SUBJECT: 2016 Asset Management Financing Plan

TO: Committee of the Whole

FROM: Finance Department

Report Number: F-12-17

Wards Affected: All

File Numbers: 701-04

Date to Committee: May 1, 2017

Date to Council: May 15, 2017

Recommendation:

Receive and file the 2016 Asset Management Financing Plan; and

Direct the Director of Finance to continue to include dedicated infrastructure renewal levy requirements in future budgets; and

Direct the Director of Finance to repurpose the levy raised for the expansion of Joseph Brant Hospital to dedicated infrastructure renewal needs as the hospital levy requirements are reduced; and

Direct the Director of Finance to include full lifecycle costing in all Capital Budget business cases/ committee reports pertaining to new assets and asset expansions as part of the annual capital budget process; and

Direct the Director of Finance to update the Asset Management Financing Plan aligned with updates to the Asset Management Plan contained in capital works report CW-22-17.

Purpose:

The Asset Management Financing Plan is the city's implementation strategy for meeting the financial needs of the Asset Management plan. The financing plan is aligned with and supports the city's Strategic Plan through an Engaging City.

An Engaging City

- Good Governance

- 4.1.e City infrastructure, such as buildings and roads are in good condition and properly maintained
  - Annual property tax increases will reflect inflationary increases, infrastructure renewal financing and increased service investments.

Background and Discussion:

In December 2013, Council approved the 20 year financing plan presented in the Asset Management Financing Plan report (F-39-13). The financing plan presented within the report provided a long term sustainable funding plan to address the city' s unfunded renewal needs (backlog), and infrastructure funding gap as well as provide predictable infrastructure investment consistent with the city's Long Term Financial Plan. The financing plan included the following;

- Dedicated Infrastructure levy of 1.25% (up to 2022), reducing to 1% (2023-2033) and further reducing to 0.5% (2034 and beyond)
- re-purposing the hospital levy in phases beginning in 2019

In July 2015, Council directed staff to bring forward a holistic and coordinated funding plan in order to address the existing backlog of road works. An asset management plan update (CW-20-15) pertaining specifically to roads infrastructure was brought forward recommending a short term funding strategy which was approved. The funding strategy enhanced the overall asset management financing plan by including the following;

- $20 million phased over 4 years (2016-2019) to directly assist with the renewal of the city's roads infrastructure
- 0.2% levy beginning in 2020 to address the renewal needs of a growing asset inventory

On April 18, 2017, Council approved the city's Asset Management plan which was revised and refined significantly to meet legislative requirements and provides the city's most comprehensive and detailed asset management plan to date. The updated financing plan uses the information from the asset management plan to determine the sustainability and effectiveness of the financing plan and any changes proposed.

State of Local Infrastructure

The city's replacement values are highlighted in table A below. All replacement values are based on maintaining the city's current asset inventory, and renewing and replacing assets to a similar function and equivalent utility. As of 2016 the overall replacement value of the city's inventory is $2.9 billion, an increase of $395 million from 2015 values.

The primary reason for the increase is the enhancement of inventory and condition data, updating to current dollars and the inclusion of costs for updated legislated requirements and soft costs which were not considered in previous asset management plans.

Table A: 2016 Replacement Value by Asset Category

Asset Category	Replacement Value (millions '000)
Facilities & Buildings	$548
Roadways	$2,013
Stormwater Management	$67
Parks & Land Improvements	$200
Fleet - Vehicles & Equipment	$71
Information Technology (IT) Services	$45
Total	**$2,944**

Unfunded Renewal Need

The city's unfunded renewal need represents the unfunded value of infrastructure renewal that requires immediate attention as of the current year, previously referred to as the city's backlog. This term has been refined to more closely align with the intended meaning and use of the term. The city's unfunded renewal need is currently $126.5 million, compared to $133.5 million from the previous update (reduction of approximately $7 million). As a result of Council's continued and recently enhanced investment and commitment to the city's existing infrastructure needs, progress has been made on renewing and replacing more of our assets at the right time.

Annual Renewal Need

The City of Burlington is still considered to be a young city and many of our assets are only now reaching the middle of their estimated useful life. The result is that over a 60 year time horizon the renewal needs increase steadily as assets approach end of life. Over the same time horizon the annual average renewal requirements are approximately $67.5 million. This would imply that on average this should be our annual investment to renew our assets in a timely manner and maximize value for service.   When reviewing the requirements average needs vary based on timing of renewal; over a shorter term of 20 years the average need is $41 million (2017-2026) and then stepping up to $56 million (2027-2036), signifying a steady increase in our needs. Chart A provides a graphical representation of our total annual renewal needs over the 60 year period. Table B, highlights the unfunded renewal need and 60 year average renewal need by asset category.

Chart A: 60 Year Needs Analysis

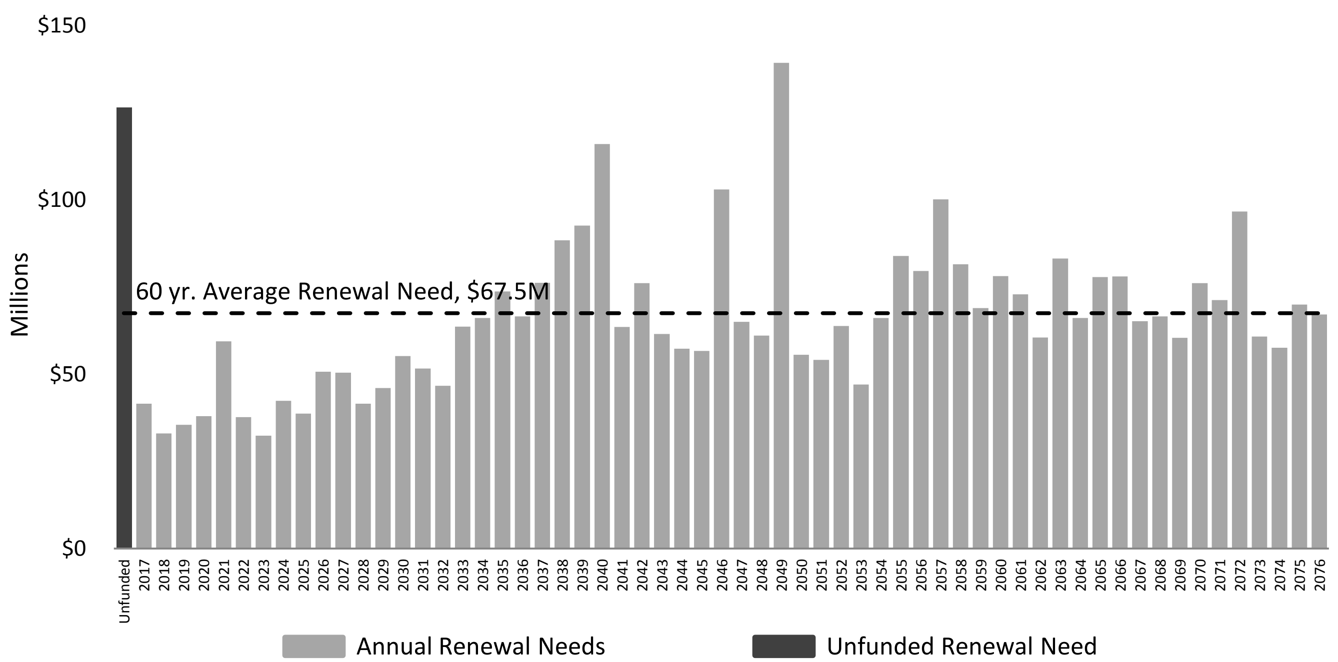


Table B: Needs Analysis

Asset Category	Unfunded Renewal Need (URN)	60-yr Average Renewal Need (millions '000)
Facilities & Buildings	$11.8	$9.0
Roadways	$108	$42.7
Stormwater Management	-	$1.2
Parks & Land Improvements	$6.3	$5.6
Fleet - Vehicles & Equipment	-	$6.6
Information Technology (IT) Services	$0.4	$2.4
Total	**$126.5**	**$67.5**

Financing Plan

Based on the comprehensive 2016 Asset Management plan, the financial model was updated for revised costs and revenue assumptions. The financing plan uses the financial variables that are known today in modeling a cash flow over the next 60 years. Based on the financial model represented in Appendix A, by maintaining the financing strategy presented to Council in 2013 and updated in 2015, the plan provides an adequate and stable ongoing funding strategy, that continues to achieve the objectives set forth in 2013 and supports sustainable long term funding. The following highlights the funding strategy in the 2016 asset management financing plan.

Dedicated Infrastructure Levy: A dedicated levy towards infrastructure represents a consistent and strategic approach to investment in the city's replacement needs that is both sustainable in the short and long term. The financial model includes the following to address infrastructure;

- Dedicated Infrastructure levy of 1.25% (up to 2022), reducing to 1% (2023-2033) and further reducing to 0.5% (2034 and beyond)
- 0.2% levy beginning in 2020 to address the renewal needs of a growing asset inventory

No further changes in the dedicated infrastructure levy are recommended through this report, as the levies continue to meet the long term funding needs.

Reserve and Reserve Funds: Reserve and reserve funds are a critical component of the city's long term financial planning. For our infrastructure needs they represent planned sustainability for today and the future. The asset management financing plan conservatively employs the city's reserve and reserve funds without impacting financial flexibility and overall liquidity. The financial model continues to include a stable approach to using the following reserve funds in the financial plan.

- Burlington Hydro reserve fund
- Capital reserves & reserve funds (various)
- Parks & Recreation Infrastructure reserve funds (various)
- Federal and Provincial Gas Tax allocation

Debt Policy: The city's debt policy allows for total debt charges as a percentage of net revenues to be no greater than 12.5%, and the city's tax supported debt policy is limited to 10% of net revenues. Staff recommends this policy continue as it is an integral part to responsible debt management. Furthermore, as per the city's long term financial plan the city continues to phase in a reduced reliance on debt as a funding source for ongoing renewal needs. As such the asset management financing plan does not consider the use of debt beyond the first ten years of the financing plan as a sustainable funding source for renewal needs.

The financial model includes approximately $67 million in tax supported debt towards infrastructure renewal from 2017-2026 as per the city's 2017 approved capital program without impacting the city's debt policy limits. Beyond 2026 debt financing is not modeled as a funding source for renewal to adhere to our debt policy and principles. Any consideration of debt beyond what is forecasted in the model will increase the city's debt as a percentage of net revenue fund revenue, as well as debt borrowing costs.

Hospital Levy: The hospital levy is expected to reduce in 2019 as contributions to the hospital are expected to be fulfilled, however debt repayments remain. As per previous asset management financing plans it has been modeled that when the hospital levy is reduced the available tax room would be repurposed to the city's infrastructure renewal needs. Repurposing of the hospital levy (total of $4.8 million) would occur in phases beginning in 2019 for approximately $1.5 million, by 2027 it is assumed that the entire hospital levy would be repurposed to assist in sustainable infrastructure financing.

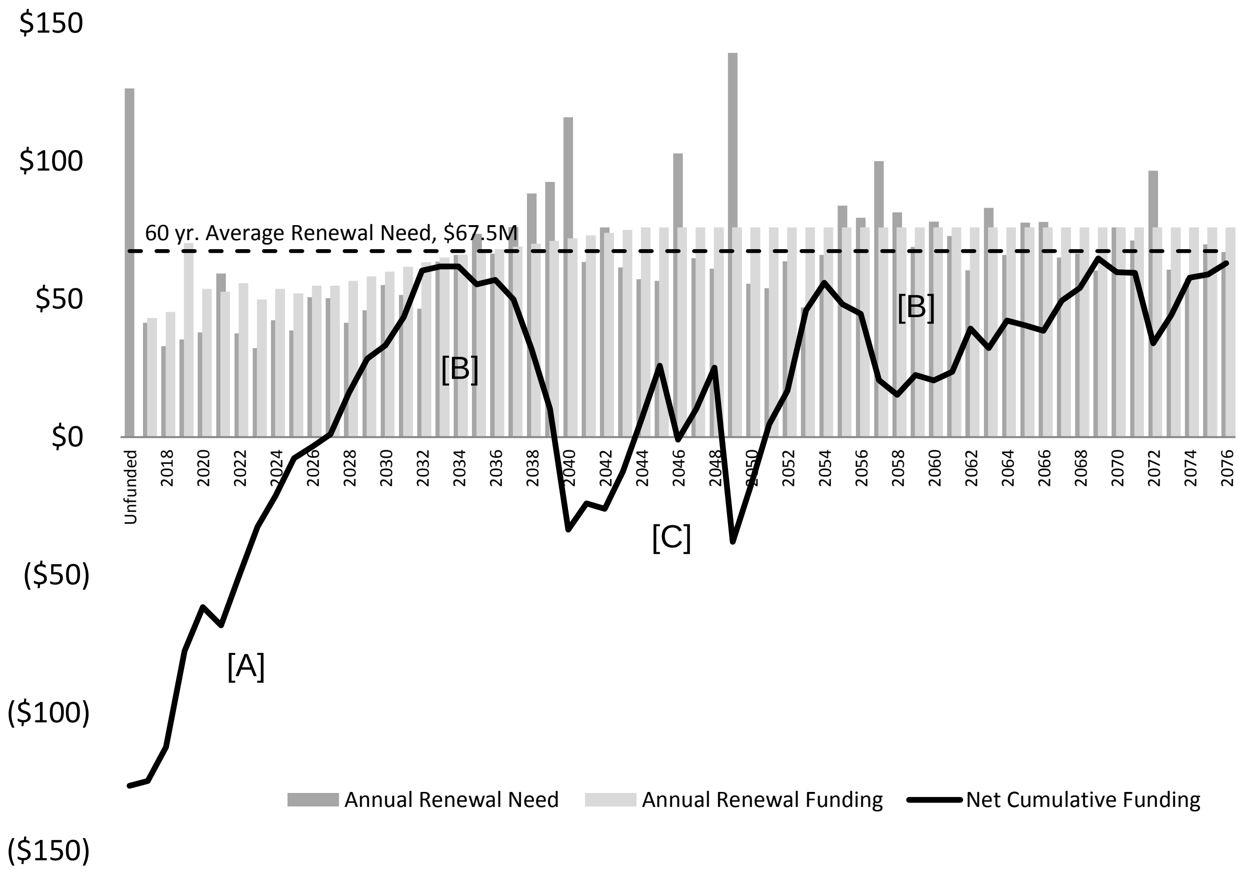
The funding options noted above are included in the asset management financial plan to present a holistic approach to funding our infrastructure needs. Staff recommend continuing with the financial strategy in place. As per the asset management plan our assets overall are in 'good' condition and our unfunded renewal needs are decreasing. We are in line with the objectives set out in 2013 and moving towards the goal of long term sustainability.

It is important to note that the financing plan represents a snapshot at a point in time and variables and factors can change both on the costs and revenues that will impact the model in the future. Though the financing strategy covers a 60 year time horizon the objective is to concentrate our funding strategies in the near term where variables are more predictable, costs are more accurate and assumptions are more realistic of the environment. Below follows a more detailed discussion on model assumptions and the anticipated impact on the financing model in meeting our infrastructure needs.

Strategy/process

Based on the financing approved to date towards infrastructure, anticipated funding employed and the needs as discussed in the previous sections the following chart summarizes the city's financial position relative to its renewal needs.

Chart B: Cumulative Infrastructure Funding Gap



The above chart, (Appendix A) illustrates a balanced approach to addressing our renewal needs for the city. Throughout the time horizon based on the financing plan presented within this report the city will move through different financial positions, where at times our funding levels will be greater than our need and vice versa. It is important to note that the financing plan contains flexibility. The proceeding section will highlight periods noted within the 60 year time frame and the financial flexibility we can draw upon in addressing our infrastructure requirements.

> **[A]** This period represents an *infrastructure funding deficit*. This is primarily driven by the unfunded renewal needs of $126.5 million, which is the value of our infrastructure that needs immediate attention. As mentioned earlier the unfunded renewal needs has decreased by $7 million as a result of steady commitment and investment, and with the updated financing plan we anticipate the unfunded renewal needs will be eliminated by 2027. This is in line with the previous asset management financing model presented in 2015. Debt financing is relied upon in this period in order to address our annual renewal needs but more importantly to address the unfunded renewal needs.

[B] These periods represent *sustainable infrastructure funding*. Infrastructure needs are being met in a timely manner and any years where funding is greater than renewal needs is being built up in capital reserves for future needs. Debt financing is not relied upon. The period beyond 2050 is representative of our long term sustainability goal.

[C] From 2040 through 2051 is a period of notable fluctuations. As mentioned earlier and as illustrated through chart B, the city's infrastructure needs start to see significant spikes as assets are reaching the end of their useful life. These spikes are causing significant draws beyond our annual funding provisions. As a result we fluctuate from periods of funding *deficits* to *sustainable* funding. To address these periods of *infrastructure deficits* options exist, which may include but are not limited to the following;

- condition of certain assets which are driving the spikes in renewal needs maybe deferred based on condition at that point in time, assisting in smoothing out the needs and preventing significant draws on our funding allotment.
- Use of debt financing to subsidize the asset management financing plan to achieve positive net cumulative funding in those periods while still remaining within the city's debt policy limits.
- Defer the reduction in the dedicated infrastructure levy.

The funding options have a future impact to the operating budget in terms of debt charges in the case of continuing debt and any changes to dedicated levy that would extend beyond the original plan.

It is important to keep in mind as mentioned previously that though this is a 60 year plan, we are focusing on a 20 year window ensuring that the objectives of the asset management financing plan are on target over 20 years. Beyond this, variables and assumptions which will be discussed next can significantly alter the future, which is why staff is recommending continuing the plan as put forward and ensuring updates to the financing plan are aligned with updates to the asset management plan. At the present time the asset management financing plan addresses the unfunded renewal needs, reduces the city's reliance on debt for renewal projects and provides predictable infrastructure investment while moving towards a position where the city's infrastructure is supported by a sustainable funding model.

Factors Impacting the Financing Plan

There are a few assumptions that were made in developing the asset management financing plan. It is expected that changes in these variables will occur and will have a direct impact on the funding strategy. However, based on the uncertainties surrounding the variables it is difficult to discern the degree of impact they may have or when and therefore were omitted from the model. Some of the notable variables and their impact are discussed further.

New Assets: Any future new assets or asset expansions should be done in consideration of community benefit in terms of service value as well as the additional lifecycle costs that the city will need to be responsible for in the future. Staff recommend that as part of the annual capital budget process, any new assets or asset enhancements will include lifecycle costs. Furthermore, the capital program has a limited funding envelope and consideration of building new, expanding assets or investment in strategic priorities takes away from funding that would be dedicated towards renewal, therefore impacting the financing strategy. Similarly, the model excludes divesting of assets which would have the opposite impact to the financing plan. New/ divesting of assets have the potential to increase/ reduce our annual replacement requirements, as a result changing our net financial position over time.

Grant Programs: The model excludes the receipt of any potential one time future infrastructure grants from senior levels of government. Since timing of government programs, and value of the programs are uncertain they were excluded, however, any potential dollars to the city can assist in reducing our unfunded renewal needs at a faster rate and/or assist in addressing our annual renewal needs. Keeping in mind this is not a sustainable funding source.

Unfunded Renewal Needs: The financing plan assumes that the unfunded renewal needs of $126.5 million are eliminated in the 60 year time horizon. As mentioned earlier changes to investment into our infrastructure over the last few years and a steady commitment to the city’s unfunded need has created progress to eliminating the unfunded renewal needs. However, there are many factors that can impact this number, for example resource capacity, additional infrastructure funding, and further depreciation of assets that require immediate attention. These have the potential to delay and/ or speed up progress in addressing unfunded renewal needs which impacts the city’s net financial position in the short term.

Levels of Service: Although the asset management plan was developed with a comprehensive assessment of needs and condition analysis, the next phase would be to develop a community based levels of service framework to assist in defining the needs within each asset category, more specifically for public facing assets. As level of service standards are developed it has the potential to increase our renewal requirements to ensure standards are achieved as expected when considering value for service.

Inflation: The financing plan has been modeled in current dollars similar to the ten year capital budget and forecast and the asset management plan (CW-22-17). No inflation has been accounted for on either costs or revenues.

Interest on Reserve Funds: The model does not consider interest earned as a result of monies that may accumulate in the reserve funds from the funding strategy.

Joint Ventures: The assets under joint venture agreement are included in our asset inventory value of $2.95 billion, however are not included in the analysis of our annual needs. The city is undergoing a joint venture policy review and based on the last policy update joint venture partners are responsible for all capital renewal needs for joint venture facilities in which they operate.

These variables are monitored to determine their impact on the financing plan, any significant adverse impact to the funding strategy will be brought forward to Council with options for corrective action.

Next Steps

The development of an integrated Asset Management Plan and Financing Strategy meets and in some cases exceeds the mandated requirements set out by the Ministry of Infrastructure Ontario. To further advance asset management practices within the organization the Asset Management Plan report (CW-22-17) noted several items as part of a continuous improvement plan. One item which is integral to defining the future lifecycle needs of city assets is Levels of Service. Levels of Service reflect the social and economic goals of the community as it pertains to the service value with respect to a particular asset. It can include any number of parameters including customer satisfaction, quality and reliability. Establishing a council approved level of service assists in infrastructure planning related to the operation, maintenance and replacement of infrastructure that is reflective of community ideals.

The 2016 Asset Management Plan and Financing Plan renewal needs were developed using Technical Levels of Service largely derived based on asset age, condition and of similar utility. The plan does not consider a replacement that by our current day standards would be considered an asset enhancement or new asset. This is due to the fact that capital enhancements are done in an ad-hoc manner with community input specific to the capital project and not in consideration of a larger strategic vision for the community regarding each asset class.

The next phase of developing asset management practices in the organization is to move in a direction to evaluate levels of service in order to more clearly forecast lifecycle costs. Developing a Levels of Service framework where the process and outcome will vary across asset classes is an activity that will progress over the next number of years. Staff anticipates reporting back to Council next year bringing forward a report defining a process, resourcing requirements for a large scale public engagement process and the suggestion of an asset category to pilot the next phase. This represents an important next step for asset management within the organization; it is also a step into new territory for the City of Burlington along with many other municipalities, who are just beginning the asset management process.

Financial Matters:

The City's tangible capital assets have a replacement value of approximately $2.95 billion. The analysis undertaken as part of the Asset Management Plan identifies an unfunded renewal need of approximately $126.5M and a long-term (60 year) annual reinvestment need that averages approximately $67.5M.

Council over the last numbers of years has made steady investments in the management of our infrastructure. Based on the financial model presented within this report, staff recommend that Council continue with the financing plan currently in place which includes the following;

- Dedicated Infrastructure levy of 1.25% (up to 2022), reducing to 1% (2023-2033) and further reducing to 0.5% (2034 and beyond)
- re-purposing the hospital levy in phases beginning in 2019
- $20 million phased over 4 years (2016-2019) to directly assist with the renewal of the city's roads infrastructure
- 0.2% levy beginning in 2020 to address the renewal needs of a growing asset inventory and impact of future unknown variables
- Reduced reliance on debt to fund infrastructure renewal needs

The long term financing plan is sustainable. It maximizes the use of dedicated infrastructure funding in the early years, helping to eliminate the current $126.5 million in unfunded renewal needs.

More recently, the Association of Municipalities (AMO) in consultation with its members launched a discussion on how municipalities can achieve long term sustainability when managing the increasing demands of Ontario $60 billion infrastructure deficit. Recognizing a municipality's main source of revenue is property taxes which cannot keep pace with the pressures of running programs, services and infrastructure. A detailed analysis by AMO suggests that if municipal governments rely on property taxes they would require 3.84% annual property tax increases for 10 years to only fund the $60 billion Ontario infrastructure deficit. This puts into perspective the magnitude of an infrastructure commitment when spreading it over a short period of time.

Connections:

The asset management financing plan represents an important document for the City of Burlington in maintaining the condition of our assets in a fiscally responsible manner while maintaining our current day levels of service. The document fits within the spectrum of a long term city plan that is aligned with the City of Burlington Strategic Plan.

Public Engagement Matters:

The city's asset management plan was approved by Council on April 18, 2017 and can be viewed on the city's website.

Conclusion:

The 2016 asset management financing plan spans the city's renewal needs and corresponding funding strategy over a 60 year time horizon. The Asset Management Plan document and corresponding financial plan are components of a process that is continually monitored and improved upon to ensure asset management and funding strategies are effective in maximizing the value of the city's infrastructure. It is important to consider the numerous factors that can impact the funding strategy in the long term, when variables become more difficult to predict. As such the financing strategy presented today focuses on the immediate needs of eliminating the city's unfunded renewal needs and the next wave of assets approaching their useful life. The asset management financing plan provides a plan for investing in the city's infrastructure which is essential to providing valued services. The plan provides predictable infrastructure investment that is sustainable and meets the objectives of the city's long term financial plan.

Respectfully submitted,

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Appendices:

A. Cumulative Infrastructure Funding

Report Approval:

All reports are reviewed and/or approved by Department Director, Director of Finance and Director of Legal. Final approval is by the City Manager.

Appendix A: Cumulative Infrastructure Funding Gap