,700	\$1,131,708	\$8,511,408
\$44,278,198	\$6,790,247	\$51,068,446

## Elements of the Phasing Program

Rivergate	1	Enhanced landscaping; relocation of footpath to be closer to shoreline		
Rivergate	2	Construct kayak launch and view "steps" at the foot of Montgomery Street	\$388,000	\$388,000
Rivergate	3	Shoreline naturalization, from rowing facility to "steps" at the foot of Montgomery Street	\$339,600	\$339,600
Rivergate	4	Implement history and art recommendations for the Rivergate/Tide Lock area	\$288,000	\$288,000
			privately funded	privately funded
Oronoco	1	Rebuild and extend curved boardwalk	\$270,000	\$270,000
Oronoco	2	Regrade central lawn, provide overlooks, new paths, and new landscaping	\$1,068,100	\$1,068,100
Oronoco	3	Shoreline naturalization, from Pendleton Street to boardwalk; stage structure at water's edge; floating islands and riparian plantings	\$852,000	\$852,000
Oronoco	4	Re-create "Ralph's Gut" marsh to recall historic shoreline, demonstrate wetlands, etc.	\$308,000	\$308,000
Oronoco	5	Boxcars, play features, public art and historic interpretation, additional park user services (bike racks, etc)	privately funded	privately funded
Robinson North	1	Public amenity package	\$0	developer
Founders	1	Landscaping enhancement and turf repair	\$69,400	\$69,400
Founders	2	Shoreline naturalization, from Oronoco Street to Queen Street	\$640,000	\$640,000
Founders	3	Implement history and art recommendations	privately funded	privately funded

## PLANNING COMMISSION RECOMMENDATION

Waterfront Plan	Flood Mitigation	Total
\$388,000	\$0	\$388,000
\$339,600	\$0	\$339,600
\$288,000	\$0	\$288,000
privately funded	privately funded	privately funded
\$270,000	\$0	\$270,000
\$1,068,100	\$0	\$1,068,100
\$852,000	\$0	\$852,000
\$308,000	\$0	\$308,000
privately funded	\$0	privately funded
developer	\$0	developer
\$69,400	\$0	\$69,400
\$640,000	\$0	\$640,000
privately funded	\$0	privately funded

Thompsons	1	Thompsons Alley bulkhead renovation, wider promenade between Founders Park, additional commercial docking locations; screening of alley from promenade
Thompsons	2	Public realm improvements for Food Court/Chart House area, including deck over "alley" and dining terraces at the entrance to both buildings
Thompsons	3	Potential future replacement of existing pleasure boat pier/slips with a third commercial pier.

Torpedo	1	Repair bulkhead; improvements to railing and furniture.
Torpedo	2	Extend Cameron Street pier (either beyond the pierhead line or along shore)
Torpedo	3	Public art and historic interpretation
Torpedo	4	Support changes identified by the Torpedo Factory

Fitzgerald	1	Demolish ODBC parking lot
Fitzgerald	2	Flood mitigation including elevating King Street and the Strand; repave, creating a pedestrian-oriented plaza or square in the unit block of King Street; Trolley and bus lane retained and marked with bollards
Fitzgerald	3	Construct new/repared bulkhead and esplanade between ODBC building and Waterfront Park
Fitzgerald	4	Construct Fitzgerald Square, including floodwall elements
Fitzgerald	5	Construct short King Street pier from Fitzgerald Square to pierhead line
Fitzgerald	6	Complete King Street pier beyond the pierhead line
Fitzgerald	7	Public art and historic interpretation for Fitzgerald Square and the King Street pier, such as iconic sculpture recalling ferry arch and historic ship docked at the foot of King Street

Waterfront Park	1a	Replace ODBC parking lot; construct ODBC replacement boat parking near existing lot near Cameron Run Regional Park. (no new parking will be located in Waterfront Park)
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Point Lumley	1	Complete purchase of waterside parking lot in the 200 block of the Strand
Point Lumley	2	Complete bulkhead and waterside promenade, except for Alexandria Marine Supply property
Point Lumley	3a	Complete park improvements, except for Alexandria Marine Supply property
Point Lumley	3b	Flood wall elements, integrated into design of park
Point Lumley	4	Implement park and promenade improvements on Alexandria Marine Supply property
Point Lumley	5	Construct civic building on Alexandria Marine Supply site
Point Lumley	6	Purchase debris skimmer, trailer, etc.
Point Lumley	7	Redevelopment public amenity package
Point Lumley	8	Implement history and art recommendations

Robinson South	1	Public amenity package
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Windmill Hill Park	3	Bulkhead and shoreline replacement and repair
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\$1,599,100	\$22,500	\$1,621,600
\$935,800	\$0	\$935,800
commercial boat funded	\$0	commercial boat funded

\$120,000	\$0	\$120,000
\$1,380,000	\$0	\$1,380,000
\$200,000	\$0	\$200,000
mixed	mixed	mixed

\$96,000	\$0	\$96,000
\$0	\$480,622	\$480,622
\$1,200,000	\$0	\$1,200,000
\$1,980,400	\$607,832	\$2,588,232
\$736,000	\$0	\$736,000
\$1,380,000	\$0	\$1,380,000
privately funded	privately funded	privately funded

\$708,000	\$0	\$708,000
\$0	\$1,620,884	\$1,620,884
\$904,800	\$0	\$904,800
\$276,750	\$0	\$276,750
privately funded	privately funded	privately funded

open space fund	open space fund	open space fund
\$2,000,000	\$0	\$2,000,000
\$1,958,280	\$0	\$1,958,280
\$0	\$1,620,884	\$1,620,884
\$0	\$0	\$0
\$3,600,000	\$0	\$3,600,000
\$416,000	\$0	\$416,000
developer	developer	developer
privately funded	privately funded	privately funded

developer	developer	developer
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\$5,500,000	\$0	\$5,500,000
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