

December 12, 2017

The Honorable Mayor Richard West and Members of City Council
City of Chesapeake, Virginia

Dear Mayor West and Members of City Council:

I am very pleased to present the recommended Chesapeake's Capital Improvement Program (CIP) for the next five years (FY 2019-2023). I have worked with staff throughout the city to identify and address the most urgent facility and infrastructure needs. While no municipality can address all its capital demands in a five-year period, I believe this plan accomplishes as much as our existing resources permit. More importantly, the proposed CIP insures Chesapeake will be prepared to successfully meet future opportunities and challenges.

Over the next five years we propose capital spending of \$490 million (nearly \$60 million more than our current five-year plan). Most new capital spending supports significant enhancements to the recreational facilities and to the transportation network (streets and bridges). Major new projects include:

- Improvement and expansion of recreational facilities \$28.6 million
- Elbow Road widening (near Virginia Beach city line) \$20.2 million
- George Washington Highway widening (Yadkin Road to Canal Drive) \$25.0 million
- Freeman Avenue Bridge construction \$25.4 million
- Mount Pleasant Road widening (second phase) \$ 9.7 million
- Centerville Bridge rehab (expand current scope) \$ 5.0 million
- Triple Decker Bridge rehabs (expand current scope) \$ 7.3 million
- Several intersection and sidewalk improvements \$ 8.4 million
- Advance Right-of-Way acquisition \$ 1.5 million

While ambitious, the plan is well within the affordability guidelines adopted by City Council. Funding for the capital plan is largely provided by available cash and borrowing capacity within the two capital lockboxes, a judicious use of city fund balances, stormwater fees, cash and borrowing capacity of the utility fund, and transportation grants administered by the Virginia Department of Transportation.

Funding for the Capital Improvement Plan is split between cash funding and the issuance of debt over five years. Approximately 54% of the capital program is financed through either city cash sources or intergovernmental grants. Cash funding is provided from current operations, the accumulation of fund balances (surpluses) from past years, and from federal and state grants. A summary of the proposed capital funding plan is noted below.

Cash from:		
City and school capital lockboxes	\$ 71.3 million	
Virginia Department of Transportation reimbursements	54.4 million	
Stormwater Fund	23.4 million	
Water and sewer fund	61.5 million	
Other city funds	55.5 million	
Total cash available for capital program	\$ 266.1 million	54.3%
Debt to be issued for:		
City projects – general government	\$87.3 million	
School projects	76.4 million	
Water and sewer projects	59.9 million	
Total debt required to fund capital program	\$ 223.6 million	45.7%

The proposed CIP meets all the city’s affordability policy targets based on the five-year revenue forecast and projected borrowings over the next decade. Targets are recommended for debt levels on borrowing for general government projects. These exclude debt and associated operations for the three enterprise funds: Water and Sewer, Stormwater, and Chesapeake Transportation System (toll roads). While the proposed CIP requires the issuance of additional debt, all affordability measures are met:

Metric	Policy	CIP Proposal
Net government debt compared to assessed value of taxable real estate in the city	Less than 3.5%	1.4% to 1.6%
Per capita general government debt	Less than \$3,000	Up to \$1,601
Annual debt service compared to general government revenue	Less than 10%	7.6% to 8.6%

While our capital assessment was comprehensive, the new CIP does not address all capital demands citizens have requested or that the city’s engineers and planners have identified. Several projects are either beyond the city’s financial capacity or the projects are at very preliminary stages and were not fully vetted. While not exhausting all available resources, the proposed CIP addresses all high priority capital projects either through borrowing or using available cash. Projects that were considered but are not immediately recommended include:

- Community swimming pools and field house,
- Extension of the Dismal Swamp Canal Trail,
- Acquiring property for a new business park,
- Road improvements for Shillelagh Road,
- Renovations to numerous school facilities identified in the Superintendent’s Proposed Capital Improvement Plan dated October 2017,
- Public Utility improvements that might be required if Aqua Virginia is acquired,
- Public Utility improvements that might be required to adequately serve the Dominion Corridor, Landings West or Williams Farm (potential industrial sites),
- Public improvements along the Dominion Corridor, and
- Flood control improvements that might feasibly address severe rain events.

In developing the proposed Capital Improvement Program, we were especially mindful of the ongoing discussions for developing a sustainable funding plan for Chesapeake Schools. Attempting to “stretch” our present funding capacity to include additional capital projects may present greater challenges in reaching the goal of sustainability for both our capital needs and operational costs.

Immediately following this transmittal letter are summaries of existing and proposed capital projects for the upcoming five years.

The proposed \$490 million Capital Improvement Plan represents the city’s commitment of resources to protect, maintain, and upgrade critical infrastructure throughout the city. The CIP requires the issuance of \$163.7 million of general obligation bonds (including short-term financing) and \$60 million of public utility revenue bonds over the next five years. The city has capacity through a combination of locked revenue and tax increment financing to fund debt service on all required GO bonds. Similarly, the Public Utilities Fund has adequate capacity to fund debt service required on its revenue bonds. The proposed CIP requires savings realized from the retirement of old debt issues be reinvested into the capital plan (via school and city capital lockboxes).

While the objective of a Capital Improvement Program is to identify facility and infrastructure needs, several projects that might start before 2023 are not included in this plan. These include projects that are either currently or will soon be under evaluation and the outcome of the evaluation cannot be predicted. Projects that may require funding in the next five years include:

- Specific projects that have been recommended or suggested by individual Council Members that have not been fully defined or approved by the full Council. Examples include recreational amenities and a field house.
- Public Improvements along Dominion Boulevard – a study recommending appropriate land uses of the area south of Cedar Road was completed last year. In order to develop a thriving mixed-use community, public investments are probably necessary. Such investments will require financing outside the scope of current capital planning.

These and other issues are likely to emerge that will require attention in future capital programs. However, the availability of resources may require prioritization and deferral of some very worthy capital projects.

The Capital Improvement Program is a five-year planning document that is reevaluated annually. In the spring when City Council considers the operating budget, it will also appropriate funds for the first year of the CIP so that city staff can implement the FY 2019 portion of the new capital plan starting July 1, 2018.

The proposed Capital Budget for FY 2019 is \$87.8 million and is financed as follows:

Cash from operating and capital funds	\$ 44,845,955
Cash from intergovernmental grants	6,146,000
Developer proffers	999,000
General obligation debt	23,200,000
<u>Revenue bonds (utility fund)</u>	<u>12,575,000</u>
Total financing plan for FY 2017	\$ 87,774,955

In summary, the Proposed Capital Improvement Program for the next five years reflects our focus on maintaining existing infrastructure, ensuring economic vitality, and addressing the capital needs of core city services. The CIP proposal addresses critical requirements while maintaining or improving metrics that impact the city's financial strength. I look forward to working with you in the coming weeks as you review and finalize the City's Capital Improvement Plan.

Sincerely,



James E. Baker
City Manager

DISCUSSION OF EXISTING CAPITAL PROJECTS

Community Facilities – we recommend continuing the existing efforts to address deferred maintenance of city facilities. Over the next five years we propose investing \$11.87 million to renew existing facilities and building components (including roofs and HVAC systems). This investment will ensure serviceability of city facilities for current and future generations. For the general facility program, we propose spending \$1.75 million during FY 2019 to:

- Replace roof at Indian River Community Center,
- Renovate restroom at Juvenile and Domestic Relations Courthouse,
- Overhaul elevators at several locations,
- Reconfigure Planning Department office space, and
- Replace carpet in main courthouse.

Similar types of work are planned throughout the next five years.

The proposed CIP continues annual funding to repair and maintain municipal parking lots and sidewalks, and to insure greater accessibility to municipal facilities for disabled persons.

The CIP includes planned funding of \$22.5 million in FY 2021 to relocate and/or rebuild the operations facilities used by Departments of Public Works and Public Utilities. Previously, council included \$13.7 million for the first phase of the project. Existing facilities continue to deteriorate and are inadequate for current operational levels. The future location of the facility remains under review.

In 2011, Council provided \$2.17 million to relocate the Solid Waste Facilities currently located on Executive Parkway. An additional \$3.3 million during FY 2019 was included in the CIP last year. While the facility remains in the design phase, estimates indicate the total cost may be as much as \$9.7 million to replace the building and adjacent compressed natural gas station. Project cost estimates have increased since the project was first identified in 2011 because of a combination of factors, including the addition of the CNG fill stations, construction inflation, and overly optimistic estimates. No additional funding is recommended for the project at this time. If more recent estimates prove accurate, it will be necessary to either reduce project scope or add \$4.25 million to the project.

Economic Development – the current CIP includes \$1.5 million towards site development of a new 76,000 square foot sciences building on the Chesapeake Campus of Tidewater Community College. Since the expansion has not been approved by the General Assembly, we now estimate the city's contribution to the project will occur in FY 2020 rather than FY 2019, as stated in the current CIP.

The current capital budget includes a project focused on protecting air space and reducing encroachment around the Naval Auxiliary Landing Field at Fentress. Currently, \$2.6 million of state funding is available along with a local match of the same amount. Separately, we will recommend an adjustment to the Fentress budget to align with available state funding. We do not expect additional state funding for the project.

Several TIF funded projects that were funded in earlier years remain underway, including:

- The strategic acquisition of real property in South Norfolk for redevelopment,
- Several projects that improve the flow of vehicular, pedestrian, and bicycle traffic and improved signage in the Greenbrier District, and
- Improvements in support of Dollar Tree expansion.

No additional funding for TIF projects is required at this time.

Education – the current CIP includes:

- Classroom additions at Oscar Smith High School \$ 6.1 million
- Facility additions required by full-day kindergarten \$ 9.1 million
- School bus and technology replacement projects \$10.0 million
- Non-routine renewals and replacements (primarily HVAC and roofs) \$54.5 million
- Modernization for existing facilities – campuses to be determined \$45.0 million

The classroom addition at Oscar Smith HS is underway and does not require additional funding. The full-day kindergarten project is also underway; however the superintendent requested and we have included an additional \$5.2 million in FY 2020 to complete the project. The school bus, technology, and non-routine renewal projects are also underway and we recommend continuation of the existing plan with new funding during FY 2023 at existing levels. Finally, the modernization project included funding over three years (2018-2020) with \$4,725,000 budgeted in 2018.

Last year, the superintendent’s capital planning document identified thirteen (13) schools that require either expansion or modernization in the next five years. The plan includes the replacement of Great Bridge Primary School which was funded in FY 2016; we anticipate construction will start by June 2018. The superintendent recommended several new projects that we recommend from the \$45 million modernization project:

- Expansion and modernization of Chittum Elementary School \$27.2 million
- Expansion of Hickory Middle School (design funded in FY 2017) \$ 5.3 million
- Full-Day Kindergarten (in addition to current allocations) \$ 5.2 million
- Improvements to athletic fieldhouses \$ 6.5 million

Design of the Hickory MS addition is now underway and construction is recommended to start in calendar year 2018. Separately, we will recommend the transfer of a portion of the “to-be-determined” school project to the Hickory MS project. The school board also requests funding for design of the Chittum Elementary modernization project in FY 2019 with construction commencing in FY 2020. Renewal of the school athletic facilities would start in FY 2019. Finally, the board requests additional funds for the full-day kindergarten program in FY 2020. A summary of the board’s plans is as follows:

<u>Project</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Hickory Middle School	\$4.7 million	\$0.5 million	none
Chittum Elementary School	none	\$2.4 million	\$24.8 million
Full-Day Kindergarten	none	none	\$11.3 million
Athletic Facility improvements	none	\$6.5 million	none

We recommend moving available funds in the \$45 million modernization project to the projects noted above. All modernization funding is provided by long-term borrowing.

Information Technology – the current CIP includes nearly \$11.0 million of funding for existing projects over the next four years. Technology projects that are currently underway include:

- The migration of legacy systems from the main-frame (fully funded);
- Broadband wireless project to connect city facilities;
- Citizen engagement and website redesign;

- Enterprise upgrades for Kronos (time and attendance), MUNIS (Human Resources/Payroll), PeopleSoft (Financials), Telestaff (Fire Department scheduling), Computer Assisted Dispatch, Laserfiche (document imaging and storage), Jail Data, and Library Operations;
- Replacement of city telephone systems with voice over internet protocol (VOIP) based system;
- Replacement of network equipment (two separate phases);
- Replacement of library technology equipment; and
- Replacement of the Fire Station Alerting System.

With the exception of additions to three projects, all existing projects are recommended for continued funding as outlined in the existing plan. The three changes recommended are as follows:

- Add installation of new release/upgrades for Laserfiche (\$100,000) during FY 2022,
- Add installation of new release/upgrades for PeopleSoft (\$400,000) also during FY 2022, and
- Accelerate Fire Station Alerting System to FY 2019 for two new stations (\$100,000 for Bowers Hill and Saint Brides).

Parks, Recreation, and Tourism – The CIP includes a continuation of projects first identified in FY 2015:

- Recreational center improvements – annual allocation of \$300,000 through FY 2029 (15 years).
- Park program improvements – also approved at \$300,000 through FY 2029.
- Athletic field improvements and expansions – annual allocation of \$380,000 through FY 2026 (12 years).
- Modifications to improve access for disabled patrons are recommended at \$75,000/year through FY 2024 (10 years).
- Parking lot improvements are recommended at \$90,000/year through FY 2024.
- Security improvements are recommended at \$40,000/year through FY 2024.

Other Parks, Recreation, and Tourism (PRT) projects:

- Conference Center renovations to replace ceilings, doors, and HVAC units and to resurface the parking area are included in the existing CIP (through FY 2021). The plan also includes an addition for storage and painting the building exterior.
- Projects funded with Open Space and Recreation Fund – we recommend continuing the program and adding \$500,000 to seventh year (FY 2023). That increases total project funding to \$7.2 million. Funding is provided from developer payments made in lieu of installing neighborhood recreational facilities.
- Bridge replacements at the Chesapeake Arboretum during FYs 2019 and 2020 as planned in the current CIP.

No other changes are recommended for existing PRT projects.

Public Safety – major public safety projects now underway include:

- Community Corrections annex to the City Jail scheduled for completion in Spring 2018.
- Saint Brides Fire Station and Police Precinct – the project is fully funded and under design, no further funding is anticipated.
- Bowers Hill Fire Station replacement – design is complete and construction should start in coming months.

- Construction of replacement fire stations at Deep Creek and Dock Landing Road are planned. The FY 2018 Capital Budget included construction for the Deep Creek station. We are recommending a two-year delay for the Dock Landing replacement; design is proposed for FY 2021 with construction occurring the following year.
- Design of two fire stations during FY 2022 – the current plan includes designing a replacement for the Battlefield Fire Station (#4) and a new fire station in the Grassfield area. No changes are proposed for the design of the two stations. Construction funding would occur after FY 2023.
- Replacement of fire vehicles – recommend continuing annual allocation of \$1.5 million (2023).
- Replace Mobile Police Command Vehicle – this project is currently funded for \$303,770, but the cost of vehicle comparable to the current vehicle is over \$400,000. The proposed capital plan provides an additional \$102,873 to ensure continued operational capacities.
- Renewal and replacement of building components are planned for the Jail and Sheriff’s Office. We recommend continuing the project for a seventh year with an additional \$600,000 during FY 2023. Plans include replacing HVAC systems, the main tower roof, security fencing and refreshing interiors.
- Jail kitchen equipment replacements continue as approved in the current CIP (final allocation during FY 2019).
- Juvenile Justice Center – the FY 2018 Capital Budget includes \$9.2 million for the city’s share of the cost of facility that is shared with the state. While City Council rejected the proposed joint venture last month, the project remains in the capital budget and deficiencies at the existing facility need attention. In the coming months, staff will recommend strategies to replace parts or all of the existing juvenile detention facility.

Public Utilities – The department continues to upgrade pump stations and replace/repair sewer lines as prescribed by the Sanitary Sewer Evaluation Studies and mandated by Department of Environmental Quality (DEQ). The department operates under a regional consent order from the DEQ that requires it to follow best management practices, control sewer overflows and limit the infiltration of stormwater into the sewer system. Public Utilities works with the Hampton Roads Sanitation District (HRSD), the regional authority that treats waste water, to ensure compliance with DEQ and federal regulations. The department is also executing long term planning and maintenance on its water treatment, storage, pumping, distribution, and sales systems.

The current CIP includes the following for the next five years:

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|---|-----------------|
| • Water projects | \$35.94 million |
| • Sewer projects | \$35.25 million |
| • Other projects (customer service and billing) | \$ 8.00 million |

Specific revisions to existing water and sewer projects are as follows:

- Sewer renewals required by DEQ regional consent order (#05-180) – the department maintains an evolving list of priority sewer replacement and rehabilitation projects. To date, we have allocated \$7.26 million to this project and planned to add another \$24.0 million through FY 2022 for a total of \$31.26 million. We now propose to shift project funding from FYs 2020 and 2021 to FY 2022 and add an additional \$7.65 million to the project. Total project funding through FY 2023 increases to \$38.91 million. Additional funding is necessary beyond FY 2023. Sewer rehabilitation will continue at a level of approximately \$9 to 10 million per year (with appropriate adjustments for inflation) to maintain the 1,100 mile sewer network. Future funding will likely fluctuate based on competing priorities.

- Automated meter reading system – the project is currently funded for \$1.4 million with an additional \$4.0 million planned in both FY 2021 and 2022. Another \$4.0 million is needed in FY 2023 to complete the project. Total project cost is estimated at \$13.4 million.
- Centerville Turnpike Loop – this project improves reliability by creating a redundant loop between the existing water lines on Centerville to the City’s Greenbrier area. Project funding plans are revised to delay \$3.5 million of work from FY 2019 to FY 2020 and add \$1.68 million to the project (also in 2020) based on revised cost data. Total project cost is revised from \$7.57 million to \$9.25 million based on the actual costs of similar projects (Battlefield – Centerville water line) currently underway in Chesapeake.
- Greenbrier Parkway Force Main (sewer) – we recommend an additional \$1.4 million to this project that was previously classified as fully funded. The project creates a loop between two existing pipelines, both of which have experienced failures. The revised cost estimates were identified during design as it became clear that the existing right-of-way was too small to install the new pipe. The additional costs include acquisition of easements for the installation and an increase in the cost of ductile iron pipe (inflation and rising commodity costs). While the project design is complete, the exact location and easement acquisitions remain unresolved
- Lake Gaston Water Treatment Plant – (a) defer membrane replacement (\$2.2 million) from FY 2020 to FY 2022 based on improved operating conditions and (b) add \$2.7 million to miscellaneous modifications project for FY 2023 for the addition of a second centrifuge to include related building modifications). The miscellaneous modification project is a proactive plan to refresh aging equipment in order to prevent failure. As the plant ages, more equipment requires replacement.
- Northwest Water Treatment Plant – (a) add \$3.2 million to the miscellaneous modification project during FY 2023 for groundwater reverse osmosis (RO) train replacement and (b) eliminate \$1.63 million project for membrane replacement (FY 2020) due to the alternate funding mechanism of replacing RO elements within the operating budget.
- Northwest River Switchgear Replacement – the cost to replace the switchgear was reduced from \$8.03 million to \$6.0 million based on the more accurate preliminary engineering report (only recently available). The replacement is still planned for FY 2022
- Sewer pump station safety improvements – initially, we planned to spend \$500,000 annually to replace safety equipment at pump stations. Work on the project has proceeded slower than originally planned and we propose removing annual allocations for FY 2019 and 2020. The annual allocations would resume in FY 2021 and continue at least through 2024.
- Sewer pump station replacement and rehabilitation – this project was added last year with \$2.7 million of funding in FY 2022. Initial plans included rehabilitation of pump stations in the Indian River area (#60 and 61). Revised plans include additional funding of \$3.0 million in 2023 plus another \$3.0 million annually beyond the five-year planning horizon. Future rehabilitation is planned for seven other pump stations (#34, 50, 1, 86, 9, 39, and 115).
- Sewer renewal – 18th Street – this project was previously considered fully funded and was scheduled to begin in July 2016 but was delayed to fall 2017 (related to the annual engineering services contract renewal). The department has updated cost estimates from \$736,000 to \$1.12 million. An additional \$388,000 is required to complete the project (due primarily to inflationary price changes).
- Water renewal – Buchanan Street – this project was also considered fully funded and estimated to cost \$257,000. The initial plan was to replace the 2” water main on Buchanan with an 8” water main in order to address low water pressure. Based on more thorough evaluation, we now recommend expansion of the scope to include surrounding streets (including Bainbridge

and Grady) that also have deteriorated and experience very low water pressure. Approximately 7700 feet of water line to be replaced (up from an initial estimate of 1,100 feet), ranging in size from 4" to 12". The increased physical scope now requires added engineering, inspection and surveying costs. The project is now estimated at \$3.3 million to include new funding of \$2.0 million in FY 2019 and \$1.05 million in FY 2020.

- Water renewals/water line upgrades – this project is focused on replacing water mains and upgrading the existing water system and appurtenances in order to maintain fire protection and acceptable water pressures. The current water network includes approximately 900 miles of water mains. Many of our water mains have exceeded their 40-50-year design life. The department recommends delaying previous plans for FY 2020 and adding \$2.0 million for FY 2023. An additional \$5.0 million annually is envisioned after FY 2023. Many of the water line projects are executed concurrently with sewer pipeline projects in the same neighborhood, to reduce customer inconvenience and overall project cost.
- Water system planning and upgrades – this project provides for master planning for the city's water distribution system and includes both planning and construction requirements. The project is currently funded for \$650,000 and annual additions of \$250,000 are planned through FY 2022. We propose an additional \$400,000 during FY 2023. Total project funding through FY 2023 would total \$2.05 million.

In 2014, the State Water Control Board issued a new Consent Order to fourteen localities served by HRSD. This consent order identifies specific responsibilities for HRSD and the localities based on a Memorandum of Agreement (MOA) executed by each locality earlier in the year. HRSD is responsible for capacity improvements in the locality's sanitary sewer system that contribute to sanitary sewer overflows, while the localities are responsible for operations, maintenance, and renewal improvements. The Consent Order and MOA require coordination between each locality and HRSD with respect to capital improvements. While HRSD will not address all sewer improvements in the city, we anticipate work performed by HRSD will have a positive impact on the city's capital plans. Under terms of the MOA, we will need to undertake improvements that are not included in HRSD's Regional Wet Weather Management Plan. For that reason, we envision the need for Council to occasionally consider changes to the City's Capital Improvement Plan as we coordinate activities with HRSD and systematically renew our sanitary sewer facilities. Ultimately, we believe coordination will reduce costs by limiting duplicated efforts.

Stormwater – The proposed CIP continues outfall upgrades and on-going neighborhood drainage improvements that address localized flooding. The plan is consistent with the City's permit under the Virginia Pollutant Discharge Elimination System (VPDES) that regulates the quality of water being discharged through pipes, ditches, and other conveyances.

A number of changes are recommended for existing projects largely because of two factors:

1. An increasing share of the stormwater budget is needed in the operating budget in order to ensure existing systems are maintained in a more sustainable fashion.
2. The City will receive pollution credits for water quality improvements made by the regional sanitation authority. Hampton Roads Sanitation District's SWIFT program will significantly lower particle discharges to the Chesapeake Bay and thereby reduce similar improvements that would otherwise be required of the City.

Proposed funding for existing projects in the Stormwater CIP is revised as follows:

Project	Current Plan 2019-2022	Revised Plan 2019-22	FY 2023	5 Year Total 2019-23
BMP Restoration Citywide	\$ 1,300,000	\$ 350,000	\$ 100,000	\$ 450,000
Citywide Outfall Re-grading and Restoration	600,000	3,400,000	1,000,000	4,400,000
Citywide System Rehab	1,300,000	1,300,000	None	1,300,000
Citywide Undesignated Drainage III	1,100,000	200,000	50,000	250,000
Liberty Street (FY 2021)	1,500,000	800,000	None	800,000
Loxley Gardens (FY 2022)	1,100,000	1,100,000	None	1,100,000
Major Equipment Purchases	2,800,000	600,000	200,000	800,000
Neighborhood Drainage Improvements II	2,300,000	1,850,000	None	1,850,000
Oakdale Area BMP/Drainage Improvements	3,000,000	3,000,000	None	3,000,000
Old Mill Road (FY 2019)	500,000	750,000	None	750,000
Stormwater Mapping & Master Drainage III	500,000	100,000	100,000	200,000
Stormwater Quality Program Phase II	7,500,000	400,000	100,000	500,000
Total Existing Projects	\$ 23,500,000	\$ 13,850,000	\$ 1,550,000	\$ 15,400,000

Transportation – major public safety projects now underway include:

- AIW Deep Creek Bridge – the city has entered into an agreement with the Commonwealth and the Army Corps of Engineers to provide \$20 million of VDOT funding for replacement of the current 2 lane bridge with a pair of bridges carrying a total of five lanes. Approximately \$28 million of federal spending is not included in the city’s CIP. The project will be managed by the Corps and is under design with construction expected in mid-2019. Under the agreement, the city will advance funds to the Army Corps when the project is ready for bidding. Commonwealth reimbursements are anticipated during FY 2020 and 2021. Aside from right-of-way acquisition funding already approved by Council and advances on VDOT reimbursements, no further city contributions are anticipated. (Once the project is completed, the city will assume responsibility for its operation.)
- Expressway Interchange at Mt. Pleasant Road – repairs to the interchange were required because of damage by Hurricane Matthew. We expect construction to start February 2018.
- Portsmouth Boulevard Widening (I-664 to Suffolk) is under construction; completion expected in October 2018.
- 22nd Street Bridge – design is complete and construction is expected to start in early 2018 and take 18 months to complete.
- Centerville Bridge Rehabilitation – design is underway (60%) and construction is projected to start in the summer of 2018 (10 month duration).
- Mount Pleasant Road Widening – Public Works is negotiating with design consultant; we anticipate construction to commence in summer 2018 (10 month duration).
- Sunray Bridge Rehabilitation – project is nearing end of design phase (90%); expect construction to start spring 2018 (12 month duration).
- Triple Decker Bridge Rehabilitation – design will start in 2019 with construction expected during FY 2020.
- Intersection of Hanbury and Johnston Roads – project is in design and needs an additional \$622,000 related to right-of-way acquisition and increased construction costs. Construction would start in FY 2019 and end during FY 2020.

- Public Works is working on a number of smaller projects including the rehab of several bridges and overpasses and improvements to intersections. No substantive changes are planned for those projects.

Virginia Department of Transportation (VDOT) has recently agreed to additional funding for three projects under its State of Good Repair program. Execution of new funding agreements are in progress as follows:

- Triple Decker Bridge \$7,326,000
- Centerville Turnpike Bridge \$4,537,000
- Sunray Overpass \$2,912,000 (revision to FY 2018 budget)

The proposed capital plan includes additional funding for each of the projects noted above.

Several projects included in the current CIP remain in the proposed CIP without changes. These include: the widening of Mount Pleasant Road, improvements to Chesapeake Expressway, and intersection improvements at Woodlake Drive and Greenbrier Parkway.

DISCUSSION OF NEW CAPITAL PROJECT PROPOSALS

In developing the proposed capital plan, city staff evaluated the conditions of current facilities and infrastructure along with citizen demands and expectations. Listed below is a brief description of new projects that are proposed in the CIP:

Community Facilities

- Records storage facility – funding is recommended for a feasibility study to determine the most appropriate manner to store city records. Options include storing records at a central city-controlled location and outsourcing the function to private contractors. Estimated cost of the study is \$100,000. If the study supports a city-controlled site, additional funding will be required to either construct or retrofit an existing facility.
- Shelving for libraries – two projects are recommended for the replacement of library shelving. The current shelving includes laminated materials that were obtained from bookstores several years ago that are beginning to fail. The replacement shelves would be more durable steel shelving. Recommended funding - \$575,000 in FY 2023.
- CIBH Office Space – the department requested funds to design and renovate the existing Clubhouse Building for offices once it moves to the former Galilee Church site. We recommend funding of \$75,000 for a feasibility study and design for converting the existing building to office space (design would only proceed if the study supports). Construction and rehabilitation funds are not included in the five year plan.
- Voting Equipment – we have included \$100,000 in the CIP for FY 2021 for additional polling equipment if new precincts are required following redistricting that is expected following the 2020 census.

Education (Public Schools)

- As was noted in the previous section, we recommend the allocation of funds from a “to-be-determined” project to the modernization of Chittum Elementary School, full-day kindergarten, and rehabilitation of athletic facilities.

Economic Development

- Open Space and Agricultural Preservation (OSAP) – the proposed capital plan includes \$610,000 annually for the purchase of development easements from property owners. Preservation easement will limit future development and preserve crop and forest lands. Previously OSAP projects were not included in the CIP, but were approved by Council on an ad hoc basis.
- Study and Small Area Plan for Indian River Road and Military Highway Corridors – this project includes \$268,800 to identify strategies to revitalize the road network and commercial areas along the two roadways. Transportation options include walking, biking, public transportation, and driving.

Technology Projects

- Automated Library Handling Systems – the proposed capital plan includes installation of materials handling systems at Greenbrier (2019) and Russell Memorial (2020) branches. This equipment was installed at the Central Library several years ago. The equipment significantly reduces the time required to receive and reshelv materials returned by patrons. The estimated cost to install equipment at Greenbrier and Russell is \$656,800.

- Identity Access Management – the city currently relies on Microsoft Active Directory to manage user access; however, access to some databases is controlled within the respective databases. This leads to fragmented controls that are difficult to manage. It is anticipated that several access controls will still be in place, but better integration across databases would be developed. The estimated cost to install updated access controls is \$230,000 with design and implementation starting in FY 2021.
- Library Data Center and Switching Equipment – this project will replace equipment that will be installed this year and which should be replaced every five years. The estimated cost to replace the library data center and switching equipment is \$600,000; installation planned for FY 2023.

Parks, Recreation and Tourism

- Northwest River Park Improvements – this is a six year project requiring annual allocations of \$1.0 million (\$6.0 million total estimated cost) to replace much of the parks facilities. The project will replace the sanitary sewer system, the Marjorie Rein Scenic Overlook and bridges, the Ranger Station, Camp Store, activity building, and shop offices.
- Park and Recreational Expansions – the proposed capital plan includes \$23.6 million over three years starting in FY 2019 to expand recreational offerings across the city. Approximately \$120 million of projects have been identified, including Centerville Park, expansions of existing community centers, addition of new community centers, school stadiums, and water parks/pools. Funding to begin expansions starts in FY 2021; if all identified expansions are approved, funding would continue far beyond the five year capital plan. Funding would come from the issuance of general obligation bonds.

Public Safety

- Public Safety Facilities – a number of facility issues have surfaced, including the joint training facilities, police evidence storage, and the Public Safety Building (Albemarle Drive). We recommend funding of \$750,000 to conduct appropriate feasibility studies and to provide conceptual designs for solutions to aging facilities.
- Fire Station #4 Replacement (North Battlefield) – funding of \$975,000 is included in the proposed capital plan to design a replacement for the circa 1962 fire station that is cramped with little room for training, meetings, and personal living space. The department requests a new facility on a larger site. The construction of a new station is expected to cost approximately \$10 million and to occur after FY 2023. A portion of the cost can be recouped by selling the existing site that is located in a commercial area.
- Public Safety Technology – we recommend funding for the following technology-based solutions:

○ Building Access Controls (Police and Fire)	\$ 110,000
○ New World App (CAD system for mobile devices)	\$ 102,000
○ Academy computer upgrades	\$ 120,000
○ Two Factor Authentication (access FBI database)	\$ 100,000
○ Civil Paper Software (delivered by Sheriff)	\$ 130,000
○ Vehicle Network Connection Upgrades	\$ 175,000

Public Utilities

- Chesapeake Connector Water Pipeline – this project involves constructing a pipeline from Norfolk’s Western Branch Reservoir to Chesapeake’s pump station at Red Top (all within the City of Suffolk). The project includes design and construction costs of \$850,000 and a one-time payment to the City of Suffolk of \$1.15 million as required by existing agreement for pumping water through Suffolk.
- Great Bridge Force Main Redundancy Study – this feasibility study will evaluate the need for a second sewer connection to Hampton Roads Sanitation District along Cedar Road. The study is estimated to cost \$300,000 and is necessary to determine what future costs may be required if the project is needed.
- Lake Gaston Pipeline – Capital Cost Sharing – Chesapeake is a part owner of the Lake Gaston Pipeline that is managed by the City of Virginia Beach. As such, it is also responsible for a part of the cost to operate and maintain the pipeline. During the next five years, Chesapeake is responsible for \$1.5 million of improvements to the pipeline (one-sixth of approximately \$9.0 million of capital replacements).
- Northwest River Lakes and Pump Station – this project involves pumping surface water from several borrow pits in the vicinity of the Northwest River Water Treatment Plant. Since the water quality of the borrow pits is better than that currently drawn from NW River, combining the two sources would improve operating efficiencies and lower the cost of treating water. The project includes system design, the construction of pipelines, property acquisitions and/or easements, and associated costs. The project is estimated to cost \$7.7 million with \$4.0 million planned over the next five years.
- Replace Lead Service Lines – this project provides \$600,000 over the next five years to replace lead service lines located between the water main and the water meters. Some of the oldest service lines used lead pipes; further, neighborhoods developed before 1980s may contain trace amounts of lead leaching from solder connections. Public Utilities is working on a sampling plan to identify and track locations that may contain lead service lines.

Not included in capital plans: utility improvements that are necessary for the Dominion Corridor, Landings West, Williams Tract, and Indian River neighborhoods currently served by Aqua Virginia. Considerable uncertainty exists as to when and how these improvements will be made. In the case of Indian River, it is not certain that the city will reach an agreement to purchase the water system from the existing owner.

Stormwater Systems

- Four projects addressing flooding issues identified in 1999 study:
 - Elmwood Lane Drainage Improvements – \$150,000 for engineering in FY 2019 and \$1.4 million for construction and related costs in FY 2020 (all funded by a state grant).
 - Forest Lakes Outfall Improvements – \$100,000 for engineering in FY 2019 and \$800,000 for construction and related costs in FY 2020.
 - Hickory Ridge Outfall Improvements – \$100,000 for engineering in FY 2019 and \$800,000 for construction and related costs in FY 2020.
 - Parkview Area Drainage Improvements – \$200,000 for engineering in FY 2019 and \$1.05 million for construction and related costs over the following four years (2020-23).

- Resiliency and Reliability Program – this project addresses the increased frequency and intensity of storms impacting the systems of interconnected lakes. Significant investments are necessary to increase drainage capacity and upgrade deficient drainage systems. Targeted areas include the Greenbrier, Etheridge, and Stonegate lake systems. Estimated investments over next five years - \$5.1 million.

Transportation Systems

- Advance Right-of-Way Acquisitions – the purpose of this project is to preserve future corridors for road improvements by utilizing available resources to purchase property and/or easements before development occurs. The department requests funding of \$700,000 in FY 2019 with additional investments of \$200,000 annually thereafter.
- Centerville Bridge Replacement – this feasibility study is necessary to secure state funding for a future replacement of the bridge (anticipated by 2042).
- Elbow Road Widening (Phase 2) – this \$20.2 million project would widen a portion of the road to four lanes and widen the remaining sections to two 12-foot lanes. The project also includes installing shoulders and improving adjacent ditches. The project is recommended, but is contingent on the securing \$10.0 million of state funds; the remaining costs would be funded by issuing general obligation bonds.
- George Washington Highway Widening – project widens the road between Yadkin Road and Canal Drive on right-of-way that was already acquired. The \$25.0 million project is contingent on the securing state funding of \$10.0 million; the remaining costs would be funded by issuing general obligation bonds.
- Gilmerton Bridge – Replace Counterweights – this project addresses a design flaw on the new Gilmerton Bridge. Most funding (\$486,000) is provided by VDOT, a city match of approximately \$9,000 is required.
- Improvements are planned for the following intersections (traffic signals and/or new turn lanes):

○ Battlefield Boulevard and Albemarle Road	\$ 1.35 million from GF Balances
○ Battlefield Boulevard and Volvo Parkway	\$ 1.35 million from GF Balances and TIF
○ Butts Station and Kempsville Roads	\$ 1.15 million from GF Balances
○ Greenbrier Parkway and Kempsville Road	\$ 1.15 million from GF Balances
○ Campostella Road and Sunrise Avenue	\$ 0.15 million from proffers
○ Deep Creek Area (Right turn lanes)	\$ 0.39 million from proffers
○ Greenbrier Parkway and Woodlake Drive	\$ 1.17 million from Greenbrier TIF
- Mount Pleasant Road Widening (Phase 2) – project widens road between Cooper’s Ditch Bridge and Centerville Turnpike. The \$9.7 million project includes acquisition of right-of-way and is contingent on the securing state funding of \$4.85 million; the remaining costs would be funded from the City’s General Fund balance.
- Pedestrian Sidewalks and Lighting improvements on:

○ Poindexter Street at I-464 Overpass	\$ 420,000 with 61% from VDOT
○ Etheridge Road	\$ 730,000 with 80% from VDOT

The remaining funds are provided by South Norfolk TIF (Poindexter) and General Fund balances (Etheridge).

- Chesapeake Transportation System – the financing terms of the two toll roads requires that the city maintain the roads as recommended by an independent engineer. Periodically, this requires capital improvements or renewals of the roadway, bridges, drainage systems, and equipment. Three new projects are added for capital spending (non-routine maintenance) that is anticipated over the next five years as follows.
 - Dominion Boulevard Renewals (phase 1) \$ 1,950,000
 - Dominion Boulevard – Closed Circuit TV Cameras \$ 100,000
 - Chesapeake Expressway Renewals (phase 3) \$ 773,700

- Freeman Avenue Bridge – this project would replace the existing at-grade railroad crossing with a two-lane bridge; it is contingent on VDOT or federal funding of \$15.3 million. The remaining costs (\$10.2 million) would be funded with general obligation bonds backed by the South Norfolk TIF. The current at-grade crossings is frequently blocked by train traffic.

