THE $50 MILLION COST TO ALEXANDRIA OF

A PUMP STATION IN WATERFRONT PARK

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Executive Summary

A large pump station appears to be a necessary part of Alexandria's Waterfront Flood Mitigation Project. The City's project team has proposed to place that facility along the southern edge of Waterfront Park, displacing about one-third of the park's current open area.

Under this proposal, a large, concrete industrial building would replace recreational space currently enjoyed by both visitors and residents, destroy an existing tree canopy, overshadow and devalue hundreds of adjoining commercial and residential properties, and block views of the Potomac River that are the very signature of Alexandria. The proposal runs directly counter to decades of City policies including master plans lauding open space and the economic benefits of historic preservation, environmental goals of Eco-City Alexandria, and deed restrictions negotiated in good faith with the National Park Service. More than 5,000 Alexandrians have signed petitions opposing invasion of their beloved park, and their number continues to grow.

What could justify a proposal with such negative public and private consequences? According to the City's Flood Mitigation Project Team, the in-park location is the cheapest alternative and the only one that fits within the project's budget. They assume that, because the park provides nothing of financial value to the City and the City already owns it, the cost of acquiring the site is zero. Since no other no other site would be costless, no alternative sites can compete.

This assumption is false. **Far from being valueless, the direct financial losses to Alexandria City government that would be triggered by a pump station in the park would total at least $50 million over the lifetime of the pump station. This report transparently documents these financial losses including:**

- **$38 million in lost property taxes;**
- **$5 million in lost tourist-based sales taxes; and**
- **$7 million from increased costs of providing recreation, health, and environmental services.**

Year after year, these losses would undermine the City's ability to:

- Avoid increases in the property tax rate;
- Fund City priorities such as affordable housing;

- Balance the City's annual budget; and

- Preserve the City's AAA bond rating.

This $50 million loss must be included when comparing the true benefits and costs of the in-park site to alternative sites outside the park, including those wholly or partly at 1 Prince Street. The City's Waterfront Flood Mitigation Project Team has continually ignored these costs in their analyses.

Equally, the Project Team continues to provide the Mayor and the City Council with analyses that misleadingly ignore:

- Potential multi-million dollar revenue from new commercial space at 1 Prince Street;

- The potential of 1 Prince Street to anchor new economic activity on a block of Strand Street that is currently a barren parking lot;

- Costly multi-year delays of the entire Waterfront Flood Mitigation Project from additional, vigorously-opposed regulatory processes that an in-park site would require; and

- Potential multi-million dollar City legal costs from inevitable litigation.

The Mayor and City Council need to recognize the $50 million or more in costs that are missing in calculations provided by their Flood Mitigation Project Team. When all costs and benefits are accurately considered, the City cannot afford a pump station in Waterfront Park.

Information Gaps in the City's Pump Station Analyses

In its letter to the City Manager on September 16, 2025, the Waterfront Commission stated:

> It is critical to understand the longer-term benefits associated with situating the pump station at 1 Prince Street versus Waterfront Park….Benefits may be …quantifiable, such as any potential incremental revenue that could accrue…"

Despite this request, the City's project manager for Waterfront Flood Mitigation Project has publicly stated that the City has done no analyses of benefits or revenues attributable to Waterfront Park or alternative locations and has no current mandate to do so. This report is intended to fill part of that important gap.

Where possible, the report relies on data from the City. To date, that data has consisted solely of information already publicly released and usually not specific to the Waterfront Flood Mitigation Project or the proposed pump station.

When the authors requested cost analyses underlying the project's proposed placement of the pump station in the park (FOIA W026693-092425, 9/24/2025), the City denied the request on grounds that this information was exempt from disclosure as "appraisals and costs estimates of real property subject to a proposed purchase sale, or lease" as well as a "working paper of a chief executive officer of a political subdivision of the Commonwealth."

Additional FOIA requests filed on November 3, 2025 and November 20, 2025 have provided no useable data to date.

About the Authors

Urban economist Dr. Marc Bendick, Jr. and business economist Dr. Mary Lou Egan are co-founders of Bendick and Egan Economic Consultants, Inc. (www.bendickegan.com). They are nationally and internationally recognized for their research on city economies and economic development, with support from the World Bank, U.S. Department of Housing and Urban Development, U.S. Department of Commerce, Ford Foundation, and the National Science Foundation. They have advised cities including Atlanta, Chicago, Detroit, Los Angeles, New York, and Seattle and provided expert testimony for federal courts including the Supreme Court. They and their firm have been Alexandria residents since 2015, where Mary Lou serves on the Historical Restoration and Preservation Commission and Marc on the Human Rights Commission.

This report was prepared without compensation.

FINANCIAL ANALYSES

The eight tables which follow transparently document the calculations underlying each component of the City's $10.4 million loss.

Because these tables are detailed and technical, many readers will wish to focus instead on the brief explanations which precede each table. These passages explain the concept of the table and its basis in long-standing City policies.

Table 1

Summary of Financial Losses for Alexandria City Government from a Pump Station in Waterfront Park

There are well-established, research-based professional methods for valuing the financial contributions of public parks to their communities.[1] The present report applies these methods to measure seven principal dollar contributions that Waterfront Park currently provides to Alexandria's City government. It then calculates the losses in these contributions if the proposed pumping station is placed in the park.

These losses are essential to include in a comprehensive financial comparison between an in-park location and alternatives outside the park. To date, the City's Waterfront Flood Mitigation Project has not considered any of the costs and benefits measured here, leaving major gaps in their analysis and seriously misleading City leadership.

Table 1 summarizes the financial losses computed in Tables 1 through 8 of this report. Together, **these losses total $50.1 million over the anticipated 100-year lifetime of the pump station.**

Together, these losses would significantly undermine the City's financial ability to:[2]

- Avoid increasing the property tax rate;
- Fund City action on priorities such as affordable housing.
- Balance the City's annual budget; and
- Preserve the City's AAA bond rating.

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[1] For example: C. Walker, *The Public Value of Urban Parks* (Urban Institute, 2004); P. Harnik & B. Welle, *Measuring the Economic Value of a City Park System* (Trust for Public Land, no date); *The Economic Impact of Local Parks* (National Parks and Recreation Association, no date); J. Clinton et al., *The Economic Benefits of Parks in New York City* (Trust for Public Land, 2022); *Economic Benefits of Parks* at weconservepa.org/library; C. Walker et al., "Valuation of Urban Parks," *Landscape and Planning* (1988); P. Harnik & J. Crompton, "Measuring the Total Economic Value of a Park System to a Community," *Managing Leisure* (2014); T. Tempesta, "Benefits and Costs of Urban Parks: A Review," *Aestimum* (2015); L. Brander & M Koetse, "The Value of Urban Open Space: Meta-Analyses of Contingent Valuation and Hedonic Pricing Results," *Journal of Environmental Management* (2011).

[2] *Fiscal Year 2026 Approved Budget* at alexandriava.gov/Budget, accessed 11/10/2025; *General Obligation Bonds: The City's Bond Rating* at alexandriava.gov/Finance, accessed 11/10/2025.

Table 1
Summary of Financial Losses for Alexandria City Government from a Pump Station in Waterfront Park

	(a)	(b)	(c)
	Category	**Loss**	**Table**
	Property Tax Revenues Lost by ...		
(1)	... Reducing Park Size	$23,201,898	2
(2)	... Diminishing Historic District	$5,155,977	3
(3)	... Blocking River Views	$10,020,205	4
(4)	Sales Tax Revenues Lost by Reducing Tourist Spending	$4,571,378	5
(5)	New Spending to Offset Lost ...		
(6)	... Recreational Use	$5,428,728	6
(7)	... Physical & Mental Health	$1,524,808	7
(8)	... Environmental Management	$219,456	8
(9)	**TOTAL**	**$50,122,450**	

Table 2

Loss of City Property Tax Revenues from a One-Third Reduction in the Size of Waterfront Park

Alexandria's city government derives almost 60% of its annual general revenues from its 1.135% property tax on assessed valuations of Alexandria real estate:[1]

Statistical research[2] on cities similar to Alexandria documents that proximity to public parks significantly enhances the assessment of both residential and commercial property and that reduction in the size of those parks reduces those assessments.

Table 2 applies this research to calculate the City's potential loss in property tax revenues from 316 residential and 79 commercial properties located within 500 feet of Waterfront Park. The total assessed value of these 395 properties is three-quarters of a billion dollars.[3] Based on pump station designs the City has publicly presented to date,[4] this analysis assumes that the pump station building and associated areas would displace one-third of the park's current open space.

The financial loss to the City calculated in Table 2 is $23.2 million.

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[1] *Fiscal Year 2026 Approved Budget* at alexandriava.gov/Budget, accessed 11/10/2025; *General Obligation Bonds: The City's Bond Rating* at alexandriava.gov/Finance, accessed 11/10/2025.

[2] For example: J. Crompton & S. Nicholls, "Impact on Property Values of Distance to Parks and Open Spaces: An Update of U.S. Studies in the New Millenium," *Journal of Leisure Research* (2020); N. Pouydal, D. Hodges & C. Merrett, "A Hedonic Analysis of the Demand for and Benefits of Urban Recreation Parks," *Land Use Policy* (2008); J. Holt & M. Borsuk, "Using Zillow Data to Value Green Space Amenities at the Neighborhood Level*," Urban Forestry & Urban Greenin*g (2020); S. Cho, J. Bowker, & W. Park, "Measuring the Contribution of Water and Green Spaces Amenities to Housing Values," *Journal of Agricultural & Resource Economics* (2006); A. Zalejska-Jonsson, S. Wilkinson, & R. Wahlund," Willingness to Pay for Green Infrastructure in Residential Development," *Atmosphere* (2020).

[3] See Table 2, Row (396).

[4] *Waterfront Flood Mitigation Project Discussion, Draft Deliberative Pre-Decisional*, Old Dominion Boat Club and Old Town Civic Association, slides dated September 4, 2025 (https://alexandriava.gov/sites/default/files/2025-09/2025-09-04_WFI-PRESENT_AWA_FINAL_WEB.pdf). For example, one pump station design in this presentation measures approximately 96 feet long by 48 feet wide by 33 feet tall.

Table 2
Loss of City Property Tax Revenues from a One-Third Reduction of the Size of Waterfront Park

	(a)	(b)	(c)	(d)	(e)
	Address	Current Occupant	Assessed Value of Propery	Annual City Revenues from 1.135% Property Tax Rate	2.7% Reduction in City Annual Property Tax Revenues
(1)	1 Prince	Vacant (Am. Medical Group Assoc.)	$6,900,000	$78,315	$2,115
(2)	2 Prince	Vacant (Bike shop/Taco Restaurant)	$746,926	$8,478	$229
(3)	6 Prince	Misha's Coffee	$1,014,904	$11,519	$311
(4)	10 Prince	Clare Locke	$2,682,653	$30,448	$822
(5)	100 Prince	Residence	$1,524,426	$17,302	$467
(6)	102 Prince	Residence	$1,269,782	$14,412	$389
(7)	103 Prince	Residence	$1,134,069	$12,872	$348
(8)	104 Prince	Residence	$1,224,657	$13,900	$375
(9)	105 Prince	Residence	$1,106,565	$12,560	$339
(10)	106 Prince	Residence	$1,388,203	$15,756	$425
(11)	107 Prince	Residence	$1,805,832	$20,496	$553
(12)	108 Prince	Residence	$2,118,589	$24,046	$649
(13)	109 Prince	Residence	$1,726,968	$19,601	$529
(14)	110 Prince	Residence	$1,046,503	$11,878	$321
(15)	111 Prince	Residence	$1,872,072	$21,248	$574
(16)	112 Prince	Residence	$1,183,582	$13,434	$363
(17)	113 Prince	Residence	$1,852,349	$21,024	$568
(18)	114 Prince	Residence	$1,620,010	$18,387	$496
(19)	115 Prince	Residence	$2,608,409	$29,605	$799
(20)	116 Prince	Residence	$2,456,610	$27,883	$753
(21)	117 Prince	Residence	$2,764,762	$31,380	$847
(22)	118 Prince	Residence	$1,402,833	$15,922	$430
(23)	119 Prince	Residence	$1,694,945	$19,238	$519
(24)	121 Prince	Residence	$1,563,202	$17,742	$479
(25)	122 Prince	Residence under construction	$663,837	$7,535	$203
(26)	123 Prince	Residence	$1,899,817	$21,563	$582
(27)	126 Prince	Residence	$1,513,637	$17,180	$464
(28)	127 Prince	Residence	$1,777,398	$20,173	$545
(29)	129 Prince	Residence	$1,210,114	$13,735	$371
(30)	130 Prince	Residence	$1,715,265	$19,468	$526
(31)	201 Prince	Athenaeum	$1,677,900	$19,044	$514
(32)	207 Prince	Residence	$4,182,559	$47,472	$1,282
(33)	209 Prince	Residence	$1,858,064	$21,089	$569
(34)	210 Prince	Residence	$2,957,230	$33,565	$906
(35)	211 Prince	Residence	$2,552,089	$28,966	$782
(36)	212 Prince	Residence	$1,923,190	$21,828	$589
(37)	213 Prince	Residence	$1,880,778	$21,347	$576
(38)	214 Prince	Residence	$2,297,802	$26,080	$704
(39)	215 Prince	Residence	$1,697,560	$19,267	$520

(40)	216 Prince	Residence	$2,075,980	$23,562	$636
(41)	217 Prince	Residence	$950,510	$10,788	$291
(42)	10 Duke	Cooper Mill	$2,902,497	$32,943	$889
(43)	14 Duke	Residence	$2,907,055	$32,995	$891
(44)	16 Duke	Residence	$2,739,927	$31,098	$840
(45)	18 Duke	Residence	$3,157,911	$35,842	$968
(46)	100 Duke	Residence	$2,352,952	$26,706	$721
(47)	102 Duke	Residence	$1,246,080	$14,143	$382
(48)	104 Duke	Residence	$1,307,744	$14,843	$401
(49)	106 Duke	Residence	$1,344,647	$15,262	$412
(50)	108 Duke	Residence	$2,022,768	$22,958	$620
(51)	109 Duke	Residence	$3,143,044	$35,674	$963
(52)	110 Duke	Residence	$1,637,217	$18,582	$502
(53)	111 Duke	Residence	$2,025,879	$22,994	$621
(54)	112 Duke	Residence	$943,664	$10,711	$289
(55)	114 Duke	Residence	$1,037,954	$11,781	$318
(56)	115 Duke	Residence	$1,355,648	$15,387	$415
(57)	121 Duke	Residence	$3,234,105	$36,707	$991
(58)	123 Duke	Residence	$1,114,632	$12,651	$342
(59)	125 Duke	Residence	$1,110,111	$12,600	$340
(60)	1 King	Lot foot of King	$2,272,396	$25,792	$696
(61)	2 King	Vacant land	$539,327	$6,121	$165
(62)	6 King	Mai Thai	$4,500,000	$51,075	$1,379
(63)	101 King	Lucky Knot	$4,835,000	$54,877	$1,482
(64)	105 King	Fish Mrket	$3,297,000	$37,421	$1,010
(65)	108 King	Commercial	$1,522,276	$17,278	$467
(66)	109 King	Pop's Ice Cream	$4,620,000	$52,437	$1,416
(67)	111 King	Bugsy's Pizza	$2,828,232	$32,100	$867
(68)	112 King	Daniel O'Connell's Irish Pub	$4,520,000	$51,302	$1,385
(69)	113 King	Commercial	$2,767,518	$31,411	$848
(70)	115 King	Landini's	$3,370,500	$38,255	$1,033
(71)	117 King	Commercial	$3,465,000	$39,328	$1,062
(72)	118 King	Paper Source	$11,300,000	$128,255	$3,463
(73)	119 King	Wharf	$3,286,500	$37,302	$1,007
(74)	121 King	Il Porto	$2,386,542	$27,087	$731
(75)	128 King	Urban Legend	$1,551,532	$17,610	$475
(76)	132 King	Lou Lou	$3,143,000	$35,673	$963
(77)	200 King	Comfort One	$2,909,185	$33,019	$892
(78)	201 King	Comfort One	$3,654,000	$41,473	$1,120
(79)	202 King	Market Square Shop	$2,107,320	$23,918	$646
(80)	205 King	She's Boutique	$1,378,450	$15,645	$422
(81)	206 King	Commercial	$2,681,575	$30,436	$822
(82)	210 King	Old Virginia Tobacco	$2,099,991	$23,835	$644
(83)	211 King	Bollywood	$2,227,277	$25,280	$683
(84)	212 King	Kilwin's	$1,948,333	$22,114	$597
(85)	213 King	3 Sisters	$1,659,873	$18,840	$509
(86)	214 King	Warehouse Restaurant	$20,707,094	$235,026	$6,346
(87)	215 King	John Crouch	$1,360,295	$15,439	$417
(88)	217 King	King Street Souvenirs	$1,623,208	$18,423	$497
(89)	219 King	Basin Street Lounge	$3,213,000	$36,468	$985

(90)	221 King	Lot 500 of Ramsey House	$1,499,026	$17,014	$459
(91)	1 Cameron	Torpedo Factory	$7,595,860	$86,213	$2,328
(92)	5 Cameron	Chart House/Blackwalll Hitch	$11,100,000	$125,985	$3,402
(93)	110 Cameron #CS101	Residence	$719,414	$8,165	$220
(94)	110 Cameron #CS102	Residence	$475,891	$5,401	$146
(95)	110 Cameron #CS103	Residence	$475,891	$5,401	$146
(96)	110 Cameron #CS104	Residence	$546,173	$6,199	$167
(97)	120 Cameron #CS105	Residence	$552,982	$6,276	$169
(98)	120 Cameron #CS106	Residence	$362,675	$4,116	$111
(99)	120 Cameron #CS107	Residence	$500,027	$5,675	$153
(100)	120 Cameron #CS108	Residence	$605,278	$6,870	$185
(101)	120 Cameron #CS201	Residence	$656,461	$7,451	$201
(102)	120 Cameron #CS202	Residence	$457,475	$5,192	$140
(103)	120 Cameron #CS203	Residence	$458,267	$5,201	$140
(104)	120 Cameron #CS204	Residence	$475,891	$5,401	$146
(105)	120 Cameron #CS205	Residence	$587,572	$6,669	$180
(106)	130 Cameron #CS109	Residence	$605,707	$6,875	$186
(107)	130 Cameron #CS111	Residence	$466,468	$5,294	$143
(108)	130 Cameron #CS112	Residence	$822,794	$9,339	$252
(109)	100 Cameron Mews	Residence	$1,524,148	$17,299	$467
(110)	101 Cameron Mews	Residence	$1,457,612	$16,544	$447
(111)	102 Cameron Mews	Residence	$1,399,985	$15,890	$429
(112)	103 Cameron Mews	Residence	$1,522,697	$17,283	$467
(113)	104 Cameron Mews	Residence	$1,399,985	$15,890	$429
(114)	105 Cameron Mews	Residence	$1,390,774	$15,785	$426
(115)	106 Cameron Mews	Residence	$1,490,193	$16,914	$457
(116)	107 Cameron Mews	Residence	$1,490,156	$16,913	$457
(117)	108 Cameron Mews	Residence	$1,474,057	$16,731	$452
(118)	109 Cameron Mews	Residence	$1,630,343	$18,504	$500
(119)	110 Cameron Mews	Residence	$1,418,979	$16,105	$435
(120)	111 Cameron Mews	Residence	$1,341,971	$15,231	$411
(121)	112 Cameron Mews	Residence	$1,656,438	$18,801	$508
(122)	113 Cameron Mews	Residence	$1,422,050	$16,140	$436
(123)	114 Cameron Mews	Residence	$1,441,355	$16,359	$442
(124)	115 Cameron Mews	Residence	$1,497,772	$17,000	$459
(125)	116 Cameron Mews	Residence	$1,419,837	$16,115	$435
(126)	117 Cameron Mews	Residence	$1,512,221	$17,164	$463
(127)	118 Cameron Mews	Residence	$1,412,889	$16,036	$433
(128)	119 Cameron Mews	Residence	$1,414,426	$16,054	$433
(129)	120 Cameron Mews	Residence	$1,348,113	$15,301	$413
(130)	121 Cameron Mews	Residence	$1,330,521	$15,101	$408
(131)	122 Cameron Mews	Residence	$1,422,050	$16,140	$436
(132)	123 Cameron Mews	Residence	$1,552,590	$17,622	$476
(133)	124 Cameron Mews	Residence	$1,374,111	$15,596	$421
(134)	125 Cameron Mews	Residence	$1,233,270	$13,998	$378
(135)	126 Cameron Mews	Residence	$1,422,050	$16,140	$436
(136)	1/2 Swifts Alley	Residence	$959,568	$10,891	$294
(137)	2 Swifts Alley	Residence	$3,581,239	$40,647	$1,097
(138)	2 Pioneer Mill Way	Barca's Pier & Wine Bar	$3,670,200	$41,657	$1,125
(139)	3 Pioneer Mill Way	Ada's on the River	$1,315,800	$14,934	$403

(140)	5 Pioneer Mill Way	Residence	$1,323,427	$15,021	$406
(141)	10 Pioneer Mill Way	Residence	$3,022,670	$34,307	$926
(142)	12 Pioneer Mill Way	Residence	$2,924,515	$33,193	$896
(143)	14 Pioneer Mill Way	Residence	$2,924,515	$33,193	$896
(144)	15 Pioneer Mill Way	Residence	$2,907,055	$32,995	$891
(145)	16 Pioneer Mill Way	Residence	$2,808,940	$31,881	$861
(146)	17 Pioneer Mill Way	Residence	$2,739,927	$31,098	$840
(147)	18 Pioneer Mill Way	Residence	$3,022,670	$34,307	$926
(148)	19 Pioneer Mill Way	Residence	$3,022,670	$34,307	$926
(149)	9 Bakers Walk	Residence	$3,022,670	$34,307	$926
(150)	10 Bakers Walk	Residence	$1,566,579	$17,781	$480
(151)	11 Bakers Walk	Residence	$2,924,515	$33,193	$896
(152)	13 Bakers Walk	Residence	$2,924,515	$33,193	$896
(153)	15 Bakers Walk	Residence	$2,808,940	$31,881	$861
(154)	16 Bakers Walk	Residence	$1,024,537	$11,628	$314
(155)	17 Bakers Walk	Residence	$3,022,670	$34,307	$926
(156)	22 Bakers Walk	Residence	$1,104,131	$12,532	$338
(157)	100 Waterford Place	Residence	$1,289,773	$14,639	$395
(158)	102 Waterford Place	Residence	$1,275,891	$14,481	$391
(159)	104 Waterford Place	Residence	$1,400,813	$15,899	$429
(160)	106 Waterford Place	Residence	$953,794	$10,826	$292
(161)	108 Waterford Place	Residence	$1,109,236	$12,590	$340
(162)	110 Waterford Place	Residence	$1,170,677	$13,287	$359
(163)	112 Waterford Place	Residence	$1,309,449	$14,862	$401
(164)	114 Waterford Place	Residence	$1,304,591	$14,807	$400
(165)	116 Waterford Place	Residence	$1,331,598	$15,114	$408
(166)	118 Waterford Place	Residence	$1,721,716	$19,541	$528
(167)	120 Waterford Place	Residence	$1,174,706	$13,333	$360
(168)	122 Waterford Place	Residence	$1,083,474	$12,297	$332
(169)	124 Waterford Place	Residence	$1,063,200	$12,067	$326
(170)	126 Waterford Place	Residence	$1,364,450	$15,487	$418
(171)	128 Waterford Place	Residence	$1,239,666	$14,070	$380
(172)	130 Waterford Place	Residence	$1,205,595	$13,684	$369
(173)	132 Waterford Place	Residence	$1,677,976	$19,045	$514
(174)	200 Strand Street	Old Dominion Boat Club	$8,300,000	$94,205	$2,544
(175)	203 Strand Street	Chadwick's	$3,580,000	$40,633	$1,097
(176)	205 Strand Street	Clare Locke	$1,197,241	$13,589	$367
(177)	206 Strand Street	Parking lot	$1,194,486	$13,557	$366
(178)	210 Strand Street	Parking lot	$195,946	$2,224	$60
(179)	225 Strand Street	Residence (Watermark #201)	$2,765,878	$31,393	$848
(180)	225 Strand Street	Residence (Watermark #202)	$698,221	$7,925	$214
(181)	225 Strand Street	Residence (Watermark #203)	$1,160,210	$13,168	$356
(182)	225 Strand Street	Residence (Watermark #204)	$1,120,230	$12,715	$343
(183)	225 Strand Street	Residence (Watermark #205)	$1,176,800	$13,357	$361
(184)	225 Strand Street	Residence (Watermark #301)	$3,072,748	$34,876	$942
(185)	225 Strand Street	Residence (Watermark #302)	$729,350	$8,278	$224
(186)	225 Strand Street	Residence (Watermark #303)	$1,487,071	$16,878	$456
(187)	225 Strand Street	Residence (Watermark #304)	$1,866,876	$21,189	$572
(188)	225 Strand Street	Residence (Watermark #305)	$2,939,843	$33,367	$901
(189)	225 Strand Street	Residence (Watermark #401)	$3,483,619	$39,539	$1,068

(190)	225 Strand Street	Residence (Watermark #403)	$2,173,746	$24,672	$666
(191)	225 Strand Street	Residence (Watermark #404)	$2,053,808	$23,311	$629
(192)	225 Strand Street	Residence (Watermark #405)	$3,564,389	$40,456	$1,092
(193)	225 Strand Street	Residence (Watermark #501)	$3,861,535	$43,828	$1,183
(194)	225 Strand Street	Residence (Watermark #503)	$2,893,380	$32,840	$887
(195)	225 Strand Street	Residence (Watermark #504)	$1,987,027	$22,553	$609
(196)	225 Strand Street	Residence (Watermark #505)	$3,564,389	$40,456	$1,092
(197)	225 Strand Street	Retail (Watermark #C-104)	$466,509	$5,295	$143
(198)	225 Strand Street	Retail (Watermark #C-105)	$725,297	$8,232	$222
(199)	101 N. Union	Office building	$4,933,000	$55,990	$1,512
(200)	102B N. Union	Parking garage	$8,717,375	$98,942	$2,671
(201)	102 N. Union TH-102	Residence	$1,155,121	$13,111	$354
(202)	103 N Union	City leased to other	$1,192,696	$13,537	$366
(203)	104 N Union	Residence (Torpedo Factory Condo)	$867,206	$9,843	$266
(204)	105 N Union	Torpedo Factory Art Center - currently exempt	$10,114,037	$114,794	$3,099
(205)	105 N Union	Torpedo Factory - currently taxable	$1,575,000	$17,876	$483
(206)	106 N Union	Residence (Torpedo Factory Condo)	$867,206	$9,843	$266
(207)	107 N. Union	Land behind Torpedo Art Center Bldg. 2	$1,872,835	$21,257	$574
(208)	108 N Union	Residence (Torpedo Factory Condo)	$937,804	$10,644	$287
(209)	110 N Union	Residence (Torpedo Factory Condo)	$973,765	$11,052	$298
(210)	112 N Union	Residence (Torpedo Factory Condo)	$919,467	$10,436	$282
(211)	114 N Union	Residence (Torpedo Factory Condo)	$929,353	$10,548	$285
(212)	116 N Union	Residence (Torpedo Factory Condo)	$1,088,529	$12,355	$334
(213)	118 N Union	Residence (Torpedo Factory Condo)	$1,235,227	$14,020	$379
(214)	120 N Union	Residence (Torpedo Factory Condo)	$966,331	$10,968	$296
(215)	122 N Union	Residence (Torpedo Factory Condo)	$963,566	$10,936	$295
(216)	124 N Union	Residence (Torpedo Factory Condo)	$963,565	$10,936	$295
(217)	126 N Union	Residence (Torpedo Factory Condo)	$963,565	$10,936	$295
(218)	128 N Union	Residence (Torpedo Factory Condo)	$964,948	$10,952	$296
(219)	130 N Union	Residence (Torpedo Factory Condo)	$967,023	$10,976	$296
(220)	132 N Union	Residence (Torpedo Factory Condo)	$1,224,734	$13,901	$375
(221)	134 N Union	Residence (Torpedo Factory Condo)	$1,006,029	$11,418	$308
(222)	136 N Union	Residence (Torpedo Factory Condo)	$1,005,020	$11,407	$308
(223)	138 N Union	Residence (Torpedo Factory Condo)	$923,929	$10,487	$283
(224)	140 N Union	Residence (Torpedo Factory Condo)	$1,011,477	$11,480	$310
(225)	142 N Union	Residence (Torpedo Factory Condo)	$1,011,880	$11,485	$310
(226)	144 N Union	Residence (Torpedo Factory Condo)	$956,493	$10,856	$293
(227)	146 N Union	Residence (Torpedo Factory Condo)	$1,309,658	$14,865	$401
(228)	148 N Union	Residence (Torpedo Factory Condo)	$858,732	$9,747	$263
(229)	150 N Union	Residence (Torpedo Factory Condo)	$1,039,726	$11,801	$319
(230)	152 N Union	Residence (Torpedo Factory Condo)	$1,044,468	$11,855	$320
(231)	154 N Union	Residence (Torpedo Factory Condo)	$923,199	$10,478	$283
(232)	156 N Union	Residence (Torpedo Factory Condo)	$594,465	$6,747	$182
(233)	158 N Union	Residence (Torpedo Factory Condo)	$1,019,952	$11,576	$313
(234)	160 N Union	Residence (Torpedo Factory Condo)	$1,111,334	$12,614	$341
(235)	101 S. Union	Mia's Italian	$5,490,000	$62,312	$1,682
(236)	103 S. Union	Commercial	$2,123,415	$24,101	$651
(237)	104 S. Union	Old Town Shop	$2,782,500	$31,581	$853
(238)	105 S. Union	Happy Place	$1,622,120	$18,411	$497
(239)	106 S. Union	Virtue Feed & Grain	$5,815,000	$66,000	$1,782

(240)	107 S. Union	Happy Place	$1,322,754	$15,013	$405
(241)	110 S. Union	Strand Building	$5,335,000	$60,552	$1,635
(242)	115 S. Union	Office building	$7,401,000	$84,001	$2,268
(243)	121 S. Union	Union Street Pub	$4,557,000	$51,722	$1,396
(244)	125 S. Union	Vacant (Christmas Attic)	$1,937,563	$21,991	$594
(245)	203 S. Union	Architessa	$1,976,397	$22,432	$606
(246)	205 S. Union	Braemar Carpentry	$1,122,526	$12,741	$344
(247)	206 S. Union	Office Building	$7,675,000	$87,111	$2,352
(248)	207 S. Union	Residence	$771,111	$8,752	$236
(249)	207A S. Union	Residence	$824,655	$9,360	$253
(250)	209 S. Union	Residence	$771,111	$8,752	$236
(251)	209 A S. Union	Residence	$771,111	$8,752	$236
(252)	211 S. Union	Residence	$771,111	$8,752	$236
(253)	211A S. Union	Residence	$896,480	$10,175	$275
(254)	213 S. Union	Residence	$771,111	$8,752	$236
(255)	213 A S. Union	Residence	$855,909	$9,715	$262
(256)	215 S. Union	Carriage Shops	$1,474,285	$16,733	$452
(257)	217 S. Union	Residence	$3,218,800	$36,533	$986
(258)	219 S. Union	Residence	$2,877,800	$32,663	$882
(259)	220 S. Union	Hotel Indigo	$20,485,000	$232,505	$6,278
(260)	221 S. Union	Residence	$3,218,800	$36,533	$986
(261)	223 S. Union	Residence	$3,666,000	$41,609	$1,123
(262)	225 S. Union	Residence	$3,325,000	$37,739	$1,019
(263)	227 S. Union	Residence	$3,325,000	$37,739	$1,019
(264)	300 S. Union	Residence	$2,900,121	$32,916	$889
(265)	302 S. Union	Residence	$2,231,215	$25,324	$684
(266)	303 S. Union	Residence	$2,198,932	$24,958	$674
(267)	304 S. Union	Residence	$2,231,215	$25,324	$684
(268)	305 S. Union	Residence	$1,393,706	$15,819	$427
(269)	306 S. Union	Residence	$2,231,215	$25,324	$684
(270)	307 S. Union	Residence	$1,321,547	$15,000	$405
(271)	308 S. Union	Residence	$2,900,121	$32,916	$889
(272)	309 S. Union	Residence	$1,302,131	$14,779	$399
(273)	311 S. Union	Residence	$1,321,547	$15,000	$405
(274)	313 S. Union	Residence	$1,388,161	$15,756	$425
(275)	314 S. Union	Residence	$2,900,121	$32,916	$889
(276)	315 S. Union	Residence	$1,169,561	$13,275	$358
(277)	316 S. Union	Residence	$2,231,215	$25,324	$684
(278)	317 S. Union	Residence	$1,472,243	$16,710	$451
(279)	319 S. Union	Residence	$2,178,485	$24,726	$668
(280)	320 S. Union	Residence	$2,231,215	$25,324	$684
(281)	322 S. Union	Residence	$2,900,121	$32,916	$889
(282)	106 N. Lee	South Block/Glo 360	$5,025,000	$57,034	$1,540
(283)	115 N. Lee	Residence (Unit BH200)	$375,677	$4,264	$115
(284)	115 N. Lee	Residence (Unit BH201)	$486,933	$5,527	$149
(285)	115 N. Lee	Residence (Unit BH202)	$533,924	$6,060	$164
(286)	115 N. Lee	Residence (Unit BH203)	$887,135	$10,069	$272
(287)	115 N. Lee	Residence (Unit BH204)	$479,853	$5,446	$147
(288)	115 N. Lee	Residence (Unit BH205)	$455,011	$5,164	$139
(289)	115 N. Lee	Residence (Unit BH206)	$456,082	$5,177	$140

(290)	115 N. Lee	Residence (Unit BH207)	$900,847	$10,225	$276
(291)	115 N. Lee	Residence (Unit BH208)	$456,082	$5,177	$140
(292)	115 N. Lee	Residence (Unit BH209)	$459,423	$5,214	$141
(293)	115 N. Lee	Residence (Unit BH210)	$479,853	$5,446	$147
(294)	115 N. Lee	Residence (Unit BH211)	$550,885	$6,253	$169
(295)	115 N. Lee	Residence (Unit BH212)	$529,960	$6,015	$162
(296)	115 N. Lee	Residence (Unit BH213)	$899,709	$10,212	$276
(297)	115 N. Lee	Residence (Unit BH300)	$484,457	$5,499	$148
(298)	115 N. Lee	Residence (Unit BH301)	$740,219	$8,401	$227
(299)	115 N. Lee	Residence (Unit BH302)	$926,944	$10,521	$284
(300)	115 N. Lee	Residence (Unit BH303)	$603,659	$6,852	$185
(301)	115 N. Lee	Residence (Unit BH304)	$501,847	$5,696	$154
(302)	115 N. Lee	Residence (Unit BH305)	$905,656	$10,279	$278
(303)	115 N. Lee	Residence (Unit BH400)	$984,509	$11,174	$302
(304)	115 N. Lee	Residence (Unit BH401)	$1,036,467	$11,764	$318
(305)	115 N. Lee	Residence (Unit BH402)	$1,343,608	$15,250	$412
(306)	115 N. Lee	Residence (Unit BH403)	$456,082	$5,177	$140
(307)	115 N. Lee	Residence (Unit BH404)	$470,581	$5,341	$144
(308)	115 N. Lee	Residence (Unit BH405)	$482,625	$5,478	$148
(309)	115 N. Lee	Residence (Unit BH406)	$1,124,038	$12,758	$344
(310)	115 N. Lee	Residence (Unit BH407)	$1,063,607	$12,072	$326
(311)	115 N. Lee	Residence (Unit BH501)	$916,541	$10,403	$281
(312)	115 N. Lee	Residence (Unit BH502)	$887,499	$10,073	$272
(313)	115 N. Lee	Residence (Unit BH503)	$934,279	$10,604	$286
(314)	115 N. Lee	Residence (Unit BH504)	$887,499	$10,073	$272
(315)	125 N. Lee	Residence (Unit DH201)	$947,642	$10,756	$290
(316)	125 N. Lee	Residence (Unit DH202)	$879,165	$9,979	$269
(317)	125 N. Lee	Residence (Unit DH203)	$830,499	$9,426	$255
(318)	125 N. Lee	Residence (Unit DH204)	$899,392	$10,208	$276
(319)	125 N. Lee	Residence (Unit DH205)	$883,768	$10,031	$271
(320)	125 N. Lee	Residence (Unit DH206)	$603,458	$6,849	$185
(321)	125 N. Lee	Residence (Unit DH207)	$530,496	$6,021	$163
(322)	125 N. Lee	Residence (Unit DH208)	$555,660	$6,307	$170
(323)	125 N. Lee	Residence (Unit DH209)	$551,911	$6,264	$169
(324)	125 N. Lee	Residence (Unit DH210)	$493,281	$5,599	$151
(325)	125 N. Lee	Residence (Unit DH211)	$423,219	$4,804	$130
(326)	125 N. Lee	Residence (Unit DH300)	$1,313,812	$14,912	$403
(327)	125 N. Lee	Residence (Unit DH301)	$612,560	$6,953	$188
(328)	125 N. Lee	Residence (Unit DH303)	$828,837	$9,407	$254
(329)	125 N. Lee	Residence (Unit DH304)	$890,776	$10,110	$273
(330)	125 N. Lee	Residence (Unit DH305)	$814,651	$9,246	$250
(331)	125 N. Lee	Residence (Unit DH306)	$510,476	$5,794	$156
(332)	125 N. Lee	Residence (Unit DH307)	$566,732	$6,432	$174
(333)	125 N. Lee	Residence (Unit DH401)	$1,028,908	$11,678	$315
(334)	125 N. Lee	Residence (Unit DH402)	$968,384	$10,991	$297
(335)	125 N. Lee	Residence (Unit DH403)	$485,635	$5,512	$149
(336)	125 N. Lee	Residence (Unit DH404)	$452,411	$5,135	$139
(337)	125 N. Lee	Residence (Unit DH405)	$466,941	$5,300	$143
(338)	125 N. Lee	Residence (Unit DH406)	$636,973	$7,230	$195
(339)	125 N. Lee	Residence (Unit DH407)	$487,821	$5,537	$149

(340)	125 N. Lee	Residence (Unit DH408)	$1,068,046	$12,122	$327
(341)	125 N. Lee	Residence (Unit DH409)	$1,267,578	$14,387	$388
(342)	125 N. Lee	Residence (Unit DH501)	$896,668	$10,177	$275
(343)	125 N. Lee	Residence (Unit DH502)	$863,768	$9,804	$265
(344)	125 N. Lee	Residence (Unit DH503)	$982,212	$11,148	$301
(345)	125 N. Lee	Residence (Unit DH504)	$1,019,186	$11,568	$312
(346)	106 S. Lee	Residence	$1,607,512	$18,245	$493
(347)	107 S. Lee	Residence	$1,353,798	$15,366	$415
(348)	109 S. Lee	Commercial	$1,748,947	$19,851	$536
(349)	110 S. Lee	Architect	$2,206,512	$25,044	$676
(350)	111 S. Lee	Residence	$2,206,512	$25,044	$676
(351)	113 S. Lee	Residence	$1,762,795	$20,008	$540
(352)	115 S. Lee	Residence	$899,974	$10,215	$276
(353)	116 S. Lee	Residence	$2,170,023	$24,630	$665
(354)	117 S. Lee	Residence	$2,170,023	$24,630	$665
(355)	118 S. Lee	Residence	$1,411,174	$16,017	$432
(356)	120 S. Lee	Residence	$1,350,436	$15,327	$414
(357)	201 S. Lee	Residence	$4,732,779	$53,717	$1,450
(358)	203 S. Lee	Residence	$1,808,674	$20,528	$554
(359)	205 S. Lee	Residence	$1,281,874	$14,549	$393
(360)	206 S. Lee	Residence	$1,797,907	$20,406	$551
(361)	207 S. Lee	Residence	$1,815,422	$20,605	$556
(362)	208 S. Lee	Residence	$980,237	$11,126	$300
(363)	209 S. Lee	Residence	$4,037,089	$45,821	$1,237
(364)	210 S. Lee	Residence	$1,630,718	$18,509	$500
(365)	211 S. Lee	Residence	$1,550,886	$17,603	$475
(366)	212 S. Lee	Residence	$1,392,738	$15,808	$427
(367)	213 S. Lee	Residence	$1,888,929	$21,439	$579
(368)	214 S. Lee	Residence	$1,948,581	$22,116	$597
(369)	215 S. Lee	Residence	$1,939,043	$22,008	$594
(370)	217 S. Lee	Residence	$1,297,384	$14,725	$398
(371)	218 S. Lee	Residence	$980,237	$11,126	$300
(372)	219 S. Lee	Residence	$1,870,246	$21,227	$573
(373)	220 S. Lee	Residence	$2,167,685	$24,603	$664
(374)	221 S. Lee	Residence	$1,607,755	$18,248	$493
(375)	223 S. Lee	Residence	$1,195,701	$13,571	$366
(376)	224 S. Lee	Residence	$5,061,839	$57,452	$1,551
(377)	225 S. Lee	Residence	$826,857	$9,385	$253
(378)	226 S. Lee	Residence	$1,294,414	$14,692	$397
(379)	110 S. Fairfax	Burke & Herbert Bank	$8,300,000	$94,205	$2,544
(380)	112 S. Fairfax	Bank parking lot	$1,131,808	$12,846	$347
(381)	117 S. Fairfax	Offices	$2,062,314	$23,407	$632
(382)	118 S. Fairfax	Burke & Herbert office	$1,272,075	$14,438	$390
(383)	119 S. Fairfax	Freed Railroad	$1,321,166	$14,995	$405
(384)	120 S. Fairfax	Burke & Herbert office	$1,787,802	$20,292	$548
(385)	121 S. Fairfax	Commerical	$1,454,316	$16,506	$446
(386)	122 S. Fairfax	Residence	$3,378,316	$38,344	$1,035
(387)	124 S. Fairfax	Residence	$2,790,314	$31,670	$855
(388)	125 S. Fairfax	Skincare	$1,369,310	$15,542	$420
(389)	126 S. Fairfax	Residence	$1,986,249	$22,544	$609

(390)	127 S. Fairfax	Monday's Child	$1,098,471	$12,468	$337
(391)	131 S. Fairfax	Residence	$1,019,258	$11,569	$312
(392)	133 S. Fairfax	Residence	$910,428	$10,333	$279
(393)	135 S. Fairfax	Residence	$902,362	$10,242	$277
(394)	137 S. Fairfax	Residence	$857,167	$9,729	$263
(395)	139 S. Fairfax	Enchanted Florist	$677,744	$7,692	$208
(396)	**TOTAL PER YEAR**	**316 residential and 79 commerical properties**	**$757,118,546**	**$8,593,295**	**$232,019**
(397)	**TOTAL OVER 100 YEARS**				**$23,201,898**

Sources and Notes:

Column (a): Properties within an approximate 500 foot radius of the City's proposed location of the pump station at the southern edge of Waterfront Park, identified by the authors using GoogleMaps (*https://maps.google.com)* and GIS Parcel Viewer at *realestate.alexandriava.gov* .

Column (b): Based on authors' visual survey, October 17, 2025; provided only to assist readers in recognizing entries in Column (a).

Column (c): Total value (land + building) reported in "Property Details, Real Estate Assessment Search," at *realestate.alexandriava.gov, accessed* October 15, 2025. For 79 commercial properties, the average assessed value is $3,676,000. For 316 residential properties, the average assessed value is $1,477,000.

Column (d) : Column (c) * 1.135%. 1.135% rate applies to both commerical and residential property ("FY2026 Approved Tax Rates and Fees for Major Revenue Sources" at *alexandriava.gov/taxes/tax-rates)*.

Column (e) : Column (d) * 2.7% According to J. Crompton & S. Nichols, "Impact on Property Values of Distance to Parks and Open Spaces: An Update of U.S. Studies in the New Millenium," *Journal of Leisure Research* (2020), properties within 500 feet of a park receive a 8-10% premium in their sale price, and the premium is related to the size of the park.
Presentations by City project staff (Matthew Landes, *Waterfront Flood Mitigation Project Discussion, Draft Deliberative Pre-Decisional, Old* Dominion Boat Club and Old Town Civic Association, slides dated September 4, 2025) contains alternative designs for pump stations of different sizes. The present analysis assumes that the proposed pump station would occupy or impinge on one-third of the 1.37 acres of Waterfront Park. 8% * 1/3 = 2.7%.

Row (396): sum of Rows (1) - (395).

Row (397) : Row (396) * 100. 100 years is assumed lifetime of the pump station.

Table 3

Loss of City Property Tax Revenues from Diminishing the Property-Enhancing Effect of the Old Town Historic District

As the City's website states, "Alexandria has a rich historic and cultural legacy which not only creates the City's unique sense of place, but also represents one of its primary economic and cultural assets."[1] Nowhere is this more evident than in the Old and Historic District, especially its waterfront area encompassing Waterfront Park, which includes some of the City's greatest density and highest variety of historic buildings and archaeological resources. Few areas within the City better exemplify the National Park Service's definition of an historic district:[2]

> A geographically-defined area…possessing a significant concentration, linkage, or continuity of sites, landscapes, structures, or objects unified by past events or aesthetically by plan or physical developments.

Equally, no location within the City matches Waterfront Park and its adjacent streets and river frontage in constituting a cultural landscape, defined by the National Park Service as:[3]

> a geographic area, including both cultural and national resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values.

This latter definition further identifies community parks as important elements of cultural landscapes. The National Park Service also states that cultural landscapes are as important to preserve as their surrounding historic buildings.

City government has long been aware of its role in preserving Alexandria's historic areas, noting that historic districts are fragile and constantly at risk of being displaced or diminished for development purposes. Individual properties and amenities are equally vulnerable to encroaching development. Even minor changes to individual properties can importantly affect the area's overall character and atmosphere, and these impacts can be particularly destructive when development introduces buildings that are large in scale or discordant in design.[4]

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[1] https://www.alexandriava.gov/Preservation.

[2] https://www.nps.gov/dscw/definitionsdc_h.htm.

[3] C. Birnbaum, *Protecting Cultural Landscapes: Planning Treatment and Management of Historic Landscape*s, National Park Service Preservation Brief 36, pp. 1-2.

[4] *Alexandria's Master Plan: Historic Preservation* (https://media.alexandriava.gov/content/planning/CitywideChapters/1992MasterPlanHistoricPreservation.pdf), including "Old Town Small Area Plan for Historic Preservation," p.103.

Historic areas have important economic effects, not just cultural and aesthetic ones. Statistical research[5] on cities similar to Alexandria has found that location of a property within a recognized historic district enhances its assessed real estate values and that reduction in the historic features or amenities of the district diminish this enhancement.

Table 3 applies this research to calculate the City's loss in property tax revenues from the 316 residential and 79 commercial properties located within 500 feet of Waterfront Park, assuming that the pump station would particularly diminish property values in the sub-area within the historic district where the park is such a prominent local feature.

The financial loss to the City calculated in Table 3 is $5.2 million.

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[5] For example: R. Lienchenko, N. Coulson, & D. Listokin, "Historic Preservation and Residential Property Values," *Urban Studie*s (2000); S. Waights, "The Preservation of Historic Districts-Is It Worth It?" *Journal of Economic Geography* (2019); D. Rypkema, "Historic Conservation and Property Values," *The Economics of Uniqueness* (World Bank, 2012); P. Asabere & F. Huffman, F. , "Historic Districts and Land Values," *Journal of Real Estate Research (1991); V.* Zahirovic-Herbert & S. Chatterjee, "Historic Preservation and Residential Property Values: Evidence from Quantile Regression," *Urban Studies* (2012); E. Thompson, D. Rosenbaum & B. Schmitz, "Property Values on the Plains: The Impact of Historic Preservation," *Annals of Regional Science* (2011); C. Warren, P. Elliott & J. Staines, "The Impact of Historic Districts on Residential Land Values in Australia,"*International Journal of Housing* (2017).

Table 3
Loss of City Property Tax Revenues from Diminishing the Property-Enhancing Effect of the Old Town Historic District

	(a) Address	(b) Current Occupant	(c) Assessed Value of Propery	(d) Annual City Revenues from 1.135% Property Tax Rate	(e) % of Tax Revenue Attributable to Location in an Historic District	(f) Annual Property Tax Revenue Attributable to Location in an Historic District	(g) 5% Reduction in City Annual Property Tax Revenues Attributable to Historic District
(1)	1 Prince	Vacant (Am. Medical Group Assoc.)	$6,900,000	$78,315	12%	$9,398	$470
(2)	2 Prince	Vacant (Bike shop/Taco Restaurant)	$746,926	$8,478	12%	$1,017	$51
(3)	6 Prince	Misha's Coffee	$1,014,904	$11,519	12%	$1,382	$69
(4)	10 Prince	Clare Locke	$2,682,653	$30,448	12%	$3,654	$183
(5)	100 Prince	Residence	$1,524,426	$17,302	12%	$2,076	$104
(6)	102 Prince	Residence	$1,269,782	$14,412	12%	$1,729	$86
(7)	103 Prince	Residence	$1,134,069	$12,872	12%	$1,545	$77
(8)	104 Prince	Residence	$1,224,657	$13,900	12%	$1,668	$83
(9)	105 Prince	Residence	$1,106,565	$12,560	12%	$1,507	$75
(10)	106 Prince	Residence	$1,388,203	$15,756	12%	$1,891	$95
(11)	107 Prince	Residence	$1,805,832	$20,496	12%	$2,460	$123
(12)	108 Prince	Residence	$2,118,589	$24,046	12%	$2,886	$144
(13)	109 Prince	Residence	$1,726,968	$19,601	12%	$2,352	$118
(14)	110 Prince	Residence	$1,046,503	$11,878	12%	$1,425	$71
(15)	111 Prince	Residence	$1,872,072	$21,248	12%	$2,550	$127
(16)	112 Prince	Residence	$1,183,582	$13,434	12%	$1,612	$81
(17)	113 Prince	Residence	$1,852,349	$21,024	12%	$2,523	$126
(18)	114 Prince	Residence	$1,620,010	$18,387	12%	$2,206	$110
(19)	115 Prince	Residence	$2,608,409	$29,605	12%	$3,553	$178
(20)	116 Prince	Residence	$2,456,610	$27,883	12%	$3,346	$167
(21)	117 Prince	Residence	$2,764,762	$31,380	12%	$3,766	$188
(22)	118 Prince	Residence	$1,402,833	$15,922	12%	$1,911	$96
(23)	119 Prince	Residence	$1,694,945	$19,238	12%	$2,309	$115
(24)	121 Prince	Residence	$1,563,202	$17,742	12%	$2,129	$106
(25)	122 Prince	Residence under construction	$663,837	$7,535	12%	$904	$45
(26)	123 Prince	Residence	$1,899,817	$21,563	12%	$2,588	$129
(27)	126 Prince	Residence	$1,513,637	$17,180	12%	$2,062	$103
(28)	127 Prince	Residence	$1,777,398	$20,173	12%	$2,421	$121
(29)	129 Prince	Residence	$1,210,114	$13,735	12%	$1,648	$82
(30)	130 Prince	Residence	$1,715,265	$19,468	12%	$2,336	$117
(31)	201 Prince	Athenaeum	$1,677,900	$19,044	12%	$2,285	$114
(32)	207 Prince	Residence	$4,182,559	$47,472	12%	$5,697	$285
(33)	209 Prince	Residence	$1,858,064	$21,089	12%	$2,531	$127
(34)	210 Prince	Residence	$2,957,230	$33,565	12%	$4,028	$201
(35)	211 Prince	Residence	$2,552,089	$28,966	12%	$3,476	$174
(36)	212 Prince	Residence	$1,923,190	$21,828	12%	$2,619	$131
(37)	213 Prince	Residence	$1,880,778	$21,347	12%	$2,562	$128
(38)	214 Prince	Residence	$2,297,802	$26,080	12%	$3,130	$156
(39)	215 Prince	Residence	$1,697,560	$19,267	12%	$2,312	$116
(40)	216 Prince	Residence	$2,075,980	$23,562	12%	$2,827	$141
(41)	217 Prince	Residence	$950,510	$10,788	12%	$1,295	$65
(42)	10 Duke	Cooper Mill	$2,902,497	$32,943	12%	$3,953	$198
(43)	14 Duke	Residence	$2,907,055	$32,995	12%	$3,959	$198
(44)	16 Duke	Residence	$2,739,927	$31,098	12%	$3,732	$187
(45)	18 Duke	Residence	$3,157,911	$35,842	12%	$4,301	$215
(46)	100 Duke	Residence	$2,352,952	$26,706	12%	$3,205	$160
(47)	102 Duke	Residence	$1,246,080	$14,143	12%	$1,697	$85
(48)	104 Duke	Residence	$1,307,744	$14,843	12%	$1,781	$89
(49)	106 Duke	Residence	$1,344,647	$15,262	12%	$1,831	$92
(50)	108 Duke	Residence	$2,022,768	$22,958	12%	$2,755	$138

(51)	109 Duke	Residence	$3,143,044	$35,674	12%	$4,281	$214
(52)	110 Duke	Residence	$1,637,217	$18,582	12%	$2,230	$111
(53)	111 Duke	Residence	$2,025,879	$22,994	12%	$2,759	$138
(54)	112 Duke	Residence	$943,664	$10,711	12%	$1,285	$64
(55)	114 Duke	Residence	$1,037,954	$11,781	12%	$1,414	$71
(56)	115 Duke	Residence	$1,355,648	$15,387	12%	$1,846	$92
(57)	121 Duke	Residence	$3,234,105	$36,707	12%	$4,405	$220
(58)	123 Duke	Residence	$1,114,632	$12,651	12%	$1,518	$76
(59)	125 Duke	Residence	$1,110,111	$12,600	12%	$1,512	$76
(60)	1 King	Lot foot of King	$2,272,396	$25,792	12%	$3,095	$155
(61)	2 King	Vacant land	$539,327	$6,121	12%	$735	$37
(62)	6 King	Mai Thai	$4,500,000	$51,075	12%	$6,129	$306
(63)	101 King	Lucky Knot	$4,835,000	$54,877	12%	$6,585	$329
(64)	105 King	Fish Mrket	$3,297,000	$37,421	12%	$4,491	$225
(65)	108 King	Commercial	$1,522,276	$17,278	12%	$2,073	$104
(66)	109 King	Pop's Ice Cream	$4,620,000	$52,437	12%	$6,292	$315
(67)	111 King	Bugsy's Pizza	$2,828,232	$32,100	12%	$3,852	$193
(68)	112 King	Daniel O'Connell's Irish Pub	$4,520,000	$51,302	12%	$6,156	$308
(69)	113 King	Commercial	$2,767,518	$31,411	12%	$3,769	$188
(70)	115 King	Landini's	$3,370,500	$38,255	12%	$4,591	$230
(71)	117 King	Commercial	$3,465,000	$39,328	12%	$4,719	$236
(72)	118 King	Paper Source	$11,300,000	$128,255	12%	$15,391	$770
(73)	119 King	Wharf	$3,286,500	$37,302	12%	$4,476	$224
(74)	121 King	Il Porto	$2,386,542	$27,087	12%	$3,250	$163
(75)	128 King	Urban Legend	$1,551,532	$17,610	12%	$2,113	$106
(76)	132 King	Lou Lou	$3,143,000	$35,673	12%	$4,281	$214
(77)	200 King	Comfort One	$2,909,185	$33,019	12%	$3,962	$198
(78)	201 King	Comfort One	$3,654,000	$41,473	12%	$4,977	$249
(79)	202 King	Market Square Shop	$2,107,320	$23,918	12%	$2,870	$144
(80)	205 King	She's Boutique	$1,378,450	$15,645	12%	$1,877	$94
(81)	206 King	Commercial	$2,681,575	$30,436	12%	$3,652	$183
(82)	210 King	Old Virginia Tobacco	$2,099,991	$23,835	12%	$2,860	$143
(83)	211 King	Bollywood	$2,227,277	$25,280	12%	$3,034	$152
(84)	212 King	Kilwin's	$1,948,333	$22,114	12%	$2,654	$133
(85)	213 King	3 Sisters	$1,659,873	$18,840	12%	$2,261	$113
(86)	214 King	Warehouse Restaurant	$20,707,094	$235,026	12%	$28,203	$1,410
(87)	215 King	John Crouch	$1,360,295	$15,439	12%	$1,853	$93
(88)	217 King	King Street Souvenirs	$1,623,208	$18,423	12%	$2,211	$111
(89)	219 King	Basin Street Lounge	$3,213,000	$36,468	12%	$4,376	$219
(90)	221 King	Lot 500 of Ramsey House	$1,499,026	$17,014	12%	$2,042	$102
(91)	1 Cameron	Torpedo Factory	$7,595,860	$86,213	12%	$10,346	$517
(92)	5 Cameron	Chart House/Blackwalll Hitch	$11,100,000	$125,985	12%	$15,118	$756
(93)	110 Cameron #CS101	Residence	$719,414	$8,165	12%	$980	$49
(94)	110 Cameron #CS102	Residence	$475,891	$5,401	12%	$648	$32
(95)	110 Cameron #CS103	Residence	$475,891	$5,401	12%	$648	$32
(96)	110 Cameron #CS104	Residence	$546,173	$6,199	12%	$744	$37
(97)	120 Cameron #CS105	Residence	$552,982	$6,276	12%	$753	$38
(98)	120 Cameron #CS106	Residence	$362,675	$4,116	12%	$494	$25
(99)	120 Cameron #CS107	Residence	$500,027	$5,675	12%	$681	$34
(100)	120 Cameron #CS108	Residence	$605,278	$6,870	12%	$824	$41
(101)	120 Cameron #CS201	Residence	$656,461	$7,451	12%	$894	$45
(102)	120 Cameron #CS202	Residence	$457,475	$5,192	12%	$623	$31
(103)	120 Cameron #CS203	Residence	$458,267	$5,201	12%	$624	$31
(104)	120 Cameron #CS204	Residence	$475,891	$5,401	12%	$648	$32
(105)	120 Cameron #CS205	Residence	$587,572	$6,669	12%	$800	$40
(106)	130 Cameron #CS109	Residence	$605,707	$6,875	12%	$825	$41
(107)	130 Cameron #CS111	Residence	$466,468	$5,294	12%	$635	$32
(108)	130 Cameron #CS112	Residence	$822,794	$9,339	12%	$1,121	$56
(109)	100 Cameron Mews	Residence	$1,524,148	$17,299	12%	$2,076	$104
(110)	101 Cameron Mews	Residence	$1,457,612	$16,544	12%	$1,985	$99
(111)	102 Cameron Mews	Residence	$1,399,985	$15,890	12%	$1,907	$95
(112)	103 Cameron Mews	Residence	$1,522,697	$17,283	12%	$2,074	$104
(113)	104 Cameron Mews	Residence	$1,399,985	$15,890	12%	$1,907	$95

(114)	105 Cameron Mews	Residence	$1,390,774	$15,785	12%	$1,894	$95
(115)	106 Cameron Mews	Residence	$1,490,193	$16,914	12%	$2,030	$101
(116)	107 Cameron Mews	Residence	$1,490,156	$16,913	12%	$2,030	$101
(117)	108 Cameron Mews	Residence	$1,474,057	$16,731	12%	$2,008	$100
(118)	109 Cameron Mews	Residence	$1,630,343	$18,504	12%	$2,221	$111
(119)	110 Cameron Mews	Residence	$1,418,979	$16,105	12%	$1,933	$97
(120)	111 Cameron Mews	Residence	$1,341,971	$15,231	12%	$1,828	$91
(121)	112 Cameron Mews	Residence	$1,656,438	$18,801	12%	$2,256	$113
(122)	113 Cameron Mews	Residence	$1,422,050	$16,140	12%	$1,937	$97
(123)	114 Cameron Mews	Residence	$1,441,355	$16,359	12%	$1,963	$98
(124)	115 Cameron Mews	Residence	$1,497,772	$17,000	12%	$2,040	$102
(125)	116 Cameron Mews	Residence	$1,419,837	$16,115	12%	$1,934	$97
(126)	117 Cameron Mews	Residence	$1,512,221	$17,164	12%	$2,060	$103
(127)	118 Cameron Mews	Residence	$1,412,889	$16,036	12%	$1,924	$96
(128)	119 Cameron Mews	Residence	$1,414,426	$16,054	12%	$1,926	$96
(129)	120 Cameron Mews	Residence	$1,348,113	$15,301	12%	$1,836	$92
(130)	121 Cameron Mews	Residence	$1,330,521	$15,101	12%	$1,812	$91
(131)	122 Cameron Mews	Residence	$1,422,050	$16,140	12%	$1,937	$97
(132)	123 Cameron Mews	Residence	$1,552,590	$17,622	12%	$2,115	$106
(133)	124 Cameron Mews	Residence	$1,374,111	$15,596	12%	$1,872	$94
(134)	125 Cameron Mews	Residence	$1,233,270	$13,998	12%	$1,680	$84
(135)	126 Cameron Mews	Residence	$1,422,050	$16,140	12%	$1,937	$97
(136)	1/2 Swifts Alley	Residence	$959,568	$10,891	12%	$1,307	$65
(137)	2 Swifts Alley	Residence	$3,581,239	$40,647	12%	$4,878	$244
(138)	2 Pioneer Mill Way	Barca's Pier & Wine Bar	$3,670,200	$41,657	12%	$4,999	$250
(139)	3 Pioneer Mill Way	Ada's on the River	$1,315,800	$14,934	12%	$1,792	$90
(140)	5 Pioneer Mill Way	Residence	$1,323,427	$15,021	12%	$1,803	$90
(141)	10 Pioneer Mill Way	Residence	$3,022,670	$34,307	12%	$4,117	$206
(142)	12 Pioneer Mill Way	Residence	$2,924,515	$33,193	12%	$3,983	$199
(143)	14 Pioneer Mill Way	Residence	$2,924,515	$33,193	12%	$3,983	$199
(144)	15 Pioneer Mill Way	Residence	$2,907,055	$32,995	12%	$3,959	$198
(145)	16 Pioneer Mill Way	Residence	$2,808,940	$31,881	12%	$3,826	$191
(146)	17 Pioneer Mill Way	Residence	$2,739,927	$31,098	12%	$3,732	$187
(147)	18 Pioneer Mill Way	Residence	$3,022,670	$34,307	12%	$4,117	$206
(148)	19 Pioneer Mill Way	Residence	$3,022,670	$34,307	12%	$4,117	$206
(149)	9 Bakers Walk	Residence	$3,022,670	$34,307	12%	$4,117	$206
(150)	10 Bakers Walk	Residence	$1,566,579	$17,781	12%	$2,134	$107
(151)	11 Bakers Walk	Residence	$2,924,515	$33,193	12%	$3,983	$199
(152)	13 Bakers Walk	Residence	$2,924,515	$33,193	12%	$3,983	$199
(153)	15 Bakers Walk	Residence	$2,808,940	$31,881	12%	$3,826	$191
(154)	16 Bakers Walk	Residence	$1,024,537	$11,628	12%	$1,395	$70
(155)	17 Bakers Walk	Residence	$3,022,670	$34,307	12%	$4,117	$206
(156)	22 Bakers Walk	Residence	$1,104,131	$12,532	12%	$1,504	$75
(157)	100 Waterford Place	Residence	$1,289,773	$14,639	12%	$1,757	$88
(158)	102 Waterford Place	Residence	$1,275,891	$14,481	12%	$1,738	$87
(159)	104 Waterford Place	Residence	$1,400,813	$15,899	12%	$1,908	$95
(160)	106 Waterford Place	Residence	$953,794	$10,826	12%	$1,299	$65
(161)	108 Waterford Place	Residence	$1,109,236	$12,590	12%	$1,511	$76
(162)	110 Waterford Place	Residence	$1,170,677	$13,287	12%	$1,594	$80
(163)	112 Waterford Place	Residence	$1,309,449	$14,862	12%	$1,783	$89
(164)	114 Waterford Place	Residence	$1,304,591	$14,807	12%	$1,777	$89
(165)	116 Waterford Place	Residence	$1,331,598	$15,114	12%	$1,814	$91
(166)	118 Waterford Place	Residence	$1,721,716	$19,541	12%	$2,345	$117
(167)	120 Waterford Place	Residence	$1,174,706	$13,333	12%	$1,600	$80
(168)	122 Waterford Place	Residence	$1,083,474	$12,297	12%	$1,476	$74
(169)	124 Waterford Place	Residence	$1,063,200	$12,067	12%	$1,448	$72
(170)	126 Waterford Place	Residence	$1,364,450	$15,487	12%	$1,858	$93
(171)	128 Waterford Place	Residence	$1,239,666	$14,070	12%	$1,688	$84
(172)	130 Waterford Place	Residence	$1,205,595	$13,684	12%	$1,642	$82
(173)	132 Waterford Place	Residence	$1,677,976	$19,045	12%	$2,285	$114
(174)	200 Strand Street	Old Dominion Boat Club	$8,300,000	$94,205	12%	$11,305	$565
(175)	203 Strand Street	Chadwick's	$3,580,000	$40,633	12%	$4,876	$244
(176)	205 Strand Street	Clare Locke	$1,197,241	$13,589	12%	$1,631	$82

(177)	206 Strand Street	Parking lot	$1,194,486	$13,557	12%	$1,627	$81
(178)	210 Strand Street	Parking lot	$195,946	$2,224	12%	$267	$13
(179)	225 Strand Street	Residence (Watermark #201)	$2,765,878	$31,393	12%	$3,767	$188
(180)	225 Strand Street	Residence (Watermark #202)	$698,221	$7,925	12%	$951	$48
(181)	225 Strand Street	Residence (Watermark #203)	$1,160,210	$13,168	12%	$1,580	$79
(182)	225 Strand Street	Residence (Watermark #204)	$1,120,230	$12,715	12%	$1,526	$76
(183)	225 Strand Street	Residence (Watermark #205)	$1,176,800	$13,357	12%	$1,603	$80
(184)	225 Strand Street	Residence (Watermark #301)	$3,072,748	$34,876	12%	$4,185	$209
(185)	225 Strand Street	Residence (Watermark #302)	$729,350	$8,278	12%	$993	$50
(186)	225 Strand Street	Residence (Watermark #303)	$1,487,071	$16,878	12%	$2,025	$101
(187)	225 Strand Street	Residence (Watermark #304)	$1,866,876	$21,189	12%	$2,543	$127
(188)	225 Strand Street	Residence (Watermark #305)	$2,939,843	$33,367	12%	$4,004	$200
(189)	225 Strand Street	Residence (Watermark #401)	$3,483,619	$39,539	12%	$4,745	$237
(190)	225 Strand Street	Residence (Watermark #403)	$2,173,746	$24,672	12%	$2,961	$148
(191)	225 Strand Street	Residence (Watermark #404)	$2,053,808	$23,311	12%	$2,797	$140
(192)	225 Strand Street	Residence (Watermark #405)	$3,564,389	$40,456	12%	$4,855	$243
(193)	225 Strand Street	Residence (Watermark #501)	$3,861,535	$43,828	12%	$5,259	$263
(194)	225 Strand Street	Residence (Watermark #503)	$2,893,380	$32,840	12%	$3,941	$197
(195)	225 Strand Street	Residence (Watermark #504)	$1,987,027	$22,553	12%	$2,706	$135
(196)	225 Strand Street	Residence (Watermark #505)	$3,564,389	$40,456	12%	$4,855	$243
(197)	225 Strand Street	Retail (Watermark #C-104)	$466,509	$5,295	12%	$635	$32
(198)	225 Strand Street	Retail (Watermark #C-105)	$725,297	$8,232	12%	$988	$49
(199)	101 N. Union	Office building	$4,933,000	$55,990	12%	$6,719	$336
(200)	102B N. Union	Parking garage	$8,717,375	$98,942	12%	$11,873	$594
(201)	102 N. Union TH-102	Residence	$1,155,121	$13,111	12%	$1,573	$79
(202)	103 N Union	City leased to other	$1,192,696	$13,537	12%	$1,624	$81
(203)	104 N Union	Residence (Torpedo Factory Condo)	$867,206	$9,843	12%	$1,181	$59
(204)	105 N Union	Torpedo Factory Art Center - currently exempt	$10,114,037	$114,794	12%	$13,775	$689
(205)	105 N Union	Torpedo Factory - currently taxable	$1,575,000	$17,876	12%	$2,145	$107
(206)	106 N Union	Residence (Torpedo Factory Condo)	$867,206	$9,843	12%	$1,181	$59
(207)	107 N. Union	Land behind Torpedo Art Center Bldg. 2	$1,872,835	$21,257	12%	$2,551	$128
(208)	108 N Union	Residence (Torpedo Factory Condo)	$937,804	$10,644	12%	$1,277	$64
(209)	110 N Union	Residence (Torpedo Factory Condo)	$973,765	$11,052	12%	$1,326	$66
(210)	112 N Union	Residence (Torpedo Factory Condo)	$919,467	$10,436	12%	$1,252	$63
(211)	114 N Union	Residence (Torpedo Factory Condo)	$929,353	$10,548	12%	$1,266	$63
(212)	116 N Union	Residence (Torpedo Factory Condo)	$1,088,529	$12,355	12%	$1,483	$74
(213)	118 N Union	Residence (Torpedo Factory Condo)	$1,235,227	$14,020	12%	$1,682	$84
(214)	120 N Union	Residence (Torpedo Factory Condo)	$966,331	$10,968	12%	$1,316	$66
(215)	122 N Union	Residence (Torpedo Factory Condo)	$963,566	$10,936	12%	$1,312	$66
(216)	124 N Union	Residence (Torpedo Factory Condo)	$963,565	$10,936	12%	$1,312	$66
(217)	126 N Union	Residence (Torpedo Factory Condo)	$963,565	$10,936	12%	$1,312	$66
(218)	128 N Union	Residence (Torpedo Factory Condo)	$964,948	$10,952	12%	$1,314	$66
(219)	130 N Union	Residence (Torpedo Factory Condo)	$967,023	$10,976	12%	$1,317	$66
(220)	132 N Union	Residence (Torpedo Factory Condo)	$1,224,734	$13,901	12%	$1,668	$83
(221)	134 N Union	Residence (Torpedo Factory Condo)	$1,006,029	$11,418	12%	$1,370	$69
(222)	136 N Union	Residence (Torpedo Factory Condo)	$1,005,020	$11,407	12%	$1,369	$68
(223)	138 N Union	Residence (Torpedo Factory Condo)	$923,929	$10,487	12%	$1,258	$63
(224)	140 N Union	Residence (Torpedo Factory Condo)	$1,011,477	$11,480	12%	$1,378	$69
(225)	142 N Union	Residence (Torpedo Factory Condo)	$1,011,880	$11,485	12%	$1,378	$69
(226)	144 N Union	Residence (Torpedo Factory Condo)	$956,493	$10,856	12%	$1,303	$65
(227)	146 N Union	Residence (Torpedo Factory Condo)	$1,309,658	$14,865	12%	$1,784	$89
(228)	148 N Union	Residence (Torpedo Factory Condo)	$858,732	$9,747	12%	$1,170	$58
(229)	150 N Union	Residence (Torpedo Factory Condo)	$1,039,726	$11,801	12%	$1,416	$71
(230)	152 N Union	Residence (Torpedo Factory Condo)	$1,044,468	$11,855	12%	$1,423	$71
(231)	154 N Union	Residence (Torpedo Factory Condo)	$923,199	$10,478	12%	$1,257	$63
(232)	156 N Union	Residence (Torpedo Factory Condo)	$594,465	$6,747	12%	$810	$40
(233)	158 N Union	Residence (Torpedo Factory Condo)	$1,019,952	$11,576	12%	$1,389	$69
(234)	160 N Union	Residence (Torpedo Factory Condo)	$1,111,334	$12,614	12%	$1,514	$76
(235)	101 S. Union	Mia's Italian	$5,490,000	$62,312	12%	$7,477	$374
(236)	103 S. Union	Commercial	$2,123,415	$24,101	12%	$2,892	$145
(237)	104 S. Union	Old Town Shop	$2,782,500	$31,581	12%	$3,790	$189
(238)	105 S. Union	Happy Place	$1,622,120	$18,411	12%	$2,209	$110
(239)	106 S. Union	Virtue Feed & Grain	$5,815,000	$66,000	12%	$7,920	$396

(240)	107 S. Union	Happy Place	$1,322,754	$15,013	12%	$1,802	$90
(241)	110 S. Union	Strand Building	$5,335,000	$60,552	12%	$7,266	$363
(242)	115 S. Union	Office building	$7,401,000	$84,001	12%	$10,080	$504
(243)	121 S. Union	Union Street Pub	$4,557,000	$51,722	12%	$6,207	$310
(244)	125 S. Union	Vacant (Christmas Attic)	$1,937,563	$21,991	12%	$2,639	$132
(245)	203 S. Union	Architessa	$1,976,397	$22,432	12%	$2,692	$135
(246)	205 S. Union	Braemar Carpentry	$1,122,526	$12,741	12%	$1,529	$76
(247)	206 S. Union	Office Building	$7,675,000	$87,111	12%	$10,453	$523
(248)	207 S. Union	Residence	$771,111	$8,752	12%	$1,050	$53
(249)	207A S. Union	Residence	$824,655	$9,360	12%	$1,123	$56
(250)	209 S. Union	Residence	$771,111	$8,752	12%	$1,050	$53
(251)	209 A S. Union	Residence	$771,111	$8,752	12%	$1,050	$53
(252)	211 S. Union	Residence	$771,111	$8,752	12%	$1,050	$53
(253)	211A S. Union	Residence	$896,480	$10,175	12%	$1,221	$61
(254)	213 S. Union	Residence	$771,111	$8,752	12%	$1,050	$53
(255)	213 A S. Union	Residence	$855,909	$9,715	12%	$1,166	$58
(256)	215 S. Union	Carriage Shops	$1,474,285	$16,733	12%	$2,008	$100
(257)	217 S. Union	Residence	$3,218,800	$36,533	12%	$4,384	$219
(258)	219 S. Union	Residence	$2,877,800	$32,663	12%	$3,920	$196
(259)	220 S. Union	Hotel Indigo	$20,485,000	$232,505	12%	$27,901	$1,395
(260)	221 S. Union	Residence	$3,218,800	$36,533	12%	$4,384	$219
(261)	223 S. Union	Residence	$3,666,000	$41,609	12%	$4,993	$250
(262)	225 S. Union	Residence	$3,325,000	$37,739	12%	$4,529	$226
(263)	227 S. Union	Residence	$3,325,000	$37,739	12%	$4,529	$226
(264)	300 S. Union	Residence	$2,900,121	$32,916	12%	$3,950	$197
(265)	302 S. Union	Residence	$2,231,215	$25,324	12%	$3,039	$152
(266)	303 S. Union	Residence	$2,198,932	$24,958	12%	$2,995	$150
(267)	304 S. Union	Residence	$2,231,215	$25,324	12%	$3,039	$152
(268)	305 S. Union	Residence	$1,393,706	$15,819	12%	$1,898	$95
(269)	306 S. Union	Residence	$2,231,215	$25,324	12%	$3,039	$152
(270)	307 S. Union	Residence	$1,321,547	$15,000	12%	$1,800	$90
(271)	308 S. Union	Residence	$2,900,121	$32,916	12%	$3,950	$197
(272)	309 S. Union	Residence	$1,302,131	$14,779	12%	$1,774	$89
(273)	311 S. Union	Residence	$1,321,547	$15,000	12%	$1,800	$90
(274)	313 S. Union	Residence	$1,388,161	$15,756	12%	$1,891	$95
(275)	314 S. Union	Residence	$2,900,121	$32,916	12%	$3,950	$197
(276)	315 S. Union	Residence	$1,169,561	$13,275	12%	$1,593	$80
(277)	316 S. Union	Residence	$2,231,215	$25,324	12%	$3,039	$152
(278)	317 S. Union	Residence	$1,472,243	$16,710	12%	$2,005	$100
(279)	319 S. Union	Residence	$2,178,485	$24,726	12%	$2,967	$148
(280)	320 S. Union	Residence	$2,231,215	$25,324	12%	$3,039	$152
(281)	322 S. Union	Residence	$2,900,121	$32,916	12%	$3,950	$197
(282)	106 N. Lee	South Block/Glo 360	$5,025,000	$57,034	12%	$6,844	$342
(283)	115 N. Lee	Residence (Unit BH200)	$375,677	$4,264	12%	$512	$26
(284)	115 N. Lee	Residence (Unit BH201)	$486,933	$5,527	12%	$663	$33
(285)	115 N. Lee	Residence (Unit BH202)	$533,924	$6,060	12%	$727	$36
(286)	115 N. Lee	Residence (Unit BH203)	$887,135	$10,069	12%	$1,208	$60
(287)	115 N. Lee	Residence (Unit BH204)	$479,853	$5,446	12%	$654	$33
(288)	115 N. Lee	Residence (Unit BH205)	$455,011	$5,164	12%	$620	$31
(289)	115 N. Lee	Residence (Unit BH206)	$456,082	$5,177	12%	$621	$31
(290)	115 N. Lee	Residence (Unit BH207)	$900,847	$10,225	12%	$1,227	$61
(291)	115 N. Lee	Residence (Unit BH208)	$456,082	$5,177	12%	$621	$31
(292)	115 N. Lee	Residence (Unit BH209)	$459,423	$5,214	12%	$626	$31
(293)	115 N. Lee	Residence (Unit BH210)	$479,853	$5,446	12%	$654	$33
(294)	115 N. Lee	Residence (Unit BH211)	$550,885	$6,253	12%	$750	$38
(295)	115 N. Lee	Residence (Unit BH212)	$529,960	$6,015	12%	$722	$36
(296)	115 N. Lee	Residence (Unit BH213)	$899,709	$10,212	12%	$1,225	$61
(297)	115 N. Lee	Residence (Unit BH300)	$484,457	$5,499	12%	$660	$33
(298)	115 N. Lee	Residence (Unit BH301)	$740,219	$8,401	12%	$1,008	$50
(299)	115 N. Lee	Residence (Unit BH302)	$926,944	$10,521	12%	$1,262	$63
(300)	115 N. Lee	Residence (Unit BH303)	$603,659	$6,852	12%	$822	$41
(301)	115 N. Lee	Residence (Unit BH304)	$501,847	$5,696	12%	$684	$34
(302)	115 N. Lee	Residence (Unit BH305)	$905,656	$10,279	12%	$1,234	$62

(303)	115 N. Lee	Residence (Unit BH400)	$984,509	$11,174	12%	$1,341	$67
(304)	115 N. Lee	Residence (Unit BH401)	$1,036,467	$11,764	12%	$1,412	$71
(305)	115 N. Lee	Residence (Unit BH402)	$1,343,608	$15,250	12%	$1,830	$91
(306)	115 N. Lee	Residence (Unit BH403)	$456,082	$5,177	12%	$621	$31
(307)	115 N. Lee	Residence (Unit BH404)	$470,581	$5,341	12%	$641	$32
(308)	115 N. Lee	Residence (Unit BH405)	$482,625	$5,478	12%	$657	$33
(309)	115 N. Lee	Residence (Unit BH406)	$1,124,038	$12,758	12%	$1,531	$77
(310)	115 N. Lee	Residence (Unit BH407)	$1,063,607	$12,072	12%	$1,449	$72
(311)	115 N. Lee	Residence (Unit BH501)	$916,541	$10,403	12%	$1,248	$62
(312)	115 N. Lee	Residence (Unit BH502)	$887,499	$10,073	12%	$1,209	$60
(313)	115 N. Lee	Residence (Unit BH503)	$934,279	$10,604	12%	$1,272	$64
(314)	115 N. Lee	Residence (Unit BH504)	$887,499	$10,073	12%	$1,209	$60
(315)	125 N. Lee	Residence (Unit DH201)	$947,642	$10,756	12%	$1,291	$65
(316)	125 N. Lee	Residence (Unit DH202)	$879,165	$9,979	12%	$1,197	$60
(317)	125 N. Lee	Residence (Unit DH203)	$830,499	$9,426	12%	$1,131	$57
(318)	125 N. Lee	Residence (Unit DH204)	$899,392	$10,208	12%	$1,225	$61
(319)	125 N. Lee	Residence (Unit DH205)	$883,768	$10,031	12%	$1,204	$60
(320)	125 N. Lee	Residence (Unit DH206)	$603,458	$6,849	12%	$822	$41
(321)	125 N. Lee	Residence (Unit DH207)	$530,496	$6,021	12%	$723	$36
(322)	125 N. Lee	Residence (Unit DH208)	$555,660	$6,307	12%	$757	$38
(323)	125 N. Lee	Residence (Unit DH209)	$551,911	$6,264	12%	$752	$38
(324)	125 N. Lee	Residence (Unit DH210)	$493,281	$5,599	12%	$672	$34
(325)	125 N. Lee	Residence (Unit DH211)	$423,219	$4,804	12%	$576	$29
(326)	125 N. Lee	Residence (Unit DH300)	$1,313,812	$14,912	12%	$1,789	$89
(327)	125 N. Lee	Residence (Unit DH301)	$612,560	$6,953	12%	$834	$42
(328)	125 N. Lee	Residence (Unit DH303)	$828,837	$9,407	12%	$1,129	$56
(329)	125 N. Lee	Residence (Unit DH304)	$890,776	$10,110	12%	$1,213	$61
(330)	125 N. Lee	Residence (Unit DH305)	$814,651	$9,246	12%	$1,110	$55
(331)	125 N. Lee	Residence (Unit DH306)	$510,476	$5,794	12%	$695	$35
(332)	125 N. Lee	Residence (Unit DH307)	$566,732	$6,432	12%	$772	$39
(333)	125 N. Lee	Residence (Unit DH401)	$1,028,908	$11,678	12%	$1,401	$70
(334)	125 N. Lee	Residence (Unit DH402)	$968,384	$10,991	12%	$1,319	$66
(335)	125 N. Lee	Residence (Unit DH403)	$485,635	$5,512	12%	$661	$33
(336)	125 N. Lee	Residence (Unit DH404)	$452,411	$5,135	12%	$616	$31
(337)	125 N. Lee	Residence (Unit DH405)	$466,941	$5,300	12%	$636	$32
(338)	125 N. Lee	Residence (Unit DH406)	$636,973	$7,230	12%	$868	$43
(339)	125 N. Lee	Residence (Unit DH407)	$487,821	$5,537	12%	$664	$33
(340)	125 N. Lee	Residence (Unit DH408)	$1,068,046	$12,122	12%	$1,455	$73
(341)	125 N. Lee	Residence (Unit DH409)	$1,267,578	$14,387	12%	$1,726	$86
(342)	125 N. Lee	Residence (Unit DH501)	$896,668	$10,177	12%	$1,221	$61
(343)	125 N. Lee	Residence (Unit DH502)	$863,768	$9,804	12%	$1,176	$59
(344)	125 N. Lee	Residence (Unit DH503)	$982,212	$11,148	12%	$1,338	$67
(345)	125 N. Lee	Residence (Unit DH504)	$1,019,186	$11,568	12%	$1,388	$69
(346)	106 S. Lee	Residence	$1,607,512	$18,245	12%	$2,189	$109
(347)	107 S. Lee	Residence	$1,353,798	$15,366	12%	$1,844	$92
(348)	109 S. Lee	Commercial	$1,748,947	$19,851	12%	$2,382	$119
(349)	110 S. Lee	Architect	$2,206,512	$25,044	12%	$3,005	$150
(350)	111 S. Lee	Residence	$2,206,512	$25,044	12%	$3,005	$150
(351)	113 S. Lee	Residence	$1,762,795	$20,008	12%	$2,401	$120
(352)	115 S. Lee	Residence	$899,974	$10,215	12%	$1,226	$61
(353)	116 S. Lee	Residence	$2,170,023	$24,630	12%	$2,956	$148
(354)	117 S. Lee	Residence	$2,170,023	$24,630	12%	$2,956	$148
(355)	118 S. Lee	Residence	$1,411,174	$16,017	12%	$1,922	$96
(356)	120 S. Lee	Residence	$1,350,436	$15,327	12%	$1,839	$92
(357)	201 S. Lee	Residence	$4,732,779	$53,717	12%	$6,446	$322
(358)	203 S. Lee	Residence	$1,808,674	$20,528	12%	$2,463	$123
(359)	205 S. Lee	Residence	$1,281,874	$14,549	12%	$1,746	$87
(360)	206 S. Lee	Residence	$1,797,907	$20,406	12%	$2,449	$122
(361)	207 S. Lee	Residence	$1,815,422	$20,605	12%	$2,473	$124
(362)	208 S. Lee	Residence	$980,237	$11,126	12%	$1,335	$67
(363)	209 S. Lee	Residence	$4,037,089	$45,821	12%	$5,499	$275
(364)	210 S. Lee	Residence	$1,630,718	$18,509	12%	$2,221	$111
(365)	211 S. Lee	Residence	$1,550,886	$17,603	12%	$2,112	$106

(366)	212 S. Lee	Residence	$1,392,738	$15,808	12%	$1,897	$95
(367)	213 S. Lee	Residence	$1,888,929	$21,439	12%	$2,573	$129
(368)	214 S. Lee	Residence	$1,948,581	$22,116	12%	$2,654	$133
(369)	215 S. Lee	Residence	$1,939,043	$22,008	12%	$2,641	$132
(370)	217 S. Lee	Residence	$1,297,384	$14,725	12%	$1,767	$88
(371)	218 S. Lee	Residence	$980,237	$11,126	12%	$1,335	$67
(372)	219 S. Lee	Residence	$1,870,246	$21,227	12%	$2,547	$127
(373)	220 S. Lee	Residence	$2,167,685	$24,603	12%	$2,952	$148
(374)	221 S. Lee	Residence	$1,607,755	$18,248	12%	$2,190	$109
(375)	223 S. Lee	Residence	$1,195,701	$13,571	12%	$1,629	$81
(376)	224 S. Lee	Residence	$5,061,839	$57,452	12%	$6,894	$345
(377)	225 S. Lee	Residence	$826,857	$9,385	12%	$1,126	$56
(378)	226 S. Lee	Residence	$1,294,414	$14,692	12%	$1,763	$88
(379)	110 S. Fairfax	Burke & Herbert Bank	$8,300,000	$94,205	12%	$11,305	$565
(380)	112 S. Fairfax	Bank parking lot	$1,131,808	$12,846	12%	$1,542	$77
(381)	117 S. Fairfax	Offices	$2,062,314	$23,407	12%	$2,809	$140
(382)	118 S. Fairfax	Burke & Herbert office	$1,272,075	$14,438	12%	$1,733	$87
(383)	119 S. Fairfax	Freed Railroad	$1,321,166	$14,995	12%	$1,799	$90
(384)	120 S. Fairfax	Burke & Herbert office	$1,787,802	$20,292	12%	$2,435	$122
(385)	121 S. Fairfax	Commerical	$1,454,316	$16,506	12%	$1,981	$99
(386)	122 S. Fairfax	Residence	$3,378,316	$38,344	12%	$4,601	$230
(387)	124 S. Fairfax	Residence	$2,790,314	$31,670	12%	$3,800	$190
(388)	125 S. Fairfax	Skincare	$1,369,310	$15,542	12%	$1,865	$93
(389)	126 S. Fairfax	Residence	$1,986,249	$22,544	12%	$2,705	$135
(390)	127 S. Fairfax	Monday's Child	$1,098,471	$12,468	12%	$1,496	$75
(391)	131 S. Fairfax	Residence	$1,019,258	$11,569	12%	$1,388	$69
(392)	133 S. Fairfax	Residence	$910,428	$10,333	12%	$1,240	$62
(393)	135 S. Fairfax	Residence	$902,362	$10,242	12%	$1,229	$61
(394)	137 S. Fairfax	Residence	$857,167	$9,729	12%	$1,167	$58
(395)	139 S. Fairfax	Enchanted Florist	$677,744	$7,692	12%	$923	$46
(396)	**TOTAL PER YEAR**	**316 residential and 79 commercial properties**	**$757,118,546**	**$8,593,295**		**$1,031,195**	**$51,560**
(397)	**TOTAL OVER 100 YEARS**						**$5,155,977**

Sources and Notes:

Column (a)-(d): Columns (a) - (d) of Table 2.

Column (e) : According to R. Lienchenko, N. Coulson, & D. Listokin, "HIstoric Preservation and Residential Property Values," *Urban Studies* (2001), location within a designated historic distric enhances a property's value between 5% and 20%, with federally-recognized districts having lthe largest effect. Waterfront Park is a prominent component of Alexandria's federally-designated Old and Historic District, which runs from Hunting Creek on the south to Bashford Lane on the north and from the Potomac River on the east to the King Street Metro station on the west ("Old & Historic Alexandria and the Parker Gray Districts and One Hundred Year Old Buildings" at *alexandriava.gov* , accessed 10/23/2025). This analysis assumes that Waterfront Park accounts for 12% of the value of properties within 500 feet of the proposed pump station within the park.

Column (f): Column (e) * Column d)

Column (g): Coulmn (f) * 5%. Conservatively, this analysis assumes that location of the pump station within Waterfront Park would reduce the property-enhancing value of the historic distict by 5% for properties within 500 feet of the proposed location.

Row (396): sum of rows (1) - (395).

Row (397) : Row (396) * 100. 100 years is assumed lifetime of the pump station.

Table 4

Loss of City Property Tax Revenues from Reducing Water Views from 39 Properties Near Waterfront Park

Views of the Potomac River, its shoreline, and activities on and around the river provide some of the most distinctive elements of Alexandria's unique atmosphere for both visitors and residents. City policy has long prioritized the preservation of these vistas and the open spaces that preserve them.[1]

While providing public enjoyment, these views also enhance the value of residential and commercial properties near the river. Statistical research[2] on cities similar to Alexandria has documented that water views substantially increase property assessments. As a large, tall, solid concrete structure, the proposed pump station would partially block current water views from adjacent properties.

Table 4 applies this research to calculate the City's loss in property tax revenues from reduced views of the Potomac River from 22 residential and 17 commercial properties located near the park.

The financial loss to the City calculated in Table 4 is $10 million.

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[1] *Open Space Master Plan: Updated Implementation Strategy A Plan for Action 2017-2026* (https://www.alexandriava.gov/parks/project/open-space-planning#2017UpdatedImplementationStrategy), p. 38; *Alexandria Waterfront Small Area Plan* (https://www.aiava.org/wp-content/uploads/2016/09/WaterfrontPlanCurrent_rfs.pdf), pp. 18-19.

[2] For example: D. Wyman & E. Worzala, "Dockin' USA-A Spatial Hedonic Valuation of Waterfront Property," *Journal of Housing Research* (2020); S. Nicholls & J. Crompton, "The Effect of Rivers, Streams, and Canals on Property Values," *River Research and Applications* (2017); O. Smarasinghe & B. Sharp, "The Value of a View," *New Zealand Economic Papers (*2008); N. Miller, J. Gabe, J., & M. Sklarz, "The Impact of Waterfront Location on Residential Home Values Considering Flood Risks," *Journal of Sustainable Real Estate* (2019).

Table 4

Loss in City Property Tax Revenues from Reducing Water Views from 39 Properties Near Waterfront Park

	(a) Address	(b) Current Occupant	(c) Assessed Value of Property	(d) Annual City Revenues from 1.135% City Property Tax	(e) % of Tax Revenue Attributable to Current Water View	(f) Annual Property Tax Revenue Attributable to Water View	(g) Estimated % Reduction of Current Water View by Pump Station in Waterfront Park	(h) Reduction in City Annual Property Tax Revenue from Reduced View
(1)	I Prince	Vacant (American Medical Group Assoc.)	$6,900,000	$78,315	44%	$34,459	75%	$25,844
(2)	2 Prince	Vacant (Bike Shop/Taco Restaurant)	$746,926	$8,478	44%	$3,730	60%	$2,238
(3)	6 Prince	Misha's Coffee	$1,014,904	$11,519	10%	$1,152	60%	$691
(4)	10 Prince	Clare Locke	$2,682,653	$30,448	10%	$3,045	50%	$1,522
(5)	100 Prince	Residence	$1,524,426	$17,302	10%	$1,730	35%	$606
(6)	102 Prince	Residence	$1,269,782	$14,412	10%	$1,441	35%	$504
(7)	103 Prince	Residence	$1,134,069	$12,872	10%	$1,287	20%	$257
(8)	104 Prince	Residence	$1,224,657	$13,900	10%	$1,390	30%	$417
(9)	105 Prince	Residence	$1,106,565	$12,560	10%	$1,256	15%	$188
(10)	106 Prince	Residence	$1,388,203	$15,756	10%	$1,576	30%	$473
(11)	107 Prince	Residence	$1,805,832	$20,496	10%	$2,050	20%	$410
(12)	108 Prince	Residence	$2,118,589	$24,046	10%	$2,405	15%	$361
(13)	109 Prince	Residence	$1,726,968	$19,601	10%	$1,960	20%	$392
(14)	110 Prince	Residence	$1,046,503	$11,878	10%	$1,188	25%	$297
(15)	111 Prince	Residence	$1,872,072	$21,248	10%	$2,125	10%	$212
(16)	112 Prince	Residence	$1,183,582	$13,434	10%	$1,343	20%	$269
(17)	113 Prince	Residence	$1,852,349	$21,024	10%	$2,102	5%	$105
(18)	114 Prince	Residence	$1,620,010	$18,387	10%	$1,839	20%	$368
(19)	10 Duke	Cooper Mill	$2,902,497	$32,943	10%	$3,294	5%	$165
(20)	1 King	Lot foot of King	$2,272,396	$25,792	44%	$11,348	20%	$2,270

(21)	2 King	Vacant land	$539,327	$6,121	44%	$2,693	20%	$539
(22)	6 King	Mai Thai	$4,500,000	$51,075	10%	$5,108	20%	$1,022
(23)	1 Cameron	Torpedo Factory/restaurant	$7,595,860	$86,213	44%	$37,934	10%	$3,793
(24)	200 Strand	Old Dominion Boat Club	$8,300,000	$94,205	44%	$41,450	20%	$8,290
(25)	203 Strand Street	Chadwick's	$3,580,000	$40,633	10%	$4,063	40%	$1,625
(26)	205 Strand Street	Clare Locke	$1,197,241	$13,589	10%	$1,359	10%	$136
(27)	206 Strand Street	Parking lot	$1,194,486	$13,557	44%	$5,965	5%	$298
(28)	210 Strand Street	Parking lot	$195,946	$2,224	44%	$979	5%	$49
(29)	225 Strand Street	Residence (Watermark #201)	$2,765,878	$31,393	44%	$13,813	20%	$2,763
(30)	225 Strand Street	Residence (Watermark #301)	$3,072,748	$34,876	44%	$15,345	20%	$3,069
(31)	225 Strand Street	Residence (Watermark #305)	$2,939,843	$33,367	44%	$14,681	20%	$2,936
(32)	225 Strand Street	Residence (Watermark #401)	$3,483,619	$39,539	44%	$17,397	20%	$3,479
(33)	225 Strand Street	Residence (Watermark #405)	$3,564,389	$40,456	44%	$17,801	20%	$3,560
(34)	225 Strand Street	Residence (Watermark #501)	$3,861,535	$43,828	44%	$19,284	20%	$3,857
(35)	225 Strand Street	Residence (Watermark #503)	$2,893,380	$32,840	44%	$14,450	20%	$2,890
(36)	225 Strand Street	Residence (Watermark #505)	$3,564,389	$40,456	44%	$17,801	20%	$3,560
(37)	106 S. Union	Virtue Feed & Grain	$5,815,000	$66,000	10%	$6,600	35%	$2,310
(38)	110 S. Union	Strand Building	$5,335,000	$60,552	44%	$26,643	50%	$13,321
(39)	220 S. Union	Hotel Indigo	$20,485,000	$232,505	44%	$102,302	5%	$5,115
(40)	**TOTAL PER YEAR**	**22 residential and 17 commercial properties**	**$122,276,624**	**$1,387,840**	--	**$446,388**	--	**$100,202**
(41)	**TOTAL OVER 100 YEARS**							**$10,020,205**

Sources and Notes:

Columns (a)-(d): Columns (a-d) of Table 2. Includes properties visually identified by the authors as having a water view likely to be blocked by the pump station in Waterfront Park, based on Mathew Landes, *Waterfront Flood Mitigation Project Discussion, Draft Deliberative Pre-Decisional,* Old Dominion Boat Club and Old Town Civic Association, slides dated September

Column (e): According to D. Wyman & E. Worzala, "Dockin' USA - A Spatial Hedonic Valuation of Waterfront Property," *Journal of Housing Research* (020) and O. Smarasinghe & B. Sharp, "The Value of a View," *New Zealand Economic Papers (* 2008)], a partial water view adds 10% to the price of a property, while a wide water view adds at least 44%.

Column (f): Column (d) * Column (e).

Column (g): Visually estimated at street level by the authors.

Column (h): Column (f) * Column (g).

Row (40): sum of rows (1) - (39).

Row (41): Row (40) * 100. 100 years is assumed lifetime of the pump station.

Table 5

Loss in City Sales Tax Revenues from Reducing the Waterfront's Attraction of Visitor Spending

Visitors to Alexandria spend more than $1 billion annually in the city's restaurants, hotels, and retail stores. That activity, in turn, generates $79 million per year in the City's tax revenues through a 5% levy on restaurant food, a variable amount on alcoholic beverages (collected through business license fees), 6.5% plus $1.25 per night on lodging, and 1.0 on retail sales.[1]

Statistical research[2] on cities similar to Alexandria has established that parks attract additional tourists to visit and induce them to stay longer, resulting in increases in taxable spending. This effect is particularly strong in heavily-touristed areas, such as the lower King Street and Waterfront area, where crowding in limited open space discourages strolling, consuming carry-out food, and window shopping.

Table 5 applies this research to calculate the City's loss in sales tax revenues paid by daily and overnight visitors that would be triggered by the proposed pump station's reduction in the size and attractiveness of Waterfront Park.

The financial loss to the City calculated in Table 5 is $4.6 million.

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[1] *Visit Alexandria Fiscal Year 2025 Annual Report*, p. 3; *FY2026 Approved Tax Rates and Fees for Major Revenue Sources* (updated October 17, 2025), at alexandriava.gov/taxes/tax-rates (accessed December 8, 2025); *City of Alexandria FY 2025 Proposed Operating Budget and CIP Budget Document* at *alexandriava.gov/sites*, Table 7.1.

[2] For example: D. Archer, "Urban Parks and Tourism," *Annals of Leisure Research* (2006); M. Jansen-Verbeke, "Urban Recreation and Tourism: Physical Planning Issues," *Tourism Recreation Research* (2014); J. Ding et al., "Linking Urban Forests and Urban Tourism: A Case of Savannah, Georgia," *Tourism Analysis* (2010); T. Terkenli et al., "Recreational Use of Urban Green Infrastructure: The Tourist's Perspective," *The Urban Forest* (Springer, 2017); C. Konijnendijk et al., *Benefits of Urban Parks: A Systematic Review* (International Federation of Parks and Recreation Administration, 2013); M. Selby, "Geographies of Tourism and the City," *Handbook of Tourism Geographies* (Routledge, 2012); J. Clinton et al., *The Economic Benefit of Parks in New York City* (Trust for Public Lands, 2022).

Table 5
Loss in City Sales Tax Revenues from Reducing the Waterfront's Attraction of Visitor Spending

		Taxable Spending in Alexandria on...			
		Transient Lodging	Restaurant Food	Retail Sales	Total
(1)	Annual Visitor Spending in Alexandria				$1,016,000,000
(2)	Annual City Consumption Tax Revenues in 3 Visitor-Related Categories	$13,822,126	$25,916,487	$38,874,730	$78,613,344
(3)	% of these City Consumption Tax Revenues Attracted or Encouraged by the Waterfront Area including the Park	33%	10%	5%	--
(4)	Annual City Sales Tax Revenues Attributable to the Waterfront Area including the Park	$4,607,371	$2,591,649	$1,943,737	$9,142,756
(5)	% Reduction in Visitor Spending Attributable to Reduced Attractiveness of the Waterfront Area from a Pump Station in Waterfront Park	0.5%	0.5%	0.5%	--
(6)	**TOTAL LOST REVENUE PER YEAR**	**$23,037**	**$12,958**	**$9,719**	**$45,714**
(7)	**TOTAL OVER 100 YEARS**				**$4,571,378**

Sources and Notes:

Row (1): Visit Alexandria, *Fiscal year 2025 Annual Report* , p. 3.

Row (2): Calculated from *City of Alexandria FY 2025 Proposed Operating and CIP Budget Documents,* p. 7.1 (*alexandriava.gov/sites/default/files/2024-2* , accessed October 30, 2025).

Row (3): Assumption reflecting the prevalence of Old Town and Waterfront businesses among members of Visit Alexandria (*Visit Alexandria Fiscal year 2025 Annual Report,* pp. 12-13) and the statement by Visit Alexandria's Board Chair that one of the organization's priorities for FY 2026 is "an expanded neighborhood initiative to spread the positive effects of tourism across the city" ("Visit Alexandria Announces $1 Billion in Visitor Spending and Unveils Bold 5-Year Strategic Plan at Annual Meeting," *Press Release, September 25, 2025* at *visitalexandria.com*).

Row (4): Row (2) * Row (3).

Row (5): assumption reflecting examples such as the following of businesses whose products or location make their sales especially dependent on waterfront amenities including the park:

-- Carry-out food businesses close to Waterfront Park: Misha's Coffee, Ben & Jerry's Ice Cream, Kilwin's Ice Cream, Pop's Ice Cream, Ben & Jerry's Ice Cream, Union Sandwich Co., Alexandria Cupcake, Zen Press Juice,

-- Other restaurants close to Waterfront Park or with water views: Chadwick's, Cooper Mill, Ada's on the River, Barca's, Vola's, Blackwall Hitch, Chart House, Mai Tai, Virtue Feed and Grain, Café du Soleil, Emmy Squared, Kisso Asian Bistro. Bugsy's Pizza, Landini Brothers, Warehouse, Il Porto, Daniel O'Connell's Irish Pub, Sonoma Cellars, Bollywood, Lady Camilla Pastry and Tearoom.

--Overnight accomodations near the waterfront: Hotel Indigo, Alexandrian Hotel, Morrision House, Archer Hotel, Hotel Heron, AirB&Bs.

--Retailers and service firms with substantial sales to visitors: Potomac Water Taxi/City Cruises, Tall Ship Providence, Torpedo Factory, Old Town Shop, King Street Souvenirs, Manumism Tour Company, Alexandria Colonial Tours, Spice and Tea Exchange, Paper Source, Lou Lou's, Comfort One Shoes, Today's Cargo, Ten Thousand Villages, Boxwood, Red Barn Mercantile, Shop Made in VA.

Row (6): Row (4) * Row (5).

Row (7): Row (6) * 100.

Table 6

Increased City Expenditures to Replace Recreation Services Lost by Reducing the Size and Attractiveness of Waterfront Park

For FY 2026, the City has allocated nearly $35 million to its Department of Recreation, Parks and Cultural Activities to provide recreational opportunities, including those in Waterfront Park.[1] A pump station in the park would reduce the availability and attractiveness of open space for activities that include walking, running, bicycling, dog walking, picnics, and special events.

This reduction would be especially significant for many limited-income, recent immigrant, and race/ethnic minority residents who visit the City's waterfront green space in large numbers in part because of less abundant recreational opportunities in their own homes (e.g., in high-rise apartment buildings) and neighborhoods.[2]

Statistical research[3] on cities similar to Alexandria has established that the size and characteristics of urban parks affect the number of recreational users and their amount of use. The more space, amenities, and attractive scenery a park offers, the better it serves the recreational needs of community residents. Conversely, when limited space and reduced attractiveness limits park users' enjoyment , a park will attract fewer users and diminish their recreational use.

Table 6 applies this research to measure the loss imposed by an in-park pump station of recreational services provided by Waterfront Park to Alexandria residents. Equivalently, for Alexandria to maintain the current level of resident recreation, City expenditures on recreational services would have to increase by this amount to offset these losses.

The financial loss to the City calculated in Table 6 is $5.4 million.

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[1] *City of Alexandria FY 2025 Proposed Operating Budget and CIP Budget Document* at alexandriava.gov/sites, Table 7.1.

[2] *2025 Recreation Parks and Cultural Affairs Needs Assessment* at alexandriava.gov/rpca/rpca-neeeds-assessment.

[3] For example: *2024 Engagement With Parks Report* (National Parks and Recreation Association, 2024); D. Klenosky et al., "*Factors that Attract and Repel Visitation to Urban Recreation Sites* (U.S. Forest Service, 2008); T. Zheng et al., "Visitors Perceptions Based on Five Physical Senses of Ecosystem Services of Urban Parks from the Perspective of Landsense Ecology," *International Journal of Sustainable Development & World Ecology* (2020); J. Zhu et al., "Vitality of Urban Parks and its Influencing Factors from the Perspective of Recreational Service Supply, Demand, and Spatial Links," *International Journal of Environmental Journal and Public Health* (2020); R. Rosenberger et al, "Attitudes, Willingness to Pay, and Stated Values for Recreation Use Fees at an Urban Proximate Forest," *Journal of Forest Economics* (2012).

Table 6
Increased City Expenditures to Replace Recreation Services Lost by Reducing the Size and Attractiveness of Waterfront Park

	(a)	(b)	(c)	(d)			
		Recreational Activity					
		Walking, Hiking, or Running	Bicycle Riding	Dog Walking	Picnicking	Other	Total
(1)	Per-Visit User Willingness to Pay	$1.00	$0.10	$2.50	$5.00	$2.50	
(2)	Estimated Annual User Visits by Alexandria Residents	11,020	11,020	11,020	11,020	11,020	55,100
(3)	Value of Total Annual Park Recreational Services	$11,020	$1,102	$27,550	$55,100	$27,550	
(4)	Assumed Reduction in Recreational Quality	33%	10%	33%	50%	50%	
(5)	Loss in Recreational Willingness to Pay	$3,670	$110	$9,182	$27,550	$13,775	
(6)	**TOTAL LOSS PER YEAR**	**$3,670**	**$110**	**$9,182**	**$27,550**	**$13,775**	**$54,287**
(7)	**TOTAL OVER 100 YEARS**						**$5,428,728**

Sources and Notes:

Row (1): P. Harnik & J. Crompton, "Measuring the Total Economic Value of a Park System to a Community," *Managing Leisure* (2014) , Table 4, adapted to the facilities of Waterfront Park.

Row (2): In the absence of data on actual users of Waterfront Park, these figures conservatively assume 250 park users each day on Saturdays, Sundays, and holidays (124 days per year) and 100 park users on remaining days (241 days per year), and divide these users equally among the five recreational activities.

Row (3): Row (2) * Row (1).

Row (4): Estimated based on pump station designs presented in Matthew Landes, *Waterfront Flood Mitigation Project Discussion, Draft Deliberative Pre-Decisional* , Old Dominion Boat Club and Old Town Civic Association, slides dated September 4, 2025. The pump station is assumed to reduce the size of the park by one-third (see Table 2), reduce the visual connection of the park to the historic district (see Table 3), and partially block water views from within the park (see Table 4).

Row (5): Row (3) * Row (4).

Row (6): same as row (5)

Row (7): Row (6) * 100. 100 years is the assumed lifetime of the pump station.

Table 7

Increased City Expenditures to Replace Health Services Lost by Reducing the Size and Attractiveness of Waterfront Park

Annually, the City spends more than $11 million through its Department of Health and other programs to promote the physical and mental health of its residents.[1] Trends such as high rates of obesity and inactivity, increasing heat exposure through climate change, and widespread prevalence of mental health issues add urgency to those efforts. For example:

- In 2022, 27.3% of Alexandrians were categorized as obese, and 17.7% reported not routinely engaging in any physical activity.[2]
- While Alexandria has historically averaged 7 days of above-100 degree annually, this figure is projected to increase by mid-century to 41 days.[3]
- In the City's 2025 Community Health Assessment, 47% of Alexandrians identified mental health as the largest single health issue in their community.[4]

Statistical research[5] on cities similar to Alexandria has established multiple pathways by which urban green spaces promote both physical and mental health. These include: encouraging

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[1] *City of Alexandria FY 2025 Proposed Operating Budget and CIP Budget Document* at alexandriava.gov/sites, Table 7.1; *City of Alexandria VA Energy and Climate Change Action Plan,* May 2023, at alexandriava.gov/sites/default/files, accessed November 13, 2025.

[2] Center for Disease Control, *Local Data for Better Health,* at cdc.gov/places/index.html, accessed 11/13/2025.

[3] Union of Concerned Scientists, *Extreme Heat and Climate Change* at https://www.ucs.org/killer-heat-interactive-tool, accessed November 13, 2025. See also M. Schantz, *Heat Islands, Environmental Policy Commission Presentation to the Waterfront Commission*, May 2025, https://www.alexandriava.gov/sites/default/files/2025-05/wc_heat_islands_epc_may_2025.pdf , accessed 10/15/2025; *City of Alexandria VA Energy and Climate Change Action Plan,* May 2023 at alexandriava.gov/sites/default/files, accessed November 13, 2025).

[4] *The State of Health in Alexandria*, at alexandriava.gov/cites/default, accessed November 13, 2025; *Alexandria's Community Health Assessment and Community Health Improvement Plan* at https://www.alexandria.gov/news-ahd/2025-06-24.

[5] For example: M. Cohen, K. Burrowes & P. Gwam, *The Health Benefits of Parks and Their Economic Impact* (Urban Institute, 2022); J. Wilson & X. Xiao, "The Economic Value of Health Benefits Associated with Urban Park Investment," *International Journal of Environmental Research and Public Health* (2023); F. Pope et al., "Lung Cancer, Cardiopulmonary Mortality, and Long-Term Exposure to Fine Particulate Air Pollution," *Journal of the American Medical Association* (2002); T. Zupancic, T. Westmacott & M. Bulthuis,, "The Impact of Green Space on Heat and Air Pollution in Urban Communities: A Meta Narrative," *Systematic Review* (2015); Union of Concerned Scientists, "Killer Heat Interactive Tool," at https://www.ucs.org/resources/killer-heat-interactive-tool?location=alexandria-city--va; R. Buckley & P. Brough, "Economic Value of Parks via Human Mental Health," *Frontiers in Ecology*

physical activity; reducing exposure to air pollution; mitigating extreme temperatures in urban heat islands; providing calm spaces for relaxation; and reducing inter-group tensions through interactions with diverse populations.

Table 7 applies this research to calculate Alexandria residents' health benefits currently attributable to Waterfront Park in three forms: enhanced resident physical activity, improved residents' mental health, and improved air quality. To the extent that a pump station would diminish the size and amenities of Waterfront Park, these benefits would be proportionately reduced. Equivalently, for Alexandria to maintain the current level of resident health, City expenditures on health promotion would have to increase by this amount to offset these losses.

The financial loss to the City calculated in Table 7 is $1.5 million.

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and Evolution (2017); D. Cohen et al., "The Potential for Pocket Parks to Increase Physical Activity," *American Journal of Health Promotion* (2014); T. Graham & T. Glover, "On the Fence: Dog Parks in the (Un)leashing of Community and Social Capital," *Leisure Sciences* (2014); S. Griffin et al., "Physical Activity Influences in a Disadvantaged African American Community," *Health Promotion Practices* (2008); A. Kaczynski, L. Potwarka & B. Saelens, "Association of Park Size, Distance, and Features with Physical Activity in Neighborhood Parks," *American Journal of Public Health* (2008).

Table 7
Increased City Expenditures to Replace Health Services Lost by Reducing the Size and Attractiveness of Waterfront Park

	(a) Health Benefit	(b) Annual Health Benefit from Entire Waterfront Park	(c) Area in Waterfront Park	(d) % of Area Displaced by Proposed Pump Station	(e) Annual Lost Health Benefit
(1)	Increased Physical Activity	$89,478	Grass	10%	$8,948
(2)	Improved Mental Health	$18,798	Grass+ Trees	33%	$6,266
(3)	Improved Air Quality	$103	Grass+ Trees	33%	$34
(4)	**TOTAL PER YEAR**	**$108,380**	**--**	**--**	**$15,248**
(5)	**TOTAL OVER 100 YEARS**				**$1,524,808**

Sources and Notes:

Columns (a) and (b): Adapted from J. Wilson & X. Xiao, "The Economic Value of Health Benefits Associated with Urban Park Investment," *International Journal of Environmental Research and Public Health* (2023), Table 2.

Columns (c) and (d): Visually estimated at street level by the authors based on multiple pump station designs presented in Matthew Landes, *Waterfront Flood Mitigation Project Discussion, Draft Deliberative Pre-Decisional*, Old Dominion Boat Club and Old Town Civic Association, slides dated September 4, 2025.

Column (e): Column (b) * Column (d).

Row (4):sum of rows (1)-(3).

Row (5): Row (4) * 100. 100 years is the assumed lifetime of the pump station.

Table 8

Increased City Expenditures to Replace Diminished Environmental Management Services of Waterfront Park

Trees are both the symbolic and practical centerpiece of the City's efforts to address environmental degradation from climate change, air and water pollution, energy production and consumption, and uncontrolled flooding. Alexandria's *Environmental Action Plan 2040* recognizes the importance of preserving and expanding the City's tree canopy with a target ratio of 7.3 acres of publicly available open space per 1,000 residents and a goal of 40% tree canopy across the City by 2035.[1] Alexandria's current 26% tree cover falls far short of this latter goal, and also compares unfavorably to, for example, Arlington's 30% and Annapolis' 34%.[2]

Statistical research[3] on cities similar to Alexandria supports this City commitment to trees by documenting the role of trees in urban parks in sequestering carbon, filtering and removing air and water pollutants, reducing energy consumption by adjacent buildings, and absorbing rainfall to mitigate storm water flooding.

This research has been translated into a practical tool that quantifies the dollar value of the services of individual trees in uptake of CO2, storm water mitigation, air pollution reduction, energy usage reduction, and energy emissions avoidance.[4]

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[1] *City of Alexandria Environmental Action Plan 2040* at media.alexandria.gov; *Urban Forestry Full Master Plan 2009* at https://media.alexandriava.gov/docs-archives/planning/info/masterplan/mpa200900012.pdf. The City also offers residential tax credits on storm water utility fees for new tree planting and mature tree preservation (https://www.alexandriava.gov/stormwater-management/stormwater-utility-fees-and-credits-for-residential-properties)

[2] Calculated from "Our Trees Scorecard" at https://ourtrees.itreetools.org. accessed 10/17/2025.

[3] For example: L. Tryrainen et al., "Benefits and Uses of Urban Forests and Trees," *Urban Forests and Trees* (Springer, 2005); X. Song et al., "The Economic Benefits and Costs of Trees in Urban Forestry Stewardship," *Urban Forestry and Urban Greening* (2018); J. Turner-Skoff & N. Coninder, "The Benefit of Trees for Liveable and Sustainable Communities," *Plants, People, Planet* (2019); D. Pataki, M. Alberti & M. Cadenasso, "The Benefits and Limits of Urban Tree Planting for Environmental and Human Health," *Frontiers of Ecology* (2021); K. Wolf et al., "Urban Trees and Human Health," *International Journal of Environmental Research and Public Health* (2020); S. Roy, J. Byrne & C. Pickering, "A Systematic Quantitative Review of Urban Tree Benefits, Costs, and Assessment Methods Across Cities in Different Climate Zones," *Urban Forestry & Urban Greening* (2012); Y. Liu et al., "Cooling Benefits of Urban Tree Canopy," *Sustainability* (2024).

[4] U.S. Forest Service, Arbor Day Foundation, Urban & Community Forestry Society, International Society for Arborculture, and Casey Trees, *My Tree,* at https://mytree.itreetools.org accessed October 15, 2025.

Table 8 applies this tool to the 17 trees that would be removed from Waterfront Park to make way for the proposed pump station.[5] To the financial loss associated with cutting these trees, the table adds additional losses from displacement or degradation of the park's grass areas and other plants.[6] Equivalently, for Alexandria to maintain the current level of environmental services, City expenditures would have to increase by these financial amounts to offset these losses.

The financial loss to the City calculated in Table 8 is $ .2 million.

[5] Skanska JMT, *Tree and Shrub Inventory,* TI-10, 6/30/2025 (draft).

[6] For example: J. Monterio, "Ecosystem Services of Turfgrass Landscapes," *Crop Sciences* (2024); C. Reid et al., "Is All Urban Green Space the Same? A Comparison of the Health Benefits of Trees and Grass in New York City," *Journal of Environmental Research and Public Health* (2017).

Table 8

Increased City Expenditures to Replace Diminshed Environmental Management Services of Waterfront Park

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
		Current Tree or Equivalent Replacement	Annual Benefit in					
			CO2 Uptake	Storm Water Mitigation	Air Pollution Removal	Energy Useage	Energy Emissions Avoided	TOTAL
(1)	347	32 inch Willow oak	$36	$9	$29	$34	$25	$132
(2)	348	20 inch Willow oak	$18	$4	$12	$34	$25	$93
(3)	349	24.5 inch Willow oak	$18	$4	$14	$34	$25	$95
(4)	350	31 inch Willow oak	$34	$8	$27	$34	$25	$129
(5)	351	28 inch Willow oak	$22	$5	$18	$34	$25	$104
(6)	352	27 inch Hackberry spp	$2	$8	$11	$34	$25	$79
(7)	353	8 inch Serviceberry spp	$5	$1	$2	$16	$11	$35
(8)	354	2 inch Serviceberry spp	$1	$0	$0	$6	$4	$12
(9)	355	1.5 inch Black gum	$1	$0	$1	$9	$7	$18
(10)	356	14.5 inch Serviceberry spp	$8	$3	$4	$16	$11	$42
(11)	357	18.5 inch Viburnum spp	$1	$3	$4	$6	$4	$18
(12)	358	4 inch European crabapple	$2	$1	$1	$6	$4	$13
(13)	359	11 inch Viburnum spp	$7	$1	$2	$6	$4	$21
(14)	360	16 inch American sycamore	$9	$4	$10	$34	$25	$82
(15)	361	14 inch American sycamore	$8	$4	$8	$34	$25	$78
(16)	362	14 inch American sycamore	$7	$3	$7	$34	$24	$75
(17)	363	14 inch American sycamore	$5	$2	$6	$33	$24	$71
(18)	Total for Trees		$183	$62	$154	$404	$294	$1,097
(19)	Parallel Benefits from Displaced Grass Area							$1,097

(20)	**TOTAL PER YEAR**		**$2,195**
(21)	**TOTAL OVER 100 YEARS**		**$219,456**

Sources and Notes:

Column (a) and (b): Skanska JMT, *Tree and Shrub Inventory* , *TI-10* , 6/30/2025 (draft), p. 36. Inches are tree diameter.

Columns (c) - (g): Calculated based on tree size, species, and condition using peer-reviewed software developed by the U.S. Forest Service, Davy Tree, Arbor Day Foundation, Urban and Community Forestry Society, International Society for Arborculture, and Casey Trees, at *https://mytree.itreetools.org* , accessed October 15, 2025.

Column (h): sum of columns (c) - (g).

Row (18): sum of Rows (1) - (17).

Row (19): equals Row (18).

Row (20): Row (18) + Row (19).

Row (21): Row (20) * 100. 100 years is the assumed lifetime of the pump station.