

City of Alexandria, Virginia

MEMORANDUM

DATE: MARCH 23, 2016

TO: THE HONORABLE MAYOR AND MEMBERS OF CITY COUNCIL

THROUGH: MARK B. JINKS, CITY MANAGER *mj*

FROM: MORGAN ROUTT, DIRECTOR, OFFICE OF MANAGEMENT AND BUDGET *MR*

SUBJECT: BUDGET MEMO #6: RESPONSE TO COUNCIL QUESTIONS

The Office of Management & Budget issues a Budget Memo to answer questions posed by members of City Council that can be addressed in a question and answer format. Below are answers to some of the questions posed thus far.

CAPITAL IMPROVEMENT PROGRAM (Vice Mayor Wilson)

Question: What is the current estimated cost for the completion of the infrastructure portion of the City's broadband strategy?

Answer: The current estimate for the completion of a City-owned I-Net is about \$8 million, including engineering and project management and construction costs of a fiber optic backbone that would serve all City and ACPS buildings as well as the City's public safety radio network. Amortized over ten years, the annual debt service would cost around \$1 million. The City-owned network would offer gigabit (high-speed) internet service and would yield immediate expenditure savings of more than \$500,000 annually currently paid to Comcast to lease dark fiber. Dark fiber refers to the network of fiber optic strands that the City leases for use as part of the City's network; the City provides its own network equipment and staff to operate the leased fiber optic strands. To help offset these project costs, the City would look to federal E-Rate funds, revenues from the private sector for fiber leasing agreements, and future avoided costs.

The E-rate Modernization Order, adopted by the Federal Communications Commission in 2014, allowed for the program to cover up-front capital funding of municipal-based network programs like the one the City is proposing. This one-time funding source, which would need to be awarded through a competitive process, could yield over \$500,000 for the build out.

Additional ongoing revenue streams would come from leasing agreements or partnerships with middle mile and last mile Internet Service Providers (ISPs). The City can build additional conduit and fiber capacity into the I-Net at a small, marginal cost to be offered for lease on the open market for other entities to use. Depending on the leasing agreements, these revenues could be possibly \$500,000 per year. Beyond providing a direct City revenue source, these companies would also provide much needed alternative service options for City residents and businesses which can help stimulate the local economy.

Construction of a City-owned I-Net also saves the City money through future cost avoidance. The current dark fiber lease arrangement, which costs around \$500,000 annually, is known to be well below actual market rates and is unlikely at current rates to be available in the very near future, as the City is nearing the end of its current dark fiber lease. To stay with a private provider (whether dark fiber lease or a managed service model), the City would reasonably expect its annual costs to increase by several orders of magnitude in a few years. Even without new revenue streams, the avoided costs associated with the next dark fiber lease the City negotiates, would likely offset the City's cost of capital for this project, as well as provide a major benefit to the community through the provision of gigabit fiber in the City.

Attachment I is a presentation that provides additional details on the costs and benefits of constructing a City-owned I-Net

FINANCE DEPARTMENT (Vice Mayor Wilson)

Question: Are there other components of the remaining \$889,839 of spending within the Pension Administration area that can instead be funded by the applicable pension funds?

Answer: The Pension Administration budget totals \$889,839, of which \$683,957 is funded as a retirement expense. This amount is an estimate of the time spent by Pension staff actively managing the pension, including the evaluation of actuarial assumptions and investment and allocation activities. The estimated direct costs are included as an administrative fee and charged as a payroll expense to Departments for employees that are participants in that pension plan. This cost allocation strategy has been executed for the past 10 years and enables the cost of administering the pension to be more accurately distributed across the City's Departments.

The remaining \$205,882 is not considered a direct pension administration cost. This amount covers retirement planning and employee counseling as well as office supplies. Each year as part of the budget development process, staff recalculates the eligible expenditures and adjusts the administrative fee. This includes reviewing the IRS regulations, the plan documents and applicable accounting rules. It is important to note that increasing the administrative fee to cover these direct costs represents an allocation of General Fund costs to the appropriate City program, as their personnel

budgets would need to be adjusted to pay those costs. There would be no overall savings to the City's General Fund budget.

FINANCE DEPARTMENT (Vice Mayor Wilson)

Question: Is there a new practice of budgeting for vacancy factors within the departments?

Answer: The City's practice is to budget vacancy factors by department in order to reflect the true estimated personnel cost for each department. In some past years, a City-wide adjustment to the vacancy factor was placed in the Non-Departmental budget in the proposed budget and redistributed to departments in the approved budget, as was also the case with some City-wide salary and benefit adjustments. Departments calculate their vacancy factor based on historical turnover trends and expected hiring. The Finance Department is working aggressively to fill a number of vacancies, but does not expect to have done so by the end of FY 2016 and has adjusted its vacancy factor for the FY 2017 budget accordingly.

HISTORIC ALEXANDRIA (Vice Mayor Wilson)

Question: Can further details be provided on the necessity of a proposed \$61,080, 0.50 FTE, position in Historic Building and Artifact Preservation?

Answer: The City Manager's proposed FY 2017 budget includes \$61,080 to convert a 0.5 FTE Research Historian position in Historic Building and Artifact Preservation to full-time. This addition was a high priority of the Livable, Green and Prospering City Focus Area Team as this position supports initiatives across City departments, economic development partners, the media, and the general public. The current 0.5 FTE position was restored to OHA's operating budget three years ago after two full-time positions, a Public Information Officer (PIO) and a Research Historian were eliminated approximately five years ago. The position was restored at the urging of the Alexandria Archaeological Commission, Alexandria Historical Restoration and Preservation Commission, Historic Alexandria Resources Commission, and Public Records Advisory Commission.

The duties of the OHA Research Historian include working with museum directors on the development of new exhibits, educational programs, City collections and artifacts; providing accurate answers to queries on history or historic preservation to City departments such as RPCA, P&Z, BAR, and TES; providing content to economic development partners, the media, and the public; disseminating press releases and public information to promote museum attendance, heritage tourism and enhance City revenues; and developing grants, gifts and donations to support public programs and research into broad topics of Alexandria's heritage.

The first OHA Research Historian, T. Michael Miller, served the City as a full-time employee for many years and was designated an "Alexandria Living Legend" before his retirement in 2010. During his tenure as Research Historian, he was responsible for identifying the presence of the long-forgotten Freedmen's Cemetery underneath an operating gasoline station which now is now the site of the City's new

Contrabands and Freedmen Memorial. The second Research Historian and current incumbent in the position, Dr. Daniel Lee, holds his doctoral degree from the University of California at Berkeley, and also serves as OHA's PIO. Over the past two years, Dr. Lee's research has included content for the Civil War and War of 1812 commemorations, recent PBS and WETA productions, Visit Alexandria marketing programs and the current "Immigration Alexandria" project. Additionally, last year Dr. Lee submitted grants applications to the Virginia Foundation for the Humanities (VFH) and National Endowment for the Humanities (NEH) for a new, multi-year immigration initiative, and the City was awarded an \$8,000 grant from VFH to begin the project. OHA is awaiting word on the \$75,000 NEH planning application expected to be announced in June, and a supplemental implementation application to be paid over the next three years.

The workload of the OHA Research Historian has increased substantially over the past two years, well beyond the current 20 hour per week limit, as Alexandria's historical prominence and growth in tourism has increased. In supporting the request to make this position full-time, the Livable, Green and Prospering City Focus Area Team recognized the vital contributions this position makes to maintaining Alexandria's unusual history brand and the sustainability of economic development in the City.

Accurate historical research is the foundation for all public history programs and heritage services and is particularly important to municipal governments that operate museums and maintain regulated historic districts and historic preservation programs. The maintenance of an ongoing research program is a requirement of accreditation by the American Alliance of Museums (AAM), and the Office of Historic Alexandria, including all City museums and historic sites, are accredited as one of eight municipally-operated "museum systems" in the United States.

TAXES & REVENUES (Councilwoman Pepper)

Question: What is the potential impact of the advertised maximum real estate property tax on the average residential tax bill?

Answer: The advertised maximum real estate property tax rate for calendar year 2016 is \$1.073 per \$100, an increase of 3.0 cents over the FY 2016 tax rate of \$1.043. The table below provides information regarding the effect of changes to the CY 2016 real property tax rate on the average tax assessment. The average equalized value of existing residential property, including single family and condominium, is \$521,227, an increase of 2.2 percent from the previous year. Based on an increase in the average assessment, the average residential tax bill would increase by \$119. If the tax rate is increased by 1.0 cents, the impact on the average residential tax bill will be \$171. If the tax rate is increased by 2.0 cents, the impact on the average residential tax bill will be \$223. If the tax rate is increased by 3.0 cents, the impact on the average residential tax bill will be \$275.

Real Property	2015 (CY) Avg. Tax Bill \$1.043	2016 (CY) Avg. Tax Bill	Monthly Impact	Annual Impact
2016 Tax Rate \$1.043 (Assessment Increase Only)	\$5,318	\$5,436	\$10	\$119
2016 Tax Rate \$1.053 (1.0 cent Increase)	\$5,318	\$5,489	\$14	\$171
2016 Tax Rate \$1.063 (2.0 cent Increase)	\$5,318	\$5,541	\$19	\$223
2016 Tax Rate \$1.073 (3.0 cent Increase)	\$5,318	\$5,593	\$23	\$275

FINANCE DEPARTMENT (Vice Mayor Wilson)

Question: Can you please provide a breakdown of the \$3.3 million of real estate tax relief programs currently provided by the City?

Answer: The City provides three real estate tax relief programs, the Real Estate Tax Relief for Elderly and/or Totally Disabled Persons, Real Estate Tax Relief for Disabled Veterans, and Real Estate Tax Relief for Surviving Spouses of a Member of U. S. Armed Forces Killed in Action (KIA). The Real Estate Tax Relief Program for Elderly and/or Totally Disabled is currently administered on a need-based system. Need is determined by gross household income and assets, with lower income households receiving proportionately greater amounts of tax relief. Real Estate Tax Relief for Disabled Veterans and Surviving Spouses of a Member of U. S. Armed Forces Killed in Action is mandated by state law. Table 1 shows the amount of revenues foregone for these three programs and the number of participants in calendar year 2015.

Table 1: Revenues Foregone through Real Property Tax Relief Programs, 2015

Program	Revenue Foregone	Total Participants
Elderly and/or Totally Disabled	\$2,826,947	903
Disabled Veterans & Surviving Spouses of Military Killed in Action	\$499,019	85
Total	\$3,325,966	988

The Real Estate Tax Relief Program for Elderly and/or Totally Disabled Persons is a program provided by City Council and offers full or partial real estate tax exemption and deferral for property owners who are 65 years of age or older or permanently and totally disabled by November 15. Tax relief is prorated for property owners who turn 65 or become disabled between January 1 and November

- 15. The City provides tax deferral upon request to eligible participants who do not qualify for full tax exemption. Taxes exempted under the program do not have to be paid back, but taxes deferred under the program must be paid when the property changes ownership or when the last program-eligible owner dies. Deferred taxes accrue interest at a rate of five percent per year from the date of deferral until the taxes are paid in full.

To qualify, applicants must meet both basic eligibility requirements and certain income and asset limitations. In addition to the age and/or disability requirement, the basic eligibility requirements are:

1. The property for which an exemption or deferral is requested must be owned or partially owned by the applicant on January 1 of the current calendar year;
2. As of January 1 of the current calendar year, the applicant must occupy the property for which the exemption or deferral is sought as his or her sole residence and must occupy the property throughout the year.

Table 2 shows the income and asset levels and percentage of tax relief for the Tax Relief Program for Elderly and/or Totally Disabled Persons that were in effect in calendar year 2015.

Table 2: Income and Assets Requirements

Percentage of Tax Relief	Tax Exemption			Deferral
	100%	50%	25%	
Gross Combined Income Requirement*	\$40,000	\$55,000	\$72,000	\$72,000
Asset Requirement**	\$430,000	\$430,000	\$430,000	\$430,000

* Gross combined income includes the income of both spouses as well as any income in excess of \$10,000 per year of other relatives living in the home

** Asset requirement excludes home value and up to 2 acres of land

Table 3 shows the program statistics of the Elderly and/or Disabled Tax Relief program for calendar year 2015. The data indicates that 903 properties received tax relief and of that 262 properties were above the 2015 average assessed value of \$509,853. The total cost of providing tax relief for the elderly and/or totally disabled property owners were approximately \$2.8 million. Of the 352 properties that received partial relief, 11 property owners deferred their tax liability totaling \$0.03 million.

Table 3: Program Statistics for City Provided Elderly and/or Disables Tax Relief, 2015

Relief Category	Average Assessment	Count	Relief Value	Max Assessment w/in Category	No. of Properties above 2015 avg. assessment (509,853)	Total Relief Assessments above 2015 avg. assessment
25 percent	\$ 443,792	145	\$0.2 Million	\$1.1 Million	52	\$0.09 Million
50 percent	\$ 420,690	207	\$0.4 Million	\$1.5 Million	66	\$0.2 Million
100 percent	\$ 389,317	551	\$2.2 Million	\$1.3 Million	144	\$1.0 Million
Total	\$ 405,256	903	\$2.8 Million	\$1.5 Million	262	\$1.3 Million
Deferral	\$ 555,326	11	\$0.003 Million	\$0.9 Million	8	\$0.002 Million

In addition to the Real Estate Tax Relief for the Elderly and/or Totally Disabled Persons, the City also provides tax relief for two state mandated programs, Real Estate Tax Relief for Disabled Veterans and Real Estate Tax Relief for Surviving Spouses of a Member of Armed Forces Killed in Action. Beginning in 2011, the Virginia Constitution requires the General Assembly to exempt from taxation the real property of any veteran who has been rated by the U.S. Department of Veterans Affairs, or its successor agency pursuant to Federal law, to have a 100 percent service-connected, permanent, and total disability, and who occupies the real property as his/her principal place of residence. The surviving spouse of a veteran with such disability is also entitled to claim this exemption as long as the surviving spouse does not remarry and continues to occupy the primary place of residence. A veteran is considered to have a 100 percent service-connected disability if the veteran's disability is rated at 100% or if the veteran's service-connection is rated at less than 100%, but the veteran is paid at the 100% disability rate due to employability. Under either standard, the disability must be considered total and permanent. Veterans with temporary disabilities, no matter how severe, do not qualify for this program.

Beginning in 2015, the state approved legislation to provide Real Estate Tax Relief to Surviving Spouses of a Member of Armed Forces Killed in Action effective January 1, 2015. This program offers exemption to surviving spouses of any member of the armed forces of the United States who was killed in action, as determined by the U.S. Department of Defense, where the surviving spouse occupies the real property as his/her principal place of residence and has not remarried. Full tax exemption is applied to properties at or below the City's average assessed value for such year. If the property value is above the average assessed value, the portion above the average assessed value is fully taxable.

Table 4 shows statistics for this state mandated tax relief program for calendar year 2015. The data indicates that 86 properties received tax relief and of that amount 55 properties in the disabled veterans program were above the 2015 average assessed value of \$509,853. The total cost of providing tax relief for these state mandated programs was approximately \$0.5 million.

Table 4: Program Statistics for Mandatory Tax Relief Programs of Disabled Veterans & Surviving Spouses of Military Persons Killed in Action, 2015

Average Assessment	Count	Relief	Max Assessment for Category	No. of Properties over 2015 avg. assessment (509,853)	Total Relief Assessments above 2015 avg. assessment
\$600,369	86	\$0.5 Million	\$1.2 Million	55	\$0.4 Million

The Real Estate Tax Relief for Disabled Veterans and Tax Relief for Surviving Spouses of Member of the Armed Forces Killed in Action programs have no income or asset limits and City Council cannot modify the program's requirements or parameters.

ATTACHMENTS: (if any)

Attachment I – Alexandria Fiber: I-Net and FTTP

City of Alexandria, Virginia

Alexandria Fiber: I-Net and FTTP



Advantages of City-owned I-Net

- Ownership of network offers several advantages:
 - Future cost stability and certainty
 - Control over network scalability (what connects to our network and when)
 - Modernize level of service (i.e., gigabit service) to ACPS, Library and government buildings
 - Public safety radio network improved reliability
 - Incentivize additional private investment in fiber throughout the community (FTTP)
 - Generate ongoing City revenue stream via excess fiber leases

Cost of Fiber I-Net

Alexandria Fiber Network Cost Component Breakdown

Cost Component	Backbone	City Laterals	ACPS Laterals	Public Safety Radio	Estimated Cost
Engineering and Project Management	\$615,000	\$50,000	\$75,000	\$20,000	\$760,000
Construction	\$5,485,000	\$1,475,000	\$550,000	\$130,000	\$7,640,000
Total	\$6,100,000	\$1,525,000	\$625,000	\$150,000	\$8,400,000

The Numbers

- Estimated total cost of I-Net: \$8.4 million
- 10 year amortized cost: ~\$930k per year (\$1M in year 1 debt service)
- Future lease payments for dark fiber will very likely exceed our debt service costs
 - Current advertised market rates for our level of service (i.e., 2 dark fiber strands) would be in excess of \$4M annually for City and ACPS

Outside Funding Sources

- Possibly several outside funding sources to offset project costs:
 - E-Rate (upfront grant funding \$500k - \$650k) based on eligibility
 - Private leasing agreements or IRUs of extra network capacity to last-mile Internet Service Provider(s)
 - Depending on leasing agreements and tradeoffs, \$500k+ per year is within reason for future year revenues
 - Partnerships with middle mile firms to share in cost of I-Net construction
 - Wireless backhaul and institutional dark fiber industries likely interested
 - Look to leverage other fiber-connected City assets in the future with leasing rights for cellular antenna systems (DAS, etc.)

The Network

- Cost estimate assumes all undergrounded
- Incorporates significant spare conduit and fiber strand capacity
 - Two 2" conduits throughout backbone with 288 strands (upgradeable for another 1,000)
 - Robust enough to provide sufficient future scalability
- Useful life of fiber is ~25 years and conduit is 50+ years; could reinstall new fiber after 25 years for a fraction of initial cost to extend overall network life
- Ability to take full advantage of current City 10 gigabit network equipment
- City investment makes private FTTP much more possible, which in turn supports economic development and the tax base

Gigabit Speeds

Speed comparison for 2 minutes of video downloading

1 Gbps (1000 Mbps) Download Complete



240 Mbps



60 Mbps (Typical current speeds in the City)



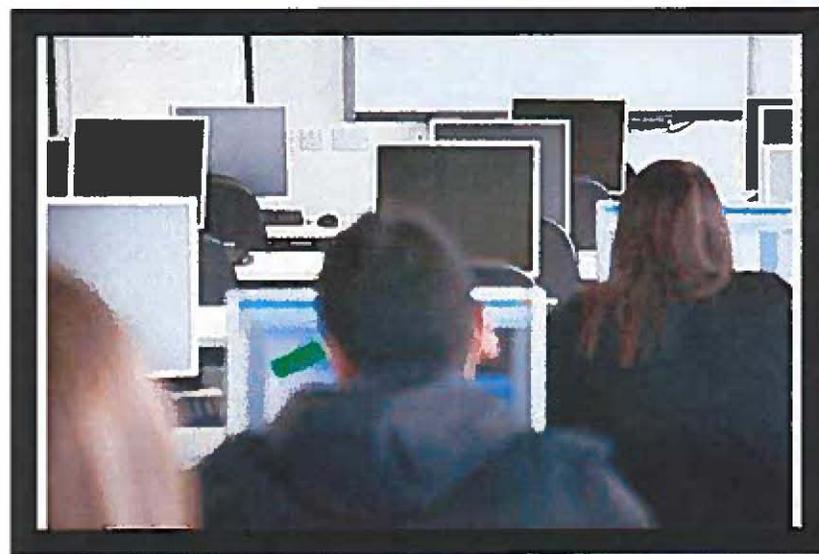
15 Mbps



*Based on downloading a full HD movie

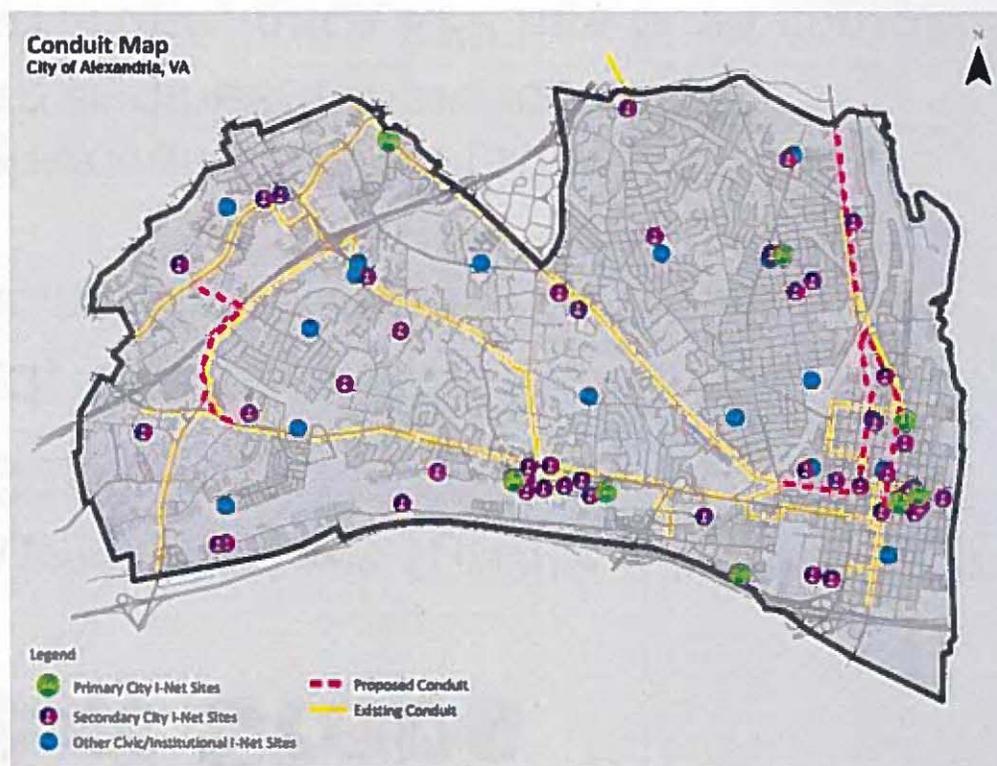
Network Potential

- Why does the current proposal call for 288 strands of fiber?
- Excess fiber provides the bandwidth that allows for a greater number of users to simultaneously experience full high-speed internet
- The more strands of fiber to City and ACPS sites, the higher likelihood of securing gigabit or better internet service for all users



A Prospective Partnership

- Our I-Net's presence in neighborhoods provides an ISP an excellent jumping off point for an FTTP network
- ISP could be a City revenue source by leasing excess dark fiber



Next Steps

- City Council considers project funding in the CIP process (spring 2016)
- If project is funded, then:
 - Procure project engineering services (spring/summer 2016)
 - Issue RFP for construction services (summer 2016; could run parallel to engineering procurement)
 - Begin project construction, once RFP has been completed and funding plan has been approved
- Continue to seek companies interested in building private fiber assets in Alexandria (ongoing)