

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF NOVEMBER 19, 2013

Item 3, Report No. 51, of the Committee of the Whole (Working Session), which was adopted without amendment by the Council of the City of Vaughan on November 19, 2013.

3

CORPORATE ASSET MANAGEMENT STRATEGY

The Committee of the Whole (Working Session) recommends approval of the recommendations contained in the following report of the Interim City Manager, Commissioner of Engineering and Public Works, Acting Commissioner of Finance and the Director of Engineering Services, dated November 12, 2013:

Recommendation

The Interim City Manager, Commissioner of Engineering and Public Works, Acting Commissioner of Finance and the Director of Engineering Services recommend:

1. That Council endorse the preferred funding strategy outlined in the Economic Impact section of the report, and
2. That the funding requirements will be included for consideration as part of the 2014 Budget Deliberations.

Contribution to Sustainability

An integral part of a sustainable city is effective asset management. The management of the City's assets will maximize the return on the capital and operating investments, and ensure optimal services are provided to the City's citizens.

Economic Impact

Capital Budget

The \$2.5M implementation of Phase 2 of the Corporate Asset Management initiative is proposed to be funded from Gas Tax

During the 2013 Budget Deliberations, Capital Project EN-1958-13 Corporate Asset Management was presented whereby:

- \$500k was approved in 2013 for the development of the Asset Management Framework
- \$780k was recognized in 2014 for the initial implementation of the corporate asset management system, and
- \$750k was recognized in 2015 for the continued implementation of the system

In order to move forward with the next phase of the Corporate Asset Management initiative, the revised estimate for implementing the newly defined elements is a total of \$2.5M. This represents a \$970k increase to the original estimated budget requirements, but reflects an efficient implementation process. The following Table summarizes these changes:

	2013 (Approved)	2014 (Forecast)	2015 (Forecast)	TOTAL
Preliminary Submission	\$500,000	\$780,000	\$750,000	\$2,030,000
Revised Submission	\$500,000	\$2,500,000		\$3,000,000

Difference \$970,000

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF NOVEMBER 19, 2013

Item 3, CW(W/S) Report No. 51 – Page 2

Capital Project EN-1958-13 Corporate Asset Management has been submitted for Council consideration as part of the 2014 Budget Deliberations, with funding for the \$2.5M being entirely from Gas Tax. Staff have confirmed with the Association of Municipalities Ontario (AMO) that the CWMS, the AMS and data collection qualify for funding from Gas Tax.

The future Phase 3 will require an estimated investment of \$0.8M for asset management tools, as well as supportive investments in core enterprise IT systems

The Corporate Asset Management framework prepared by GHD Inc. also suggests that the City may need to consider additional asset management investments, as well as supportive enterprise IT systems, in the longer term. These additional investments (estimated at \$0.8M) for asset management tools are not being recommended by staff at this time. Core enterprise IT solutions will be separately prioritized by staff for Council's consideration as part of future budgets. These corporate enterprise systems, being considered as part of the Corporate IT Strategy include the Project Management Information System (PMIS) and Electronic Document Management System (EDMS).

Operating Budget

Phase 2 implementation will also include 5 new FTE's with a net impact of \$108k from the Water and Wastewater rate and \$264k from Taxation.

To support a successful implementation of the Corporate Asset Management Framework and Strategy and ensure ongoing effectiveness, 5 FTE's will be required for the next phase of this initiative. The 5 FTE's represent a Manager to lead a newly created Asset Management Office, as well as 4 Asset Management Co-ordinator's within the Community Services and Engineering & Public Works Commissions. The total estimated cost associated with these 5 additional resources is approximately \$561k. Staff have explored opportunities to partially offset the costs associated with these FTE's. The table below provides a summary for each position.

Position	Total Budget	Water & Wastewater Rate	Operating Budget Offsets	Taxation Funding
Manager of Corporate Asset Management	\$142,012	\$80,947	\$0	\$61,065
Roads Asset Management Co-ordinator	\$108,185	\$0	\$108,185	\$0
Water Asset Management Co-ordinator	\$108,185	\$108,185	\$0	\$0
Building & Facilities A.M. Co-ordinator	\$96,360	\$0	\$0	\$96,360
Community Services A.M. Co-ordinator	\$106,285	\$0	\$0	\$106,285
TOTAL	\$ 561,027	\$189,132	\$108,185	\$263,710

The identified Additional Resource Requests have been submitted for consideration as part of the 2014 Budget Deliberations.

Communications Plan

Not applicable at this time.

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF NOVEMBER 19, 2013

Item 3, CW(WS) Report No. 51 – Page 3

Purpose

To provide a summary of the costs associated with the implementation of the Corporate Asset Management Strategy, and funding alternatives.

Background - Analysis and Options

A roadmap to implement Corporate Asset Management practices has been developed and approved by Council

At the meeting held on October 8, 2013 Council approved the following recommendations of the Priorities and Key Initiatives Committee:

- 1. That recommendation 1 of the following report of the Interim City Manager, Commissioner of Engineering and Public Works and the Director of Engineering Services, dated September 16, 2013 be approved;*
- 2. That staff report back as soon as possible to a Committee of the Whole (Working Session) illustrating the framework of costs and funding to show the full tax impact;*
- 3. That staff review the implementation schedule so that funds being requested in 2014 can be phased in over 2014, 2015 and 2016;*
- 4. That the benefits and cost savings be shown in the financial impact to illustrate the payback period; and*
- 5. That the presentation by the Commissioner of Engineering and Public Works, the Director of Engineering Services, and Mr. Roop Lutchman, GHD, and Communication C1, presentation material, be received.*

Corporate investments in Information Technology Systems, Data, and Human Resources will be needed to successfully implement the Corporate Asset Management Strategy

The Corporate Asset Management initiative is proposed to be executed in a multi-phased approach. The development of the Corporate Asset Management Strategy (CAMS) is the key deliverable in Phase 1 of this initiative. Two additional phases have been identified to fully implement the strategy. The implementation of the core IT systems is the goal of Phase 2, which will be carried out between 2014 to 2016. Any additional tools and additional data collection are envisioned to be undertaken in Phase 3, targeted for 2016 to 2018. The following table summarizes the key deliverables of all 3 Phases.

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF NOVEMBER 19, 2013

Item 3, CW(W/S) Report No. 51 – Page 4

Phase	Asset Management – Required Investments	Estimated Cost
Phase 1 (2012 to 2013)	Corporate Asset Management Strategy (Completed)	\$0.45M
Phase 2 (2014 to 2016)	Computerized Work Management System (CWMS) Asset Management System (AMS) Data Collection	\$1.65M \$0.35M \$0.50M
	Phase 2 Corporate Asset Management Sub-Total	\$2.5M
Phase 3 (future)	Additional Tools and Data Collection	\$0.8M
	Estimated Corporate Asset Management Total	\$3.75M

Staff have reviewed and analyzed various funding strategies for Phase 2 of this initiative.

Capital

Through the development of the Asset Management Strategy, it has been identified that a total investment of \$2.5M will be required to procure the technology tools needed to successfully implement Phase 2 of the Corporate Asset Management initiative. The following funding options were considered for funding the \$2.5M capital project:

1. Taxation

Funding for Phase 2 of the Corporate Asset Management Strategy would require 1.63% (one-time) from taxation. This could be accomplished by:

- Deferring capital projects funded from Capital from Taxation to fund CAMS, or
- Increasing taxes by 1.63%

2. Infrastructure Reserves

Funding for Phase 2 of the Corporate Asset Management Strategy would require an 8% draw from the Infrastructure Reserves. However, as the Financial Master Plan has identified an annual financial gap in funding Infrastructure Reserves, funding CAMS from this reserve would further deplete reserves.

3. Gas Tax

Funding for Phase 2 of the Corporate Asset Management Strategy could be funded in its entirety from Gas Tax. Staff have confirmed with the Association of Municipalities Ontario (AMO), the association that is responsible for administering the Gas Tax program, that the CWMS, the AMS and data collection qualify for funding from Gas Tax.

Phase 2 capital budget requirements should be funded from Gas Tax

To mitigate any tax and service level impacts, it is recommended that the funding for this project be from Gas Tax, that will be submitted for consideration during the 2014 Budget Deliberations.

Five additional staff resources will be needed to lead the implementation and ensure the success of this strategic initiative

To support a successful implementation of the Corporate Asset Management Framework and Strategy and ensure ongoing effectiveness, 5 FTE's will be required. The 5 FTE's represent a Manager to lead a newly created Asset Management Office, as well as 4 Asset Management Co-

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF NOVEMBER 19, 2013

Item 3, CW(WS) Report No. 51 – Page 5

ordinators within the Community Services and Engineering & Public Works Commissions. The total cost associated with these FTE's is approximately \$561k; approximately \$189k will be funded from the Water and Wastewater rate, approximately \$108k has been identified through operating offsets resulting in \$263k having an estimated taxation impact of 0.17%. The recommended 5 FTE's have been submitted as Additional Resource Requests (ARR's) for consideration as part of the 2014 Budget Deliberations.

The suggested phasing will ensure an efficient and cost effective implementation of the Phase 2 components

Staff have reviewed the proposed project schedule, exploring opportunities to further phase the implementation. Of the four components identified in Phase 2, consideration was given to deferring procurement of the Asset Management System (AMS), as this could be considered the only component that was not essential for 2014. However, deferring procurement of the AMS will likely increase future implementation costs by separating this system implementation from the Computerized Work Management System (CWMS) procurement. Synergies can be achieved through a single implementation of the two integrated systems, that will result in a more cost effective implementation. Staff recommend procuring the AMS together with the CWMS as identified in the proposed Phase 2 requirements.

City staff have reviewed the various elements proposed in Phase 3

Some of the tools recommended in Phase 3 fall outside the scope of the Corporate Asset Management Strategy, such as the Project Management Information System (PMIS) and the Electronic Data Management System (EDMS), but have been identified by GHD Inc. Excluding the cost for these systems, which are considered core enterprise IT system solutions that will be addressed through the corporate IT Strategy, reduces the budget for this phase to \$0.8M. The needs for the other tools and any additional data collection will be addressed as the City progresses with the implementation of the next phase.

Effective asset management is focused on reducing life cycle costs (capital and operating) over the useful life of corporate assets

The current state of asset management at the City is very typical of other municipalities in the province. Projects are developed using basic asset management approaches and in reaction to immediate and short term anticipated deficiencies. Based on the experiences of other jurisdictions and organizations, life cycle cost savings ranging from 5 to 10% can be expected using advanced asset management techniques and tools. Based on the City's average Capital Budget for the last 3 years (excluding DC-funded and significant one-time projects) this could result in savings of \$2.5M to \$3.7M, equivalent to a 1.6 to 2.4% taxation rate.

However, as the City continues to grow and new infrastructure is assumed, the infrastructure operating expenses and life cycle costs also increase. Moreover, the total annual contribution to infrastructure reserves should also increase to reflect life cycle costs of the new infrastructure. As a result, in a continually growing municipality like the City of Vaughan, the above mentioned life cycle cost savings for existing infrastructure will contribute to funding the increased life cycle cost needs associated with assuming new infrastructure.

Preventative maintenance programs will also provide cost avoidance benefits in Operating Budgets

Many of the programs carried out by staff are reactive, based on inquiries and complaints received from citizens. Improved planning in these program areas will result in more cost-effective preventative maintenance that will extend asset life, sustain performance and enhance reliability.

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF NOVEMBER 19, 2013

Item 3, CW(WS) Report No. 51 – Page 6

Based on the experiences at other organizations, and the City's current maintenance programs, life cycle cost avoidance benefits ranging from 5 to 10% can be achieved in the associated Operating Budgets. Based on the average Operating Budgets in these asset related areas, annual cost avoidance benefits of \$300k to \$600k associated with existing infrastructure may be realized in the longer term.

The CWMS and AMS will provide staff the tools needed to make informed decisions. This will ensure the useful lives of assets are maximized at the lowest lifecycle costs. Cost avoidance benefits will be realized that can provide relief to future funding pressures (such as taxation).

The implementation of the Corporate Asset Management Strategy will ensure optimal long term and financial decision making

A successful implementation of the Corporate Asset Management Strategy is dependent on the City's investment in information technology systems, data, and people. These investments will help ensure that the service life of the \$2.89B of assets owned by the City are maximized, at the lowest overall life cycle costs.

Extensive understanding of the City's assets improve the City's long range financial forecasting, will provide staff the ability to examine fiscal trends (past and future), and develop alternative approaches to solve future challenges; an essential component to achieving financial sustainability at the City.

Relationship to Vaughan Vision 2020/Strategic Plan

In consideration of the strategic priorities related to Vaughan Vision 2020, the recommendations of this report will assist in maintaining assets and infrastructure; priorities previously set by Council. The overall asset management process will take into account the City's objectives and strategic initiatives, such as Vaughan Vision 2020, Green Directions Vaughan and Vaughan's Financial Master Plan, and determines how these rely on infrastructure, and then develop a plan to provide the supporting infrastructure services at the lowest lifecycle cost.

Regional Implications

Not Applicable.

Conclusion

That Council endorse the preferred funding strategy identified for the Corporate Asset Management Strategy, which will be considered as part of the 2014 Budget Deliberations.

Attachments

Attachment No. 1 – Corporate Asset Management Strategy – Priorities and Key Initiatives
Committee – September 16, 2013

Report prepared by:

Jack Graziosi, Director of Engineering Services, ext. 8201

(A copy of the attachments referred to in the foregoing have been forwarded to each Member of Council and a copy thereof is also on file in the office of the City Clerk.)

COMMITTEE OF THE WHOLE (WORKING SESSION) - NOVEMBER 12, 2013

CORPORATE ASSET MANAGEMENT STRATEGY

Recommendation

The Interim City Manager, Commissioner of Engineering and Public Works, Acting Commissioner of Finance and the Director of Engineering Services recommend:

1. That Council endorse the preferred funding strategy outlined in the Economic Impact section of the report, and
2. That the funding requirements will be included for consideration as part of the 2014 Budget Deliberations.

Contribution to Sustainability

An integral part of a sustainable city is effective asset management. The management of the City's assets will maximize the return on the capital and operating investments, and ensure optimal services are provided to the City's citizens.

Economic Impact

Capital Budget

The \$2.5M implementation of Phase 2 of the Corporate Asset Management initiative is proposed to be funded from Gas Tax

During the 2013 Budget Deliberations, Capital Project EN-1958-13 Corporate Asset Management was presented whereby:

- \$500k was approved in 2013 for the development of the Asset Management Framework
- \$780k was recognized in 2014 for the initial implementation of the corporate asset management system, and
- \$750k was recognized in 2015 for the continued implementation of the system

In order to move forward with the next phase of the Corporate Asset Management initiative, the revised estimate for implementing the newly defined elements is a total of \$2.5M. This represents a \$970k increase to the original estimated budget requirements, but reflects an efficient implementation process. The following Table summarizes these changes:

	2013 (Approved)	2014 (Forecast)	2015 (Forecast)	TOTAL
Preliminary Submission	\$500,000	\$780,000	\$750,000	\$2,030,000
Revised Submission	\$500,000	\$2,500,000		\$3,000,000

Difference \$970,000

Capital Project EN-1958-13 Corporate Asset Management has been submitted for Council consideration as part of the 2014 Budget Deliberations, with funding for the \$2.5M being entirely from Gas Tax. Staff have confirmed with the Association of Municipalities Ontario (AMO) that the CWMS, the AMS and data collection qualify for funding from Gas Tax.

The future Phase 3 will require an estimated investment of \$0.8M for asset management tools, as well as supportive investments in core enterprise IT systems

The Corporate Asset Management framework prepared by GHD Inc. also suggests that the City may need to consider additional asset management investments, as well as supportive enterprise IT systems, in the longer term. These additional investments (estimated at \$0.8M) for asset management tools are not being recommended by staff at this time. Core enterprise IT solutions will be separately prioritized by staff for Council's consideration as part of future budgets. These corporate enterprise systems, being considered as part of the Corporate IT Strategy include the Project Management Information System (PMIS) and Electronic Document Management System (EDMS).

Operating Budget

Phase 2 implementation will also include 5 new FTE's with a net impact of \$108k from the Water and Wastewater rate and \$264k from Taxation.

To support a successful implementation of the Corporate Asset Management Framework and Strategy and ensure ongoing effectiveness, 5 FTE's will be required for the next phase of this initiative. The 5 FTE's represent a Manager to lead a newly created Asset Management Office, as well as 4 Asset Management Co-ordinator's within the Community Services and Engineering & Public Works Commissions. The total estimated cost associated with these 5 additional resources is approximately \$561k. Staff have explored opportunities to partially offset the costs associated with these FTE's. The table below provides a summary for each position.

Position	Total Budget	Water & Wastewater Rate	Operating Budget Offsets	Taxation Funding
Manager of Corporate Asset Management	\$142,012	\$80,947	\$0	\$61,065
Roads Asset Management Co-ordinator	\$108,185	\$0	\$108,185	\$0
Water Asset Management Co-ordinator	\$108,185	\$108,185	\$0	\$0
Building & Facilities A.M. Co-ordinator	\$96,360	\$0	\$0	\$96,360
Community Services A.M. Co-ordinator	\$106,285	\$0	\$0	\$106,285
TOTAL	\$ 561,027	\$189,132	\$108,185	\$263,710

The identified Additional Resource Requests have been submitted for consideration as part of the 2014 Budget Deliberations.

Communications Plan

Not applicable at this time.

Purpose

To provide a summary of the costs associated with the implementation of the Corporate Asset Management Strategy, and funding alternatives.

Background - Analysis and Options

A roadmap to implement Corporate Asset Management practices has been developed and approved by Council

At the meeting held on October 8, 2013 Council approved the following recommendations of the Priorities and Key Initiatives Committee:

- 1. That recommendation 1 of the following report of the Interim City Manager, Commissioner of Engineering and Public Works and the Director of Engineering Services, dated September 16, 2013 be approved;***
- 2. That staff report back as soon as possible to a Committee of the Whole (Working Session) illustrating the framework of costs and funding to show the full tax impact;***
- 3. That staff review the implementation schedule so that funds being requested in 2014 can be phased in over 2014, 2015 and 2016;***
- 4. That the benefits and cost savings be shown in the financial impact to illustrate the payback period; and***
- 5. That the presentation by the Commissioner of Engineering and Public Works, the Director of Engineering Services, and Mr. Roop Lutchman, GHD, and Communication C1, presentation material, be received.***

Corporate investments in Information Technology Systems, Data, and Human Resources will be needed to successfully implement the Corporate Asset Management Strategy

The Corporate Asset Management initiative is proposed to be executed in a multi-phased approach. The development of the Corporate Asset Management Strategy (CAMS) is the key deliverable in Phase 1 of this initiative. Two additional phases have been identified to fully implement the strategy. The implementation of the core IT systems is the goal of Phase 2, which will be carried out between 2014 to 2016. Any additional tools and additional data collection are envisioned to be undertaken in Phase 3, targeted for 2016 to 2018. The following table summarizes the key deliverables of all 3 Phases.

Phase	Asset Management – Required Investments	Estimated Cost
Phase 1 (2012 to 2013)	Corporate Asset Management Strategy (Completed)	\$0.45M
Phase 2 (2014 to 2016)	Computerized Work Management System (CWMS) Asset Management System (AMS) Data Collection	\$1.65M \$0.35M \$0.50M
	Phase 2 Corporate Asset Management Sub-Total	\$2.5M
Phase 3 (future)	Additional Tools and Data Collection	\$0.8M
	Estimated Corporate Asset Management Total	\$3.75M

Staff have reviewed and analyzed various funding strategies for Phase 2 of this initiative.

Capital

Through the development of the Asset Management Strategy, it has been identified that a total investment of \$2.5M will be required to procure the technology tools needed to successfully implement Phase 2 of the Corporate Asset Management initiative. The following funding options were considered for funding the \$2.5M capital project:

1. Taxation

Funding for Phase 2 of the Corporate Asset Management Strategy would require 1.63% (one-time) from taxation. This could be accomplished by:

- Deferring capital projects funded from Capital from Taxation to fund CAMS, or
- Increasing taxes by 1.63%

2. Infrastructure Reserves

Funding for Phase 2 of the Corporate Asset Management Strategy would require an 8% draw from the Infrastructure Reserves. However, as the Financial Master Plan has identified an annual financial gap in funding Infrastructure Reserves, funding CAMS from this reserve would further deplete reserves.

3. Gas Tax

Funding for Phase 2 of the Corporate Asset Management Strategy could be funded in its entirety from Gas Tax. Staff have confirmed with the Association of Municipalities Ontario (AMO), the association that is responsible for administering the Gas Tax program, that the CWMS, the AMS and data collection qualify for funding from Gas Tax.

Phase 2 capital budget requirements should be funded from Gas Tax

To mitigate any tax and service level impacts, it is recommended that the funding for this project be from Gas Tax, that will be submitted for consideration during the 2014 Budget Deliberations.

Five additional staff resources will be needed to lead the implementation and ensure the success of this strategic initiative

To support a successful implementation of the Corporate Asset Management Framework and Strategy and ensure ongoing effectiveness, 5 FTE's will be required. The 5 FTE's represent a Manager to lead a newly created Asset Management Office, as well as 4 Asset Management Co-ordinators within the Community Services and Engineering & Public Works Commissions. The total cost associated with these FTE's is approximately \$561k; approximately \$189k will be funded from the Water and Wastewater rate, approximately \$108k has been identified through operating offsets resulting in \$263k having an estimated taxation impact of 0.17%. The recommended 5 FTE's have been submitted as Additional Resource Requests (ARR's) for consideration as part of the 2014 Budget Deliberations.

The suggested phasing will ensure an efficient and cost effective implementation of the Phase 2 components

Staff have reviewed the proposed project schedule, exploring opportunities to further phase the implementation. Of the four components identified in Phase 2, consideration was given to deferring procurement of the Asset Management System (AMS), as this could be considered the only component that was not essential for 2014. However, deferring procurement of the AMS will likely increase future implementation costs by separating this system implementation from the Computerized Work Management System (CWMS) procurement. Synergies can be achieved through a single implementation of the two integrated systems, that will result in a more cost effective implementation. Staff recommend procuring the AMS together with the CWMS as identified in the proposed Phase 2 requirements.

City staff have reviewed the various elements proposed in Phase 3

Some of the tools recommended in Phase 3 fall outside the scope of the Corporate Asset Management Strategy, such as the Project Management Information System (PMIS) and the Electronic Data Management System (EDMS), but have been identified by GHD Inc. Excluding the cost for these systems, which are considered core enterprise IT system solutions that will be addressed through the corporate IT Strategy, reduces the budget for this phase to \$0.8M. The needs for the other tools and any additional data collection will be addressed as the City progresses with the implementation of the next phase.

Effective asset management is focused on reducing life cycle costs (capital and operating) over the useful life of corporate assets

The current state of asset management at the City is very typical of other municipalities in the province. Projects are developed using basic asset management approaches and in reaction to immediate and short term anticipated deficiencies. Based on the experiences of other jurisdictions and organizations, life cycle cost savings ranging from 5 to 10% can be expected using advanced asset management techniques and tools. Based on the City's average Capital Budget for the last 3 years (excluding DC-funded and significant one-time projects) this could result in savings of \$2.5M to \$3.7M, equivalent to a 1.6 to 2.4% taxation rate.

However, as the City continues to grow and new infrastructure is assumed, the infrastructure operating expenses and life cycle costs also increase. Moreover, the total annual contribution to infrastructure reserves should also increase to reflect life cycle costs of the new infrastructure. As a result, in a continually growing municipality like the City of Vaughan, the above mentioned life cycle cost savings for existing infrastructure will contribute to funding the increased life cycle cost needs associated with assuming new infrastructure.

Preventative maintenance programs will also provide cost avoidance benefits in Operating Budgets

Many of the programs carried out by staff are reactive, based on inquiries and complaints received from citizens. Improved planning in these program areas will result in more cost-effective preventative maintenance that will extend asset life, sustain performance and enhance reliability. Based on the experiences at other organizations, and the City's current maintenance programs, life cycle cost avoidance benefits ranging from 5 to 10% can be achieved in the associated Operating Budgets. Based on the average Operating Budgets in these asset related areas, annual cost avoidance benefits of \$300k to \$600k associated with existing infrastructure may be realized in the longer term.

The CWMS and AMS will provide staff the tools needed to make informed decisions. This will ensure the useful lives of assets are maximized at the lowest lifecycle costs. Cost avoidance benefits will be realized that can provide relief to future funding pressures (such as taxation).

The implementation of the Corporate Asset Management Strategy will ensure optimal long term and financial decision making

A successful implementation of the Corporate Asset Management Strategy is dependent on the City's investment in information technology systems, data, and people. These investments will help ensure that the service life of the \$2.89B of assets owned by the City are maximized, at the lowest overall life cycle costs.

Extensive understanding of the City's assets improve the City's long range financial forecasting, will provide staff the ability to examine fiscal trends (past and future), and develop alternative approaches to solve future challenges; an essential component to achieving financial sustainability at the City.

Relationship to Vaughan Vision 2020/Strategic Plan

In consideration of the strategic priorities related to Vaughan Vision 2020, the recommendations of this report will assist in maintaining assets and infrastructure; priorities previously set by Council. The overall asset management process will take into account the City's objectives and strategic initiatives, such as Vaughan Vision 2020, Green Directions Vaughan and Vaughan's Financial Master Plan, and determines how these rely on infrastructure, and then develop a plan to provide the supporting infrastructure services at the lowest lifecycle cost.

Regional Implications

Not Applicable.

Conclusion

That Council endorse the preferred funding strategy identified for the Corporate Asset Management Strategy, which will be considered as part of the 2014 Budget Deliberations.

Attachments

Attachment No. 1 – Corporate Asset Management Strategy – Priorities and Key Initiatives
Committee – September 16, 2013

Report prepared by:

Jack Graziosi, Director of Engineering Services, ext. 8201

Respectfully submitted,

Barbara Cribbett
Interim City Manager

Paul Jankowski
Commissioner of Engineering
and Public Works

John Henry
Acting Commissioner of Finance

Jack Graziosi
Director of Engineering Services

JG:sm

ATTACHMENT NO. 1

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF OCTOBER 8, 2013

Item 1, Report No. 5, of the Priorities and Key Initiatives Committee, which was adopted without amendment by the Council of the City of Vaughan on October 8, 2013.

1 CORPORATE ASSET MANAGEMENT STRATEGY

The Priorities and Key Initiatives Committee recommends:

- 1) That recommendation 1 of the following report of the Interim City Manager, Commissioner of Engineering and Public Works and the Director of Engineering Services, dated September 16, 2013, be approved;
- 2) That staff report back as soon as possible to a Committee of the Whole (Working Session) illustrating the framework of costs and funding to show the full tax impact;
- 3) That staff review the implementation schedule so that funds being requested in 2014 can be phased in over 2014, 2015 and 2016;
- 4) That the benefits and cost savings be shown in the financial impact to illustrate the payback period; and
- 5) That the presentation by the Commissioner of Engineering and Public Works, the Director of Engineering Services, and Mr. Roop Lutchman, GHD, and Communication C1, presentation material, be received.

Recommendation

The Interim City Manager, Commissioner of Engineering and Public Works and the Director of Engineering Services in consultation with the Senior Management Team recommend:

1. That the framework contained within the Corporate Asset Management Strategy Report document be approved;
2. That the economic implications outlined in the report be included for consideration in the 2014 Budget Deliberations.

Contribution to Sustainability

An integral part of a sustainable city is effective asset management, assuring the management of the City's assets maximize the return on the capital and operating investments, and continue to provide optimal service to its residents. Phase 1 of the City's corporate asset management initiative is to develop a strategy to build the processes, tools and resources for the long-term.

Economic Impact

Capital Budget

During the 2013 Budget Deliberations, Capital Project EN-1958-13 Corporate Asset Management was presented whereby:

- \$500k was approved in 2013 for the development of the Asset Management Framework
- \$780k was recognized in 2014 for the initial implementation of the corporate asset management system, and
- \$750k was recognized in 2015 for the continued implementation of the system

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF OCTOBER 8, 2013

Item 1, Priorities Report No. 5 – Page 2

In order to move forward with the next stage of the Corporate Asset initiative, the revised estimate for implementing the newly defined elements is a total of \$2.5M. This represents a \$970k increase to the original estimated budget requirements, but reflects an efficient implementation process. The following Table summarizes these changes:

	2013 (Approved)	2014 (Forecast)	2015 (Forecast)	TOTAL
Preliminary Submission	\$500,000	\$780,000	\$750,000	\$2,030,000
Revised Submission	\$500,000	\$2,500,000		\$3,000,000

Difference \$970,000

The \$2.5M funding for the project would be allocated for a computerized work management system (est. \$1.65M), an enterprise asset management system (est. \$350K) and data collection for various asset classes (est. \$500K).

Operating Budget

To support a successful implementation of the Corporate Asset Management Framework and Strategy and ensure ongoing effectiveness, 5 FTE's will be required. The 5 FTE's represent a Manager to lead a newly created Asset Management Office, as well as 4 Asset Management Co-ordinator's within the Community Services and Engineering & Public Works Commissions. The total estimated cost associated with these 5 additional resources is approximately \$600k. Staff will explore opportunities to partially offset the costs associated with the 4 of the FTE's. Staff will also explore funding the remaining FTE through the Water/Wastewater rates.

All of the identified Additional Resource Requests and Capital Budget requirements, for all the defined elements of the Asset Management implementation, will be considered as part of the 2014 Budget Deliberations.

Communications Plan

Not applicable at this time.

Purpose

To present the corporate asset management strategy and recommended implementation framework as identified in the Corporate Asset Management Strategy Report document (see Attachment No 1), and to advise Council of the financial implications associated with the framework.

Background - Analysis and Options

The development of a Corporate Asset Management System is a strategic initiative identified within Vaughan Vision 2020

One of the strategic initiatives identified by Council, within the Vaughan Vision 2020, is the implementation of a corporate asset management system. A corporate asset management system will create a consistent and standardized approach throughout the organization for the management of infrastructure and equipment, while allowing the flexibility to interpret and apply different practices for the various infrastructure classes.

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF OCTOBER 8, 2013

Item 1, Priorities Report No. 5 – Page 3

Asset management can be defined as an integrated, lifecycle approach to effective stewardship of infrastructure assets that will maximize benefits, manage risk and provide appropriate levels of service to the public, in a sustainable and environmentally responsible manner.

The City owns a variety of assets which require ongoing management to ensure optimal investment and sustainability strategies, have been included in this initiative

The City owns a significant portion of public infrastructure that encompasses many different asset classes. As identified through the reporting requirements of PSAB 3150, a variety of assets, varying in both age and value, have been included in this initiative, including:

- Municipal Buildings – Community Centres, Libraries and Fire Halls
- Parks – Trees, Playground Equipment and Entrance Features
- Fleet – Vehicles and Equipment
- Road Network – Bridges, Sidewalks and Streetlights
- Water Distribution System – Water Mains, Hydrants, Valves and Water Services
- Storm Water System – Storm Water Management Ponds and Inlet/Outlet Structures
- Waste Water Collection System – Sanitary Sewer Pipes, Manholes and Pumping Stations
- Information Technology – Computers, Servers, Telephones and Equipment

Staff throughout the organization manage all of the City's assets

Municipalities are the stewards of the infrastructure they own. The historical value of the assets owned by the City exceeds \$2.89B. These assets are actively managed by a variety of departments within the organization. In the absence of a corporate asset management strategy, each department may manage assets differently applying varying levels of asset management principals.

Future capital funding opportunities are likely to be contingent on municipalities having a detailed asset management plan

The Government of Ontario – Ministry of Infrastructure recently released "Building Together, Guide to Municipal Asset Management Plans". This plan sets out a strategic framework that will guide future investments in ways that support economic growth, are fiscally responsible and respond to changing needs. In addition, the document states *"We are moving toward standardization and consistency in municipal asset management. The first step is requiring any municipality seeking provincial capital funding to prepare a detailed asset management plan and show how its proposed project fits within it."* As a result, the corporate asset management strategy will align with this provincial document to ensure that the City can capitalize on any potential future funding opportunities.

GHD Inc. was retained to assist in developing a comprehensive Corporate Asset Management Strategy and an implementation framework for the City.

The Asset Management Strategy outlines a structured set of actions to be undertaken by the City to modify and improve its asset management capabilities and implement the most appropriate asset management system. The Corporate Asset Management Report, includes the following:

- Developing common goals and objectives
- Define the City's future vision of asset management
- Document and assess current status of City's asset management practices
- Refine the data requirements and level of service for all City assets

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF OCTOBER 8, 2013

Item 1. Priorities Report No. 5 – Page 4

- Analyze the gap between the required level and current status of the City's asset inventory to achieve the future vision
- Identify and evaluate strategies and actions required to close the gaps, including resource requirements and timeframes, and
- Recommend the most appropriate asset management governance model for the City and strategies to implement the preferred model

A roadmap to implement Corporate Asset Management practices has been developed and can be fully achieved by 2016 (with the appropriate allocation of resources)

The Corporate Asset Management system includes a comprehensive development and implementation of key concepts, practices and technology solutions. Based on the timelines identified within Section 5 of the Corporate Asset Management Strategy Report, the City can reach a level of "Competent" on the PAS55 scale, by the end of 2016. All elements of the AM Framework would be fully implemented, the appropriate AM Governance model would be in place and leading AM practices would be integrated into many of the day-to-day activities throughout the Corporation.

The benefits of leading asset management practices will only be realized through the implementation of the Corporate Asset Management roadmap.

Asset management considers three key variables, namely level of service, cost of service, and risk. The interaction of these variables define the business case for a Corporate Asset Management strategy at the City.

The following benefits can be realized through the implementation of asset management at a corporate level:

1. City residents can expect reliable delivery of a defined level of service as the City improves its response to their needs.
2. The cost of service will continue to be lowered to the point where there is confidence that the City is operating efficiently with the resources provided.
3. Effective risk management where staff understands the likelihood of assets failing and the consequence and/or impact on levels of service.

A number of initiatives have been identified and developed as part of the Corporate Asset Management strategy and roadmap to help the City take advantage of the existing opportunity gaps identified. The improvement initiative recommendations are consistent with the four major elements of the AM Framework (Planning, Core Service Delivery, Performance Management and Support Services). The strategy and framework for Corporate Asset Management has been developed, and staff recommend proceeding with the implementation of the AM Roadmap.

A corporate investment of \$3.1M is required to ensure the successful implementation of the Corporate Asset Management initiative

Data and information technology are essential components of a sound AM program. In the recommended framework, information technology systems and data management are key activities that will enable other elements of the AM Framework, namely planning, service delivery, and performance management.

To successfully implement Corporate Asset Management, the City needs to make the following four strategic investments in the short term:

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF OCTOBER 8, 2013

Item 1, Priorities Report No. 5 – Page 5

1. Computerized Work Management System (CWMS) – Optimal allocation of operating budgets (\$1.65M)
2. Asset Management System (AMS) – Optimal long term capital and financial decision making (\$0.35M)
3. Data Collection Gaps – People and tools (\$0.50M)
4. AM Governance – People – 5 FTE's (\$0.60M)

The implementation of a Computerized Work Management System will ensure optimal allocation of operating budgets

The implementation of a Computerized Work Management System (CWMS) will provide the City with the technological tools and processes needed to optimize the operations and maintenance activities of its infrastructure. Undertaking maintenance activities at the most appropriate time will not only prolong the need for more expensive infrastructure rehabilitation/replacement, but will also ensure that infrastructure is meeting the required levels of service established by Council. In addition, the CWMS will ensure more efficient and consistent PSAB 3150 reporting.

The implementation of an Asset Management System will ensure optimal long term and financial decision making

An Asset Management System (AMS) will provide the tools needed to make informed decision making. The system will ensure consistent data collection while creating an integrated corporate asset inventory, where all asset information can be readily accessed. An AMS will help the City establish best practices and optimize organization processes. As a result, the following has been identified as benefits of a corporate asset management system:

- Integrate information across departments and commissions
- Optimize decision making
- Enrich long-term asset management planning
- Consistent and uniform financial reporting
- Present comparable information between competing projects

These actions will provide decision makers with added foresight and the ability to proactively grasp future opportunities, address future challenges, and reduce blind spots by understanding the longer-term financial implications of present and past decisions. This is a very strategic approach intended to generate discussion on where the City's future resources should be focused to best support the City's vision, operationalize strategies, generate public value and address pertinent challenges

Adjustments to the recognized 2014 and 2015 capital budgets are required to fund the strategic investments needed to continue implementation of the Corporate Asset Management framework

As part of the 2013 Budget Deliberations, Capital Project EN-1958-13 was submitted and \$500,000 was approved for the development of the Corporate Asset Management Strategy and Framework. Estimated funding requirements in the amount of \$780,000 and \$750,000 were recognized for the 2014 and 2015 capital budgets, respectively, for the implementation of the Corporate Asset Management System.

Through the development of the Asset Management Strategy, it has been identified that a total investment of \$2.5M will be required to procure the technology tools needed to successfully implement the Corporate Asset Management initiative, and is calculated as follows:

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF OCTOBER 8, 2013

Item 1, Priorities Report No. 5 – Page 6

Requirements	Anticipated Cost
1. Computerized Work Management System (CWMS)	\$1.65M
2. Asset Management System (AMS)	\$0.35M
3. Data Collection Gaps	\$0.5M
Total	\$2.5M

In order to move forward with the next stage of the Corporate Asset initiative, the 2015 recognized budget (\$750,000) would be advanced to 2014 and an increase to the capital budget of \$970,000 would be required. This would result in a 2014 capital request of \$2.5M, funded from Capital from Taxation, to be submitted for consideration during the 2014 Budget Deliberations.

A Manager of Corporate Asset Management will be needed to lead the implementation and ensure the success of this strategic initiative

To support a successful implementation of the Corporate Asset Management Framework and Strategy and ensure ongoing effectiveness, 5 FTE's will be required. The 5 FTE's represent a Manager to lead a newly created Asset Management Office, as well as 4 Asset Management Co-ordinator's within the Community Services and Engineering & Public Works Commissions. The total cost associated with these FTE's is approximately \$600,000.

In order to continue the implementation of the Asset Management framework, the procurement of a consultant assignment may be considered once the 2014 Budget Deliberations have been completed. This consultant would assist the Asset Management steering committee to begin the procurement process of the CWMS, AMS and review of the identified data collection gaps. This assignment would be considered until the recruitment of a Manager of Corporate Asset Management has been completed.

Relationship to Vaughan Vision 2020/Strategic Plan

In consideration of the strategic priorities related to Vaughan Vision 2020, the recommendations of this report will assist in maintaining assets and infrastructure; priorities previously set by Council. The overall asset management process will take into account the City's objectives and strategic initiatives, such as Vaughan Vision 2020, Green Directions Vaughan and Vaughan's Financial Master Plan, and determines how these rely on infrastructure, and then develop a plan to provide the supporting infrastructure services at the lowest lifecycle cost.

Regional Implications

Not Applicable.

Conclusion

That Council approve the framework contained within the Corporate Asset Management Strategy Report document.

Attachments

Attachment No. 1 – Corporate Asset Management Strategy Report – City of Vaughan.

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF OCTOBER 8, 2013

Item 1, Priorities Report No. 5 – Page 7

Report prepared by:

Jack Graziosi, Director of Engineering Services, ext. 8201

Vince Musacchio, Manager of Capital Planning and Infrastructure, ext. 8311

(A copy of the attachments referred to in the foregoing have been forwarded to each Member of Council and a copy thereof is also on file in the office of the City Clerk.)