An Infrastructure Plan for a Sustainable City Stewarding & Strengthening Burlington's Foundation for Future Generations



Updated September 9, 2016

TABLE OF CONTENTS

1.	Exe	ecutive Summary	3
2.	Ba	ckground	7
3.	Gu	iding Principles of Infrastructure Plan	9
4.	Sui	mmary of Plan by Major Asset Type	10
	a.	City Fleet	10
	b.	Facilities	10
	c.	Sidewalks	11
	d.	Streets	12
	e.	IT Infrastructure	13
	f.	Bike Path	14
	g.	City Hall Park	15
	h.	Street Trees	15
	i.	Water Infrastructure	16
	j.	Wastewater/Stormwater Infrastructure	18
	k.	Memorial Auditorium	21
	l.	Parking Garages	21
	m.	Parks	22
	n.	Burlington School District	23
5.	Fin	ancing Plan	24
6.	20	16 Timeline	28

I. Executive Summary: An Infrastructure Plan for a Sustainable City

Purpose and Vision

The foundation of a vibrant city life rests on well-maintained capital infrastructure. Quality of life, public safety, commerce, $21^{\rm st}$ century transportation systems, and tourism depend to a great degree on the proper care and functioning of a city's streets, sidewalks, park network, parking facilities, fire suppression capacity, and water / wastewater / stormwater systems. Water main breaks, deteriorated sidewalks, old fire trucks, and neglected parks are not just inconveniences – they impact businesses' bottom line, erode people's ability to enjoy the city's open space, and hinder economic development.

Stewarding these assets is one of a municipality's core responsibilities and one of its greatest opportunities. This white paper summarizes Burlington's comprehensive capital planning effort and lays out an affordable, multi-pronged plan of action and reinvestment that will address areas of chronic underinvestment and prospects for important modernization in a cost-effective way. The plan will ensure a City where current and future generations can move easily across the City on foot, by stroller, or in a wheelchair along sidewalks or $21^{\rm st}$ century streets, where businesses can depend on the water system and easy public access to help facilitate commerce, where City parks are well maintained, where our Bike Path is restored and strengthened, where City Hall Park is rebuilt to better accommodate our wonderful Farmers' Market and new community events and increase park usage by the public, and where we have made necessary investments in our fire trucks and other City vehicles to maintain a high level of public safety for our community.

Our Infrastructure Challenge

Over the past two years, the City of Burlington has conducted an evaluation of its infrastructure – including independent professional assessments of our sidewalks, facilities, and garages and detailed projection of our capital needs in every City department. While the City has existing sources for most of the capital investment that it will need to make over the next decade, we have to identify approximately \$42M in new revenue for the next five years, and \$70.7M in the next ten years in order to address eleven areas of current underinvestment that will cost taxpayers more money the longer they are left unaddressed:

- **Bike Path**: This much-loved recreation and transportation corridor along the lake generates millions of dollars in economic activity for the City every year, yet in many areas is in poor and deteriorating condition and does not meet modern standards.
- **Sidewalks:** 16 percent of our sidewalk system is in serious to failed condition based on an empirical assessment across the City conducted by a specialized firm.
- **Streets:** Burlington should have well-functioning 21st century streets, yet we repair streets on a 40-year cycle despite the fact that streets require road surface redevelopment after 15 to 25 years. As a result, 23 percent of our streets are currently in a poor or failed condition and we are falling further behind every year.
- **Fire Engines:** Five of our six fire vehicles are nearing the end of their service life, and responsibly replacing these necessary vehicles carries a substantial cost.
- **City Hall Park:** This central park, meant to represent our City's park system, is poorly lit and underutilized much of the time. The park needs updating to be welcoming, well-used by people

of all ages, and properly accommodate current uses, such as the popular and successful Farmers' Market.

- **Park System**: While the City has successfully completed over 100 park improvement projects across the community in the last four years, the park system struggles with deferred court replacements, stormwater management issues, and outdated public restroom and playground facilities.
- **Water Mains**: An estimated 42 percent of our water mains are older than 75 years old, and thus at or near the end of their useful life. All aspects of our water system (the distribution system, including our storage reservoirs, and the water plant) need on-going investment to make sure we can continue to produce and supply high quality water and sufficient flow for fire protection throughout the City and avoid costly reactive maintenance and water main breaks.
- **Sewer Mains and Wastewater Plants**: Many of the pipes for sanitary, storm or combined sewer main infrastructure are beyond their useful life and need repair or replacement. The City's three wastewater treatment plants are also in need of addressing deferred and ongoing maintenance.
- IT infrastructure: As we modernize the City's existing IT infrastructure to implement measures intended to make City data more transparent and City processes like permit applications more efficient, updates to existing infrastructure and security protocols are necessary to keep our IT system secure and properly functioning.
- **Garages:** An independent assessment of the City's three garages determined over \$9 million of capital repairs are needed to keep the aging facilities open and safe in the years to come.
- **Deferred Facility Maintenance**: The City faces substantial deferred maintenance on several facilities, including City Hall, the Miller Center, Leddy Park Arena, and other civic buildings that when addressed should result in increased energy efficiency, better space utilization, and a reduced need for unanticipated (and potentially expensive) reactive repairs.

This paper details a total unmet need over the next decade for the proper stewardship of our City General Fund assets of approximately \$70 million and lays out a detailed plan for fully meeting this challenge.

The Way Forward

To address this unmet need, the City will 1) make approximately \$42 million of General Fund infrastructure investments in the next five fiscal years along with the proposed water system improvements outlined below, and then 2) increase its baseline annual investment in the following years to ensure the higher quality infrastructure is maintained and the current backlog of deferred investment does not build up again.

To make this needed investment affordable, the City will use a number of simultaneous strategies, including:

• **Long-term planning:** For the first time in many years, the City now has a comprehensive 10-year capital plan. This planning tool enables strategic decision-making with a multi-year perspective that can help avoid dramatic impact on property taxpayers, improve coordination

of related investments (i.e. replacing water lines when streets are dug up for repaving), and identify structural funding deficiencies that can be addressed with appropriate planning over multiple years. Further, a key component of long-term asset stewardship that the City is actively pursuing is developing an asset management program that sets levels of service and provides metrics so that the City can make the best decisions possible when allocating its scarce capital resources.

- **Focus on preventative maintenance:** The City has prioritized a new and logical effort around preventative maintenance, including, a systematic approach to sealing cracks and microsurfacing on City streets, shaving down cement sidewalks to eliminate displacement, and relining old water mains beneath streets prior to repaving. Those strategies are expected to extend the effective life of our streets and sidewalks substantially, reducing taxpayer costs.
- **Prudent financial management:** As a result of recent credit rating upgrades and refinancing the City is well-positioned to take on new long-term debt. In the last year the City refinanced existing debt to save \$130,000 on annual debt payments, and the combination of historically low interest rates and a restored "A" credit rating should allow the City to secure favorable long-term debt terms. Further, energy efficiency measures implemented over the last two years are generating \$75,000 a year in savings now and are projected to save taxpayers nearly \$1 million over the life of the 10-year capital plan. In future years, the City will retire debt and use some limited interest-only borrowing options to minimize increases in capital-related debt service payments, reducing annual debt service payments by hundreds of thousands of dollars and helping to keep the impact of the plan on property tax payers low.
- **Generate new non-property tax revenue sources for capital financing:** Over the last two years the City has reformed its parking system, positioning the Traffic Fund to contribute \$250,000 toward the City's capital needs in FY17. The City also is pursuing new philanthropic fundraising efforts that are projected to contribute approximately \$2 million to the infrastructure effort.
- Secure commitments from the University of Vermont and Champlain College: The City has been in discussions with the institutions about a contribution to the City's capital needs that starting in FY18 would provide approximately \$1 million a year of new revenues for infrastructure.
- Coordinate with the School District to identify new saving opportunities: The City and School District both have capital needs and are seeking to work collaboratively to limit the impact of those costs on the community. Working together, the City and School District are seeking to identify up to \$2 million of savings that could be realized through better coordination of existing assets. This includes, for example, a collaborative approach to managing and using School and City park space or the more efficient use of City and School facilities to accommodate existing needs while reducing costs.
- **Secure new revenue from visitors to Burlington:** The plan will be funded in part by an additional two percent of gross receipts tax on alcohol and rooms starting during FY17 More than two-thirds of the gross receipts tax is expected to be paid by visitors to Burlington and will produce approximately \$2 million a year for infrastructure projects that generate economic development such as the revitalization and enhancement of the Bike Path and City Hall Park.

• In sum, approximately \$15 million in new, non-property tax revenue will be generated for the needed capital infusion over the next five years. The balance will be paid by an infrastructure bond of approximately \$27.5 million. The bond would be structured and drawn down in such a way that the total added cost to the average residential taxpayer of the new bonding would not exceed \$10/month over the next five years, and would be limited to approximately \$10/month in the peak cost years of 2025 and later. For that amount, City taxpayers would see a rebuilt City Hall Park, enhanced Bike Path, new fire engines, a dramatically improved and sustainable street and sidewalk system, important facility renovations, necessary investments in City IT systems, and more. Completing this work now – with low interest rates, the City in a financially strong position, and before the infrastructure deteriorates further – will save taxpayers money as well.

Conclusion:

The balance of this white paper describes in detail the status of every major element of the City's infrastructure and provides greater discussion of each funding strategy.

Over the months ahead we have an opportunity to take a number of key actions to see this plan implemented, setting us on a course to dramatically improve our core infrastructure within five years, and then sustainably maintain it at a high level thereafter. Unlike decades past, no windfall of help is likely to come from the state or federal government. It is incumbent on us to act at the local level to properly steward the City's infrastructure and leave our children a City worthy of Burlington's proud history.

II. Background: Continuation of Effort to Responsibly Steward the City's Resources

The infrastructure plan outlined in this white paper is a continuation of the multi-year focus on responsible stewardship of the City's resources and the product of two years of sustained due diligence across City government. It also marks a transition of sorts: Having addressed the urgent financial challenge the City faced in 2012, the Administration is seeking to proactively address our growing infrastructure needs and in a way that will ultimately reduce the total burden asked of the City's taxpayers.

Focus on Responsible Stewardship of the City Resources

In 2012, the City's credit rating was downgraded three steps from A3 to Baa3, the edge of junk bond status. The Administration, City Council, and voters responded to this adversity and have successfully addressed our most acute financial issues. Improved management of our enterprises, voter approval of the Fiscal Stability Bond, and the creation and resourcing of a new fund balance policy has addressed the City's dangerous liquidity challenge. The City settled an uncertain \$33.5-plus million Citibank lawsuit on terms favorable to the City and taxpayers, eliminating a cloud of financial uncertainty that had hung over Burlington for five years. Improved financial controls have steadily improved our annual audits, reducing the number of management letter deficiencies from 27 in 2012 to four in 2015. As a result of this work on many fronts, the City, the Burlington International Airport, and Burlington Electric Department have all been upgraded over the last two years, and the City's A credit rating has been restored. In fact, the success of this effort has led to modest decreases in the municipal tax rate each of the last two years – a trend that stands in stark contrast to the trajectory of many Vermont municipalities.

With the most acute financial issues addressed, the Administration has turned our focus increasingly to addressing long-term financial challenges that continue to pose a risk to taxpayers and detract from residents' quality of life and the economic vibrancy of the City. The infrastructure challenge is the last major element of this effort to restore responsible stewardship to the City's financial resources to affordably modernize and maintain our community's physical infrastructure in the years to come to benefit all of our residents. Stewardship is a coordinated effort of the Capital Plan with an asset management plan to ensure there is a clear strategy to maintaining our infrastructure in a sustainable manner.

Two Years of Due Diligence

This infrastructure effort began with Mayor Weinberger's 2014 State of the City declaration:

"Overall, our infrastructure continues to degrade at a faster rate than we reinvest, and there is no comprehensive, coordinated plan for properly caring for the community assets we have inherited. I have directed the Chief Administrative Officer to lead an effort to craft an affordable and comprehensive 10-year capital plan for presentation to the City Council for approval no later than Town Meeting Day 2015. This plan will include responsible investments in our roads, sidewalks, municipal buildings and parking garages, our water, sewer, and stormwater system, the bike path, parks, and our schools. The plan also will include better management of our fleet of over 250 vehicles to reduce maintenance and fuel costs, as well as capital costs. I see this plan as a key document for ensuring that we make good on our responsibility to leave the City in better shape than it was when we started."

In the two years since Mayor Weinberger's remarks, the City has commissioned engineering studies of our garages, buildings, streets, sidewalks, and bike path. A draft 10-year capital plan has been reviewed by the City Council and the relevant City Boards and Commissions with a stake in the City's capital planning. The Burlington School District is now also fully engaged in an evaluation of

their capital assets and projections of future needs that mirrors the effort the City has undertaken, and initial indications of the results of that planning are expected in the months ahead. Further, the City Administration and the School District have begun coordinating their efforts to take advantage of creative opportunities to save money on shared infrastructure needs. Additional planning documents that form the basis of this initiative include the 2011 Burlington Bike Path Task Force Report, 2011 Transportation Plan, 2014 PlanBTV Downtown & Waterfront, 2015 Burlington Parks, Recreation & Waterfront Master Plan, and the ongoing development of the City's Walk-Bike Master Plan and Great Streets request for proposals.

The Administration's work on this effort has been led by the Mayor, with day-to-day responsibility for management of the effort delegated to the Chief Administrative Officer overseeing a working group that has included the Public Works Director, Parks, Recreation & Waterfront Director, City Engineer, Assistant Director – Water Resources and the Capital Improvement Program Manager. In addition the Community & Economic Development Office (CEDO) Director, Planning & Zoning Director, Burlington City Arts Director, City Attorney's Office, additional City Staff, and numerous consultants have contributed significantly to this plan.

The Neighborhood Planning Assemblies (NPAs) have been briefed and provided input on elements of the emerging infrastructure plan over the past two years. The Administration plans to re-engage the City Council, relevant City Boards and Commissions, and NPAs, and reach out to many other community groups during the finalization and implementation of this plan over the course of 2016.

This effort has already produced results, without any impact on City taxpayers. With a heightened organizational focus on infrastructure investment and the benefit of the planning tool that is the 10-year capital plan, existing resources have been deployed in a focused and strategic manner that has already dramatically increased our investments in parks, City buildings, and sidewalks in the last two fiscal years without impacting taxpayers (and, in fact, supported two consecutive budgets with modest reductions in the municipal tax rate). After greatly improving their financial positions over the last four years, the City's water and sewer enterprise funds have also increased their capital reinvestment, and major renovations of our three downtown garages are underway that will improve the lifespan, safety, and quality of experience for users parking in the downtown.

These two years of careful planning and analytical work have provided a strong empirical basis for moving forward and making additional strategic investments now to implement the next and critical phase of this effort in a way that will address an unavoidable challenge proactively, save taxpayers money over time, and improve the quality of life in the City for generations to come.

III. Guiding Principles of Infrastructure Plan

This action plan has been shaped by the following principles:

- Stewardship of public infrastructure is a core responsibility of municipal government that drives quality of life, equity, economic development, public safety, and highest value of public investment.
- Strategic investments reflecting a comprehensive plan should be able to save taxpayers money over time, rather than investments made reactively in the face of an immediate need.
- Residents, businesses, visitors, and institutions all benefit from high quality public infrastructure, and all should contribute to its construction, maintenance, and improvement.
- Preventative maintenance and coordinated investments between different asset classes are critical for efficient use of public dollars and for improving infrastructure quality (i.e., it is generally most efficient to replace subsurface water and sewer pipes when a street is being repaved not a year after a street has been paved).
- Municipal and school district capital investments should be coordinated both to promote
 efficiencies and shared-use facilities and to moderate and minimize the impact on Burlington
 property taxpayers of needed capital investments.
- Use the opportunity provided by the ten-year capital plan horizon to thoughtfully and methodically address the structural underfunding of core assets in a way that reduces projected taxpayer costs.
- Given the significant ongoing capital investments required to maintain City assets individually, and more significantly the collective asset list, the City will relook at the current capital asset portfolio to evaluate if all truly meet the requirement of qualifying as essential public infrastructure. For any assets that don't meet that criteria, the City will develop plans that could include selling these assets, or leasing them out to private sector operators who would be responsible for daily operations and capital maintenance. This would allow the City to invest available staff resources into the projects which are most essential
- After exhausting efforts to maximize existing resources and seek other revenue sources, it is reasonable to consider bonding for some of the necessary investment for several reasons:
 - o It is fair and equitable to pay for long-term assets over the course of their functional life;
 - Like the use of long-term mortgages to finance household acquisitions and improvements, bonding has traditionally been employed by municipalities to financing long-term assets;
 - o Burlington has considerable untapped debt capacity by objective standards and the plan proposed here will keep the City well within its debt capacity limits; and
 - o Long-term debt interest rates remain at historic lows.
- Any consideration of new bonding should be as limited as possible to respect the substantial property taxes paid by City residents and to minimize the cost of future interest payments.
- Any new bonding should be explained alongside sustained efforts to offset or even reduce City taxpayers' burden.

IV. Summary of Plan by Major Asset Type

This section articulates the status and proposed future actions for General Fund, Water Resources and Traffic asset category that the City is responsible for maintaining.

In addition, the review of different City asset classes led the City Administration to the conclusion that Memorial Auditorium was an asset the City could no longer afford to maintain – with substantial deferred maintenance of that facility since the early 1990s, the City is looking instead to partner with the University of Vermont and produce a joint RFP that would allow for a private operator to update Memorial to accommodate UVM hockey and basketball games, other civic events, and concerts, conferences, and community gatherings. The decision not to reinvest in Memorial Auditorium as part of the capital plan will save the City about \$14 million.

City Fleet

Current Status:

- Numerous vehicles within the fleet are at or near their end of life. Fire trucks and some Public Works vehicles take six months to a year from ordering to delivery.
- Public Works fleet has 11 plow trucks with the oldest purchased in 1998. Four are more than 10 years old (the average life for a plow truck).
- Having an older fleet adds operational costs through higher levels of maintenance, labor, and parts.

Proposed Action Under 10-Year Capital Plan:

- The goal of all vehicle purchases in the future is to minimize operational maintenance costs and increase the trade-in value of the vehicles.
- Five of the City's six fire vehicles will be replaced through capital infusion between 2017 2021.
- The last purchase of fire trucks occurred in 2008, and the majority were purchased in 2003 or earlier. The capital plan includes replacement of fire trucks on a 12-year life cycle and ambulances on a 6 year life cycle.
- This will allow for lower costs in operational maintenance and higher trade-in values to offset the cost of the new vehicles.
- Police have their vehicles on a five-year rotation due to the high level of use and are budgeted to pay cash out of their operating budgets.
- Public Works vehicles are scheduled on a 10-year life cycle, although with good maintenance the life may be extended to 15 years. The strategy will be to utilize master leases of 4-5 years in the short term to catch up on deferred purchases allowing for outright purchases when replacement is scheduled in 10 years.

Facilities

Current Status:

- From the assessments completed in 2014, there is a large volume of deferred maintenance causing a larger capital need. Addressing the need in the near future will allow for lower operational costs.
- There is significant labor spent on reactive work rather than being able to schedule maintenance and be more efficient with our labor force.

- All major deferred maintenance identified in the 2014 building needs assessments approximately \$10 million in projects is budgeted to be completed by 2021 without expanding the City's customary annual facilities bonding of \$2 million a year.
- Facilities with the greatest need will be renovated as completely as possible to create a more predictable building need. Fletcher Free Library and Fire Station #1 are examples of buildings already renovated as part of the City's increased focus on capital needs that have immediately saved operational dollars and maintenance labor.
- As noted above, the City is also seeking to divest itself from the continued operation and maintenance of Memorial Auditorium, given the \$3 to \$4 million in known needs to keep the building open in its current underutilized state.
- The City will continue to implement energy efficiency projects in collaboration with BED to utilize on-line billing and minimize capital outlay while saving dollars on utilities. We are currently saving over \$75,000 a year as a result of projects in recent years, and this figure is expected to continue to grow modestly and reach six-figure annual savings by approximately 2023.
- Adding continuous preventive maintenance on the buildings will extend the life of the equipment, lowering our capital need in the longer term.
 - The City added an electrician this past year who is attending to many deferred electrical projects, saving more than the cost of the position in the first year. Additional maintenance capacity has been approved in the FY17 budget.
 - Where in house staff cannot address the preventive maintenance needs, RFPs and contracts are being developed to ensure the assets of the City are maintained.
 - An Asset Management Plan is in process to make sure there is a method long-term to capture the needs of the City's assets.

Sidewalks

Current Status:

- A 2014 inventory of the City's 130 miles of sidewalks conducted by Sally Swanson Architects, Inc. found that 16 percent of the City's sidewalks were in serious to failed condition. The sidewalks are graded on a scale of seven criteria with serious and failed the lowest two on the scale.
- The City has an existing sidewalk property tax that generates approximately \$515,000 a year in revenues, enough to replace less than 1 percent of the sidewalk network per year. Given that the average sidewalk lifespan is 40 years or less, continuing to invest on this 100-year replacement cycle will result in further degradation of the existing system.
- In FY'15, FY'16 and FY'17, the Capital Plan has supplemented the \$515,000 of base funding with an additional \$700,000 per year.
- The City has identified approximately seven miles of streets without any sidewalks that would be improved by adding a sidewalk on at least one side of all accepted streets.

- For the years 2017 through 2021 the plan contemplates investing approximately \$2 million per year in the sidewalk system with the goal of correcting the 16 percent of the system (21 miles) that is currently in a serious to failed condition.
- During the years 2021 through 2026 the plan proposes a base of \$1.5 million a year with a 3 percent escalator, the amount necessary to achieve a 40-year replacement cycle.
- This investment will address all of the sidewalks currently categorized as serious or failed within five years, and have addressed all of the poor to failed segments in approximately 15 years.

- The City will continue to budget \$100,000 a year of local funds for sidewalk expansion projects and vigorously pursue state and federal funding (over the last decade Burlington has successfully implemented six sidewalk enhancement projects funded largely by state and federal funds).
- The City in FY16 successfully piloted a new preventive maintenance process utilizing diamond cutting of vertically displaced sidewalk panels to maintain the functional lifespan of sidewalk segments. It is anticipated that this technique will help the City achieve a higher level of service in our sidewalk network over the projected 40-year lifespan by minimizing the costs to address the safety and short run repairs that tend to be related to the vertical displacement of sidewalk slabs.

Streets

Current Status:

- Mayor Kiss and his Administration identified the need to increase investment in the City streets, supporting an effort approved by voters in November 2008 to bond \$5.5 million for additional street work.
- As part of the evaluation of City streets following that infusion, the City has implemented a Pavement Maintenance Management System entitled MicroPaver, which uses inspection data and a pavement condition index (PCI) rating from zero (failed) to 100 (excellent) to consistently describe a pavement's condition and predict its maintenance and repair needs many years into the future.
 - The City inspected and inventoried the 95 centerline miles of roads in the last two years to ensure our inspection records are accurate and up to date with their assessment.
 - The computer model provides City staff information as to which streets will likely require repair a number of years into the future. As you look further into the future, the model becomes less accurate, however, it has been proven to be a useful tool to inform and coordinate subterranean utility capital reinvestment.
- The City has an existing street property tax that generates approximately \$1,500,000 a year in revenues, enough to replace approximately 2.5 percent of the road network per year. Given that the average road lifespan is between 15-25 years depending on usage, the current replacement cycle is about 40 years. It is anticipated to result in further degradation of the existing system.
- The City initiated a pavement preservation program in 2016 with crack sealing on several of the major arterial roads. This measure will protect the pavement against deterioration and thereby extend its service life, ultimately reducing annual maintenance costs by using more cost-effective preservation techniques.

- The plan proposes an annual investment in the program of approximately \$2.3 million dollars from 2017 to 2021 into street paving related work.
- The program goal is to focus on 23 percent of the poor to failed streets within the City that require full depth rehabilitation to restore the street subbase and pavement.
 - Streets that currently fall within the poor to failed categories are not candidates for any alternative maintenance or preservation treatments that could extend the life of the pavement. Therefore it is important to redevelop these streets to a new condition to allow for these maintenance techniques to be used in the future.
- In years 2022 and beyond the paving program will be adjusted to an annual adjusted base of \$1.55 million with additional funding for preventative maintenance and curbs. The goal is to maintain an average pavement condition of "good" (PCI above 72) for the entire network.

- The City is working closely with all of its Departments to plan and coordinate work. It is vital to address failing underground infrastructure prior to redeveloping the street surface under both the near-term additional funding as well as the long-term program investment.
 - Coordinating work with subsurface utilities maximizes the cost efficiencies of combining work, shortens total construction of all work types, and results in higher quality street and infrastructure investment.
 - Coordinating work also reduces the risk to the new street investment of future utility work that will result in cuts, excavations, and repairs that reduce the service life of a street.
- An enhanced pavement preservation investment of \$200,000 annually towards pavement life extending practices will complement the enhanced investment into the pavement replacement program.
 - The program will focus on streets where the condition of the street is still in excellent-good condition and maintaining that status through preservation treatments.
 - Pavement preservation techniques such as crack sealing, fog sealing, and microsurfacing are low cost treatments that add four to eight years or more of service life to pavement depending on the treatment used for a single application.
 - This allocation towards pavement preservation paired with the reinvestment will help to ensure the long-term success of a sustainable 40 year pavement management program.
- The Capital Plan will introduce a dedicated allocation toward curb construction and replacement. The initial investment in the first five years will total \$2.5 million from 2017 through 2021.
 - Curbing will have multiple benefits to the City with added pedestrian safety, greenbelt preservation, and better stormwater management.
 - The allocation towards curb work will then be adjusted to a base of \$1 million starting in 2022 with a 3 percent annual escalator.
 - The goal of the program is to initially address some of the serious deficiencies that exist throughout the City with our curb infrastructure within the first four years. Subsequent years curb work will focus on leading ahead of the paving program to curb streets scheduled for paving. The target replacement cycle for curbs under this program is 50 years.
- The 10-Year Capital Plan has allocated approximately \$3.5 million to address the long-term deferred maintenance of the City owned/shared bridges and culverts. These funds paired with grant opportunities from State programs and adjacent municipalities will allow for necessary repairs to the structures to ensure the remaining service life is achieved.

IT Infrastructure

Current Status:

The City's spending on IT needs for Departments funded from the General Fund has not kept pace with our operational demands or the changing technology landscape. Over the last five years, investments in our network infrastructure (e.g. servers, backup appliances) have totaled approximately \$150,000. We currently find ourselves with gaps in our infrastructure and capabilities that will prevent us from maintaining, improving, and expanding the services and capabilities we provide to residents.

• The pace of the creation and use of data continues to increase, and the tools we use to capture and store that data are at capacity, no longer adequately support our current work, and do not allow for growth.

- There are increasing threats to the security of networks and data, and there are many steps we could take to better protect our assets.
- There are limited disaster recovery capabilities in place that would enable us to quickly be operational in the event of a disaster.
- Employee computers have not always been replaced on a standard schedule, resulting in inefficient work as well as security vulnerabilities.
- There are many untapped opportunities to automate existing work; the lack of using technology leads to relying on manual processes and significant inefficiencies.
- The City does not provide many capabilities to allow the community to obtain services or engage online.

The plan proposes investing an average amount of \$363,000 per year to be allocated for technology capital expenses for FY 2017-2021 for a total investment of about \$1.4 million. If approved, the funds will help address the challenges identified above and enable the City to take advantage of future opportunities. Investments will be made toward the following activities:

- Invest approximately \$45,000 in tools and services that will help to protect the security and integrity of our network and data, and an additional \$50,000 to develop and maintain disaster recovery capabilities.
- Invest \$150,000 in infrastructure over the next four years (local hardware and cloud-based) beyond our traditional investment to replace existing hardware past its useful life that is necessary to expand the capacity of services we provide to staff and the public.
- Purchase and implement tools that will allow City Departments to work more efficiently and collaboratively, and to deliver improved services. This includes:
 - \$225,000 for software, which includes purchase and implementation of a computerized maintenance management system (CMMS) in FY17 to support renewed efforts across Departments to more proactively and efficiently maintain City assets and upgrades to permitting software.
 - o \$100,000 to advance the capabilities of the Burlington Fire Department over the next four years.
 - Approximately \$75,000 in new hardware over the next four years to enable employees to work more efficiently and effectively by performing their work from the field.
- Continue recently implemented efforts to replace employee computers every four years to enable efficient work and to protect network security, and to purchase computers for new employees, estimated at \$130,000 per year.

Bike Path

Current Status:

- In 2012 the Bike Task Force, commissioned by the City Council, completed the Burlington Bike Path Improvement Feasibility Study. Its purpose was to identify significant issues so that the path remains a safe corridor, attracts visitors to the City, and enhances quality of life.
- An intersection scoping study finalized in 2014 evaluated at grade crossings across the City to identify short-term safety improvements and long-term design changes.
- The City conducted preliminary engineering and conceptual design work beginning in 2013 to begin the path's rehabilitation and to address issues raised by the Feasibility and Scoping Study.
- In 2014 rehabilitation of the path began in Waterfront Park as part of the Tax Increment Financing (TIF) investment. The first phase of construction from Perkins Pier to the Urban Reserve was completed in the winter of 2015.

- In 2016, path rehabilitation and realignment is taking place from the Urban Reserve through to North Beach.
- The current path generates over \$4 million in economic activity annually.

- After spending \$3.5M in FY15 and FY16, the entire eight mile path from Queen City Parkway to the Winooski River Bridge will be fully rehabilitated in the next five years.
 - o 2017 North Beach Bridge to Staniford \$3.5M
 - o 2018 Staniford to Winooski River Bridge \$3M
 - o 2019 Queen City Parkway to Oakledge Park \$3M
 - o 2020 Oakledge to Perkins Pier \$3M
 - o 2021 Oakledge to Perkins Pier Finish \$500K
 - o 2022 final touches to bike path \$500K
- Estimated project budget is \$17 million.
- To date over \$3.5 million has been secured through City resources (TIF, BPRW Capital and CIP) with an additional nearly \$1 million raised through private philanthropy by the Parks Foundation of Burlington.
- Approximately \$12.5 million is needed to complete the project as envisioned.

City Hall Park

Current Status:

- A 2011 study commissioned by Burlington City Arts and the Burlington Business Association found that the park was negatively impacted by its current design. Problems identified included stormwater, fountain functionality, age and location of trees and pathways.
- In the years since the report, the Parks, Recreation & Waterfront Department has mitigated these issues through intense efforts at erosion control and planting of new grass, and BCA and the Police Department have made numerous attempts at improving conditions in the park through programming and different policing strategies. While these efforts have provided temporary relief, they have not fundamentally altered the conditions found in the study.
- In 2014 after an extended public planning process, the City Council unanimously approved a resolution endorsing a conceptual plan for a rebuilt City Hall Park.
- In early 2015 the City, through the Parks Foundation of Burlington, received a \$1,000,000 philanthropic contribution towards the rebuilding of the park from Antonio and Rita Pomerleau.
- In early 2016 a contribution of \$30,000 was received through a grant from Northfield Savings Bank.
- The City is currently underway with a consultant to complete the design and engineering of a renovated park.

Proposed Action Under 10-Year Capital Plan:

• Beyond investing approximately \$1,000,000 in anticipated total private contributions, the plan includes \$2 million for completing the renovation in non-GO bond sources during the summer of 2017.

Street Trees

Current Status:

• The City has over 8,500 individual street trees.

- Trees in the downtown core of the City suffer from quantity and quality of soils. Expected lifespan of a downtown tree is approximately 10-15 years, while trees in other parts of the City can last over 30-50 years.
- Biggest barrier to improving tree infrastructure is cost of improving streets and sidewalks.
- Through greenbelt capital funding, trees are planted and maintained across the City on a regular basis, with over 200 trees planted in 2015.
 - The City's Climate Action Plan calls for planting over 500 trees annually between public and private property.

- With increased funding for sidewalks and streets, integrated planning can accomplish improvements to soil quality, quantity and structures to support future growth.
 - o Approximately 200 trees need to be replaced in the downtown over the next 10 years.
 - Increased capital funding allows current resources to be focused on planting in greenbelts, parks, and riparian areas to achieve increased canopy coverage.
 - Downtown trees play a specific green infrastructure role in managing stormwater, a much less costly solution than improvements to grey infrastructure improvements.
 - Additional tree replacements and new tree planting opportunities (50-75) can be created through new coordinated development in the plan (i.e. Burlington Town Center, Imagine City Hall Park)
 - Trees with suspended pavement and proper soil volume can live up to 50 years, making the initial investment pay off.

http://www.deeproot.com/silvapdfs/resources/articles/LifecycleCostAnalysis.pdf

- Current trees need to be replaced three times over the same 50 year period.
- If the trees reach maturity, an ROI can be over \$25,000 per tree over this period.
- Benefits include stormwater retention, air quality, energy conservation, increased property values and business performance. These all factor into the ROI and have real quantitative value, as well as qualitative benefit.
- The Great Streets initiative will significantly improve standards for future improvements to tree infrastructure.
 - Approximately 1,000 1500 cubic yards of soil is needed per tree for proper growth for large trees like elm and maple. 500-600 cubic yards are needed for smaller mature trees.
 - o All downtown trees should have tree grates for protection and accessibility.
 - Vertical tree protection is needed for young trees to limit vandalism and damage from sidewalk plowing and other impacts.

Water Infrastructure

Current Status:

• Water initially developed a prioritized 30 Year Capital Reinvestment Plan in 2008 outlining the highest priority needs in all areas from the Treatment Plant, two Reservoirs, two Elevated Tanks, the 100-mile Distribution System and Metering. The greatest need at that time, and for the future, is the distribution system with needs in excess of \$35 million. While the 2008 plan did list streets in need of capacity upgrades or streets with a known history of breaks, the plan was not comprehensive in its evaluation of the entire distribution system and did not specifically outline a plan for replacement/rehabilitation based on the expected life cycle of our metal water pipes.

- Given that 42 percent of our pipes are older than 75 years, the water distribution system in particular is in need of additional investment while at the same time investments in our Water Treatment and Storage system must also be maintained at sufficient levels to ensure the City's ability to produce high quality drinking water.
- To complement the above analysis, a building envelope/facility conditions assessment was completed in late 2014.
- After many years of underfunding capital investments, FY16 was the first year of a more robust annual capital budget to date totaling \$1.5 million for efforts related to water distribution, building envelope, plant internal infrastructure and reservoirs. The FY16 rate increase (an increase of \$0.50/100 cu. ft. of use) along with retired debt added \$1 million to the Water Capital budget.
- The proposed budget for FY17 continues to improve the City's water system capital reinvestment ability through a small rate increase (\$0.05/100 cu. ft.) and \$382,000 in Council authorized borrowing to meet the minimum level of investment required to coordinate subsurface utility work with Champlain Parkway efforts. However, this infusion does not provide sufficient funding for replacement of water lines on streets on the regular paving program list, nor the proposed enhanced paving program documented above under the *Streets* section above.
- Replacement of water mains in the recent years has focused on coordinated investments that follow the Capital Street Plan.
- Efforts to develop a formal asset management plan and implement a computerized maintenance management system (CMMS) are underway to support decision making regarding maintenance activities and capital replacement.

- Update the 30 Year Capital Reinvestment Plan to reflect the comprehensive needs of the drinking water system, including all needs at the drinking water plant (building envelope and production infrastructure), storage facilities, metering and distribution system. This enhanced plan will focus on estimating the condition of our pipes older than 75 years old and plan to mitigate this infrastructure deficit as quickly as financially feasible, while beginning to plan for the concurrent timely replacement of younger pipes as they reach their useful life. Where possible, this work will be coordinated with the street paving program, but it is possible that some pipes may need to be rehabilitated outside of the paving program work. Additionally it will integrate our building envelope/facility to ensure integrated financial planning.
- Develop a long term financial planning model for the Water utility for improved long term budget and rate planning. This model will be integrated with financial models for Wastewater and Stormwater to ensure that rate increases across the three utilities are coordinated in such a way to minimize impact to rate payers.
- Pursue additional potential sources of capital funding such as the State Drinking Water Revolving Loan Fund to maintain the necessary level of investments in the Water Capital Reinvestment Plan.
- Leverage new technologies like CIPP (cured-in-place-pipe) relining of water mains to increase their useful life, increase fire flow capabilities, improve water quality, decrease overall project costs and prevent traffic/pedestrian disruption resulting from open digging of City streets.
- Implement the necessary asset management strategies identified in the asset management plan and acquire and implement CMMS tools to support the long term stewardship of our water resource assets. The total estimated distribution (water main) capital need for Water to integrate water main rehabilitation with proposed street paving projects over the next five years (FY17-FY21) is approximately \$12.3 million. This need will be addressed through a

- combination of new revenues (including possible rate increases and use of cash reserve) and Council or voter-authorized borrowing of up to an additional \$8.4 million. Depending on the results of the updated water capital plan and paving plans for FY22 and beyond, additional borrowing may be required in advance of FY22 to continue our paving related infrastructure renewal efforts and bring our average pipe age back to a more acceptable range.
- The total additional water process related capital <u>unrelated</u> to the paving program (e.g. water treatment plant and metering; does not include all building capital) for FY17- FY21 is currently estimated at \$2.6 million. At this time, no borrowing is proposed, but this estimated need will likely change with our updated capital plan, particularly regarding needs at the water treatment plant.
- As part of this capital implementation enhancement, Water Resources will need to evaluate staff resource needs in order to ensure successful implementation of these capital projects.

Wastewater/Stormwater Infrastructure

Current Status:

- Through an intensive inventory effort in 2011, the City has an up to date GIS inventory (location, type, size) of all sanitary, combined, and storm-sewer pipes.
- Whereas the City's CCTV based (pipe filming) condition assessment had been suspended for a number of years due to staff constraints and other demands, the City acquired in-house equipment for filming on an as-needed basis. Since 2015, pipe condition assessment has been prioritized for sewers on streets that are part of the paving program. At this point, there is not enough data to know the full picture of the condition of our sewer assets; however the City is launching a comprehensive Pipe Assessment Project in FY17 (see below under proposed action).
- Rehabilitation (trenchless pipe lining) of a select number of high priority sewer pipes sections has been occurring since 2012 in both the wastewater and stormwater systems. This activity has been coordinated to the maximum extent practicable with streets identified for paving in order to ensure our paving investment is protected. Average annual reinvestment in recent years for sewers has been approximately \$150,000 and \$75,000 for Wastewater and Stormwater respectively. Additional condition assessments are needed to understand the full scope of the sewer infrastructure need and the level of annual investment likely needs to increase to adequately address aging and structurally failing pipe (see Pipe Assessment Project).
- Inspections and initial conditions assessments have been completed for the City's stormwater outfalls. Of our 102 outfalls, approximately 10 percent are in a failed/near failure condition, with many more in poor condition.
- A draft report of the 20-year engineering evaluation and 10 year capital plan for Main, East and North Wastewater Treatment Plants, all 25 pump stations, and portions of the collection system has recently been completed and is under review (as of June 2016). Additionally, assessments of the building envelopes/facilities of the WWTPs were completed late 2014.
- Significant investment in combined sewer stormwater reductions (\$1.16 million) were made in 2010-2012 to reduce the frequency of combined sewer overflows (CSOs) at three combined sewer overflow outfalls. Additional work is necessary to abate CSOs at Pine Street, and possibly at other CSOs pending an update of the Vermont CSO policy.
- Localized separated stormwater management planning activities have either been completed or are underway (College Street Green Stormwater Infrastructure Plan, Centennial Brook Flow Restoration Plan, Englesby Brook Flow Restoration Plan). Additional City wide stormwater management planning is necessary to address our regulatory (Lake Champlain TMDL) as well as our local water resources issues (flooding etc.).

- The recent release of the Lake Champlain TMDL (Total Maximum Daily Load) will result in
 additional new (vs. reinvestment in existing capital) capital costs. Efforts are underway to
 pursue Integrated Water Quality Management Planning to examine the most cost effective
 solutions to meeting the TMDL as well as other Clean Water Act obligations and local clean
 water priorities.
- Efforts to develop a formal asset management plan and implement a computerized maintenance management system (CMMS) are underway to support decision making regarding maintenance activities and capital replacement.

- A prioritized 10 Year Capital Plan for the three treatment plants and 25 pump stations is in process through a 20 Year Engineering Evaluation for Wastewater. This will also include a recommended methodology for assessing the collection system.
- Borrow Clean Water State Revolving Fund (CWSRF) loan money to complete a Pipe Assessment and Rehabilitation project totaling approximately \$5.02 million. This effort will involve an expanded pipe filming and assessment effort to obtain a more comprehensive look at the condition of our wastewater and stormwater pipes and to develop a capital replacement plan for this asset class. Funds will then be used to rehabilitate (through trenchless lining) or replace as many pipes as possible based on that capital plan. The capital plan will also identify long term funding strategies to ensure that remaining pipe replacement needs are addressed in the years to come.
- Borrow CWSRF loan money (\$4.65 million) and Ecosystem Restoration Program grant funds (\$100K) to complete Integrated City-wide stormwater/wet-weather master planning, design and capital project implementation. This effort will involve a substantial detailed capital and programmatic planning effort to identify the specific stormwater management capital investments and other strategies that will be needed to ensure compliance with the Lake Champlain Total Maximum Daily Load (TMDL), as well as other water quality issues such as combined sewer overflows and basement back up issues, stormwater impaired watersheds etc. Later stages will involve the design and implementation of the highest priority water quality management capital projects. State policy on this topic is in flux, and it is possible that additional stormwater treatment, combined sewer mitigation, and possibly wastewater treatment plant upgrade funds will be necessary in the long term to fully comply with the requirements of the TMDL. Leverage CWSRF loan money for any equipment replacement/upgrades identified as part of the 20 year engineering evaluation and 10 year WWTP capital plan or process upgrades if required to meet the Lake Champlain TMDL.
- Develop a long term financial planning model for the Stormwater utility for improved long term budget and rate planning, and continue to advance the financial planning model developed in 2016 for Wastewater as more cost estimate data becomes available. These models will be integrated with financial models for Water to ensure that rate increases across the three utilities are coordinated in such a way to minimize impact to rate payers.
- Implement the necessary asset management strategies identified in the asset management plan and acquire and implement CMMS tools to support the long term stewardship of our water resource assets.
- The total estimated wastewater capital need in order to integrate sewer main rehabilitation with proposed street paving projects over the next 5 years (FY17-FY21) is approximately \$3.1 million. This need will be addressed through rate derived revenues (including possible rate increases and use of cash reserve) and approximately \$2.5 million of borrowing from the CWSRF. No additional bonding is proposed at this time for paving related wastewater infrastructure improvements. However, the pipe assessment project will inform the need for

- additional sewer main expenditures beyond FY19/FY20 and additional borrowing may be necessary at that point.
- The total additional wastewater capital <u>unrelated</u> to the street paving program (e.g. wastewater treatment plant including some building facility repair and pump stations) for FY17- FY21 is currently roughly estimated at \$4.3 million, <u>without</u> any upgrades that may be required as part of the Lake Champlain TMDL. Additional capital planning and Integrated Planning over FY17- FY19 will assist in determining what additional needs must be met due to existing infrastructure, TMDL and other Clean Water Act obligations. This planning effort will be coupled with a financial capacity analysis and strategy development for funding these improvements, including, but not limited to, rate increases, grants, smaller amounts of annual borrowing authorized by the Council (per the Charter), leveraging of additional CWSRF funding or future (larger scale) revenue bonds.
- The total estimated stormwater capital need in order to integrate storm sewer main rehabilitation and stormwater treatment with proposed street paving projects over the next five years (FY17-FY21) is approximately \$4.1 million. This need will be addressed through rate derived revenues (including possible rate increases and use of cash reserve) and approximately \$2.5 million of borrowing from the CWSRF. No additional bonding is proposed at this time for paving related stormwater infrastructure improvements. However, the pipe assessment project will inform the need for additional sewer main expenditures beyond FY19/FY20 and additional borrowing may be necessary at that point.
- Additional stormwater capital costs <u>unrelated</u> to the paving program (FY17-FY21) include an additional approximate \$1.1 million for stormwater outfall repair (currently proposed to be funded by rate revenue) and approximately \$2.1 million on Integrated Planning and <u>initial</u> phases of implementation of enhanced stormwater management retrofits (funded by CWSRF borrowing) related to our highest priority clean water obligations. Additional capital planning and Integrated Planning over FY17-FY19 will assist in determining what additional capital needs must be met due to existing infrastructure, the TMDL and other Clean Water Act obligations. This planning effort will be coupled with a financial capacity analysis and strategy development for funding these improvements, including, but not limited to, rate increases, grants, smaller amounts of annual borrowing authorized by the Council (per the Charter), leveraging of additional CWSRF funding or future larger scale revenue bonds.
- As part of this capital implementation enhancement, Water Resources will need to evaluate staff resource needs in order to ensure successful implementation of these capital projects.

Water Resources FY17-21 Capital Needs	Water	Wastewater	Stormwater	Total
Related to Street Paving	\$12,300,000	\$3,100,000	\$4,100,000	\$15,700,000
Unrelated to Street Paving	\$2,600,000	\$4,300,000	\$3,200,000	\$10,100,000
Total Needs	\$14,100,000	\$7,400,000	\$7,300,000	\$25,800,000
2016 Water Revenue Bond Request*	\$8,350,000			\$8,350,000

*Note: See wastewater and stormwater narrative above for discussion of funding plan for identified wastewater and stormwater need. Future budget planning and Council authorizations will affect FY17-FY21 funding portfolios for all Water Resources. Ongoing capital planning in FY17 and FY18 will inform possible additional needs and borrowing particularly for FY20 and beyond.

Memorial Auditorium

Current Status:

- There is significant capital work needed to continue use of the building.
 - The fire alarm system and the heating system need to be rehabilitated.
 - There are structural questions that require the upper portion of the building be opened up, beams tested, and repaired.
 - No events are scheduled within the building after April 1, 2016.
- There is no budget in the Capital Plan to address any capital needs, which are estimated to cost about \$4 million to maintain the building as is and approximately \$14 million to redevelop the facility.

Proposed Action Under 10-Year Capital Plan:

• An RFP is in process to look at potential reuses of the building. The RFP process is expected to result in a plan for the building, potentially in collaboration with the University of Vermont.

Parking Garages

Current Status:

- A 2014 engineering assessment identified \$9 million of major capital repairs needed in the City's three major downtown parking structures to enable them to reach their full service life:
 - Marketplace Garage (built in 1976 with 378 spaces) requires an estimated \$3.8 million in repairs to extend its life an additional 15-20 years;
 - o College Street Garage (built in 1986 with 456 spaces) requires an estimated \$3.9 million in repairs to extend its life an additional 20-30 years; and
 - Lakeview Garage (built in 1998 with 667 spaces) requires an estimated \$647,000 in repairs to extend its life an additional 30-40 years.
- If the structural, drainage, electrical, and mechanical repairs are not completed in a timely fashion, the parking structures will suffer from increased operating costs, poor customer experience, and a shortened lifespan.
- In 2015, the City Council accepted a Downtown Parking & Transportation Plan that provides a roadmap to upgrading the parking system so it achieves three main goals into the future:
 - o Delivering excellent customer service;
 - o Achieving a financially sustainable system; and
 - o Contributing to the ongoing vitality of downtown.

- Thanks to the continued patronage of the public and rate increases that were enacted in November 2014, the Traffic Fund has transitioned from deficit budgets and deferred capital expenditures to positive budgets that include increased capital investments.
- Phase I of the capital repair effort is currently underway. This \$1.6 million investment is repairing the decks and improving drainage in the College Street Garage while repairing the decks and refurbishing the elevators in Marketplace Garage.
- Design for Phase II is underway, and construction is expected to start in FY17. The estimated cost for this phase is \$7 million. Work in the College Street Garage will include all new high-efficiency LED lighting, repairs to the structural beams, new ventilation fans, etc.

- Work in the Marketplace Garage will include upgraded stair towers, new cable guard rail, and overhauled exit lanes. The Lakeview Garage will see painting of steel, reconfiguration of the stair tower enclosure, and joint sealant. The Downtown Parking & Transportation Plan recommended additional rate adjustments to fund this and future capital repair work.
- The parking plan also recommended further upgrades to the garage payment equipment on-street meter system to expand payment options and to allow for dynamic pricing depending on demand.
- The parking plan's recommendations also provided a road map for expanding the Traffic Fund's focus on maintaining our current system to also be a dynamic engine of innovation as the City looks to reinvest in downtown infrastructure and transportation options.

Parks

Current Status:

- Burlington Parks, Recreation & Waterfront (BPRW) currently manages 40 parks, 38 miles of public trails, and 500+ acres of parkland.
- The Penny for Parks program has been successfully re-established over the last four years, reaching beyond the level of functionality originally intended with the program's inception.
- BPRW's capital planning and implementation resources also include the Bike Path Maintenance Improvement Program (BPMIF), Park Impact Fees, and private donations from the Parks Foundation.
- Over the last four years, BPRW has successfully completed over 100 projects, leveraging an additional \$3 million in enhancements above current funding levels from alternate sources.
- Despite these efforts, BPRW still has significant deferred court replacements, crumbling roadways, stormwater management issues, and outdated public restroom and playground facilities, not to mention climate adaptation needs.

- The comprehensive 2015 BPRW Master Plan illustrated that the Department actually requires twice the current annual funding to maintain capital investments in current parkland, facilities, and amenities
- Much of the current, identified parks capital need comes from projects that were originally installed decades ago and now require substantial investment and renovation rather than light improvement or repair.
- Additional funding will support:
 - Evaluation of existing court placements and subsequent improvement, replacement, or removal:
 - Playground enhancements to increase universal accessibility and innovative play design;
 - o Coordinated planning efforts with DPW and stormwater team for improvements to park infrastructure and better community management of stormwater issues;
 - o Increased funding for connectivity and accessibility upgrades to existing park facilities (trails, paths, bathrooms);
 - Phased installation of parks and Bike Path-specific wayfinding throughout the parks system;
 - Management updates to Urban Wild Conservation areas to better protect our sensitive natural areas; and
 - o Monument restoration and public art maintenance to preserve and protect the heritage, history, and beauty of our parks system.
 - Staffing/consultant capacity to support expeditious project completion.

Burlington School District

Current Status:

- As noted above, the City and School District both have capital needs and are seeking to work collaboratively to limit the impact of those costs on the community.
- Adopting the practice of a long-range comprehensive capital planning effort in consultation
 with the City, the School District has conducted facility assessments and identified needs across
 the community.
- In addition to diagnosing its capital needs, the School District is collaborating with the City to attempt to find \$2 million of recurring annual operational savings.
- Unlike the City, the District is reliant on property taxes supporting the State Education Fund for its infrastructure needs.
- Total School District need will be a function in large part of the District's vision for the future of Burlington High School the School Board is weighing options that range from necessary repairs to the facility to a complete rebuild (the latter option is substantially more expensive).

- The School District is by law outside of the City's capital planning effort.
- The City and School District understand they draw on the same property tax base and are
 working together to reduce operational costs where possible and to accommodate each other's
 capital needs.
- Part of the reason the City has pursued the RFP process for Memorial Auditorium was a recognition of the needs in the School District: a complete re-build and repurposing of the auditorium could have cost upward of \$14 million, which would have taken place in competition with the needs of the School District.

V. Financing Plan

The challenge posed by our deteriorating infrastructure impacts all our residents, businesses, and institutions. Proper stewardship will require contributions from all stakeholders across the City to stabilize and efficiently maintain our infrastructure if we are going to keep our City affordable, accessible, economically vibrant, and reduce long-term potential costs. By sharing the cost among all stakeholders, we will be able to address the challenge while avoiding an undue burden on any group – and by taking action proactively now, while the City is in a strong financial position and before the system deteriorates further, we are reducing the total cost to taxpayers.

This section outlines cost-saving measures and a proposed cost-sharing strategy among different stakeholders, including institutions, visitors, and the business community.

Overview

This white paper outlines a period of focused infrastructure investment of about \$42 million in general fund assets and about \$26 million in water resource related assets over the next five years. The strategy for funding this needed investment includes:

- \$8.6 million in investment in the Bike Path and renovated City Hall Park from increasing the City's Gross Receipts Tax by two percent on alcohol and rooms starting in FY17. Visitors to Burlington are expected to pay for the majority of these revenues, approximately 60 percent of meals costs and close to 100 percent of hotel room costs.
- Approximately \$4 million in new contributions from the University of Vermont (UVM) and Champlain College.
- \$250,000 in new transportation investment from the Traffic Fund in FY17.
- Approximately \$2 million in private contributions.
- Approximately \$27.5 million in a new general obligation bond that will be drawn down incrementally over five years to pay for the balance of the investments planned over the next five years (detailed in the chart below).
- An additional \$8.4 million in a revenue bond for Water and Wastewater improvements, with an additional almost \$7 million in initial Clean Water State Revolving Fund loans for Wastewater and Stormwater capital planning, design and implementation.

Following the five-year investment period, the 10-year capital plan projects a substantially higher ongoing annual investment in the maintenance of the City's streets and sidewalks to ensure the higher quality infrastructure is maintained and the current backlog of deferred investment does not build up again.

FY17 – FY21 General Fund Capital Plan Summary by Source

General Fund	Streets/Sidewalks	Vehicle Fleet	Bike Path	City Hall Park	IT infrastructur e	Civic Buildings	Total
Traffic Fund	\$250,000						250,000
Gross Receipts			\$7,170,425	\$1,500,000			\$8,670,425
Institutions	\$2,085,320	\$785,888	\$750,000	\$500,000			\$4,121,208
Philanthropy			\$1,000,000	\$1,030,000			\$2,030,000
Bond Proceeds	\$14,392,032	\$3,357,325	\$3,198,576		\$1,675,000	\$4,950,575	\$27,573,508
Total	\$16,727,352	\$4,143,213	\$12,119,001	\$3,030,000	\$1,675,000	\$4,950,575	\$42,645,141

Financing Details by Source

Traffic Fund

Summary of role in 10 Year Capital Plan: Over the past three years, through expense reductions and new pricing strategies, the Traffic Fund has been transformed from negative operating revenues to a revenue generator for the City's traffic-related needs. The plan assumes that the Traffic Fund will generate \$250,000 from the approved FY17 budget.

Institutions

Summary of role in 10 Year Capital Plan: UVM and Champlain College are tremendous assets for the City of Burlington, which benefits from the students, faculty, research, and cultural springs both institutions provide. In turn, UVM and Champlain share a common interest in maintaining an attractive and inviting community that is diverse, vibrant, welcoming to students, maintains a high quality of life, and possesses amenities that attract students and take advantage of Burlington's remarkable natural setting.

Students living off campus generally live in taxable properties that participate in the funding of the City's capital infrastructure. However, approximately 8,000 students – about 20 percent of the City's population – live in tax-exempt dormitories. The City is involved in negotiations with UVM and Champlain College an annual contribution that would generate about \$10 million over a 10-year period for capital investments, approximately 14 percent of the total funding need for the Capital Plan. The plan assumes that these payments begin with the 2017-2018 academic year.

Implementation required: Completion of agreements regarding this plan with both UVM and Champlain College.

Gross Receipts Revenues

Summary of role in 10 Year Capital Plan: Burlington's business community has time and again stepped forward to help make this City the incredible destination and accessible community that is has become. And, there is reason to believe that re-investment in City assets will help support the prosperity Burlington has enjoyed in recent years. To facilitate necessary investment in new, enhanced City assets like the Bike Path and City Hall Park that spur economic growth, this white paper proposes an increase from two to four percent of the gross receipts tax for hotels and alcohol for five years.

• The City's gross receipts tax (which includes rooms and meals purchases) is paid primarily by the many visitors who come annually to Burlington (about 60 percent of meals costs and close to 100 percent of hotel room costs). Over a five-year period, that increase would generate approximately \$1.5 million annually and about \$8.5 million total.

Implementation required:

• The City Council must approve a two percent increase in the gross receipts tax for alcohol and rooms for FY17.

Bonding

Summary of role in 10 Year Capital Plan: To make the balance of the necessary investments between FY17 and FY21, the City will seek authority to bond over time for a total General

Obligation Bond of approximately \$27.5 million. The City will pursue a number of strategies to minimize the impact of this new bonding on taxpayers, including:

- <u>Phasing:</u> If authorized, the new bonding will be done in annual phases to keep pace with the construction of new infrastructure. This will spread out over that time period the new financial impact of this bonding.
- <u>Debt retirement:</u> In 2022 the City will retire \$4.3 million of debt, freeing up approximately \$300,000 a year to service the new bond.
- <u>Deferral of principal payments</u>: To minimize the impact of the new bonding on taxpayers in the early years (until other debt is retired and the City's Waterfront TIF district expires in 2026, freeing up considerable new revenues that will take pressure off property taxpayers), the City will pursue a strategy common in the municipal bond market of deferring principal payments on some of the new bonding for five years.

The cumulative impacts of these strategies mean that the average residential property taxpayer will face higher tax bills as a result of the new bond authorization of less than \$10/month in the early years of the new bonding and no more than \$10/month when the bonds are fully drawn and amortizing (around \$120 a year). The model contains some uncertainty beyond 2021, as the higher base spending required to maintain improved infrastructure is not fully projected. This approach is well within the City's bonding capacity. As noted above, the City relies on different sources for its underground water infrastructure, and would seek additional authority to supply the \$8.4 million necessary to complete water infrastructure repairs concurrent with street repaving.

Regarding its overall bond debt, Burlington has taken a conservative approach. The City could issue an additional \$200 million of general obligation debt and not jeopardize its newly restored "A" rating or otherwise impact the scoring it receives related to the City's debt. The City currently has approximately \$76 million of net direct General Obligation debt.

Implementation required: The General Obligation bond will require a two-thirds vote in support from City taxpayers in November 2016. The Revenue Anticipation bond will require a 50 percent vote in support from City residents in November 2016.

VI. 2016 Timeline

Key steps in the implementation of this plan will take place over the course of the 2016 calendar year. Current projected actions include:

- September October 2016:
 - o City Council review, amendment, and approval of the 10-year capital plan.
 - o Commission review of the 10-year capital plan.
 - \circ Completion of discussions with UVM and Champlain College regarding contributions to 10-year capital plan.
- November 2016:
 - o Voter consideration of \$27.5 million General Fund infrastructure bond
 - o Voter consideration of \$8.4 million Water infrastructure bond
 - o City Council consideration and approval of increase of gross receipts tax.