

Summary Business Cases for Proposed Capital Investments

How to Read Guide

Purpose of Summaries

To support Council in their review and consideration of 2019-2022 One Calgary Service Plans and Budgets. The purpose of these summaries is to:

- Support service pages (primary source of information)
- · Provide additional details or clarification on the proposed investment

Further details are available from the Service Owner should additional information be required.

Organization of Summaries

- Categorized by Citizen Priority, then Service
- Activity Numbers and Project Identifiers (PIDs) are provided in each summary. This
 helps connect business case summaries to the service pages.
- Please note that in some cases, multiple PIDs align to the same Activity Number.

How to Read the Summaries

The Summary Business Cases are comprised of four sections which provide additional context to the content in the Service Plans and Budgets and the Supplemental information. Many of the fields are self-explanatory, but where additional context, definitions or explanations are useful, they are provided below.

Section 1 - Business case name / Title and Executive summary

 Executive Summary: Provides a brief description of the project, program or annual investment program (AIP). This expands on the Project Description explanation of the requests provided in the service pages. For further information please contact the Service Owner.

Section 2 – Service, organization, location and strategic alignment details

- Service: Indicates which of the 61 services this investment is assigned to
- Project Identifier (PID): Provides Administration with a unique identifier for tracking capital investments, linking across organizational units and systems. Assists in ongoing reporting.
- Service Type: refers to whether the proposed investment is categorized as essential, current or enhanced according to the corporate prioritization criteria.

Essential: investments that address legal, regulatory, health and safety requirements necessary to meet The City's legal obligations, maintain the delivery of critical services, address critical assets or reduce the cost of service delivery.

Current: investments that maintain a level of service at existing levels. **Enhanced:** investments that provide an increase in the level of service of an existing service or introduce a new service.

• **Investment Category:** refers to whether the proposed investment is a project, program or annual investment program (AIP). The new budget requests are aligned to these categories on the service pages.

AIP: A recurring capital program focused on maintaining or upgrading current, inservice assets or for ongoing purchases of similar assets.

Program: A program is a grouping of capital projects that are related and benefit from being planned and managed together.

Project: A project is a capital investment that is planned, delivered and evaluated on its own merit and has a well-defined scope, cost and schedule resulting in new or substantially improved assets.

- <u>Capital Investment Plan Alignment</u>: Indicates which area of the plan this investment aligns to (C2017-0214).
- <u>Capital Infrastructure Investment Principles</u>: Indicates the investments primary alignment. Note: Document title has since been updated to reflect Council direction (C2018-0304).
- <u>City Resiliency Framework Dimension & Driver</u>: Indicates which area of the framework this investment aligns to.

Section 3 – Financial and Economic Impact

Please note that the four indicators below were not used to prioritize capital investments but are offered as additional information about the impact of the investments.

- Recommended Funding Allocation: Displayed in \$s.
- **Funding Status:** Identifies whether investment is a "For Approval" and therefore included in the proposed 2019-2022 One Calgary capital budget, or a "For Information" potential investment which is not recommended for the 2019-2022 cycle.
- Operating Impact of Capital: Identified whether recommended capital investments require operating budget. Field is a Yes / No. For additional information please contact the Service Owner.
- Economic Impacts of 2019-2022 Recommended Funding: Four key economic indicators were identified to determine the economic impacts of the recommended capital investments:

Gross Output: Gross output of an industry is the total market value of the goods and services produced in an industry. It reflects total sales and other operating

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income for all industry participants. As a result, it includes double counting because the output of some firms are inputs of others. Displayed in dollars.

Gross domestic product (GDP): This is a measure of the value of all goods and services produced in the economy by eliminating double counting. It is the broadest measure of economic progress. Displayed in dollars.

Income: This is a subset of the value added measured by GDP. This measure includes, wages and salaries, Mixed Income (Sole proprietorship and partnership), and Supplementary Income. It reflects income from participation as laborers in production, from owning a home or business, from the ownership of financial assets, and from government and business in the form of transfers. Displayed in dollars.

Employment: This is the number of jobs created by the investment activity. It measures impact in person-years. A value of 125 person-years of employment implies that 125 jobs are created in one year if all the investment is made in that year. If the investments take longer, then the creation of jobs will be distributed across that time in years. Displayed in person-years.

 MUGS: Provides a method, consistent with the 2015-2018 Action Plan, for classifying investment types to Council. The 2019-2023+ capital budget has been classified according to the following definitions. Displayed in percentages:

Capital maintenance/replacement (M) – Rehabilitation of existing infrastructure due to obsolescence, safety concerns, age, or condition of the infrastructure.

Capital upgrade (U) – Improvement of existing infrastructure with new assets that constitute improved functionality, reliability or compatibility. These changes are driven by legislation, technological innovations, changing public needs and expectations, change in the environment or changes in potential risk.

Capital growth (G) – Development of infrastructure to service Calgary's growth, in both population and area, demographic changes, and economic expansion (not specific or exclusive to new and actively developing communities). It includes "downstream" projects such as transportation improvements that are necessitated primarily by growth at the periphery of the city.

Capital service change (S) – New infrastructure associated with a Council decision to provide a new or expanded level of service. This is driven primarily by changing public expectations or legislation.

Section 4 - Benefits

 <u>Triple Bottom Line: Social, Environmental, Economic</u>: Identifies benefits the Triple Bottom Line Policy (LUP003, EM003, CS003)

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• Expected Key Benefits: Summarizes anticipated benefits from this capital investment.



Building Safet

Business Technology Sustainment

Executive Summary	This program supports the ongoing investment in customer facing technologies and the continuous improvement of business processes and data management. This program ensures that Planning &Development (PD) continues to meet customer, community and citizen expectations regarding responsiveness, quality, and convenience of PD services.
Document Date	2018/09/11

Service	Building Safety	Sector Affected	Internal / The City of Calgary
Activity #	470140	Ward(s)	All Wards
Project Identifier (PID)	3000551	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY BUILDING SERVICES	Capital Investment Plan Alignment	Other.Other
Department	PLANNING AND DEVELOPMENT	City Resilience Framework Dimension	Leadership and Strategy
Service Type	Essential	City Resilience Framework Driver	Fosters long-term & integrated Planning
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	23,000,000	3,000,000	4,000,000	8,000,000	8,000,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	31,445	,546	20,0	67,551	14,681,915	159
MUGS	Mainter	nance	Upg	grade	Growth	New Services
	0%	, D	10	00%	0%	0%

Triple Bottom Line - Social	This program supports safe and resilient communities through enhancements to inspection processes, that may help enhance response times to building and site safety concerns.
Triple Bottom Line – Environmental	Initiatives under this program enhance approvals processes, approvals like reviewing buildings based on their alignment to the National Energy Code, which encourages more energy efficient buildings.
Triple Bottom Line - Economic	This program supports initiatives that make Building Safety more efficient and effective, ensuring that this service is adaptive to changing needs and pressures of the construction industry in Calgary.
Expected Key Benefits	Improved customer experience Improved service delivery/expanded services Improved access to service Lower operating costs/higher efficiency gains/return on investment.

CCS ByLaw Equip Lifecycle

Executive Summary			oce needs to lifecycle				ule communications	
Executive Summary	equipment(e.g return on inve- manages asse facing services	w Education & Compliance needs to lifecycle equipment including radios, mobile data terminals, communications oment(e.g. GPS, modems) and other various assets. As equipment ages, maintenance costs can rise above any non investment, without a comprehensive mitigation strategy. The equipment lifecycle program proactively ages assets through their lifecycle to maximize investments while ensuring their performance in supporting citizeng services, and providing officer life safety. This equipment must be lifecycled appropriately for CCS to respond tively to calls for service.						
Document Date	2018/09/11							
Service	Bylaw Educatio Compliance	Bylaw Education & Compliance				Multiple Sectors		
Activity #	480405		Ward(s)			All Wards		
Project Identifier (PID)	3000167		Citizen Priority			A City of Safe & Ins Neighborhoods	spiring	
Business Unit	CALGARY CON STANDARDS	MMUNITY	Capital Investment	Plan Alignmen	t	Other.Other		
Department	COMMUNITY S	SERVICES	City Resilience Fra	mework Dimen	sion	Economy and Soci	ety	
Service Type	Essential		City Resilience Framework Driver			Ensures Social Stability & Security and Justice		
Investment Category	Annual Investm A recurring progon maintaining current in-service for ongoing pure similar assets	gram focused or upgrading ce assets or	n focused pgrading ssets or			Enhance the long-tassets	term value of City	
		Total	2019	2020	2021	2022	2023+	
Recommended Fundin	g Allocation (\$)	900,000	225,000	225,000	225,00	00 225,000	0	
Funding Status		For Approva	l					
Operating Impact Of C	apital	Yes						
Economic Impacts of 2 Recommended Funding		Gr	oss Output (\$)	Gross Domestic Produc (\$)		Income (\$)	Employment (Person-Years	
		•	1,121,892	839,565		748,898	6	
MUGS		Ma	aintenance	Upgrade		Growth	New Services	
			100%	()%	0%	0%	
Triple Bottom Line – Social This equipment supports operations, ensures organizational relife safety. As such this program supports safe cities and strong						failures and officer		
Triple Bottom Line – Environmental Bylaw officers open spaces. Vincreased impa			manage public safety Vith the growing trend ct on the environmen ive response to comm	related activity a l in opioid usage t through discard	t specific lo	cations in the city, in	ve are seeing	

These investments improve public safety and resilience, thereby creating economic security, and creating a city where citizens and business can feel safe to live and invest.

Ongoing lifecycle replacement of equipment to support front line operations and officer safety. Includes radios, mobile communications equipment and safety equipment.

C2018-1158 Attachment 10 ISC: UNRESTRICTED

Triple Bottom Line - Economic

Expected Key Benefits

OneCity Coord RMS - Bylaw

	C	meGi	ly Coord	KIVIS -	Dylav	V		
Executive Summary	intelligence on safety interaction disorder related have reliable, conforcement of portion of the \$ service lines to	his program will create a common platform for multiple service lines across One City, to track known risks, and collect elligence on emerging community trends. Current systems are disparate, limiting The City's overall view on public fety interactions in the community. The City is facing emerging challenges due to the economic downturn, and social sorder related to increased opioid use, highlighting the importance of collaboration and ensuring public safety bodies we reliable, complete and consistent information. This program is expected to promote coordinated and proactive forcement of municipal bylaws and provincial statutes, for safe and inspiring neighborhoods. This reduced ask is a urtion of the \$1.08M funding required for full implementation for this service line, and will be combined with other rvice lines to deliver program in a phased approach.						
Document Date	2018/09/11							
Service	Bylaw Education Compliance	&	Sector Affected			Multiple	e Sectors	
Activity #	480401		Ward(s)			All Wa	rds	
Project Identifier (PID)	3000203		Citizen Priority				of Safe & Inspir	ing
Business Unit	CALGARY COM STANDARDS	MUNITY	Capital Investment	Plan Alignmen	t	Other.0	Other	
Department	COMMUNITY SE	ERVICES	City Resilience Fra	mework Dimen	sion	Infrastr	ructure and Eco	systems
Service Type	Essential		City Resilience Fra	mework Driver		Ensure	es continuity of	critical services
Investment Category	Program - A Progrouping of proje related and bene being planned ar together	cts that are fit from	Capital Infrastructu	Capital Infrastructure Investment Principles		Integrate coordinate and optimize Th City's investment		nd optimize The
		Total	2019	2020	2021		2022	2023+
Recommended Fundin	g Allocation (\$)	50,000	0	50,000	0		0	0
Funding Status		For Approva	ıl					
Operating Impact Of Ca	apital	Yes						
Economic Impacts of 2 Recommended Fundin		Gr	ross Output Gross Domestic Produ (\$) (\$)			ct	Income (\$)	Employment (Person-Years)
			62,327 46,642		5,642		41,605	0
MUGS		Ma	Maintenance Upgrade		grade		Growth	New Services
			0% 100%		00%		0%	0%
Triple Bottom Line – S	ris TI ch th in by	sks, and colle- ne City's over- nallenges due e importance formation. The relaws and pro	will create a common ct intelligence on eme all view on public safe to the economic dow of collaboration and is program is expecte vincial statutes, for sa	erging communit ety interactions in Inturn and social ensuring public sed to promote co afe and inspiring	y trends. Cun the communities disorder related safety bodies ordinated an neighborhoo	rrent sys inity. Th ated to i s have re d proac ods.	stems are dispa le City is facing increased opioid eliable, complet tive enforcemen	arate, which limits emerging d use, highlighting e and consistent nt of municipal
Triple Bottom Line – Environmental This system will enable officers and administration to track public safety related activity at specifications in the city, including parks and open spaces. With the growing trend in opioid usage an homelessness in our city, we are seeing increased impact on the environment through discarded and drug paraphernalia. There is also a negative environmental impact to our city infrastructure, the watercourse or city parks, due to illegal encampments where vegetation is being destroyed, are large amounts of discarded materials including chemicals.					usage and liscarded needles tructure, whether			
improving economic s invest. The City's byla			egic infrastructure investment that improves public and community safety, thereby nomic security, and creating a city where citizens and business can feel safe to live and y's bylaws create community standards, that when effectively enforced, signal to business corce that Calgary is a desirable place to invest and work.					
Expected Key Benefits	community issu- conomic dowr teractions with uring investiga- tety Delivers community a cordinated en	vice and satisfaction faces and community rinturn, opioid use) Offin heitizens, animals, butions Officers have keen Solicitor General and communicate their forcement of municipal tribunals	sk assessments cers from multiplusinesses Coord town relevant in mandate (from in real time to	Proactive made service lindered interaction be 2018 Lazen peace office	anagemes can to actions we fore att by Fatars, to mi	nent of social distrack and share with citizens and sending scenes lity Inquiry) to tritigate threats to	sorder (e.g. due to information on d businesses for efficiency and ack known risks o officer life safety	

C2018-1158 Attachment 10 ISC: UNRESTRICTED

Efficiencies for municipal tribunals



Calgary 9-1-

C911 Equipment Lifecycle

Executive Summary	Calgary 9-1-1 has a heavy reliance on small equipment & ergonomic furniture to support its 9-1-1- call taking and dispatch operations. As equipment ages, maintenance costs can rise above any return on investment, without a comprehensive mitigation strategy. The equipment lifecycle program proactively manages assets through their lifecycle to maximize investments while ensuring their performance in supporting 9-1-1 Operations. Equipment includes base & portable radios, audio visual equipment, ergonomic operations chairs, and other related equipment.
Document Date	2018/09/11

Service	Calgary 9-1-1	Sector Affected	Multiple Sectors
Activity #	440007	Ward(s)	All Wards
Project Identifier (PID)	3000193	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY COMMUNITY STANDARDS	Capital Investment Plan Alignment	Other.Other
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Economy and Society
Service Type	Essential	City Resilience Framework Driver	Ensures Social Stability & Security and Justice
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,350,000	100,000	450,000	600,000	200,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	2,160	,409	817	7,960	533,733	6
MUGS	Mainte	nance	Upg	grade	Growth	New Services
	100	%	()%	0%	0%

Triple Bottom Line – Social	This equipment supports 9-1-1 operations and ensures organizational resilience to equipment failures. As such this program supports safe cities and strong communities.
Triple Bottom Line – Environmental	This program supports multiple projects and investments for managing response to small and large-scale incidents, including environmental incidents (e.g. floods, wildfires, spills, derailments). Ensuring the performance and resilience of these systems supports effective emergency response to environmental threats
Triple Bottom Line – Economic	These investments improve public safety and resilience, thereby creating economic security, and creating a city where citizens and business can feel safe to live and invest.
Expected Key Benefits	Updated furniture – ergonomic benefits Backup radios for resilient communications with respinders Reliable audio-visual equipment to support operational decision making Reduced maintenance efforts and costs

Computer-Aided Dispatch System Maintenance

Executive Summary	The 9-1-1 Computer Aided Dispatch(CAD) system is an emergency incident management system to evaluate, dispatch and manage events. This system is used for processing calls, mapping, determining priorities, recommending, deploying and monitoring resources. CAD interfaces with mobile applications for first responders, and supports real time data analysis. The CAD product is only supported to the two most recent versions and must be upgraded regularly to maintain ongoing vendor support. With the upcoming transition to next generation 9-1-1 services, CAD upgrades are necessary to support additional system integrations from new data sources, and capabilities to improve public and officer safety. Calgary 9-1-1currently has a project to unify the Calgary 9-1-1 Fire CAD System with the Calgary 9-1-1 Police CAD for long-term cost savings, and greater operational agility for Calgary 9-1-1.
Document Date	2018/09/11

Service	Calgary 9-1-1	Sector Affected	Multiple Sectors
Activity #	440018	Ward(s)	All Wards
Project Identifier (PID)	3000218	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY COMMUNITY STANDARDS	Capital Investment Plan Alignment	Other.Other
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

						1
	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	2,800,000	400,000	800,000	800,000	800,000	0
Funding Status	For Approval					
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years
	3,828	,153	2,44	13,006	1,787,364	19
MUGS	Mainte	nance	Up	grade	Growth	New Services
	100	%	(0%	0%	0%

Triple Bottom Line – Social	As the emergency incident management system for 9-1-1, CAD is a critical tool for maintaining safe and strong neighborhoods. This system supports frontline responders in several service lines including Police, Fire, CCS and Transit Public Safety.
Triple Bottom Line – Environmental	As an emergency incident management system, CAD is a critical tool for managing small and large-scale events that potentially threaten the environment (e.g. floods, wildfires, spills, derailments). Ensuring the performance and resilience of CAD supports effective emergency response to environmental threats.
Triple Bottom Line - Economic	This is a strategic infrastructure investment that improves public safety, thereby creating economic security, and creating a city where citizens and business can feel safe to live and invest.
Expected Key Benefits	(a) Improved service to citizens, as well as Officer and public safety. (b) One City approach for leveraging technology to multiple BUs including CCS, Fire, Police & Transit. (c) Maintain current supported version of CAD. (d) Improved system resilience and interoperability Improved integration with emerging next generation (NG911) technologies. (e) Situational awareness for responders.

Critical Technology Maintenance

Executive Summary	Calgary 9-1-1 requires technical infrastructure, software, hardware, network maintenance and enhancements, on a regular basis to ensure continued operation of critical systems. Suppliers are continually updating their products as technology evolves, and 9-1-1 must regularly upgrade to remain on a supported version. Calgary 9-1-1 cannot risk having critical systems in use for which no support or repair can be obtained. Appropriate redundancies must be in place to ensure resilience and business continuity. As citizen expectations evolve in response to rapidly changing consumer technologies, 9-1-1 must be agile in its ability to update its systems to incorporate new capabilities to improve public safety. As we transition toNG9-1-1, new capabilities around advanced and predictive analytics, and cognitive systems will be central to our ability to deliver effective services to citizens.
Document Date	2018/09/11

	1		1
Service	Calgary 9-1-1	Sector Affected	Multiple Sectors
Activity #	440009	Ward(s)	All Wards
Project Identifier (PID)	3000215	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY COMMUNITY STANDARDS	Capital Investment Plan Alignment	Other.Other
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	4,350,000	1,000,000	1,350,000	1,000,000	1,000,000	0
Funding Status	For Approval					
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	Output		estic Product (\$)	Income (\$)	Employment (Person-Years)
	5,947,	310	3,79	95,385	2,776,797	30
MUGS	Mainter	nance	Upg	grade	Growth	New Services
	100	%	(0%	0%	0%

Triple Bottom Line – Social	Calgary 9-1-1 utilizes multiple technical systems to support emergency response. These systems support the safety of citizens, locating callers to 9-1-1, criminal investigations and business intelligence to identify trends. Within the program multiple smaller projects ensure accessibility (e.g. Text with 9-1-1 for the deaf, hard of hearing and speech impaired). This program ensures the reliability and security of these systems, and thus contributes to a safe city with strong and resilient communities.
Triple Bottom Line – Environmental	This program supports multiple projects and investments for managing response to small and large-scale incidents, including environmental incidents (e.g. floods, wildfires, spills, derailments). Ensuring the performance and resilience of these systems supports effective emergency response to environmental threats.
Triple Bottom Line - Economic	This is a strategic infrastructure investment that improves public safety, thereby creating economic security, and creating a city where citizens and business can feel safe to live and invest.
Expected Key Benefits	Updated/current public safety systems resilience and continuity of operations. Ability to address evolving regulatory requirements Improved security and monitoring of systems. Ability to support investigations and court proceedings with data and voice logs. Business intelligence and to support planning and real-time decision making Interoperability between responders and regional partners. Operational efficiencies through automation and new technologies. Protect reputation of The City.

NG911 Technology Upgrades

Executive Summary	Across North America 9-1-1 services are undergoing a digital transformation to Next Generation 9-1-1 (NG911) services, and to NG112 in the European Union. The current voice-centric system was designed 50 years ago, and has not kept pace with the many developments in consumer wireless communications. Calgary 9-1-1 is deploying a new 9-1-1 IP telephone system (Q4 2018) to prepare for these changes. This program will now build on the new 9-1-1 telephone system to modernize 9-1-1 services, in line with the capabilities being enabled by a new national 9-1-1 IP network. This will enable citizens to communicate with 9-1-1 in new ways, such as real-time texting. Furthermore, current manual processes will be automated for operational efficiencies and potential cost savings.
Document Date	2018/09/11

Service	Calgary 9-1-1	Sector Affected	Multiple Sectors
Activity #	440013	Ward(s)	All Wards
Project Identifier (PID)	3000186	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY COMMUNITY STANDARDS	Capital Investment Plan Alignment	Other.Other
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Build an adaptable resilient and smart city

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	2,000,000	500,000	500,000	500,000	500,000	0
Funding Status	For Approval					
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years
	2,734	,395	1,74	45,004	1,276,688	14
MUGS	Mainter	nance	Up	grade	Growth	New Services
	100	%		0%	0%	0%

Triple Bottom Line – Social	The new Calgary 9-1-1 IP telephony system is a mission-critical public safety system to connect with citizens in need of emergency help. This system will improve communications with deaf, hard of hearing and speech impaired callers through texting. This program ensures the reliability and security of these systems, and thus contributes to a safe city with strong and resilient communities.
Triple Bottom Line – Environmental	This program supports response to small and large-scale incidents, including environmental incidents (e.g. floods, wildfires, spills, derailments). Ensuring the performance and resilience of these systems supports effective emergency response to environmental threats.
Triple Bottom Line - Economic	This is a strategic infrastructure investment that improves public safety, thereby creating economic security, and creating a city where citizens and business can feel safe to live and invest.
Expected Key Benefits	Highly agile and functional telephony and emergency communications platform Systems resilience and continuity of operations Ability to address evolving regulatory requirements Scalability to large scale emergency events Improved security and monitoring of systems Business intelligence and to support planning and real-time decision making Interoperability with allied partners (e.g. YYC, campus security, alarm monitoring) Automations of manual tasks



City Cemeterio

			Attachment 10				
	North C	Semetery Developme	nt				
Executive Summary Document Date	new cemetery is required to past 70 years there have be Cemetery is the only City of than 3 years of in-ground ca will address the City's short- under the Cemeteries Act(Al	ness case is requesting funding for land acquisition and Phase 1 of the new North Cemetery development. A etery is required to accommodate the growing need for additional cemetery space within City limits. In the ears there have been no new cemeteries opened within the City's limits. Currently, the Queen's Park is the only City of Calgary cemetery with a remaining land inventory for casket burial, which represents less ars of in-ground casket burial land supply. The new Southeast Cemetery is currently in development, which is the City's short-term needs (20 years). In order for The City to continue to meet citizens expectations a Cemeteries Act(Alberta) for the provision of interment space, a new cemetery site must be designed and d to address the City's longer-term needs (70+ years).					
Service	City Cemeteries	Sector Affected	NORTH				
Activity #	419810	Ward(s)	2, 3, 5				
Project Identifier (PID)	3000560	Citizen Priority	A City of Safe & Inspiring Neighborhoods				
Business Unit	CALGARY PARKS	Capital Investment Plan Alignment	Community Investments.Growth Infrastructure				
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems				
Service Type	Essential	City Resilience Framework Driver Provides & enhances natural manmade assets					
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels				

Total	2019	2020	2021	2022	2023+	
10,800,000	6,000,000	1,000,000	2,000,000	1,800,000	0	
For Approval						
No						
				Income (\$)	Employment (Person-Years)	
20,099	9,405	8,18	88,282	5,191,850	61	
Mainte	nance	Upç	grade	Growth	New Services	
0%	6	()%	100%	0%	
	10,800,000 For Approval No Gross (\$ 20,099	10,800,000 6,000,000 For Approval	10,800,000 6,000,000 1,000,000 For Approval No Gross Output (\$) Gross Dom (\$) 20,099,405 8,18 Maintenance Upg	10,800,000 6,000,000 1,000,000 2,000,000 For Approval No Gross Output (\$) Gross Domestic Product (\$) 20,099,405 8,188,282 Maintenance Upgrade	10,800,000 6,000,000 1,000,000 2,000,000 1,800,000 For Approval No Gross Output (\$) Gross Domestic Product (\$) Income (\$) 20,099,405 8,188,282 5,191,850 Maintenance Upgrade Growth	

Triple Bottom Line – Social	(a) Social accessibility – designated park space provides access to the public, (b) Health and Wellness opportunities – opportunities for passive activities (primary focus) and limited active activities, (c) Serve as a gathering space for multi-uses, including educational opportunities, (d) Increasing desirable use activities/interaction with park to encourage desirable social behavior, (e) Public relationships – cemetery development may garner support from various committees, interest groups, and the public in general, (f) Acquisition of North cemetery lands will accommodate all users and any special needs that they may require (i.e. universal accessibility, youth/senior friendly design) to ensure that we are investing in an inclusive city, as well as a safe city.
Triple Bottom Line – Environmental	(a) Native habitat retention protection and restoration as well as water resource protection, (b) Increased biodiversity habitat improvement for local and migratory species, (c) Goal of the work is the Management Plan goal- to protect and conserve the wildlife and ecological value of the site.
Triple Bottom Line – Economic	Improved quality of life for citizens contribute to a vibrant city that attracts and retains professionals and families The new cemetery is a strategic investment in infrastructure for The City. The new addition will serve as a multifunctional space that will allow for bookings and educational opportunities. This will contribute to increased revenue opportunities. The addition will help to invest and leverage investment in community infrastructure and programs.
Expected Key Benefits	(a)Capacity to meet the needs of citizens for internment cemetery space, (b) Meet an important societal need for grieving families, (c) Provides additional cemetery options for Calgary residents, (d) Contributes to Perpetual Care Fund, (e) Meet public expectations, (f) Increased diversity of users, (g) Increased revenue potential, (h) Increased space for additional educational programs.

SE Cemetery Development

		<u> </u>		, to. y =	evelop				
Executive Summary	unfunded porti Cemetery loca irrigation, was cemetery deve stakeholders a	ons of phase of the control of the c	1 of the Operation e, and operated gary Pa	e cemetery devo ons and Admini on-site power r rks will be able	elopment include stration purpose equirements. Wi	es: the provi es, additional ith additional ectations of	sion of I road a I funds the ce	access, a cistern to complete pha metery client bas	New Southeast /pump station for ase 1 of the
Document Date	2018/09/11								
Service	City Cemeteries	3	Secto	r Affected			SOUT	THEAST	
Activity #	419810		Ward((s)			12		
Project Identifier (PID)	3000246		Citize	n Priority				of Safe & Inspir	ing
Business Unit	CALGARY PAR	KS	Capita	al Investment	Plan Alignment	t		nunity Investmer tructure	ts.Growth
Department	COMMUNITY S	SERVICES	City R	Resilience Fra	mework Dimens	sion	Infras	tructure and Eco	systems
Service Type	Essential		City R	Resilience Fra	mework Driver		Ensur	es continuity of	critical services
Investment Category	Project -A Proje investment that delivered and e its own merit an defined scope; schedule resulti substantially im	is planned- valuated on d has a well- cost and ng in new or	Capital Infrastructure Investment Principles				ort the delivery o es at approved s		
		Total		2019	2020 2021			2022	2023+
Recommended Fundin	g Allocation (\$)	3,325,00	3,325,000 958,00		1,483,000	884,000		0	0
Funding Status		For Approva	al						
Operating Impact Of Ca	apital	No							
Economic Impacts of 2 Recommended Fundin		Gross Output (\$)		Gross Domestic Product (\$)		ıct	Income (\$)	Employment (Person-Years)	
		Ę	5,480,519		2,500,751			1,610,268	17
MUGS		Ma	Maintenance		Upgrade			Growth	New Services
			0%		C)%		100%	0%
Triple Bottom Line – So	s	takeholder me sers and any	eetings special	and public openeeds that the	en house in need	d for cemete .e. universal	ry site acces	buildings Will a sibility, youth/ser	
Triple Bottom Line – Er				energy efficient		eet the requ	iremer	nts and expectati	ons of the client
Triple Bottom Line – Ed	Increased desire to purchase, increased sales, increase and support to perpetual care funds, no community needs and expectations. The new cemetery buildings are a strategic investment in infrastructure for The City. The new additions will serve as multifunctional spaces that will allow fookings and educational opportunities. This will contribute to increased revenue opportunities, addition will help to invest and leverage investment in community infrastructure and programs. Imquality of life for citizens contribute to a vibrant city that attracts and retains professionals and fam					ent in vill allow for tunities. The grams Improved			
Expected Key Benefits	A t a A	quality of life for citizens contribute to a vibrant city that attracts and retains professionals and families A building/ facility to meet operations and staff requirements of the new cemetery location A building/facility to meet administrative needs of the new cemetery location Storage area for equipment and work areas for staff Sound functional buildings that relate and function well within a prairie landsca Additional road access Cistern/pump station for irrigation Wastewater storage On-site power Meet public expectations Customer interface area Multi functional/programmable facilities (educational programs, etc.) Increased revenue potential				on A for equipment prairie landscape power Meet			

CPP Service Improvements

Executive Summary	This program				customer facing			he continuous ir	nprovement of
zacounto cummany	business prod	cesses and data	a mana	agement. This p	orogram ensures	that Planni	ng &De	evelopment (PD)	
Document Date	2018/09/11								
Service	City Planning &	& Policy	Secto	Sector Affected				al / The City of 0	Calgary
Activity #	481250		Ward	l(s)			All Wa	ards	
Project Identifier (PID)	3000586		Citize	en Priority				of Safe & Inspir	ring
Business Unit	CALGARY BU SERVICES	ILDING	Capit	tal Investment	Plan Alignment	t	Other	.Other	
Department	PLANNING AN DEVELOPMEN		City I	Resilience Fra	mework Dimens	sion	Leade	ership and Strate	egy
Service Type	Essential		City I	Resilience Fra	mework Driver		Foste	rs long-term & ir	ntegrated Planning
Investment Category	Annual Investn A recurring pro on maintaining current in-servi for ongoing pur similar assets	gram focused service s					Support the delivery of City of Calgary services at approved service levels		
		Total		2019	2020	2021		2022	2023+
Recommended Funding	g Allocation (\$	2,000,00	00	500,000	500,000	500,00	0	500,000	0
Funding Status		For Approva	al						<u>'</u>
Operating Impact Of C	apital	No							
Economic Impacts of 2 Recommended Funding		Gr	Gross Outpu (\$)				ıct	Income (\$)	Employment (Person-Years)
		2	2,734,3	395	1,74	5,004		1,276,688	14
MUGS		M	ainten	ance	Upg	grade		Growth	New Services
			0%		10	00%		0%	0%
Triple Bottom Line – S					r citizens and co olicies and plans		o partio	cipate in public e	engagement
Triple Bottom Line – E	planning tools			will enhance The City's ability to forecast Calgary's growth and change through scenario s, which could help strengthen The City's understanding of the environmental impact of and redevelopment in Calgary.					
Triple Bottom Line – E		This programs will support efficiency through developing new tools and digital experier plans.					digital experienc	ces of policies and	
Expected Key Benefits Enhanced ability to anticipate planning trends/risks Planning policy documents are convoluments are co				tizens and viewing					

applications against the rules of the Land Use Bylaw Improved customer experience Improved service delivery/expanded services Improved access to service

		Dowr	ntov	vn Imp	orovem	ents		,	none to
Executive Summary Document Date	approved budge through the Cer to enhance soc tree planting, to immediate need	et provided funtre City Plan ial life & vibra social prograds in the Cente need is imp	unding, in Implement Imple	in conjunction nentation Strat the Centre City Engaging Vul where investmow with a high	with other progra egy and housed They vary in somerable People. The is important The office vacancy	ams, for corp in Urban St cale from ba This funding to retain and that is reduce	oorate rategy inners g allov d attra	ity as it did in 2015 e projects that were y. Projects aim to s & lighting, to side ws the City to be a act employees, and tax revenue from	e prioritized improve safety & walk repairs & ddress d private sector
Service	City Planning & F	Policy	Sector Affected Multiple Sectors						
Activity #	463910		Ward(s)			All Wards		
Project Identifier (PID)	3000584		Citizer	n Priority				y of Safe & Inspiri hborhoods	ng
Business Unit	URBAN STRATE	GY	Capita	al Investment	Plan Alignmen	t	Othe	er.Other	
Department	URBAN STRATE	GY	City R	esilience Fran	nework Dimen	sion	Infra	structure and Ecos	systems
Service Type	Current		City Resilience Framework Driver Provides & enhances natural and manmade assets					natural and	
Investment Category	Program - A Prog grouping of proje related and bene being planned ar together	cts that are fit from	, i						
		Total		2019	2020	2021		2022	2023+

	Total	2019	2020	2021	2022	2023+	
Recommended Funding Allocation (\$)	2,000,000	400,000	600,000	400,000	600,000	0	
Funding Status	For Approval	For Approval					
Operating Impact Of Capital	No						
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)			estic Product (\$)	Income (\$)	Employment (Person-Years)	
	3,722	2,112	1,51	16,348	961,454	11	
MUGS	Maintenance		Upgrade		Growth	New Services	
	0%		100%		0%	0%	

Triple Bottom Line – Social	The program will revitalize & reinvest in the Centre City. This is important because: (1) It is the key employment centre in the city. Calgary's downtown area employs over 161,500 people and over 6,000 businesses. (2) Providing a safe public realm encourages people to want to live, work & socialize in the Centre City. (3) Revitalization of public spaces provides amenities for more Calgarians. Improving the public spaces provides spaces for people to socialize. A corridor enhancement provides mobility choices by improving safety and accessibility. (4) It is an important civic forum where the community comes together and where Calgarians & visitors come to experience arts, culture & entertainment. The downtown area is the social and cultural hub of the city, home to theatres, museums, galleries, and gathering spaces for celebrations & parades, and sports & entertainment complexes.
Triple Bottom Line – Environmental	(1) It improves air quality through the introduction of trees & soft landscaping and reduction in CO2 emissions. (2) Improvements to the public realm through landscaping & mobility choices will encourage people to walk, cycle & to take transit. (3) More plant material aids in the absorption of surface water runoff improving water quality & resiliency.
Triple Bottom Line – Economic	(1) Investing in the Centre City public realm supports a significant portion of Calgary's tax revenue. Less than 1% of the land mass generates over 25% of the City's tax revenue. In 2014, Centre City businesses and property owners contributed over \$390 million in tax revenue, the majority of which is spent outside Centre City to help fund the growth and sustainment of the city. (2) It represents a huge amount of private & public investment. Over the past 10 years, private developers have invested over \$8.5B into Calgary's Centre City, helping grow the total assessed value of the downtown to over \$31 billion. (3) It is the storefront to the city & the region. Calgary's downtown & its concentration of public and private attractions attract millions of visitors each year, contributing revenue to the local tourism market. (4) A vital downtown Centre City retains & creates job.

C2018-1158 Attachment 10

Expected Key Benefits

Improving the public realm in the Centre City to create an environment that is safe, lively, and vibrant will: Attract and accelerate private development and grow municipal taxation base. Revitalizing corridors and improving the public realm is a strong catalyst for private development. Reinvesting in the Centre City should help attract new private developments and accelerate existing development plans. New developments will contribute new tax revenue to the city, and accelerated development timelines will allow The City to receive these taxation benefits sooner. Attract and retain businesses and citizens. Remain competitive in the global market. Demonstrates that The City values the contribution that downtown businesses make to the larger city. Improve quality of life of residents and workers through better mobility choices.



Development Approvals

DA Service Improvements

Executive Summary	business pro	This program supports the ongoing investment in customer facing technologies and the continuous improvement of business processes and data management. This program ensures that Planning & Development (PD) continues to meet customer, community and citizen expectations regarding responsiveness, quality, and convenience of PD services							
Document Date	2018/09/11								
Service	Development .	velopment Approvals Se		r Affected			Intern	al / The City of 0	 Calgary
Activity #	481251		Ward((s)			All Wa	ards	
Project Identifier (PID)	3000587		Citize	Citizen Priority				of Safe & Inspi	ring
Business Unit	CALGARY BU SERVICES	CALGARY BUILDING C SERVICES		al Investment	Plan Alignmen	t	Other	.Other	
Department		PLANNING AND DEVELOPMENT		City Resilience Framework Dimension			Leade	ership and Strate	əgy
Service Type	Essential		City R	esilience Fran	mework Driver		Fosters long-term & integrated Planning		
Investment Category	Annual Investr A recurring pro on maintaining current in-serv for ongoing pu similar assets	ogram focused or upgrading ice assets or	am focused upgrading assets or					ort the delivery ones at approved	of City of Calgary service levels
		Total		2019	2020	2021		2022	2023+
Recommended Funding	ng Allocation (\$	6,000,0	00	3,080,000	1,500,000	790,00	00	630,000	0
Funding Status		For Approv	al						
Operating Impact Of C	apital	No							
Economic Impacts of 2 Recommended Fundir		G	ross Ou (\$)	itput	Gross Domestic Produ (\$)		uct	Income (\$)	Employment (Person-Years)
			8,203,1	86	5,23	5,013		3,830,065	41
MUGS		N	laintena	ince	Upç	grade		Growth	New Services
			0%		10	00%		0%	0%
Triple Bottom Line - S	ocial		application		s to strengthen o				
Triple Bottom Line - E	nvironmental	This program is working towards moving the review of development applications online, reducing the							

Triple Bottom Line – Social	This program will work on digital tools to strengthen collaboration with communities on the review of development applications, supporting enhanced representation of community voices in how Calgary grows and changes.
Triple Bottom Line – Environmental	This program is working towards moving the review of development applications online, reducing the amount of paper required for every approval.
Triple Bottom Line – Economic	This program supports initiatives that will make approvals processes more efficient, strengthen the culture of continuous improvement, and innovation, and ensure that this service adapts to the changing needs and pressures to support the development industry in Calgary.
Expected Key Benefits	Improved customer experience. Improved service delivery. Improved access to service Lower operating costs/higher efficiency gains/return on investment.

Working Space Initiative

Executive Summary	This program p				g &Developmen	nt working sp	oaces 1	to support enhan	cing service	
Document Date	2018/09/11									
Service	Development Ap	Development Approvals		or Affected			Internal / The City of Calgary			
Activity #	470040		Ward	l(s)			All W	ards		
Project Identifier (PID)	3000557		Citizen Priority				A City of Safe & Inspiring Neighborhoods			
Business Unit	CALGARY BUILI SERVICES			Capital Investment Plan Alignment				Other.Other		
Department	PLANNING AND DEVELOPMENT		City Resilience Framework Dimension			Infrastructure and Ecosystems				
Service Type	Essential		City Resilience Framework Driver				Ensures continuity of critical services			
Investment Category	Program - A Prog grouping of proje related and bene being planned ar together	cts that are fit from	ts that are t from			Principles		ort the delivery o ces at approved s		
		Total		2019	2020	2021		2022	2023+	
Recommended Fundin	g Allocation (\$)	7,000,00	00	500,000	2,500,000	2,000,0	00	2,000,000	0	
Funding Status For Approva		al								
Operating Impact Of Capital No										
Economic Impacts of 2019-2022 G Recommended Funding		Gr	ross Output (\$)		Gross Domestic Production (\$)		ıct	Income (\$)	Employment (Person-Years)	

	0%	100%	0%	0%					
Triple Bottom Line – Social	This program will strengthen Planning& Development's ability to collaborate with external and internal partners on the review of development applications, as well as city planning and policy and building safe initiatives. This will help to ensure that new developments in Calgary and planning policy reflect community needs while balancing development opportunities, and growth and change in the city.								
Triple Bottom Line – Environmental	This program will upgrade Planning & Development working spaces to align with corporate space standards, including more energy efficient solutions.								
Triple Bottom Line – Economic	This program will strengthen Planning& Development's ability to collaborate with external and internal partners on the review of development applications, as well as city planning and policy and building safety initiatives. This will help to ensure that new developments in Calgary and planning policy reflect community needs while balancing development opportunities, and growth and change in the city.								
Expected Key Benefits	Improved customer experience Impro Lower operating costs/higher efficien		ervices Improved a	ccess to service					

6,047,644

Upgrade

3,976,310

Growth

40

New Services

9,614,019

Maintenance

C2018-1158 Attachment 10 ISC: UNRESTRICTED

MUGS

Emergency Management & Business Continuity

CanaTaskForce2 Muni Contri

Executive Summary	Canada Task Force 2 is Alberta's Disaster Response Team based out of Calgary and managed by the Calgary Emergency Management Agency. Under a current 5-year funding commitment, the Government of Canada will contribute 75% percent of approved grant purchases with the Municipal contribution to make up the remaining 25%. These purchases allow the team to maintain readiness and capability to respond to large scale disasters within Calgary, Alberta and across Canada.
Document Date	2018/09/11

Service	Emergency Management & Business Continuity	Sector Affected	Multiple Sectors
Activity #	480453	Ward(s)	All Wards
Project Identifier (PID)	3000228	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY EMERGENCY MGMT AGENCY	Capital Investment Plan Alignment	Targeted Theme Investments.Resilience
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Optimize financing and funding sources

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	2,340,000	585,000	585,000	585,000	585,000	0
Funding Status	For Approval					'
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (estic Product (\$)	Income (\$)	Employment (Person-Years
	3,737	,313	1,75	57,214	1,251,493	15
MUGS	Mainte	nance	Up	grade	Growth	New Services
	25	%	2	25%	25%	25%

Triple Bottom Line - Social	This funding provides a trained and ready response for the next major emergency or disaster in Calgary. Calgarians can enjoy a sense of preparedness and ability to respond in an emergency.
Triple Bottom Line – Environmental	This funding will allow for new equipment that will be more environmentally friendly and upgrade any outdated equipment as necessary.
Triple Bottom Line - Economic	Investment in preparedness allows for effective response to an emergency or disaster enabling protection of critical infrastructure and a safe and effective resolution to an event while leveraging federal funding.
Expected Key Benefits	Increased capacity and capability for emergency and disaster response, therefore increasing the resilience of The City of Calgary and improving the lives of Calgarians everyday.

Common Op Picture Maint

Executive Summary	The Common Operating Picture (COP) is an application critical to CEMA's operations as it is used during emergency events to communicate situational awareness and provide planning information critical to response. The COP relies on technology that is no longer supported and, as a result, is at risk. Therefore, it is critical that we upgrade this software in order for CEMA to be operationally ready.
Document Date	2018/09/11

Service	Emergency Management & Business Continuity	Sector Affected	Multiple Sectors
Activity #	480451	Ward(s)	All Wards
Project Identifier (PID)	3000195	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY EMERGENCY MGMT AGENCY	Capital Investment Plan Alignment	Targeted Theme Investments.Resilience
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	750,000	400,000	350,000	0	0	0
Funding Status	For Approval					<u>'</u>
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	1,025	,398 654,377		478,758	5	
MUGS	Mainter	nance	Upç	grade	Growth	New Services
	100	%	()%	0%	0%

Triple Bottom Line – Social	Investment in upgrading the COP with the latest technology for use in emergency management will improve the operational response and recovery activities of The City's emergency management personnel. This will also allow for critical information gathering abilities, situational awareness and communication to Calgarians, thus contributing to the development of a safe and resilient city.
Triple Bottom Line – Environmental	Investment in upgrading the COP with the latest technology for use in emergency management will assist operational response to emergencies impacting the environment.
Triple Bottom Line – Economic	Investment in upgrading the COP with the latest technology for use in emergency management will increase the overall resilience of the city, making it an attractive place for new business development and investment.
Expected Key Benefits	Implementation of a reliable, maintained and supported COP application based on current technology and CEMA's strategic vision. This will contribute to our response abilities and allow CEMA to provide effective services to Calgarians in times of need through situational awareness and public information/notification. This opportunity will leverage existing GIS based emergency management applications.

Disaster Preparedness

Executive Summary	Adequate disaster preparedness requires The City of Calgary to have the necessary materials and equipment for response and recovery on hand, as supply chains tend to be overloaded or disrupted during emergency events and just in time procurement may not be possible. The Disaster Preparedness program is designed to ensure The City has the necessary materials on-hand to overcome the impacts of disasters that are most likely to occur in Calgary.
Document Date	2018/09/11

Service	Emergency Management & Business Continuity	Sector Affected	Multiple Sectors
Activity #	480452	Ward(s)	All Wards
Project Identifier (PID)	3000205	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY EMERGENCY MGMT AGENCY	Capital Investment Plan Alignment	Targeted Theme Investments.Resilience
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Economy and Society
Service Type	Essential	City Resilience Framework Driver	Ensures Social Stability & Security and Justice
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Build an adaptable resilient and smart city

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	2,160,000	540,000	540,000	540,000	540,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No	No				
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	utput		estic Product (\$)	Income (\$)	Employment (Person-Years)
	3,560,	3,560,277		1,624,548		11
MUGS	Mainter	nance	Up	grade	Growth	New Services
	100	%		0%	0%	0%

Triple Bottom Line – Social	The equipment that will be purchased through the Disaster Preparedness program will provide Calgarians with critical equipment to use during the next major emergency or disaster in Calgary. Calgarians can enjoy a sense of preparedness and ability to respond in an emergency.	
Triple Bottom Line – Environmental	Equipment procured with this funding will be used to respond to all impacts of emergencies or disasters, including those that adversely affect the environment.	
Triple Bottom Line - Economic	The economy will be able to recover quicker as we will be more prepared to respond during the next major emergency.	
Expected Key Benefits	There will be an increase in CEMA's operational readiness and preparedness for large emergencies and disasters. This will make Calgary more resilient when dealing with the next emergency of disaster. Also, there will be increased stock levels of preparedness equipment and investment recovery on stale-dated items.	

EOC Backup

Executive Summary	The City of Calgary's backup Emergency Operations Centre (EOC) is currently an undersized, aging facility. In order to ensure effective and efficient incident command and coordination during major emergencies or disasters, the City requires an adequate backup EOC. The technology is challenged and the room provides less than one-half the number of work stations of the primary EOC at Rotary Park. We need to update the technology and space accordingly to ensure that we have an effective and efficient backup EOC to use should the primary EOC be compromised.
Document Date	2018/09/11

Service	Emergency Management & Business Continuity	Sector Affected	Multiple Sectors
Activity #	480454	Ward(s)	All Wards
Project Identifier (PID)	3000229	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY EMERGENCY MGMT AGENCY	Capital Investment Plan Alignment	Targeted Theme Investments.Resilience
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	428,631	0	428,631	0	0	0
Funding Status	For Approval					'
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)			estic Product (\$)	Income (\$)	Employment (Person-Years)
	677,128		298,035		215,596	2
MUGS	Maintenance 100%		Upgrade		Growth	New Services
			()%	0%	0%

Triple Bottom Line - Social	The investment in improving our backup EOC is essential to the operational response and recovery activities of The City's emergency management program, thus contributing to the development and sustainment of a safe and resilient city for all Calgarians.
Triple Bottom Line – Environmental	The investment in improving the backup EOC will assist operational response to emergencies impacting the environment.
Triple Bottom Line - Economic	The investment in improving the backup EOC will increase the overall resilience of the city, making it an attractive place for new and ongoing business development and investment.
Expected Key Benefits	By ensuring that the City of Calgary has an available site to coordinate incident command and delivery of services during a major emergency or disaster, the impacts of the event are minimized and recovery is able to begin sooner, thus contributing to a safer and more resilient city.

EOC IT Lifecycle

Executive Summary	The Emergency Operations Centre (EOC) was established in2012 and most of the technology and equipment required for response to large scale emergencies is entering its 7th year of service. The EOC IT Lifecycle program will manage the replacement of aging technology and equipment to reduce incidents/risk of failure and improve the ability to respond to large scale emergencies.
Document Date	2018/09/11

Service	Emergency Management & Business Continuity	Sector Affected	Multiple Sectors
Activity #	480450	Ward(s)	All Wards
Project Identifier (PID)	3000185	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY EMERGENCY MGMT AGENCY	Capital Investment Plan Alignment	Targeted Theme Investments.Resilience
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,804,200	179,105	499,365	635,595	490,135	0
Funding Status	For Approval					·
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years)
	2,881,564		1,354,857		964,933	11
MUGS	Mainte	nance	Upgrade		Growth	New Services
	100%		0%		0%	0%

Triple Bottom Line - Social	The investment in maintaining and improving our emergency operations centre will improve the operational response and recovery activities of The City's emergency management personnel, thus contributing to the development and sustainment of a safe and resilient city for all Calgarians.
Triple Bottom Line – Environmental	The investment in maintaining and improving our emergency operations centre will assist operational response to emergencies impacting the environment.
Triple Bottom Line - Economic	The investment in maintaining and improving the emergency operations centre will increase the overall resilience of the city, making it an attractive place for new business development and investment.
Expected Key Benefits	Implementation of reliable, maintained systems and equipment based on evolving trends in technology, emergency management and CEMA's strategic vision. This will contribute to our response abilities and allow CEMA to provide effective services to Calgarians in times of need. This will also contribute to an effective municipal government, making us more resilient and allow us to contribute to making the lives better every day for Calgarians.

		Belve	de	re Eme	rg Res	p Stn)	,	iment 10	
Executive Summary	workload and r Population and business and r	maintain fire re I incidents hav educing availa Calgarians, Ca	espon e incability algary	se times and se reased in Station of fire trucks to	rvice level bencl n 12's area by 1 respond to othe	nmarks in th O per cent or r emergencion	e Belve ver the es. To	last five years, i deliver the highe	cture Plan (ASP).	
Document Date	2018/09/11	•								
Service	Fire & Emergency Response			tor Affected			Multip	ole Sectors, EAS	T, SOUTH	
Activity #	480506		War	d(s)			9			
Project Identifier (PID)	3000224		Citiz	en Priority				of Safe & Inspir	ing	
Business Unit	CALGARY FIRE		Сар	ital Investment	Plan Alignmen	t	-	munity Investmer	nts.Multi-Service	
Department	COMMUNITY SERVICES		City	Resilience Fran	mework Dimen	sion	Infras	tructure and Eco	systems	
Service Type	Essential		City	Resilience Fran	mework Driver		Ensu	res continuity of	critical services	
Investment Category	delivered and evits own merit and defined scope; coschedule resulting	nt that is planned- and evaluated on erit and has a well-		Capital Infrastructure Investment Principles				Support the delivery of City of Calgary services at approved service levels		
		Total		2019	2020	2021		2022	2023+	
Recommended Fundin	g Allocation (\$)	2,000,000		1,000,000	0	0		1,000,000	0	
Funding Status		For Approva	ıl							
Operating Impact Of Ca	apital	Yes								
Economic Impacts of 2 Recommended Fundin		Gros		oss Output Gross Domestic (\$) (\$)			ıct	Income (\$)	Employment (Person-Years	
		;	3,159,490 aintenance		1,390,638 Upgrade			1,005,975	11	
MUGS		Ma						Growth	New Services	
			0%	6		0%		100%	0%	
Triple Bottom Line – Environmental		lay in Calgary nd death throu ontributed to a cidents. We corgrams creat nivironment for ystems, training FD is committed then built will refill be emphasionsumption. To mee from rai	. Whe ugh easign conducte \$2 rits easign meet conducted to meet conducted, Xerison wat cling a	on not actively reducational, safet ificant decrease cted a social retigion and in savings to imployees through its human right a sustainability the or exceed the Gosolar panels used capting will be cover capture system and organics was	sponding to emy & injury preversing the number of the public for every its diversity as practices. Tough its operate of the Lead where feasible mpleted with names. CFD minimiste collection preverse injury injury is the collection preverse injury	ergencies, fintion, and m f people when the evaluation ery dollar in a dinclusion ery dollar e	refightenedical of die in which wested actions constructions constructions requiristated value of the construction of the cons	in fires and as a run showed that out. CFD seeks to est, health and we. The new perman ruction rating system automated to ming minimal wate waste by taking pes. Six fire station.	the risk of injury neterventions have esult of other ir fire safety ensure a safe, illness support enent fire station stem. Natural lightinimize r, most of which part in the ens designated as	

Triple Bottom Line - Economic

Economic consequences can include the impact on humans and property, but also such factors as fire protection, insurance, rebuilding of the structure(s), temporary housing, ability to continue working and doing business, etc., In 2017, our save rate was 92.8%. The total value saved from fire was \$743,035,041. Results from our annual Comparative Cities Survey showed that our fire suppression cost per capita is better than the average of comparative municipalities. In addition, the latest Municipal Benchmarking Network of Canada (MBNCanada) survey results showed our fire service operating costs per assessed value of the property we protect was \$0.86 per \$1,000, significantly lower than the comparative municipalities' average of \$1.88, and that we are performing at the same level or better at outcome measures such as residential fire injuries and fatalities.

for proper disposal. Firefighters assist in the mitigation of environmental risks from contamination of air

and possibly also to surface water, groundwater, sediment, and soil.

C2018-1158 Attachment 10

	/ Machinian 10	
Expected Key Benefits	Improved service delivery: New permanent emergency response station. Good distribution of workload	
	for emergency response facilities and equipment across the city. Maintain fire response times and	
	service level benchmarks. Maintain citizen expectations. (69% of citizens say that a fire station "should be	
	built in a new development before construction begins, so that the buildings are protected before	
	residents move in").	

CFD Equipment

	N. I. I. I.			<u> </u>	•					
Executive Summary	New budget request of \$1.4M for a high risk medication and equipment tracking locker that will be used to maintain control overmedications and to add to our POD program.									
Document Date	2018/09/11									
Service	Fire & Emergency Response		Sect	or Affected			Multip	ole Sectors		
Activity #	413040		War	d(s)			All W	ards		
Project Identifier (PID)	CALGARY FIRE COMMUNITY SERVICES		Citiz	en Priority				y of Safe & Inspir	ing	
Business Unit			Capi	ital Investment	Plan Alignmer	nt	Othe	r.Other		
Department			City	Resilience Fran	nework Dimen	sion	Infras	structure and Eco	osystems	
Service Type			City	Resilience Fran	nework Driver		Ensu	res continuity of	critical services	
	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets			Capital Infrastructure Investment Principles				Support the delivery of City of Calgary services at approved service levels		
		Total		2019	2020	2021		2022	2023+	
Recommended Funding	g Allocation (\$)	1,350,00	0	1,350,000	0	0		0	0	
Funding Status		For Approva	ıl							
Operating Impact Of Ca	apital	No								
Economic Impacts of 2 Recommended Funding		Gross		Output)	Gross Domestic Prod (\$)		ıct	Income (\$)	Employment (Person-Years)	
		2	2,156,	1,013,778			722,015	8		
MUGS		Maintenance			Upgrade			Growth	New Services	
		0%				50%		50%	0%	
Triple Bottom Line – So	p a cr ir p e	lay in Calgary and death throu contributed to a cidents. We crograms creat nvironment fo	. Whe ugh ed a signi conducte \$2.2 r its e	en not actively reducational, safet ducational, safet ificant decrease cted a social retu 20 in savings to the	sponding to emy & injury prevention the number of the number of the number of the public for exploit the public for exploits and the public for exploits and the number of	ergencies, fi ention, and m of people who ent evaluation ery dollar in	refight nedical o die ir n which vested	of the people who ers help reduce to programs. Our in fires and as a real showed that out. CFD seeks to est, health and we	the risk of injury nterventions have esult of other if it safety ensure a safe,	
Triple Bottom Line – Environmental CFD is committed to sustainability through its operations and planning. The new permanent fire when built will meet or exceed the Gold level of the LEED® New Construction rating system. Now will be emphasized, solar panels used where feasible and electric lights automated to minimize consumption. Xeriscaping will be completed with native species requiring minimal water, most of comes from rain water capture systems. CFD minimizes its generated waste by taking part in the corporate recycling and organics waste collection programs in all facilities. Six fire stations design Household Hazardous Waste program sites collect household hazardous waste chemicals from for proper disposal. Firefighters assist in the mitigation of environmental risks from contamination and possibly also to surface water, groundwater, sediment, and soil.						stem. Natural light inimize r, most of which oart in the ons designated as als from citizens amination of air				
Triple Bottom Line – Ec	р	Economic consequences can include the impact on humans and property, but also such factors as fire protection, insurance, rebuilding of the structure(s), temporary housing, ability to continue working and doing business, etc., In 2017, our save rate was 92.8%. The total value saved from fire was \$743,035,041. Results from our annual Comparative Cities Survey showed that our fire suppression cost per capita is better than the average of comparative municipalities. In addition, the latest Municipal Benchmarking Network of Canada (MBNCanada) survey results showed our fire service operating costs per assessed value of the property we protect was \$0.86 per \$1,000, significantly lower than the comparative municipalities' average of \$1.88, and that we are performing at the same level or better at outcome measures such as residential fire injuries and fatalities.								
	\$ p B p	er capita is be enchmarking er assessed v omparative m	etter the Netwo alue of unicip	Its from our annument the average ork of Canada (Not the property walities' average of	ual Comparative of comparative ////////////////////////////////////	municipalitie urvey results 0.86 per \$1, at we are pe	es. In a showe 000, si	ddition, the lates ed our fire service ignificantly lower	suppression cost t Municipal e operating costs than the	

CFD Fleet 2019-2022

Executive Summary	New budget request of \$7.7M for apparatus for new station builds. As the growth of our City increase so do the needs of Calgarians in relation to Fire Service. As part of our ongoing commitment to Calgarians we are requesting the additional apparatus based on growth stations and ERF (Emergency Response Force.) ERF is the arrival of 12 firefighters and necessary equipment within 11 minutes at serious and escalating fires.
Document Date	2018/09/11

Service	F: 9 F	Conton Affordad	Multiple Contains
Service	Fire & Emergency Response	Sector Affected	Multiple Sectors
Activity #	480504	Ward(s)	All Wards
Project Identifier (PID)	3000177	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY FIRE	Capital Investment Plan Alignment	Other.Other
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	7,700,000	4,800,000	2,900,000	0	0	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product \$)	Income (\$)	Employment (Person-Years)
	12,29	7,997	5,78	2,287	4,118,162	48
MUGS	Mainte	nance	Upg	rade	Growth	New Services
	09	%	0	%	100%	0%

Triple Bottom Line – Social	The Calgary Fire Department contributes to the well being and safety of the people who live, work, and play in Calgary. When not actively responding to emergencies, firefighters help reduce the risk of injury and death through educational, safety & injury prevention, and medical programs. Our interventions have contributed to a significant decrease in the number of people who die in fires and as a result of other incidents. We conducted a social return on investment evaluation which showed that our fire safety programs create \$2.20 in savings to the public for every dollar invested. CFD seeks to ensure a safe, environment for its employees through its diversity and inclusion actions, health and wellness support systems, training and its human rights practices.
Triple Bottom Line – Environmental	As CFD upgrades its Engine fleet, engines are equipped with Auxiliary Power Unit (APU) idle reduction systems. These systems burn up to 80% less fuel than running the main engine to power emergency lighting, communications devices, and vehicle systems at emergency events, which accounts for 55-75% of a typical Fire Engine's run time. In addition to fuel savings we will see a significant reduction in maintenance frequency which reduces the amount of hazardous wastes, such as oils and filters, being generated.
Triple Bottom Line – Economic	Economic consequences can include the impact on humans and property, but also such factors as fire protection, insurance, rebuilding of the structure(s), temporary housing, ability to continue working and doing business, etc., In 2017, our save rate was 92.8%. The total value saved from fire was \$743,035,041. Results from our annual Comparative Cities Survey showed that our fire suppression cost per capita is better than the average of comparative municipalities. In addition, the latest Municipal Benchmarking Network of Canada (MBNCanada) survey results showed our fire service operating costs per assessed value of the property we protect was \$0.86 per \$1,000, significantly lower than the comparative municipalities' average of \$1.88, and that we are performing at the same level or better at outcome measures such as residential fire injuries and fatalities.
Expected Key Benefits	As growth continues in the City these vehicles will ensure equitable service to citizens in new communities.

CFD Protective Equipment Lifecycle

Executive Summary	This project addresses the life cycling of medical, extrication and firefighting equipment. This includes fire hose, nozzles, thermal imaging cameras, defibrillators, power equipment and extrication equipment and Personal Protective Equipment (PPE). This equipment is used by firefighters to complete a variety of tasks while attending a medical call, motor vehicle accident or fire call. Without this equipment firefighters may not be able to alleviate or diminish loss of property, injury or death to the citizens of Calgary.	
Document Date	2018/09/11	
Service	Fire & Emergency Response Sector Affected	Multiple Sectors

Service	Fire & Emergency Response	Sector Affected	Multiple Sectors
Activity #	413040	Ward(s)	All Wards
Project Identifier (PID)	3000155	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY FIRE	Capital Investment Plan Alignment	Other.Other
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	18,534,114	4,164,972	2,369,142	6,000,000	6,000,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (. •		estic Product (\$)	Income (\$)	Employment (Person-Years)
	29,601	,620	13,9	18,125	9,912,530	117
MUGS	Mainte	nance	Up	grade	Growth	New Services
	100	%	(0%	0%	0%

Triple Bottom Line – Social	The Calgary Fire Department contributes to the well being and safety of the people who live, work, and play in Calgary. When not actively responding to emergencies, firefighters help reduce the risk of injury and death through educational, safety & injury prevention, and medical programs. Our interventions have contributed to a significant decrease in the number of people who die in fires and as a result of other incidents. We conducted a social return on investment evaluation which showed that our fire safety programs create \$2.20 in savings to the public for every dollar invested. CFD seeks to ensure a safe, environment for its employees through its diversity and inclusion actions, health and wellness support systems, training and its human rights practices.
Triple Bottom Line – Environmental	CFD through all its work contributes to both the well-being of society in general and the integrity of the natural environment. While we are not able to maximize returns across all three dimensions of corporate performance for every projects and initiative we undertake, we make every decision with recognition, concern and sensitivity to the three dimensions of societal responsibility: economic, environmental, and social.
Triple Bottom Line – Economic	Economic consequences can include the impact on humans and property, but also such factors as fire protection, insurance, rebuilding of the structure(s), temporary housing, ability to continue working and doing business, etc., In 2017, our save rate was 92.8%. The total value saved from fire was \$743,035,041. Results from our annual Comparative Cities Survey showed that our fire suppression cost per capita is better than the average of comparative municipalities. In addition, the latest Municipal Benchmarking Network of Canada (MBNCanada) survey results showed our fire service operating costs per assessed value of the property we protect was \$0.86 per \$1,000, significantly lower than the comparative municipalities' average of \$1.88, and that we are performing at the same level or better at outcome measures such as residential fire injuries and fatalities.

Expected Key Benefits

(1) Fire equipment inventories are maintained within current service specifications and safety requirements (2) Reduction in maintenance and repair costs (3) Lower the risk of failure of equipment

CFD Technology Lifecycle

Executive Summary Document Date	systems, radio communication increased reliance and the 24	lude fire station alerting systems, mobile CAD ons and post-event records management. With C 4/7 usage of these technology systems, service ging technology will negatively impact CFD	FD's
Comica	Fire 9 Francisco Decreases		Multiple Contain

Service	Fire & Emergency Response	Sector Affected	Multiple Sectors
Activity #	480500	Ward(s)	All Wards
Project Identifier (PID)	3000180	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY FIRE	Capital Investment Plan Alignment	Other.Other
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	7,549,000	684,000	2,730,000	2,935,000	1,200,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	10,320	,975	6,58	36,519	4,818,860	52
MUGS	Mainter	nance	Upg	grade	Growth	New Services
	100	%	(0%	0%	0%

Triple Bottom Line – Social	The Calgary Fire Department contributes to the well being and safety of the people who live, work, and play in Calgary. When not actively responding to emergencies, firefighters help reduce the risk of injury and death through educational, safety & injury prevention, and medical programs. Our interventions have contributed to a significant decrease in the number of people who die in fires and as a result of other incidents. We conducted a social return on investment evaluation which showed that our fire safety programs create \$2.20 in savings to the public for every dollar invested. CFD seeks to ensure a safe, environment for its employees through its diversity and inclusion actions, health and wellness support systems, training and its human rights practices.
Triple Bottom Line – Environmental	CFD through all its work contributes to both the well-being of society in general and the integrity of the natural environment. While we are not able to maximize returns across all three dimensions of corporate performance for every projects and initiative we undertake, we make every decision with recognition, concern and sensitivity to the three dimensions of societal responsibility: economic, environmental, and social.
Triple Bottom Line – Economic	Economic consequences can include the impact on humans and property, but also such factors as fire protection, insurance, rebuilding of the structure(s), temporary housing, ability to continue working and doing business, etc., In 2017, our save rate was 92.8%. The total value saved from fire was \$743,035,041. Results from our annual Comparative Cities Survey showed that our fire suppression cost per capita is better than the average of comparative municipalities. In addition, the latest Municipal Benchmarking Network of Canada (MBNCanada) survey results showed our fire service operating costs per assessed value of the property we protect was \$0.86 per \$1,000, significantly lower than the comparative municipalities' average of \$1.88, and that we are performing at the same level or better at outcome measures such as residential fire injuries and fatalities.

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Expected Key Benefits Conversion of communications channels and talk groups to digital for clearer audio during Fire incidents. Integration of Portable radios with Fire & Rescue members SCBA for enhanced communication with SCBA masks on. MDC used to communicate with the Calgary 9-1-1 dispatchers and other Fire & Rescue members in providing timely updates of the Fire incident. Lifecycle of Modems in the Fire apparatus to ensure continuous connectivity with Calgary 9-1-1 and the CAD network Replacing Portable Radios batteries to ensure Fire & Rescue members can optimally operate and communicate through the duration of a Fire incident.

Facilities Privacy Renos

Executive Summary	This project is required to maintain Calgary Fire Department (CFD) facilities in the appropriate condition to provide service, as well as address health and safety, code compliance, operational need, physical integrity and general efficiency issues and needs.
Document Date	2018/09/11

Service	Fire & Emergency Response	Sector Affected	Multiple Sectors
Activity #	480502	Ward(s)	All Wards
Project Identifier (PID)	3000502	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY FIRE	Capital Investment Plan Alignment	Other.Other
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	3,000,000	750,000	750,000	750,000	750,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	4,739	234	2,08	35,956	1,508,963	16
MUGS	Mainter	nance	Up	grade	Growth	New Services
	100	%		0%	0%	0%

Triple Bottom Line – Social	Diversity of faith, culture and integrated crews with men and women firefighters are the make-up of today's firehouse. We believe living spaces for the firefighters should be comfortable and offer privacy as needed, as a fire station is not only a work place, but a home as well. To ensure this functionality, facilities are being upgraded to improve equity for all personnel and to attract new firefighters in the future.
Triple Bottom Line – Environmental	Our city planning efforts on this project focus on integration of infrastructure, environment and services.
Triple Bottom Line – Economic	Mitigation of fire risk is fundamental for economic stability. Economic consequences can include the impact on humans & property, but also factors like fire protection, insurance, rebuilding of structure(s), temporary housing, ability to continue working & doing business etc. In 2017, our save rate was 92.8%. The total value saved from fire was \$743,035,041. Results from our annual Comparative Cities Survey showed that our fire suppression cost per capita is better than the average of comparative municipalities. The latest Municipal Benchmarking Network of Canada (MBN Canada) results showed our fire service operating costs/assessed value of the property we protect was \$0.86/\$1,000, significantly lower than the comparative municipalities' average of \$1.88, and that we are performing at the same level or better at outcome measures such as residential fire injuries and fatalities.
Expected Key Benefits	Reduction in maintenance and repair costs. Lower the risk of failure of equipment. Improve morale and efficiency of staff stationed at various locations. Minimize risk of Human Rights complaints. Create a fire station environment that is more inclusive for diverse employees.

ICFP Dwtn Core FireStn Repl

Executive Summary	The Downtown Core Emergency Response Stations are required to support the distribution of workload and maintain fire response times and service level benchmarks in the Downtown, Beltline, Bridgeland and Inglewood areas. Inner city residential and office areas have increased in population and density in recent years and these trends are expected to continue. Station #1 is at the end of its life cycle and will be replaced with 2 other stations in the downtown area in Phase 1 of this project.
Document Date	2018/09/11

Service	Fire & Emergency Response	Sector Affected	Multiple Sectors
Activity #	480501	Ward(s)	7, 8, 9, 11
Project Identifier (PID)	3000271	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY FIRE	Capital Investment Plan Alignment	Other.Other
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	27,502,776	1,000,000	2,000,000	6,000,000	18,502,776	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years
	43,447	7,367	19,1	23,197	13,833,553	151
MUGS	Mainte	nance	Up	grade	Growth	New Services
	0%	6	5	0%	50%	0%

Triple Bottom Line – Social	The Calgary Fire Department contributes to the well being and safety of the people who live, work, and play in Calgary. When not actively responding to emergencies, firefighters help reduce the risk of injury and death through educational, safety & injury prevention, and medical programs. Our interventions have contributed to a significant decrease in the number of people who die in fires and as a result of other incidents. We conducted a social return on investment evaluation which showed that our fire safety programs create \$2.20 in savings to the public for every dollar invested. CFD seeks to ensure a safe, environment for its employees through its diversity and inclusion actions, health and wellness support systems, training and its human rights practices.
Triple Bottom Line – Environmental	The fire station replacement program is rooted in the principles of smart growth, sustainability and locally-based economic development, using a comprehensive and holistic program to invest in local neighborhoods with a goal of creating safe, vibrant, walkable destinations in collaboration with the community. This approach represents a triple-bottom-line philosophy of social, economic and environmental sustainability, contributing to revitalized communities that are hubs for economic and cultural prosperity.
Triple Bottom Line – Economic	Mitigation of fire risk is fundamental for economic stability. Economic consequences can include the impact on humans and property, but also such factors as fire protection, insurance, rebuilding of the structure(s), temporary housing, ability to continue working and doing business, etc., In 2017, our save rate was 92.8%. The total value saved from fire was \$743,035,041. Results from our annual Comparative Cities Survey showed that our fire suppression cost per capita is better than the average of comparative municipalities. In addition, the latest Municipal Benchmarking Network of Canada (MBNCanada) results showed our fire service operating costs per assessed value of the property we protect was \$0.86 per \$1,000, significantly lower than the comparative municipalities' average of \$1.88, and that we are performing at the same level or better at outcome measures such as residential fire
Expected Key Benefits	New permanent Emergency Response Stations – less maintenance cost and reduced risk of building system failures Improved efficiencies and capacity for the required building functionality for the community and fire crews Improved flexibility in vehicle deployment Maintain and improve fire response times to meet established service level benchmarks in the downtown core and surroundings areas Good distribution of workload for emergency response facilities and equipment across the downtown core and surrounding communities

Livingston Emerg Resp Stn

Executive Summary	The Livingston Emergency Response Station is a new facility required to support the distribution of workload and maintain fire response times and service level benchmarks in the Livingston ASP area. To deliver the highest possible protection for Calgarians, CFD strategically locates fire stations across the city to provide optimal response times to emergency incidents.
Document Date	2018/09/11

Service	Fire & Emergency Response	Sector Affected	Multiple Sectors
Activity #	480505	Ward(s)	3
Project Identifier (PID)	3000252	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY FIRE	Capital Investment Plan Alignment	Community Investments.Growth Infrastructure
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	and any improved decode					
	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	2,000,000	1,000,000	0	0	1,000,000	0
Funding Status	For Approval					
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross (estic Product (\$)	Income (\$)	Employment (Person-Years)
	3,159	59,490 1,390,6		90,638	1,005,975	11
MUGS	Mainte	nance	Upg	grade	Growth	New Services
	09	6	(0%	100%	0%

Triple Bottom Line – Social	The Calgary Fire Department contributes to the well being and safety of the people who live, work, and play in Calgary. When not actively responding to emergencies, firefighters help reduce the risk of injury and death through educational, safety & injury prevention, and medical programs. Our interventions have contributed to a significant decrease in the number of people who die in fires and as a result of other incidents. We conducted a social return on investment evaluation which showed that our fire safety programs create \$2.20 in savings to the public for every dollar invested. CFD seeks to ensure a safe, environment for its employees through its diversity and inclusion actions, health and wellness support systems, training and its human rights practices.
Triple Bottom Line – Environmental	CFD is committed to sustainability through its operations and planning. The new permanent fire station when built will meet or exceed the Gold level of the LEED® New Construction rating system. Natural light will be emphasized, solar panels used where feasible and electric lights automated to minimize consumption. Xeriscaping will be completed with native species requiring minimal water, most of which comes from rain water capture systems. CFD minimizes its generated waste by taking part in the corporate recycling and organics waste collection programs in all facilities. Six fire stations designated as Household Hazardous Waste program sites collect household hazardous waste chemicals from citizens for proper disposal. Firefighters assist in the mitigation of environmental risks from contamination of air and possibly also to surface water, groundwater, sediment, and soil.
Triple Bottom Line – Economic	Mitigation of fire risk is fundamental for economic stability. Economic consequences can include the impact on humans and property, but also such factors as fire protection, insurance, rebuilding of the structure(s), temporary housing, ability to continue working and doing business, etc., In 2017, our save rate was 92.8%. The total value saved from fire was \$743,035,041. Results from our annual Comparative Cities Survey showed that our fire suppression cost per capita is better than the average of comparative municipalities. In addition, the latest Municipal Benchmarking Network of Canada (MBNCanada) results showed our fire service operating costs per assessed value of the property we protect was \$0.86 per \$1,000, significantly lower than the comparative municipalities' average of \$1.88, and that we are performing at the same level or better at outcome measures such as residential fire
Expected Key Benefits	New emergency response station that includes: Temporary commercial building consisting of residential house converted to accommodate emergency response station Supporting furniture, fixtures, and equipment 1 fire apparatus

Motorola Upgrade

Document Date	2018/09/11 Since 9 Supermone Contact Affordard
Executive Summary	The Motorola Calgary Mobile Radio Network provides critical public safety voice communications to various City agencies such as Calgary Police, Calgary Fire, Calgary Transit and Calgary Community Standards. In order to maintain lifecycle management of the system, the City is required to perform an upgrade of the core system servers and controllers. This will allow the system to be kept current in terms of security software and management services and allow the system to maintain operational integrity. The total capital cost for the project is \$5Million. Each of Calgary Police, Calgary Transit and Calgary Fire will request a proportionate capital budget to aggregate the total project cost, this business case covers only the Fire portion.

Service	Fire & Emergency Response	Sector Affected	Internal / The City of Calgary
Activity #	480503	Ward(s)	All Wards
Project Identifier (PID)	3000512	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY FIRE	Capital Investment Plan Alignment	Other.Other
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	777,000	777,000	0	0	0	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years)
	1,062,313		677,934		495,993	5
MUGS	Maintenance		Upgrade		Growth	New Services
	0%		100%		0%	0%

	0%	100%	U%	0%				
Triple Bottom Line – Social	As part of The City of Calgary's planned improvements to enhance Calgary's flood and emergency preparedness, we are upgrading our radio communication system to ensure continued reliability of our radio communications during emergencies. This will ensure operational resiliency for our critical technology systems while contributing to the preparedness and self activation of communities in the response to, and recovery from, large-scale disasters and emergencies.							
Triple Bottom Line – Environmental	Our city planning efforts on this project focus on integration of infrastructure, environment and services.							
Triple Bottom Line – Economic	Mitigation of fire risk is fundamental for humans and property, fire protect ability to continue working and doing saved from fire was \$743,035,041. Fire suppression cost per capita is be latest Municipal Benchmarking Netwassessed value of the property we pumunicipalities' average of \$1.88, and measures such as residential fire injunction.	ion, insurance, rebuilding of the sting business, etc. In 2017, our save rescults from our annual Comparative than the average of comparations of Canada results showed our rotect was \$0.86 per \$1,000, signiful that we are performing at the same	ructure(s), tempore ate was 92.8%. The ve Cities Survey so the municipalities. fire service operate ficantly lower than	ary housing, ne total value howed that our In addition, the ting costs per the comparative				
Expected Key Benefits	Completion of the upgrade will allow Fire and The City to continue to operate and effectively manage the Motorola CMRN and provide critical public safety voice services to users, supported by Motorola maintenance agreement.							

Replace Emergency Units

Executive Summary	The project is for the lifecycle replacement of existing CFD Heavy Fleet Vehicles and Apparatus to support optimized service delivery and firefighter and citizen safety. Fleet encompasses all heavy and light duty rolling stock requirements for CFD, including Engines, Quints, Arials, Tenders, Rescue, Hazardous materials, Cars, Trucks, Vans, and specialized light duty apparatus such as Rescue Boats, Bush Buggies and Support units. Generally fleet vehicles and apparatus last from 5 to 15 years as front line response vehicles, depending on the application, although vehicles that are used less frequently may be in service longer. Operating equipment beyond their scheduled replacement decreases reliability, significantly increases maintenance costs and increases servicing down-time.
Document Date	2018/09/11

Service	Fire & Emergency Response	Sector Affected	Multiple Sectors
Activity #	413020	Ward(s)	All Wards
Project Identifier (PID)	3000178	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY FIRE	Capital Investment Plan Alignment	Other.Other
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	12,318,801	3,079,700	3,079,700	3,079,700	3,079,701	0
Funding Status	For Approval					
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years)
	19,674,880		9,250,758		6,588,418	78
MUGS	Maintenance		Upgrade		Growth	New Services
	100%		0%		0%	0%

Triple Bottom Line – Social	The Calgary Fire Department contributes to the well being and safety of the people who live, work, and play in Calgary. When not actively responding to emergencies, firefighters help reduce the risk of injury and death through educational, safety & injury prevention, and medical programs. Our interventions have contributed to a significant decrease in the number of people who die in fires and as a result of other incidents. We conducted a social return on investment evaluation which showed that our fire safety programs create \$2.20 in savings to the public for every dollar invested. CFD seeks to ensure a safe, environment for its employees through its diversity and inclusion actions, health and wellness support systems, training and its human rights practices.
Triple Bottom Line – Environmental	By the end of 2018 CFD will have 34 Fire Engines, which is 56% of our Engine fleet, in service that are equipped with Auxiliary Power Unit (APU) idle reduction systems. These systems burn up to 80% less fuel than running the main engine to power emergency lighting, communications devices, and vehicle systems at emergency events, which accounts for 55-75% of a typical Fire Engine's run time. In addition to fuel savings we also see a significant reduction in maintenance frequency which reduces the amount of hazardous wastes, such as oils and filters, being generated.
Triple Bottom Line – Economic	Mitigation of fire risk is fundamental for economic stability. Economic consequences can include the impact on humans and property, but also such factors as fire protection, insurance, rebuilding of the structure(s), temporary housing, ability to continue working and doing business, etc., In 2017, our save rate was 92.8%. The total value saved from fire was \$743,035,041. Results from our annual Comparative Cities Survey showed that our fire suppression cost per capita is better than the average of comparative municipalities. In addition, the latest Municipal Benchmarking Network of Canada (MBNCanada) results showed our fire service operating costs per assessed value of the property we protect was \$0.86 per \$1,000, significantly lower than the comparative municipalities' average of \$1.88, and that we are performing at the same level or better at outcome measures such as residential fire
Expected Key Benefits	Improved service delivery through reduced vehicle downtime and lower overall operating costs due to reduced maintenance and repairs. Improvements in technology and more efficient vehicles will also increase effectiveness of fire operations as well as reduce environmental footprint.

SouthShepard Emerg Resp Stn

				paru Li					
Executive Summary				mergency Responservice level ben				the distribution of P area.	of workload and
Document Date	2018/09/11								
Service	Fire & Emergeno	N Posponso	Soci	tor Affactad			eOH.	THEAST	
	480507	by Nesponse		Sector Affected Ward(s)			SOUTHEAST		
Activity #				. ,			12	, of Cofo O Imamin	i
Project Identifier (PID)				zen Priority				y of Safe & Inspir nborhoods	ing
Business Unit	CALGARY FIRE	ALGARY FIRE C		ital Investment	Plan Alignmen	t		munity Investmer structure	nts.Growth
Department	COMMUNITY S	ERVICES	City	Resilience Frai	mework Dimen	sion	Infras	structure and Eco	systems
Service Type	Essential		City	Resilience Frai	mework Driver		Ensu	res continuity of	critical services
Investment Category	Project -A Project investment that it delivered and evits own merit and defined scope; conschedule resulting substantially imp		ital Infrastructu	re Investment I	Principles	Support the delivery of City of Calgary services at approved service levels			
		Total		2019	2020	2021		2022	2023+
Recommended Fundin	g Allocation (\$)	2,000,00	0	0	2,000,000	0		0	0
Funding Status		For Approva	ıl						
Operating Impact Of Ca	apital	Yes							
Economic Impacts of 2 Recommended Fundin		Gross (Gross Domestic Produ (\$)		ict	Income (\$)	Employment (Person-Years)
		;	3,043	,124	1,703,144			1,313,311	23
MUGS		Ma		nance	Upgrade			Growth	New Services
		0%			(0%		100%	0%
pi ar cr in w br di		ay in Calgary and death through the death through through the death through through the death through through through the death through through the death through through through the death through throug	. Whe ugh e a sign ore re mpro er com clusio	en not actively re ducational, safet ificant decrease ecent years, expa wed the quality of nmunities. CFD son actions, health	sponding to emo y & injury preve in the number o insion of our pre f life of thousand seeks tonsure a n and wellness s	ergencies, fir ntion, and m f people who eventative ro ds of more C safe, enviror eupport syste	refight edical o die ir le to fo algaria nment ems, tr	n fires and as a recus on the wider ans while also co for its employees aining and its hu	he risk of injury nterventions have esult of other health and ntributing to the s through its man rights
wher will be considered to the		CFD is committed to sustainability through its operations and planning. The new permanent fire station when built will meet or exceed the Gold level of the LEED® New Construction rating system. Natural light will be emphasized, solar panels used where feasible and electric lights automated to minimize consumption. Xeriscaping will be completed with native species requiring minimal water, most of which comes from rain water capture systems. CFD minimizes its generated waste by taking part in the corporate recycling and organics waste collection programs in all facilities. Six fire stations designated as Household Hazardous Waste program sites collect household hazardous waste chemicals from citizens for proper disposal. Firefighters assist in the mitigation of environmental risks from contamination of air and possibly also to surface water, groundwater, sediment, and soil through hazardo							
Triple Bottom Line – Economic Mitigation of fi impact on hum structure(s), te rate was 92.89			ans a mpora 5. The smen	and property, but ary housing, abili a total value save t (MBNCanada,	also such factor ty to continue w ed from fire was	s as fire pro orking and d \$743,035,04	tectior loing b l1. Ou	onsequences can insurance, rebu dusiness, etc., In r operating costs 2016 median of o	uilding of the 2017, our save per \$1000
Expected Key Benefits	e		oss th					emergency respo level benchmark	nse facilities and s (4) Maintain

47 of 284

West Macleod Emerg Resp Stn

	The temporary West Macleod Emergency Response Station is a new facility required to support the distribution of workload and maintain fire response times and service level benchmarks in the community of Silverado and the West Macleod Area Structure Plan (ASP) area. To deliver the highest possible protection for Calgarians, Calgary Fire Department (CFD) strategically locates fire stations to provide optimal response times to emergency incidents.
Document Date	2018/09/11

Service	Fire & Emergency Response	Sector Affected	SOUTH
Activity #	411588	Ward(s)	14
Project Identifier (PID)	3000200	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY FIRE	Capital Investment Plan Alignment	Other.Other
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	2,000,000	0	0	1,000,000	1,000,000	0
Funding Status	For Approval					'
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•	Gross Don	nestic Product (\$)	Income (\$)	Employment (Person-Years)
	3,159,490		1,390,638		1,005,975	11
MUGS	Maintenance		Upgrade		Growth	New Services
	0%	6	0%		100%	0%

	
Triple Bottom Line – Social	The Calgary Fire Department contributes to the well being and safety of the people who live, work, and play in Calgary. When not actively responding to emergencies, firefighters help reduce the risk of injury and death through educational, safety & injury prevention, and medical programs. Our interventions have contributed to a significant decrease in the number of people who die in fires and as a result of other incidents. We conducted a social return on investment evaluation which showed that our fire safety programs create \$2.20 in savings to the public for every dollar invested. CFD seeks to ensure a safe, environment for its employees through its diversity and inclusion actions, health and wellness support systems, training and its human rights practices.
Triple Bottom Line – Environmental	CFD is committed to sustainability through its operations and planning. The new permanent fire station when built will meet or exceed the Gold level of the LEED® New Construction rating system. Natural light will be emphasized, solar panels used where feasible and electric lights automated to minimize consumption. Xeriscaping will be completed with native species requiring minimal water, most of which comes from rain water capture systems. CFD minimizes its generated waste by taking part in the corporate recycling and organics waste collection programs in all facilities. Six fire stations designated as Household Hazardous Waste program sites collect household hazardous waste chemicals from citizens for proper disposal. Firefighters assist in the mitigation of environmental risks from contamination of air and possibly also to surface water, groundwater, sediment, and soil
Triple Bottom Line – Economic	Economic consequences can include the impact on humans and property, but also such factors as fire protection, insurance, rebuilding of the structure(s), temporary housing, ability to continue working and doing business, etc., In 2017, our save rate was 92.8%. The total value saved from fire was \$743,035,041. Results from our annual Comparative Cities Survey showed that our fire suppression cost per capita is better than the average of comparative municipalities. In addition, the latest Municipal Benchmarking Network of Canada (MBNCanada) survey results showed our fire service operating costs per assessed value of the property we protect was \$0.86 per \$1,000, significantly lower than the comparative municipalities' average of \$1.88, and that we are performing at the same level or better at outcome measures such as residential fire injuries and fatalities.
Expected Key Benefits	(1) New permanent emergency response station (2) Good distribution of workload for emergency response facilities and equipment across the city (3) Maintain fire response times and service level benchmarks



Neighbourhood Support

Capital Conservation Grant

Executive Summary	The Capital Conservation Grant (CCG) Policy (CPS2013-0643) provides capital lifecycle funding and support to approximately 200 community associations and social recreation groups who sit on City-owned land with a lease or license of occupation (LOC) with The City. These organizations provide valuable community programming, operate and maintain a variety of infrastructure. CCG funding is used for lifecycle studies, lifecycle projects and upgrades to better meet citizens' needs. The portfolio is estimated to have a total replacement value of approximately \$950 million dollars. The nature of the lease/LOCs allows for any amenity to be returned to The City should an organization be unable to maintain it, creating a liability for The City. The CCG helps mitigate this risk by encouraging good asset management practice while enabling leaseholders to provide service to citizens.
Document Date	2018/09/11

Service	Neighbourhood Support	Sector Affected	Multiple Sectors
Activity #	411292	Ward(s)	All Wards
Project Identifier (PID)	3000171	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY RECREATION	Capital Investment Plan Alignment	Community Investments.Parks and Public Spaces
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Economy and Society
Service Type	Essential	City Resilience Framework Driver	Promotes Cohesive & Engaged Communities
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Promote the well-being of communities- environment and economy

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	19,367,250	2,766,750	5,533,500	5,533,500	5,533,500	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (estic Product (\$)	Income (\$)	Employment (Person-Years
	30,595	5,312	13,4	66,413	9,741,485	106
MUGS	Maintenance		Upgrade		Growth	New Services
	100%		0%		0%	0%

Triple Bottom Line – Social	Improved building conditions ensure Calgarians will have safe and healthy facilities to enjoy social and recreation opportunities. Lifecycle investments made to community-operated infrastructure in Calgary will increase the lifespan of facilities. Further, accessibility projects may also receive funding. This will result in more facilities available to support the development of healthy, active individuals and vibrant communities.
Triple Bottom Line – Environmental	Organizations have the opportunity to improve the environmental efficiencies of their systems, utilize renewable resources, and reduce their ecological footprint.
Triple Bottom Line – Economic	Organizations receiving the grant will leverage funds from other sources (e.g., provincial grants) which allows The City to spend less on community facilities that occupy City-owned land. Further, if buildings are eventually returned to The City, if they have been maintained, savings will be realized by The City, as less work will need to be done before assigning them to another organization. Improved building conditions can also potentially reduce operating costs and allow the organization to fully rent their facility and improve their revenue stream.
Expected Key Benefits	It is expected that the CCG will continue to enhance sustainability for organizations in the following areas: (1) Maintaining the community facility to extend the lifespan of the facility (2) Providing financial relief and technical support to organizations reduces pressure and stress on volunteer boards which reduces the likelihood of volunteer burnout leading to boards/organizations who may fold or dissolve. (3) Safe community facilities that have the ability to respond to resident needs in their provision of programs and services. The CCG will also enhance sustainability for The City in the following areas: (1) Creating a system that proactively plans for lifecycle maintenance for our community partners (2) Creates an accurate and detailed lifecycle forecasting system to allocate funding and quantify risk

Pet Ownership & Licensing

OneCity Coord RMS - PetL

	(OneC	Ity	Coord	RMS -	PetL	1		
Executive Summary	This program will create a common platform for multiple service lines across One City, to track known risks, and collect intelligence on emerging community trends. Current systems are disparate, limiting The City's overall view on public safety interactions in the community. The City is facing emerging challenges due to the economic downturn, and social disorder related to increased opioid use, highlighting the importance of collaboration and ensuring public safety bodies have reliable, complete and consistent information. This program is expected to promote coordinated and proactive enforcement of municipal bylaws and provincial statutes, for safe and inspiring neighborhoods. This reduced ask is a portion of the \$720K funding required for full implementation for this service line, and will be combined with other service lines to deliver program in a phased approach.								
Document Date	2018/09/11								
Service	Pet Ownership 8	Licensing	Secto	or Affected			Multip	ole Sectors	
Activity #	480402		Ward	l(s)			All Wa	ards	
Project Identifier (PID)	3000567		Citize	en Priority			A City Neigh	of Safe & Inspir	ing
Business Unit	CALGARY COM STANDARDS	MUNITY	Capit	tal Investment	Plan Alignmen	t	_	:Other	
Department	COMMUNITY SI	ERVICES	City	Resilience Fra	mework Dimen	sion	Infras	tructure and Eco	osystems
Service Type	Essential		City	Resilience Fra	mework Driver		Ensur	res continuity of	critical services
Investment Category	Program - A Progrouping of proje related and bene being planned artogether	Capit	Capital Infrastructure Investment Principles			Integrate coordinate and optimize The City's investment			
		Total		2019	2020	2021		2022	2023+
Recommended Fundin	g Allocation (\$)	200,000	0	0	200,000	0		0	0
Funding Status		For Approva	al						
Operating Impact Of Ca	apital	Yes							
Economic Impacts of 2 Recommended Fundin		Gross Output (\$)		Gross Domestic Product (\$)		ıct	Income (\$)	Employment (Person-Years)	
MUGS		Maintenance		Upgrade			Growth	New Services	
		0%		100%			0%	0%	
Triple Bottom Line – Social This program will create a common platform for multiple service lines across or risks, and collect intelligence on emerging community trends. Current systems The City's overall view on public safety interactions in the community. The City challenges due to the economic downturn and social disorder related to increat the importance of collaboration and ensuring public safety bodies have reliable information. This program is expected to promote coordinated and proactive elbylaws and provincial statutes, for safe and inspiring neighborhoods. Triple Bottom Line – Environmental This system will enable officers and administration to track public safety related locations in the city, including parks and open spaces. With the growing trend homelessness in our city, we are seeing increased impact on the environment and drug paraphernalia. There is also a negative environmental impact to our contents.					ystems are disparted in City is facing increased opioi reliable, completed enforcement y related activity trend in opioid onment through of to our city infras	arate, which limits emerging d use, highlighting te and consistent nt of municipal at specific usage and discarded needles tructure, whether			
the watercourse or city parks, due to illegal encampments where vegetation is being destroyed are large amounts of discarded materials including chemicals. Triple Bottom Line – Economic This is a strategic infrastructure investment that improves public and community safety, there improving economic security, and creating a city where citizens and business can feel safe to invest. The City's bylaws create community standards, that when effectively enforced, signal and the labor force that Calgary is a desirable place to invest and work. Expected Key Benefits Improved service and satisfaction for citizens and businesses Intelligence to identify emerging community issues and community risk assessments Proactive management of social disorde economic downturn, opioid use) Officers from multiple service lines can track and share inform interactions with citizens and businesses.				thereby afe to live and ignal to business merging sorder (e.g. due to					
	du sa in C	interactions with citizens, animals, businesses Coordinated interactions with citizens and businesses during investigations Officers have known relevant information before attending scenes for efficiency a safety Delivers on Solicitor General's mandate (from 2018 Lazenby Fatality Inquiry) to track known risi in community and communicate them in real time to peace officers, to mitigate threats to officer life sai Coordinated enforcement of municipal bylaws and provincial statutes, with decreased time on file Efficiencies for municipal tribunals				for efficiency and rack known risks o officer life safety			

PetL Equipment Lifecycle

Executive Summary	Pet ownership & licensing needs to lifecycle equipment including radios, mobile data terminals, communications equipment (e.g. GPS, modems) and other various assets. There is also a need to maintain and lifecycle equipment related to the animal shelter and veterinary clinic for animals seized or recovered by CCS. This equipment must meet the standards set by the Alberta Veterinary Medical Association. As equipment ages, maintenance costs can rise above any return on investment, without a comprehensive mitigation strategy. The equipment lifecycle program proactively manages assets through their lifecycle to maximize investments while ensuring their performance in supporting citizen facing services, and providing officer life safety. This equipment must be life cycled appropriately for CCS to respond effectively to calls for service.
Document Date	2018/09/11

Service	Pet Ownership & Licensing	Sector Affected	Multiple Sectors
Activity #	462200	Ward(s)	All Wards
Project Identifier (PID)	3000421	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY COMMUNITY STANDARDS	Capital Investment Plan Alignment	Other.Other
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Economy and Society
Service Type	Essential	City Resilience Framework Driver	Ensures Social Stability & Security and Justice
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	765,000	191,250	191,250	191,250	191,250	0
Funding Status	For Approval					
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years)
	1,089,035		676,207		468,553	6
MUGS	Maintenance		Upgrade		Growth	New Services
	100	%		0%	0%	0%

Triple Bottom Line – Social	This equipment supports operations, ensures organizational resilience to equipment failures and officer life safety. It supports equipment to care for animals seized or recovered by CCS. As such this program supports safe cities and strong communities.
Triple Bottom Line – Environmental	N/A
Triple Bottom Line - Economic	These investments improve public safety and resilience, thereby creating economic security, and creating a city where citizens and business can feel safe to live and invest.
Expected Key Benefits	Reliable equipment for citizen facing services. Improved officer life safety. Reliable radio communications. Reduced maintenance efforts and costs. Animal Sheltering & veterinarian equipment. Well-being of animals under CCS care Pet Licensing and front counter services



Police Service

COMMUNICATIONS LIFECYCLE

Executive Summary	CPS employs key telecommunications equipment provided by Cisco, Avaya and Motorola (among other vendors). There is a vital need to replace equipment as it fails or when it reaches an age at which it is no longer supported by the manufacturer or is nearing a failure point. Much of the CPS network and telecom infrastructure was installed during the relocation of HQ to Westwinds in 2011 and is approaching end of life status with the applicable manufacturers. This project will allow CPS to perform lifecycle replacements of critical infrastructure components involved in providing both voice and data communications capability to first line officers, investigators and civilian support staff as well as maintain links to external agencies necessary for CPS to conduct operations.
Document Date	2018/09/11

Service	Police Services	Sector Affected	Internal / The City of Calgary
Activity #	427603	Ward(s)	All Wards
Project Identifier (PID)	3000470	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY POLICE	Capital Investment Plan Alignment	Other.Other
Department	CALGARY POLICE SERVICE	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	6,400,000	1,600,000	1,600,000	1,600,000	1,600,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	9,207,	571	3,92	25,526	2,893,865	56
MUGS	Mainter	nance	Upg	grade	Growth	New Services
	100	%	(0%	0%	0%

Triple Bottom Line - Social	Ensures a safe environment for Calgarians through the provision of emergency services. The project herein is critical to maintaining the operational capabilities of those who provide policing services in the City.
Triple Bottom Line – Environmental	NA
Triple Bottom Line - Economic	NA
Expected Key Benefits	CPS networks will retain high availability to support CPS requirements for users to be able to access key data and communicate with both internal and external parties.

FACILITIES LIFECYCLE

Executive Summary	This project supports the replacement of building infrastructure that originally was capitalized as part of the building purchase/construction, but does not meet the threshold for capitalization on its own, yet requires retirement and replacement. Typically the value of these items could be between \$25K and \$750K, but may require replacement due to the cycle in which they were originally installed (i.e. air handling units). To date, these replacements have been done using Operating Budget dollars, which in the short term diverts funds from the preventative maintenance program, and in the long term undermines the maintenance program for other assets. This practice results in assets not reaching the expected end of their useful life. This causes a cycle of diverting maintenance dollars to address failing equipment which perpetuates equipment failing before it should.
Document Date	2018/09/11

Service	Police Services	Sector Affected	Multiple Sectors
Activity #	428304	Ward(s)	All Wards
Project Identifier (PID)	3000493	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY POLICE	Capital Investment Plan Alignment	Other.Other
Department	CALGARY POLICE SERVICE	City Resilience Framework Dimension	Economy and Society
Service Type	Essential	City Resilience Framework Driver	Ensures Social Stability & Security and Justice
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	5,000,000	1,250,000	1,250,000	1,250,000	1,250,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years)
	7,985,	712	3,75	54,732	2,674,131	31
MUGS	Mainter	nance	Up	grade	Growth	New Services
	100	%	(0%	0%	0%

Triple Bottom Line - Social	A safe city; an inclusive city.				
Triple Bottom Line – Environmental	Reducing energy use and climate change impacts.				
Triple Bottom Line - Economic	Strategically invest in Infrastructure; Accountability , transparency and good governance.				
	Executed preventative maintenance program within 2 calendar days 95%. Reduced reactive maintenance rates and almost zero rate of repeated repairs on same asset. Overall life-cycle cost is minimized. Assets reach their expected life.				

HELICOPTER REPLACEMENT

Executive Summary		The police helicopters, HAWC2 andHAWC1, are scheduled to be replaced in 2019, and 2021 respectively, after 15years of service to the City of Calgary.							
Document Date	2018/09/11								
Service	Police Services		Sector A	Affected			Interna	I / The City of C	algary
Activity #	427300		Ward(s)				All Wa	rds	
Project Identifier (PID)	3000438		Citizen l	Citizen Priority			A City of Safe & Inspiring Neighborhoods		
Business Unit	CALGARY POLICE		Capital Investment Plan Alignment			Other.Other			
Department	CALGARY POLICE SERVICE		City Resilience Framework Dimension			Infrastructure and Ecosystems			
Service Type	Essential		City Resilience Framework Driver			Ensures continuity of critical services			
Investment Category	Annual Investme A recurring progr on maintaining o current in-service for ongoing purch similar assets	am focused r upgrading e assets or	Capital I	Infrastructur	e Investment	Principles		rt the delivery of es at approved s	
		Total		2019	2020	2021		2022	2023+
Recommended Funding Allocation (\$) 11,000,0		00 5	5,500,000	0	5,500,0	00	0	0	
Funding Status For Approva		al							
Operating Impact Of C	apital	No							

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	11,000,000	5,500,000	0	5,500,000	0	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years)
	15,141	5,065,401 3,755,09		3,755,099	89	
MUGS	Maintenance		Up	grade	Growth	New Services
	0%	6	100%		0%	0%

Triple Bottom Line – Social	The City of Calgary seeks to ensure a safe environment for individuals and families through the provision of emergency services (Police, Fire and Emergency Medical Services). The HAWCS helicopter remains an invaluable tool for the Calgary Police to detect, reduce and prevent crime.
Triple Bottom Line – Environmental	The City seeks to protect and improve atmospheric air quality by putting into place policies that reduce dependency on the automobile. Several studies show helicopter patrols can do the work of 10 to 15 ground units and offer the same crime reduction effectiveness.
Triple Bottom Line – Economic	The City recognizes that Calgary's high quality of life is one of the major reasons businesses choose to locate and stay in Calgary. Crimes to businesses make up a large percentage of overall crime in Calgary. The helicopter is particularly well suited to detect, reduce and prevent crime in industrial areas.
Expected Key Benefits	Will enable the Calgary Police Service Air Support Unit to fulfill its mandate "To optimize public safety in the City of Calgary by providing swift response to incidents, the covert detection of threats, and airborne over watch to ground units; increasing the efficiency to detect, reduce and prevent crime" for the next 15-20 years.

IN CAR DIGITAL VIDEO

Executive Summary	The In Car Digital Video (ICDV) system is installed in 406 of CPS vehicles. The system captures and records interactions between Police officers and the public. The recordings are part of the disclosure process that CPS must produce for the Crown. As well, recordings may be required by CPS' Professional Services Section (PSS) and investigations. It consists of hardware and software that must be periodically upgraded. The current City contract has expired and we have used all possible extensions.
Document Date	2018/09/11

Service	Police Services	Sector Affected	Internal / The City of Calgary
Activity #	428000	Ward(s)	
Project Identifier (PID)	3000486	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY POLICE	Capital Investment Plan Alignment	Other.Other
Department	CALGARY POLICE SERVICE	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+	
Recommended Funding Allocation (\$)	4,000,000	4,000,000	0	0	0	0	
Funding Status	For Approval						
Operating Impact Of Capital	No						
Economic Impacts of 2019-2022 Recommended Funding	Gross (estic Product (\$)	Income (\$)	Employment (Person-Years	
	5,754	,732	2,45	53,454	1,808,665	35	
MUGS	Mainte	nance	Up	grade	Growth	New Services	
	09	%	10	00%	0%	0%	

Triple Bottom Line – Social	Keeps CPS operations accountable and transparent to maintain public confidence.
Triple Bottom Line – Environmental	N/A
Triple Bottom Line - Economic	Digitally recording officers' activities will reduce complaints and time and provide quicker responses to police activities.
Expected Key Benefits	CPS unable to use the system after July 2019 without this upgrade. Expected additional benefits include newer / improved hardware, better quality video, improved management software and hopefully clean integration with Body Worn Camera's (BWC) recently purchased. As well, the system will maintain efficient operations without productivity interruption to ensure key deliverables.

MOTOROLA UPGRADE 1

Executive Summary	The Motorola Calgary Mobile Radio Network provides critical public safety voice communications to various City agencies such as Calgary Police, Calgary Fire, Calgary Transit and Calgary Community Standards. In order to maintain lifecycle management of the system, the City is required to perform an upgrade of the core system servers and controllers. This will allow the system to be kept current in terms of security software and management services and allow the system to maintain operational integrity. The total capital cost for the project is \$5 Million. Each of Calgary Police, Calgary Transit and Calgary Fire will request a proportionate capital budget to aggregate the total project cost, this business case covers only the CPS portion.
Document Date	2018/09/11

Service	Police Services	Sector Affected	Internal / The City of Calgary
Activity #	427603	Ward(s)	All Wards
Project Identifier (PID)	3000471	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY POLICE	Capital Investment Plan Alignment	Other.Other
Department	CALGARY POLICE SERVICE	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	2,142,000	2,142,000	0	0	0	0
Funding Status	For Approval	or Approval				
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	2,928,	537	1,86	88,900	1,367,333	15
MUGS	Mainter	nance	Upç	grade	Growth	New Services
	0%)	10	00%	0%	0%

Triple Bottom Line - Social	Ensures a safe environment for Calgarians through the provision of emergency services. The project herein is critical to maintaining the operational capabilities of those who provide policing services in the City.
Triple Bottom Line – Environmental	NA
Triple Bottom Line - Economic	NA
Expected Key Benefits	Completion of the upgrade will allow CPS and The City to continue to operate and effectively manage the Motorola CMRN and provide critical public safety voice services to users, supported by Motorola maintenance agreement.

NEW DISTRICT OFFICE

Executive Summary	A recent review of CPS District Offices shows that District 4, located in the NE part of Calgary in Marlborough, is in the most pressing need of attention. The property has significant parking issues, with no space for additional desks, lockers, or storage. The property itself has some inherent security risks, being at the end of a cul de sac and a precipice directly behind on the west side. A review over a year ago suggested that the building has no capacity to take an additional story, but would require a parking garage as well if additional space was added. Given the age and condition of the building, it is recommended that the facility is at the end of its useful life. The recommendation is to build a purpose-built building somewhere in District 4.
Document Date	2018/09/11

Service	Police Services	Sector Affected	NORTHEAST
Activity #	428304	Ward(s)	All Wards
Project Identifier (PID)	3000488	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY POLICE	Capital Investment Plan Alignment	Community Investments.Growth Infrastructure
Department	CALGARY POLICE SERVICE	City Resilience Framework Dimension	Economy and Society
Service Type	Essential	City Resilience Framework Driver	Ensures Social Stability & Security and Justice
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	32,500,000	0	0	32,500,000	0	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•	Gross Dor	nestic Product (\$)	Income (\$)	Employment (Person-Years
	51,341	,705	22,	597,861	16,347,094	179
MUGS	Mainte	nance	Up	ograde	Growth	New Services
	0%	6		50%	50%	0%

Triple Bottom Line – Social	Accountability, transparency and good governance; A safe city.
Triple Bottom Line – Environmental	Reducing Energy use and Climate Change Impacts.
Triple Bottom Line - Economic	Strategically invest in Infrastructure.
Expected Key Benefits	(a) On time, on budget, meeting or exceeding specifications, (b) Meets or exceeds sustainability, accessibility and Inclusion objectives, (c) Staff satisfaction achieved and confirmed through feedback mechanism, (d) Citizen satisfaction achieved and confirmed through feedback mechanism (TBD), (e) Operating costs on per sq. ft. basis at or lower than D4, (f) Improved security profile.

POLICE EQUIPMENT REPL

Executive Summary	The replacement of various types of Police equipment due to asset life cycling requirements. The provision of equipment to sworn members to enable them to carry out their duties in a safe effective/efficient manner.				
Document Date	2018/09/11				
Service	Police Services	Sector Affected	Internal / The City of Calgary		
Activity #	427300	Ward(s)	All Wards		
Project Identifier (PID)	3000465	Citizen Priority	A City of Safe & Inspiring Neighborhoods		
Business Unit	CALGARY POLICE	Capital Investment Plan Alignment	Other.Other		
Department	CALGARY POLICE SERVICE	City Resilience Framework Dimension	Infrastructure and Ecosystems		
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services		
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels		

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	2,600,000	650,000	650,000	650,000	650,000	0
Funding Status	For Approval				·	
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	3,740	,576	1,59	94,745	1,175,632	23
MUGS	Mainter	nance	Up	grade	Growth	New Services
	100	%		0%	0%	0%

Triple Bottom Line – Social	The City of Calgary seeks to ensure a safe environment for individuals and families through the provision of emergency services (Police, Fire and Animal & Bylaw Services).
Triple Bottom Line – Environmental	NA NA
Triple Bottom Line - Economic	NA NA
Expected Key Benefits	The ability to provide the best possible service to the citizens of Calgary.

Red Light Enforcement Project

Executive Summary	Intersection enforcement cameras (AKA: red-light cameras, RLC) provide the ability to effectively monitor intersections on an ongoing basis, while avoiding potentially dangerous situations involving motorists and officers, making RLCs more effective than human resources.
Document Date	2018/09/11

Service	Police Services	Sector Affected	Internal / The City of Calgary
Activity #	427400	Ward(s)	All Wards
Project Identifier (PID)	3000468	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY POLICE	Capital Investment Plan Alignment	Other.Other
Department	CALGARY POLICE SERVICE	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

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	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	6,560,000	1,640,000	1,640,000	1,640,000	1,640,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (. •		estic Product (\$)	Income (\$)	Employment (Person-Years)
	9,437	9,437,761 4,023,664		23,664	2,966,211	57
MUGS	Mainte	nance	Upç	grade	Growth	New Services
	100)%	()%	0%	0%

Triple Bottom Line - Social	The City of Calgary seeks to ensure a safe environment for individuals and families through the provision of emergency services (Police, Fire and Animal & Bylaw Services).
Triple Bottom Line – Environmental	N/A
Triple Bottom Line – Economic	N/A
Expected Key Benefits	At the first 50 red light camera locations in Calgary (Phases 1-8) during the one-year pre implementation and one-year post implementation period, we see the following: Total collisions at the first eight phases decreased by 6.8% Injury collisions have decreased by 4.0% Fatal collisions have decreased by 100% Right angle collisions have decreased by 18.2% Right angle injury collisions have decreased by 26.5% Right angle fatal collisions have decreased by 100% Rear end collisions have increased by 0.3%

STORAGE _ SERVER LIFECYCLE

Executive Summary	This project is to support the regular life-cycle of CPS's core compute and storage infrastructure. Proper lifecycle management is crucial in ensuring that the reliability and efficiency of our infrastructure continues to meet the ever-increasing needs of the CPS. Lifecycle management is a best practice that should be maintained. As hardware ages, warranties will expire and support for each device will increase. Aging equipment increases the likelihood of unplanned outages and failures, and increases our risk of data loss and other catastrophic failures.
Document Date	2018/09/11

Service	Police Services	Sector Affected	Internal / The City of Calgary
Activity #	429406	Ward(s)	
Project Identifier (PID)	3000490	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY POLICE	Capital Investment Plan Alignment	Other.Other
Department	CALGARY POLICE SERVICE	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
	IOlai	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	2,368,000	834,000	189,000	918,000	427,000	0
Funding Status	For Approval	For Approval				
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	3,237,	524	2,066,085		1,511,599	16
MUGS	Mainter	nance	Up	grade	Growth	New Services
	100	%		0%	0%	0%

Triple Bottom Line - Social	Maintain public trust – failure of key CPS IT systems impacts service delivery to citizens and decreases trust in the CPS
Triple Bottom Line – Environmental	Newer equipment is more efficient resulting in less power and cooling required in the datacenter
Triple Bottom Line - Economic	Modern equipment requires less maintenance and takes advantage of newer technology which provides greater capacity and cheaper maintenance costs for less price.
Expected Key Benefits	Newer equipment will provide better reliability that meets the latest standards while increasing the core capacity of our compute and storage infrastructure. It also allows us to maintain pace with the lifecycles maintained by key IT vendors such as Microsoft and VMWare.

USER REQUEST LIFECYCLE

Executive Summary	Life cycling of equipment is an essential part of maintaining the usability of our computer environment. As the City continues to develop and grow, the demand on the technology also increases. Year over year, we out-grow the oldest generation of computers and technology. With the funding required, we can replace aging equipment to maintain functionality. There are also several projects and infrastructure upgrades that will require the support of the latest Windows 10operating system and Office 365.
Document Date	2018/09/11

Service	Police Services	Sector Affected	Multiple Sectors
Activity #	429406	Ward(s)	
Project Identifier (PID)	3000566	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY POLICE	Capital Investment Plan Alignment	Other.Other
Department	CALGARY POLICE SERVICE	City Resilience Framework Dimension	Economy and Society
Service Type	Essential	City Resilience Framework Driver	Ensures Social Stability & Security and Justice
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	5,090,000	1,340,000	1,250,000	1,250,000	1,250,000	0
Funding Status	For Approval	or Approval				<u>'</u>
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	7,322	2,897	3,12	22,020	2,301,527	44
MUGS	Mainte	nance	Upg	grade	Growth	New Services
	50	%	5	0%	0%	0%

Triple Bottom Line - Social	Officers with the proper tools can better create a safer Calgary
Triple Bottom Line – Environmental	Newer equipment consumes less power.
Triple Bottom Line – Economic	Old equipment is either recycled or sent to investment recovery.
Expected Key Benefits	Out of warranty devices will be removed from circulation and will be replaced with devices that are new. New devices will require less support and will come with a full warranty.

VEHICLES REPLACEMENT

Executive Summary	CPS vehicles will go for replacement at either 6 years or 150,000 kms for patrol marked and unmarked units and 7 years or 150,000 kms for covert or Investigative units. Vehicles need to have the equipment / police equipment removed prior to going to auction. New vehicles are then having all equipment / police equipment installed. CPS Fleet services is also reducing the impact to the environment and a reduction in fuel consumption through reduced engine sizes and alternate fuel technologies.
Document Date	2018/09/11

Service	Police Services	Sector Affected	Internal / The City of Calgary
Activity #	428000	Ward(s)	
Project Identifier (PID)	3000476	Citizen Priority	A City of Safe & Inspiring Neighborhoods
Business Unit	CALGARY POLICE	Capital Investment Plan Alignment	Other.Other
Department	CALGARY POLICE SERVICE	City Resilience Framework Dimension	Economy and Society
Service Type	Essential	City Resilience Framework Driver	Ensures Social Stability & Security and Justice
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	32,000,000	8,000,000	8,000,000	8,000,000	8,000,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	42,554	1,364	22,3	13,686	14,172,684	178
MUGS	Mainte	nance	Upg	grade	Growth	New Services
	100	1%	()%	0%	0%

Triple Bottom Line - Social	The City of Calgary seeks to ensure a safe environment for individuals and families through the provision of emergency services (Police, Fire and Animal & Bylaw Services).
Triple Bottom Line – Environmental	The City of Calgary is committed to reductions in greenhouse gases within its own operations.
Triple Bottom Line - Economic	The City of Calgary ensures its long-term economic development and fiscal health by managing its assets wisely and strategically investing in infrastructure to optimize functioning and service.
Expected Key Benefits	Enable the Calgary Police Service (CPS) to provide service to the public and respond quickly and safely to situations requiring a Police presence. Reduce vehicle downtimes so the officers' will have vehicles to operate.



Public Tra

Provides reliable communication &

Enhance the long-term value of City

mobility

Bldngs Lifecycle Asset Mgmt

Executive Summary Document Date	Calgary Transit buildings include LRT stations, substations, shelters, administration offices, auxiliary buildings and maintenance garages which contribute to the provision of public transit service for Calgarians. Like every asset, aging and deterioration occurs in buildings and this drives the need for optimal asset management. Lifecycle planning, condition assessments and rehabilitation is used to ensure building safety, reliability and desired functional usage. Proper maintenance of Calgary Transit building assets are part of the business unit's continued safety and reliability commitment to both internal and external users of LRT stations, shelters, offices and bus/Light Rail Vehicle maintenance garages. 2018/09/11				
Service	Public Transit	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST		
Activity #	481302	Ward(s) All Wards			
Project Identifier (PID)	3000323	Citizen Priority A City That Moves			
Business Unit	CALGARY TRANSIT	Capital Investment Plan Alignment Targeted Theme Investments.Train and Transportation			
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems		

City Resilience Framework Driver

Capital Infrastructure Investment Principles

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	13,928,100	1,897,200	5,070,250	2,091,000	4,869,650	0
Funding Status	For Approval					
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross ((\$			estic Product (\$)	Income (\$)	Employment (Person-Years)
	22,002	2,843	9,68	34,470	7,005,660	77
MUGS	Mainte	nance	Up	grade	Growth	New Services
	100	%	()%	0%	0%

Triple Bottom Line – Social	This program allows for maintaining the existing infrastructure and making design related improvements to Calgary Transit infrastructure including maintaining escalators and elevators. This helps with improvious customer experience, allowing for safe and reliable functioning of infrastructure.			
Triple Bottom Line – Environmental	n/a			
Triple Bottom Line - Economic	Continuous investments into maintenance of building assets helps with maintaining the efficiency of operations.			
Expected Key Benefits	• This program supports safe and reliable service at all the transit stations and buildings. • This program allows lifecycle replacement and maintenance of various electrical, mechanical, and architectural systems in CT buildings. • This program supports safe and reliable working conditions for City employees at transit stations and buildings			

C2018-1158 Attachment 10 ISC: UNRESTRICTED

Service Type

Investment Category

Essential

similar assets

Annual Investment Program-

A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of

Bus & Shuttle Procurement

Executive Summary	The Calgary Transit bus fleet consists of approximately 750 40 foot buses, 100 60 foot buses, 150 community shuttle buses and 85 CT access Group shuttles. The lifecycle replacement of these vehicles is needed to allow CT to provide reliable and operationally effective service. Replacement of these vehicles is based on a fleet plan which calculates the replacement as follows; community shuttle bus at 5-6 years, 40 foot Bus at 16 years, 60 foot articulated bus at 20 years, and Handibus replacement at 8 years. In addition to the life cycle replacement of a portion of the fleet, bus purchase is required to accommodate service growth in accordance with the CT service design plan that helps provide service to existing, developing and new communities. In addition to the core fleet, this program also includes an estimate for an extended trial of electric buses – 15 buses in total and the associ
Document Date	2018/09/11

Service	Public Transit	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST
Activity #	481304	Ward(s)	All Wards
Project Identifier (PID)	3000324	Citizen Priority	A City That Moves
Business Unit	CALGARY TRANSIT	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	90,278,940	23,069,885	23,069,885	23,069,370	21,069,800	0
Funding Status	For Approval					'
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	120,05	5,089	62,9	51,747	39,984,216	503
MUGS	Mainter	nance	Upg	grade	Growth	New Services
	509	%	(0%	50%	0%

Triple Bottom Line – Social	The provision of more frequent, higher quality service will encourage more Calgarians to adopt transit as a preferred means of regular transportation. The shift to newer buses will provide a higher quality service with improved passenger information, passenger security and passenger accessibility.
Triple Bottom Line – Environmental	The majority of buses procured in this program will be compressed natural gas fuelled, and will help significantly with reducing the overall greenhouse gas (GHG) footprint of the City of Calgary. The other major procurement in this program is for a trial involving electric buses, which will similarly contribute to reducing the City's GHG footprint.
Triple Bottom Line – Economic	It is expected that the support costs associated with maintaining the new vehicles will be lower than the current fleet. It is additionally expected that a transition to compressed natural gas will see major cost savings in fuel procurement.
Expected Key Benefits	The lifecycle replacement of the bus fleet has benefits on three fronts – financial (because of improved reliability and lower fuel costs, passenger satisfaction (because of greater passenger amenties and cleaner service) and Operationally (because of improved operational reliability CT reputation will improve)

Fare Collection Equipment & System

Executive Summary	Modern transit systems require up to date and technologically advanced payment systems. It is very important that the fare payment systems at Calgary Transit are updated and reviewed and updated from time to time to stay on top of changing technologies and to attract new riders. In ensuring this, it is also imperative that we take care of the legacy fare collection systems which are being used by some sections of customers as well. The systems and hardware included in this program are: Ticket Vending Machines (TVM), Onboard Fare Collection Systems (Fare boxes), Mobile Payment system, and Cash Processing Centre at Victoria Park Garage. The Ticket Vending Machine (TVM) system is a critical component of the fare collection system of Calgary Transit (CT).
Document Date	2018/09/11

Service	Public Transit	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST
Activity #	431825	Ward(s)	All Wards
Project Identifier (PID)	3000341	Citizen Priority	A City That Moves
Business Unit	CALGARY TRANSIT	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Build an adaptable resilient and smart city

9						
	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,260,000	405,000	225,000	225,000	405,000	0
Funding Status	For Approval					'
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (estic Product (\$)	Income (\$)	Employment (Person-Years)
	1,812	,741	772	2,838	569,730	11
MUGS	Mainte	nance	Up	grade	Growth	New Services
	50%		50%		0%	0%

Triple Bottom Line – Social	These investments result in improved customer experience and reliability of the fare systems. Enhancements and improvements to these systems improve service attractiveness as it makes it easier for customers to purchase fares.
Triple Bottom Line – Environmental	N/A
Triple Bottom Line – Economic	Fare collection systems assist in collection of revenues from customers is instrumental in running an efficient public transit service.
Expected Key Benefits	Improved customer experience Uniterrupted fare systems availability for revenue collection Improved data analysis

Fleet Equip & Tools Proc

Executive Summary	As part of managing the overall Calgary Transit Fleet, some pieces of support equipment and vehicles are required to run the operation. Typical equipment provided by Transit Fleet includes SUVs/Vans for operations supervisors, rail replacement equipment for track and way, pick-up trucks for fleet, cars for Calgary Transit Transit Access training, Shop Jacks, Operational maintenance software etc.					
	This equipment requires periodic life cycle replacement and occasionally expansion (for new roles etc.)					
This budget request has following projects: • Lifecycle replacement of support vehicles – based on historical expenditure for support vehicles with a year • Shop Jack replacements – this is major equipment required to maintain the bus fleet and requires perior replacement						
Document Date	2018/09/11					
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Service	Public Transit	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST
Activity #	481303	Ward(s)	All Wards
Project Identifier (PID)	3000342	Citizen Priority	A City That Moves
Business Unit	CALGARY TRANSIT	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,270,800	317,700	317,700	317,700	317,700	0
Funding Status	For Approval			'		<u>'</u>
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	1,689,	940	886,132		562,833	7
MUGS	Mainter	nance	Up	grade	Growth	New Services
	100	%	(0%	0%	0%

Triple Bottom Line - Social	A more reliable service is one of the key measures of Calgary Transit service delivery.
Triple Bottom Line – Environmental	Ensuring availability of vehicles on the road to provide public transit service helps with service attractiveness, which in turn helps with people choosing public transit as an option to travel.
Triple Bottom Line – Economic	Without these vehicles, all breakdown vehicles would need to be towed back to one of our shape which would be a major expense. Additionally, Track work would need to be contracted out in its entirety (assuming a contractor could be found) or we would run the risk of a lack of rail maintenance introducing a risk of derailment. Supporting equipment is needed to maintain the fleet – without this equipment, we would have to find an organisation in Calgary big enough and qualified to repair the bus fleet.
Expected Key Benefits	Continued operational support and maintenance of the Transit Fleet, Right of Way and Infrastructure

LRT Lifecycle & Asset Mgmt

Executive Summary	This program consists of lifecycle asset management projects for the Engineering Support and Track & Way section Calgary Transit's Infrastructure division. Capital planning for assets within these sections is based on condition assessments and asset management planning to support the collection and use of asset data. Engineering Support responsible for structure rehabilitation, the LRT Right-of-Way, drainage improvements and pedestrian crossings. T & Way maintains the integrity of track, track structure and other aspects of the Right-of-Way. LRT lifecycle management is required to ensure that the specified infrastructure is properly maintained and the requested fund is required to address the various asset lifecycle challenges and maintenance tasks associated with the LRT system.	
Document Date	2018/09/11	

Service	Public Transit	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST
Activity #	481301	Ward(s)	All Wards
Project Identifier (PID)	3000356	Citizen Priority	A City That Moves
Business Unit	CALGARY TRANSIT	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	19,244,500	4,811,125	4,811,125	4,811,125	4,811,125	0
Funding Status	For Approval					
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	Output		estic Product (\$)	Income (\$)	Employment (Person-Years)
	31,720	,258	14,4	73,896	9,319,940	100
MUGS	Maintenance		Upgrade		Growth	New Services
	80%	6	2	0%	0%	0%

Triple Bottom Line – Social	This program ensures reliability of Ctrain service provided to the Calgarians.
Triple Bottom Line – Environmental	This program ensures that Ctrain system is reliable and effective. Ctrains replaces considerable amount of cars from the road, helping with corporation's environmental goals.
Triple Bottom Line – Economic	This program helps with reducing the breakdowns resulting in service disruption. Planned maintenance work ensures that the system remains efficient and resilient for continuity of effective and efficient service delivery.
Expected Key Benefits	This program provides required repairs and replacements to support safe, reliable and operational CTrain service.

LRV Purchases

Executive Summary	The Calgary Transit LRV Fleet currently operates a Light Rail service with over 200 vehicles. 42 of these Light Rail Vehicles (LRVs) are considerably older than planned life. These U2 vehicles are currently up to 37 years old but have an operational lifecycle of 30 years. The operation beyond the lifecycle of the vehicle negatively affects operational reliability, costs and customer experience.			
Document Date	2018/09/11			
Service	Public Transit	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST	
Activity #	431603	Ward(s)	All Wards	
Project Identifier (PID)	3000352	Citizen Priority	A City That Moves	
Business Unit	CALGARY TRANSIT	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation	
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems	
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility	
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels	

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	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	75,531,760	37,765,880	37,765,880	0	0	0
Funding Status	For Approval					·
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (\$	•		estic Product (\$)	Income (\$)	Employment (Person-Years
	95,501,853		45,850,380		49,634,932	1,021
MUGS	Mainte	nance	Upg	grade	Growth	New Services
	100	%	О)%	0%	0%

Triple Bottom Line – Social	The provision of more frequent, higher quality service (particularly four-car LRT service) will encourage more Calgarians to adopt LRT as a preferred means of regular transportation. The shift to newer LRVs will provide a higher quality service with improved passenger information, passenger security and passenger accessibility.
Triple Bottom Line – Environmental	A shift in transportation mode to transit will reduce the volume of automobile traffic attempting to enter the downtown during peak periods, reducing the amount of greenhouse gas emissions, and improving the overall environmental footprint of the City.
Triple Bottom Line – Economic	It is expected that the support costs associated with maintaining the new vehicles will be lower than those of the U2s. Additionally, the start of 4-car service will mean that an additional 33% more passengers can be carried on each train with only a marginal increase in operating costs.
Expected Key Benefits	Benefits for the lifecycle replacement of the U2 fleet include improved passenger experience (Air conditioning, passenger information, security camera monitoring, better accessability etc.) and improved operational performance (improved reliability, on-time performance and reduced operating costs)

LRV Refurbishment

Executive Summary	The current Light Rail Vehicle (LRV) fleet consists of 200 vehicles, of which, 72 vehicles are approximately 12-15 years old. The expected life of a LRV is planned at 30 years and so a large portion of the fleet is at mid-life. A mid-life refurbishment of these LRVs is required in order to enable the fleet to :• Continue reliable operation for the remainder of its life• Undertake preventive maintenance on major systems that can not normally be maintained as part of the planned maintenance program• Receive functional upgrades for security and passenger experience• Run with newer vehicles currently operating and thus improving operational availability. This work is already underway on the first 32 (of 72 vehicles) – funding is required to complete the work on the remaining 40.
Document Date	2018/09/11

Service	Public Transit	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST
Activity #	431435	Ward(s)	All Wards
Project Identifier (PID)	3000353	Citizen Priority	A City That Moves
Business Unit	CALGARY TRANSIT	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	27,200,000	6,800,000	6,800,000	6,800,000	6,800,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	36,171,209		18,966,633		12,046,782	152
MUGS	Mainter	nance	Up	grade	Growth	New Services
	100	%	(0%	0%	0%

Triple Bottom Line - Social	The provision of more frequent, higher quality service (mainly through improved functionality and security) will encourage more Calgarians to adopt LRT as a preferred means of regular transportation.
Triple Bottom Line – Environmental	Without this major refurbishment, it is difficult to envision that these vehicles will be able to operate for the planned 30 year life. Without this activity it is expected that the vehicle life will likely not exceed 20 years and a major capital expense will be required to replace fleet at that time.
Triple Bottom Line - Economic	A shift in transportation mode to transit will reduce the volume of automobile traffic attempting to enter the downtown during peak periods, reducing the amount of greenhouse gas emissions, and improving the overall environmental footprint of the City.
Expected Key Benefits	Benefits for the refurbishment include, improved vehicle interiors, addition of passenger information systems, addition of on-board video monitoring for improved safety and security and the ability to make the refurbished vehicles compatible with newer vehicles in the fleet, thereby improving operational flexibility and reliability.

Primary Transit Network Optimization

Executive Summary	Funds for bus zone upgrades and amenities allows Calgary Transit to address issues related to accessibility, operational, safety and customer service issues that arise within the current roadway and transit service network. Funds for these facilities are generally used to retrofit existing areas since new facilities are generally designed with these amenities included. This fund is also used for life cycle maintenance on existing bus stop aprons and extending bus stops to provide passenger waiting areas to allow the use of articulated buses on a route to increase service capacity. With the move to increased integration of Calgary Transit Access and Calgary Transit it is important that all aspects of the ride be universally accessible. This program allows CT to be proactive in becoming universally accessible and follow the City of Calgary Access Design Standards.
Document Date	2018/09/11

Service	Public Transit	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST
Activity #	430001	Ward(s)	All Wards
Project Identifier (PID)	3000407	Citizen Priority	A City That Moves
Business Unit	CALGARY TRANSIT	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Integrate coordinate and optimize The City's investment

*						
	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,350,000	337,500	337,500	337,500	337,500	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (estic Product (\$)	Income (\$)	Employment (Person-Years
	2,225	,173	1,01	5,343	653,793	7
MUGS	Mainte	nance	Up	grade	Growth	New Services
	0%	6	10	00%	0%	0%

Triple Bottom Line - Social	Bus zone amenity improvements will improve access and mobility choice for Calgarians to access the system.	
Triple Bottom Line – Environmental	Bus zone amenity improvements enables environmental benefits by providing mobility choice to people who commute by transit, therefore reducing greenhouse gas emissions and energy consumption.	
Triple Bottom Line - Economic	N/A	
Expected Key Benefits	Meet the needs of customers though enhanced facilities and signage. Improved attractiveness of transit service. Improved waiting environment, improved accessibility for customers at stops.	

Rail System Life & Asset Mgmt

Executive Summary Document Date	Asset management are key elements in swaps, Distributed F life stages for some	This program covers yearly lifecycle asset management and corrective maintenance for Rail Systems infrastructure. Asset management planning best practices such as life expectancy analysis and condition assessment of these assets are key elements in capital budgeting for Rail System components. The program includes slices, tension length swaps, Distributed Power Unit replacements and breaker replacements. The upcoming business cycle presents end of life stages for some Rail Systems assets. In addition, lifecycle management for security systems including CCTVs, servers and UPS assets are included in this program. 2018/09/11			
Service	Public Transit	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHWEST		

Service	Public Transit	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST
Activity #	481300	Ward(s)	All Wards
Project Identifier (PID)	3000379	Citizen Priority	A City That Moves
Business Unit	CALGARY TRANSIT	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	19,496,450	5,534,350	5,228,350	4,510,100	4,223,650	0
Funding Status	For Approval					
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross (. •		estic Product (\$)	Income (\$)	Employment (Person-Years)
	32,135	5,541	14,6	63,389	9,441,957	101
MUGS	Mainte	nance	Upg	grade	Growth	New Services
	100)%	(0%	0%	0%

Triple Bottom Line – Social	This program ensures availability and safety of Ctrain service provided to the Calgarians.	
Triple Bottom Line – Environmental	This program helps with reducing the breakdowns resulting in service disruption. This also ensures that system remains efficient and resilient for continuity of effective and efficient service delivery.	
Triple Bottom Line – Economic This program ensures that Ctrain system is reliable and effective. Trains replaces considerable are cars from the road, helping with corporation's environmental goals.		
Expected Key Benefits	This program enables proper maintenance and regular lifecycle management of aging and outdated Rail System components. It keeps abreast of modern technology, improves transit service for customers and enhances operations efficiency.	

Transit Customer Service Tech Lifecycle

Executive Summary	Customer service technologies at Calgary Transit (CT) are the backbone of providing relevant and helpful information to CT customers who use CT services. These technologies work together to provide the uninterrupted flow of information and require regular maintenance. Data from these technologies also help CT internally to make choices and business decisions to make service better for Calgarians. The systems and hardware included in this program are: CAD/AVL System, APIS System, Giro Hastus, Onboard Cameras, customer information systems, Reserved Parking Application, APC (Automatic Passenger Counter) System, VAMIS (Vendor Management System), Radio systems, Senior Bus Pass Program, SAMS (Subsidy Assistance Management System) and M5 Yardworks System. Calgary Transit is part of the Calgary Municipal Radio Network (CMRN) and contributes to capital projects involving radio systems.
Document Date	2018/09/11

Service	Public Transit	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST
Activity #	430007	Ward(s)	All Wards
Project Identifier (PID)	3000332	Citizen Priority	A City That Moves
Business Unit	CALGARY TRANSIT	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Integrate coordinate and optimize The City's investment

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	5,985,000	1,800,000	1,800,000	1,192,500	1,192,500	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	8,520	,098	5,29	90,325	3,665,735	45
MUGS	Mainte	nance	Upg	grade	Growth	New Services
	509	%	5	0%	0%	0%

Triple Bottom Line - Social	These investments result in improved customer experience and increased reliability of the service.
Triple Bottom Line – Environmental	N/A
Triple Bottom Line - Economic	These investments help with improved efficiency and effectiveness of service.
Expected Key Benefits	Improved customer experience via improved bus to bus and bus to Ctrain connections• Uninterrupted real time information provided to customers• Improved schedule adherence • Improved efficiency via data analysis• Improved and upgraded customer information systems• Ensure safety for customers and employees• Optimized vendor management process



Sidewalks & Pathways

Comm Mobility Imp-Sidewalks

It is program is dedicated to the strategic investment in planned community mobility and active transportation infrastructure, equipment, materials and testing. Key objectives are to support transportation choices for per and cycle, create all ages and abilities infrastructure that will promote safer and more livable streets and neighborhoods for people to travel to school, shopping, recreation or to work. Capital investments includes planning, engagement, design, construction, monitoring and adjustments for work associated with the program is dedicated to the strategic investment in planned community mobility and active transportation infrastructure.			
Document Date	2018/09/11		
Service	Sidewalks & Pathways	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST
Activity #	481400	Ward(s)	All Wards
Project Identifier (PID)	3000417	Citizen Priority	A City That Moves
Business Unit	TRANSPORTATION INFRASTRUCTURE	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Program - A Program is a grouping of projects that are related and benefit from	Capital Infrastructure Investment Principles	Build an adaptable resilient and smart city

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	22,375,000	3,750,000	6,200,000	6,200,000	6,225,000	0
Funding Status	For Approval					'
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	41,641	,129	16,9	64,149	10,756,263	127
MUGS	Mainte	nance	Upg	grade	Growth	New Services
	0%	6	7	5%	0%	25%

being planned and managed together

Triple Bottom Line – Social	By implementing the program, improvements to the safety and walkability of communities will provide opportunities for Calgarians to walk more regardless of age, gender, income or ability. Walking fosters social interactions; it increases personal awareness of and attachment to one's community. This increased attachment builds social capital which generates interest and involvement in local government and builds community trust. Walking not only improves the health of individuals, but it's also an affordable and inclusive way to travel.
Triple Bottom Line – Environmental	Walking is quiet, doesn't pollute and can decrease car travel which in turn decreases greenhouse gas emissions associated with vehicle use, which improves water and air quality. Having more citizens walk is a key long-term strategy for reducing Calgary's per capita ecological footprint.
Triple Bottom Line – Economic	Research indicates that walkable communities have increased residential property values, increased retail sales and can support related industries such as tourism. Providing safe walking options for citizens helps attract and retain young college graduates which in turn generates diversity and could nurture entrepreneurial business. A well designed and attractive pedestrian realm adds value to public space and to the social fabric and keeps Calgary a competitive and international city built around strong neighborhoods.
Expected Key Benefits	City-wide investments, more people walking and cycling, fewer collisions, increased citizen satisfaction with service

Concrete Rehabilitation

Executive Summary	The City maintains an extensive network of sidewalks, curbs and gutters. A significant funding gap exists for the replacement of these aging concrete assets and ensuring an accessible, pedestrian friendly environment. The sidewalk network, including curbs and cutters, is presently valued at over \$5 billion and asset condition is projected to decline over the next four years. Improving pedestrian accessibility is a key outcome of this program and the funds required for this program will go towards lifecycle replacement and safety issues related to concrete sidewalks, curbs and gutters, adding wheelchair ramps, enhancing asset management systems, upgrading sidewalks to support increasing pedestrian activity, tactile treatments, and accessible infrastructure that supports universal access on the transportation network and transit locations.
Document Date	2018/09/11

Service	Sidewalks & Pathways	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST
Activity #	481354	Ward(s)	All Wards
Project Identifier (PID)	3000327	Citizen Priority	A City That Moves
Business Unit	ROADS	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	16,000,000	4,000,000	4,000,000	4,000,000	4,000,000	0
Funding Status	For Approval					
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	Output		estic Product (\$)	Income (\$)	Employment (Person-Years)
	29,776	,897	12,130,788 7,691,629		91	
MUGS	Mainter	nance	Up	grade	Growth	New Services
	100	%	(0%	0%	0%

Triple Bottom Line - Social	Supports an inclusive city where Calgarians have the opportunity to take an active part in the social, economic and cultural life of the community. Design compliant with The City's Access Design Standards.
Triple Bottom Line – Environmental	Reducing energy use and climate change impacts by piloting alternative products Initiative encourages alternate modes of transportation such as transit, carpooling, walking, or cycling.
Triple Bottom Line – Economic	Ensures long-term economic development and fiscal health by managing assets wisely and strategically investing in infrastructure to optimize functioning and service. Infrastructure designed and managed to optimize use.
Expected Key Benefits	Sidewalks that are kept in good condition encourage active modes of travel, reducing dependence on automobiles and decreases associated carbon emissions. Ensuring these assets are in good condition promotes safety for pedestrians and cyclists increases public safety. Timely investments in lifecycle and asset management also will minimize financial risks to The City through a decreased number of claims.

Main St Stscape Swalk

The Main Streets Program consists of three phases, and Council approval of a new land use framework for 20 of 35 priority Main Streets outlined in the MDP will be followed by streetscape design and construction to prepare the areas for investment in new buildings, increased density and improve safety and accessibility. The Main Streets Streetscape Program is the design and construction phase as directed by Council. The funding for design provides a plan for development and construction projects along any of the Main Streets to build towards. Construction funding will capitalize on shared costs and minimize disruption to the community to execute placemaking design elements. The request of \$18,000,000 will fund construction for up to two of the priority areas that are currently in the design phase. This business case is tied to PID 3000585, Main Street Streetscape Sidewalks and Pathways. Document Date

Service	Sidewalks & Pathways	Sector Affected	Multiple Sectors
Activity #	481500	Ward(s)	All Wards
Project Identifier (PID)	3000585	Citizen Priority	A City That Moves
Business Unit	URBAN STRATEGY	Capital Investment Plan Alignment	Targeted Theme Investments.Main Streets
Department	URBAN STRATEGY	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Current	City Resilience Framework Driver	Provides & enhances natural and manmade assets
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Promote the well-being of communities- environment and economy

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	18,000,000		9,000,000	9,000,000		
Funding Status	For Approval					
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross (\$)	utput		estic Product (\$)	Income (\$)	Employment (Person-Years)
MUGS	Mainter	ance	Upç	grade	Growth	New Services
	0%)	10	00%	0%	0%

	0%	100%	0%	0%			
Triple Bottom Line – Social	The Main Streets program will provide the uses, the people, and the public realm to support Calgarians to live, work and play in their community. Creating the physical spaces and mobility choices that will support current and future residents in the Main Streets area also brings diversity to the community. The Streetscape Master Plan represents the investment phase of the program and is the final blueprint to rebuild the main street to meet the needs of current and future residents and business owners which will also improve the safety and accessibility of the public realm. Providing community influenced social gathering spaces improves the character and sense of place attracting people to the area and to stay. Not proceeding with the implementation of the capital improvements will negatively impact stakeholders, potentially develop mistrust with citizens and the development industry.						
Triple Bottom Line – Environmental	The Main Streets program will enhance the physical environment through the introduction of natural vegetation that will improve the air quality, provide impermeable surfaces that will improve surface water drainage which reduces impact on the construction and maintenance of built infrastructure. By providing a comfortable pubic realm for people year round, to move, shop and stay in the area, people are more likely to walk, cycle or take transit within their community. Leading to further reduction associated with CO2 emissions as well as improve their physical health.						
Triple Bottom Line – Economic	The return on investment for projects like Main Streets comes from various sources. They include improved safety, reduced maintenance costs, attraction for investment on private property, increased attraction for retail and potential reduced health costs through encouraging people to walk and cycle. With increased private sector investment and public realm improvements there is an increase in tax revenues.						

C2018-1158 Attachment 10

Expected Key Benefits

This program represents a strategic approach to land use intended to enable the supply of housing and employment space to keep pace with demand. Supporting supply increases in places with existing and planned infrastructure is a key component in reducing the fiscal impact of growth, while also acting to attenuate pressure on housing affordability. Economic value will be created through the land use and public realm improvements by enhancing the value of properties and attracting new investment, leading to increased tax revenue & desirable place for citizens to go to. Other benefits: Improve the safety & accessibility; Private & public investment will attract more residential & commercial growth; Increase mobility, a diverse built form, provides for adaptability & flexibility. This diversity provides better access for housing, recreation & commercial services for more Calgarians.

Pathways & Trails Lifecycle

Executive Summary	This business case is requesting \$5.5 Million for the replacement and refurbishment of existing pathways and trails that are critical and in failing condition. This project will also standardize the material used in the pathway and trail system to improve the life expectancy of the trail system. A key result of the city- wide pathway and trail repairs and life cycling project is to increase the movement of pedestrian traffic, while protecting natural habitats by directing foot traffic away from ecological sensitive areas.
Document Date	2018/09/11

Service	Sidewalks & Pathways	Sector Affected	Multiple Sectors
Activity #	423080	Ward(s)	All Wards
Project Identifier (PID)	3000189	Citizen Priority	A City That Moves
Business Unit	CALGARY PARKS	Capital Investment Plan Alignment	Community Investments.Parks and Public Spaces
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
	Total	2013	2020	2021	2022	20237
Recommended Funding Allocation (\$)	5,500,000	1,375,000	1,375,000	1,375,000	1,375,000	0
Funding Status	For Approval					
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	10,235	,808	4,16	69,958	2,643,998	31
MUGS	Mainter	nance	Up	grade	Growth	New Services
	100	%	(0%	0%	0%

Triple Bottom Line – Social	(a) Establishing a good trail network would increase accessibility for all Calgarians. (b) Trail improvements in natural areas would encourage access by a diverse group of people. Trail improvements include better surfacing thereby increasing sustainability and grade, universal trail signage, and encourage park stewardship of children. (c) Trail guidelines will incorporate historical road alignments and protect archaeological sites, and will provide diverse recreational opportunities. (d) Trail sustainability will encourage citizens to become and stay active in our parks, and improve the health of the ecosystem and our environment.
Triple Bottom Line – Environmental	(a) Significant Contribution to long term park ecological sustainability for the benefit of Calgarians now and in the future. (b) Implementation of well maintained trails will help protect natural vegetation and thus air quality, prevent soil erosion and thus protect water quality, protect natural habitats. (c) Help Calgarians reduce their environmental impact by reducing the overall trail footprint in our environment.
Triple Bottom Line – Economic	(a) Work towards creating a trail network that complements the highly valued regional pathway network. (b) Trail improvements would increase the overall quality of life in Calgary by optimizing citizens' access to parks, and supporting creative activities such as hiking and nature study. (c) Sustainable trails encourage more efficient land use, promote walking and cycling, and promote long-term sustainability of trail assets and urban natural environment parks. (d) Create connectivity with pathway network to support alternative means of transport (e.g., Cycling, walking).
Expected Key Benefits	(a) Improve pedestrian movement through park, (b) Enhanced protection of natural habitats, (c) Decreased disturbance to wildlife, (d) Improved safety conditions on the pathways for users of all ages, (e) Improved user experience, (f) Lower maintenance costs, (g) Fewer 311 calls.

Plus 15 Rehabilitation

Executive Summary	transportation network ar 15 bridges are located in buildings. Two Plus 15 br 15 bridge. The current es contributes to vibrancy of order to provide safe con	k is an integral part of Calgary's downtown that enables pedestrian travel in an all-weather rk and attracts businesses to lease vacant floor space within private buildings. Eighty-Three Plus and in downtown Calgary and are connected by 14km of publicly accessible walkways within private 15 bridges located outside downtown core are the Chinook and Village Square Leisure Center Plus nt estimated asset value of the Plus 15 bridge network is over \$515 million. This program cy of the downtown core by providing lifecycle rehabilitation and protection of Plus 15 bridges. In a conditions for the public and support the downtown office real estate sector, lifecycle rehabilitation in long term sustainment of this pedestrian network.					
Document Date	2018/09/11						
Service	Sidewalks & Pathways	Sector Affected	CENTRE				
Activity #	481350	Ward(s)	8. 7. 11				

Service	Sidewalks & Pathways	Sector Affected	CENTRE
Activity #	481350	Ward(s)	8, 7, 11
Project Identifier (PID)	3000375	Citizen Priority	A City That Moves
Business Unit	ROADS	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	6,000,000	1,500,000	1,500,000	1,500,000	1,500,000	0
Funding Status	For Approval					
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	9,478	469	4,171,913		3,017,925	33
MUGS	Mainter	nance	Up	grade	Growth	New Services
	100	%	(0%	0%	0%

Triple Bottom Line – Social	economic and cultural life of the community. Improved safety for vulnerable users. Provision of active modes infrastructure will encourage healthier forms of transportation choices.
Triple Bottom Line – Environmental	Incorporates energy-efficiency measures where possible to minimize environmental impacts.
Triple Bottom Line – Economic	Promoting an environment conducive to attracting, retaining and nurturing businesses. Ensures long-term economic development and fiscal health by managing assets wisely and strategically investing in infrastructure to optimize functioning and service. Infrastructure is provided in a manner that is affordable and cost-effective.
Expected Key Benefits	Investment in the rehabilitation and protection of Plus 15 bridges will support the downtown real estate sector, improve public safety, reduce on street-congestion, protect the longevity of the asset, decrease long term costs and support short term job growth. With pedestrian volumes range from 10,000 to 20,000 people per day during the winter, investment in the safety and security of the Plus 15 Network will improve public safety for users, businesses and building owners and support the downtown real estate sector through improved security.



Specialized Transi

Access Calgary Technology

Executive Summary	This program is intended to address the lifecycle and replacement of systems and hardware that Calgary Transit (CT) Access relies upon to ensure customers receive service that is reliable and high-quality. The systems and hardware included in this program are: Giro/Access, Mobile Data Computer (MDC), Onboard Cameras, CTA web booking, Mobile Payment (integrated with CT Fixed Route), ACE System, Incident Management System (integrated with CT Fixed Route), and general hardware requirements for operations (including servers, phones, and tough books)
Document Date	2018/09/11

Service	Specialized Transit	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST
Activity #	430006	Ward(s)	All Wards
Project Identifier (PID)	3000333	Citizen Priority	A City That Moves
Business Unit	CALGARY TRANSIT	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Integrate coordinate and optimize The City's investment

	Total	2019	2020	2021	2022	2023+	
Recommended Funding Allocation (\$)	675,000	382,500	112,500	90,000	90,000	0	
Funding Status	For Approval	For Approval					
Operating Impact Of Capital	No						
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years)	
	922,8	358	588	3,939	430,882	5	
MUGS	Mainter	nance	Up	grade	Growth	New Services	
	509	%	5	0%	0%	0%	

Triple Bottom Line - Social	These investments result in improved customer experience and increased reliability of the service.
Triple Bottom Line – Environmental	N/A
Triple Bottom Line – Economic	These investments help with improved efficiency and effectiveness of service.
Expected Key Benefits	Improved customer experience • Uninterrupted real time information provided to customers• Improved schedule adherence • Improved efficiency via data analysis• Improved and upgraded customer information systems• Ensure safety for customers and employees• Improved efficiency by improved operations management

Stree

144 AV NW at W Nose Creek

Executive Summary	This project is the 144 Avenue NW crossing over West Nose Creek and the construction of 144 Avenue from Symons Valley Road to west of Panorama Road. The bridge over West Nose Creek will provide six lanes for vehicular traffic and accommodate pedestrians and cyclists as part of the Primary Cycling Network. This project will support current and planned growth of adjacent developments by providing an east-west connection north of Stoney Trail and supports the ASP Areas of Keystone Hills and Glacier Ridge.
Document Date	2018/09/11

Service	Streets	Sector Affected	NORTHWEST
Activity #	481407	Ward(s)	2
Project Identifier (PID)	3000305	Citizen Priority	A City That Moves
Business Unit	TRANSPORTATION INFRASTRUCTURE	Capital Investment Plan Alignment	Community Investments.Growth Infrastructure
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Enhanced	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Optimize financing and funding sources

	Total	2019	2020	2021	2022	2023+	
Recommended Funding Allocation (\$)	25,000,000	1,000,000	5,000,000	19,000,000	0	0	
Funding Status	For Approval	For Approval					
Operating Impact Of Capital	No						
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years)	
	46,526	5,401	18,9	54,356	12,018,171	142	
MUGS	Mainter	nance	Up	grade	Growth	New Services	
	0%	6		0%	100%	0%	

Triple Bottom Line – Social	Increased transportation choice – Calgary provides more travel choices in strategic locations aligned with land use direction.
Triple Bottom Line – Environmental	The project increases the network connectivity of lands on either side of West Nose Creek, and establishes multi-modal network connections promoting increased transit ridership and encouraging more energy efficient active modes of transportation.
Triple Bottom Line - Economic	The project positively contributes to the provision of a business environment that attracts new industry and jobs, and contributes to ensuring that an adequate supply of appropriately zoned land is available for development.
Expected Key Benefits	Improved transportation network connectivity in northwest Calgary. Supports the completion of suburban residential communities, consistent with the Growth Management Framework.

194 AV S-MacLeod TR Improvs

	schedule resulting i substantially improv							
Investment Category	Project -A Project is investment that is p delivered and evalu its own merit and ha defined scope; cost	lanned- ated on as a well- and	n ell-			S Optimize financing and funding sou		funding sources
Service Type	Enhanced	Ci			Provides reliable communication & mobility			
Department	TRANSPORTATIO	N Ci	City Resilience Framework Dimension			Infrastructure and Ecosystems		
Business Unit	TRANSPORTATIO INFRASTRUCTUR					Targeted Theme Investments.Transit and Transportation		
Project Identifier (PID)	3000308	Ci	Citizen Priority			A City That Moves		
Activity #	481405	W	/ard(s)			13		
Service	Streets	Se	ector Affected			SOUT	Н	
Document Date	2018/09/11							
Executive Summary	An interchange will be required at Macleod Trail and 194 Avenue S in order to accommodate new suburban developments west of Macleod Trail. This project will consist of the detailed design work required for the future interchange.							

	Total	2019	2020	2021	2022	2023+	
Recommended Funding Allocation (\$)	4,000,000	0	0	4,000,000	0	0	
Funding Status	For Approval	For Approval					
Operating Impact Of Capital	No						
Economic Impacts of 2019-2022 Recommended Funding	Gross (•	Gross Don	nestic Product (\$)	Income (\$)	Employment (Person-Years)	
	5,493	,725	3,4	55,796	2,272,177	23	
MUGS	Mainter	nance	Up	grade	Growth	New Services	
	0%	6		0%	100%	0%	

Triple Bottom Line – Social	The project supports the future 194 Avenue interchange, construction of which will support Social TBL by aligning with the following Goals, Principles, and Directions:- Goal #1: Align transportation planning and infrastructure investment with the city and regional land use direction and implementation strategies by supporting an identified growth management areaGoal #2: Promote safety for all transportation system usersGoal #4: Enable public transit, walking and cycling as the preferred mobility choices for people by providing better and safer connectivity across Macleod Trail Sustainability Principle #8: Support compact development by increasing capacity of access points into development to allow for higher density thresholds Key Direction for Land Use Mobility #1: Achieve a balance of growth between established communities by allowing for continued growth in a greenfield area.
Triple Bottom Line – Environmental	This project supports the future 194 Avenue interchange project, construction of which will enable environmental benefits by reducing traffic delays translate to a reduction in emissions and greenhouse gases. (TBL & GHG Emission Reduction 2020 Objective) Transportation Goal #6: Advance Environmental Sustainability.
Triple Bottom Line - Economic	The project supports the future 194 Avenue interchange project, construction of which will ensure the efficient movement of workers and goods by improving egress from a significant residential area to improve mobility to employment areas Transportation Goal #5: Promote economic development
Expected Key Benefits	Completion of the detailed design for the future interchange, facilitating construction as resources permit in the near term.

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88 Street SE Extension

		00 0			LV(CII2	1011				
Executive Summary	lane 88 Street	S.Ė. roadway,	, a firs		ıture 6-lane skel	etal road, w		SETON Town Cond south 2.6 kilor		
Document Date	2018/09/11									
Service	Streets		Sect	tor Affected			SOUTHEAST			
Activity #	481408		War	d(s)			12			
Project Identifier (PID)	3000316		Citiz	zen Priority			A Cit	A City That Moves		
Business Unit	TRANSPORTA		Сар	ital Investment	Plan Alignmen	t		eted Theme Inves	stments.Transit	
Department	INFRASTRUCT TRANSPORTA		City	Resilience Fra	mework Dimens	sion		Fransportation structure and Eco	systems	
Service Type	Enhanced		City	Resilience Fra	mework Driver			des reliable comr	munication &	
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets			Capital Infrastructure Investment Principles			mobility Optimize financing and funding sources			
		Total		2019	2020	2021		2022	2023+	
Recommended Fundin	g Allocation (\$)	23,500,00	00	4,700,000	18,800,000	0		0	0	
Funding Status		For Approva	al							
Operating Impact Of Ca	apital	No								
Economic Impacts of 2 Recommended Fundin				ss Output Gross Domesti (\$) (\$)			ıct	Income (\$)	Employment (Person-Years)	
		43,734		734,817 17,81		17,095		11,297,081	133	
MUGS		Maintena		nance	Upgrade			Growth	New Services	
		0%		6	0%			100%	0%	
		treet SE will h #1 – Align trai irections and i icreasing capa irection for La Illowing for cor	nave on sportimple acity of the contract of th	direct contribution tation planning a mentation strate of access points se Mobility #1: A growth in a	n to the City sociand infrastructure gies; - Sustainab into developmer chieve a balance eenfield area.	ial, environne investment bility Principl nt to allow for e of growth	nental t with t e #8: S or high betwee	the City regional la Support compact er density thresho en established co	als. Social Goals: and use development by olds Key mmunities by	
		This project aligns with the CTP and MDP goals, and the 2020 Sustainable Direction. Construction of 88 Street SE will have direct contribution to the City social, environmental and economic goals. Environmental Goals: - Construction of 88 Street SE will reduce traffic delays directly translating to a reduction in emissions and greenhouse gases. (TBL & GHG Emission Reduction 2020 Objective) Transportation Goal #6: Advance Environmental Sustainability.								
		This project aligns with the CTP and MDP goals , and the 2020 Sustainable Direction. Construction of 88 Street SE will have direct contribution to the City social, environmental and economic goals. Economic Goals: -#5 — Promote economic development by ensuring the efficient movement of workers and goods by improving egress from a significant residential area to improve mobility to employment areas.								
Expected Key Benefits	ld C ru O ru	This new road will provide direct access to the new local communities and businesses. It will provide the local communities and businesses direct access to the ring road system and Highway 22X. Without this connection, new communities will have no ability to access Stoney Trail to the north and all traffic will be required to use the 52 Street SE interchange as well as the Seton boulevard interchange. Given the size of the communities in the southeast quadrant of Calgary, an additional connection to the ring road is required. The project aligns with growth management and supports the development of Mahogany, Seton, and Range view. It also provides southeast street access to new south Calgary hospital.								

Bridge Rehabilitation and Protection

Executive Summary	Regular infrastructure maintenance and rehabilitation are critical to the preservation and extension of the service life of bridge assets, ensuring public safety and maximizing the value of capital investments. Bridges are subjected to many forces that contribute to their deterioration and eventually affect their performance and decrease their service life. To achieve the optimal service life, bridges require ongoing maintenance and including several major interventions throughout their service life. Avoiding this work would cause premature deterioration, poor performance and result in a significant reduction in the useful life of the bridge. The absence of a maintenance and rehabilitation program will result in the need for full replacement far earlier than the planned 75 year time horizon of many bridges.
Document Date	2018/09/11

Service	Streets	Sector Affected	CENTRE, EAST, SOUTHWEST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST
Activity #	433150	Ward(s)	All Wards
Project Identifier (PID)	3000322	Citizen Priority	A City That Moves
Business Unit	ROADS	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	48,000,000	12,000,000	12,000,000	12,000,000	12,000,000	0
Funding Status	For Approval					'
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)			estic Product (\$)	Income (\$)	Employment (Person-Years)
	89,330	,690	36,39	92,363	23,074,888	272
MUGS	Maintenance		Upgrade		Growth	New Services
	100%		0%		0%	0%

Triple Bottom Line – Social	Design compliant with The City's Access Design Standards. Improved safety for vulnerable users.
Triple Bottom Line – Environmental	Initiative encourages alternate modes of transportation such as transit, carpooling, walking, or cycling. Reduced delay and travel times result in a decrease of fuel consumption and emissions.
Triple Bottom Line – Economic	Promoting an environment conducive to attracting, retaining and nurturing businesses and supporting goods movement. Ensures long-term economic development and fiscal health by managing assets wisely and strategically investing in infrastructure to optimize functioning and service. Infrastructure designed and managed to optimize use.
Expected Key Benefits	The expected benefits of dedicated lifecycle funding for this program would be extended service life of assets, lower lifecycle capital costs, increased safety, higher citizen satisfaction with travel conditions and fewer traffic disruptions.

Comm Mobility Imp - Streets

Executive Summary	This program is dedicated to the strategic investment in planned community mobility and active transportation infrastructure, equipment, materials and testing. Key objectives are to support transportation choices for people to wall and cycle, create all ages and abilities infrastructure that will promote safer and more livable streets and neighborhoods for people to travel to school, shopping, recreation or to work. Capital investments includes the planning, engagement, design, construction, monitoring and adjustments for work associated with the program.						
Document Date	2018/09/11						
Service	Streets	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST				
Activity #	481404	Ward(s)	All Wards				
Project Identifier (PID)	3000581	Citizen Priority	A City That Moves				
Business Unit	TRANSPORTATION INFRASTRUCTURE	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation				
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems				
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility				
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed	Capital Infrastructure Investment Principles	Build an adaptable resilient and smart city				

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	7,625,000	1,250,000	2,125,000	2,125,000	2,125,000	0
Funding Status	For Approval					<u>'</u>
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•	0.000 20	estic Product (\$)	Income (\$)	Employment (Person-Years)
	14,190),552	5,78	31,079	3,665,542	43
MUGS	Mainte	nance	Up	grade	Growth	New Services
	0%	6	7	5%	0%	25%

Triple Bottom Line – Social	Good active modes infrastructure contributes to healthier citizens and helps improve the quality of life of Calgarians. This can create significant household savings for Calgarians.
Triple Bottom Line – Environmental	Creating a city where Calgarians have effective active mode options results in reduced dependence on automobiles, better air quality, and fewer greenhouse gas emissions.
Triple Bottom Line - Economic	Community mobility and active modes are some of the most efficient forms of transportation in terms of capital costs.
Expected Key Benefits	City-wide investments, more people walking and cycling, fewer collisions, increased citizen satisfaction with service

C2018-1158 Attachment 10 ISC: UNRESTRICTED

together

Crowchild Tr Wide 24-32AVNW

Executive Summary	The purpose of this project is to improve traffic flow for northbound traffic on Crowchild Trail. The project limits are the northbound lanes of Crowchild Trail from south of 24 Avenue NW to the off ramp from northbound Crowchild Trail that connects with 32 Avenue NW and the west side of the intersection of Crowchild Trail and 24 Avenue NW. The project includes widening Crowchild Trail to 4 northbound through lanes and a modification of the westbound right turn movement at Crowchild Trail and 24 Avenue NW to a signalized dual right turn. The signalized dual right turn requires the closure of the connection of 24 Street NW to 24 Avenue NW.
Document Date	2018/09/11

Service	Streets	Sector Affected	NORTHWEST
Activity #	481402	Ward(s)	7
Project Identifier (PID)	3000330	Citizen Priority	A City That Moves
Business Unit	TRANSPORTATION INFRASTRUCTURE	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Integrate coordinate and optimize The City's investment

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	2,892,750	2,778,750	114,000	0	0	0
Funding Status	For Approval					
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product \$)	Income (\$)	Employment (Person-Years)
	5,383	3,570	2,19	3,209	1,390,623	16
MUGS	Maintenance		Upgrade		Growth	New Services
	0%		0%		100%	0%

Triple Bottom Line - Social	Improved traffic flow on Crowchild Trail will reduce the attractiveness of alternate routes through adjacent communities during and after construction of the short-term changes to Crowchild Trail.
Triple Bottom Line – Environmental	The reduction in travel times associated with the project reduces the energy consumed and vehicle emissions associated with travel in the area.
Triple Bottom Line – Economic	The project increases roadway network connectivity and reduces travel times for customers and businesses accessing the area, positively contributing to the business environment in Calgary.
Expected Key Benefits	Once constructed, the changes at Crowchild Trail and 24 Avenue NW are expected to provide benefits to northbound motorists on Crowchild Trail in the PM Peak by reducing queuing by 60%, and reducing delay by 80%.

Dev Infrastructure - AD

Executive Summary	This program provides construction and funding of future infrastructure related to development in 27 'Actively Developing' communities . Examples of infrastructure include key missing links in major roadway / transportation networks associated with new sub-divisions and new signals. Work is completed on an ongoing basis and the timelines are established by the developer.							
Document Date	2018/09/11							
Service	Streets	Sector Affected	EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST					
Activity #	481352	Ward(s) 1, 2, 3, 5, 6, 12, 13, 14						
Project Identifier (PID)	3000617	Citizen Priority A City That Moves						
Business Unit	ROADS	Capital Investment Plan Alignment Community Investments.Gro						
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems					
Service Type	Enhanced	City Resilience Framework Driver	Provides reliable communication & mobility					
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Optimize financing and funding sources					

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	37,900,000	14,350,000	12,050,000	7,750,000	3,750,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	70,534,024		28,734,804		18,219,547	215
MUGS	Maintenance		Upgrade		Growth	New Services
	0%		0%		100%	0%

Triple Bottom Line – Social	Safety and resiliency, ensuring communities and neighbourhoods are safe, resilient, and supportive.
Triple Bottom Line – Environmental	Ensuring land stewardship and protection and protecting water resources.
Triple Bottom Line – Economic	Infrastructure is provided in a manner that is affordable and cost-effective.
Expected Key Benefits	Improved connectivity for all modes of travel. The benefits of signalization are to improve efficiency and safety for motorists, pedestrians, cyclists, and Calgary Transit. Developer funding of these projects reduces the need for tax supported funding as the city grows. Furthermore, no street light outages during development permit construction process and lifecycle replacement of old infrastructure when applicable.

Dev Infrastructure - NC

Executive Summary	This program provides construction and funding of future infrastructure related to development in 14 'New Communities'. Examples of infrastructure include key missing links in major roadway / transportation networks associated with new sub-divisions and new signals. Work is completed on an ongoing basis and the timelines are established by the developer.								
Document Date	2018/09/11	018/09/11							
Service	Streets	Sector Affected	SOUTHWEST, NORTH, SOUTH, WEST NORTHEAST, NORTHWEST, SOUTHEAST, EAST						
Activity #	481353	Ward(s)	1, 2, 3, 5, 9, 12, 13						
Project Identifier (PID)	3000620	Citizen Priority	A City That Moves						
Business Unit	ROADS	Capital Investment Plan Alignment	Community Investments.Growth Infrastructure						
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems						
Service Type	Enhanced	City Resilience Framework Driver	Provides reliable communication & mobility						
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Optimize financing and funding sources						

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	12,410,000	300,000	2,360,000	7,750,000	2,000,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years)
	23,095	5,705	9,40	08,942	5,965,820	70
MUGS	Maintenance		Upgrade		Growth	New Services
	0%		0%		100%	0%

Triple Bottom Line – Social	Safety and resiliency, ensuring communities and neighbourhoods are safe, resilient, and supportive.
Triple Bottom Line – Environmental	Ensuring land stewardship and protection and protecting water resources.
Triple Bottom Line – Economic	Infrastructure is provided in a manner that is affordable and cost-effective.
Expected Key Benefits	Improved connectivity for all modes of travel. The benefits of signalization are to improve efficiency and safety for motorists, pedestrians, cyclists, and Calgary Transit. Pedestrian Corridors and Rectangular Rapid Flashing Beacons provide controlled crossing opportunities for pedestrians. Developer funding of these projects reduces the need for tax supported funding as the city grows. Furthermore, no street light outages during development permit construction process and lifecycle replacement of old infrastructure when applicable.

Main St Stscape Street

Service	Streets	Sector Affected Multiple Sectors			
Executive Summary Document Date	priority Main Streets outlined for investment in new building Streetscape Program, is the plan for development and con will capitalize on shared cost City will work with communiti	onsists of three phases, and Council approval of a in the MDP will be followed by streetscape design gs, increased density and improve the safety and design and construction phase as directed by Construction projects along any of the Main Streets the sand minimize disruption to the community to except on short and long term strategies. The request is that are currently in the design phase. This busing	n and construction to prepare the areas accessibility. The Main Streets uncil. The funding for design provides a to build towards. Construction funding ecute placemaking design elements. The of \$12,000,000 will fund construction for		

Service	Streets	Sector Affected	Multiple Sectors
Activity #	481501	Ward(s)	All Wards
Project Identifier (PID)	3000244	Citizen Priority	A City That Moves
Business Unit	URBAN STRATEGY	Capital Investment Plan Alignment	Targeted Theme Investments.Main Streets
Department	URBAN STRATEGY	City Resilience Framework Dimension	Economy and Society
Service Type	Current	City Resilience Framework Driver	Fosters economic prosperity
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Promote the well-being of communities- environment and economy

13						
	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	12,000,000		6,000,000	6,000,000		
Funding Status	For Approval					·
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross ((\$	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
MUGS	Maintenance		Upgrade		Growth	New Services
	0%		100%		0%	0%

Triple Bottom Line – Social	The Main Streets program will provide the uses, the people, and the public realm to support Calgarians to live, work and play in their community. Creating the physical spaces and mobility choices that will support current and future residents in the Main Streets area also brings diversity to the community. The Streetscape Master Plan represents the investment phase of the program and is the final blueprint to rebuild the main street to meet the needs of current and future residents and business owners which will also improve the safety and accessibility of the public realm. Providing community influenced social gathering spaces improves the character and sense of place attracting people to the area and to stay. No proceeding with the implementation of the capital improvements will negatively impact stakeholders, potentially develop mistrust with citizens and the development industry.
Triple Bottom Line – Environmental	The Main Streets program will enhance the physical environment through the introduction of natural vegetation that will improve the air quality, provide impermeable surfaces that will improve surface water drainage which reduces impact on the construction and maintenance of built infrastructure. By providing a comfortable pubic realm for people year round, to move, shop and stay in the area, people are more likely to walk, cycle or take transit within their community. Leading to further reduction associated with CO2 emissions as well as improve their physical health.
Triple Bottom Line – Economic	There turn on investment for projects like Main Streets comes from various sources. They include improved safety, reduced maintenance costs, attraction for investment on private property, increased attraction for retail and potential reduced health costs through encouraging people to walk and cycle. With increased private sector investment and public realm improvements there is an increase in tax revenues.
Expected Key Benefits	This program represents a strategic approach to land use intended to enable the supply of housing and employment space to keep pace with demand. Supporting supply increases in places with existing and planned infrastructure is a key component in reducing the fiscal impact of growth, while also acting to attenuate pressure on housing affordability. Economic value will be created through the land use and public realm improvements by enhancing the value of properties and attracting new investment, leading to increased tax revenue & desirable place for citizens to go to. Other benefits: Improve the safety & accessibility Private & public investment will attract more residential & commercial growth Increase mobility, a diverse built form, provides for adaptability & flexibility. This diversity provides better access for housing, recreation & commercial services for more Calgarians.

Major Road Reconstruction

Executive Summary	The Transportation Department is focused on providing a safe, reliable, efficient, customer focused transportation system that support all modes of travel and promote sustainability. The objective of this program is to reconstruct deteriorated roads to restore the structural capacity, provide acceptable level of service and decrease long-term pavement lifecycle costs. Major Road Reconstruction Program addresses any project requiring full road reconstruction of major roadways. Often, other types of work are needed to be considered with full reconstruction, such as drainage improvements or water main or sanitary sewer replacement.								
Document Date	2018/09/11								
Service	Streets		Sect	Sector Affected			CENTRE, EAST, NORTH, SOUTH, NORTHEAST, WEST, NORTHWEST, SOUTHEAST, SOUTHWEST		
Activity #	464170		War	d(s)			All Wa	ards	
Project Identifier (PID)	3000371		Citiz	en Priority			A City	That Moves	
Business Unit	TRANSPORTATION INFRASTRUCTURE		Capital Investment Plan Alignment			Targeted Theme Investments.Transit and Transportation			
Department	TRANSPORTATION		City Resilience Framework Dimension			Infrastructure and Ecosystems			
Service Type	Essential		City Resilience Framework Driver			Provides reliable communication & mobility			
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets		Capi	ital Infrastructu	re Investment I	Principles	Enha asset	nce the long-terns	n value of City
		Total		2019	2020	2021		2022	2023+
Recommended Fundin	g Allocation (\$)	16,000,00	00	4,000,000	4,000,000	4,000,00	00	4,000,000	0
Funding Status		For Approval							
Operating Impact Of Capital		No							
Economic Impacts of 2019-2022 Recommended Funding		Gross Output (\$)		Gross Domestic Produ (\$)		ict	Income (\$)	Employment (Person-Years)	
		2	9,776	6,897	12,1	30,788		7,691,629	91
MUGS		Maintenance		Upgrade			Growth	New Services	

Triple Bottom Line – Social	Supports an inclusive city where Calgarians have the opportunity to take an active part in the social, economic and cultural life of the community.
Triple Bottom Line – Environmental	Reducing energy use and climate change impacts by piloting alternative products. Initiative encourages alternate modes of transportation such as transit, carpooling, walking, or cycling.
Triple Bottom Line - Economic	Promoting an environment conducive to attracting, retaining and nurturing businesses and supporting goods movement. Infrastructure designed and managed to optimize use.
Expected Key Benefits	The benefits of this program are upgrades to current City standards, improvements in network condition, improved safety, reduced road maintenance cost and a better user experience.

0%

0%

0%

100%

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New Traffic Signals and Pedestrian Corridors

				iis and					
Executive Summary	is required to opedestrian cor meet the warra	operate safely ntrol is required ant are recomr	and e d usin nende	efficiently. Warra g the Transporta	nts are also comation Association on. The benefits	pleted at lo	cations (TAC)	to determine if a warrant matrix. I	
Document Date	2018/09/11								
Service	Streets		Sect	Sector Affected			CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST		
Activity #	432240		War	d(s)			All W	ards	
Project Identifier (PID)	3000363		Citiz	en Priority			A City	y That Moves	
Business Unit	ROADS		Сар	ital Investment	Plan Alignmen	t		eted Theme Inve	stments.Transit
Department	TRANSPORTA	TION	City	Resilience Fra	mework Dimen	sion	Infras	structure and Eco	systems
Service Type	Essential		City	Resilience Fra	mework Driver		Provi	des reliable com	munication &
Investment Category	Annual Investm A recurring prog on maintaining current in-service for ongoing pure similar assets	gram focused or upgrading ce assets or	d Cit				Integrate coordinate and optimize The City's investment		
		Total		2019	2020	2021		2022	2023+
Recommended Funding	g Allocation (\$)	12,000,000 3,00		3,000,000	3,000,000	3,000,0	00	3,000,000	0
Funding Status		For Approva	oroval						
Operating Impact Of Ca	apital	Yes							
Economic Impacts of 2 Recommended Funding		Gr	Gross Output (\$)		Gross Domestic Produ (\$)		ıct	Income (\$)	Employment (Person-Years)
		2	2,332	2,672	9,09	8,091		5,768,722	68
MUGS		Ma	aintei	nance	Upg	grade		Growth	New Services
			0%	6	5	0%		50%	0%
Triple Bottom Line - So	6	economic and	cultur		munity. Design			e an active part in City's Access D	in the social, esign Standards.
Triple Bottom Line – Er	riple Bottom Line – Environmental Initiative encourages alternate modes of transportation such as transit, carpooling, walking, or or					king, or cycling.			
Triple Bottom Line – Ed	g	Promoting an environment conducive to attracting, retaining and nurturing businesses and supporting goods movement. Infrastructure designed and managed to optimize use. Reduced congestion (less delatravel time) contributes to improved economic productivity of the city.							
Expected Key Benefits	f c	ravel time) contributes to improved economic productivity of the city. The benefits of signalization are to improve efficiency and safety for motorists, pedestrians, cyclists, and for transit. Pedestrian Corridors and Rectangular Rapid Flashing Beacons provide controlled crossing opportunities for pedestrians. PTZ cameras allow for monitoring of traffic conditions in order to provide real-time information on incidents, congestion, and signal operation.					olled crossing		

Operational Improvements

Executive Summary	This purpose of	this program	is to implem	nent low	cost measures th	nat maximize	the effi	iciency, mobility	, and safety
,	performance of developing and typically include improvements,	the existing to implementing active mode lane reversal	ransportation g safety and improvement systems, tra	n networl operatio nts, signa ansit que	k for all users. Th nal improvement al timing, signage	nis programs projects bal and roadm her transit p	takes a lancing t arking ir riority m	a holistic approa the needs for al mprovements, r easures. Impro	ach when Il modes. Projects ninor geometric vements will also
Document Date	2018/09/11								
Service	Streets		Sector Affected				CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST		
Activity #	481355		Ward(s)	ard(s)			All Wards		
Project Identifier (PID)	3000366	00366		Citizen Priority			A City That Moves		
Business Unit	ROADS	OADS		Capital Investment Plan Alignment			Targeted Theme Investments.Transit and Transportation		stments.Transit
Department	TRANSPORTAT	ION	City Resilience Framework Dimension			Infrastructure and Ecosystems			
Service Type	Essential		City Resilience Framework Driver				Provide	es reliable com	munication &
Investment Category	Program - A Progrouping of proje related and bene being planned ar together	cts that are fit from	Capital Infrastructure Investment Principles				ite coordinate a nvestment	nd optimize The	
		Total	2	019	2020	2021		2022	2023+
Recommended Funding	g Allocation (\$)	1,000,00	00 250	0,000	250,000	250,00	0	250,000	0
Funding Status		For Approva	ıl						
Operating Impact Of C	apital	No							
Economic Impacts of 2019-2022 Gross Output Gross Domestic Product Income Er			Employment						

	. Otal					_0_0.
Recommended Funding Allocation (\$)	1,000,000	250,000	250,000	250,000	250,000	0
Funding Status	For Approval					·
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years)
	1,861	,056	758	8,174	480,727	6
MUGS	Maintenance		Up	grade	Growth	New Services
	0%	6	5	50%	50%	0%
						7

Triple Bottom Line – Social	Time saved from reduced delay and travel times can be spent in more social and recreational activities. Improved safety for vulnerable users. Provision of active modes infrastructure will encourage healthier forms of transportation choices.
Triple Bottom Line – Environmental	Reduced delay and travel times result in a decrease of fuel consumption and emissions. Implementation of active modes and transit oriented projects promotes a more environmentally sustainable transportation system.
Triple Bottom Line – Economic	Reduced congestion (less delay, travel time) contributes to improved economic productivity of the city. Lower cost improvements that defer the need for larger capital improvements. Reduction in collisions represents a significant cost reduction to society.
Expected Key Benefits	These projects maximize the efficiency of the existing transportation network, reduce congestion, enhance safety, promote alternative modes of travel, reduce impacts on the environment, and enhance the social and economic vibrancy of the community.

Ontimization

			U	ptimiz	ation				
Executive Summary Document Date	benefit the trans rights of way be medium sized re effective solutio	sportation net fore larger, no cadway upgrans to enhance benefit analy	twork. I nore co ades ra ce traffic	mprovements stly improvements anging between coperations are	built under this pents are needed a \$600K - \$3M to	orogram max Projects the reduce coroad network	kimize t rough t ngestio a. Cand	the existing infra this program will n/bottlenecks ar idate projects a	include designing nd develop cost re prioritized yearly
Service	Streets			Sector Affected			CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST		
Activity #	481401	1		Ward(s)				ards	
Project Identifier (PID)	3000368		Citizen Priority				A City That Moves		
Business Unit	TRANSPORTATION INFRASTRUCTURE		Capital Investment Plan Alignment			Targeted Theme Investments.Transit and Transportation			
Department	TRANSPORTAT	NSPORTATION		City Resilience Framework Dimension			Infras	tructure and Eco	osystems
Service Type	Essential		City Resilience Framework Driver				Provides reliable communication & mobility		
Investment Category	Program - A Prog grouping of proje related and bene being planned an together	cts that are fit from	Capita	al Infrastructu	re Investment I	Principles		ate coordinate a investment	and optimize The
		Total		2019	2020	2021		2022	2023+
Recommended Funding	g Allocation (\$)	2,000,00	00	500,000	500,000	500,00	0	500,000	0
Funding Status		For Approva	al						'
Operating Impact Of Ca	apital	No							
Economic Impacts of 2 Recommended Funding		Gross Output (\$)		ıtput	Gross Domestic Produ (\$)		ıct	Income (\$)	Employment (Person-Years)
		;	3,722,1	12	1,516,348 961,454			11	

	0%	50%	50%	0%				
Triple Bottom Line – Social	Time saved from reduced delay and travel times can be spent in more social and recreational activities Improved safety for vulnerable users. Provision of active modes infrastructure will encourage healthier forms of transportation choices.							
Triple Bottom Line – Environmental	Reduced delay and travel times result in a decrease of fuel consumption and emissions. Implementation of active modes and transit oriented projects promotes a more environmentally sustainable transportation system.							
Triple Bottom Line - Economic	Reduced congestion (less delay, travel time) contributes to improved economic productivity of the city. Lower cost improvements that defer the need for larger capital improvements. Reduction in collisions represents a significant cost reduction to society.							
Expected Key Benefits	Projects funded through this progran reduce congestion, reduce environm community.							

Maintenance

Upgrade

Growth

New Services

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MUGS

Pavement Rehabilitation

Executive Summary	Rehabilitation of roadways improves safety and infrastructure quality for all users. The program provides lifecycle funding of roadways to repair aging and deteriorating pavement infrastructure. The Pavement Rehabilitation Program improves safety and extends the service life of roadways before major road reconstruction is required.							
Document Date	2018/09/11							
Service	Streets	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST					
Activity #	432271	Ward(s)	All Wards					
Project Identifier (PID)	3000370	Citizen Priority	A City That Moves					
Business Unit	ROADS	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation					
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems					
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility					
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets					

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	53,500,000	12,500,000	13,500,000	13,500,000	14,000,000	0
Funding Status	For Approval					
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years
	99,566	6,498	40,50	62,322	25,718,886	303
MUGS	Maintenance		Upgrade		Growth	New Services
	100%		0%		0%	0%

Triple Bottom Line - Social	Supports an inclusive city where Calgarians have the opportunity to take an active part in the social, economic and cultural life of the community.
Triple Bottom Line – Environmental	Reducing energy use and climate change impacts by piloting alternative products. Initiative encourages alternate modes of transportation such as transit, carpooling, walking, or cycling.
Triple Bottom Line – Economic	Promoting an environment conducive to attracting, retaining and nurturing businesses and supporting goods movement. Ensures long-term economic development and fiscal health by managing assets wisely and strategically investing in infrastructure to optimize functioning and service. Infrastructure designed and managed to optimize use.
Expected Key Benefits	Pavement preservation is one of the best ways to keep good roads in good condition to minimize long-term capital expenditures. If a road deteriorates to a condition where it fails, it costs six to 10 times more to reconstruct. Selecting the right treatment for the right road at the right time saves significant money and ensures better level of service to citizens.

Plants Capital

			•		apitai				
Executive Summary Document Date	aggregates a revenue to pa	nd asphaltic co by for costs of the s. The Spyhill c	ncreto he op	e for paving oper erations and cor	rations, other Cintribute to the Pl	ty business ants Capital	units a Reser	nd the private se ve for maintenar	ne operation sells ector to generate nce and capital e air space for the
Service	Streets	Streets Se		tor Affected			WES	Γ, CENTRE, NOI Τ, NORTHEAST THEAST, SOUT	, NORTHWEST,
Activity #	432300		War	d(s)			All W	ards ards	
Project Identifier (PID)	3000373		Citiz	en Priority			A City	y That Moves	
Business Unit	ROADS		Сар	ital Investment	Plan Alignmen	t		eted Theme Inve	stments.Transit
Department	TRANSPORTA	ATION	City	Resilience Fra	mework Dimen	sion	Infras	structure and Eco	osystems
Service Type	Essential		City	City Resilience Framework Driver			Provides reliable communication & mobility		
Investment Category	Annual Investn A recurring pro on maintaining current in-servi for ongoing pur similar assets	gram focused or upgrading ice assets or	Capital Infrastructure Investment Principles			Enha asset	nce the long-terr ts	n value of City	
		Total		2019	2020	2021		2022	2023+
Recommended Fundin	g Allocation (\$	3,550,00	00	750,000	800,000	1,000,0	00	1,000,000	0
Funding Status		For Approva	al						
Operating Impact Of Co	apital	No							
Economic Impacts of 2 Recommended Fundin		Gr	oss (Output)	Gross Domestic Prod (\$)		uct	Income (\$)	Employment (Person-Years)
			5,608	,094	2,46	68,382		1,785,606	20
MUGS		M	ainte	nance	Up	grade		Growth	New Services
			75°	%	2	25%		0%	0%
Triple Bottom Line - So	ocial	Projects coordinated to minimize impact to acresidents.				communities	s which	n improves qualit	y of life for
Triple Bottom Line – Er	nvironmental	Funding for this program provides for upgrades for the Plants and minimizes the environmental footp by focusing on reducing emission to the atmosphere, reducing energy consumption and recycling of renewable resources.							
Triple Bottom Line – Ed			for la					ve. Lower cost in te money to othe	mprovements that er

The Asphalt & Crusher Plants (Plants) would continue to be a financially self sustaining operation which would provide aggregates and asphaltic concrete products to City business units for important City services and support the private sector generating revenue to fund lifecycle maintenance and capital improvements. In addition, the Spyhill crusher plant will continue to operate jointly with W&RS to create air space for the landfill operation.

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Expected Key Benefits

Richmond-Sarcee Improvement

Executive Summary	Construction of the South West Calgary Ring Road (SWCRR) is underway and the roadway is scheduled to open Fall 2021. An investigation of the ring road's downstream traffic impacts was conducted in 2015, identifying that improvements to the Sarcee Trail / Richmond Road intersection would be warranted to alleviate operational concerns once the SWCRR opens. This project consists of at-grade improvements to the existing intersection providing one additional through lane in each direction on Sarcee Trail.
Document Date	2018/09/11

Service	Streets	Sector Affected	WEST
Activity #	481403	Ward(s)	6
Project Identifier (PID)	3000381	Citizen Priority	A City That Moves
Business Unit	TRANSPORTATION INFRASTRUCTURE	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Integrate coordinate and optimize The City's investment

	Total	2019	2020	2021	2022	2023+	
Recommended Funding Allocation (\$)	7,000,000	1,000,000	6,000,000	0	0	0	
Funding Status	For Approval						
Operating Impact Of Capital	No						
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)			estic Product (\$)	Income (\$)	Employment (Person-Years)	
	13,027	,392	5,30	7,220	3,365,088	40	
MUGS	Maintenance		Upgrade		Growth	New Services	
	0%		25%		75%	0%	

Triple Bottom Line – Social	The provision of additional through lanes on Sarcee Trail addresses safety and operational challenges, and encourages the use of Sarcee Trail, thereby improving community/business access in the area, and reducing cut-through traffic on adjacent community roads.
Triple Bottom Line – Environmental	The proposed improvements increase the operational efficiency of the at-grade intersection, reducing vehicle emissions and energy consumption relative to a 'no-build' scenario.
Triple Bottom Line - Economic	The proposed improvements enhance the movement of goods and services through the intersection, improving goods movement reliability and contributing to making Calgary a more competitive environment for businesses.
Expected Key Benefits	Additional through lanes on Sarcee Trail will address safety and operational challenges resulting from the proximity of Richmond Road to the SWCRR.

Roads Equipments & Systems

Executive Summary	This program allows Roads to maintain and upgrade software and is used to fund small equipment purchases. The Road Business Unit requires various technologies to manage assets, maintain functionality and fully utilize features to continue being efficient with planning and resource management. This program will replace small equipment capital assets that are coming to end of life in this budget cycle. This equipment includes trailers, equipment attachments, phunmatic tools, small engine landscape and snow removal equipment. Specific projects will include a Bridge Management System, a Plus 15 wayfinding system, updates to weather information systems, Route Optimization systems, workforce management software, work order systems and online payment systems.
Document Date	2018/09/11

Service	Streets	Sector Affected	SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST, CENTRE, EAST, NORTH
Activity #	432290	Ward(s)	All Wards
Project Identifier (PID)	3000382	Citizen Priority	A City That Moves
Business Unit	ROADS	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,600,000	400,000	400,000	400,000	400,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (. •		estic Product (\$)	Income (\$)	Employment (Person-Years)
	2,977	,690	1,21	13,079	769,163	9
MUGS	Maintenance		Upgrade		Growth	New Services
	50%		50%		0%	0%

Triple Bottom Line – Social	Lower cost, smaller scale projects result in quick solutions that will give greater customer satisfaction.
Triple Bottom Line – Environmental	Reducing energy use and climate change impacts.
Triple Bottom Line - Economic	Ensures long-term economic development and fiscal health by managing assets wisely and strategically investing in infrastructure to optimize functioning and service.
Expected Key Benefits	The expected benefits would be:• Improved management of assets such as bridges, Plus 15 and equipment. • Improved efficiency for snow and ice control, spring clean up, operations work order tracking, time management.• Improved customer service with wayfinding, ePermit and maintenance of roadways through route optimization and asset management.

Roads Facilities and Depots

Executive Summary	of facilities mana- replaced, environ citizens. Some fa Without preventa continue to escal	ged by Roads. The purpose of the program mental regulations are met and operationa cilities are seeing greater degrees of deter tive maintenance and lifecycle investment ate for the City. This capital program suppostorm water retention ponds, cold storage b	capital funding to complete required improvements and lifecycle infrastructure replacement ads. The purpose of the program is to ensure that Roads' infrastructure is upgraded or gulations are met and operational needs for maintaining effective service delivery to eseeing greater degrees of deterioration and significant capital investment are now required enance and lifecycle investment strategies, operating costs for maintenance and repair will of City. This capital program supports the following infrastructure: material storage structures, or retention ponds, cold storage buildings used for non-temperature sensitive equipment, repairs.					
Document Date	2018/09/11							
	0	0	OFFITTE FACT MODELL COLUMN					

Service	Streets	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST
Activity #	481357	Ward(s)	All Wards
Project Identifier (PID)	3000383	Citizen Priority	A City That Moves
Business Unit	ROADS	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Promote the well-being of communities- environment and economy

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	21,480,000	880,000	3,950,000	7,550,000	9,100,000	0
Funding Status	For Approval					
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years)
	33,932	,918	14,9	35,448	10,804,172	118
MUGS	Maintenance		Upgrade		Growth	New Services
	100%		0%		0%	0%

Triple Bottom Line - Social	Safety and resiliency, ensuring communities and neighbourhoods are safe, resilient, and supportive.
Triple Bottom Line – Environmental	Ensuring land stewardship and protecting water resources. Reducing energy use and climate change impacts.
Triple Bottom Line – Economic	Promoting an environment conducive to attracting, retaining and nurturing businesses and supporting goods movement. Ensures long-term economic development and fiscal health by managing assets wisely and strategically investing in infrastructure to optimize functioning and service.
Expected Key Benefits	The expected deliverables within this program may include improved infrastructure assets such as material and equipment storage structures, stormwater facilities, security measures, safety and environmental controls and a higher level of service for Calgarians.

Safety Improvements

Executive Summary	This program will enable the delivery of actions identified in the Calgary Safer Mobility Plan. Council provided direction to strengthen the initiatives carried out under the City's Traffic Safety Plan and to align the plan and the capital spending through One Calgary. This program is designed to deliver cost effective traffic safety measures with quantifiable benefits versus costs, proactive traffic safety measures, or intrinsic value activities such as engagement and education.								
Document Date	2018/09/11								
Service	Streets		Sector Affected				CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST		
Activity #	432514		Ward(s)				All Wards		
Project Identifier (PID)	3000395	Citizen Priority			A City That Moves				
Business Unit	ROADS		Capital Investment Plan Alignment			Targeted Theme Investments.Transit and Transportation		tments.Transit	
Department	TRANSPORTATI	ON	City F	Resilience Fran	nework Dimen	sion	Infrastructure and Ecosystems		
Service Type	Essential		City F	City Resilience Framework Driver			Provides reliable communication & mobility		
Investment Category	Program - A Prog grouping of project related and beneft being planned an together	cts that are fit from	Capital Infrastructure Investment Principles				note the well-being onment and econd		
		Total		2019	2020	2021		2022	2023+

	Total	2019	2020	2021	2022	2023+	
Recommended Funding Allocation (\$)	19,000,000	4,750,000	4,750,000	4,750,000	4,750,000	0	
Funding Status	For Approval						
Operating Impact Of Capital	No						
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)			estic Product (\$)	Income (\$)	Employment (Person-Years)	
	35,360,065		14,405,311		9,133,810	108	
MUGS	Maintenance		Upgrade		Growth	New Services	
	0%		100%		0%	0%	

Triple Bottom Line – Social	Supports an inclusive city where Calgarians have the opportunity to take an active part in the social, economic and cultural life of the community. Improved safety for vulnerable users. Safety and resiliency, ensuring communities and neighbourhoods are safe, resilient, and supportive.				
Triple Bottom Line – Environmental	Ensuring land stewardship and protecting water resources. Reducing energy use and climate change impacts.				
Triple Bottom Line – Economic	Promoting an environment conducive to attracting, retaining and nurturing businesses and supporting goods movement. Infrastructure designed and managed to optimize use. Reduced congestion (less delay, travel time) contributes to improved economic productivity of the city.				
Expected Key Benefits	The primary benefit of this program is the reduction of motor vehicle collisions which are a significant burden on our citizens & impact mobility and the economy. Additional benefits include improvements to public safety and decreased societal costs associated with health care costs.				

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Signal Communications

Executive Summary	The Traffic Management Centre uses many technologies and systems to provide accurate information to citizen through various modes. Funding for this program will support the Transportation Department to coordinate with other agencies and mobilize Roads crew during major emergencies as well as fund required system software and maintenance. Funding for this program also includes upgrading traffic controllers and cabinets to communicate with the Traffic Management Centre to provide more responsive control at intersections connected to the central traffic control system. The installation of uninterrupted power supplies at traffic signals allows the ability to operate for two to four hours if a power interruption occurs. This can often mean that the signal will operate without loss of service if the power source is restored within this time frame.								
Document Date	2018/09/11								
Service	Streets		Sector Affected				SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST, CENTRE, EAST, NORTH		
Activity #	481356		Ward(s)			All Wards			
Project Identifier (PID)	3000364		Citizen Priority			A City	That Moves		
Business Unit	ROADS		Capital Investment Plan Alignment			Targeted Theme Investments.Transit and Transportation			
Department	TRANSPORTATION		City Resilience Fra	mework Dimens	sion	Infrastructure and Ecosystems			
Service Type	Essential		City Resilience Framework Driver			Provides reliable communication & mobility			
Investment Category	Annual Investm A recurring progon maintaining current in-service for ongoing pur similar assets	gram focused or upgrading ce assets or	Capital Infrastructure Investment Principles			Integrate coordinate and optimize The City's investment			
		Total	2019	2020	2021		2022	2023+	
Recommended Fundin	g Allocation (\$)	6,000,00	0 1,500,000	1,500,000	1,500,0	00	1,500,000	0	
Funding Status		For Approva	I						
Operating Impact Of Capital		No							
Economic Impacts of 2019-2022 Recommended Funding MUGS		Gr	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years)	
		3	3,203,186	5,235,013			3,830,065	41	
		Ma	aintenance	Upgrade			Growth	New Services	
		0%		50%			50%	0%	
economic and		nclusive city where Calgarians have the opportunity to take an active part in the social, cultural life of the community. Design compliant with The City's Access Design Standards. ety for vulnerable users.							
Triple Bottom Line - Environmental Reduced del		ay and travel times result in a decrease of fuel consumption and emissions.							
reduction to so			designed and managed to optimize use. Reduction in collisions represents a significant cost ciety. Promoting an environment conducive to attracting, retaining and nurturing d supporting goods movement.						
Expected Key Benefits	At the end of the business cycle in 2022 various systems will be upgraded to industry standar Extension of the data management contract will provide real-time traffic data. Improvements traffic information to be available to the public in real-time and improve responsiveness of sign				ents will allow				

Slope Stabilization

Executive Summary Document Date	This program funds the investigation, design and implementation of slope failure mitigation measures. The City of Calgary owns land and infrastructure such as environmental reserves, parks, roadways, utilities, pathways, and embankments that are potentially affected by slope instability. When slope stability concerns pose risks to public safety, City infrastructure, City owned land or adjacent private land, The City will assess the slope and determine the most appropriate course of action. Addressing slope failures in a timely manner is key to mitigate potential property damage and safeguarding public safety. 2018/09/11				
Service	Streets	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST		
Activity #	432390	Ward(s)	All Wards		
Project Identifier (PID)	3000397	Citizen Priority	A City That Moves		
Business Unit	ROADS	Capital Investment Plan Alignment	Community Investments.Parks and Public Spaces		
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems		
Service Type	Essential	City Resilience Framework Driver	Provides & enhances natural and manmade assets		
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Promote the well-being of communities- environment and economy		

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,600,000	400,000	400,000	400,000	400,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years)
	2,977,690		1,213,079		769,163	9
MUGS	Maintenance		Upgrade		Growth	New Services
	100%		0%		0%	0%

Triple Bottom Line – Social	Safety and resiliency, ensuring communities and neighbourhoods are safe, resilient, and supportive.
Triple Bottom Line – Environmental	Ensuring land stewardship and protecting water resources.
Triple Bottom Line - Economic	Lower cost improvements that defer the need for larger capital improvements allows the City to allocate money to other programs/initiatives.
Expected Key Benefits	The investment costs of remediation are small in comparison to the long term costs of the risk to public safety, liability, and deterioration of infrastructure. Tangible benefits include the appropriate management of risk arising from natural hazards and increased maintenance. Intangible benefits include environmental stewardship, public safety preservation, preserving community and neighborhood vitality, preservation of public spaces and environmental resources; coupled with avoidance of costly reactionary actions.

Sound Wall Lifecycle

Executive Summary	Sound attenuation walls/noise barriers are engineered noise attenuation structures consisting of several designs and materials including concrete panels or blocks, bricks, wood and stucco that provide a safety barrier for motorists, pedestrians, cyclists and a reduced decibel level of road noise migrating into neighboring communities. Condition surveys have determined that several locations are past their useful design life and contain sections where total deterioration has occurred which are an immediate risk to public health & safety resulting in a hazard. There is currently no dedicated maintenance capital program funded for the lifecycle replacement of sound attenuation walls and this program would establish funding for this critical work.
Document Date	2018/09/11

	,		
Service	Streets	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST
Activity #	481351	Ward(s)	All Wards
Project Identifier (PID)	3000398	Citizen Priority	A City That Moves
Business Unit	ROADS	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,982,000	482,000	500,000	500,000	500,000	0
Funding Status	For Approval			<u> </u>		
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	Output		estic Product (\$)	Income (\$)	Employment (Person-Years)
	3,688,	613	1,50	02,701	952,801	11
MUGS	Mainter	nance	Up	grade	Growth	New Services
	100	%	(0%	0%	0%

Triple Bottom Line – Social	Safety and resiliency, ensuring communities and neighbourhoods are safe, resilient, and supportive.
Triple Bottom Line – Environmental	Ensuring the transportation network is safe and reliable for various modes of travel will encourage healthier forms of transportation choices.
Triple Bottom Line – Economic	Ensures long-term economic development and fiscal health by managing assets wisely and strategically investing in infrastructure to optimize functioning and service. Infrastructure is provided in a manner that is affordable and cost-effective.
Expected Key Benefits	A safe and effective sound attenuation wall network will improve safety and the quality of life for citizens of Calgary.

Stoney TR - 11 ST NE Interc

Executive Summary	This project is the new construction of the Stoney Trail and 11 St NE interchange as a second stage of improvements (first stage consisting of ramps only). In addition to maintaining a free flow condition along Stoney Trail, this new interchange will be an important component in supporting the development throughout the surrounding area, both north and south of Stoney Trail.
Document Date	2018/09/11

Service	Streets	Sector Affected	NORTH
Activity #	481406	Ward(s)	3
Project Identifier (PID)	3000453	Citizen Priority	A City That Moves
Business Unit	TRANSPORTATION INFRASTRUCTURE	Capital Investment Plan Alignment	Community Investments.Growth Infrastructure
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Enhanced	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Optimize financing and funding sources

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	21,000,000	0	0	1,000,000	20,000,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (. •	Gross Dor	nestic Product (\$)	Income (\$)	Employment (Person-Years
	39,082,177		15,921,659		10,095,263	119
MUGS	Mainte	nance	Up	ograde	Growth	New Services
	0%	6		0%	100%	0%

Triple Bottom Line - Social	The project contributes to increased transportation choice- Calgary provides more travel choices in strategic locations aligned with land use direction.
Triple Bottom Line – Environmental	The project increases the network connectivity of lands on either side of Stoney Trail, and establishes multi-modal network connections across Stoney Trail, promoting increased transit ridership and encouraging more energy efficient active modes of transportation.
Triple Bottom Line - Economic	The project helps to ensure that a supply of appropriately-zoned land is available for development.
Expected Key Benefits	The interchange supports the goals of complete communities, intensification and greater housing choice, support goods movements, and supports long-term population and employment growth in the north Calgary.

Stoney TR - Shag TR Upgrade

Executive Summary	This project consists of the completion of the Stoney Trail and Shaganappi Trail interchange by a widening of the Shaganappi Trail bridge from 3 lanes to 6 lanes across Stoney Trail. In addition to maintaining a free flow condition along Stoney Trail, the additional capacity provided by this project supports the development of lands in the surrounding area.
Document Date	2018/09/11

Service	Streets	Sector Affected	NORTH
Activity #	481406	Ward(s)	3, 4
Project Identifier (PID)	3000401	Citizen Priority	A City That Moves
Business Unit	TRANSPORTATION INFRASTRUCTURE	Capital Investment Plan Alignment	Community Investments.Growth Infrastructure
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Enhanced	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Optimize financing and funding sources

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	20,000,000	1,000,000	10,000,000	9,000,000	0	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (. •		estic Product (\$)	Income (\$)	Employment (Person-Years
	37,221	1,121	15,16	63,485	9,614,537	113
MUGS	Mainte	nance	Upg	grade	Growth	New Services
	0%	6	C)%	100%	0%

Triple Bottom Line – Social	Social benefit deriving from a reduction in travel times along Shaganappi Trail
Triple Bottom Line – Environmental	Reduced traffic delays translates to a reduction in emissions and greenhouse gas.
Triple Bottom Line - Economic	The project increases the capacity of the Shaganappi Trail interchange on Stoney Trail, optimizing the performance of existing infrastructure, and contributing to ensuring that an adequate supply of appropriately zoned land is available for development.
Expected Key Benefits	Reduced traffic delays; improved quality of service along Shaganappi Trail

Stoney TR-11 ST NE N Ramps

Executive Summary	The project consists of the the construction of ramps on the north side of Stoney Trail at the site of the future 11 Street NE interchange as a first stage of improvement. The construction of the ramps allows for free flow traffic to be maintained on Stoney Trail while providing improved access to the Keystone Hills Area Structure Plan lands. The roadway network connectivity provided by the ramps supports the development of the lands north of Stoney Trail.
Document Date	2018/09/11

Service	Streets	Sector Affected	NORTH
Activity #	481406	Ward(s)	3
Project Identifier (PID)	3000399	Citizen Priority	A City That Moves
Business Unit	TRANSPORTATION INFRASTRUCTURE	Capital Investment Plan Alignment	Community Investments.Growth Infrastructure
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Enhanced	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Optimize financing and funding sources

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	5,000,000	500,000	4,500,000	0	0	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years)
	9,305,280		3,790,871		2,403,634	28
MUGS	Maintenance		Upgrade		Growth	New Services
	0%		0%		100%	0%

Triple Bottom Line - Social	The project contributes to increased transportation choice - Calgary provided more travel choices in strategic locations aligned with land use direction.
Triple Bottom Line – Environmental	The project will reduce travel times to/from the area north of Stoney Trail, positively contributing to reductions in energy use and emissions relative to a no-build scenario.
Triple Bottom Line – Economic	The project positively contributes to the provision of a business environment that attracts new industry and jobs, and contributes to ensuring that an adequate supply of appropriately zoned land is available for development.
Expected Key Benefits	Better connectivity through enhanced access to adjacent communities

Stoney TR-14 ST NW Upgrade

Executive Summary	In addition to maintaining fre	This project is the completion of the Stoney Trail and14 Street NW from the existing access ramps to an interchange. In addition to maintaining free flow condition along Stoney Trail, this interchange will be an important component in supporting the existing and future development in the surrounding area.							
Document Date	2018/09/11	018/09/11							
Service	Streets	Sector Affected	NORTH						
Activity #	481406	Ward(s)	2, 3						
Project Identifier (PID)	3000515	Citizen Priority	A City That Moves						
Business Unit	TRANSPORTATION INFRASTRUCTURE	Capital Investment Plan Alignment	Community Investments.Growth Infrastructure						
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems						
Service Type	Enhanced	City Resilience Framework Driver	Provides reliable communication & mobility						
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Optimize financing and funding sources						

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	30,000,000	7,500,000	11,000,000	11,500,000	0	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years)
	55,831,681		22,745,227		14,421,805	170
MUGS	Maintenance		Upgrade		Growth	New Services
	0%		0%		100%	0%

Triple Bottom Line – Social	The project contributes to increased transportation choice— Calgary provides more travel choices in strategic locations aligned with land use direction.
Triple Bottom Line – Environmental	The project increases the network connectivity of lands on either side of Stoney Trail, and establishes multi-modal network connections across Stoney Trail, promoting increased transit ridership and encouraging more energy efficient active modes of transportation.
Triple Bottom Line - Economic	The project positively contributes to the provision of a business environment that attracts new industry and jobs, and contributes to ensuring that an adequate supply of appropriately zoned land is available for development.
Expected Key Benefits	Increased connectivity across Stoney Trail; support for development of new suburban communities north of Stoney Trail

	Sto	oney 1	Trail and	80 Ave	Flyov	ver		
Executive Summary Document Date	roadways cross on Stoney Trail Trail to the east in-between in the	Stoney Trail NE. The curr will provide a ne shape of S	re two very importar NE as both of these ent 80 Ave NE ends a more direct connect toney Tr NE. The fly gn and construction of	roadways are sa at the west side of tion between the over will include a	ndwiched be of Stoney Tra two commun two-lane ro	etween ail. Exte nities w adway	96 Ave NE and I ending 80 Ave NI hich otherwise w with a pathway t	McKnight Blvd NE E over Stoney vill face a barrier
Service	Streets		Sector Affected			NORT	HEAST	
Activity #	481406		Ward(s)			5		
Project Identifier (PID)	3000619		Citizen Priority			A City	That Moves	
Business Unit	TRANSPORTAT INFRASTRUCTU	-	Capital Investment	Plan Alignmen	t		nunity Investmentructure	ts.Growth
Department	TRANSPORTAT	ION	City Resilience Fra	mework Dimen	sion	Infrast	tructure and Ecos	systems
Service Type	Enhanced		City Resilience Fra	mework Driver		Provid	les reliable comn	nunication &
Investment Category	Project -A Project investment that is delivered and evits own merit and defined scope; coschedule resulting substantially imp	is planned- valuated on id has a well- cost and ing in new or					funding sources	
		Total	2019	2020	2021		2022	2023+
Recommended Funding	g Allocation (\$)	8,500,00	0 0	2,000,000	3,000,00	00	3,500,000	0
Funding Status		For Approva	I					
Operating Impact Of Ca	apital	No						
Economic Impacts of 2 Recommended Funding		Gr	oss Output (\$)	Gross Domestic Produ (\$)		ıct	Income (\$)	Employment (Person-Years)
		1	5,818,976	6,444,481			4,086,178	48
MUGS		Maintenance		Upgrade			Growth	New Services
			0%		0%		100%	0%
Triple Bottom Line – Social This project aligns with a num connection accross Stoney Tr – by providing affordable mob Achieve a balance of growth be growth in approved land use a area.				d a vital link to co d universal acce en established an	nnecting cor ss for all.• Ke d greenfield	nmuniti ey Dire comm	ies. • CTP Trans ction for Land Us unities by allowin	portation Goal #3 se Mobility #1: ng for continued
Triple Bottom Line – Er			aligns with TBL policies including: • Reduced traffic delays translates to a reduction in degreenhouse gas (TBL & 'GHG Emission Reduction' 2020 Objective).					
Triple Bottom Line – Ed	de 80 pl	This project aligns with a number of policies including: Transportation Goal #5: Promote economic development by ensuring the efficient movement of goods and workers by improving corridor access to 80 Avenue NE and the adjacent communities. • CTP Transportation Goal #1 – by aligning transportation planning and infrastructure investment with City and regional land use directions and implementation strategies.					ridor access to g transportation	
Expected Key Benefits	A in ot er Ci	ve NE and M terchanges of herwise will b nergency, fire ty develop pr	E has interchanges cKnight Blvd NE eas hay. The extension of e separated through transit and pedestrosperous and inspiritervices to the Citizer	t of Stoney Trail I 80 Ave NE will c a barrier (Stoney ans. Provision of ng neighbourhood	NE will have onnect the to Trail NE) and access and	access wo adja nd will p mobilit	s restrictions at the acent communitied provide easy accept to the resident	he two es which cess to s will help The

Executive Summary	Memorial Dr	rive is the only r	najor	roadway that co		gary with the	e City (Centre. Currently	
•	ends at the w major arterial one bridge st over the Rota	rest side of Stor connection to t ructure over CN ry Mattamy Gre	ney Tr the tra I Rail eenwa	ail. The extensi insportation net tracks, another ay on the east s	on of Memorial E work of the future bridge structure	Drive E over e developme across Stor ail SE. The t	Stone ent of E ey Tra	y Trail to the eas Belvedere. The e	t will serve as a xtension includes rd bridge structure
Document Date	2018/09/11								
Service	Streets		Sector Affected				SOU	THEAST	
Activity #	481406		Ward	d(s)			9, 10		
Project Identifier (PID)	3000618		Citiz	en Priority			A Cit	y That Moves	
Business Unit	TRANSPORTA INFRASTRUC		Capi	tal Investment	Plan Alignmen	t		munity Investme	nts.Growth
Department	TRANSPORTA	ATION	City	Resilience Fra	mework Dimen	sion	Infras	structure and Eco	osystems
Service Type	Enhanced		City	Resilience Fra	mework Driver		Provi	des reliable com lity	munication &
Investment Category	Project -A Proj investment that delivered and delivered and delivered and delivered and defined scope; schedule result substantially in	t is planned- evaluated on nd has a well- cost and		Capital Infrastructure Investment Principles			Optimize financing and funding sources		
		Total		2019	2020	2021		2022	2023+
Recommended Fundin	g Allocation (\$) 2,000,00	00,000		1,000,000	1,000,0	00	0	0
Funding Status		For Approva	al						
Operating Impact Of Ca	apital	No							
Economic Impacts of 2 Recommended Fundin		Gr	Gross Ou (\$)		Gross Domestic Prod (\$)		ıct	Income (\$)	Employment (Person-Years
		2	2,746,	863	1,727,898			1,136,089	11
MUGS		Ma	ainter	nance	Upgrade			Growth	New Services
			0%		0%		100%	0%	
Triple Bottom Line – So		Support Memo connecting con access for all.• and greenfield	rial Dr nmuni Key D comm	rive's role as a c ties. • CTP Trar Direction for Lan nunities by allow	critical network consportation Goal and Use Mobility #	onnection ac #3 – by prov 1: Achieve a d growth in a	ccross viding a a balan approv	ed land use area	a vital link to
Triple Bottom Line – Environmental This project traffic delay		This project sup traffic delays tra	roject support Memorial Drive flyover project, which aligns with TBL policies including: • Reduced delays translates to a reduction in emissions and greenhouse gas (TBL & 'GHG Emission etion' 2020 Objective).						
Triple Bottom Line – Ed	This project sup Transportation and workers by	roject support Memorial Drive flyover project, which aligns with a number of policies including: cortation Goal #5: Promote economic development by ensuring the efficient movement of goods brikers by improving corridor access to Memorial Drive and the adjacent communities. • CTP cortation Goal #1 – by aligning transportation planning and infrastructure investment with City and college upon the properties and implementation strategies.							

regional land use directions and implementation strategies. Stoney Trail NE has interchanges at16 Ave NE and 17 Ave SE. Only 17 Ave SE provides a low capacity access to the City Centre whereas 16 Ave bypasses the City Centre to the north. Future developments (like Belvedere) between 16 Ave NE and 17 Ave SE east of Stoney Trail NE will have access restrictions at the two interchanges only. The extension of Memorial Drive E will connect the two adjacent communities which otherwise will be separated through a barrier (Stoney Trail NE) and will provide easy access to emergency, fire, transit and pedestrians. Provision of access and mobility to the residents will help The City develop prosperous and inspiring neighbourhoods as well as provide cost effective and efficient transportation services to the Citizens

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Expected Key Benefits

Stoney TR-Centre ST Upgrade

Executive Summary	This project consists of the the completion of the existing Stoney Trail and Centre Street interchange by a widening of the Centre Street bridge from 3 lanes to 6 lanes across Stoney Trail. In addition to maintaining a free flow condition along Stoney Trail, the additional capacity provided will support land development north of Stoney Trail.
Document Date	2018/09/11

Service	Streets	Sector Affected	NORTH
Activity #	481406	Ward(s)	3
Project Identifier (PID)	3000402	Citizen Priority	A City That Moves
Business Unit	TRANSPORTATION INFRASTRUCTURE	Capital Investment Plan Alignment	Community Investments.Growth Infrastructure
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Enhanced	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Optimize financing and funding sources

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	20,000,000	1,000,000	10,000,000	9,000,000	0	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years)
	37,221,121		15,163,485		9,614,537	113
MUGS	Maintenance		Upgrade		Growth	New Services
	0%		0%		100%	0%

Triple Bottom Line – Social	Social benefits derived from a reduction in travel times along Centre Street.
Triple Bottom Line – Environmental	Reduced traffic delays translates to a reduction in emissions and greenhouse gas .
Triple Bottom Line – Economic	The project increases the capacity of the Centre Street interchange on Stoney Trail, optimizing the performance of existing infrastructure, and contributing to ensuring that an adequate supply of appropriately zoned land is available for development.
Expected Key Benefits	 Reduced traffic delays translates to a reduction in emissions and greenhouse gas (TBL & 'GHG Emission Reduction' 2020 Objective) improve quality of service along Center Street by a reduction in travel times (CTP 3.6)

Streetlight - Upgrade & Maintenance

Executive Summary	This program funds the upgrade and preventative maintenance of the existing street light network including replacing aging or critical system components to meet safety requirements. The program is related to lifecycle upgrades which includes critical poles and lighting quality program to address poorly lit areas.							
Document Date	2018/09/11							
Service	Streets	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST					
Activity #	432200	Ward(s)	All Wards					
Project Identifier (PID)	3000403	Citizen Priority	A City That Moves					
Business Unit	ROADS	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation					
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems					
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility					
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets					

	Total	2019	2020	2021	2022	2023+	
Recommended Funding Allocation (\$)	20,000,000	5,000,000	5,000,000	5,000,000	5,000,000	0	
Funding Status	For Approval	-or Approval					
Operating Impact Of Capital	Yes						
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years	
	37,221	1,121	15,1	63,485	9,614,537	113	
MUGS	Mainte	nance	Up	grade	Growth	New Services	
	50%		50%		0%	0%	

Triple Bottom Line - Social	Safety and resiliency, ensuring communities and neighbourhoods are safe, resilient, and supportive. Incorporates opportunities for recreational and leisure pursuits that are appropriate for a diverse population. Improved safety for vulnerable users.
Triple Bottom Line – Environmental	Reducing energy use and climate change impacts Incorporates energy-efficiency or renewable energy where possible to decrease long-term environmental impacts.
Triple Bottom Line – Economic	Promoting an environment conducive to attracting, retaining and nurturing businesses and supporting goods movement. Infrastructure is provided in a manner that is affordable and cost-effective.
Expected Key Benefits	The benefits of roadway lighting are to enhance pedestrian, driver and cyclist's safety and comfort and to increase night time personal and business activities. The City of Calgary follows the Transportation Association of Canada to provide roadway lighting on all classes or roadways within the City of Calgary.

Integrate coordinate and optimize The

City's investment

Subdivision Construction

This program funds the City's share of development charges in all areas of the City. This includes boundary payments

	and other non recoverab resiliency. This capital pr	ele payments to developers and the City's share in cogram also funds the acquisition of road right-of-vay dedications and construction of roadways when	raising roads above the flood plain for vay for minor widenings, fees for legal survey
Document Date	2018/09/11		
Service	Streets	Sector Affected	EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST
Activity #	433160	Ward(s)	1, 2, 3, 5, 9, 12, 14, 13, 6
Project Identifier (PID)	3000404	Citizen Priority	A City That Moves
Business Unit	ROADS	Capital Investment Plan Alignment	Community Investments.Growth Infrastructure
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility

Capital Infrastructure Investment Principles

Program - A Program is a grouping of projects that are

related and benefit from being planned and managed

together

· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			*		
	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	2,900,000	725,000	725,000	725,000	725,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years
	5,397	,063	2,19	98,705	1,394,108	16
MUGS	Mainte	nance	Up	grade	Growth	New Services
	0%	6	0%		100%	0%

Triple Bottom Line – Social	Safety and resiliency, ensuring communities and neighbourhoods are safe, resilient, and supportive.
Triple Bottom Line – Environmental	Ensuring land stewardship and protecting water resources.
Triple Bottom Line – Economic	Infrastructure is provided in a manner that is affordable and cost-effective.
Expected Key Benefits	A safe transportation network network will improve safety and the quality of life for citizens of Calgary.

C2018-1158 Attachment 10 ISC: UNRESTRICTED

Executive Summary

Investment Category

Traffic Signals Ped Corridors Lifecycle

Evacutiva Summari				tmonts for the C					anala nadastrian
Executive Summary	signals and re intersections	elated infrastrud to improve safe such as poles,	cture. ety, ac	This program al cessibility and e	so funds infrastru fficiency for use	ucture imprors rs of the net	vemer work. 7	ncludes traffic signts to existing signers of the contract of	ical signal
Document Date	2018/09/11								
Service	Streets		Sect	Sector Affected			CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST		
Activity #	432260		War	d(s)			All Wa	ards	
Project Identifier (PID)	3000406		Citiz	en Priority			A City	That Moves	
Business Unit	ROADS		Capi	ital Investment	Plan Alignment	t		eted Theme Investransportation	stments.Transit
Department	TRANSPORT	ATION	City	Resilience Fra	mework Dimens	sion	Infras	tructure and Ecc	systems
Service Type	Essential		City	Resilience Fra	mework Driver		Provid mobil	des reliable comi ity	munication &
Investment Category	Annual Investr A recurring pro on maintaining current in-serv for ongoing pu similar assets	ogram focused or upgrading ice assets or	Capi	Capital Infrastructure Investment Principles			Integrate coordinate and optimize The City's investment		
		Total		2019	2020	2021		2022	2023+
Recommended Fundin	g Allocation (\$) 14,400,0	00	3,600,000	3,600,000	3,600,00	00	3,600,000	0
Funding Status		For Approva	al						
Operating Impact Of Ca	apital	No							
Economic Impacts of 2 Recommended Fundin		Gross Output (\$)		Gross Domestic Product (\$)		ıct	Income (\$)	Employment (Person-Years)	
		2	26,799	,207	10,917,709			6,922,466	82
MUGS		Ma	ainter	nance	Upgrade			Growth	New Services
			100	%	0%			0%	0%
Triple Bottom Line – So	ocial							ignals to include th The City's Acc	
			raffic signals use LED technology to reduce overall energy consumption. Incorporates energy-efficiency renewable energy where possible to decrease long-term environmental impacts.						
Triple Bottom Line – Ed		Improve goods movement – Calgary has improved goods movement reliability along the Goods Movement Network. Ensures long-term economic development and fiscal health by managing assessively and strategically investing in infrastructure to optimize functioning and service.							
Expected Key Benefits		The expected benefits of this program are increased resiliency of the signal system by reducing the number of end of life assets and increase the number of signals with reduced maintenance expectation. The promotion of walking as a choice for Calgarians by upgrading signals to include pedestrian countdown signals and audible pedestrian signals and the increased resiliency of the traffic system by reducing the number of end of life assets.				nce expectations. destrian			

Various Street Improvements

Executive Summary	The program provides for the design and construction of various small to medium roadway, transit, active modes, and other improvements in all areas of the City. Improvements can be done for other Business Units that do not have the design or construction implementation resources to fulfill their objectives such as Transportation Planning, Transit, Parks, Facilities and various City Partners.							
Document Date	2018/09/11	.018/09/11						
Service	Streets	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST					
Activity #	433095	Ward(s)	All Wards					
Project Identifier (PID)	3000410	Citizen Priority	A City That Moves					
Business Unit	ROADS	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation					
Department	TRANSPORTATION	City Resilience Framework Dimension	Infrastructure and Ecosystems					
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility					
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Integrate coordinate and optimize The City's investment					

	Total	2019	2020	2021	2022	2023+	
Recommended Funding Allocation (\$)	2,000,000	500,000	500,000	500,000	500,000	0	
Funding Status	For Approval	or Approval					
Operating Impact Of Capital	Yes						
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)	
	3,722	112	1,51	16,348	961,454	11	
MUGS	Mainter	Maintenance		Upgrade		New Services	
	0%))	100%		0%	0%	

Triple Bottom Line – Social	Design compliant with The City's Access Design Standards. Time saved from reduced delay and travel times can be spent in more social and recreational activities. Provision of active modes infrastructure will encourage healthier forms of transportation choices.
Triple Bottom Line – Environmental	Reduced delay and travel times result in a decrease of fuel consumption and emissions. Implementation of active modes and transit oriented projects promotes a more environmentally sustainable transportation system.
Triple Bottom Line – Economic	Promoting an environment conducive to attracting, retaining and nurturing businesses and supporting goods movement. Lower cost improvements that defer the need for larger capital improvements allows the City to allocate money to other programs/initiatives.
Expected Key Benefits	The expected benefits of this program are: Improved capacity, connectivity, safety, improved active modes, citizen satisfaction, reduced maintenance costs.

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Taxi, Limousine & Vehicles-for-Hire

CCS LTS Equip Lifecycle

Executive Summary	Taxi, Limousine & Vehicles-for-Hire needs to lifecycle equipment including radios, mobile data terminals, communications equipment(e.g. GPS, modems) and other various assets. As equipment ages, maintenance costs can rise above any return on investment, without a comprehensive mitigation strategy. The equipment lifecycle program proactively manages assets through their lifecycle to maximize investments while ensuring their performance in supporting citizen facing services, and providing officer life safety. This equipment must be lifecycled appropriately for CCS to respond effectively to calls for service. This equipment enables The City to meet Solicitor General's mandate from 2018 Lazenby fatality inquiry to monitor Peace Officers.
Document Date	2018/09/11

Service	Taxi - Limousine & Vehicles- for-hire	Sector Affected	Multiple Sectors
Activity #	480403	Ward(s)	All Wards
Project Identifier (PID)	3000181	Citizen Priority	A City That Moves
Business Unit	CALGARY COMMUNITY STANDARDS	Capital Investment Plan Alignment	Other.Other
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

l ,						
	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	320,000	80,000	80,000	80,000	80,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (. •		estic Product (\$)	Income (\$)	Employment (Person-Years)
	595,5	538	242	2,616	153,833	2
MUGS	Mainte	nance	Up	grade	Growth	New Services
	100	%	(0%	0%	0%

Triple Bottom Line – Social	This equipment supports operations, ensures organizational resilience to equipment failures and officer life safety. It supports equipment to care for animals seized or recovered by CCS. As such this program supports safe cities and strong communities.
Triple Bottom Line – Environmental	N/A
Triple Bottom Line – Economic	These investments improve public safety and resilience, thereby creating economic security, and creating a city where citizens and business can feel safe to live and invest.
Expected Key Benefits	Reliable equipment for citizen facing services Improved officer life safety Reliable radio communications Reduced maintenance efforts and costs Enables The City to meet Solicitor General's mandate from 2018 Lazen by fatality inquiry to monitor Peace Officers

Livery Technology

Executive Summary	electronic scanned documer	ousine driver documentation to an electronic systems. Develop and implement an online-enabled apor municipal driver licenses through an online systems.	plication platform that allows Taxi and
Document Date	2018/09/11		
Service	Taxi - Limousine & Vehicles- for-hire	Sector Affected	Internal / The City of Calgary
Activity #	462260	Ward(s)	
Project Identifier (PID)	3000239	Citizen Priority	A City That Moves
Business Unit	CALGARY COMMUNITY STANDARDS	Capital Investment Plan Alignment	Other.Other
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	500,000	100,000	100,000	150,000	150,000	0
Funding Status	For Approval					·
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	683,5	599	43	6,251	319,172	3
MUGS	Mainter	nance	Up	grade	Growth	New Services
	0%	6	10	00%	0%	0%

Triple Bottom Line - Social	Developing online application capabilities for taxi and limousine driver licensing will result in social inclusion by creating multiple application options for customers including online and in person functions.
Triple Bottom Line – Environmental	Technological advancements contribute to Calgary's environmental sustainability by moving licensing functions online and reducing energy consumption stemming from in person visits and paper use.
Triple Bottom Line - Economic	Online application options contribute to the promotion of Calgary's economic well-being by advancing technological efficiencies.
Expected Key Benefits	To streamline the licensing process for Taxi and Limousine driver applicants and allow online/electronic options to apply and renew for livery driver licenses. To eliminate the need for Taxi and Limousine driver applicants to attend the LTSlicensing office.

		OneC	ity	Coord	RMS -	· LTS			
Executive Summary Document Date	intelligence on safety interaction disorder related have reliable, cenforcement of	emerging cor ons in the con I to increased omplete and municipal by	mmunity mmunity d opioid consiste laws an	trends. Curre The City is fause, highlightient information d provincial st	nt systems are of acing emerging on the important in This program in atutes, for safe a	disparate, lin challenges do ce of collabo s expected to and inspiring	niting T ue to the ration to pron neigh	he City's overall he economic dov	vnturn, and social blic safety bodies and proactive funding for this
Document Date	2018/09/11								
Service	Taxi - Limousine for-hire	& Vehicles-	Sector	r Affected			Multip	ole Sectors	
Activity #	480404		Ward(s)			All Wa	ards	
Project Identifier (PID)	3000543		Citize	n Priority			A City	/ That Moves	
Business Unit	CALGARY COM STANDARDS	MUNITY	Capita	I Investment	Plan Alignmen	t	Other	:Other	
Department	COMMUNITY SE	ERVICES	City R	esilience Fra	mework Dimen	sion	Infras	tructure and Eco	systems
Service Type	Essential		City R	esilience Fra	mework Driver		Ensu	res continuity of o	critical services
Investment Category	Program - A Progrouping of proje related and bene being planned ar together	Capita	l Infrastructu	re Investment I	Principles		ate coordinate a investment	nd optimize The	
		Total		2019	2020	2021		2022	2023+
Recommended Fundin	g Allocation (\$)	300,000	0	0	200,000	100,00	0	0	0
Funding Status		For Approva	al						
Operating Impact Of Ca	apital	Yes							
Economic Impacts of 2 Recommended Fundin		Gross Output (\$)		Gross Domestic Product (\$)		ıct	Income (\$)	Employment (Person-Years)	
		558,317		227,452			144,218	2	
MUGS		Maintenance		Upgrade			Growth	New Services	
		0% 100%			0%	0%			
Triple Bottom Line – So	This program will create a common platform for multiple service lines across risks, and collect intelligence on emerging community trends. Current system The City's overall view on public safety interactions in the community. The City challenges due to the economic downturn and social disorder related to increate the importance of collaboration and ensuring public safety bodies have reliable information. This program is expected to promote coordinated and proactive bylaws and provincial statutes, for safe and inspiring neighborhoods. This system will enable officers and administration to track public safety related locations in the city, including parks and open spaces. With the growing trend homelessness in our city, we are seeing increased impact on the environment and drug paraphernalia. There is also a negative environmental impact to out the watercourse or city parks, due to illegal encampments were vegetation is are large amounts of discarded materials including chemicals.			ystems are disparted in creased opioid reliable, complet in creased activity and trend in opioid uponment through of to our city infrast	urate, which limits emerging duse, highlighting e and consistent of municipal at specific usage and liscarded needles tructure, whether				
economic secu City's bylaws c		rity, and reate co	d creating a cit ommunity stan	y where citizens	and busine effectively	ss can	mmunity safety, feel safe to live a ed, signal to busi		
Expected Key Benefits	community issued to econom information on and businesses scenes for efficient linguity) to track mitigate threats			community risturn, opioid us ions with citized investigations and safety, (g) la risks in common life safety, (e)	sk assessments, se), (d) Officers fens, animals, bus, (f) Officers have Delivers on Solid nunity and comm	(c) Proactive rom multiple sinesses, (e) we known relicitor Genera nunicate the enforcement	e mana e service) Coord evant i l's man m in re t of mu	al time to peace inicipal bylaws ar	al disorder (e.g. and share ns with citizens e attending Lazenby Fatality officers, to

Environmental Programs

Executive Summary Document Date	opportunities and trends ass change risks including: impa reductions and energy mana management of contamination legislative requirements and managing energy, climate ris	les a corporate-wide approach to City of Calgary ociated with the delivery of City services. Climate cts from severe weather on infrastructure, people gement. It further supports citizens and ICI orgain risks of City-owned land and environmental erassessment of risks using science-based analysisk reduction and GHGs are met. Investment in access of the environmental programs for both the	e resilience aims to address climate e and nature, greenhouse gas (GHG) inizations through climate resilience, ducation. This capital addresses evolving is, to develop cost-effective solutions to daption, mitigation and contamination
		,	
Service	Environmental Management	Sector Affected	Multiple Sectors

Service	Environmental Management	Sector Affected	Multiple Sectors
Activity #	410713	Ward(s)	All Wards
Project Identifier (PID)	3000241	Citizen Priority	A Healthy & Green City
Business Unit	ENVIRONMENTAL & SAFETY MGMT	Capital Investment Plan Alignment	Other.Other
Department	UTILITIES ENVIRON PROTECTION	City Resilience Framework Dimension	Leadership and Strategy
Service Type	Essential	City Resilience Framework Driver	Promotes leadership & effective management
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Promote the well-being of communities- environment and economy

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,665,000	545,000	540,000	335,000	245,000	0
Funding Status	For Approval			'		
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (estic Product (\$)	Income (\$)	Employment (Person-Years
	2,370,253		1,471,745		1,019,791	13
MUGS	Mainte	nance	Up	grade	Growth	New Services
	309	%	!	5%	25%	40%

Triple Bottom Line – Social	The environment and climate change are among the most important issues related to the quality of life of citizens. The City is proactive in supporting citizen and business actions to manage energy and reduce greenhouse gas emissions, while mitigating and adapting to the impacts of climate change. Capital investment is needed to build climate resilience and specifically support the Climate Change Resilience Strategy. The 100 Resilient Cities framework was established in 2017 as a commitment and approach to reducing climate risks and risk exposure as well as guiding the City towards a low carbon future. In addition, capital investment supports the management of contaminated sites, which allow The City to both address environmental risks and develop our communities.
Triple Bottom Line – Environmental	Calgary has experienced changes in climate in recent decades and it is expected that this will continue with greater frequency and impact. This has a direct impact on the quality of life for citizens. Adverse environmental and climate conditions are expected to continue leading to extreme weather events creating additional hazards to the city, including: more storms, drought, and flooding. These hazards will have a direct impact on City resources (e.g. roads, water, infrastructure). In additon, climate change may lead to negative impacts on agriculture, biodiversity, and ecosystems. Finally, it is important to continue investing in addressing the risks associated with contaminated sites, in order to support the continued development of our community.
Triple Bottom Line – Economic	Financial impacts to The City of Calgary from adverse environmental and climate change conditions will be substantial and include damage to infrastructure, productivity losses and a lower quality of life for its citizens. Capital investment in climate resilience will facilitate in the reduction of climate risks, and reduce liability costs. For contaminated sites, liability costs are significantly decreased with clear accountability for the development, operation and effectiveness of the overall system with regards to the regulation and management of these sites.

C2018-1158 Attachment 10

Expected Key Benefits

Citizens rely on The City to ensure that both our organization and community are resilient to adverse environmental and climate change impacts. This capital program provides: • The Corporation with information and data through technology solutions. It supports the implementation of the Climate Change Resilience Strategy. And, it will also facilitate reporting and reduction in environmental risks related to meeting evolving legislation. • Improved access to digital data and information to inform climate resilience and environmental risk decision-making. • Access to funding from other levels of government, supporting innovation and emerging energy management and GHG emission reduction solutions. • Tools to assess and reduce environmental risks, aimed at reduced adverse impacts within City operations and the community, while continuing to ensure high quality services.

Parks & Open Spaces

Asset Management System LC

Executive Summary	This business case is requesting \$574,000for the lifecycle/replacement of Oracle Work & Asset Management (WAM)System & ParcMap. Parks currently uses Oracle WAM 1.9x to track all work activities and related costs for asset management. The support for WAM will end in July 2021. ParcMap is an internet based view of Parks GIS whose support for Silverlight ends October 2021. Both of these software tools are core asset management tools used by Parks staff daily. These tools provide information for operating, cost tracking, budgeting and forecasting, benchmarking, and overall asset management. Identifying and implementing a replacement solution is critical to all Parks operations. This program will focus on a) full lifecycle of Oracle WAM with either WAM version 2.x or replacement of WAM with another asset management software, b) replacement of ParcMap with a new ESRI ArcGIS Online tool.
Document Date	2018/09/11

Service	Parks & Open Spaces	Sector Affected	Internal / The City of Calgary, Multiple Sectors
Activity #	423440	Ward(s)	All Wards
Project Identifier (PID)	3000510	Citizen Priority	A Healthy & Green City
Business Unit	CALGARY PARKS	Capital Investment Plan Alignment	Community Investments.Parks and Public Spaces
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Economy and Society
Service Type	Essential	City Resilience Framework Driver	Promotes Cohesive & Engaged Communities
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	574,000	574,000	0	0	0	0
Funding Status	For Approval	or Approval				'
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (\$			estic Product (\$)	Income (\$)	Employment (Person-Years
	916,760		431,043		306,990	4
MUGS	Mainte	nance	Up	grade	Growth	New Services
	100	0%	(0%	0%	0%

Triple Bottom Line - Social	Information provided by Calgary Parks asset management system provides the informational basis for sound management and provision of Calgary parks and programs.
Triple Bottom Line – Environmental	Provides the base informational data to sustainably manage Calgary Parks resources including ornamental and natural landscapes, urban forest, and hard infrastructure and water used for irrigation.
Triple Bottom Line – Economic	Optimizes resources by providing a fully mobile integrated asset management solution
Expected Key Benefits	•Enhanced usability with a mobile asset management solution •Enhanced ability to track work done to assets and the associated labour, materials, and equipment costs •Potential process & resource efficiencies with a fully mobile and integrated asset management solution

									hment 10
	Е	au Cl	air	e Plaza	a_Prom	enad	le		
Executive Summary									
Document Date	Plaza is a publi public infrastruction result in signification undergoing floor adding an urba	c space of greature projects cant changes of mitigation of design that a pure engine	eat sign for flow to the work. Will in the ering	gnificance for lo ood resiliency an area. The pron This capital ask tegrate public s flood solution ti	nd a future Greer nenade which ex	l Calgarians nline station tends from the ding from the ctional infra	s as we , along the plaa ne prov astructu	Il as internationa with private dev za to Reconciliat rince for the flood ire. Not providing	al tourists. Multiple elopments will ion Bridge will be d barrier work, by g this funding
Service	Parks & Open Sp	Parks & Open Spaces					CEN	ΓRE	
Activity #	423440 \		War	d(s)			7		
Project Identifier (PID)	3000255		Citizen Priority				A Healthy & Green City		
Business Unit	CALGARY PARKS		Capital Investment Plan Alignment			Community Investments.Parks and Public Spaces			
Department	COMMUNITY SERVICES		City Resilience Framework Dimension			Econ	omy and Society	,	
Service Type	Essential	sential		City Resilience Framework Driver				otes Cohesive & nunities	Engaged
Investment Category	Program - A Progrouping of projected and benebeing planned artogether	ects that are efit from	Capi	Capital Infrastructure Investment Principles Integrate coordinate and City's investment					and optimize The
		Total		2019	2020	2021		2022	2023+
Recommended Fundin	g Allocation (\$)	11,834,1	50	546,000	3,461,150	3,999,0	00	3,828,000	0
Funding Status		For Approva	al						
Operating Impact Of C	apital	No							
Economic Impacts of 2019-2022 Recommended Funding		Gross (Gross Domestic Prod (\$)		luct Income (\$)	Employment (Person-Years)	
		2	2,024	,016	8,97	2,348		5,688,993	67
MUGS		M	ainter	nance	Upg	grade		Growth	New Services
			100	%	0%			0%	0%
Triple Bottom Line – S	ocial	Accessibility	to higi	h-quality parks	supports the over	all physical	, menta	al well-being and	I enjoyment of

Necommended Funding Anocation (\$, 11,034,130	340,000	3,401,130	3,333,000	3,020,000	0
Funding Status	For Approval					·
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (estic Product (\$)	Income (\$)	Employment (Person-Years)
	22,024	4,016	8,97	72,348	5,688,993	67
MUGS	Mainte	nance	Up	grade	Growth	New Services
	100)%		0%	0%	0%
	Accessibility to hig Calgarians. This pro the changing citizen	ogram supports s needs. Since	the redevelopme parks are impor	ent of parks in esta tant locations for	ablished communi various social gat	ities to respond to herings, all parks

	Calgarians. This program supports the redevelopment of parks in established communities to respond to the changing citizens needs. Since parks are important locations for various social gatherings, all parks assets would support parks functioning in this role, as well as ensure public safety, park protection and enhance parks visitors' experience.
Triple Bottom Line – Environmental	Various park redevelopment projects are in parks that are in need of life cycling and improvement. Redesign and redevelopment will allow for upgrades and landscape improvements in this parks which may lead to savings in maintenance, energy and water conservation. Protection of parks assets directly supports protection of parks and the natural environment in Calgary.
Triple Bottom Line – Economic	Many of the Calgary parks redevelopment projects are in Calgary's most successful and popular mixed use communities. Improvements to these park will help support continued investment in the areas and help sustain (the attraction of) residents and businesses. Eau Claire Plaza is adjacent to current City of Calgary real estate land holdings that are currently under final negotiations. Detail design will provide a concrete approach to the area and could accelerate redevelopment to the area Proper management of parks assets during their lifecycle ensures effective and efficient funding and better return on investment. Attractive and well-managed Calgary parks are a highlight for city visitors, which may bring significant economic benefit to our city.
Expected Key Benefits	This work will allow an orderly and effective investment in the area. The benefits include: Higher investment value; Leveraging other investments in the area – maximizing value of previous capital

investment value; Leveraging other investments in the area – maximizing value of previous capital investments; Enhancing the market redevelopment; Enhanced community and city amenity; Private public partnership; Reduction in throw away costs; Attraction of investment and people Informed investment decisions; Comprehensive plans/design for the future park development supported by internal and external stakeholders; Accessibility to high quality park spaces for high priority areas; Improved connectivity; Improved safety in the park; Better visibility in the park; Reduced maintenance costs; Reduced 311 complaints; Improved service delivery.

Infrastructure Lifecycle

Executive Summary	This business case is requesting \$17.5Million for the Parks Infrastructure Lifecycle Program which annually addresses the removal, replacement and upgrade of a variety of different assets in existing parks throughout Calgary. The Parks Infrastructure Lifecycle program funds projects for assets such as sports fields, tennis courts, playgrounds, furniture, tree vault planting, signage, hard surfaces (parking lots, promenades, plazas, lay-by lanes etc.), electrical, lighting, barriers(fences, gates, guardrails, etc.), irrigation systems and water management control systems, miscellaneous infrastructure (fire pits, basketball nets, bicycle racks, etc.) in all parks, city-wide. The Parks Infrastructure Lifecycle program supports various park improvements city-wide to optimize the existing parks network to ensure Calgary Parks continues to meet the needs of citizens now and in the future.
Document Date	2018/09/11

Service	Parks & Open Spaces	Sector Affected	Multiple Sectors
Activity #	423440	Ward(s)	All Wards
Project Identifier (PID)	3000207	Citizen Priority	A Healthy & Green City
Business Unit	CALGARY PARKS	Capital Investment Plan Alignment	Community Investments.Parks and Public Spaces
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Economy and Society
Service Type	Essential	City Resilience Framework Driver	Promotes Cohesive & Engaged Communities
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	17,500,000	3,000,000	4,000,000	6,500,000	4,000,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	Output		estic Product (\$)	Income (\$)	Employment (Person-Years)
	28,844	,839	13,1	61,848	8,475,094	91
MUGS	Mainter	nance	Up	grade	Growth	New Services
	100	%	(0%	0%	0%

Triple Bottom Line - Social	Since parks are important locations for various social gatherings, all parks assets would support parks functioning in this role, as well as ensure public safety, park protection and enhance parks visitors' experience.
Triple Bottom Line – Environmental	Protection of parks assets directly supports protection of parks and the natural environment in Calgary.
Triple Bottom Line – Economic	Proper management of parks assets during their lifecycle ensures effective and efficient funding and better return on investment. Attractive and well-managed Calgary parks are a highlight for city visitors, which may bring significant economic benefit to our city. The Project will support improved quality of life with recreational and environmental features that contribute to attracting and retaining professionals; provide better cost performance of natural areas; reduced potential risk of significant post-disaster investments to protect infrastructure from natural disasters; and work collaboratively across City Business Units.
Expected Key Benefits	Improved public amenities in all areas Improved public safety and aesthetics Reduced maintenance costs Reduced 311 complaints Improved service delivery Better safety and slope stability for Parks infrastructure Mitigation of legal risks

	Le	everaç	ged	l Partn	er Prog	gram	Γ1	Allaoi	inent 10
Executive Summary Document Date	priority). This propen spaces in synergies with business units, relationships aronly one busines	his business case is requesting \$2 Million for the Parks & Open Space – Leveraged Partners Program-Tier 1 (high riority). This program supports the service of planning, building, maintaining and stewarding accessible parks and open spaces in projects where opportunities exist to leverage external resources, funding sources, and/or collaborative ynergies with other business units within the corporation. Collaborative opportunities to work with between city usiness units, community partners and other non-profit or specialty organizations not only strengthen civic elationships and alliances, but increases community resiliency and often results in outcomes that exceed beyond what only one business unit or group can accomplish alone. Projects identified in this business case include: Somerset pray Park Lifecycle (Ward 13) & Bow to Bluff Park Redevelopment (Ward7).							
Service	Parks & Open S _l	paces	Secto	or Affected			Multip	le Sectors	
Activity #	420300	420300 W		(s)			7, 13		
Project Identifier (PID)	3000286		Citize	en Priority			A Hea	Ilthy & Green Cit	у
Business Unit	CALGARY PARI	K S	Capit	al Investment	Plan Alignmen	t		nunity Investmer	ts.Parks and
Department	COMMUNITY SI	ERVICES	City F	Resilience Fra	mework Dimens	sion	Econo	omy and Society	
Service Type	Essential		City F	Resilience Fra	mework Driver			otes Cohesive & nunities	Engaged
Investment Category	Program - A Progrouping of proje related and bene being planned ar together	ects that are assets efit from				hance the long-term value of City sets			
		Total		2019	2020	2021		2022	2023+
Recommended Fundin	g Allocation (\$)	2,000,00	2,000,000 500,000		1,000,000	1,000,000 500,000		0	0
Funding Status		For Approva	al						
Operating Impact Of Ca	apital	No							
Economic Impacts of 2 Recommended Fundin		Gross Output (\$)		Gross Domestic Produc (\$)		ıct	Income (\$)	Employment (Person-Years)	
		:	3,722,1	112	1,51	6,348		961,454	11
MUGS		Ma	ainten	ance	Upgrade			Growth	New Services
			100% 0%				0%	0%	
Triple Bottom Line – So	Calgarians. This program supports the redevelopment of parks in established communities to respond to the changing citizens needs. Since parks are important locations for various social gatherings, all parks assets would support parks functioning in this role, as well as ensure public safety, park protection and enhance parks visitors' experience.					ies to respond to erings, all parks protection and			
Rede may		Redesign and redevelopment will allow for upgrades and landscape improvements in this parks which may lead to savings in maintenance, energy and water conservation. Protection of parks assets directly supports protection of parks and the natural environment in Calgary.							
Triple Bottom Line – Economic Many of the Calgary parks redevelopment projects are in Calgary's most successful an use communities. Improvements to these park will help support continued investment in help sustain (the attraction of) residents and businesses. Proper management of parks lifecycle ensures effective and efficient funding and better return on investment. Attract managed Calgary parks are a highlight for city visitors, which may bring significant econour city.			ed investment in ement of parks a estment. Attractiv	the areas and assets during their re and well-					
Expected Key Benefits This work will gap need in a service Inform supported by previous capit			eas of the contract of the con	the city where r stment decision and external st tments Leverag	new parks and op ns Comprehensivakeholders Com ging other invest	pen space is ve plans/des apletion of un ments in the	s requir sign for nderwa e area E	red to meet expe the future park or y projects – max Enhancing/suppo	: Filling of service cted levels of development kimizing value of orting surrounding I community and

redevelopment Accessibility to high quality park spaces for high priority areas Enhanced community and city amenity Improved connectivity Improved safety in the park Better visibility in the park Reduced

maintenance costs Reduced 311 complaints Improved service delivery

Recreation Opportunities

Facility Lifecycle

Executive Summary	The City's Infrastructure Status Report (ISR) identified that Calgary Recreation has the highest percentage of poor-critical facilities per portfolio compared to other business units. As our facilities continue to age beyond their typical observed lifecycles, preventative maintenance and modernizations are required to prevent service disruptions and improve customer experience. The Facility Development and Enhancement Study (2016) identified deferred lifecycle renewal as a significant threat to Calgary Recreation's service delivery continuum in both the short- and long-term. A maintenance shortfall of \$312.4 million will exist at the end of 2018 across Calgary Recreation facilities (excluding athletic parks and golf courses). Calgary Recreation requires \$51.4 million for design and construction of critical projects to maintain service levels and minimize unplanned service disruptions.
Document Date	2018/09/11

Service	Recreation Opportunities	Sector Affected	Internal / The City of Calgary, Multiple Sectors
Activity #	447885	Ward(s)	All Wards
Project Identifier (PID)	3000511	Citizen Priority	A Healthy & Green City
Business Unit	CALGARY RECREATION	Capital Investment Plan Alignment	Community Investments.Parks and Public Spaces
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Economy and Society
Service Type	Essential	City Resilience Framework Driver	Promotes Cohesive & Engaged Communities
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	51,412,000	13,425,000	25,654,000	6,298,000	6,035,000	0
Funding Status	For Approval				'	
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years)
	81,217	7,839	35,7	47,730	25,859,594	283
MUGS	Mainter	nance	Upç	grade	Growth	New Services
	100	%	()%	0%	0%

Triple Bottom Line - Social	Well-maintained recreation facilities will ensure customers and staff have safe and healthy environments to enjoy social, recreational and employment opportunities.
Triple Bottom Line – Environmental	The scheduled facility service cycle will include some form of building systems upgrades, lowering the facilities' environmental footprint.
Triple Bottom Line – Economic	Lower operating costs due to well-maintained building systems. Lower long term operating costs due to minimized deferred maintenance. Improved citizen experiences and renewed interest in facilities will contribute to cost-recovery.
Expected Key Benefits	Continuity of service for citizens (minimizing unplanned service disruptions, consistent levels of service, quality experiences) Ensure code compliance (Alberta Building Code, Alberta Health Services). Prolonged life of existing assets Improved functionality and operational efficiency Enhanced facility aesthetics, renewing interest in our facilities and improving overall citizen satisfaction.

Repsol Ctr Flood Res Prj

Executive Summary	In June 2013, Repsol Sport Centre experienced a devastating flood that resulted in approximately \$15 million worth of infrastructure damage, \$1 million in business interruption and \$600,000 in contents loss. Even more difficult to quantify is the impact to employees, members and sport partners. This project will complete design in 2019 and construct flood mitigation infrastructure in 2020 to protect the Repsol Sport Centre from a 1:100 year flood event.
Document Date	2018/09/11

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Service	Recreation Opportunities	Sector Affected	CENTRE
Activity #	480353	Ward(s)	11
Project Identifier (PID)	3000507	Citizen Priority	A Healthy & Green City
Business Unit	CIVIC PARTNERS	Capital Investment Plan Alignment	Targeted Theme Investments.Resilience
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides & enhances natural and manmade assets
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Promote the well-being of communities- environment and economy

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,000,000	250,000	750,000	0	0	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product \$)	Income (\$)	Employment (Person-Years)
	1,579	,745	695	5,319	502,988	5
MUGS	Mainte	nance	Upg	grade	Growth	New Services
	0%		100%		0%	0%

Triple Bottom Line – Social	Repsol Sport Centre serves approximately 4,500 each day and 1.5 million people annually. Calgarians rely on the facility for their health, recreation and sporting needs, which in turn encourages opportunities for social and community involvement. In addition to daily use, Repsol Sport Centre hosts more than 50 events annually. As such, the facility extends its social reach nationally and internationally.
Triple Bottom Line – Environmental	The proposed capital project will better prepare Repsol Sport Centre for another flood, should one occur. The Centre will be more resilient as a result.
Triple Bottom Line – Economic	The proposed projects will reduce the possibility of another flood impacting Repsol Sport Centre operations and capital infrastructure. Repsol Sport Centre is a key contributor to Calgary's economy. With over 50 events held at the facility annually, Repsol Sport Centre contributes significantly to Calgary tourism.
Expected Key Benefits	The project will help mitigate the risk of financial loss for infrastructure replacement, business interruption and content replacement caused by potential future flooding. Based on the Stantec report, risk mitigation requires a three pronged approach to address: (1) Overland Flooding (2) Storm water System Backup (3) Groundwater Infiltration.

Vivo Expansion

Executive Summary Vivo is a charitable enterprise on a mission to raise healthier generations. Our roots are in North Central Calgary where we operate The City's regional recreation centre and conduct research and innovation to help people be more active and healthy for life. As a civic partner, The City of Calgary's investment in the Expansion Project as a leasehold improvement is critical to keep pace with the North Central communities' access to recreation, sport and social spaces. uphold our obligations to help The City fulfill its Recreation Master Plan and provide much needed social infrastructure to address gaps for service in North-Central Calgary. To date, Vivo has invested \$2.1 million of its own funds and the Province of Alberta has pledged \$15 million. 2018/09/11 **Document Date**

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Service	Recreation Opportunities	Sector Affected	NORTHWEST
Activity #	480654	Ward(s)	2, 3, 4
Project Identifier (PID)	3000519	Citizen Priority	A Healthy & Green City
Business Unit	CALGARY RECREATION	Capital Investment Plan Alignment	Community Investments.Multi-Service Facilities
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Economy and Society
Service Type	Current	City Resilience Framework Driver	Promotes Cohesive & Engaged Communities
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Promote the well-being of communities- environment and economy

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	22,500,000	7,000,000	7,000,000	8,500,000		
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
MUGS	Mainter	nance	Up	grade	Growth	New Services
	0%	6	10	00%	0%	0%

Triple Bottom Line - Social Vivo operates a North Central regional rec centre and conduct research to help children & families be happy, healthy and active. 34% new Canadians, 44% identify as visible minority. Multi-cultural & generational efforts: SPRY in the Hills, Healthy Living School & Culture Expos. Vivo has had a 40% increase in fee assistance. We play a role in crime prevention by keeping youth involved, safe and healthy so they don't engage in risky behaviours. 65+ community and cultural organizations utilize Vivo as a gathering place. Vivo is part of a large integrated 57-acre master planned site incorporating Notre Dame Catholic High School, a future CSSD Middle School, Calgary Parks Maintenance Depot, park, playing fields and pathway system with a multi-services centre across the street (Calgary Police Service, By-law, Fire, EMS) and is located at the planned future site for north-central transit hub. Vivo is committed to continued environmental stewardship and sustainability as the first recreation facility Triple Bottom Line – Environmental in Alberta to receive LEED™ Gold certification. Expansion will: Increase citizen's interaction with 'green space' and act as a catalyst to engage with nature. Reduce carbon footprint with designs in the mechanical systems, building envelope and structural concrete, electric vehicle parking, bicycle parking, etc. Utilize low flow water fixtures and a Rainwater Harvesting System Concept to reduce portable water use by 44% and wastewater generation by 76%. Utilize High Efficiency Condensing Boilers and an optimized building management system to reduce building energy cost by 29% over the ASHRAE 90.1-2007 baseline. Electric Light Modeling was completed and will allow Vivo to use LED lighting and optimize daylighting. Vivo generates over \$8 million annually in North Central Calgary communities, 61% of Vivo's employees Triple Bottom Line - Economic

live in our catchment. On average we employ 41 FTE, 230 PTE and 34 contractors. We work with local vendors, groups and residents to support entrepreneurial growth and impact. The expansion project adds \$60 million to a City asset for a \$22.5 million investment and continued assumption of no additional

operating requests to The City. The project will add the equivalent of 320 FTE in construction jobs and the equivalent of 60 FTE in jobs post construction. Vivo generates scalable models in communities across the country, including Calgary communities of Haysboro and Coventry Hills. Our research and innovative programs resulted in \$1.8 million research dollars invested in the community and another \$3.5 million in the next 4 years from the Public Health Agency and other funders.

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Expected Key Benefits	Meet current and future social, recreation and sports needs of residents in North-Central Calgary;
	Increase social cohesion and civic engagement through community building; Act as a catalyst for
	Calgarians to be more physically, socially and emotionally healthy at home, school, work and play;
	Maintain organizational sustainability through revenue growth, diversification and social impact.

Stormwater Management

Drainage Escilities 9 Network

	D	rainag	је	Faciliti	es & N	etwo	rk		
Executive Summary Document Date	Program, of wh Program (ACR businesses & tl delivers stormy techniques and and include floo	nich a large por P). Investment he community vater infrastru I standards; Fod barriers in	ortion orts in and cture lood the lo	is funded throug this program red are categorized upgrades in olde resiliency - these	h external grant duce risk of flood as follows: Com er communities to investments ar ong the Bow and	s e.g. the Poding from rail ding from rail munity Drail that were but e required to d Elbow rive	rovinci in and nage I uilt prio o redu rs. Ad		unity Resiliency npacts homes, DI) - this program odern drainage
Service	Stormwater Management		Sector Affected			Multiple Sectors, CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST			
Activity #	453429		War	d(s)				/ards	
Project Identifier (PID)	3000461		Citiz	zen Priority			A He	althy & Green Cit	y
Business Unit	WATER RESOL	JRCES	Сар	ital Investment	Plan Alignmen	t	Othe	r.Other	
Department			City	Resilience Fran	mework Dimen	sion	Infra	structure and Eco	systems
Service Type	Essential		City	Resilience Fran	mework Driver			Ensures continuity of critical services	
Investment Category	Program - A Progrouping of projected and benefing planned at together	ects that are efit from	Capital Infrastructure Investment Principles			Build an adaptable resilient and smart city			
		Total		2019	2020	2021		2022	2023+
Recommended Fundin	g Allocation (\$)	211,493,0	00	209,000	77,612,000	75,087,0	000	58,585,000	0
Funding Status		For Approva	ıl					,	
Operating Impact Of Co	apital	No							
Economic Impacts of 2 Recommended Fundin		Gr	Gross Output (\$)		Gross Domestic Produc (\$)		ıct	Income (\$)	Employment (Person-Years
		34	48,59	8,950	159,065,066			102,424,172	1,100
MUGS		Ma	ainte	nance	Upgrade			Growth	New Services
			11	%	18%			26%	45%
health and Communi improvem quality of Triple Bottom Line – Environmental which allo perserve I Triple Bottom Line – Economic The capitate goals of the reliability a stormwater.			perty, ainag to recoanks estme qual ny fish estme unicip vailal vs an	and improves one Improvement police the number is and public floodents limit the sedity of the rivers to and wildlife poperats translate into all Development bility of the serviced ponding. Investigation	ar city's resilience of properties produced by the preparedness diment going into the maintained by the properties for a graph of the properties for a graph while minimal than the properties of the properties o	te to extremes to invest one to flood and readine to the rivers, for Calgaria growing populating the cool damage at new growth	e ever in infraing. T ss. ensuring and ensuring and ensuring and ensure of control of co	reduction of flood the sand climate cha astructure upgrade he service also act in g healthy rivers of d downstream use in and enable deve growth. Improvem t avoidance due to munities will ensu affordable and div	ange. The es and ddresses the and river banks, ers and to elopment to meet ent in the o uncontrolled re that the
	احا	• • .							

Key benefits include reduced risk of flood and associated reductions in property damage; a more resilient city to extreme weather events; healthy rivers and riparian areas.

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Expected Key Benefits



Urban Fores

UF Lifecycle

Executive Summary	This business case is requesting \$3 Million for the Urban Forestry Lifecycle program. This program supports the Urban Forest line of service which manages public trees and promotes an urban forest canopy that improves air quality, reduces storm water, helps moderate climate, provides wildlife habitat, increases property values, and creates stress-reducing environments. This lifecycle program will focus on tree replacement for trees lost due to attrition of the existing public tree inventory. It will involve planting trees along roadways, parks and recreation areas, and along major corridors such as Stephan Ave, 16 Ave and Memorial Drive. The expected outcomes of this program include the resiliency of the urban forest, enhanced public safety and healthy living, contributes to a well-run city and natural environment benefits.
Document Date	2018/09/11

	1			
Service	Urban Forestry	Sector Affected	Multiple Sectors	
Activity #	422195	Ward(s)	All Wards	
Project Identifier (PID)	3000209	Citizen Priority	A Healthy & Green City	
Business Unit	CALGARY PARKS	Capital Investment Plan Alignment	Community Investments.Parks and Public Spaces	
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems	
Service Type	Essential	City Resilience Framework Driver	Provides & enhances natural and manmade assets	
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Promote the well-being of communities- environment and economy	

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	3,000,000	0	1,000,000	1,000,000	1,000,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	utput		estic Product (\$)	Income (\$)	Employment (Person-Years)
	4,944,	830	2,25	56,317	1,452,873	16
MUGS	Mainter	nance	Upg	grade	Growth	New Services
	100	%	(0%	0%	0%

Triple Bottom Line - Social	Increases sense of community, providing gathering areas, enhances a sense of unity, all of which can result in crime reduction. Reduces exposure to UV by providing shade and absorbing up to 95% UV radiation.
Triple Bottom Line – Environmental	Reduces storm water runoff by absorbing and intercepting rainfall delaying its flow into drainage areas. Reduces the "heat island" effect.
Triple Bottom Line - Economic	Attracts and maintains business and tourism, contributes to economic stability and community pride.
Expected Key Benefits	Enhanced biodiversity Environmental Benefits, reduced heat island effect, reduced storm water runoff by absorbing and intercepting rainfall delaying its flow into drainage areas. Social benefits, increased sense of community, providing gathering areas, enhances a sense of unity and wellbeing, all of which can result in crime reduction. Economic benefits, moderate's temperature, reducing energy needs for heating and cooling, and attracts and maintains business and tourism contributing to economic stability and community pride.



Waste & Recycling

Facilities & Equipment

Executive Summary	Investments in waste management programs and managing facilities in accordance with legislative and regulatory compliance to protect public health and the environment including: Upgrading environmental protection systems (including landfill gas management and remediation activities); Cart based services; Diversion infrastructure; Data management and billing; and Customer facing infrastructure.			
Document Date	2018/09/11			

Service	Waste & Recycling	Sector Affected	Internal / The City of Calgary, Multiple Sectors
Activity #	452299	Ward(s)	All Wards
Project Identifier (PID)	3000301	Citizen Priority	A Healthy & Green City
Business Unit	WASTE & RECYCLING SERVICES	Capital Investment Plan Alignment	Other.Other
Department	UTILITIES ENVIRON PROTECTION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	80,936,000	15,309,000	23,157,000	21,143,000	21,327,000	0
Funding Status	For Approval					
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	133,40	4,910	60,8	72,417	39,196,582	421
MUGS	Mainter	nance	Upg	grade	Growth	New Services
	309	%	3	5%	15%	20%

Triple Bottom Line – Social	Providing calgary and region with proper disposal of end of life materials.			
	Improve customer service and access to programs (including carts and bins and T 'n' G).			
Triple Bottom Line – Environmental	Addressing regulatory and environmental risks. Capacity to divert additional material and safely disposal of garbage. Diverting waste reduces greenhouse gas emissions, redirects natural resources back into the economy and reduces The City's landfill liability. Investment in landfill gas management reduces greenhouse gas emissions.			
Triple Bottom Line – Economic	Delivering waste infrastructure investment projects creates employment opportunities and stimulated economic growth. The 10 year planning horizon for this investment program supports consistent investments in our community.			
Expected Key Benefits	Investing in this program provides the infrastructure required to deliver diversion and waste management services in compliance with operating approvals to customers in Calgary and the region. Managing 600,00 tonnes diverted and disposed materials Stormwater management, Landfill gas management 400,000 customer visits			

Landfill Treatment Infrastructure

Executive Summary	Investments in Waste Management Facility infrastructure required for WRS to manage waste in accordance with legislation and regulatory compliance to protect public health and the environment including: Landfill disposal cells (design, construction, and final cover); Environmental protection systems (including landfill gas and leachate management systems, stormwater management, and remediation projects); Closure and post closure care; and Customer facing infrastructure.
Document Date	2018/09/11

Service	Waste & Recycling	Sector Affected	Multiple Sectors
Activity #	451799	Ward(s)	All Wards
Project Identifier (PID)	3000300	Citizen Priority	A Healthy & Green City
Business Unit	WASTE & RECYCLING SERVICES	Capital Investment Plan Alignment	Other.Other
Department	UTILITIES ENVIRON PROTECTION	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Promote the well-being of communities- environment and economy

	Total	2019	2020	2021	2022	2023+			
Recommended Funding Allocation (\$)	29,667,000	6,354,000	6,190,000	8,794,000	8,329,000	0			
Funding Status	For Approval	For Approval							
Operating Impact Of Capital	Yes								
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years)			
	48,899,420		22,312,716		14,367,463	154			
MUGS	Maintenance		Upgrade		Growth	New Services			
	45%	%	1	5%	40%	0%			

Triple Bottom Line - Social	Providing Calgary and region with proper disposal of end of life materials. Supports customers as they deliver waste and resource material for processing.
Triple Bottom Line – Environmental	Addressing regulatory and environmental risks. Capacity to divert additional material and safe disposal of garbage. Diverting waste reduces greenhouse gas (GHG) emissions, redirects natural resources back into the economy and reduces The City's landfill liability. Investment in landfill gas management reduces greenhouse gas emissions and migration Investment in leachate management reduces the risk of groundwater contamination which protects groundwater on and off site.
Triple Bottom Line – Economic	Delivering infrastructure investment projects on the WMF creates employment opportunities and stimulated economic growth. The 10 year planning horizon for this investment program supports consistent investments in our community.
Expected Key Benefits	Investment in this program ensures regulatory compliance, protection of public health and environment while progressing toward Council Directives and long term strategic targets and maintaining high levels of customer satisfaction.

Wastewater Collection Network

			<u> </u>				<i>-</i>			
Executive Summary	accommodate dedicated to care	Investments in the Wastewater Collection Network Program are driven by major trunk upgrades required to accommodate growth, including the Inglewood and Nose Creek sanitary trunks. The remainder of the investments is dedicated to capital maintenance programs and infrastructure upgrades. These investments are needed to accommodate the servicing of established and new communitities.								
Document Date	2018/09/11									
Service	Wastewater Collection & Treatment		Sector Affected				Multiple Sectors, CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST NORTHWEST, SOUTHEAST, SOUTHWEST			
Activity #	456129		War	d(s)			All W	ards		
Project Identifier (PID)	3000460		Citiz	en Priority			A He	althy & Green Ci	ty	
Business Unit	WATER RESO	JRCES	Capi	ital Investment	Plan Alignmen	t	Othe	r.Other		
Department	UTILITIES ENV PROTECTION	TRON	City	Resilience Fra	mework Dimen	sion	Infrastructure and Ecosystems			
Service Type	Essential		City	Resilience Fra	mework Driver		Ensures continuity of critical services			
Investment Category	grouping of proj related and ben	g of projects that are and benefit from anned and managed						Support the delivery of City of Calgary services at approved service levels		
		Total		2019	2020	2021		2022	2023+	
Recommended Fundin	g Allocation (\$)	215,370,0	00	44,263,000	33,441,000	71,159,0	000	66,507,000	0	
Funding Status		For Approva	ıl							
Operating Impact Of Ca	apital	No								
Economic Impacts of 2 Recommended Fundin		Gr	Gross O (\$)		Gross Domestic Produc (\$)		uct	Income (\$)	Employment (Person-Years)	
		4:	32,640	0,049	186,8	354,724		99,430,347	1,333	
MUGS		M	ainter	nance	Up	grade		Growth	New Services	
		169	%	(0%		69%	15%		
		This service protects public health and our rivers by ensuring the necessary investments are made in th wastewater collection network to keep pace with the needs of a growing population. Annual capital maintenance programs and infrastructure upgrades reduce the risk to property from sanitary backups.						nual capital		
Triple Bottom Line – Environmental Annual capita			al maintenance programs ensure reliable wastewater collection operations and the tection of our rivers.							
Triple Bottom Line – Economic		The capital investments translate into services for a growing population and enable development to meet goals of the Municipal Development Plan while minimizing the cost of growth. Improvement in the reliability and availability of the service translates into damage and cost avoidance due to sanitary backups. Investments in the 14 new growth communities will ensure that the development industry								

remains healthy and Calgarians have access to affordable and diverse housing options.

Key benefits include reduced risk to property from sanitary backups, more reliable and available service, protection of the environment and the health of our rivers and, wastewater services for a growing population.

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Expected Key Benefits

Wastewater Treatment Plants

Executive Summary						y for the next anticipa ted in a way that prote		
Document Date	2018/09/11							
Service	Wastewater Collection & Treatment		Sector Affected		Multiple Sectors, CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST NORTHWEST, SOUTHEAST, SOUTHWEST			
Activity #	455739		Ward(s)			All Wards		
Project Identifier (PID)	3000459		Citizen Priority			A Healthy & Green C	ity	
Business Unit	WATER RESO	URCES	Capital Investment	Plan Alignmen	t	Other.Other		
Department	UTILITIES ENV PROTECTION	'IRON	City Resilience Fra	mework Dimen	sion	Infrastructure and Ec	osystems	
Service Type	Essential		City Resilience Fra	mework Driver		Ensures continuity of	critical services	
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together		Capital Infrastructure Investment Principles			Support the delivery of City of Calgary services at approved service levels		
			2019	2020	2021	2022	2023+	
Recommended Fundin	g Allocation (\$)	239,439,0	00 (176,000)	19,851,000	123,218,0	96,546,000	0	
Funding Status		For Approva	I					
Operating Impact Of Ca	apital	No						
Economic Impacts of 2 Recommended Fundin		Gr	oss Output (\$)	Gross Domestic Produ (\$)		Income (\$)	Employment (Person-Years)	
		48	31,697,497	208,042,351		110,704,844	1,484	
MUGS		Maintenance		Upgrade		Growth	New Services	
			20% 10%			67%	3%	
Triple Bottom Line – So	s to keep pace with the	ne needs of a gro	owing popula	e necessary investment ation. The Bonnybroo demands and regulation	k Wastewater			
Triple Bottom Line – Environmental Annu of ou conc		Annual capital maintenance programs ensure reliable treatment operations and the continued protection of our rivers. Upgrades and improvements to the Fish Creek Wastewater Treatment Plant will address concerns with unionized ammonia. Investments in energy efficiencies, and the recovery of energy from waste streams yield cost savings, reductions in environmental footprint and climate change mitigation.						
goals of the Mu reliability and a			estments translate into services for a growing population and enable development to meet unicipal Development Plan while minimizing the cost of growth. Improvement in the availability of the service translates into damage and cost avoidance due to uncontrolled be environment.					
Expected Key Benefits	d Key Benefits Key benefits					tion of the environmer ons in environmental f		

Facilities, Equipment & Technology

Executive Summary		Investments required in the Facilities, Equipment and Technology program to support the delivery of water, wastewater and stormwater services.								
Document Date	2018/09/11	18/09/11								
Service	Water Treatment & Supply	Sector Affected	Internal / The City of Calgary							
Activity #	460989	Ward(s)								
Project Identifier (PID)	3000462	Citizen Priority	A Healthy & Green City							
Business Unit	WATER RESOURCES	Capital Investment Plan Alignment	Other.Other							
Department	UTILITIES ENVIRON PROTECTION	City Resilience Framework Dimension	Infrastructure and Ecosystems							
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services							
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels							

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	42,371,500	8,353,000	11,860,000	11,449,000	10,709,500	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years)
	58,194,343		36,606,818		24,068,887	242
MUGS	Maintenance		Upgrade		Growth	New Services
	25	%	0%		3%	72%

Triple Bottom Line – Social	Investments in facilities, equipment and technology common to the water, wastewater and stormwater services improve service delivery, facilitate response planning for emergencies, and makes it easier to conduct business with The City.
Triple Bottom Line – Environmental	Investments allow for improved monitoring and response to changes in the water, wastewater and stormwater systems, to safeguard public health and the environment.
Triple Bottom Line – Economic	Investments improve access to information and services, and enable development to proceed in a timely fashion.
Expected Key Benefits	Key benefits include improved service delivery, better response planning for emergencies, and easier to conduct business with The City.

Water Distribution Network

		vvalei	וט	stribut	ion ne	LWOIF	•			
Executive Summary		ne investments						lity drinking wate communities, ar	r to our nd address asset	
Document Date	2018/09/11									
Service	Water Treatment & Supply		Sect	Sector Affected				Multiple Sectors, CENTRE, EAST, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST		
Activity #	460940		Ward	d(s)			All W	ards		
Project Identifier (PID)	3000458		Citiz	en Priority			A Hea	althy & Green Cit	у	
Business Unit	WATER RESOL	JRCES	Capi	tal Investment	Plan Alignmen	t	Othe	Other		
Department	UTILITIES ENV PROTECTION	IRON	City	Resilience Fra	mework Dimens	sion	Infras	tructure and Eco	systems	
Service Type	Essential		City	Resilience Fra	mework Driver		Ensu	res continuity of o	critical services	
Investment Category	Program - A Progrouping of proj related and ben being planned a together	Capi	Capital Infrastructure Investment Principles			Support the delivery of City of Calgary services at approved service levels				
		Total		2019	2020	2021		2022	2023+	
Recommended Fundin	g Allocation (\$)	250,513,0	000	36,393,000	65,799,000	66,497,000		81,824,000	0	
Funding Status		For Approval								
Operating Impact Of Ca	apital	No								
Economic Impacts of 2 Recommended Fundin		Gr	oss C (\$)	Output	Gross Domestic Produ (\$)		ıct	Income (\$)	Employment (Person-Years)	
		503,236		6,089	217,344,744			115,654,894	1,550	
MUGS		Maintenance		nance	Upgrade			Growth	New Services	
			26% 3%			3%		56%	15%	
Triple Bottom Line – So	d h A li	Irinking water lealth, provide Annual capital	now a s nece mainte servie	nd for generatio essary fire prote enance program ce are reduced t	ns to come. The ction and enable is maintain reliate	e treatment as s urban devoility and ava	and su ⁄elopm ailabilit	ce ensures contin pply of water pro ent and a prospe y of this core ser estments. Investi	tects public rous economy. vice.	
conser		The capital investment plan includes investments to address water loss in the system. Water conservation measures safeguard our water resources for generations to come, reduce the environmental footprint of delivering the service, and yield improved resilience to climate change.								
direct impact of upgrades to p Investments in			n the e imp state the 14	economic prospe ations to improv 4 new growth co	erity of Calgary. e energy efficier	The annual ncies and the nsure that the	capita e reliat ne dev	I maintenance problems of the water elopment industr		
Expected Key Benefits					available supply d improved resili				ced environmental	

Water Treatment Plants

		vval	CI	reatm	ent Pic	11112			
Executive Summary	Investments re	quired at the	Wate	r Treatment Plar	nts to provide rel	iable, high c	uality	drinking water to	our customers.
Document Date	2018/09/11								
Service	Water Treatment	& Supply	Sect	tor Affected			CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST		
Activity #	459259		War	d(s)			All W	ards	
Project Identifier (PID)	3000457		Citiz	en Priority			A He	althy & Green Cit	у
Business Unit	WATER RESOU	RCES	Сарі	ital Investment	Plan Alignmen	t	Othe	r.Other	
Department	UTILITIES ENVI PROTECTION	RON	City	Resilience Fran	mework Dimen	sion	Infras	structure and Eco	systems
Service Type	Essential		City	Resilience Fran	mework Driver		Ensu	res continuity of c	critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together		Capi	ital Infrastructu	re Investment F	Principles	Support the delivery of City of Calgary services at approved service levels		
		Total		2019	2020	2021		2022	2023+
Recommended Fundin	g Allocation (\$)	58,821,0	00	(4,011,000)	21,449,000	19,817,0	00	21,566,000	0
Funding Status		For Approval							
Operating Impact Of Ca	apital	No							
Economic Impacts of 2 Recommended Fundin		Gross C (\$)			Gross Domestic Produ (\$)		ict	Income (\$)	Employment (Person-Years)
		134,275,706			57,992,898			30,859,556	414
MUGS		Maintenance		nance	Upgrade			Growth	New Services
		55%			23%			12%	10%
Triple Bottom Line – So	inking water in ealth, provide nnual capital terruptions to lenmore Dam	now a s neco mainto servi n Infra	and for generation essary fire protec enance program ce are reduced t	ns to come. The ction and enable s maintain reliate hrough targeted ements will enha	e treatment a es urban dev bility and ava infrastructu	and surelopm ailabilit re inve	ce ensures continupply of water proteent and a prosperty of this core servestments. The coet of droughts while	tects public rous economy. vice.	
balar cons resili		To allow for future growth and long term sustainability, the Utility aggressively manages water storage, balances water treatment plant production and continues to reduce our per capita water demands through conservation programs coupled with capital investments. These initiatives are making Calgary more resilient to drought, and allows for our population to continue to grow without drawing additional water from our rivers.							
Triple Bottom Line – Ed	tre in	The capital investment plan includes modifications to the treatment plants to optimize the average treatment capacity and meet the water needs of a growing city and prosperous economy. The investments translate into services for a growing population and enable development to meet Municipal Development Plan while minimizing the cost of growth.					r. These		
Expected Key Benefits	wi	thout drawing	g addi		n our rivers, redu			, continued populato service, and im	



Affordable Housing

Affordable Housing Redevelopment

Executive Summary	This business case is requesting \$106,200 thousand to redevelop/regenerate approximately 341existing/new affordable homes in the Affordable Housing 10 Year Capital Development Plan. 70% will be funded by the provincial and federal government. By redeveloping two sites to a higher density, the number of homes can be increased by replacing existing units and adding new units that would operate under a mixed-market model. The Province has a requirement to replace 96 of these social housing units. One avenue to deliver new units is through redevelopment and densification of existing housing sites that are either vacant or where buildings are near the end of their useful life and require significant capital maintenance. The program works in conjunction with The City's other housing programs to deliver new units and positions The City to leverage provincial and federal funds.
Document Date	2018/09/11

Service	Affordable Housing	Sector Affected	NORTHEAST, SOUTHEAST
Activity #	403994	Ward(s)	9, 10
Project Identifier (PID)	3000173	Citizen Priority	A Prosperous City
Business Unit	CALGARY HOUSING	Capital Investment Plan Alignment	Targeted Theme Investments.Housing
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Health and Wellbeing
Service Type	Essential	City Resilience Framework Driver	Meets basic needs
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Optimize financing and funding sources

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	106,200,000	200,000	12,800,000	32,800,000	34,400,000	26,000,000
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (estic Product (\$)	Income (\$)	Employment (Person-Years)
	166,77	9,400	74,6	74,504	55,474,221	584
MUGS	Mainte	nance	Upg	grade	Growth	New Services
	259	%	7	5%	0%	0%

Triple Bottom Line – Social	(1) Calgary is recognized as a high growth, high needs community. The number of Calgary households in need of assistance with housing costs has remained constant since recorded in the 1991 federal census at 18% of Calgary's population; (2) Improved living conditions will ensure that Calgarians will have safe and healthy accommodation; (3) The number of affordable homes constructed is not commensurate with the growth of the city, and this is demonstrated by Calgary Housing Company wait list; (4) One site falls within the Southeast 17 Corridor Land Use and Urban Design Concept which ranks 4th on the City's prioritized list for growth of developed areas.
Triple Bottom Line – Environmental	(1) Building affordable housing units close to transit, cycle paths and work places diminishes the need for families and individuals to rely on personal vehicles; (2) Construction methodology and building design can reduce building emissions by up to 90%. The materials required for high-performance buildings are also more resilient which will prolong a buildings useful lifespan.
Triple Bottom Line – Economic	(1) Housing one person results in savings of \$34,000 to taxpayers annually; (2) Lower wage earners such as those in the service sector, are a vital component of the economic development and sustainability of Calgary's economy. Without affordable housing for this important sector, Calgary's vibrant economy will be negatively impacted; (3) Every billion dollars invested in housing grows Canada's economy by \$1.4 billion and generates up to 13,000 indirect and direct jobs; (4) Improvement within the built environment of affordable housing developments will reduce operating costs, reduce maintenance costs, and allow for financial sustainability through reserve funds and scenario modelling.
Expected Key Benefits	(1) Replace units at the end of its useful lifespan with environmentally/financially sustainable buildings resulting in operational cost savings; (2) Provide variety of housing that meets population demographic that qualify for affordable housing; (3) Positive impact on housing in Calgary with new affordable rental homes; (4) Safe and affordable housing provides Calgarians in need with a home where they can lead meaningful lives and address intersectional barriers to success. Economic studies demonstrate that the provision of adequate housing reduces costs to healthcare and justice systems, social services, and other municipal/provincial services; (5) Creation of new jobs in the building sector will attract new workers; (6) Investment unaffordable housing is financially justified when compared to the cost of alternative support services required for families with no available housing.

Increase Affordable Housing Supply

Executive Summary	This business case is requesting \$9,250 thousand to increase the supply of affordable housing. 70% will be funded by the provincial and federal government. Approximately 37 new affordable homes will be added to 190 units already funded in the Increase Affordable Housing program that will be delivered this cycle from the 10 Year Capital Development Plan. The program works in conjunction with The City's other housing programs to create new homes. It aims to increase acceptance of affordable housing developments through community engagement, creative architecture and place-making. It supports Foundations for Home: Calgary's Corporate Affordable Housing Strategy (2016) objective to Design and Build new City units. The program positions The City to leverage provincial and federal funds to increase affordable housing development and create housing options in Calgary.
Document Date	2018/09/11

Service	Affordable Housing	Sector Affected	Multiple Sectors, SOUTHWEST
Activity #	403980	Ward(s)	8, 11
Project Identifier (PID)	3000165	Citizen Priority	A Prosperous City
Business Unit	CALGARY HOUSING	Capital Investment Plan Alignment	Targeted Theme Investments.Housing
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Health and Wellbeing
Service Type	Essential	City Resilience Framework Driver	Meets basic needs
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Optimize financing and funding sources

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	9,250,000	0	3,562,000	2,853,000	2,835,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	14,526	6,454	6,50	04,135	4,831,794	51
MUGS	Mainte	nance	Upg	grade	Growth	New Services
	0%	6	(0%	100%	0%

	0,0			• • • • • • • • • • • • • • • • • • • •
Triple Bottom Line – Social	(1) Calgary is recognized as a high gneed of assistance with housing cost at 18% of Calgary's population; (2) Ir and healthy accommodation; (3) The Calgary's growth. The Calgary Houshousing.	ts has remained constant since re mproved living conditions will ensu demand for additional affordable	corded in the 1991 are that Calgarians housing has not k	federal census will have safe ept up with
Triple Bottom Line – Environmental	(1) The City develops all new housin affordable housing units close to trar individuals to rely on personal vehicle	nsit, cycle paths and work places o		
Triple Bottom Line – Economic	(1) Lower wage earners such as those and sustainability of Calgary's economic vibrant economy would be negatively taxpayers annually, compared to hor Canada's economy by \$1.4 billion ar	my. Without affordable housing for impacted; (2) Housing one personelessness; (3) Every billion dolla	or this important se on results in saving rs invested in hous	ctor, Calgary's s of \$34,000 to
Expected Key Benefits	1) This program will place 37 househ affordable housing city-wide that mel Increase the amount of Calgary's aff affordable housing in urban centres; the needs of seniors and families, ar stable, secure housing, (4) Reduce t and other municipal and provincial support services; (5) Help empower and contribute to complete communications.	ets the current demographic that of ordable housing supply to help me (3) Contributes to the creation of jud helps keep our most vulnerable he impacts on the health care system ervices reducing the financial inve Calgarians to maximize their conti	qualify for affordab eet the national avoidobs, attracts new citizens off the stratem, justice system stment required to	le housing; (2) erage of 6% workers, meets eet by providing n, social services ward alternative

Lifecycle Maintenance

Executive Summary	This business case is requesting \$25,145 thousand to address critical lifecycle maintenance repairs on City-owned affordable housing (Community Housing and City Partnership portfolios) to ensure the health and safety of tenants. Units are showing significant deterioration from deferred maintenance due to insufficient funding for operating subsidies and underfunded capital investment from historic flatlined federal and provincial funding. The estimated 10-year funding required for housing lifecycle is \$130,000 thousand. Investment this cycle is only the start to addressing the long-term need. Social housing operating agreements expire between 2021-2024, at which time these assets will be fully City-owned with no ongoing subsidies. Investment is critical to bring units up to minimum health and safety standards and prepare them to transition to a mixed-market portfolio as agreements expire.
Document Date	2018/09/11

Service	Affordable Housing	Sector Affected	Multiple Sectors
Activity #	403995	Ward(s)	All Wards
Project Identifier (PID)	3000221	Citizen Priority	A Prosperous City
Business Unit	CALGARY HOUSING	Capital Investment Plan Alignment	Targeted Theme Investments.Housing
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Health and Wellbeing
Service Type	Essential	City Resilience Framework Driver	Meets basic needs
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	25,145,283	5,214,223	6,260,738	9,165,111	4,505,211	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (\$	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	40,160,599		18,882,758		13,448,356	158
MUGS	Mainte	nance	Upg	grade	Growth	New Services
	100%		(0%	0%	0%

Triple Bottom Line – Social	(1) In order to provide citizens with adequate affordable housing, it is essential to have safe, functional, and fully maintained buildings; (2) Housing provides opportunities for tenants to break out of the cycle of poverty. The consequence of reducing housing opportunities is historically proven to come at a much higher social and economic cost; (3) The demand for additional affordable housing has not kept up with Calgary's growth. The Calgary Housing Company waitlist has grown to almost 4,400 families waiting for housing.
Triple Bottom Line – Environmental	(1) Energy efficiency improvements will be made on City-owned affordable housing. For example installing high efficiency furnaces, reduces the carbon footprint while also reducing energy costs. In addition, operating maintenance costs of new furnaces are minimal compared to aging furnaces; (2) Energy improvements can reduce building emissions by up to 90%; (3) Materials required for high-performance buildings are also more resilient which will prolong a buildings useful lifespan.
Triple Bottom Line – Economic	(1) Investment will support the creation of new employment opportunities which positively contributes to the overall economy; (2) Additional homes provided to vulnerable Calgarians increases the net economic effect. It is much less costly to provide an affordable home than bearing the economic and social consequences of homelessness; (3) Housing one person results in savings of \$34,000 to taxpayers annually, compared to homelessness; (4) Every billion dollars invested in housing grows Canada's economy by \$1.4 billion and generates up to 13,000 indirect and direct jobs.
Expected Key Benefits	1) Improved tenant safety, pride and comfort; (2) Prevention of unit closures due to inadequate funding to meet Alberta Minimum Housing and Health Standards; (3) Address critical lifecycle and emergency repairs thus preserving capital investment; (4) Reduction in operating maintenance/repair costs; (5) Energy efficiency improvements result in lower carbon footprint and reduced utility costs; (6) Safe and affordable housing provides Calgarians in need with a home where they can lead meaningful lives and address intersectional barriers to success; (7) Economic studies demonstrate that provision of adequate housing reduces costs to our healthcare & justice systems, social services, and other municipal/provincial services; (8) Investment in affordable housing is financially justified when compared to the cost of alternative support services required for families with no available housing.

Silvera for Seniors -LMP

Executive Summary	The Senior's Lodge housing program operated by Silvera for Seniors is a long-standing program under Ministerial Order H029/16 funded by The City and Province. In Calgary, the Lodge Program consists of 777 suites in eight lodges; 6 facilities are owned by the Province and 2 are owned by Silvera. The provincially owned buildings are approximately 40 years old and the Silvera owned buildings are approximately 25 years old. To maintain these facilities in good working condition a lifecycle-maintenance program is required for which Silvera is requesting \$15.4 M over the next 4 years from the City to fund. Lifecycle planning is informed by Facility Index Reports provided by third parties and include project ratings and cost estimates. Original ask was for \$12M, this was increased to \$15.4M following the completion of Facility Condition Assessments.
Document Date	2018/09/11

Service	Affordable Housing	Sector Affected	Multiple Sectors
Activity #	480350	Ward(s)	All Wards
Project Identifier (PID)	3000531	Citizen Priority	A Prosperous City
Business Unit	CIVIC PARTNERS	Capital Investment Plan Alignment	Targeted Theme Investments.Housing
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Health and Wellbeing
Service Type	Essential	City Resilience Framework Driver	Meets basic needs
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	9,507,487	2,716,425	2,716,425	2,716,425	1,358,212	0
Funding Status	For Approval					<u>'</u>
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	15,184,811		7,139,612		5,084,853	60
MUGS	Maintenance 100%		Upgrade 0%		Growth	New Services
					0%	0%

	100% 0% 0%								
Triple Bottom Line – Social Silvera is an important non-profit organization that provides much needed homes to low and moderate income seniors in Calgary. The continued partnership between Silvera and The City will work to deliver affordable housing for seniors in a variety of built forms and operating models that best serve their housing needs. The ongoing partnership between Silvera, The City, and the Province to implement a sustainable funding and governance model will ensure that Silvera is able to work toward greater finansustainability while preserving homes and continuing to deliver services for citizens in need.									
Triple Bottom Line – Environmental	Similar to the economic impacts of t maintenance issues helps to minimiz to extend the facility's useful life. For deterioration can prevent significant roof is leaking and causes damage to possible, life cycle maintenance proj- natural gas, electricity and water.	ze damage to an asset from syster example, replacing a roof when it damage to the interior of the build to the interior – thereby triggering a	m and equipment for starts to show signing as compared to additional remedial	ailures and helps ns of waiting until the work. Where					
Triple Bottom Line – Economic	It is anticipated that major compone equipment, doors, fencing, etc. requimaintain the building's integrity and maintenance for these types of items. Therefore, investment in an adequat the building and avoid the premature	ire replacement at least once within maximize its useful life. Without the state overall life span of the asset to lifecycle-maintenance program he	n the targeted life e investment in ca can shorten subst nelps to maximize	spans in order to pital antially. the useful life of					
Expected Key Benefits	(1) Improve the condition rating for (3) Prevent and impede further deter operations and maintenance of facili electrical consumption when mechan when mechanical equipment is replaced. (9) Improve the appearance	rioration of assets. (4) Meet regula ties. (5) Contribute to a positive re nical equipment is replaced. (7) Re aced. (8) Reduce water consumption	tory and compliand sident experience. Peduce natural gas I son when plumbing	ce standards for (6) Reduce consumption fixtures are					



Arts & Culture

Calgary Opera Arts Centre

Executive Summary	The Calgary Opera Community Arts Centre seeks to address the lack of appropriate, affordable rehearsal, performance and production-building space currently facing the arts sector in Calgary. In May 2016, Council approved, in principle, funding from the Cultural Municipal Sustainability Initiative (CMSI) of \$7.5 million (CPS2016-0297). This multi-purpose facility will help increase the capacity of Calgary Opera to sustain and further develop its artistic aspirations and community outreach potential. Designed as a cultural hub, the new building will be used by Calgary Stampede youth performers and our current family of 180+ arts organizations at the Mamdani Centre, which currently operates at capacity.
Document Date	2018/09/11

Service	Arts & Culture	Sector Affected	SOUTHEAST
Activity #	480652	Ward(s)	11
Project Identifier (PID)	3000431	Citizen Priority	A Prosperous City
Business Unit	CALGARY RECREATION	Capital Investment Plan Alignment	Geographic Investments.Culture and Entertainment District
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Health and Wellbeing
Service Type	Current	City Resilience Framework Driver	Supports livelihoods & employment
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Promote the well-being of communities- environment and economy

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	7,500,000	2,500,000	2,500,000	2,500,000	0	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	11,848,086		5,214,891		3,772,406	41
MUGS	Maintenance		Upgrade		Growth	New Services
	0%	, o	(0%	100%	0%

Triple Bottom Line – Social	Participation in cultural activities provides many community and individual benefits. Individual benefits include creative expression and development, social, emotional and cognitive well-being. This facility invests in infrastructure that supports creative activities and improves Calgary's quality of life. This project will help create an environment where artists and arts organizations thrive and contribute significantly to Calgary's reputation as a cultural diverse and collaborative community.
Triple Bottom Line – Environmental	Through co-location with other partners, the Calgary Opera facility will minimize their footprint and support connectivity within an existing collaborative hub. The project will be built to be a certified GOLD LEED standard.
Triple Bottom Line – Economic	This project will contribute to economic growth and resiliency through developing creative and cultural skills that support production services and emerging artist training. This facility will contribute to social cohesion, by positively impacting a culturally vibrant, emerging neighbourhood, leveraging the ability to partner and provide below market rate production facilities to the arts and cultural sector.
Expected Key Benefits	A larger more physically stable facility will house Calgary Opera operations, to accomplish the following: (1) Increase the scope of training and programming offered to emerging artists; (2) Support local cultural development and training through collaboration with community partners and arts and cultural groups; (3) Expand community outreach programs and artistic partnerships with the Calgary Stampede and other community arts and cultural organizations; (4) Build small-venue production capacity with increased operational efficiency for Calgary Opera and sector partners by: enhancing local set-building capacity, provision of prop and costume creation in-house, supporting production development needs, and creating event and performance space. (5) Provide cultural opportunities for citizens and visitors (6) Contribute to a revitalized Victoria Park community district

Community Cultural Spaces

Executive Summary	In May 2016, Council approved, in principle, funding from the Cultural Municipal Sustainability Initiative (CMSI) in the amount of \$16 million for up to eight community cultural spaces (CPS2016-0297). Current gaps and opportunities are to be informed by research, studies and plans, and should explore opportunities for multi-purpose spaces and repurposing of current facilities. In alignment with the Integrated Civic Facility Planning program, work is currently underway to integrate community cultural spaces with planned facilities in Sage Hill and Forest Lawn. This business case recommends an investment of \$4.6 million to identify and begin development of an additional three-to-five community cultural spaces in underserved areas of the city.
Document Date	2018/09/11

Service	Arts & Culture	Sector Affected	Multiple Sectors
Activity #	480651	Ward(s)	All Wards
Project Identifier (PID)	3000275	Citizen Priority	A Prosperous City
Business Unit	CALGARY RECREATION	Capital Investment Plan Alignment	Community Investments.Parks and Public Spaces
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Economy and Society
Service Type	Current	City Resilience Framework Driver	Promotes Cohesive & Engaged Communities
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Promote the well-being of communities- environment and economy

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	9,000,000	90,000	90,000	2,205,000	2,205,000	4,410,000
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (Output		nestic Product (\$)	Income (\$)	Employment (Person-Years
	14,217,703		6,257,869		4,526,888	49
MUGS	Maintenance		Upgrade		Growth	New Services
	0%))		0%	100%	0%

Triple Dettern Line Coniel	Destriction in authors a activities was idea many community, and individual banefits, ladicidual banefits
Triple Bottom Line – Social	Participation in cultural activities provides many community and individual benefits. Individual benefits include creative expression and development, social, emotional and cognitive well-being. These spaces will be important gathering places, fostering social connections and community resiliency.
Triple Bottom Line – Environmental	Through multi-purpose spaces that meet a range of community needs, and through co-location with other public spaces and municipal services, these community cultural spaces minimize their footprint, support connectivity within a community and meet The City's environmental goals.
Triple Bottom Line – Economic	Community cultural spaces and amenities contribute to economic growth and resiliency through developing creative and cultural skills that support creative industries such as design, architecture and media development. These spaces contribute to social cohesion, culturally vibrant neighbourhoods and attracting and retaining creative talent.
Expected Key Benefits	Additional cultural spaces help address service gaps identified in specific areas of the city. These spaces would be used by a wide range of citizens from children to seniors, engaging in acts of creating and connecting. Specific attention would be paid to address gaps related to Indigenous and ethno-cultural expression, youth/all ages and physical accessibility. These activities develop social connections, connect young people to career paths, enliven a community and allow for creative energy to extend into the neighbourhood. Creative economy is developed by potential co-location and co-working spaces that build connections. This will help meet the goals of healthy, active living per the Recreation Master Plan and the Recreation for Life strategy.

ICFP - Arts & Culture Hub

Executive Summary	amount of \$1 to be informe purposing of space in Eas Planning pro	, Council approved, in principle, funding from the Cultural Municipal Sustainability Initiative (CMSI) in the 6 million for up to eight community cultural spaces (CPS2016-0297). Current gaps and opportunities are d by research, studies and plans, and should explore opportunities for multi-purpose spaces and recurrent facilities. Calgary Recreation requests \$2.6 million for the creation of dedicated arts and cultural calgary to help address identified gaps and opportunities. In alignment with the Integrated Civic Facility gram, the project will explore integration of an arts and culture hub within the redevelopment of the Forest tion Complex.							
Document Date	2018/09/11								
Service	ervice Arts & Culture		Secto	r Affected			SOU	THEAST	
Activity #	480650 V		Ward((s)			10		
Project Identifier (PID)	3000274		Citize	n Priority			A Pro	sperous City	
Business Unit	CALGARY RECREATION (Capita	al Investment	Plan Alignmen	t	Comr	munity Investmer	nts.Multi-Service
Department	COMMUNITY	COMMUNITY SERVICES		Resilience Fra	mework Dimen	sion		omy and Society	
Service Type	Current	Current		Resilience Fra	mework Driver			otes Cohesive &	Engaged
Investment Category	delivered and its own merit a defined scope; schedule resul	nt that is planned- and evaluated on erit and has a well-		Capital Infrastructure Investment Principles		Promote the well-being of communities environment and economy			
		Total		2019	2020	2021		2022	2023+
Recommended Fundin	g Allocation (\$	5,000,00	00	0	50,000	50,000)	1,225,000	3,675,000
Funding Status		For Approva	al						
Operating Impact Of Ca	apital	No							
Economic Impacts of 2 Recommended Fundin	9 9	Gr	Gross Output (\$)		Gross Domestic Produ (\$)		ıct	Income (\$)	Employment (Person-Years)
			7,898,7	24	3,476,594			2,514,938	27
MUGS		Ma	aintena	ance	Up	grade		Growth	New Services
		0%			0%			100%	0%
include crea will be impo		include creative	e expre	ssion and deve ering places, fo	elopment, social stering social co	, emotional a	and co	dual benefits. Ind gnitive well-being diverse neighbou	
public spaces		public spaces a	bugh multi-purpose spaces that meet a range of community needs, and through co-location with other c spaces and municipal services, these community cultural spaces minimize their footprint, support ectivity within a community and meet The City's environmental goals.						
developing crumedia develop		developing creamedia developi	munity cultural spaces and amenities contribute to economic growth and resiliency through ping creative and cultural skills that support creative industries such as design, architecture and development. These spaces contribute to social cohesion, culturally vibrant neighbourhoods and ing and retaining creative talent.						
Expected Key Benefits Increase and creestablis			ncreased access to arts and culture facilities in east Calgary responds to a significant need for gathering nd creation spaces. This project presents an opportunity to bring diverse ethno-cultural groups and stablished residents together to create. These spaces would be used by a wide range of citizens from hildren to seniors, engaging in acts of creating and connecting. Specific attention would be paid to						

children to seniors, engaging in acts of creating and connecting. Specific attention would be paid to address gaps related to Indigenous and ethno-cultural expression, youth/all ages and physical

accessibility. These activities develop social connections, connect young people to career paths, enliven a community and allow for creative energy to extend into the neighbourhood.

ICFP – Symons Valley Centre

Executive Summary	In October 2015, Council directed Administration to report back on a build out and investment strategy for the Sage Hill land purchase. The goal is to optimize use of the total property for City, partner or community uses, explore additional community uses and determine the full development potential of the site to maximize value. Identified as a priority learning project for the Integrated Civic Facility Planning program, Symons Valley Centre Phase 1 includes development of a library, affordable housing units, arts and culture components, community spaces, child care and supportive site infrastructure to facilitate development of remaining Phases. Phase 1 requires coordinated capital budgeting between multiple business units to facilitate auditability, project management accountability, project reporting and continuity.
Document Date	2018/09/11

Service	Arts & Culture	Sector Affected	NORTHWEST
Activity #	480653	Ward(s)	2
Project Identifier (PID)	3000579	Citizen Priority	A Prosperous City
Business Unit	CALGARY RECREATION	Capital Investment Plan Alignment	Community Investments.Multi-Service Facilities
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Economy and Society
Service Type	Current	City Resilience Framework Driver	Promotes Cohesive & Engaged Communities
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Promote the well-being of communities- environment and economy

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	2,000,000	0	0	2,000,000	0	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•	Gross Don	nestic Product (\$)	Income (\$)	Employment (Person-Years)
	2,746,863		1,727,898		1,136,089	11
MUGS	Mainter	nance	Up	grade	Growth	New Services
	0%	6		0%	100%	0%

Triple Bottom Line – Social	Participation in cultural activities provides many community and individual benefits. Individual benefits include creative expression and development, social, emotional and cognitive well-being. This facility invests in infrastructure that supports creative activities and improves Calgary's quality of life by providing community members access to a facility where they can program and participate in cultural experiences.
Triple Bottom Line – Environmental	Through multi-purpose spaces that meet a range of community needs, and through co-location with other public spaces and municipal services, these community cultural spaces minimize their footprint, support connectivity within a community and meet The City's environmental goals.
Triple Bottom Line – Economic	Community cultural spaces and amenities contribute to economic growth and resiliency through developing creative and cultural skills that support creative industries such as design, architecture and media development. These spaces contribute to social cohesion, culturally vibrant neighbourhoods and attracting and retaining creative talent.
Expected Key Benefits	Integrated service delivery New or improved services to the local area. Economic stimulation Optimization of civic resources Environmental return on investment: avoided land consumption of multiuse builds vs. single use builds City budget return on investment: avoided land costs of single use build vs. multi-use build. City land base value return on investment: multi-use builds preserve later phases to be attractive to purchasers. Economic return on investment: employment of architectural design and construction firms. Social return on investment. affordable housing: project will increase number of affordable housing units in neighbourhood by 48 units. public access spaces provides a qualitative return to the community. Social return on investment: provision of child care spaces; benefit of child care spaces increased with proximity to affordable housing.

Pumphouse Theatre Project

Executive Summary Document Date	The Pumphouse is a significant historic asset as well as an important cultural facility. The Pumphouse Theatre Schematic Design Report (2015) undertaken by The City identified current conditions of the building and anticipated priorities. Calgary Recreation is requesting \$1.2 million to address the most urgent items identified in the report. These items include: structural integrity study and remediation, fire alarm, detection and suppression requirements; roof replacement on non-heritage portion of the building and significant repairs to the heritage building roof; code compliance issues in main lobby, public washrooms, theater and storage area; and HVAC to address ventilation issues. 2018/09/11			
Service	Arts & Culture	Sector Affected	SOUTHWEST	

Service	Arts & Culture	Sector Affected	SOUTHWEST
Activity #	401482	Ward(s)	7
Project Identifier (PID)	3000176	Citizen Priority	A Prosperous City
Business Unit	CIVIC PARTNERS	Capital Investment Plan Alignment	Community Investments.Parks and Public Spaces
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Economy and Society
Service Type	Current	City Resilience Framework Driver	Promotes Cohesive & Engaged Communities
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Promote the well-being of communities- environment and economy

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,174,000	0	228,000	946,000	0	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years
	1,875,045		881,611		627,886	7
MUGS	Mainte	nance	Upg	grade	Growth	New Services
	100%		0%		0%	0%

Triple Bottom Line – Social	This initiative aligns with the Social Triple Bottom Line Policy Framework of an inclusive city, a safe city and a cultural city. It does so through the provision of equitable access for all persons, addressing the safety needs of individuals who take part in arts and culture experience throughout the building.
Triple Bottom Line – Environmental	The upgrades will address current environmental legislation, building codes and City Policies. The City is committed to protecting the quality of Calgary's environment through effective and efficient development and management of recreational facilities.
Triple Bottom Line – Economic	Addressing lifecycle maintenance priorities will ensure this facility benefits Calgarians for the next 25 years.
Expected Key Benefits	Greater public safety and accessibility Alignment with industry standards/best practices Protection of an important Historical Resource Increased patron satisfaction Maintenance of a key historic arts and cultural facility



Business Licensing

Compliance Services Equipment Lifecycle

Executive Summary	Business Licensing needs to lifecycle equipment including radios, mobile data terminals, communications equipment (e.g. GPS, modems) and other various assets. As equipment ages, maintenance costs can rise above any return on investment, without a comprehensive mitigation strategy. The equipment lifecycle program proactively manages assets through their lifecycle to maximize investments while ensuring their performance in supporting citizen facing services, and providing officer life safety. This equipment must be lifecycle appropriately for CCS to respond effectively to calls for service.
Document Date	2018/09/11

Service	Business Licensing	Sector Affected	Multiple Sectors
Activity #	462240	Ward(s)	All Wards
Project Identifier (PID)	3000174	Citizen Priority	A Prosperous City
Business Unit	CALGARY COMMUNITY STANDARDS	Capital Investment Plan Alignment	Other.Other
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	200,000	50,000	50,000	50,000	50,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	249,309		186,570		166,422	1
MUGS	Mainter	nance	Up	grade	Growth	New Services
	100	%		0%	0%	0%

Triple Bottom Line - Social	This equipment supports operations, ensures organizational resilience to equipment failures and officer life safety. As such this program supports safe cities and strong communities.
Triple Bottom Line – Environmental	N/A
Triple Bottom Line – Economic	This is a strategic infrastructure investment that improves public safety, thereby creating economic security, and creating a city where citizens and business can feel safe to live and invest.
Expected Key Benefits	Reliable equipment for citizen facing services. Improved officer life safety. Reliable radio communications. Reduced maintenance efforts and costs. Enables The City to meet Solicitor General's mandate from 2018 Lazenby fatality inquiry to monitor Peace Officers. Functional investigative tools.

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		Onec	ıτy	Coord	RMS -	BLIC	,		
Executive Summary Document Date	intelligence on safety interacti disorder related have reliable, of enforcement of	emerging cor ons in the con d to increased complete and f municipal by	nmuni nmuni I opioi consis Iaws a	ity trends. Curre ty. The City is fa d use, highlighti stent information and provincial st	nt systems are o cing emerging o	disparate, lime challenges do collabors expected to and inspiring	niting T ue to the pration a to prom neight	he City's overal ne economic do and ensuring pu note coordinated porhoods. The	wnturn, and social ublic safety bodies and proactive funding for this
Service	Business Licens	sing	Sect	or Affected			Multip	le Sectors	
Activity #	480400		Ward	d(s)			All Wa	ards	
Project Identifier (PID)	3000540		Citiz	en Priority			A Pros	sperous City	
Business Unit	CALGARY CON STANDARDS	MUNITY	Capi	tal Investment	Plan Alignmen	t	Other.	.Other	
Department	COMMUNITY S	ERVICES	City	Resilience Fra	mework Dimen	sion	Infrast	tructure and Ec	osystems
Service Type	Essential		City	Resilience Fra	mework Driver		Ensur	es continuity of	critical services
Investment Category	Program - A Progrouping of projected and bendering planned a together	ects that are efit from	at are			Principles	Integrate coordinate and optimize The City's investment		and optimize The
		Total		2019	2020	2021		2022	2023+
Recommended Fundin	g Allocation (\$)	300,000		0	200,000	100,000		0	0
Funding Status		For Approva	al						'
Operating Impact Of Co	apital	Yes							
Economic Impacts of 2 Recommended Fundin		Gross (Gross Domestic Produc (\$)		ıct	Income (\$)	Employment (Person-Years)
		373,964		964	279,855			249,633	2
MUGS		Ma	ainter	nance	Upgrade			Growth	New Services
			0%	, o	100%			0%	0%
Triple Bottom Line – So	This program will create a common platform for multiple service lines across One City, to track known risks, and collect intelligence on emerging community trends. Current systems are disparate, which limits The City's overall view on public safety interactions in the community. The City is facing emerging challenges due to the economic downturn and social disorder related to increased opioid use, highlighting the importance of collaboration and ensuring public safety bodies have reliable, complete and consistent information. This program is expected to promote coordinated and proactive enforcement of municipal bylaws and provincial statutes, for safe and inspiring neighborhoods. This system will enable officers and administration to track public safety related activity at specific locations in the city, including parks and open spaces. With the growing trend in opioid usage and homelessness in our city, we are seeing increased impact on the environment through discarded needles and drug paraphernalia. There is also a negative environmental impact to our city infrastructure, whether the watercourse or city parks, due to illegal encampments where vegetation is being destroyed, and there are large amounts of discarded materials including chemicals.								
Triple Bottom Line – Ed		This is a strategic infrastructure investment that improves public and community safety, thereby improving economic security, and creating a city where citizens and business can feel safe to live and							

Expected Key Benefits

and the labor force that Calgary is a desirable place to invest and work.

Improved service and satisfaction for citizens and businesses Intelligence to identify emerging community issues and community risk assessments Proactive management of social disorder (e.g. due to economic downturn, opioid use) Officers from multiple service lines can track and share information on interactions with citizens, animals, businesses Coordinated interactions with citizens and businesses during investigations Officers have known relevant information before attending scenes for efficiency and safety Delivers on Solicitor General's mandate (from 2018 Lazenby Fatality Inquiry) to track known risks in community and communicate them in real time to peace officers, to mitigate threats to officer life safety Coordinated enforcement of municipal bylaws and provincial statutes, with decreased time on file Efficiencies for municipal tribunals

invest. The City's bylaws create community standards, that when effectively enforced, signal to business

Civic Partners Infrastructure Grant

	Civio	: Part	nei	rs Infra	astruct	ure G	rar	nt	
Executive Summary Document Date	intent is to: (1) F and upgrades o Partner assets. City's AMP. (4)	Fund a grant n city owned (3) Assist Pa Provide Civic ecisions, and	on a m , Partners of Partners (5)	natching basis to er operated fact with the develoters with procestable transparer	o cover the cost ilities. (2) Fund s pment of improv ses and tools ne nt, accountable a	of urgently istudies nece yed asset madeded to madeded to madeded to madeded to madeded to madededed to madedededededededededededededededededede	neededessary anager ke con	d maintenance, li to understand the	e condition of the at align with The and informed
Service	Economic Develo	nment &	Secto	or Affected			CENT	re, south, no	ORTHEAST
COLVIOC	Tourism	princin a	Ocolo	Allootou				THWEST	51(111 <u>2</u> 7(51,
Activity #	414191		Ward	(s)			1, 5, 7	7, 9, 11	
Project Identifier (PID)	3000497		Citize	en Priority			A Pro	sperous City	
Business Unit	CIVIC PARTNER	S	Capit	al Investment	Plan Alignmen	t	Comr Facili	nunity Investmer ties	nts.Multi-Service
Department	COMMUNITY SE	RVICES	City F	Resilience Frai	mework Dimen	sion	Leade	ership and Strate	gy
Service Type	Essential		City F	Resilience Frai	mework Driver			owers a broad rai holders	nge of
Investment Category	Annual Investment A recurring program on maintaining or current in-service for ongoing purch similar assets	gram focused or upgrading ce assets or			Principles	Enha asset	nce the long-tern s	n value of City	
		Total		2019	2020	2020 2021		2022	2023+
Recommended Fundin	g Allocation (\$)	19,169,4	6,280,000		4,690,000	4,590,000		3,609,412	0
Funding Status		For Approva	al						
Operating Impact Of Ca	apital	No							
Economic Impacts of 2 Recommended Fundin		Gr	oss Output Gross Domestic Produ (\$) (\$)			ıct	Income (\$)	Employment (Person-Years)	
		3	30,616,281 14,395,199			95,199		10,252,304	121
MUGS		Maintenance			Upgrade			Growth	New Services
			100%	100% 0%				0%	0%
Triple Bottom Line – Social Investing in Civic Partner facilities enables more facilities to be available to support the developme healthy, active individuals and vibrant communities. The programs and services offered by our Civi Partners are a part of the social fabric of Calgary. Without these facilities, there would be less opportunities to enjoy arts and culture, recreation, the history of Calgary and Western Canada, anir from around world and many other activities that make Calgary a great place to live and visit. Improbuilding conditions enable Calgarians and visitors to have safe facilities to enjoy social and recreation opportunities. Many of the projects that will receive funding through this grant address accessibility opens up opportunity for more people to enjoy activities.						by our Civic e less anada, animals visit. Improved and recreation ccessibility, which			
Triple Bottom Line – Er		Through upgrade projects organizations can improve the environmental efficiencies of their systems, utilize renewable resources, and reduce their ecological footprint.							
Triple Bottom Line – Ed	tric etc gra fac ma	Civic Partner facilities attract tourists and business conferences to Calgary. This creates economic trickledown effect for Calgarians and The City of Calgary as visitors use our services (hotels, restaura etc.) Organizations receiving the grant will leverage funds from other sources (provincial and federal grants, corporate sponsorship, reserves, etc.) which allows The City to spend less on Civic Partner facilities that occupy City-owned land. Further, if buildings are returned to The City, if they have been maintained, savings will be realized by The City, as less work will need to be done before assigning the another organization.					otels, restaurants, I and federal vic Partner ey have been		
Expected Key Benefits	fol fin Pa	lowing areas ancial relief a Irtner facilitie	: (1) Ma and tec s that a	aintaining Civic	Partner facilities to organizations t a required leve	s to extend to to most effice	the life: ciently	ility for organizati span of the facilit invest funding. (3 sent and future o	y. (2) Providing

Convention Centre - Lifecycle

		<u> </u>			ue-Lii				
Executive Summary	Maintenance a lighting system contribution wa	In 1985, Council mandated to reduce the Partner's operating grant by \$160 K per year to establish a Major Maintenance and Replacement Reserve. This reserve was to be used to finance items such as carpet replacement, lighting system upgrading and other items which have an anticipated lifespan of 5 years or less. In 1992, this annual contribution was increased to \$180 K per annum and in 1997, a change to eliminate the restriction of useful life of five years or less was passed.							
Document Date	2018/09/11								
Service	Economic Devel	lopment &	Sector /	Affected		CENT	RE		
Activity #	414100		Ward(s)				7		
Project Identifier (PID)	3000593		Citizen	Priority			A Pros	sperous City	
Business Unit	CIVIC PARTNE	RS	Capital	Investment	Plan Alignmen	t		aphic Investme	
Department	COMMUNITY S	ERVICES	City Res	silience Fra	mework Dimen	sion	Econo	my and Society	
Service Type	Essential		City Res	silience Fra	mework Driver		Foster	rs economic pro	sperity
Investment Category	Annual Investme A recurring prog on maintaining o current in-servic for ongoing puro similar assets	gram focused or upgrading ce assets or				Principles	Enhar	nce the long-terr	n value of City
		Total		2019	2020	2021		2022	2023+
Recommended Fundin	g Allocation (\$)	720,000	0	180,000	180,000	180,00	0	180,000	0
Funding Status		For Approval							
Operating Impact Of Ca	apital	No							
Economic Impacts of 2 Recommended Fundin		Gross Output (\$)		Gross Domestic Produc (\$)		ıct	Income (\$)	Employment (Person-Years)	
			1,149,943	3	540,681			385,075	5
MUGS		Ma	aintenan	ce	Upgrade			Growth	New Services
			100%		(0%		0%	0%
Triple Bottom Line – So	The Calgary TELUS Convention Centre holds events for Calgarians as well as thousands of visitors early year. Projects that improve the facility's spaces and equipment promote the venue and the city, and they increase the opportunity for social community involvement. It increases the client experience.						the city, and they		
Triple Bottom Line – Er	nvironmental	Newer technology can provide incremental savings as a result of reduced energy consumption.						umption.	
Triple Bottom Line – Ed	Т	Improvement projects will remove substandard offerings and increase economic impact for the Centre, The City of Calgary, and surrounding stakeholders. A modernized facility can continue to bring economi benefit to the city.							
Expected Key Benefits	a c	(1) Increased operating efficiency due to reduced repair and maintenance. (2) Reduced utilities expeas a result of energy efficiencies. (3) New program and convention deliverables will enable the Centre continue meeting its mandate of being an economic driver for the City. (4) Ability to provide enhanced customer experience. (5) Increased ability for the centre to be a community hub while supporting all stakeholders.						ble the Centre to ride enhanced	

Heritage Park - Wet Dock

Executive Summary	In 2017, Community Services commissioned a study which included a comprehensive site assessment at Heritage Park to examine the impacts of the changes to the water levels of the Glenmore Reservoir. The wet dock will require replacement, as the mooring piles will fail due to the ice pressures caused by the +1.5-meter elevation during the winter, which is expected to be in operation for spring of 2020. In addition, the long-term stress of ice pressure has a high potential to damage the dry dock. Temporary measures will be put in place to address the potential +4.0-meter elevation under moderate to large flood events. These measures are required until the Springbank Off-stream Reservoir becomes operational, which is currently slated for end of 2020. The Office of Partnerships requires \$ 2.270 M to proceed with this project.
Document Date	2018/09/11

Service	Economic Development & Tourism	Sector Affected	SOUTH
Activity #	480351	Ward(s)	11
Project Identifier (PID)	3000156	Citizen Priority	A Prosperous City
Business Unit	CIVIC PARTNERS	Capital Investment Plan Alignment	Other.Other
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Leadership and Strategy
Service Type	Essential	City Resilience Framework Driver	Empowers a broad range of stakeholders
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	2,270,000	270,000	2,000,000	0	0	0
Funding Status	For Approval	or Approval				
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	utput		estic Product \$)	Income (\$)	Employment (Person-Years)
	3,586,	021	1,57	8,374	1,141,782	12
MUGS	Maintenance		Upgrade		Growth	New Services
	50%		50%		0%	0%

Triple Bottom Line – Social	Participation in recreation activities provides many community and individual benefits. Individual benefits include physical, social, emotional and cognitive well-being.
Triple Bottom Line – Environmental	Building design standards reflect best practices and current trends around climate change resiliency. Work completed at our facilities will align to the Sustainable Building Policy. Compliance with this policy ensures a cost-effective approach to maintaining service delivery in light of the City's commitment to mitigating climate change impacts.
Triple Bottom Line – Economic	Civic Partner facilities contribute to Calgary's economy by creating employment opportunities and stimulating associated economic activity.
Expected Key Benefits	Construction of a new wet dock will allow the SS Moyie to continue to operate beyond the 2020 season. The new dock will be designed to withstand ice pressures at the +1.5m elevation and will also be designed to increase accesibility.

TelusConvCentre - Improve

		i Gius	J U.	IVCCIII	.re - IIII	piov			
Executive Summary	some of the so Convention Covenue requires	outh building wentre Authority improvement	as upo . Howe ts to in	dated as well. T ever, the marke	he buildings hav t place has chan nd revenue whil	re been well nged for the	maintair consume	ned over the year or and users of	000 at which time ears by the the facility. The ce for The City of
Document Date	2018/09/11								
Service	Economic Deve	lopment &	Secto	or Affected			CENTR	RE	
Activity #	480352		Ward	l(s)			7		
Project Identifier (PID)	3000500		Citize	en Priority			A Prosp	perous City	
Business Unit	CIVIC PARTNE	RS	Capit	tal Investment	Plan Alignmen	t	Geogra Enterta	phic Investme	nts.Culture and
Department	COMMUNITY S	SERVICES	City	Resilience Fra	mework Dimen	sion	Econor	ny and Society	
Service Type	Essential		City	Resilience Fra	mework Driver		Fosters	economic pro	sperity
Investment Category	Project -A Proje investment that delivered and e its own merit an defined scope; schedule resulti substantially im	is planned- valuated on d has a well- cost and ng in new or	is planned- valuated on d has a well- cost and ng in new or			Enhand assets	e the long-tern	n value of City	
		Total		2019	2020	2021		2022	2023+
Recommended Fundin	g Allocation (\$)	15,000,00	00	3,750,000	3,750,000	3,750,0	00	3,750,000	0
Funding Status		For Approva							
Operating Impact Of Ca	apital	No							
Economic Impacts of 2 Recommended Fundin		Gr	Gross Output (\$)		Gross Domestic Produ (\$)		ıct	Income (\$)	Employment (Person-Years)
		2	23,957	,137	11,264,195			8,022,393	94
MUGS		Ma	ainten	ance	Upgrade			Growth	New Services
			34%	, 0	6	6%		0%	0%
Triple Bottom Line - So	У	The Calgary TELUS Convention Centre holds events for Calgarians as well as thousands of visitors of year. Projects that improve the facility's spaces and equipment promote the venue and the city, and the increase the opportunity for social and community involvement. It increases the client experience.						the city, and they	
Triple Bottom Line – Er	iple Bottom Line – Environmental Newer technology, equipment, furnishings, can provide incremental savings in reduced energy consumption, longer life span of equipment, and safer offerings with its usage for our customers.								
Triple Bottom Line – Ed	t	Improvement projects will remove substandard offerings and increase economic impact for the Certhe City of Calgary, and surrounding stakeholders. A modernized facility can continue to bring economefit to the city.							
Expected Key Benefits	a 0	(1) Increased operating efficiency due to reduced repair and maintenance. (2) Reduced utilities expert as a result of energy efficiencies. (3) New program and convention deliverables will enable the Central continue meeting its mandate of being an economic driver for the City. (4) Ability to provide enhance customer experience. (5) Increased ability for the centre to be a community hub while supporting all stakeholders.					ble the Centre to vide enhanced		

		And	ler	son St	ation T	OD		, ttaoi	mione 10	
Executive Summary Document Date	construction as 2018. Scope of parks, plazas a RE&DS, Trans undertaken as municipal serv	s per the revis f work include and pathway(s portation Infra well as the co ices adjacent	ed Oues details). The astructionstruction the	utline Plan and L ailed engineering his 8.0 ha (19.9 a sture and Transit lection of a new pa e existing Anders	and Use approve g design, site ser	ed at Calga vicing, grad vood will be s to existing ject provide t takes a tri	ry Plan ling and a cross g public es integ ple bot	ning Commission of construction of s-corporate collaborate infrastructure water developments.	ent of multiple	
Service	Land Developm	ent & Sales	Sec	tor Affected			SOUT	THWEST		
Activity #	402550		War	d(s)			11, 13	3, 14		
Project Identifier (PID)	2402550		Citiz	zen Priority			A Pro	sperous City		
Business Unit	REAL ESTATE SERV	AND DEV	Сар	ital Investment	Plan Alignment	:	Targe	ted Theme Inve	stments.Resilience	
Department	DEPUTY CITY	MANAGER	City	Resilience Fra	mework Dimens	sion	Econo	omy and Society	•	
Service Type	Current		City	City Resilience Framework Driver				Fosters economic prosperity		
Investment Category	Project -A Proje investment that delivered and evits own merit an defined scope; of schedule resulti substantially im	is planned- valuated on d has a well- cost and ng in new or	planned- luated on has a well- st and g in new or			rinciples		ate coordinate a investment	and optimize The	
		Total		2019	2020	2021		2022	2023+	
Recommended Funding	g Allocation (\$)	27,420,000		8,960,000	11,080,000	750,00	0	2,250,000	4,380,000	
Funding Status		For Approva	al							
Operating Impact Of C	apital	No								
Economic Impacts of 2 Recommended Funding		Gr	oss (\$)	Output)	Gross Domestic Produ (\$)		ıct	Income (\$)	Employment (Person-Years)	
		4	15,195	5,743	20,622,735			13,279,261	143	
MUGS		M	ainte	nance	Upg	grade		Growth	New Services	
			0%	6	5	5%		45%	0%	
Triple Bottom Line – S	e d r p c	fficient accessiversity of resi egional pathword a moro ommunities.	s to a idents ay thr e com A saf	renovated LRT s s with the hope of rough the core of nfortable and saf fer and more effi	the site combine er pedestrian experient circulation of	ed use focus estrian actived with a re perience an of pedestria	for this vity and novated id impro ns and	s development was development was development to develop the connections cyclist is also expenses.	vill encourage a he street'. A new dge will help to surrounding kpected.	
F		ommunities. A safer and more efficient circulation of pedestrians and cyclist is also expected. This project supports The City's goal of energy and greenhouse gas (GHG) emission reduction by ocating park and ride stalls closer to the home origins of existing Anderson Station park and ride users. Redistribution of park and ride stalls helps to reduce automobile travel distances which lowers fuel consumption and GHG emissions. Increased residents and jobs occur in one primary location, helping to educe the reliance on cars. A City study revealed multifamily residential trips could be lowered by 35%						c and ride users. lowers fuel location, helping to		

park and ride times (evenings and weekends).

With anticipated intensification of population density, Anderson TOD will provide an attractive business investment opportunity and will help diversify the area's retail mix. The site's adjacency to primary streets will support reliable goods movement and facilitate ease of access, desirable features for a business operator. The site's flexible land uses will provide a wide variety of employment opportunities helping to diversify the workforce. More housing choices will also be available including age in place options. The development potential is anticipated to make a positive contribution to the municipal tax base. Currently no taxes are being collected, but at full build out, an estimated \$8 million in new taxes will be generated.

and 25% for office workers. A shared parking strategy to ensure optimum use of available parking will allow private parking needs such as retail or visitor parking to be provided at the parkade during off peak

C2018-1158 Attachment 10 ISC: UNRESTRICTED

Triple Bottom Line - Economic

C2018-1158 Attachment 10

Expected Key Benefits This project will facilitate densification along a major roadway and act as the catalyst for new resident act as the catalyst for new residence.		/ titadillicit 10
employment and retail services at an existing LRT station. It will help balance policy direction with projected future growth in established and new communities.	Expected Key Benefits	

Centre St&16 Ave NW Stn TOD

Executive Summary	Conducting an initial review to understand the redevelopment potential of a City-owned lands located at Centre St and 16th Ave NW. By reviewing existing planning policies along with analyzing the current land assembly, feasibility and market demand will assist in determining the development opportunities for this future TOD station site. Work will include preliminary site analysis and preliminary engineering and planning reviews to inform potential infrastructure investment decisions.
Document Date	2018/09/11

Service	Land Development & Sales	Sector Affected	CENTRE
Activity #	480852	Ward(s)	7
Project Identifier (PID)	3000098	Citizen Priority	A Prosperous City
Business Unit	REAL ESTATE AND DEV SERV	Capital Investment Plan Alignment	Community Investments.Growth Infrastructure
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Economy and Society
Service Type	Current	City Resilience Framework Driver	Fosters economic prosperity
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Integrate coordinate and optimize The City's investment

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	500,000	400,000	100,000	0	0	0
Funding Status	For Approval					<u>'</u>
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product \$)	Income (\$)	Employment (Person-Years)
	686,7	716	431	,975	284,022	3
MUGS	Mainter	nance	Upg	ırade	Growth	New Services
	0%		0%		100%	0%

Triple Bottom Line - Social	Will facilitate the development of a mixed use and mixed income neighbourhood that will offer a range of housing and work options. TOD sites have the potential to attract a diversity of people and offer savings in commute costs.
Triple Bottom Line – Environmental	By leveraging a transit infrastructure investment through the development of a TOD site will help decrease the environmental impacts associated with urban travel. Improved air quality and increased physical activity are some of the benefits as a result of compact growth through transit oriented development.
Triple Bottom Line - Economic	If this project moves forward, it will make a significant contribution to local economic growth through short and long term job creation and the attraction of new business investment. Greater office and commercial development will add to The City's tax base and optimize the value of City owned lands.
Expected Key Benefits	A detailed feasibility analysis will be conducted to inform future strategic real estate and development decisions for City-owned lands. As well, potential impacts with other TOD work The City is engaged in will also be identified. In the long term, a comprehensive redevelopment plan for City owned lands at Centre St and 16th Ave will be created to guide future development. This plan will also align with Council priorities, policies and goals for planning and building a great city

Heritage Station TOD

Executive Summary	An existing policy review along with preliminary planning and engineering work is required for City owned lands at the Heritage LRT station. In addition, environmental site assessment(s), geotechnical assessment and traffic impact assessment studies will also be conducted to evaluate the site's opportunities and constraints. Determining the feasibility of transit oriented development along with understanding planning policy requirements will also help to inform future Station Area Plan work for this area.
Document Date	2018/09/11

Service	Land Development & Sales	Sector Affected	SOUTH
Activity #	480850	Ward(s)	11
Project Identifier (PID)	3000093	Citizen Priority	A Prosperous City
Business Unit	REAL ESTATE AND DEV SERV	Capital Investment Plan Alignment	Community Investments.Growth Infrastructure
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Economy and Society
Service Type	Current	City Resilience Framework Driver	Fosters economic prosperity
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Integrate coordinate and optimize The City's investment

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,900,000	600,000	1,100,000	100,000	100,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	Output		estic Product \$)	Income (\$)	Employment (Person-Years
	2,609,	519	1,64	1,503	1,079,284	11
MUGS	Maintenance		Upgrade		Growth	New Services
	0%	D	10	0%	90%	0%

Triple Bottom Line - Social	The provision of affordable housing, and a mixture of building types and styles will provide for an inclusive and resilient city.
Triple Bottom Line – Environmental	Redeveloping an inner-city site in a comprehensive manner through densification and mixed land uses will reduce consumption of greenfield lands and reduce environmental impacts.
Triple Bottom Line – Economic	Mixed use development will provide new locations for employment, housing and other services that encourage live, work and play in one compact area. Optimizing the value of an existing City-owned asset through additional infrastructure investment upholds Council's priority for a well-run city.
Expected Key Benefits	To complete a comprehensive redevelopment plan for City lands at Heritage TOD that align with Council priorities, policies and goals for the overall development of Calgary By conducting a feasibility analysis will help to inform real estate and development decisions through a better understanding of the feasibility for site development and how that affects/interplays with other TOD work The City is engaged in.

Point Trotter

Executive Summary	The Point Trotter Industrial Park was developed to enhance The City's offering of small lot industrial development lots. The first phase of development has been underway for the past several years and available lots have been actively marketed for the past two years. In 2017, RE&DS acquired the remaining lands (approx. 90 acres) from the adjacent developer and has now assumed responsibility for developing the entire site. The acquisition costs for the additional lands were secured through a separate approval from City Council; however, the capital costs for additional construction and increased off site obligations related (primarily, the construction of Glenmore Tr. And 68th St intersection)are currently unfunded. Funding is required to complete the entire expanded development.								
Document Date	2018/09/11								
Service	Land Developme	ent & Sales	Sector	Affected			SOU	THEAST	
Activity #	402010		Ward(s	s)			9, 12	!	
Project Identifier (PID)	3000094		Citizen	Priority			A Pro	osperous City	
Business Unit	REAL ESTATE AND DEV SERV		Capital	Investment	Plan Alignmen	t	Geographic Investments.Inland Port and Logistics District		
Department	DEPUTY CITY MANAGER		City Re	City Resilience Framework Dimension			Economy and Society		
Service Type	Current	City Resilience Framework Driver			Fosters economic prosperity				
Investment Category	Project -A Project investment that it delivered and evits own merit and defined scope; c schedule resulting substantially imp	s planned- aluated on I has a well- ost and og in new or		Infrastructu	ire Investment F	Principles	Enha asse	ance the long-teri	m value of City
		Total		2019	2020	2021		2022	2023+
Recommended Fundin	g Allocation (\$)	11,903,0	00	903,000	7,500,000	2,000,0	00	1,500,000	0
Funding Status		For Approva	al						
Operating Impact Of Ca	apital	No							
Economic Impacts of 2019-2022 Recommended Funding		Gr	oss Out (\$)	s Output Gross Domestic Produ (\$) (\$)		ıct	Income (\$)	Employment (Person-Years)	
		1	9,619,43	36	8,95	2,313		5,764,517	62
MUGS		Maintenance		nce	Upgrade			Growth	New Services
		0%			0%			100%	0%

Triple Bottom Line – Social	Industrial land development supports local services as well as creates jobs and small business and entrepreneurial opportunities. The architectural guidelines for this industrial park encourage sustainable development and higher building standards which make a positive impact to the surrounding urban environment.						
Triple Bottom Line – Environmental	RE&Ds obtained all required Water Act approvals from Alberta Environment and Parks to mitigate any environmental impacts on wetlands in the area. A sustainable rebate program is in place to support The City's priority for encouraging higher environmental standards of development and creating a greener, more sustainable building footprint.						
Triple Bottom Line – Economic	Providing a supply of industrial land plays a direct role in local economic development growth while also diversifying the municipal tax base. Without sufficient serviced land supply, The City may run the risk of losing business investment to surrounding municipalities.						
Expected Key Benefits	This project will provide an increased supply of serviced industrial land within City limits and generate short term construction jobs. Long term employment opportunities and growth are also a positive outcomes. By maintaining a competitive local industrial sector will also strengthen Calgary's position as an inland port and contribute to the overall economic growth for the city. Additionally, there is potential for positive contribution through the expansion of the non-residential tax base.						

South Hill Station TOD

Executive Summary	A feasibility analysis including preliminary planning and engineering work is required for City-owned lands at the South Hill LRT station. Environmental site assessment(s), geotechnical assessment and traffic impact assessment studies will also be completed to evaluate site opportunities and constraints. By determining the feasibility and market demand for potential redevelopment as well as understanding the planning policy requirements will also help nform future Station Area Plan work for this area.
Document Date	2018/09/11

Service	Land Development & Sales	Sector Affected	SOUTH
Activity #	480854	Ward(s)	11
Project Identifier (PID)	3000104	Citizen Priority	A Prosperous City
Business Unit	REAL ESTATE AND DEV SERV	Capital Investment Plan Alignment	Community Investments.Growth Infrastructure
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Economy and Society
Service Type	Current	City Resilience Framework Driver	Fosters economic prosperity
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Integrate coordinate and optimize The City's investment

	Total	2019	2020	2021	2022	2023+	
Recommended Funding Allocation (\$)	800,000	0	260,000	300,000	240,000	0	
Funding Status	For Approval	For Approval					
Operating Impact Of Capital	No						
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	utput		estic Product (\$)	Income (\$)	Employment (Person-Years)	
	1,098,	745	69	1,159	454,435	5	
MUGS	Mainter	nance	Upg	grade	Growth	New Services	
	0%))	(0%	100%	0%	

Triple Bottom Line - Social	Improving connectivity between communities Improving accessibility to Transit and services that citizens require on a daily basis.
Triple Bottom Line – Environmental	Taking all necessary mitigation measures to reduce greenhouse gas emissions, climate change impacts and the building footprint. Contributes to the development of a resilient and smart city through compact development that utilizes Transit as the primary mode of transportation for area residents.
Triple Bottom Line - Economic	Maximizing the value of City owned lands through the identification of its highest and best use. Supporting a significant capital investment in transit infrastructure.
Expected Key Benefits	In the long term, a comprehensive redevelopment plan will be developed for City-owned lands at South Hill Station and will align with Council priorities, policies and goals for the overall development of Calgary In the short tern, a detailed feasibility analysis will be conducted to inform marketing and timing for site development and to understand the potential impacts with other TOD work The City is engaged in.

Srvc Connections&Driveways

Executive Summary	Customers purchasing land receive the added value from our project management services in the construction of their site service connections and driveway. It is a cost recovery service funded through our capital development project budgets. Only when City-owned land is sold that we learn of the customer's service connection and driveway requirements. This unknown of when land is sold creates a challenge for budgeting and cost management within all our industrial development projects. Historically, industrial land project budgets have remained opened for 10 to 15 years until such time the service connections and driveway work is completed for all lots. Creating a separate activity code improves management of two distinct lines of work and provides greater financial transparency in reporting and cost recovery.
Document Date	2018/09/11

Service	Land Development & Sales	Sector Affected	SOUTHEAST		
Activity #	480851	Ward(s)	12		
Project Identifier (PID)	3000095	Citizen Priority	A Prosperous City		
Business Unit	REAL ESTATE AND DEV SERV	Capital Investment Plan Alignment	Community Investments.Growth Infrastructure		
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Economy and Society		
Service Type	Current	City Resilience Framework Driver	Fosters economic prosperity		
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Optimize financing and funding sources		

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	4,800,000	1,000,000	1,200,000	1,200,000	1,400,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	. •		estic Product (\$)	Income (\$)	Employment (Person-Years)
	7,911	,727	3,61	10,107	2,324,597	25
MUGS	Mainter	nance	Upg	grade	Growth	New Services
	0%	ó	10	00%	0%	0%

Triple Bottom Line - Social	Short term and long term job creation to improve the quality of life for citizens			
Triple Bottom Line – Environmental	More efficient use of resources in design and construction of utility services and connections.			
Triple Bottom Line - Economic	Improved cost management provides greater financial value for the service we provide to purchasers of City-owned land.			
Expected Key Benefits	More efficient and transparent cost management and financial reporting contributes to a well-run city and helps improve the customer experience.			

West Downtown Redevelopment

Executive Summary	As part of addressing Council's priority for a well-run city, our service strives to achieve the highest and best use of City-owned lands within our inventory. This goal is achieved through a planning and feasibility study which will enable the evaluation of a site's future redevelopment potential. With a better understanding of land use, geotechnical, environmental and other site opportunities and constraints, we are taking a proactive approach to put ourselves in an excellent position to respond and connect with other corporate initiatives and any arising strategic needs.
Document Date	2018/09/11

Service	Land Development & Sales	Sector Affected	CENTRE
Activity #	480855	Ward(s)	8
Project Identifier (PID)	3000589	Citizen Priority	A Prosperous City
Business Unit	REAL ESTATE AND DEV SERV	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Leadership and Strategy
Service Type	Current	City Resilience Framework Driver	Fosters long-term & integrated Planning
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	800,000	400,000	400,000	0	0	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	utput		estic Product \$)	Income (\$)	Employment (Person-Years
	1,098,	745	691	,159	454,435	5
MUGS	Mainter	nance	Upg	rade	Growth	New Services
	0%)	0	%	100%	0%

Triple Bottom Line – Social	Improve quality of life for Calgarians		
Triple Bottom Line – Environmental	Transform a scarce and underutilized land asset in the downtown to its highest and best use.		
Triple Bottom Line – Economic	Maximizing the value and financial return of City-owned lands		
Expected Key Benefits	In the short term, a feasibility analysis will be developed to inform real estate and development decisions for City-owned lands and to identify any potential impacts with other redevelopment projects The City is engaged in. In the long tern, a comprehensive redevelopment plan will be created for City-owned lands to guide future development in the downtown. The plan will align with Council priorities, policies and goals for planning and building a great city.		

West Village Redevelopment

Executive Summary	Supporting Green Line construction through the downtown with the preparation of a remediation plan for anticipated surplus fill. As part of the remediation plan, work will include understanding the fill requirements from the analysis of the redevelopment potential of City-owned lands in West Village.
Document Date	2018/09/11

Service	Land Development & Sales	Sector Affected	SOUTHWEST
Activity #	480853	Ward(s)	8
Project Identifier (PID)	3000103	Citizen Priority	A Prosperous City
Business Unit	REAL ESTATE AND DEV SERV	Capital Investment Plan Alignment	Community Investments.Growth Infrastructure
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Economy and Society
Service Type	Current	City Resilience Framework Driver	Fosters economic prosperity
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	2,300,000	1,100,000	800,000	400,000	0	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	3,791,	036	1,72	29,843	1,113,869	12
MUGS	Mainter	nance	Up	grade	Growth	New Services
	0%	, 0		0%	100%	0%

Triple Bottom Line – Social	Improve quality of life for Calgarians
Triple Bottom Line – Environmental	Minimizing gas emissions from trucks travelling greater distances to move fill to a location outside of the downtown. Utilizing scarce land in the downtown core to its highest and best use.
Triple Bottom Line - Economic	Prudent project cost management by managing surplus fill to benefit two different capital projects. Maximizing the value and financial return of City owned lands
Expected Key Benefits	In the short term, a remediation plan will be developed that utilizes the surplus construction fill which avoids incurring sigificant hauling costs. A feasibility analysis will also be conducted to inform real estate and development decisions for City-owned lands as well as identify any potential impacts with other redevelopment projects The City is engaged in. In the long term, a comprehensive redevelopment plan for City-owned lands will assist in guiding future development and align with Council priorities, policies and goals for planning and building a great city.



Library Service

ICFP - Symons Valley Community Library

Executive Summary Calgary Public Library's Master Facility Plan was updated in 2017. Population growth estimates, overlaid with existing library facility service areas, indicate a need for a new library service point in the vicinity of the community of Symons Valley, by the year 2025. At 18,000 sq. ft., the estimated capital cost is \$10.874M with expenses commencing in 2020. Projects and locations are selected to avoid overlapping service areas and to ensure that existing facilities are neither overwhelmed with new members nor rendered unnecessary as a result of new facilities. A second prime consideration for siting new libraries is the ability to participate, in a coordinated way, in multi-use civic facilities in order to realize financial and operational efficiencies and to maximize user convenience. Document Date

Service	Library Services	Sector Affected	NORTH
Activity #	413966	Ward(s)	2
Project Identifier (PID)	3000577	Citizen Priority	A Prosperous City
Business Unit	CIVIC PARTNERS	Capital Investment Plan Alignment	Community Investments.Multi-Service Facilities
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Leadership and Strategy
Service Type	Current	City Resilience Framework Driver	Empowers a broad range of stakeholders
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Integrate coordinate and optimize The City's investment

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	8,000,000		3,800,000	4,200,000		
Funding Status	For Approval		,			·
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding		oss Output Gross Domestic Produ (\$) (\$)			Income (\$)	Employment (Person-Years)
MUGS	Mainter	nance	Up	grade	Growth	New Services
	0%	6	5	0%	50%	0%

Triple Bottom Line - Social	Participation in library activities provides many community and individual benefits. Individual benefits include physical, social, emotional and cognitive well-being. The library will be an important gathering place (community hub), fostering social connections and community resiliency.
Triple Bottom Line – Environmental	Library buildings are LEED certified and are located and designed to be accessible from multiple modes of transport. A joint-use facility further minimizes impact on the environment by reducing the physical and energy footprint of the whole versus its parts.
Triple Bottom Line - Economic	Library facilities contribute to Calgary's economy by creating local employment opportunities, facilitating discovery of market knowledge by local entreprenuers, and hosting events aimed at catalyzing entrepreneurship.
Expected Key Benefits	As part of a network of community libraries, this library will contribute to the successful attainment of Calgary Public Library's Strategic Plan, which is designed to contribute to the following Quality of Life results for Calgarians: (1) A sense of belonging. (2) Empowerment to take part in decisions that affect their well-being. (3) Empathy for others. (4) Personal meaning, capacity and connectedness.

Library Lifecycle Grant

Executive Summary Document Date	components: (1) Facil requirements to keep upgrades with reason and information infras three streams create a	Calgary Public Library's Master Facility Plan was updated in 2017. Library facility planning includes three main components: (1) Facility Condition Assessments, to determine mechanical, electrical, and HVAC investment requirements to keep buildings serviceable. (2) Energy Efficiency Audits, to identify energy-related building component upgrades with reasonable payback periods. (3) Functional Condition Assessments, to identify the architectural, FFE and information infrastructure investments required to meet current operational and/or strategic expectations. These three streams create a Lifecycle Investment Plan that is intended to keep Library buildings, fleet and information infrastructure in a state of good repair and able to support operational goals.			
Service	Library Services	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHEAST, SOUTHEAST		
A 41 14 W		144 14 1	4 0 0 4 5 0 40 7 0 0 40 44 40		

Service	Library Services	Sector Affected	CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST
Activity #	413965	Ward(s)	1, 2, 3, 4, 5, 6, 13, 7, 8, 9, 10, 11, 12
Project Identifier (PID)	3000199	Citizen Priority	A Prosperous City
Business Unit	CIVIC PARTNERS	Capital Investment Plan Alignment	Community Investments.Multi-Service Facilities
Department	COMMUNITY SERVICES	City Resilience Framework Dimension	Leadership and Strategy
Service Type	Essential	City Resilience Framework Driver	Empowers a broad range of stakeholders
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	11,170,046	2,024,261	3,174,262	3,619,262	2,352,261	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	Output		estic Product (\$)	Income (\$)	Employment (Person-Years)
	17,840	,154	8,38	88,105	5,974,033	70
MUGS	Maintenance		Upg	grade	Growth	New Services
	100	%	()%	0%	0%

Triple Bottom Line – Social	Participation in library activities provides many community and individual benefits. Individual benefits include physical, social, emotional and cognitive well-being. The library will be an important gathering place (community hub), fostering social connections and community resiliency.
Triple Bottom Line – Environmental	Library buildings are LEED certified and are located and designed to be accessible from multiple modes of transport. A joint-use facility further minimizes impact on the environment by reducing the physical and energy footprint of the whole versus its parts.
Triple Bottom Line - Economic	Library facilities contribute to Calgary's economy by creating local employment opportunities, facilitating discovery of market knowledge by local entrepreneurs, and hosting events aimed at catalyzing entrepreneurship.
Expected Key Benefits	By supporting the network of community libraries, this project will contribute to the successful attainment of Calgary Public Library's Strategic Plan, which is designed to contribute to the following Quality of Life results for Calgarians: (1) A sense of belonging. (2) Empowerment to take part in decisions that affect their well-being. (3) Empathy for others. (4) Personal meaning, capacity and connectedness.

Citizen Information & Services

311 Software & Upgrades

Executive Summary	Hosting of the 311 system by vendor as well as internal costs to complete upgrades and deploy new service offerings to remain up to date with technology. This service line supports all 61 Service Lines with over 620 service requests in the 311 system to deliver effective quality services and information to our internal clients and citizens.
Document Date	2018/09/11

Service	Citizen Information & Services	Sector Affected	Multiple Sectors
Activity #	401662	Ward(s)	All Wards
Project Identifier (PID)	1401662	Citizen Priority	A Well-Run City
Business Unit	CUSTOMER SERVICE & COMMUNICATION	Capital Investment Plan Alignment	Other.Other
Department	CHIEF FINANCIAL OFFICE	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

Total	2019	2020	2021	2022	2023+
3,747,420	916,200	916,200	957,510	957,510	0
For Approval					
Yes					
	•		(^)	Income (\$)	Employment (Person-Years)
5,123,464		3,269,632		2,392,144	26
Maintenance		Upgrade		Growth	New Services
80%		20%		0%	0%
	3,747,420 For Approval Yes Gross 6 (\$ 5,123	3,747,420 916,200 For Approval Yes Gross Output (\$) 5,123,464 Maintenance	3,747,420 916,200 916,200 For Approval Yes Gross Output Gross Dom (\$) 5,123,464 3,26 Maintenance Upg	3,747,420 916,200 916,200 957,510 For Approval Yes Gross Output (\$) Gross Domestic Product (\$) 5,123,464 3,269,632 Maintenance Upgrade	3,747,420 916,200 916,200 957,510 957,510 For Approval Yes Gross Output (\$) Gross Domestic Product (\$) Income (\$) 5,123,464 3,269,632 2,392,144 Maintenance Upgrade Growth

Triple Bottom Line – Social	This project supports the social TBL policy by supporting a continuous communication with citizens on information and services while taking in account the needs of various audiences.
Triple Bottom Line – Environmental	This project supports the environmental TBL policy by providing information on city services by phone, which positively impact the environment (less transit, parking usage, mail, printing of information). Electronic efficiencies can reduce duplicate requests and repeat visits. Less paper as staff evolve to digital technology.
Triple Bottom Line – Economic	This project supports the economic TBL policy by providing information on city services by phone, which is typically more efficient than face-to-face service delivery.
Expected Key Benefits	Meet citizens expectations regarding access to information and services on a 24/7/365 basis.

Online (calgary ca) Upgrades _ Maintenance

Executive Summary	This investment is required to ensure that the calgary.ca web site platform is upgraded to continue to meet citizens' evolving needs in the next business cycle and beyond. The current platform is not supported beyond 2020 by the vendor, which may expose the site to security and performance vulnerabilities.
Document Date	2018/09/11

Service	Citizen Information & Services	Sector Affected	Multiple Sectors
Activity #	401696	Ward(s)	All Wards
Project Identifier (PID)	3000066	Citizen Priority	A Well-Run City
Business Unit	CUSTOMER SERVICE & COMMUNICATION	Capital Investment Plan Alignment	Other.Other
Department	CHIEF FINANCIAL OFFICE	City Resilience Framework Dimension	Leadership and Strategy
Service Type	Essential	City Resilience Framework Driver	Empowers a broad range of stakeholders
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	2,793,000	1,301,500	1,491,500	0	0	0
Funding Status	For Approval					
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•	Gross Dome		Income (\$)	Employment (Person-Years)
	3,818	,583	2,436	6,899	1,782,895	19
MUGS	Mainte	nance	Upg	rade	Growth	New Services
	100)%	0,	%	0%	0%

Triple Bottom Line – Social	This project supports the social TBL policy by supporting increased communication with citizens and the delivery of services that citizens expect to be available through digital channels.
Triple Bottom Line – Environmental	This project supports the environmental TBL policy by providing digital services to citizens, preventing citizens to travel and park to a city's premise.
Triple Bottom Line - Economic	This project supports the economic TBL policy by providing services digitally, which by design and through their delivery will be less expensive than traditional face-to-face delivery of services.
Expected Key Benefits	(a) Deliver City services through lower cost digital channels; (b) Maintain calgary.ca as a main source of information about City programs, services and decisions; (c) Maintain citizens satisfaction with calgary.ca; (d) Collect information about services from citizens and businesses to improve City services.



City Auditor's Offic

Upgrade Meeting Rooms

Executive Summary	This project will replace end of life meeting room technology and create additional team meeting space to support critical City Auditor's Office work. Council provided capital to upgrade all meeting rooms in 2017 as part of Tomorrow's Workplace objectives, however the two City Auditor's Office meeting rooms did not qualify. Facility Management has provided a level 5 estimate for meeting room modifications, which includes dividing one of the meeting rooms into two functional project team rooms. Competitive media and voice technology quotes have also been included in the project cost estimate. In accordance with Bylaw 48M2012, Audit Committee reviews and recommends Council approval of the City Auditor's Office budget annually. The City Auditor has discussed this capital request with the Chair of Audit Committee and has obtained support for this request.
Document Date	2018/09/11

Service	City Auditor's Office	Sector Affected	Internal / The City of Calgary
Activity #	481150	Ward(s)	
Project Identifier (PID)	3000594	Citizen Priority	A Well-Run City
Business Unit	CITY AUDITORS OFFICE	Capital Investment Plan Alignment	Other.Other
Department	MAYOR - COUNCIL	City Resilience Framework Dimension	Leadership and Strategy
Service Type	Essential	City Resilience Framework Driver	Promotes leadership & effective management
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels, Enhance the long-term value of City assets, Integrate coordinate and optimize The City's investment

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	140,000	140,000	0	0	0	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	223,6	000	10	5,132	74,876	1
MUGS	Mainter	nance	Up	grade	Growth	New Services
	0%	, D	10	00%	0%	0%

Triple Bottom Line – Social	The City Auditor's Office mandate is to assist Council in its oversight of Administration, stewardship over public funds and achievement of value for money. The City Auditor's Office fulfills this responsibility by conducting independent and objective reviews of City operations and making recommendations to assist Administration to effectively manage resources, systems and processes and mitigate risk. Reviews of City operations may include an evaluation of the achievement of social, environmental and economic objectives aligned to Citizen Priorities and Council Directives.
Triple Bottom Line – Environmental	
Triple Bottom Line - Economic	
Expected Key Benefits	Increased efficiency and engagement in team meetings. Increased efficiency in the delivery of audits, advisory and investigations through use of basic meeting room technology.



Mayor & Counci

Relationship Mgmt Solution

Funding to support the maintenance and life cycle needs for the Office of the Councillors to be able to provide a customer relationship database solution to the 14 Ward offices. Councillors and Ward staff need a means to be able to track incoming calls from constituents and monitor the status of the calls and outstanding issues. CRM provides historic and detailed accounts of information being shared between Ward offices, constituents and Administration. CRM provides continuity in communications and a detailed record of engagement between Ward offices, constituents and Administration. This is in support of the 2019-2022 Council directives, specifically having "a Well-Run City" whereby Calgary has a modern and efficient municipal government that is focused on resilience and continuous improvement to make life better every day for Calgarians by learning from citizens, partners, and others. Document Date

Service	Mayor and Council	Sector Affected	Multiple Sectors
Activity #	481200	Ward(s)	All Wards
Project Identifier (PID)	3000105	Citizen Priority	A Well-Run City
Business Unit	OFFICE OF THE COUNCILLORS	Capital Investment Plan Alignment	Other.Other
Department	MAYOR - COUNCIL	City Resilience Framework Dimension	Leadership and Strategy
Service Type	Current	City Resilience Framework Driver	Promotes leadership & effective management
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels, Promote the well-being of communities-environment and economy

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	300,000	200,000	100,000	0	0	0
Funding Status	For Approval				'	
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product \$)	Income (\$)	Employment (Person-Years)
	410,1	59	261	,751	191,503	2
MUGS	Mainter	nance	Upg	ırade	Growth	New Services
	0%))	10	0%	0%	0%

	0%	100%	0%	0%	
Triple Bottom Line – Social This program provides a platform to enable Ward offices to track input and feedback constituents or key stakeholders. The CRM system provides certainty in tracking in Ward offices, which ensures that constituents feel their concerns and comments are tracked throughout the process while a resolution is being sought. The integrity of the CRM system is critical to ensure accuracy of the historic record. Part of having systems in place that support community engagement and activism while elito citizens who are trying to help make improvements in their communities. Having CRM system allows for accurate record keeping and tracking functions, which ultim impediments to citizens and Ward offices wanting to better Calgary communities.					
Triple Bottom Line – Environmental	fices exists if the current CRM system and the process of the current CRM system and the process of the current to one Ward office and should more or all Ward offices fices in dealing with constituent cover and operates using methods not once and does not easily adapt to opermunicate with their constituents.	esolving issues wit Excessive time and files. Catastrophic be affected. The C ncerns, comments at aligned with the the changing expe	th the current d money has economical and CRM solution is s, cases and multiple social		
Triple Bottom Line - Economic	ole Bottom Line – Economic N/A				

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Expected Key Benefits

It is expected there will be an ease of record keeping whereby Ward offices could: pull any information (case, issue, comment, concern, etc.) levied by a constituent; find the resolution to any previous communication/issue/comment/case, etc.; spend less man hours combing through emails to respond to a FOIP request; use the database to complete additional tasks (email blasts, etc.); and run reports to support/create Ward strategies. Additionally, CRM provides a historic reference for any communications between the Councillor, Ward office staff, Administration and constituents; continuity in the messaging given to constituents; alignment in the delivery of service provided by Councillors/Ward office staff and the constituents; quick reference for any FOIP requests received by the Ward offices; and solution that is FOIP and CASL compliant.



Municipal Elections

Census & Election Software

Executive Summary	The census database, CIDER, (Census Information Data Entry Reporting) is dated and requires significant changes. These changes will also impact MACE (Management Administration Census Elections) and the census online, two systems that support both the election and census functions. It is also expected that census and election-related systems will require changes resulting from upgrades to POSSE. Funding will also be needed to implement the recommendations of the election four-year program, which is currently in development. The recommendations may include ballot counting machines, electors list system updates, and other technology, and would be needed in advance of the 2021 election.
Document Date	2018/09/11

Service	Municipal Elections	Sector Affected	Internal / The City of Calgary, Multiple Sectors
Activity #	481000	Ward(s)	All Wards
Project Identifier (PID)	3000129	Citizen Priority	A Well-Run City
Business Unit	CITY CLERKS	Capital Investment Plan Alignment	Other.Other
Department	LAW AND LEGISLATIVE SRVICES	City Resilience Framework Dimension	Leadership and Strategy
Service Type	Essential	City Resilience Framework Driver	Promotes leadership & effective management
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	3,600,000	1,020,000	2,200,000	380,000	0	0
Funding Status	atus For Approval					
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross (estic Product \$)	Income (\$)	Employment (Person-Years)
	4,921	,912	3,14	1,008	2,298,039	25
MUGS	Mainte	nance	Upg	grade	Growth	New Services
	33	%	34	4%	0%	33%

Triple Bottom Line - Social	No direct impact on the social dimensions of Triple Bottom Line.		
Triple Bottom Line – Environmental	No direct impact on the environmental dimensions of Triple Bottom Line.		
Triple Bottom Line – Economic	No direct impact on the economic dimensions of Triple Bottom Line.		
Expected Key Benefits	Improvements to census data collection & storage, as well as significant elections-related process changes.		

Property Assessment

Assessment Systems Improvement

Executive Summary	Supporting Property Assessment in its core business is a highly customized Computer Assisted Mass Appraisal (CAMA) system called Calgary Integrated Assessment Office (CIAO). CIAO is integrated with Geographic Information System (GIS). The current system has been in use since 2002, and is near the end of its lifecycle. The CAMA system provides information to every department in The City, and is critical to the success of Assessment. Successful completion of the CIAO+ Program will: 1) help maintain the quality of Assessment's valuations which provides stable tax revenues to finance and support key City services such as transportation, police and fire protection, parks and City infrastructure, and 2) help maintain the focus on Assessment's vision of being a leading annual market value assessment jurisdiction, earning the respect and trust of our customers every day.
Document Date	2018/09/11

Service	Property Assessment	Sector Affected	Internal / The City of Calgary
Activity #	411080	Ward(s)	All Wards
Project Identifier (PID)	3000114	Citizen Priority	A Well-Run City
Business Unit	ASSESSMENT	Capital Investment Plan Alignment	Other.Other
Department	CHIEF FINANCIAL OFFICE	City Resilience Framework Dimension	Economy and Society
Service Type	Essential	City Resilience Framework Driver	Fosters economic prosperity
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels, Integrate coordinate and optimize The City's investment, Optimize financing and funding sources

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	3,600,000	0	3,600,000	0	0	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (Gross Dome		Income (\$)	Employment (Person-Years)
	4,921	,912	3,14	1,008	2,298,039	25
MUGS	Mainte	nance	Upg	rade	Growth	New Services
	09	6	100	0%	0%	0%

Triple Bottom Line – Social	N/A
Triple Bottom Line – Environmental	N/A
Triple Bottom Line – Economic	Efficiency will be increased.
	The City will benefit from this program in several ways: an improved and more stable assessment specific software system that can be used for years to come; maintenance of the many data sharing relationships needed by other business units across The City; and increased efficiencies within the Assessment business unit

Content Suite (Phase 2) - EDRM

Executive Summary	Improvements to the City's Enterprise Document and Records Management program and software (Opentext Content Suite) will minimize legal and compliance risks, improve searchability of records and information, and improve productivity. The project will continue ongoing work to effectively manage City records and information and carry out disposition in accordance with City Policies. As volumes of electronic records and information continue to grow, it is important to apply records management practices to provide timely and secure access, support decision making, and manage costs. Funding will allow greater management of official records in new software, including new disposition processes, and support to BUs to ensure they meet operational, legal, and business requirements. \$1.558M of this project would be new funding. \$1.1M of the budget approved in Action Plan would be carried forward.
Document Date	2018/09/11

Service	Records Management - Access & Privacy	Sector Affected	Internal / The City of Calgary
Activity #	471997	Ward(s)	All Wards
Project Identifier (PID)	3000125	Citizen Priority	A Well-Run City
Business Unit	CITY CLERKS	Capital Investment Plan Alignment	Other.Other
Department	LAW AND LEGISLATIVE SRVICES	City Resilience Framework Dimension	Leadership and Strategy
Service Type	Essential	City Resilience Framework Driver	Promotes leadership & effective management
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,558,000	279,500	499,500	279,500	499,500	0
Funding Status	For Approval				'	
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding				Income (\$)	Employment (Person-Years)	
	2,130,	094	1,35	59,358	994,540	11
MUGS	Mainter	nance	Up	grade	Growth	New Services
	25%	6		0%	25%	50%

Triple Bottom Line – Social	No direct impact on the social dimensions of Triple Bottom Line.
Triple Bottom Line – Environmental	No direct impact on the environmental dimensions of Triple Bottom Line.
Triple Bottom Line – Economic	No direct impact on the economic dimensions of Triple Bottom Line.
Expected Key Benefits	By enhancing the Corporate Records Management Program through the application of greater focus on electronic records management, The City will reduce legal and compliance risks, disposition processes will be established, a methodology will be developed and consistently implemented for records in Content Server, and the corporate value of better managing records and information can be demonstrated and measured.

Taxatic

Support the delivery of City of Calgary

services at approved service levels

Tax Management Sustainment

Executive Summary	Funding is required to maintain The City of Calgary's property tax system, which supports the billing and collection of approximately 2.5 billion dollars annually. The City's tax system must be updated to ensure continued compliance with regulatory and legislative changes contained within the Municipal Government Act (MGA) and The City Charter. This is in alignment with the 2019-2022 Council Directives, specifically having "a Well-Run City", whereby Calgary has a modern and efficient municipal government that is focused on resilience and continuous improvement to make life better every day for Calgarians.						
Document Date	2018/09/11						
Service	Taxation	Sector Affected	Multiple Sectors, CENTRE, EAST, NORTH, SOUTH, WEST, NORTHEAST, NORTHWEST, SOUTHEAST, SOUTHWEST				
Activity #	480200	80200 Ward(s) All Wards					
Project Identifier (PID)	3000111	Citizen Priority A Well-Run City					
Business Unit	INANCE Capital Investment Plan Alignment Other.Other						
Department	HIEF FINANCIAL OFFICE City Resilience Framework Dimension Leadership and Strategy						
Service Type	Essential	City Resilience Framework Driver	, 3,				

Capital Infrastructure Investment Principles

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	2,000,000	1,000,000	1,000,000	0	0	0
Funding Status	For Approval				·	
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product \$)	Income (\$)	Employment (Person-Years)
	2,734	,395	1,74	5,004	1,276,688	14
MUGS	Mainte	nance	Upg	grade	Growth	New Services
	100	%	C	0%	0%	0%

Triple Bottom Line – Social	No social impacts
Triple Bottom Line – Environmental	No environmental impacts
Triple Bottom Line - Economic	Ensuring property taxes are billed in a manner compliant with legislation will enable The City to continue to collect revenue which allows it to deliver programs and services valued by Calgarians.
Expected Key Benefits	The City is able to ensure that the billing and collection of property tax remains compliant with governing legislation. Reputational and financial risk to The City will be mitigated.

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Investment Category

Annual Investment Program-

A recurring program focused

on maintaining or upgrading current in-service assets or for ongoing purchases of

similar assets



Corporate Security

		Acce	ss Secur	ity Prog	gram			
Executive Summary Document Date	Program will some The City, impa Program will appropriate privileges, allowed controls around organization. The City is a support of the City in the City is a support of the City in the	This Program will implement a comprehensive, effective approach to accessing City IT systems and applications. The Program will support the implementation of robust Roles Based Access control strategies and structures throughout The City, impacting all staff, contractors and visitors, as it will encompass The City's IT infrastructure and facilities. This Program will address information that is unnecessarily exposed by dated or ineffective access processes and privileges, allowing The City to improve information management and increase controls to City networks. Elevated controls around the management of virtual access will reduce The City's risk profile and add business value to the organization. This program will focus on implementing tools to perform threat risk assessments, offer insight into City networks and assets, and manage access rights throughout The City.						
Service	Corporate Secu	rity	Sector Affected			Multiple	Sectors	
Activity #	481050		Ward(s)			All Ward	ls	
Project Identifier (PID)	3000099		Citizen Priority			Enabling	g Services	
Business Unit	CORPORATE S	SECURITY	Capital Investmen	Plan Alignmen	t	Targeted	d Theme Inve	stments.Resilience
Department	LAW AND LEGI SRVICES	SLATIVE	City Resilience Fra	nmework Dimen	sion	Econom	y and Society	,
Service Type	Essential		City Resilience Fra	mework Driver		Ensures Justice	Social Stabili	ty & Security and
Investment Category	Program - A Progrouping of proj related and ben- being planned a together	ects that are efit from	city			an adaptable resilient and smart		
		Total	2019	2020	2021		2022	2023+
Recommended Fundin	g Allocation (\$)	970,061	485,030	485,031	0		0	0
Funding Status		For Approva	ıl		1			
Operating Impact Of Ca	apital	Yes						
Economic Impacts of 2 Recommended Fundin		Gross Output (\$)			Gross Domestic Produc (\$)		Income (\$)	Employment (Person-Years)
		1,380,955		857,467			594,150	7
MUGS		Ma	Maintenance		Upgrade		Growth	New Services
			0%		0%		80%	20%
Triple Bottom Line - So	service lines delivered by public facing business units, including Recreation, Transit, and Community Services. People and businesses would not be able to function effectively in public buildings if they are not secure and their information is not adequately protected.					d Community lings if they are		
Triple Bottom Line - Ef	Corporate Security's environmental benefits are realized through the protection of City infrastructure including critical sites utilized by Waste & Recycling Services, Water Resources, and Water Services Enhanced security measures support business continuity for public facing services, including service associated with environmental protection.					ater Services.		
Triple Bottom Line – Ed	s C c	Economic benefits include: Mitigate negative economic impacts due to breaches in data security, sabotage, and/or human error which could result in lawsuits and financial penalties. Protect The City of Calgary from service delivery disruption. Provide the redundancy and resiliency needed to maintain control of security systems to protect critical sites and assets. Minimize downtime should catastrophic failure of City systems occur.						
Expected Key Benefits	a s b	failure of City systems occur. This program will: Reduce The City's risk profile with regards to unauthorized and malicious actors attempting to gain access to information and facilities; Align information access with business needs to support effective and efficient processes; Analyze stale, inaccessible and vulnerable information which we be leveraged to delete unnecessary data, allow appropriate access to information based on business need, and reduce City of Calgary vulnerabilities.				siness needs to ormation which will		

Information Security

Sorvico	Corporato Socurity	Sector Affected	Multiple Sectors
Document Date	2018/09/11		
Executive Summary	Inadequate security of informations impacting the ability to delive Freedom of Information and management of City information prevent unauthorized access	mation could expose The City to id yer services, which can result in eco d Privacy Act. This program will imp ation. It will improve The City's abil	ring it are increasing incomplexity and velocity. entity theft, denial of service and fraudulent activities, commic loss, reputational damage and breach of the blement mitigation strategies and tools to support the ity to monitor networks and systems, protect email, and iset of The City that supports all service lines; this ecure.

Service	Corporate Security	Sector Affected	Multiple Sectors
Activity #	471030	Ward(s)	All Wards
Project Identifier (PID)	3000062	Citizen Priority	Enabling Services
Business Unit	CORPORATE SECURITY	Capital Investment Plan Alignment	Targeted Theme Investments.Resilience
Department	LAW AND LEGISLATIVE SRVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Build an adaptable resilient and smart city

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	2,317,446	788,160	99,243	135,800	1,294,243	0
Funding Status	For Approval					
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	3,168,	407	2,02	21,977	1,479,328	16
MUGS	Mainter	nance	Up	grade	Growth	New Services
	0%		0%		80%	20%

Triple Bottom Line – Social	Corporate Security's social benefits are realized through increased protection and improved resiliency of service lines delivered by public facing business units, including Recreation, Transit, and Community Services. People and businesses would not be able to function effectively in public buildings if their information is not secure and accessible.
Triple Bottom Line – Environmental	Corporate Security's environmental benefits are realized through the protection of City infrastructure including critical sites utilized by Waste & Recycling Services, Water Resources, and Water Services. Enhanced security measures support business continuity for public facing services, including services associated with environmental protection.
Triple Bottom Line – Economic	Economic benefits include: Mitigate negative economic impacts due to breaches in data security, sabotage, and/or human error which could result in lawsuits and financial penalties; Protect The City of Calgary from service delivery disruption; Provide the redundancy and resiliency needed to maintain control of security systems to protect critical sites and assets; Minimize downtime should catastrophic failure of City systems occur.
Expected Key Benefits	Reduce The City's exposure to high impact and high likelihood threats; Increase protection of City information, emails, cloud stored and confidential data; Mitigate risks such as litigation, cyber-attacks, phishing attacks and information breaches.

People & Resource Mgmt

Executive Summary	This program contains projects that improve effectiveness of The City's governance, risk and compliance programs, and contributes to the overall organizational resilience of The Corporation. These include security education and awareness programs, corporate intelligence programs and due diligence initiatives that relate to new employees, contractors and vendors.
Document Date	2018/09/11

			3
Service	Corporate Security	Sector Affected	Multiple Sectors
Activity #	481051	Ward(s)	All Wards
Project Identifier (PID)	3000101	Citizen Priority	Enabling Services
Business Unit	CORPORATE SECURITY	Capital Investment Plan Alignment	Targeted Theme Investments.Resilience
Department	LAW AND LEGISLATIVE SRVICES	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Integrate coordinate and optimize The City's investment

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,513,364	677,841	497,841	168,841	168,841	0
Funding Status	For Approval					·
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross (estic Product (\$)	Income (\$)	Employment (Person-Years)
	2,154	,388	1,33	37,709	926,916	11
MUGS	Mainte	nance	Up	grade	Growth	New Services
	0%		0%		0%	100%

Triple Bottom Line - Social	Corporate Security's social benefits are realized through increased protection and improved resiliency of service lines delivered by public facing business units, including Recreation, Transit, and Community Services. People and businesses would not be able to function effectively in public buildings if they are not secure and their information is not adequately protected.
Triple Bottom Line – Environmental	Corporate Security's environmental benefits are realized through the protection of City infrastructure including critical sites utilized by Waste & Recycling Services, Water Resources, and Water Services. Enhanced security measures support business continuity for public facing services, including services associated with environmental protection.
Triple Bottom Line – Economic	Economic benefits include: •Protect The City of Calgary from service delivery disruption. •Provide the redundancy and resiliency needed to maintain control of security systems to protect critical sites and assets. •Minimize downtime should catastrophic failure of City systems occur.
Expected Key Benefits	Key benefits will include: •Formalized guard training program and dedicated training resources; •Increased cyber security awareness culture of employees and contractors; •Perform appropriate due diligence on employees and contractors prior to employment, and new and existing vendors prior to entering into contracts.

Physical Security

		P	'ny	sical S	ecurity	/			
Executive Summary	This program focuses on the protection of City of Calgary employees, critical infrastructure, buildings, and facilities. This program will upgrade, improve, and/or lifecycle Corporate Security tools including Key Management, System Reconciliation, Public Safety Network Expansion, Lifecycle upgrades, Mobile Trailer Unit upgrades and the replacement of the Physical Security Information Management System. It will deliver threat risk assessments to support decision making, contribute to public safety and security, and assist in the maturity of The City's Risk Management Program.								
Document Date	2018/09/11								
Service	Corporate Secu	urity	Sect	tor Affected			Multipl	e Sectors	
Activity #	471000		War	d(s)			All Wa	rds	
Project Identifier (PID)	3000100		Citiz	zen Priority			Enabli	ng Services	
Business Unit	CORPORATE	SECURITY	Сар	ital Investment	Plan Alignmen	nt	Target	ed Theme Inve	stments.Resilience
Department	LAW AND LEG SRVICES	ISLATIVE	City	Resilience Fra	mework Dimen	sion	Econo	my and Society	
Service Type	Essential		City	Resilience Fra	mework Driver		Ensure Justice		ty & Security and
Investment Category	A recurring pro on maintaining current in-servi	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets				Principles	Build a city	an adaptable res	silient and smart
		Total		2019	2020	2021		2022	2023+
Recommended Fundin	g Allocation (\$)	2,415,31	6	913,829	643,829	403,82	9	453,829	0
Funding Status		For Approva	For Approval					·	
Operating Impact Of C	apital	Yes							
Economic Impacts of 2 Recommended Fundin		Gr	Gross Output (\$)		Gross Domestic Product (\$)		ıct	Income (\$)	Employment (Person-Years)
		:	3,302	,214	2,107,369			1,541,803	17
MUGS		M	aintei	nance	Upgrade			Growth	New Services
			139	%	6	64%		18%	5%
Triple Bottom Line – Se	;	Corporate Security's social benefits are realized through increased protection and improved resiliency service lines delivered by public facing business units, including Recreation, Transit, and Community Services. People and businesses would not be able to function effectively in public buildings and public spaces if they are not secure.					d Community d		
including critical Enhanced secur				e Security's environmental benefits are realized through the protection of City infrastructure critical sites utilized by Waste & Recycling Services, Water Resources, and Water Services. It security measures support business continuity for public facing services, including services divide with environmental protection.					
Triple Bottom Line – E	ļ	omic Economic benefits include: Protect The City of Calgary from service delivery disruption. Provide the redundancy and resiliency needed to maintain control of security systems to protect critical sites a assets. Minimize downtime should catastrophic failure of City systems occur.							
Expected Key Benefits					; Maintain and life ed for analysts,				

Security Risk Management

Executive Summary	This program will further Corporate Security's risk management practices and support enterprise security risk management throughout The City. It will help improve our ability to complete threat risk assessments, implement analytics, as well as provide an enterprise tool to standardize governance risk and compliance across The Corporation. The tools and processes stemming from this program will help to ensure risks are appropriately identified, measured and tracked for leaders' consideration in relation to fraud and cyber security threats.
Document Date	2018/09/11

Service	Corporate Security	Sector Affected	Multiple Sectors
Activity #	481052	Ward(s)	All Wards
Project Identifier (PID)	3000102	Citizen Priority	Enabling Services
Business Unit	CORPORATE SECURITY	Capital Investment Plan Alignment	Targeted Theme Investments.Resilience
Department	LAW AND LEGISLATIVE SRVICES	City Resilience Framework Dimension	Economy and Society
Service Type	Essential	City Resilience Framework Driver	Ensures Social Stability & Security and Justice
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+	
Recommended Funding Allocation (\$)	1,670,288	693,072	173,072	467,072	337,072	0	
Funding Status	For Approval	For Approval					
Operating Impact Of Capital	Yes						
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)	
	2,377,	781	1,47	76,419	1,023,030	13	
MUGS	Maintenance		Upgrade		Growth	New Services	
	0%		0%		53%	47%	

Triple Bottom Line – Social	Corporate Security's social benefits are realized through increased protection and improved resiliency of service lines delivered by public facing business units, including Recreation, Transit, and Community Services. Service lines will face fewer issues and less disruption if risks are managed appropriately.
Triple Bottom Line – Environmental	Corporate Security's environmental benefits are realized through the protection of City infrastructure including critical sites utilized by Waste & Recycling Services, Water Resources, and Water Services. Enhanced security measures support business continuity for public facing services, including services associated with environmental protection.
Triple Bottom Line – Economic	Economic benefits include: Mitigate negative economicimpacts due to breaches in data security, sabotage, and/or human errorwhich could result in lawsuits and financial penalties. Protect The City of Calgaryfrom service delivery disruption. Provide the redundancy andresiliency needed to maintain control of security systems to protectcritical sites and assets. Minimize downtime shouldcatastrophic failure of City systems occur.
Expected Key Benefits	The Security Risk Management Program will: Provide a one-way, easy to use and efficient mass notification tool for City employees in the event of a crisis, natural disaster or other incident; Facilitate the management of cyber threat intelligence and associated entities such as campaigns, incidents, tactics, techniques and procedures; Continue to develop a proactive approach to fraud management resulting in subsequent benefits including an increase in the City's reputation regarding its handling of contracts and vendors as well as providing the potential to avert financial, asset and reputational losses before they are incurred.

City Online Next Generation

Executive Summary	City Online is a complicated and highly customized system that requires a great amount of time and effort to maintain. Throughout the current business cycle 2015-2018, it was necessary to suspend most City Online feature enhancements due to an exorbitant amount of time and effort required to implement key component upgrades. It is imperative that we replace the current system or risk spending most of ongoing maintenance funds to continually upgrade City Online with little or no enhancements to keep current with customer service expectations. City Online supports a \$12 Billion real estate industry and is a significant revenue generator with annual revenue of \$4M. Our digital strategy for data-driven decision making and information management policy for incorporating predictive analytics for our customers will be part of City Online Next Gen to support our vast customer base.
Document Date	2018/09/11

Service	Data Analytics & Information Access	Sector Affected	Internal / The City of Calgary
Activity #	480700	Ward(s)	All Wards
Project Identifier (PID)	3000033	Citizen Priority	Enabling Services
Business Unit	CORP ANALYTICS AND INNOVATION	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	2,530,000	1,075,000	885,000	285,000	285,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)			estic Product (\$)	Income (\$)	Employment (Person-Years)
	3,459,010		2,207,431		1,615,011	17
MUGS	Maintenance		Upgrade		Growth	New Services
	25%		0%		0%	75%

Triple Bottom Line – Social	A new City Online system will be more customizable for the user experience and will enhance customer service through this retail portal.
Triple Bottom Line – Environmental	City Online will continue to minimize the use of manual paper-based transaction systems from several business units. City Online may also reduce carbon footprint from the requirement for customers to travel into the downtown core to transact retail purchases with The City.
Triple Bottom Line – Economic	AnewCityOnlinesystemthatlowersoreliminatesconcernfortechnologyupgradesloweringthetotal cost of ownership. Enhanced user experience functionality will drive more traffic to City Online and thus increase revenue.
Expected Key Benefits	The benefits to re-implementing City Online (COL) with simpler technology are many. COL will lower environmental impact as we are eliminating a paper-based retail system. Projected revenue is expected to stay the same or increase by selecting a solution to better match the customer user experience. Better service to our customers is also expected as the focus can switch to better serving customer needs and less on administering a retail system. Finally, we can eliminate technology upgrade planning if a proprietary solution is selected.

		Corp	ora	ate GIS	S Upgra	ades			
Executive Summary	Calgary, and an at The City, the than now in the resilient and su platform including platform at The	ial Information Systems (GIS) are critical technology and information systems used extensively at The City of and are integrated into day-to-day operations and business systems. While technology upgrades are common v, there has never been a more pivotal point in the advancements in location-based technology and data in the GIS industry. This project ensures the GIS platform technology and geospatial data are in current, and supported environments to meet business needs. This initiative will result in an upgraded, and stable GIS cluding hardware, software, data, tools and information systems. Delivering this project ensures the GIS in the City of Calgary will be in compliance with Information Security standards, robust, and an integral seed for day to day planning & response, whether in the office or the field.							
Document Date	2018/09/11		•						
Service	Data Analytics & Access	Information	Secto	or Affected			Intern	nal / The City of Cors	algary, Multiple
Activity #	480703		Ward	(s)			All W	ards	
Project Identifier (PID)	3000065		Citize	n Priority			Enab	ling Services	
Business Unit	CORP ANALYTI	CS AND	Capita	al Investment	Plan Alignmen	t	Targe	eted Theme Inves	tments.Resilience
Department	DEPUTY CITY N	MANAGER	City F	Resilience Fra	mework Dimen	sion	Infras	tructure and Eco	systems
Service Type	Essential		City F	Resilience Fra	mework Driver		Ensu	res continuity of c	ritical services
Investment Category	Project -A Project investment that it delivered and evits own merit and defined scope; conschedule resulting substantially imp	s planned- raluated on d has a well- ost and ng in new or		Capital Infrastructure Investment Principles			Support the delivery of City of Calgary services at approved service levels, Build an adaptable resilient and smart city, Enhance the long-term value of City assets, Integrate coordinate and optimize The City's investment		
		Total		2019	2020	2021		2022	2023+
Recommended Fundin	g Allocation (\$)	1,964,55	50	446,250	588,750	418,70	0	510,850	0
Funding Status		For Approva	al						
Operating Impact Of Ca	apital	No							
Economic Impacts of 2 Recommended Fundin		Gross Output (\$)		Gross Domestic Product (\$)		ıct	Income (\$)	Employment (Person-Years)	
		2	2,685,9	928	1,714,074			1,254,059	14
MUGS		Maintenance		ance	Upgrade			Growth	New Services
		100%		6	0%			0%	0%
Triple Bottom Line – So	formation sys ore effectively	stem pla y and fa	atform connects aster internally	s, collects, analy and to citizens t	zes and disa hrough a va	semina riety of	of Calgary. The gates accurate local fidigital options.	ation based data Web enablement	
Triple Bottom Line – Er	w	ith front line B	Busines	ss Units (BUs).		re accessibl	le from	curate and up-to-contractions remote locations rvices.	
Triple Bottom Line – Economic Thetechnologyupgradewillallowfortheexpediteddeliveryofgeographicalinformationbothinternally and externally while reducing the time and cost previously required for custom developed web map solutions. It will also enable staff to move from an analog (paper) to digital processes and extend fi mobility options.					d web mapping				
Expected Key Benefits Geospatial Info The City. The Corporation, e The Corporatio GIS, internally supported infor interoperability systems access				rate GIS Upgrada accurate, relia creases access citizens, ensura and technolog siliency via wel nformation and	des project: deli ble and current to geospatial da es critical busin y systems, incre and cloud solu	vers resilien information is ata, analytica ess systems eases syster tions, ensu forms that a	t, stab s avail al tools contir ms (da res the re in co	d information use le and supportabl able and accession and information use to utilize upgrata, software and corporation's crompliance with Intial solutions.	e GIS to the ble throughout through web aded and technology) itical business

Corporate Imagery Program

				e iiiiay		9 . a	•		
Executive Summary									
Document Date	foundational ir critical Corpor management) Asset Manage and access, th information. T	nput to their se ate business s , Calgary 911 I ement systems ne project will u The Imagery Pr	rvice or ystem Dispat , Build update ogran	ns and processes tch System, Calo ding Central etc.	y's imagery data s including Com gary Police Serv As imagery sys chnology and to ecessary metrics	a and inform mon Operat ices (for evid stems evolve ols to access s to report o	ation is ing Pict dence a for dance to the for dance to the n Wate	extensively integrate (used for end investigation to capture, procedity's current a rshed Health and	egrated into many mergency ns), Corporate essing, storage nd past Imagery d Urban Forest
Service	Data Analytics of Access	nalytics & Information Sector Affected					Interna		Calgary, Multiple
Activity #	411308		Ward	d(s)			All Wa	ırds	
Project Identifier (PID)	3000078		Citiz	en Priority			Enabli	ng Services	
Business Unit	CORP ANALYT	TICS AND	Capi	ital Investment	Plan Alignmen	t	Targe	ted Theme Inve	stments.Resilience
Department	DEPUTY CITY	MANAGER	City	Resilience Fran	nework Dimen	sion	Infrast	ructure and Eco	osystems
Service Type	Essential		City	Resilience Fran	nework Driver		Ensur	es continuity of	critical services
Investment Category	Project -A Proje investment that delivered and e its own merit ar defined scope; schedule resulti substantially im	is planned- valuated on nd has a well- cost and ing in new or	-	Capital Infrastructure Investment Principles			Support the delivery of City of Calgary services at approved service levels, Build an adaptable resilient and smart city, Enhance the long-term value of City assets, Integrate coordinate and optimize The City's investment		
		Total		2019	2020	2021		2022	2023+
Recommended Fundin	g Allocation (\$)	4,235,50	0	928,250	823,750 823,750		0	1,659,750	0
Funding Status		For Approva	ıl						
Operating Impact Of C	apital	No							
Economic Impacts of 2 Recommended Funding		Gr	Gross Output (\$)		Gross Domestic Product (\$)		ıct	Income (\$)	Employment (Person-Years)
		Ę	5,790,	,766	3,695,483			2,703,707	29
MUGS		Ma	ainter	nance	Upgrade			Growth	New Services
			0%	0	100%			0%	0%
and ready for t				the foundationa old changes and growth and rede y of Calgary.	advancements i	n technolog	y, indus	stry standards, o	citizen .
mandate of re			nis initiative supports the Municipal Development Plan (MDP) / Calgary Transportation Plan (CTP) andate of reporting on the Watershed Health and Urban Forest indicators and other Corporate and buncil initiatives.						
field costs) three				Imagery Program will enhance access to imagery data and will increase efficiencies (e.g. reducing costs) throughout The Corporation, and results in cost saving and revenues through data sharing for porate projects, and external clients.					
Expected Key Benefits The Imager throughout projects, and current and advancement ransparence internal projects.			e Corp externacessib in tec nd ope s and throu	oration, resulting al clients. This pr de to ensure the chnology, industr	g in cost savings oject will ensure Corporation is v y standards, citi. City of Calgary. n City projects. Over half a millio	s and revenue the essentivell position zen expecta The Image Imagery dat n dollars an	ues thro al found ed and itions ar ry Prog a & info nually),	ough data sharind dational informa ready for contin nd directly supporam provides im prmation genera	tion is accurate, uous changes and orts resiliency, nagery solutions for te revenues for

Facility Management

Asset Assessment Program

Executive Summary	The Asset Assessment Program budget request of \$3,951 thousand will enable Facility Management to identify, understand, and prioritize lifecycle maintenance to mitigate emerging safety issues in existing facilities. The program will plan and prioritize re-investment in existing facilities to maintain minimal service provision. This program manages the physical condition assessment of multiple portfolios through Building Condition Assessments. This program also prepares the Asset Management Plans which contain the information required to prioritize, manage risk, and set and monitor levels of asset performance. Asset management practice improvements are not in scope with this budget request.
Document Date	2018/09/11

Service	Facility Management	Sector Affected	Internal / The City of Calgary
Activity #	480751	Ward(s)	All Wards
Project Identifier (PID)	3000120	Citizen Priority	Enabling Services
Business Unit	FACILITY MANAGEMENT	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	3,951,000	1,071,000	999,000	1,197,000	684,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years)
	5,426,427		3,413,463		2,244,343	23
MUGS	Maintenance		Upgrade		Growth	New Services
	100%		0%		0%	0%

Triple Bottom Line – Social	This budget ensures the condition of critical building systems in key facilities are understood, prioritized and scheduled for investment to prevent service disruptions and enabling Service Lines to deliver quality and efficient services to citizens. This budget supports the provision of safe, accessible, attractive and well-kept workspaces and civic spaces for the enjoyment of employees, citizens and community groups. This budget will focus on critical life safety systems and building components in key City-owned facilities ensuring these buildings continue to be safe for employees, tenants and citizens.
Triple Bottom Line – Environmental	This budget will support strategic life cycle investments that will improve building performance and reduce energy consumption in critical buildings, thereby decreasing the portfolio's environmental impact.
Triple Bottom Line – Economic	This budget will support potential long-term cost savings and avoidance by reducing what The City spends on facility operations and maintenance. This budget will minimize critical system failures and service disruptions in key City facilities supporting business continuity.
Expected Key Benefits	This budget ensures facilities continue to provide minimum service delivery and public spaces are safe, accessible and well-kept. This budget will support potential long-term cost savings and avoidance by reducing what The City spends on facility operations and maintenance. This budget minimizes infrastructure risk to the Corporation and supports business continuity.

Asset Sustainment Program

Executive Summary	The Asset Sustainment Program of \$15,053 thousand will provide capital maintenance and investment in existing critical systems and facilities. Identification and prioritization of projects is provided by the Asset Assessment Program. Investments in this program will be for critical facility components. Essential Facility components include building mechanical systems, electrical systems, and structural elements. Non-core Facilities will not have proactive lifecycle maintenance performed, components will fail and be replaced reactively. This investment program is re-evaluated annually. The facility portfolio has a total current replacement value of \$1.1 Billion, over 96 buildings. The deferred maintenance backlog totals \$104 Million at the beginning of 2019. There are a further \$123 Million worth of lifecycle replacements which come due during theOneCalgary Business Cycle.
Document Date	2018/09/11

Service	Facility Management	Sector Affected	Internal / The City of Calgary
Activity #	480750	Ward(s)	All Wards
Project Identifier (PID)	3000063	Citizen Priority	Enabling Services
Business Unit	FACILITY MANAGEMENT	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	15,053,279	4,608,476	3,765,323	3,385,667	3,293,813	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years)
	24,042,231		11,304,204		8,050,888	95
MUGS	Maintenance		Upgrade		Growth	New Services
	100%		0%		0%	0%

Triple Bottom Line – Social	This budget ensures critical building systems in key facilities are replaced when required, preventing service disruptions and enabling Service Lines to deliver quality and efficient services to citizens. This budget supports the provision of safe, accessible, attractive and well-kept workspaces and civic spaces for the enjoyment of employees, citizens and community groups. This budget will focus on critical life safety systems and building components in key City-owned facilities ensuring these buildings continue to be safe for employees, tenants and citizens.
Triple Bottom Line – Environmental	This budget will support strategic life cycle investments that will improve building performance and reduce energy consumption in critical buildings, thereby decreasing the portfolio's environmental impact.
Triple Bottom Line - Economic	This budget will support potential long-term cost savings and avoidance by reducing what The City spends on facility operations and maintenance. This budget will minimize critical system failures and service disruptions in key City facilities supporting business continuity.
Expected Key Benefits	This budget ensures facilities continue to provide minimum service delivery and public spaces are safe, accessible and well-kept. This budget will support potential long-term cost savings and avoidance by reducing what The City spends on facility operations and maintenance. This budget minimizes infrastructure risk to the Corporation and supports business continuity.

Beltline YWCA Restoration

Executive Summary	The Historic Beltline YWCA is a protected Provincial Historic Resource and requires complete rehabilitation including envelope and all base building systems. This budget allows us to continue to enact the Council approved Heritage Buildings Management Plan. This project includes initial phases of the exterior rehabilitation that do not require tenant relocation. These include roof and masonry repairs and water management to ensure long term sustainability until funding is available for the full rehabilitation. This budget request is for \$5,000 thousand.
Document Date	2018/09/11

Service	Facility Management	Sector Affected	Internal / The City of Calgary
Activity #	480760	Ward(s)	11
Project Identifier (PID)	3000135	Citizen Priority	Enabling Services
Business Unit	FACILITY MANAGEMENT	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	5,000,000	0	2,500,000	2,500,000	0	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	7,985,	712	3,75	54,732	2,674,131	31
MUGS	Mainter	nance	Up	grade	Growth	New Services
	100	%		0%	0%	0%

Triple Bottom Line – Social	Historic resources connect us to our past, our future, and to each other. They provide places of learning and places of understanding for all Canadians. Historic resources are integral to the identity of our community and help to strengthen its distinctiveness. Historic resources add to the beauty, character and visual interest of our urban environment, which contribute to the city's liveability and are sources of community pride.
Triple Bottom Line – Environmental	The preservation of historic places capitalizes on their embodied energy. Re-using existing resources requires a much smaller expenditure of materials and energy than demolishing and reconstructing a city's building stock.
Triple Bottom Line – Economic	Historic resources add character and visual interest to a streetscape, increasing the attractiveness of the area to investors. Conservation of historic resources ensures these attributes are protected, and the resulting certainty promotes high-quality investment. Additionally, tourists and residents are attracted to areas with historic resources.
Expected Key Benefits	Address Council endorsement of this project as a priority for capital investment (LAS2015-34). Resolves identified exterior condition issues. Demonstrate good corporate stewardship of a Provincial Historic Resource. Aligns with 2019-2022 Council approved directives of "A City of Safe and Inspiring Neighbourhoods and "A Healthy and Green City".

Ensures continuity of critical services

Support the delivery of City of Calgary

services at approved service levels

Build- Symons Valley Multi-Service Centre

Executive Summary	This budget of \$8,000,000 supports the Symons Valley Centre Phase 1 starting point for the overall build out of the master planned multi-phased site, identified by Council as a priority Learning Project. Phase 1 includes development of a library, affordable housing units, arts and culture components, community spaces, child care, transit components and supportive site infrastructure. Phase 1 will execute coordinated capital budgeting between multiple business units and funding sources - Facility Management requires capital support to execute on its Council-directed responsibilities in this multi-use cross-corporate project and will enable, support and facilitate the delivery of other service lines across the Corporation. Approval of this business is dependent on the approval of PID#s 3000579, 3000577 and 3000449.				
Document Date	2018/09/11	2018/09/11			
Service	Facility Management	Sector Affected	Internal / The City of Calgary		
Activity #	480771	Ward(s)	2		
Project Identifier (PID)	3000144	Citizen Priority	Enabling Services		
Business Unit	FACILITY MANAGEMENT	Capital Investment Plan Alignment	Other.Other		
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems		

City Resilience Framework Driver

Capital Infrastructure Investment Principles

together	na managoa					
	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	8,000,000	500,000	2,000,000	2,750,000	2,750,000	
Funding Status	For Approval					<u>'</u>
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross (. •		estic Product (\$)	Income (\$)	Employment (Person-Years)
MUGS	Mainte	nance	Upg	grade	Growth	New Services
	0%	6	(0%	80%	20%

Triple Bottom Line – Social	This budget will support programmable spaces that provides a qualitative return to the community, adult learning, educational and community events, social and community hubs, other library services, and affordable housing. This project will increase the number of affordable housing units and avoids future social costs of homelessness
Triple Bottom Line – Environmental	Reduction of land consumption through maximizing use of existing land base. Construction of facilities to modern energy efficiency standards reducing The City's carbon footprint.
Triple Bottom Line - Economic	Employment of design/architectural and construction firms; avoid future land purchase expenditure through maximizing use of existing land holdings.
Expected Key Benefits	This budget supports: 1) Integrated service delivery and new or impoved services to local areas 2) Provides ecomomic stimulation and optimization of civic resources 3) Avoids future land purchase of single use build vs. multi use building 4) Optimizes land to highest and best use and maximizes return on land purchases 5) Multi use builds preserve land base for later builds or disposal to private sector

C2018-1158 Attachment 10 ISC: UNRESTRICTED

Service Type

Investment Category

Current

Program - A Program is a

related and benefit from being planned and managed

grouping of projects that are

Business Licensing Space

Executive Summary	This budget of \$1000 thousand will relocate Business Licensing staff—a division within Compliance Services—from an externally leased facility to the Airways Building, a City-owned facility. This budget includes retrofitting the space in the Airways Building to meet Compliance Services' business and operational needs. The current facility is at capacity and would require major renovations to keep up with Compliance Services anticipated growth. The relocation is required to support this anticipated growth during the next budget cycle. In addition, the move will improve productivity of staff through increased satisfaction with their workspaces, and allow for reallocation of payments of \$406 thousand in annual lease.
Document Date	2018/09/11

Service	Facility Management	Sector Affected	Internal / The City of Calgary
Activity #	480770	Ward(s)	All Wards
Project Identifier (PID)	3000423	Citizen Priority	Enabling Services
Business Unit	FACILITY MANAGEMENT	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,000,000	200,000	800,000	0	0	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (. •		estic Product \$)	Income (\$)	Employment (Person-Years)
	1,579	,745	695	,319	502,988	5
MUGS	Mainte	nance	Upg	rade	Growth	New Services
	100)%	0	%	0%	0%

Triple Bottom Line – Social	This budget ensures Compliance Services can deliver Business Licensing services to citizens in an equitable manner, coordinated, efficient and effective and easily accessible to all citizens.
Triple Bottom Line – Environmental	This budget will support upgrades to the Airways Building's mechanical, HVAC and electrical systems making the building more energy efficient reducing The City's carbon footprint.
Triple Bottom Line – Economic	The economic impacts include increased productivity of staff leading to efficient and quality delivery of services to businesses and citizens. This budget will also reduce long-term operating and life cycle maintenance costs and optimize use of the Airways Building.
Expected Key Benefits	The relocation of Business Licensing staff from an externally leased facility to the Airways Building will support the growth of a key citizen-facing service line, improve the productive and capacity of staff, reduce the City's carbon footprint by making the facility more energy efficient via upgrades to the mechanical, HVAC and electrical systems, and finally, allow for the reallocation of annual lease payments.

Bylaw Services Sustainment

Executive Summary	The Calgary Community Standards Portfolio budget request of \$1,305 thousand will provide capital maintenance and investment in critical systems in existing Bylaw Services facilities. Identification and prioritization of key projects is managed by the Asset Assessment Program. Investments in this program will be for lifecycle of essential facility components. Essential Facility components include building mechanical systems, electrical systems, and structural elements. This investment program is re-evaluated annually. The Calgary Community Service Facility Portfolio has a total current replacement value of \$3.6 million.
Document Date	2018/09/11

Service	Facility Management	Sector Affected	Multiple Sectors
Activity #	480765	Ward(s)	9
Project Identifier (PID)	3000160	Citizen Priority	Enabling Services
Business Unit	FACILITY MANAGEMENT	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,305,000	450,000	675,000	0	180,000	0
Funding Status	For Approval					<u>'</u>
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	2,084,	271	979	9,985	697,948	8
MUGS	Mainter	nance	Upg	grade	Growth	New Services
	100	%	(0%	0%	0%

Triple Bottom Line – Social	This budget ensures critical building systems in key Bylaw Services facilities are replaced when required, preventing service disruptions and enabling Service Lines to deliver quality and efficient services to citizens. This budget will focus on critical life safety systems and building components ensuring these buildings continue to be safe for employees and citizens.
Triple Bottom Line – Environmental	This budget will support strategic life cycle investments in key Bylaw Services facilities that will improve building performance and reduce energy consumption in critical buildings, thereby decreasing the portfolio's environmental impact.
Triple Bottom Line – Economic	This budget will support potential long-term cost savings and avoidance by reducing what The City spends on facility operations and maintenance. This budget will minimize critical system failures and service disruptions in key City facilities supporting business continuity. This project supports the economy through the creation of skilled construction jobs.
Expected Key Benefits	This budget ensures Bylaw Services facilities continue to provide service delivery and public spaces are safe, accessible and well-kept. This budget will support potential long-term cost savings and avoidance by reducing what The City spends on facility operations and maintenance. This budget minimizes infrastructure risk to the Corporation and supports business continuity.

Coordinated Operations

Executive Summary	Historically, City facilities have been operated and maintained by various Service Lines with their own operating programs, procurement and supply systems, maintenance teams and/or contractors. In 2015, Administrative Leadership Team directed Facility Management (FM) to adopt a centralized approach to facility operations to develop common standards and objectives for efficient and effective management of facilities and support increased efficiencies, process enhancements and long-term savings. Phase 1 of the Program focused on Community Services, aiming to centralize facility management operations by the end of 2018. Phase 2 will include the transition of the remaining City-owned facilities. This program currently does not have sustainable funding. This budget of \$7,333 thousand will sustain Program Office functions and provide service line support.
Document Date	2018/09/11

Service	Facility Management	Sector Affected	Internal / The City of Calgary, Multiple Sectors
Activity #	480753	Ward(s)	All Wards
Project Identifier (PID)	3000122	Citizen Priority	Enabling Services
Business Unit	FACILITY MANAGEMENT	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Integrate coordinate and optimize The City's investment

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	7,333,200	2,733,300	2,733,300	1,866,600	0	0
Funding Status	For Approval					<u>'</u>
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	10,071	,646	6,33	35,511	4,165,582	42
MUGS	Mainter	nance	Up	grade	Growth	New Services
	100	%	(0%	0%	0%

Triple Bottom Line - Social	This budget will support the centralization of operations and maintenance functions in FM allowing Service Lines to focus on efficient and effective delivery of critical services to citizens
Triple Bottom Line – Environmental	This budget will standardize operations and maintenance functions potentially resulting in significant Corporate energy/resource savings reducing The City's carbon footprint.
Triple Bottom Line – Economic	This budget will support potential long-term cost savings by reducing what The City spends on facility operation, maintenance and asset management of facilities. Furthermore, this budget will support service alignment and integration resulting in productivity gains in service lines.
Expected Key Benefits	Centralizing facility operations and maintenance will enable service lines to focus on their core service delivery, define common standards and objectives for efficient and effective management of facilities, enable a coordinated, standardized approach with common roles, responsibilities and accountabilities, realize efficiencies, process enhancements and potential long-term cost savings and lower The City's operating and maintenance costs per square foot.

Ergonomic Furniture Program

Executive Summary	This budget of \$1,080 thousand will fund the inventory management, acquisition, installation, repair, reuse, and asset recovery for ergonomic furniture at The City of Calgary. Further, this funding ensures ergonomic furniture meets basic Health & Safety requirements which results in decreased employee injuries and workers' compensation claims. This budget supports development of flexible workspaces and work styles including the creation of collaborative and multi-use spaces.
Document Date	2018/09/11

Service	Facility Management	Sector Affected	Internal / The City of Calgary
Activity #	480755	Ward(s)	All Wards
Project Identifier (PID)	3000127	Citizen Priority	Enabling Services
Business Unit	FACILITY MANAGEMENT	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,080,000	315,000	315,000	225,000	225,000	0
Funding Status	For Approval					'
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	1,537,	461	954	4,645	661,486	8
MUGS	Mainter	nance	Up	grade	Growth	New Services
	80%	%	2	0%	0%	0%

Triple Bottom Line – Social	This program supports improving the productivity, health, safety and comfort of employees, as well as promoting effective interaction among people, technology and environment in which they operate. This budget reduces workers compensation premiums through the efficient and effective use of ergonomic furniture.
Triple Bottom Line – Environmental	Efficient management of ergonomic furniture decreases waste to landfills.
Triple Bottom Line – Economic	This program reduces the risk of employee injury by adapting work to fit the person. In addition to injury prevention, this program increases productivity and employee satisfaction by removing barriers that exist that prevent employees from performing to the best of their ability. Other economic benefits include increased quality of work, increased collaboration, reduced turnover, reduced absenteeism, and increased morale.
Expected Key Benefits	This program ensures efficient management of The City's inventory of furniture by reducing costs to procure and replace furniture through the standardization of furniture making it easier and less costly to maintain and manage inventory and achieving economies of scale. Ergonomic furniture supports employees as they work by fixing posture, realigning their spine, preventing arthritis and reducing the number of work-related injuries, absenteeism and workers' compensation claims. Workers who are in a comfortable setting can focus efforts on productive work. This program creates an engaged workplace through flexible workspaces and work styles. Employees who have high levels of engagement are likely to remain with The City making it easier to attract and retain staff while saving on hiring and training costs.

Facility Data & Technology

Executive Summary	Data and Technology will continue to play a vital role in making proper data driven business decisions across Facility Management (FM) and the City. In addition to enabling proper fact based decision making, Data and Technology utilizes the delivery of tools to increase efficiency, coordination and cost savings to FM and other Service Lines. The budget of \$457 thousand will allow for the ongoing creation of a Building Data Warehouse that allows for centralization of the many disparate data systems across the City, as well as the continued expansion of asset management systems for Facility Operations staff. The work that Data and Technology is undertaking is preparing both FM and the City for the future and enabling data driven decisions.
Document Date	2018/09/11

Service	Facility Management	Sector Affected	Internal / The City of Calgary
Activity #	480754	Ward(s)	All Wards
Project Identifier (PID)	3000124	Citizen Priority	Enabling Services
Business Unit	FACILITY MANAGEMENT	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Integrate coordinate and optimize The City's investment

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	457,200	114,300	114,300	114,300	114,300	0
Funding Status	For Approval					·
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	625,0	083	398	8,908	291,851	3
MUGS	Mainte	nance	Up	grade	Growth	New Services
	509	%	5	0%	0%	0%

Triple Bottom Line – Social	The move towards evidence-based policy and decision-making requires that decisions be based on valid, reliable and objective data. Building data is therefore critical to the delivery of services and programs to citizens. Developing a secure, data warehouse and implementing the valid and reliable tools for distributing this information important for evidence-based decision making. Building data is critical for The City to respond to communities' needs and to determine the location and impact of programming.
Triple Bottom Line – Environmental	Building performance and valid, reliable data is critical to minimizing the environmental impacts of climate change and extreme weather events. The Data Warehouse provides real-time information to service lines such as 3-1-1 and CEMA to respond to events.
Triple Bottom Line – Economic	The Data Warehouse and Asset Management Systems are a means of providing data management infrastructure for information, investment decision-making and other management systems. Ongoing implementation supports effective and economical operations at The City of Calgary and ensures decisions are data-driven and provide value for money.
Expected Key Benefits	Historically, The City has been taking a more reactive approach to facilities. The Building Data Warehouse and asset management systems offer the ability to take a more proactive approach. Rather than creating reports from multiple sources and trying to decipher what it all means, the Warehouse merges all data, connecting the dots that might otherwise be lost in translation. Expansion of asset management systems will provide operational staff with real-time data and analytics improving decision-making and making Facility Management more effective. The results are a more efficiently run facility portfolio and a City workforce that is engaged and productive.

Facility Portfolio Planning

Executive Summary	The Integrated Civic Facility Planning (ICFP) program was created in Q2 2015 as a response to Council and Administrative Leadership Team's direction to commence coordinated planning and delivery of facilities. An approved business case will provide funding for the ongoing sustainment and execution of Facility Portfolio Planning (Stage 1) as well as Facility Program Planning (Stage 2) funding to further develop these multi-service and standalone programs as required. The program has been structured to allow for various funding scenarios with varying degrees of risk exposure and levels of service provision. This budget is for \$9,983 thousand.
Document Date	2018/09/11

Service	Facility Management	Sector Affected	Internal / The City of Calgary
Activity #	480761	Ward(s)	All Wards
Project Identifier (PID)	3000137	Citizen Priority	Enabling Services
Business Unit	FACILITY MANAGEMENT	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Integrate coordinate and optimize The City's investment

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	9,983,750	3,093,125	2,296,875	2,296,875	2,296,875	0
Funding Status	For Approval					'
Operating Impact Of Capital	No	No				
Economic Impacts of 2019-2022 Recommended Funding	Gross (. •		estic Product (\$)	Income (\$)	Employment (Person-Years)
	13,71	1,994	8,62	25,452	5,671,212	57
MUGS	Mainte	nance	Upg	grade	Growth	New Services
	09	%	2	0%	40%	40%

Triple Bottom Line - Social	Allowing for the strategic location and delivery of multi-use facilities that combine multiple civic services, create a sense of place and identity, enable social interaction, social cohesion, and achieve a higher level of design and accessibility; enables and facilitates the delivery of social support services.
Triple Bottom Line – Environmental	Reduction of the amount of land required for facilities, and the overall square footage of a facility will improve energy consumption per square foot and per service provided
Triple Bottom Line – Economic	Potential avoided costs of up to 15% in both operating and capital expenditures, identifying opportunities to work with private industry and establishing consistent process and authority to make it desirable to do so
Expected Key Benefits	Early planning provides an opportunity to plan civic facility needs comprehensively and develop strategic land acquisition strategies to work with developers to best execute the plans. Reduce overall land costs through strategic acquisition. Early planning provides a level of planning detail that ensures the constructed facility will meet all service requirements. This budget will prepare shovel ready projects with improved cost estimates and timelines to effectively and efficiently manage them. This budget will align service needs with timeline of facility construction.

Fire Facility Sustainment

Executive Summary	The Fire Facility Sustainment Program budget request of \$7,827 thousand will provide capital maintenance and investment in critical systems in existing Emergency Service facilities. Identification and prioritization of key projects is managed by the Asset Assessment Program. Investments in this program will be for lifecycle of essential facility components. Essential Facility components include building mechanical systems, electrical systems, and structural elements. This investment program is re-evaluated annually. The Emergency service facility Portfolio has a total current replacement value of \$484.3 Million, over 51 buildings.				
Document Date	2018/09/11	2018/09/11			
Service	Facility Management	Sector Affected	Multiple Sectors		
Activity #	480767	Ward(s)	All Wards		
Project Identifier (PID)	3000267	Citizen Priority	Enabling Services		
Business Unit	FACILITY MANAGEMENT	Capital Investment Plan Alignment	Other.Other		
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems		
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services		
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels		

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	7,826,900	3,303,900	1,954,000	1,461,000	1,108,000	0
Funding Status	For Approval					'
Operating Impact Of Capital	No	No				
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	12,50	0,674	5,87	7,582	4,186,031	49
MUGS	Mainte	nance	Upç	grade	Growth	New Services
	100)%	C)%	0%	0%

Triple Bottom Line – Social	This budget ensures critical building systems in key Emergency Services facilities are replaced when required, preventing service disruptions and enabling Service Lines to deliver quality and efficient services to citizens. This budget will focus on critical life safety systems and building components ensuring these buildings continue to be safe for employees and citizens.
Triple Bottom Line – Environmental	This budget will support strategic life cycle investments in key Emergency Services facilities that will improve building performance and reduce energy consumption in critical buildings, thereby decreasing the portfolio's environmental impact.
Triple Bottom Line – Economic	This budget will support potential long-term cost savings and avoidance by reducing what The City spends on facility operations and maintenance. This budget will minimize critical system failures and service disruptions in key City facilities supporting business continuity. This project supports the economy through the creation of skilled construction jobs.
Expected Key Benefits	1) Reduction in maintenance and repair costs. 2) Lower the risk of failure of equipment. 3) Improve morale and efficiency of staff stationed at various locations.

Forest Lawn Civic Centre

Executive Summary	This budget of \$450 thousand directly supports the pre-planning and pre-design of the Forest Lawn Civic Centre, a redevelopment that includes multiple services lines. Potential components include an optimized recreation facility (aquatics, gym, fitness, and day care), expanded library, arts & culture spaces, fire/emergency response services and other community services to be determined. The current configuration of Forest Lawn Recreation Complex makes this an ideal site for redevelopment and is consistent with study findings, which reinforce the advantages of co-locating recreation and leisure amenities. Benefits include cost recovery maximization and operational efficiency, and greater social connectedness.
Document Date	2018/09/11

Service	Facility Management	Sector Affected	Internal / The City of Calgary
Activity #	480757	Ward(s)	All Wards
Project Identifier (PID)	3000130	Citizen Priority	Enabling Services
Business Unit	FACILITY MANAGEMENT	Capital Investment Plan Alignment	Community Investments.Multi-Service Facilities
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Integrate coordinate and optimize The City's investment

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	450,000	0	0	0	450,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years
	710,885		312,893		226,344	2
MUGS	Mainter	nance	Up	grade	Growth	New Services
	0%		50%		30%	20%

Triple Bottom Line - Social	This budget will support programmable spaces that provides a qualitative return to the community through adult learning, educational and community events, social and community hubs, other library services.
Triple Bottom Line – Environmental	Reduction of land consumption through maximizing use of existing land base. Construction of facilities to modern energy efficiency standards reducing The City's carbon footprint.
Triple Bottom Line - Economic	Employment of design/architectural and construction firms; avoid future land purchase expenditure through maximizing use of existing land holdings.
Expected Key Benefits	Expected key results include a master plan and concept design that will outline community programs and services that address service gaps. Increased customer satisfaction (amenities are responsive to user needs and preferences). Increased market attraction and retention (revenue and reputational benefits). Increased operational/energy efficiency. Extended/renewed lifespan of amenities. Integrated accessible site and facilities plan.

Heritage Asset Sustainment

Executive Summary	buildings as identified in the	tal investment funds for essential projects to repai Heritage Asset Planning and prioritization process Heritage Buildings Management Plan. This budge	s.This budget allows us to continue to
Document Date	2018/09/11		
Service	Facility Management	Sector Affected	Internal / The City of Calgary, Multiple Sectors
Activity #	480759	Ward(s)	All Wards
Project Identifier (PID)	3000132	Citizen Priority	Enabling Services
Business Unit	FACILITY MANAGEMENT	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides & enhances natural and manmade assets
Investment Category	Program - A Program is a grouping of projects that are	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

grouping of projects that are related and benefit from

	anned and managed	t				
	Tota	al 2019	2020	2021	2022	2023+
Recommended Funding Alloca	tion (\$) 4,545,0	495,000	405,000	1,575,000	2,070,000	0
Funding Status	For Appro	val				
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	2	Gross Output (\$)		Gross Domestic Product (\$)		Employment (Person-Years)
		7,179,940		3,160,224		25
MUGS	ı	Maintenance		Upgrade		New Services
		100%		0%		0%

Triple Bottom Line – Social	Historic resources connect us to our past, our future, and to each other. They provide places of learning and places of understanding for all Canadians. Historic resources are integral to the identity of our community and help to strengthen its distinctiveness. Historic resources add to the beauty, character and visual interest of our urban environment, which contribute to the city's liveability and are sources of community pride.
Triple Bottom Line – Environmental	The preservation of historic places capitalizes on their embodied energy. Re-using existing resources requires a much smaller expenditure of materials and energy than demolishing and reconstructing The City's building stock.
Triple Bottom Line – Economic	Historic resources add character and visual interest to a streetscape, increasing the attractiveness of the area to investors. Conservation of historic resources ensures these attributes are protected, and the resulting certainty promotes high-quality investment. Additionally, tourists and residents are attracted to areas with preserved historic resources.
Expected Key Benefits	Improves the condition of City-owned heritage buildings by implementing projects as prioritized and developed by the Heritage Asset Planning Program. Provides timely capital maintenance to prevent deterioration of the heritage portfolio and protect its heritage value. This funding will improve safety, address deferred maintenance and return assets to an acceptable condition to avoid future repair costs. This funding optimizes the use of City-owned historic buildings, improves barrier free access and can increase energy efficiency and reduce operating costs, and optimize building functionality. Implements best practices for good asset management. Demonstrates good corporate stewardship of City-owned historic properties. Aligns with 2019-2022 Council approved directives of "A City of Safe and Inspiring Neighbourhoods and "A Healthy and Green City".

Heritage Planning Program

Executive Summary	This program enables FM to identify, understand, and prioritize lifecycle maintenance for city-owned historic buildings by preparing detailed building condition assessments, conservation plans and base building information (including drawings). This budget allows us to continue to enact the Council approved Heritage Buildings Management Plan. Condition Assessments and conservation plans are necessary to provide documentation and guidance to ensure best practices in heritage conservation are followed. Historic building records include photographic and supplemental documentation to record the heritage value for each building. Assessments and studies for 10 of the 28 heritage portfolio properties have been completed. This budget request is for \$3,440 thousand.
Document Date	2018/09/11

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Service	Facility Management	Sector Affected	Internal / The City of Calgary
Activity #	480758	Ward(s)	All Wards
Project Identifier (PID)	3000131	Citizen Priority	Enabling Services
Business Unit	FACILITY MANAGEMENT	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Economy and Society
Service Type	Essential	City Resilience Framework Driver	Promotes Cohesive & Engaged Communities
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	3,442,500	467,500	191,250	1,211,250	1,572,500	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	Output		estic Product (\$)	Income (\$)	Employment (Person-Years
	4,728,037		2,974,145		1,955,492	20
MUGS	Mainter	nance	Up	grade	Growth	New Services
	100	%		0%	0%	0%

Triple Bottom Line – Social	Historic resources connect us to our past, our future, and to each other. They provide places of learning and places of understanding for all Canadians. Historic resources are integral to the identity of our community and help to strengthen its distinctiveness. Historic resources add to the beauty, character and visual interest of our urban environment, which contribute to the city's liveability and are sources of community pride.
Triple Bottom Line – Environmental	The preservation of historic places capitalizes on their embodied energy. Re-using existing resources requires a much smaller expenditure of materials and energy than demolishing and reconstructing The City's building stock.
Triple Bottom Line – Economic	Historic resources add character and visual interest to a streetscape, increasing the attractiveness of the area to investors. Conservation of historic resources ensures these attributes are protected, and the resulting certainty promotes high-quality investment. Additionally, tourists and residents are attracted to areas with preserved historic resources.
Expected Key Benefits	Provides information to support capital planning and resource allocation. Implements best practices for good asset management. Demonstrates good corporate stewardship of City-owned historic properties. Aligns with 2019-2022 Council approved directives of "A City of Safe and Inspiring Neighbourhoods and "A Healthy and Green City".

Livery Services Relocation

Executive Summary	This budget of \$600 thousand will relocate Livery Services staff—a division within Compliance Services—from an externally leased building to the Airways Building, a City-owned facility. This budget includes retrofitting the space in the Airways Building to meet Livery Services' business and operational needs. The current building is at capacity and would require major renovations to keep up with Compliance Services anticipated growth. The relocation is required to support this anticipated growth during the next budget cycle. In addition, it will reduce operating and lifecycle maintenance costs, improve productivity of staff through increased satisfaction with their workspaces, and allow for the reallocation of the \$406 thousand annual lease.
Document Date	2018/09/11

Service	Facility Management	Sector Affected	Internal / The City of Calgary, Multiple Sectors
Activity #	480769	Ward(s)	All Wards
Project Identifier (PID)	3000419	Citizen Priority	Enabling Services
Business Unit	FACILITY MANAGEMENT	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	600,000	0	600,000	0	0	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product \$)	Income (\$)	Employment (Person-Years)
	947,847		417,191		301,793	3
MUGS	Mainter	nance	Upg	ırade	Growth	New Services
	100%		0%		0%	0%

Triple Bottom Line - Social	This budget ensures Compliance Services can deliver Livery Services to citizens in an equitable manner, coordinated, efficient and effective and easily accessible to all citizens.
Triple Bottom Line – Environmental	This budget will include upgrades to Airways' mechanical, HVAC and electrical systems where necessary making the building more energy efficient reducing The City's carbon footprint.
Triple Bottom Line – Economic	The economic impacts include increased productivity of staff leading to efficient and quality delivery of services to businesses and citizens. This budget will reduce long-term operations and maintenance costs and optimize use of the Airways Building.
Expected Key Benefits	The relocation of Livery Services staff from the an externally leased building to Airways will support the growth of a key citizen-facing service line, reduce operating and lifecycle maintenance costs, improve the productive and capacity of staff, reduce the City's carbon footprint by making the facility more energy efficient via upgrades to the mechanical, HVAC and electrical systems, and finally, allow for there allocation of lease payments.

Logistics Facility Program

Executive Summary	This budget directly supports the design and build of Operations Workplace Centres (OWC) fuel kiosks. These kiosks will address growing service needs for Waste & Recycling Services, Supply Management, Roads and Water Services. This budget request is for \$2,138 thousand.				
Document Date	2018/09/11				

Service	Facility Management	Sector Affected	Internal / The City of Calgary
Activity #	480756	Ward(s)	All Wards
Project Identifier (PID)	3000128	Citizen Priority	Enabling Services
Business Unit	FACILITY MANAGEMENT	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Integrate coordinate and optimize The City's investment

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	2,137,500	21,875	121,875	721,875	1,271,875	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years
	3,376	,704	1,48	36,244	1,075,136	12
MUGS	Mainte	nance	Upç	grade	Growth	New Services
	0%	6	4	0%	60%	0%

Triple Bottom Line – Social	This budget ensures business and operational needs are being met in order to support their delivery of core services to the Corporation and citizens.
Triple Bottom Line – Environmental	Reduction of fuel consumption (and thereby carbon footprint) by locating fuelling station closer to service areas and fleet vehicles.
Triple Bottom Line – Economic Increase in productive staff time by locating fuelling station closer to fleet vehicles (less time transit instead of in service); reduction of overall fuel usage; optimal use of funds/assets.	
Expected Key Benefits	Improved service delivery from strategically located fuel Kiosks. Reduced drive time and improved fuel efficiency. Optimal use of funds/assets along with coordinated planning achieves cross-corporate efficiencies leading to cost effectiveness.

Northeast Site Development

Executive Summary	This business case directly supports the expansion of the NE Operations Workplace Centre (OWC) site. This funding of \$4,863 thousand is for the build out of NE OWC site. This work supports multiple service lines and improves the efficiency of our Operational Workplace Centres and reduces congestion at Spring Gardens Operational Workplace Centre.
Document Date	2018/09/11

Service	Facility Management	Sector Affected	Multiple Sectors
Activity #	480762	Ward(s)	All Wards
Project Identifier (PID)	3000138	Citizen Priority	Enabling Services
Business Unit	FACILITY MANAGEMENT	Capital Investment Plan Alignment	Community Investments.Multi-Service Facilities
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Integrate coordinate and optimize The City's investment

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	4,862,560	2,000,000	2,862,560	0	0	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product \$)	Income (\$)	Employment (Person-Years)
	7,681	,604	3,38	1,029	2,445,807	27
MUGS	Mainte	nance	Upg	rade	Growth	New Services
	809	%	20)%	0%	0%

Triple Bottom Line - Social	Facilitates continued essential service delivery to existing and developing communities. Increased site compatibility with neighbouring communities.
	Reduction of land consumption through maximizing use of existing land base. Construction of facilities to modern energy efficiency standards reducing The City's carbon footprint.
Triple Bottom Line - Economic	Employment of design/architectural and construction firms; avoid future land purchase expenditure through maximizing use of existing land holdings.
	This budget will improve service delivery through efficient and effective management of these sites. This budget will support master planning to ensure readiness for future developments when funding becomes available, minimizing rework. This budget supports coordinated planning to achieve cross-corporate efficiencies leading to cost effectiveness.

Parks Facility Sustainment

Executive Summary	The Parks Facility Sustainment Program budget request of \$4,430 thousand will provide capital maintenance and investment in critical systems in existing Parks Operational and citizen-facing facilities. Identification and prioritization of key projects is managed by the Asset Assessment Program. Investments in this program will be for lifecycle of essential facility components. Essential Facility components include building mechanical systems, electrical systems, and structural elements. The Parks facility portfolio has a total current replacement value of \$53.6 Million, over 127 buildings.
Document Date	2018/09/11

Service	Facility Management	Sector Affected	Multiple Sectors
Activity #	480768	Ward(s)	All Wards
Project Identifier (PID)	3000285	Citizen Priority	Enabling Services
Business Unit	FACILITY MANAGEMENT	Capital Investment Plan Alignment	Community Investments.Parks and Public Spaces
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	4,430,000	900,000	900,000	1,300,000	1,330,000	0
Funding Status	For Approval					·
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years
	8,244	,478	3,3	58,712	2,129,620	25
MUGS	Mainter	nance	Up	grade	Growth	New Services
	209	%	3	30%	0%	0%

Triple Bottom Line – Social	This budget ensures critical building systems in key Parks facilities are replaced when required, preventing service disruptions and enabling Parks to deliver quality and efficient services to citizens. This budget will focus on critical life safety systems and building components ensuring these buildings continue to be safe for employees and citizens.
Triple Bottom Line – Environmental	This budget will support strategic life cycle investments in Parks facilities that will improve building performance and reduce energy consumption in critical buildings, thereby decreasing the portfolio's environmental impact.
Triple Bottom Line – Economic	This budget will support potential long-term cost savings and avoidance by reducing what The City spends on facility operations and maintenance. This budget will minimize critical system failures and service disruptions in key City facilities supporting business continuity. This project supports the economy through the creation of skilled construction jobs.
Expected Key Benefits	This budget ensures parks facilities continue to provide service delivery, and public spaces are safe, accessible and well-kept. This budget will support potential long-term cost savings and avoidance by reducing what The City spends on facility operations and maintenance. This budget minimizes infrastructure risk to the Corporation and supports business continuity.

Public Building Exterior

Executive Summary	This budget of \$400 thousand will revalidate and recertify the interim at-height stabilization measures at the Calgary Public Building. The Calgary Public Building is a designated Municipal Historic Resource and houses 285 City Staff from ten Service Lines. A portion of the building is leased to Arts Commons while the third floor is used for administrative offices and the main floor is the public lobby of the Jack Singer Concert Hall. In 2016 stonework from the façade of the building fell from height onto 1st street SE. In the interest of public safety interim at-height stabilization measures were installed and a regular monitoring program established. The at-height stabilization measures have a designed life-span of five years after which the existing protective elements will have to be inspected, recertified and/or renewed as required.
Document Date	2018/09/11

Service	Facility Management	Sector Affected	Internal / The City of Calgary
Activity #	480752	Ward(s)	7
Project Identifier (PID)	3000121	Citizen Priority	Enabling Services
Business Unit	FACILITY MANAGEMENT	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	400,000	0	0	0	400,000	0
Funding Status	For Approval	For Approval				<u>'</u>
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	631,8	398	278,128		201,195	2
MUGS	Mainter	nance	Up	grade	Growth	New Services
	909	%	1	0%	0%	0%

Triple Bottom Line – Social	This funding supports the safety of employees and citizens in and around the Calgary Public Building.
Triple Bottom Line – Environmental	N/A
Triple Bottom Line – Economic	This budget ensures future operations at a critical facility that delivers City and community programming and services to citizens.
Expected Key Benefits	The at-height stabilization measures protect from falling debris and facilitates safe passage for employees and citizens around the site. These measures ensure continued use of the Calgary Public Building and the delivery of critical services to citizens until capital funding becomes available to move forward with a permanent stabilization and rehabilitation solution. This budget will support certification of the at-height stabilization measures meet regulatory requirements.

Whitehorn 911 Renovation

Executive Summary	This project ensures Calgary 9-1-1 has adequate primary and backup facilities to support efficient operations, training, systems and administration. This funding will allow Calgary 9-1-1 to expand into an area at Whitehorn Multi-Services that is being vacated by an external tenant. Additionally, this will fund the development of a new Computer Aided Dispatch IT Team Office with high security to meet mandatory federal regulations for systems being managed. This funding will support a new training facility with improved capacity and accessibility, a User Acceptance Testing lab to ensure efficient and effective use of critical technology in the field, and additional workspace for growth.
Document Date	2018/09/11

Service	Facility Management	Sector Affected	Internal / The City of Calgary, Multiple Sectors
Activity #	480766	Ward(s)	All Wards
Project Identifier (PID)	3000206	Citizen Priority	Enabling Services
Business Unit	FACILITY MANAGEMENT	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,500,000	1,500,000	0	0	0	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	2,395	,714	1,12	26,419	802,239	9
MUGS	Mainter	nance	Up	grade	Growth	New Services
	100	%	(0%	0%	0%

Triple Bottom Line - Social	High quality facilities and workspaces leads to the ability to provide high quality critical services that result in a higher quality of life for citizens. Improved capacity of operations and administrative staff along with improved training facilities will increase 9-1-1 response times and readiness resulting in efficient and quality service delivery.
Triple Bottom Line – Environmental	This project will enhance utilization of existing space in the Whitehorn Multi-Services facility through the addition of collaboration spaces and unassigned workspaces reducing operating costs and the City's carbon footprint.
Triple Bottom Line – Economic	The optimal level of asset management allows for overall reduced lifecycle costs and optimized use of this facility.
Expected Key Benefits	Benefits include federal regulation compliance, increased staff productivity through improved working conditions, accessibility for staff and citizens with mobility challenges, and improved coordination of training.

Workspace Planning Program

Executive Summary	As a result of corporate workforce planning, TheCity has adjusted its staffing levels over the past year resulting in an increase in vacancies throughout the downtown core and other major administration buildings. This budget request of \$1,800 thousand will complete a comprehensive analysis of these vacancies to reduce the Corporation's existing real estate portfolio, increase density and avoid future real estate costs. Through this budget, Facility Management will collaborate with service lines to plan and coordinate the transition of staff to locations that will maximize their efficiency and effectiveness. It will increase opportunities for service lines to collaborate and solve problems through service integration and by removing barriers. Finally, this budget will support the transition of staff to mobile workspaces and work styles.
Document Date	2018/09/11

Service	Facility Management	Sector Affected	Internal / The City of Calgary
Activity #	480763	Ward(s)	All Wards
Project Identifier (PID)	3000146	Citizen Priority	Enabling Services
Business Unit	FACILITY MANAGEMENT	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,800,000	450,000	450,000	450,000	450,000	0
Funding Status	For Approval	For Approval				·
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	2,472	,176	1,55	55,108	1,022,480	10
MUGS	Mainter	nance	Up	grade	Growth	New Services
	809	%	2	20%	0%	0%

Triple Bottom Line - Social	This program will support the needs of a diverse population by creating cost-effective, welcoming, accessible and inclusive facilities.
Triple Bottom Line – Environmental	These renovations will support greater energy efficiency reducing operations and maintenance costs in key facilities.
Triple Bottom Line – Economic	There is a potential decrease in operating and maintenance costs due to increased utilization of space in the Municipal Complex and other critical facilities.
Expected Key Benefits	This budget will manage costs by optimizing existing workspaces and reducing the need for new space. It will reduce the Corporate environmental footprint in terms of operational costs and emissions. It will attract and retain productive employees by empowering them with choice on where and how work gets done while enabling innovation and collaborative workplaces. This budget supports business continuity and resilience. This budget will support the objectives highlighted in the Corporate Facility Planning and Delivery Policy, enhancing service delivery to the citizens of Calgary. Facility Management will collaborate with Service Lines to consolidate vacancies resulting in a lease cost avoidance.

Workspace Sustainment

Executive Summary	The program assesses and prioritizes workspaces for renovations. It will execute and coordinate on the scenarios selected in the Workplace Planning program. A current state analysis and functional assessments have been completed for 103 work spaces in 27 buildings. Through analysis and prioritization of the assessments, essential interior renovations have been identified for the next business cycle. The intent of the renovations is to increase or improve one or more of the following items: Increased mobility and collaboration, public access and improved way-finding, provision of accessible public service counters and seating areas, increased space occupancy and utilization. The total budget request for the business cycle is \$9,489thousand. This budget is partially funded by the FM Reserved for Future Capital.
Document Date	2018/09/11

Service	Facility Management	Sector Affected	Internal / The City of Calgary
Activity #	480764	Ward(s)	All Wards
Project Identifier (PID)	3000147	Citizen Priority	Enabling Services
Business Unit	FACILITY MANAGEMENT	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	9,489,077	2,076,019	2,616,019	2,371,019	2,426,020	0
Funding Status	For Approval					<u>'</u>
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (estic Product (\$)	Income (\$)	Employment (Person-Years)
	15,15	5,408	7,12	25,787	5,075,007	60
MUGS	Mainte	nance	Up	grade	Growth	New Services
	90	%	1	0%	0%	0%

	accessible and inclusive facilities.
Triple Bottom Line – Environmental	These renovations will support greater energy efficiency reducing operations and maintenance costs in key facilities.
Triple Bottom Line - Economic	There is a potential decrease in operating and maintenance costs due to increased utilization of space in the Municipal Complex and other critical facilities.
Expected Key Benefits	Alignment with the guiding principles as outlined in the Corporate Facility Planning Policy and Framework. Potential decrease in operating and maintenance costs due to increased utilization of space in the Municipal Complex and other key facilities. This program is in alignment with Council's notice of motion passed in 2016 July which specifies that provisions be made for the inclusion of gender neutral washrooms in City of Calgary buildings being built or renovated in the future. This program ensures some universal washrooms will be incorporated in the design phase of workspace renovation projects where applicable. This program will support the needs of a diverse population by creating cost-effective, welcoming, accessible and inclusive facilities. This program improves workspaces for employees, increasing collaboration and providing opportunities for mobility.

This program will support the needs of a diverse population by creating cost-effective, welcoming,

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Triple Bottom Line - Social



Financial Suppor

Finance Capital

Executive Summary	to ensure public funds are advice, risk management	e prudently and effectively managed strategies, internal controls, guidan also required to ensure financial sys	ncial processes and supporting systems that are required I through sound policies, providing strategic financial ce, and efficient and effective processes to the stems (i.e. Hyperion and TCA Costing) support compliance
Document Date	2018/09/11		
Service	Financial Support	Sector Affected	Internal / The City of Calgary

Service	Financial Support	Sector Affected	Internal / The City of Calgary
Activity #	413910	Ward(s)	All Wards
Project Identifier (PID)	3000110	Citizen Priority	Enabling Services
Business Unit	FINANCE	Capital Investment Plan Alignment	Other.Other
Department	CHIEF FINANCIAL OFFICE	City Resilience Framework Dimension	Leadership and Strategy
Service Type	Essential	City Resilience Framework Driver	Promotes leadership & effective management
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Integrate coordinate and optimize The City's investment

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	630,000	247,500	225,000	112,500	45,000	0
Funding Status	For Approval				·	
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)			estic Product (\$)	Income (\$)	Employment (Person-Years)
	861,335		549,676		402,157	4
MUGS	Mainter	nance	Upg	grade	Growth	New Services
	50%	%	5	0%	0%	0%

Triple Bottom Line – Social	No social impact.
Triple Bottom Line – Environmental	No environmental impact.
Triple Bottom Line - Economic	The sustainment and upgrade of financial systems will assist in providing timely and accurate financial information required for managing public funds.
Expected Key Benefits	Sustainment and upgrade of financial systems will provide accurate and timely information around the operating and capital impacts to support decision making, increase efficiency of current processes, mitigate risks and compliance to legislation requirements. This includes: efficiently producing accurate and timely planning and information to support decision making, significantly reducing TCA errors that require restatement of prior periods, and efficiencies resulting from automation of existing manual processes to produce the consolidated financial statements

Treasury Capital

Executive Summary	Funding is required to support the compliance and maintenance needs of the City's payment and investment systems. All payment systems that accept credit cards are governed by Payment Card Industry (PCI) standards and the City must implement all changes and upgrades as they are released to ensure continued compliance with PCI and City investment policies.
Document Date	2018/09/11

Service	Financial Support	Sector Affected	Internal / The City of Calgary
Activity #	413905	Ward(s)	All Wards
Project Identifier (PID)	3000109	Citizen Priority	Enabling Services
Business Unit	FINANCE	Capital Investment Plan Alignment	Other.Other
Department	CHIEF FINANCIAL OFFICE	City Resilience Framework Dimension	Leadership and Strategy
Service Type	Essential	City Resilience Framework Driver	Promotes leadership & effective management
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels, Optimize financing and funding sources, Integrate coordinate and optimize The City's investment

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	840,000	135,000	235,000	235,000	235,000	0
Funding Status	For Approval					·
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	1,146	5,657	749	9,400	595,103	8
MUGS	Mainte	nance	Up	grade	Growth	New Services
	40	%	4	.0%	0%	20%

Triple Bottom Line - Social	Continue to give citizens a broad range of highly secure payment options to purchase City provided good and services.
Triple Bottom Line – Environmental	not applicable
Triple Bottom Line - Economic	Ensuring citizens' data remains as safe and secure and that the City can invest in a broader range of investment options to maximize its returns.
Expected Key Benefits	The City will be able to increase information security and better protect citizens' credit card and payment information, a single point of access for all payment data which improves cross-corporation functionality and reduces manual processes which can lead to errors, ease of doing business for citizens and corporations, enhanced understanding of investment and risk and better incorporation of risk metrics into investment decision making and reporting to Investment Advisory Committee.



Fleet Management

Growth

Executive Summary	To enable City service delivery and adapt to changes in service levels, Fleet manages the life cycle planning for owned vehicle and equipment. As part of this process, capital funding is required to procure additional assets. the procurement process, Fleet, in consultation with business partners, considers a number of factors including operational requirements, historical utilization, current fleet composition, emerging needs, and market availabilities ensure continuous and effective front-line service delivery.	
Document Date	2018/09/11	

Service	Fleet Management	Sector Affected	Internal / The City of Calgary
Activity #	414350	Ward(s)	All Wards
Project Identifier (PID)	3000011	Citizen Priority	Enabling Services
Business Unit	FLEET SERVICES	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Enhanced	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	3,800,000	1,700,000	700,000	700,000	700,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years
	5,053	,331	2,64	19,750	1,683,006	21
MUGS	Mainter	nance	Up	grade	Growth	New Services
	0%	6	(0%	100%	0%

Triple Bottom Line – Social	Fleet enables its City business partners to meet evolving service levels to Calgarians.
Triple Bottom Line – Environmental	Fleet ensures the environmental impact of all purchased and in-house built assets has been evaluated and where possible addressed.
Triple Bottom Line – Economic	Fleet works with its business partners to select the most appropriate asset for service level delivery.
Expected Key Benefits	Growth planning allows Fleet to provide safe, reliable, and available units to its City business partners as required to meet their evolving service requirements.

Replacements

	To enable City service delivery, Fleet manages the life cycle planning of all fleet owned vehicle and equipment. As part of this process, capital funding is required for asset replacement at endif life. During the replacement process, Fleet, in consultation with business partners, considers a number of factors including operational requirements, historical utilization, current fleet composition, emerging needs, and market availability to ensure continuous and effective front-line service delivery.
Document Date	2018/09/11

Service	Fleet Management	Sector Affected	Internal / The City of Calgary
Activity #	414450	Ward(s)	All Wards
Project Identifier (PID)	3000010	Citizen Priority	Enabling Services
Business Unit	FLEET SERVICES	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	156,100,000	46,700,000	33,800,000	37,600,000	38,000,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years
	207,58	207,585,505		108,848,948		869
MUGS	Mainte	nance	Upç	grade	Growth	New Services
	100)%	C	0%	0%	0%

Triple Bottom Line – Social	Fleet enables its City business partners to meet existing service levels to Calgarians.
Triple Bottom Line – Environmental	Fleet ensures the environmental impact of all purchased and in-house built assets has been evaluated and, where possible addressed.
Triple Bottom Line – Economic	Fleet works with its business partners to select the most appropriate asset for service level delivery.
Expected Key Benefits	Replacement planning allows Fleet to provide units that are safe, reliable, and available to its City business partners as required to meet their existing service requirements.



Infrastructure Support

Base Mapping Improvements

Executive Summary	Over the past 6+ years, Land Building and Title information has been maintained and details have been exposed through various ArcGIS applications. The Base Mapping Improvements Project will build on the foundations developed through the CORE, Building Repository and Dynamic Geographic Asset Information Management (DGAIM) projects to include a number of improvements to our Base Mapping Program which will result in an enterprise grade maintenance environment for accessing corporate database information related to Land, Building and Title information by leveraging where possible Commercial Off the Shelf (COTS) software. The base mapping improvements project will deliver improvements to ensure the efficient maintenance processes and to deliver more value to the downstream users of the base map information.
Document Date	2018/09/11

Service	Infrastructure Support	Sector Affected	Multiple Sectors
Activity #	480704	Ward(s)	All Wards
Project Identifier (PID)	3000068	Citizen Priority	Enabling Services
Business Unit	CORP ANALYTICS AND INNOVATION	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	646,000	129,200	258,400	193,800	64,600	0
Funding Status	For Approval					·
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	883,2	210	563	3,636	412,370	4
MUGS	Mainter	nance	Up	grade	Growth	New Services
	209	%	3	0%	0%	50%

The Base Mapping Improvements project will help to ensure that the City of Calgary's information

	infrastructure will help to support Next Generation 911 systems to help improve response to emergency situations.
Triple Bottom Line – Environmental	The Base Mapping Improvements project will reduce the amount of paper being distributed to our clients for addressing assignments wherever feasible.
Triple Bottom Line – Economic	The Base Mapping Improvements project will help to ensure that address guidelines are up to date and that it is clear to developers and owners of property why specific addressing schemes are utilities for the public good. This will in turn reduce the frustration currently observed by the development community when responding to our comments on addressing concerns for new developments.
Expected Key Benefits	The Base Mapping Improvements project will support the essential changes required to support web-based technologies in the development approval processes resulting in more timely and accurate data being shared with the development community and internal stakeholders. The Base Mapping Improvement project will keep our base map service current to support the CRTC's Next Gen 911 (NG911) solutions through the creation of a three dimensional addressing data model resulting in more accurate data being shared with emergency responders as well as the development community and internal stakeholders.

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Triple Bottom Line - Social

Corporate AM Technology

Executive Summary	This program consists of several technology projects being managed and funded by Corporate Projects and Asset Management division on behalf of front line business units. The program aligns to the Infrastructure Support service line to support the Corporate Asset Management Program, Infrastructure Calgary and infrastructure analytics. The program's focus is on asset management technology as well as improving asset information, business intelligence and management maturity at the City. This specifically includes the following core components: 1. Technology development, integration, sustainment, support and licensing for the InforEAM v11x program; 2. PowerPlan (formerly RIVA) as part of the Capital Planning Implementation Program (CPIP); and 3. Integration of other asset management tools (e.g. Remedy, M5, Hansen, Infor, etc).
Document Date	2018/09/11

Service	Infrastructure Support	Sector Affected	Internal / The City of Calgary
Activity #	480706	Ward(s)	All Wards
Project Identifier (PID)	3000149	Citizen Priority	Enabling Services
Business Unit	CORP ANALYTICS AND INNOVATION	Capital Investment Plan Alignment	Targeted Theme Investments.Resilience
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets, Support the delivery of City of Calgary services at approved service levels, Build an adaptable resilient and smart city, Integrate coordinate and optimize The City's investment, Promote the well-being of communities-environment and economy, Optimize financing and funding sources

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,966,500	765,000	414,000	400,500	387,000	0
Funding Status	For Approval					
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	2,688	,594	1,71	15,776	1,255,304	14
MUGS	Mainter	nance	Up	grade	Growth	New Services
	309	%	4	-0%	0%	30%

Triple Bottom Line - Social	Improved accumulation and transparency of asset management data can aid in fostering citizen engagement with administration and council.
Triple Bottom Line – Environmental	This program will improve consistency of information provided to senior management, including information on environmental impacts and risks of various infrastructure investment options.
Triple Bottom Line - Economic	Cost efficiencies through establishing a corporate technology platform for asset management. Improved corporate oversight should reduce financial impact to citizens through improved asset management driving operational cost savings and error avoidance.
Expected Key Benefits	The purchase of an InforEAM Enterprise License, and annual support and maintenance commitment will reduce City costs and improve efficiency, competency, and resiliency through: lower enterprise fees (versus individual licenses); lower costs of implementation and maintenance; elimination of interdepartment billing; one centralized InforEAM funding request and centralized InforEAM resource/service delivery; minimizing use of expensive InforEAM consultants; and cost optimization and information sharing through corporately planned, collective execution of work.

CROWM Phase II

Executive Summary	The Calgary Rights of Way Management (CROWM) system is aligned with the new Rights of Way (ROW) bylaw that was enacted on Jan 1, 2018. During the last business cycle 2015-2018, it was necessary to concentrate most efforts on "must have" functionality to support the bylaw. Phase II focuses on key integrations to help enforce the bylaw. These integrations will reduce work and duplication of effort by the utility providers, allowing better information about potential work conflicts in the same roadway, allowing the parties to better coordinate to reduce those potential conflicts. CROWM supports a multi-billion dollar electricity, gas and telecommunications industry and is expected to produce \$1M per year in cost recovery from ROW assignments throughout the city. These enhancements are critical to efficient coordination of these projects and to minimize public scrutiny of ROW excavations.
Document Date	2018/09/11

Service	Infrastructure Support	Sector Affected	Multiple Sectors
Activity #	480701	Ward(s)	All Wards
Project Identifier (PID)	3000036	Citizen Priority	Enabling Services
Business Unit	CORP ANALYTICS AND INNOVATION	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides & enhances natural and manmade assets
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,425,000	475,000	475,000	475,000	0	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	utput		estic Product (\$)	Income (\$)	Employment (Person-Years)
	1,948,	257	909,640	10		
MUGS	Mainter	nance	Up	grade	Growth	New Services
	10%	6	3	30%	20%	40%

Triple Bottom Line – Social	CROWM Phase II will align with the "One Calgary" mandate to enhance communication between different departments at The City of Calgary. This phase will also increase our transparency with our customers.
Triple Bottom Line – Environmental	CROWM Phase II will continue to minimize the use of a manual paper-based transaction system. In addition, added transparency realized for customers should lesson the environmental impact of excavating rights of way corridors within city limits.
Triple Bottom Line – Economic	CROWM Phase II will enhance revenue and customer service by allowing more efficient processing of ULA applications. In addition, a fuller view of short and medium-term Rights of Way projects at the city will promote more efficient planning by shallow utilities to minimize impact to citizens on Calgary rights of way corridors.
Expected Key Benefits	The benefits to expanding the feature set outlined for CROWM Phase II are: (1) Enhanced communication between departments/groups in dealing with our customers (2) Better safety management of our city rights of way (3) Enhanced efficiency of the utility line assignment application process by driving customer behavior.

Indigenous Consultation

Executive Summary	This project is about creating some level of corporate solution(s) to assist project managers with The City's requirement to consult. The City's requirement extends to consultation with Treaty 7 Nations and Metis Nation so it extends beyond city boundaries. Every project that requires some level of regulatory approval (e.g. Water Act, Public Lands Act, Environmental Protection and Enhancement Act, Historical Resources Act) is required to show due diligence with respect to First Nations and Metis consultation. This project will focus on providing some level of training to assist project managers.
Document Date	2018/09/11

Service	Infrastructure Support	Sector Affected	Internal / The City of Calgary
Activity #	480707	Ward(s)	All Wards
Project Identifier (PID)	3000192	Citizen Priority	Enabling Services
Business Unit	RESILIENCE AND INFR CALGARY	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Leadership and Strategy
Service Type	Essential	City Resilience Framework Driver	Promotes leadership & effective management
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Promote the well-being of communities- environment and economy

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	80,000	20,000	20,000	20,000	20,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	109,8	375	69	9,116	45,444	0
MUGS	Mainter	nance	Up	grade	Growth	New Services
	0%	,)	(0%	0%	100%

Triple Bottom Line - Social	Supports indigenous relations.
Triple Bottom Line – Environmental	No Impact
Triple Bottom Line – Economic	No Impact
Expected Key Benefits	Education opportunities for project managers will facilitate capital project delivery and reduce potential delays.

Project and Portfolio Mgmt

Executive Summary	The Project and Portfolio Management capital program consists of several technology based projects, including the enterprise-wide Project and Program Management automation (P2M) and Infrastructure Investment Planning (IIPs) projects. Both P2M and IIPs programs (the rollout Microsoft Project Online software as an enterprise platform application) were funded under the 2015-2018 business plan. This new capital request is to improve project and portfolio management at the City with a focus on the core areas of P2M future releases, IIPS future releases, Portfolio Management Decision Support Tools, Data Strategy and Report Utilization and MGA S534 reporting tool. The other components of this program seek to tie into and leverage Microsoft Project Online software capabilities to serve other corporate needs.
Document Date	2018/09/11

Service	Infrastructure Support	Sector Affected	Internal / The City of Calgary
Activity #	480705	Ward(s)	All Wards
Project Identifier (PID)	3000148	Citizen Priority	Enabling Services
Business Unit	CORP ANALYTICS AND INNOVATION	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels, Build an adaptable resilient and smart city, Enhance the long-term value of City assets, Integrate coordinate and optimize The City's investment, Optimize financing and funding sources, Promote the well-being of communities-environment and economy

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	3,635,000	2,655,000	980,000	0	0	0
Funding Status	For Approval					
Operating Impact Of Capital	Yes					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	4,969	,763	3,17	1,546	2,320,381	25
MUGS	Mainte	nance	Upç	grade	Growth	New Services
	30	%	1	0%	30%	30%

Triple Bottom Line - Social	Improved accumulation and transparency of capital project data can aid in fostering citizen engagement with Administration and Council.
Triple Bottom Line – Environmental	This program will improve consistency of information provided to senior management, including information on project environmental impacts and risks.
Triple Bottom Line – Economic	Cost efficiencies through establishing a corporate technology platform for project and portfolio management. Improved corporate oversight should reduce financial impact to citizens through P2M driving operational cost savings and error avoidance.
Expected Key Benefits	A Project and Portfolio management system and technology provides significant cost savings(improved processes, training, etc.) and mitigates significant corporate risk(including reputational risk and errors related to poor cost management). Estimates are \$5 million per year in savings and risk avoidance of \$10 million to \$25 million per year in errors avoided. Other benefits include: Enhance capabilities/productivity of project, program and portfolio managers; Enhance business decision-making capabilities and more effectively manage business, infrastructure and project risk; Enable further improvement of project management maturity and practices across the organization, including improved training and support to project managers and sponsors; Compliance with external audit reports and policies; and Streamlining Project Status Reports.

Survey Control Program

Executive Summary	The City of Calgary has an ongoing responsibility for maintaining the Alberta Survey Control Marker (ASCM)Network including the High Precision Network (HPN) within the city limits. The networks are the primary geospatial referencing survey points used to accurately build and locate City and private infrastructure. This annual investment is for inspection, maintenance, expansion, and lifecycle activities for The City's portion of the Alberta Survey Control Marker Network, including the High Precision Network. This program ensures The City and private sector Surveyors can collect all the necessary information in order for projects to be accurately built and located.
Document Date	2018/09/11

Service	Infrastructure Support	Sector Affected	Internal / The City of Calgary
Activity #	480702	Ward(s)	All Wards
Project Identifier (PID)	3000039	Citizen Priority	Enabling Services
Business Unit	CORP ANALYTICS AND INNOVATION	Capital Investment Plan Alignment	Targeted Theme Investments.Transit and Transportation
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides & enhances natural and manmade assets
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Build an adaptable resilient and smart city

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,330,000	130,000	400,000	400,000	400,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (estic Product (\$)	Income (\$)	Employment (Person-Years
	1,818,373		1,160,428		848,998	9
MUGS	Mainte	nance	Up	grade	Growth	New Services
	709	%	1	0%	20%	0%

Triple Bottom Line – Social	This program supports accurate geospatial data used in urban development
Triple Bottom Line – Environmental	This program supports accurate geospatial data used in managing The City's land and water resources
Triple Bottom Line - Economic	This program supports the cost effective development and management of City infrastructure
Expected Key Benefits	The Survey Control Program will ensure The City's survey control networks are well-maintained, accurate, updated and expanded into new communities. Survey control enables accurate base maps, plans, design drawings and geospatial data. Investment in survey equipment saves costs on projects through efficient and effective data collection methods. Additionally, the equipment enables the cost effective delivery of numerous infrastructure and land development projects.

Sustainable Infrastructure Capital Program (SICP)

Executive Summary	Continue building on the successes of a previous program, intended to direct strategic investments in improved design practices, proven technologies, performance monitoring, and benchmarking, with the strategic goal of improving the triple bottom line performance of new and existing infrastructure.
Document Date	2018/09/11

Service	Infrastructure Support	Sector Affected	Multiple Sectors
Activity #	461812	Ward(s)	All Wards
Project Identifier (PID)	3000253	Citizen Priority	Enabling Services
Business Unit	CORP ANALYTICS AND INNOVATION	Capital Investment Plan Alignment	Targeted Theme Investments.Resilience
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides & enhances natural and manmade assets
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

Total	2019	2020	2021	2022	2023+
2,000,000	500,000	500,000	500,000	500,000	0
For Approval					
No					
	•			Income (\$)	Employment (Person-Years
2,734	,395	1,74	15,004	1,276,688	14
Mainter	nance	Up	grade	Growth	New Services
25%	%	2	5%	50%	0%
	2,000,000 For Approval No Gross C (\$) 2,734	2,000,000 500,000 For Approval	2,000,000 500,000 500,000 For Approval No Gross Output Gross Dom (\$) 2,734,395 1,74 Maintenance Upg	2,000,000 500,000 500,000 For Approval No Gross Output (\$) Gross Domestic Product (\$) 2,734,395 1,745,004 Maintenance Upgrade	2,000,000 500,000 500,000 500,000 For Approval No Gross Output (\$) Gross Domestic Product (\$) Income (\$) 2,734,395 1,745,004 1,276,688 Maintenance Upgrade Growth

Triple Bottom Line - Social	Improvement in environmental quality/building occupant comfort thereby improving the productivity of those who occupancy City buildings. In addition, investments made by the SICP significantly improve the reputation of the City as demonstrating leadership in energy and environmental design.
Triple Bottom Line – Environmental	Multiple environmental benefits are generated through investments made by the SICP, including, but not limited to the following: Reductions in energy consumption and cost, including GHG emissions; Reductions in water consumption; Increased material durability/longevity; Waste diversion from landfill; Stormwater quality and quantity management; Encouraging and enhancing biodiversity; Indoor environmental quality/occupant comfort;
Triple Bottom Line - Economic	A reduction in the operating cost and longevity of City infrastructure. The SICP targets improving the resiliency due to changing economic and environmental conditions.
Expected Key Benefits	There are two Citizen Priorities that directly align with the expected benefits associated with a continuation of the Sustainable Infrastructure Capital Program. With regards to a Healthy & Green City, the Program is intended to help direct strategic investments in renewable energy technologies, sustainable building initiatives and emerging technologies. The lessons CAI have learned from historic investments have proven to be transformative with regards to achieving multiple sustainability principles, all related to the long term resilience of our built environment. The Program will also contribute to a Well Run City. The value of municipal services will improved as CAI continues to play a leadership role as the services line lead on Infrastructure Support, by allowing CAI to continue to partner with businesses across the corporation in co-delivery of quality, resilient and high-performa

IT Solutions & Support

Data Centre Environmentals (Lifecycle Replacement)

	This annual investment program funds lifecycle and maintenance of environmental management systems that support critical data centres and other essential compute spaces. This includes such systems as computer room cooling, raised floors, uninterruptable power supplies, fire suppression, power distribution, and equipment cabinets. This activity is essential to maintaining uptime of the City's application and office productivity environments.
Document Date	2018/09/11

Service	IT Solutions & Support	Sector Affected	Internal / The City of Calgary
Activity #	415806	Ward(s)	All Wards
Project Identifier (PID)	3000019	Citizen Priority	Enabling Services
Business Unit	INFORMATION TECHNOLOGY	Capital Investment Plan Alignment	Other.Other
Department	CHIEF FINANCIAL OFFICE	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	2,082,000	400,000	504,000	874,000	304,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (estic Product (\$)	Income (\$)	Employment (Person-Years)
	3,331	,831	1,26	61,476	823,136	10
MUGS	Mainte	nance	Up	grade	Growth	New Services
	100)%		0%	0%	0%

Triple Bottom Line - Social	The technology delivered supports business units across the city in their initiatives that support this portion of the TBL Policy Framework.
Triple Bottom Line – Environmental	As technology advances, so does the ability to reduce the energy consumption of equipment. By managing a strategic asset lifecycle plan, Information Technology supports this goal. In addition, the technology delivered supports business units across the city in their initiatives that support this portion of the TBL Policy Framework.
Triple Bottom Line – Economic	The City of Calgary ensures its long-term economic development and fiscal health by managing its assets wisely and strategically investing in infrastructure to optimize function and service. In addition, the technology delivered supports business units across the city in their initiatives that support this portion of the TBL Policy Framework.
Expected Key Benefits	The Data Center Environmental program is required to minimize potential service disruption by maintaining needed asset conditions in City computer facilities as follows: (1) Optimal functionality in cooling and airflow systems; (2) Optimal condition and required functionality testing of emergency power and power distribution systems (generators, battery backups, in room power distribution); and (3) Appropriate access control and space management for critical facilities.

Enterprise Info Management

Executive Summary	This annual investment program supports the Enterprise Information Management (EIM) services that are designed to increase transparency and improve decision making within the City of Calgary. This investment maximizes several critical supporting services such as the Records Management and FOIP practices, both subject to legislative requirements. The EIM service also strongly supports many business units and mitigates legal risk through retention of digital copies of many transactions between the City, citizens and business. Investing in appropriate future system upgrades, integrating new technologies, and keeping current with process improvements also enables efficient service delivery to our clients and citizens.
Document Date	2018/09/11

Service	IT Solutions & Support	Sector Affected	Internal / The City of Calgary
Activity #	480300	Ward(s)	All Wards
Project Identifier (PID)	3000053	Citizen Priority	Enabling Services
Business Unit	INFORMATION TECHNOLOGY	Capital Investment Plan Alignment	Other.Other
Department	CHIEF FINANCIAL OFFICE	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,120,000	185,500	230,500	325,000	379,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	1,531,	261	97	7,203	714,945	8
MUGS	Mainter	nance	Up	grade	Growth	New Services
	0%	, o	10	00%	0%	0%

Triple Bottom Line - Social	Thisinitiative supports Cityopenin formation, transparency, and freedomofin formation efforts by providing a platform that serves information to citizens and business on City services and decisions.
Triple Bottom Line – Environmental	Thisinitiativesupportsdigitizationoreliminationofpaperinformationandefficienciesinlegaldisposition of outdated information assets.
Triple Bottom Line – Economic	Efficient management of City information and records improves accessibility for FOIP, improves the information available to support decision making, and reduces costs related to excess retention and legal risk.
Expected Key Benefits	The benefits of the Enterprise Information Management program includes: (1) Reducing the risks of cyber threats; (2) Reducing the risk of hardware and applications being on unsupported platforms; (3) Ability to respond to FOIP requests more efficiently; (4) Cost savings for future upgrades; (5) Cost savings by clients during testing of new functionality and features; and (6) Increased efficiency by mobile and field workers to access their documents from a mobile device.

Enterprise Software Licensing

Executive Summary	This annual investment program is required to pay for The City's contractual obligations for enterprise-wide software licenses. These software licenses are required to provide essential software for employee productivity as well as providing the platforms on which other business software operates, for example Oracle database software. Demand for technology to enable efficient, secure & user friendly services for the citizens of Calgary continues to increase. In addition, enterprise technology trends like cloud computing, advanced analytics, communication & collaboration platforms along with the evolving expectations of digital business and a connected citizenry further drive the need for ongoing enterprise software renewal.	
Document Date	2018/09/11	

Service	IT Solutions & Support	Sector Affected	Internal / The City of Calgary
Activity #	415890	Ward(s)	All Wards
Project Identifier (PID)	3000008	Citizen Priority	Enabling Services
Business Unit	INFORMATION TECHNOLOGY	Capital Investment Plan Alignment	Other.Other
Department	CHIEF FINANCIAL OFFICE	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	23,981,400	5,796,000	6,000,000	6,167,700	6,017,700	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	32,787	,314	20,9	23,825	15,308,386	166
MUGS	Mainter	nance	Upg	grade	Growth	New Services
	85%	%	į	5%	10%	0%

Triple Bottom Line - Social	As an enabling service, IT provides the technology services that help City Business Units achieve their Triple Bottom Line objectives. Enterprise software is an essential element of IT's technology infrastructure.
Triple Bottom Line – Environmental	As an enabling service, IT provides the technology services that help City Business Units achieve their Triple Bottom Line objectives. Enterprise software is an essential element of IT's technology infrastructure.
Triple Bottom Line - Economic	As an enabling service, IT provides the technology services that help City Business Units achieve their Triple Bottom Line objectives. Enterprise software is an essential element of IT's technology infrastructure.
Expected Key Benefits	Key benefits from the Software Licenses program include: (1) Meeting contractual obligations for enterprise-wide software licenses; (2) Providing Enterprise software platforms on which The City's line-of-business software operates; and (3) Providing The City with the ability to connect with citizens, deliver services, automate processes, enhance service delivery and make employees more effective

Fibre Optics

Executive Summary	A high speed fibre optic network provides a reliable communication path between corporate facilities and City field infrastructure. All essential services, such as Calgary Police Service, Fire, 911, Water Services, all Transportation groups and more, rely on fibre optics to serve the public. Growth is driven by the increasing use of high bandwidth in all City operations such as video, multimedia, mapping applications, and security. City infrastructure also drives demand as sensors, dynamic traffic controllers, water pump and lift stations, machine to machine communication, BRT stations and CCTV require high bandwidth fibre optic connections. The investment in the fibre optic network leverages existing capital construction projects, such as major road upgrades, LRT expansions or control system automation. This fibre will serve City bandwidth needs for the next 50 years or more.
Document Date	2018/09/11

Service	IT Solutions & Support	Sector Affected	Multiple Sectors
Activity #	418960	Ward(s)	All Wards
Project Identifier (PID)	3000030	Citizen Priority	Enabling Services
Business Unit	INFORMATION TECHNOLOGY	Capital Investment Plan Alignment	Other.Other
Department	CHIEF FINANCIAL OFFICE	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Build an adaptable resilient and smart city

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	4,000,000	1,000,000	1,000,000	1,000,000	1,000,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	Output		estic Product (\$)	Income (\$)	Employment (Person-Years)
	6,401,	213	2,42	23,586	1,581,432	19
MUGS	Mainter	nance	Up	grade	Growth	New Services
	109	6	1	5%	75%	0%

Triple Bottom Line – Social	Thefibreopticinfrastructuretransportsdataandsupportsallbusinessunitsacrossthecityintheir initiatives that support this portion of the TBL Policy Framework.
Triple Bottom Line – Environmental	TheCityoperatesinfrastructureinallareasoftown.Asbusinessunitslifecycletheirequipment,thenew infrastructure usually requires network connectivity to operate where it previously wasn't required. This network connectivity can give the business units a video feed from the field, make changes to equipment from the control center, send status reports of field equipment and alert the infrastructure owners of a problem with field equipment. City fibre network allows this to happen without rolling a truck for a service call therebyThe City's carbon footprint.
Triple Bottom Line – Economic	Asbusinessunitslifecycletheirequipment,newinfrastructureusuallyrequiresnetworkconnectivity to operate where it previously wasn't an option. This network connectivity can give the business units a video feed from the field, make changes to equipment from control centers, send status reports of field equipment and alert the infrastructure owners of a problem with field equipment. City fibre network allows this to happen without rolling a truck for a service call and reducing operational costs. This also allows City staff to do less driving and troubleshooting and more optimization of the existing systems. Traffic efficiencies through data collection, live video and on-demand traffic flow changes based on real time information will help citizens move around the City more efficiently.
Expected Key Benefits	The Fibre Optics program enables City business units to move large amounts of voice, video and data around the city. Other benefits include: (1) Meeting the demands of existing and new technologies within all City business units; (2) Enabling the City to build its own private and secure networks on top of the fibre backbone; and (3) Minimizing downtime to scheduled outages. Fiber infrastructure will provide benefits to the City indefinitely. The network equipment on the ends of the fibre will be lifecycled but the physical conduit and fibre cable in the ground will operate for 50+ years.

IT Communications Infrastructure

This annual investment program funds the lifecycling of The City's traditional phone switch infrastructure. The infrastructure provides telephony services to thousands of end users, including Transit help phones, elevated call centre agents, faxes, modems, and alarm circuits. The program includes continued replacement and program of obsolete phones, resulting in a cost savings to The City, both on infrastructure and monthly servicests. Mobile Device Management and wireless license and support purchases, Public Safey infrastructure radio tower sites, and web conferencing are included. The project incorporates lifecycle replacement and up telephony applications/technology for both standard telephony service as well as The City's 20+ contact cer including 3-1-1, Access Calgary, and the HR Service Centre.		des continued replacement and potential on infrastructure and monthly service provider hases, Public Safey infrastructure costs for orates lifecycle replacement and upgrades to	
Document Date	2018/09/11		

Service	IT Solutions & Support	Sector Affected	Internal / The City of Calgary
Activity #	415770	Ward(s)	All Wards
Project Identifier (PID)	3000016	Citizen Priority	Enabling Services
Business Unit	INFORMATION TECHNOLOGY	Capital Investment Plan Alignment	Other.Other
Department	CHIEF FINANCIAL OFFICE	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	4,198,398	933,500	1,112,299	973,699	1,178,900	0
Funding Status	For Approval	ır Approval				
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	6,718,710		2,543,795		1,659,871	20
MUGS	Mainte	nance	Upg	grade	Growth	New Services
	159	%	7:	5%	10%	0%

Triple Bottom Line – Social	TheprojectprovidesthetechnologyrequiredtoprovidecitizensaccesstoCityservices. The contact centre technology provides citizens access to recreation services, golf bookings, Transit Access services, 311 services, to name a few. The project provides critical telecommunication services to transit help phones, elevator phones, recreational facilities, alarm circuits, and Fire station and CEMA telephony.
Triple Bottom Line – Environmental	AsCorporatetelephonymovestoanInternetProtocol(IP)basedsolution,theremovalofobsolete,non-IP based telephony equipment will realize benefits such as less power consumption, reduced cabling, and reduced cooling and real estate requirements.
Triple Bottom Line – Economic	TheCityofCalgaryensuresitslong-termeconomicdevelopmentandfiscalhealthbymanagingitsassets wisely and strategically investing in communications solutions that optimize both function and service. This project supports each Business Unit across the City in delivering essential communication services both internally, and to the citizens of Calgary.
Expected Key Benefits	The benefits of the Comunications program includes: (1) Operating cost savings through the decrease in reliance on telecom service providers for voice and video conferencing circuits; (2) Improved customer experience and service to staff and citizens accessing City contact centres; (3) Increased collaboration and greater ease of use of standardized web conference technology; (4) Continued level of support and maintenance from vendors; and (5) Improved safety. This program promotes the ability for employees to work anytime, anywhere, and on any device.

IT -Lifecycle Replace-Desktop

Executive Summary	This annual investment program funds lifecycle replacement of City Windows-based personal computing devices multi-function printers. These end-user devices are required for employees to access City systems essential in the delivery of service to citizens. Compatibility with other technology components as well as vendor support are critic maintaining the access required by employees, as well as ensuring our environment is stable and secure. This inconsecure remote access infrastructure key to the delivery of the Tomorrow's Workplace strategy, which is one of the required components of our IT Service Resiliency strategy.	
Document Date	2018/09/11	

Service	IT Solutions & Support	Sector Affected	Internal / The City of Calgary
Activity #	415803	Ward(s)	All Wards
Project Identifier (PID)	3000018	Citizen Priority	Enabling Services
Business Unit	INFORMATION TECHNOLOGY	Capital Investment Plan Alignment	Other.Other
Department	CHIEF FINANCIAL OFFICE	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	13,000,000	3,500,000	2,800,000	2,700,000	4,000,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years
	17,773	3,569	11,3	42,529	8,298,474	90
MUGS	Mainte	nance	Upg	grade	Growth	New Services
	100	1%	()%	0%	0%

Triple Bottom Line - Social	The technology delivered supports business units across the city in their initiatives that support this portion of the TBL Policy Framework.
Triple Bottom Line – Environmental	As technology advances, so does the ability to reduce the energy consumption of devices. By managing a strategic asset lifecycle plan, Information Technology supports this goal. In addition, the technology delivered supports business units across the city in their initiatives that support this portion of the TBL Policy Framework.
Triple Bottom Line – Economic	The City of Calgary ensures its long-term economic development and fiscal health by managing its assets wisely and strategically investing in infrastructure to optimize function and service. In addition, the technology delivered supports business units across the city in their initiatives that support this portion of the TBL Policy Framework.
Expected Key Benefits	The End User Computing program will enable lifecycle replacement to minimize service disruption and cost increases by avoiding asset condition related issues as follows: (1) Functionality limitations due tolack of equipment performance capabilities; (2) Functionality restrictions related to compatibility issueswith newer technology and products; (3) Increased security vulnerabilities due to lack of vendor support; (4) Increased cost to repair out of warranty assets; and (5) Downtime due to equipment failure

IT Service Resiliency and Disaster Recovery

Executive Summary	This annual investment program funds ongoing lifecycle and sustainment of essential infrastructure and systems required for City Service Resiliency and Disaster Recovery. The key benefit is mitigation of the risk of a data centre facility outage or major data centre technology component failure, and avoidance of the associated outages and other impacts to essential City services as defined by the Calgary Emergency Management Agency Business Impact Analysis.
Document Date	2018/09/11

Service	IT Solutions & Support	Sector Affected	Internal / The City of Calgary
Activity #	415894	Ward(s)	All Wards
Project Identifier (PID)	3000025	Citizen Priority	Enabling Services
Business Unit	INFORMATION TECHNOLOGY	Capital Investment Plan Alignment	Other.Other
Department	CHIEF FINANCIAL OFFICE	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,282,000	406,000	217,000	343,000	316,000	0
Funding Status	For Approval			'		<u>'</u>
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	2,051	,589	770	6,759	506,849	6
MUGS	Mainter	nance	Up	grade	Growth	New Services
	909	%	1	0%	0%	0%

Triple Bottom Line - Social	The technology delivered supports business units across the city in their initiatives that support this portion of the TBL Policy Framework.
Triple Bottom Line – Environmental	As technology advances, so does the ability to reduce the energy consumption of equipment. By managing a strategic asset lifecycle plan, Information Technology supports this goal. In addition, the technology delivered supports business units across the city in their initiatives that support this portion of the TBL Policy Framework.
Triple Bottom Line – Economic	TheCityofCalgaryensuresitslong-termeconomicdevelopmentandfiscalhealthbymanagingitsassets wisely and strategically investing in infrastructure to optimize function and service. In addition, the technology delivered supports business units across the city in their initiatives that support this portion of the TBL Policy Framework.
Expected Key Benefits	The Service Resiliency program will minimize service disruption and cost increases by avoiding asset condition related issues as follows: (1) Reduced impact during planned outages (maintenance and upgrade) and unplanned outages (failure); and (2) Mitigation of risks related to the failure of a data centrefacility. This will have direct impacts on continued service delivery to Calgarians in the case of citizen consumed services such as the Calgary.ca website and indirect impacts where other Business Units' delivery of services to citizens depends on IT services.

IT-Calgary City Net

Executive Summary	The Calgary City Net is a high-speed data network backbone that provides network services/connectivity to support current and future business needs of The City. Business Units are adopting technology to become more efficient and effective in their operations and in the delivery of services. Technology adoption by business units enables access to real-time information through greater use of remote sensors and mobile applications. Remote monitoring of conditions, remote control of devices and services, and real time data capture in the field can assist in crisis management, citizen engagement, and result in operational efficiencies. On-going lifecycle and upgrades of the Calgary City Net is required to ensure that this high-speed backbone continues to be sustainable, resilient, scalable, and secure to support the delivery of essential services to the Corporation and to citizens.
Document Date	2018/09/11

Service	IT Solutions & Support	Sector Affected	Internal / The City of Calgary
Activity #	415810	Ward(s)	All Wards
Project Identifier (PID)	3000020	Citizen Priority	Enabling Services
Business Unit	INFORMATION TECHNOLOGY	Capital Investment Plan Alignment	Other.Other
Department	CHIEF FINANCIAL OFFICE	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	7,391,600	2,217,800	1,992,800	1,977,500	1,203,500	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	10,105	,778	6,44	19,188	4,718,384	51
MUGS	Mainter	nance	Upg	grade	Growth	New Services
	809	%	2	0%	0%	0%

Triple Bottom Line - Social	The technology delivered supports business units across the city in their initiatives that support this portion of the TBL Policy Framework.
Triple Bottom Line – Environmental	As technology advances, so does the ability to reduce the energy consumption of equipment. By managing a strategic asset lifecycle plan, Information Technology supports this goal. In addition, the technology delivered supports business units across the city in their initiatives that support this portion of the TBL Policy Framework.
Triple Bottom Line - Economic	The technology delivered supports business units across the city in their initiatives that support this portion of the TBL Policy Framework.
Expected Key Benefits	Key benefits from the Calgary City Net program include: (1) reduction in costs by reducing infrastructure duplication; (2) operational efficiencies; and (3) agility to meet current and future rate of technology adoption. Other benefits include: (1) being proactive to meet business needs; (2) increased efficiencies in service delivery; and (3) increased customer satisfaction and goodwill.

IT-Development Pool

Executive Summary	The Development Pool provides technology solutions to improve efficiencies within tax supported business units. This annual investment program will enhance the delivery of new or existing services through delivery of purchased or custom applications. Without this program, tax-supported services will have reduced access to technology solutions. Projects funded through this program are governed by a corporate technology committee. This committee reviews operational impact, risks and links to other capital projects before each solution is recommended and approved. As approved by the Board of Commissioners in 1998, this program is funded through a contribution from operating to capital reserve and does not require additional capital funding.
Document Date	2018/09/11

Service	IT Solutions & Support	Sector Affected	Internal / The City of Calgary
Activity #	417570	Ward(s)	All Wards
Project Identifier (PID)	3000029	Citizen Priority	Enabling Services
Business Unit	INFORMATION TECHNOLOGY	Capital Investment Plan Alignment	Other.Other
Department	CHIEF FINANCIAL OFFICE	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Current	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	20,000,000	5,000,000	5,000,000	5,000,000	5,000,000	0
Funding Status	For Approval			'		
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	27,343	,953	17,4	50,045	12,766,883	138
MUGS	Mainter	nance	Up	grade	Growth	New Services
	0%	, D	4	-0%	60%	0%

Triple Bottom Line - Social	The projects funded by the Development pool support business units and their objectives to achieve social benefits associated with corporate TBL goals.
Triple Bottom Line – Environmental	The projects funded by the Development pool support business units and their objectives to achieve environmental benefits associated with corporate TBL goals.
Triple Bottom Line - Economic	TheprojectsfundedbytheDevelopmentpoolsupportbusinessunitsandtheirobjectivestoachieve economic benefits associated with corporate TBL goals.
Expected Key Benefits	Key benefits from the Development Pool include: (1) Providing technology solutions that enable business units to manage and deliver services more effectively; (2) Providing a central source of funds for tax-supported business units who may have difficulty funding technology projects; (3) Re-using existing solutions; and (4) Through centralized governance, ensuring that projects which provide the most benefit to the corporation are funded.

IT-Enterprise Servers

Executive Summary Document Date	lifecycle replacement is ne technology components, a environment. These server of City services as well as	is annual investment program funds lifecycle replacement of server class computers in City data centres. This cycle replacement is needed to keep this infrastructure in a supportable, manageable state. Compatibility with o hnology components, as well as vendor support, are critical to our ability to maintain a stable and secure vironment. These servers host office productivity and line of business applications used by employees in the delicity services as well as the citizen facing components of those applications. This includes City applications deer ical and essential by the Calgary Emergency Management Agency Business Impact Analysis process.	
Convice	IT Colutions & Cupport	Sector Affected	Internal / The City of Colgany

Service	IT Solutions & Support	Sector Affected	Internal / The City of Calgary
Activity #	415802	Ward(s)	All Wards
Project Identifier (PID)	3000017	Citizen Priority	Enabling Services
Business Unit	INFORMATION TECHNOLOGY	Capital Investment Plan Alignment	Other.Other
Department	CHIEF FINANCIAL OFFICE	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	8,350,000	1,688,000	2,792,000	2,457,000	1,413,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	13,362	2,532	5,05	59,235	3,301,240	40
MUGS	Mainte	nance	Upg	grade	Growth	New Services
	100	1%	(0%	0%	0%

Triple Bottom Line - Social	The technology delivered supports business units across the city in their initiatives that support this portion of the TBL Policy Framework.
Triple Bottom Line – Environmental	As technology advances, so does the ability to reduce the energy consumption of equipment. By managing a strategic asset lifecycle plan, Information Technology supports this goal. In addition, the technology delivered supports business units across the city in their initiatives that support this portion of the TBL Policy Framework.
Triple Bottom Line – Economic	The City of Calgary ensures its long-term economic development and fiscal health by managing its assets wisely and strategically investing in infrastructure to optimize function and service. In addition, the technology delivered supports business units across the city in their initiatives that support this portion of the TBL Policy Framework.
Expected Key Benefits	The Enterprise Server program will enable lifecycle replacement to minimize service disruption and cost increases by avoiding asset condition related issues as follows: (1) Server problems related to version incompatibility within City IT infrastructure and cloud solutions; (2) Delayed adoption of effective and efficient server technology solutions; (3) Increased security vulnerabilities due to lack of vendor support; (4) Increased support costs as devices move out of warranty; and (5) Increased cost to repair out of warranty assets or risk of no repair available.

IT-Enterprise Storage Units

Executive Summary Document Date	benefit is avoiding system o other technology componen environment. This infrastruc offsite storage of critical info	utages, which have a negative impact on its, as well as vendor support, are critical to ture includes our backup and recovery sy	storage equipment in City data centres. The key delivery of services to citizens. Compatibility with to our ability to maintain a stable and secure stems which meet the legislative requirement of holds all of the data from our internally hosted anagement environment.
Service	IT Solutions & Support	Sector Affected	Internal / The City of Calgary
Activity #	415250	Ward(s)	All Wards

Service	IT Solutions & Support	Sector Affected	Internal / The City of Calgary
Activity #	415250	Ward(s)	All Wards
Project Identifier (PID)	3000015	Citizen Priority	Enabling Services
Business Unit	INFORMATION TECHNOLOGY	Capital Investment Plan Alignment	Other.Other
Department	CHIEF FINANCIAL OFFICE	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

*			·	·	•	
	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	7,270,851	2,534,702	2,231,704	1,820,576	683,869	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	11,635	5,566	66 4,405,383		2,874,590	35
MUGS	Mainte	nance	Upç	grade	Growth	New Services
	100)%	()%	0%	0%

Triple Bottom Line - Social	The technology delivered supports business units across the city in their initiatives that support this portion of the TBL Policy Framework.
Triple Bottom Line – Environmental	As technology advances, so does the ability to reduce the energy consumption of equipment. By managing a strategic asset lifecycle plan, Information Technology supports this goal. In addition, the technology delivered supports business units across the city in their initiatives that support this portion of the TBL Policy Framework.
Triple Bottom Line – Economic	The City of Calgary ensures its long-term economic development and fiscal health by managing its assets wisely and strategically investing in infrastructure to optimize function and service. In addition, the technology delivered supports business units across the city in their initiatives that support this portion of the TBL Policy Framework.
Expected Key Benefits	The Enterprise Storage program will enable lifecycle replacement to minimize service disruption and cost increases by avoiding asset condition related issues as follows: (1) Storage problems related to version incompatibility within City IT infrastructure; (2) Delayed adoption of effective and efficient storage technology solutions; (3) Increased security vulnerabilities due to lack of vendor support; (4) Increased support costs as devices move out of warranty; (5) Increased cost to repair out of warranty assets or risk of no repair available; and (6) Increased failure of data backup/restore functionality.

Network Infrastructure (Hardware and Cabling)

Executive Summary	This annual investment program funds lifecycle replacement and growth of critical network cabling and equipment in City buildings. This infrastructure is required for employees working in City facilities to access corporate applications, including those that are used to deliver critical and essential services. The scope includes support for Business Unit-driven projects, IT strategic initiatives, and providing connectivity for endpoint computing devices, real-time data communications, and business systems for the corporation.
Document Date	2018/09/11

Service	IT Solutions & Support	Sector Affected	Internal / The City of Calgary
Activity #	415200	Ward(s)	All Wards
Project Identifier (PID)	3000009	Citizen Priority	Enabling Services
Business Unit	INFORMATION TECHNOLOGY	Capital Investment Plan Alignment	Other.Other
Department	CHIEF FINANCIAL OFFICE	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Provides reliable communication & mobility
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,200,000	300,000	300,000	300,000	300,000	0
Funding Status	For Approval	For Approval				
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	1,920,	,364	727,076		474,430	6
MUGS	Mainter	nance	Up	grade	Growth	New Services
	50%	%	1	5%	35%	0%

	portion of the TBL Policy Framework.
Triple Bottom Line – Environmental	TheCityofCalgaryensuresitslong-termeconomicdevelopmentandfiscalhealthbymanagingitsassets wisely and strategically investing in infrastructure to optimize function and service. In addition, the technology delivered supports business units across the city in their initiatives that support this portion of the TBL Policy Framework.
Triple Bottom Line – Economic	Astechnologyadvances, sodoes the ability to reduce the energy consumption of equipment. By managing a strategic asset lifecycle plan, Information Technology supports this goal. In addition, the technology delivered supports business units across the city in their initiatives that support this portion of the TBL Policy Framework.
Expected Key Benefits	The Network Infrastructure program will enable lifecycle replacement to minimize service disruption and cost increases by avoiding asset condition related issues as follows: (1) Inconsistent network connectivity in City buildings; (2) Network connectivity problems related to version inconsistency between network devices; (3) Newly acquired City properties not having effective network connectivity options; (4) Delayed adoption of effective and efficient network connectivity technology solutions; (5) Increased security vulnerabilities due to lack of vendor support; and (6) Increased cost to repair out-of-warranty assets

The technology delivered supports business units across the city in their initiatives that support this across the city in their initiatives that support this initiative support the city in the city of the ci

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Triple Bottom Line - Social

PeopleSoft FSCM

Executive Summary	Investment in upgrades and growth which contributes to the sustainment and maintenance of the Finance & Supply Chain Management (FSCM) platform in support of Supply and Financial reporting, audit and service delivery. The investment into the Enterprise Resource Planning (ERP), specifically the PeopleSoft Finance and Supply Chain Management (FSCM) suite supports this business-critical application. The periodic updates of the FSCM suite allows The City to maximize the benefits of the system, improve efficiencies, provide enhanced functionality to City staff and strengthen The Corporation's ability to report accurate, timely information to assist in corporate decision-making. Without sustainment activities to the ERP there are several risks in non-compliance to Public Sector Accounting Board (PSAB) standards and difficulties in financial transactions with citizens and business.
Document Date	2018/09/11

Service	IT Solutions & Support	Sector Affected	Internal / The City of Calgary
Activity #	415970	Ward(s)	All Wards
Project Identifier (PID)	3000026	Citizen Priority	Enabling Services
Business Unit	INFORMATION TECHNOLOGY	Capital Investment Plan Alignment	Other.Other
Department	CHIEF FINANCIAL OFFICE	City Resilience Framework Dimension	Economy and Society
Service Type	Essential	City Resilience Framework Driver	Ensures Social Stability & Security and Justice
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,377,500	530,000	282,500	282,500	282,500	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	1,883	,315	1,20)1,872	879,319	10
MUGS	Mainter	nance	Up	grade	Growth	New Services
	600	%	4	0%	0%	0%

Triple Bottom Line - Social	This initiative supports the financial confidence and capabilities of the Citythrough openness in audit, budgeting, and confidence in City financial operations.			
Triple Bottom Line – Environmental	Thistechnologyimprovesdigitalretentionandapprovals, reducing largely paper driventransactions with citizens and business.			
Triple Bottom Line - Economic	Efficientprocurementandmanagementofsoftwareserviceswillprovidethebestvalueforthe investments.			
Expected Key Benefits	ThebenefitsofthePeopleSoftFSCMprogramincludes:(1) Enhanced auditability; (2) Standardized and automated business processes across all the business units; (3) Integrated controls and security; (4) Alignment with industry ERP (Enterprise Resource Planning) best practice; (5) Avoidance of future costs through improved access to information for more effective decision making; (6) Quicker response to business needs which increases customer satisfaction; (7) Improved quarter and year-end performance for reporting; (8) Enabling enhanced and self-service style reporting; and (9) Reduced risk of being unsupported by the vendor			

PeopleSoft HCM

Executive Summary	Investment in the sustainment and maintenance of the PeopleSoft Human Capital Management (HCM) system to ensure it remains able to meet the demands of The Corporation. The investment into the Enterprise Resource Planning (ERP), specifically HCM suite, supports business-critical applications including services such as Payroll, Talent Management, and Corporate Workforce Management. Enhancing the myHRconnect platform supports Tomorrow's Workplace and will provide all City employees with access to their human resources information - anytime, anyplace, through any device, part of a critical The Corporation's efficiency and intentional management strategy. Implementing technology within the PeopleSoft Suite to support the Corporate Talent Management program will ensure a cost effective corporate solution accessible by all business units supporting workforce development.
Document Date	2018/09/11

Service	IT Solutions & Support	Sector Affected	Internal / The City of Calgary
Activity #	415990	Ward(s)	All Wards
Project Identifier (PID)	3000027	Citizen Priority	Enabling Services
Business Unit	INFORMATION TECHNOLOGY	Capital Investment Plan Alignment	Other.Other
Department	CHIEF FINANCIAL OFFICE	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+	
Recommended Funding Allocation (\$)	2,020,000	325,000	325,000	685,000	685,000	0	
Funding Status	For Approval						
Operating Impact Of Capital	No						
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	Output		estic Product (\$)	Income (\$)	Employment (Person-Years)	
	2,761,739		1,762,455		1,289,455	14	
MUGS	Mainter	nance	Up	grade	Growth	New Services	
	60%	6	4	0%	0%	0%	

Triple Bottom Line - Social	This initiative supports many internal City social initiatives such as Code of Conduct and responsiveness to respectful workplace issues, supporting HR initiatives designed at corporate culture and behaviors.
Triple Bottom Line – Environmental	This technology investment reduces manual paper-based transactions, improves accessibility and supports workforce mobility and workplace options.
Triple Bottom Line - Economic	Efficient decisions related to Human Capital Management provide the best value in hiring, developing and retaining City of Calgary employees.
Expected Key Benefits	The benefits of the PeopleSoft HCM program include: (1) Improved efficiencies; (2) Streamlined and enhanced system functionality; and (3) Ensured version compliance for continued vendor support.

Software Lifecycle Replacement

Executive Summary	This annual investment program is essential for the maintenance and upgrading of software applications and supporting technologies that enhance business capabilities and services across the corporation. The program also reduces the risk of security vulnerabilities by adhering to defined maintenance and upgrade schedules. Funding will enable strategic planning, on-going activities and specific initiatives which enable the management and sustainability of these software assets. This program also helps to enhance The City's ability to leverage new technologies and capabilities available in product upgrades. As systems and software become obsolete, there is an increased risk of service disruptions for City services that depend on these applications and supporting technologies. Disruptions have secondary costs related to reduced staff productivity and service delays.
Document Date	2018/09/11

Service	IT Solutions & Support	Sector Affected	Internal / The City of Calgary
Activity #	415891	Ward(s)	All Wards
Project Identifier (PID)	3000021	Citizen Priority	Enabling Services
Business Unit	INFORMATION TECHNOLOGY	Capital Investment Plan Alignment	Other.Other
Department	CHIEF FINANCIAL OFFICE	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+	
Recommended Funding Allocation (\$)	7,010,000	1,785,000	1,740,000	1,775,000	1,710,000	0	
Funding Status	For Approval						
Operating Impact Of Capital	No						
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)	
	9,584,	056	6,11	16,241	4,474,792	48	
MUGS	Mainter	nance	Up	grade	Growth	New Services	
	100	%	(0%	0%	0%	

Triple Bottom Line – Social	Lifecycling City software assets improves accessibility to information and City services for our Citizens. City business units are better positioned to leverage and share information resulting in improved or new City services.
Triple Bottom Line – Environmental	Many of The City's Business Units' environmental goals use The City's software assets to run more efficient operations by establishing better information exchange and leveraging new product capabilities.
Triple Bottom Line – Economic	The lifecycling of the The City's software assets maintains and often increases their value to City lines of business while at the same time reducing the likelihood of increased sustainment costs linked to outdated software.
Expected Key Benefits	The benefits of the Software Lifecycle program includes: (1) Maintaining the overall business value of the application portfolio; (2) Sustainment of effective service levels; (3) Management of application sustainability risks; (4) Reducing software security vulnerability risks; (5) Minimizing service disruptions; and (6) Containment of IT application-related costs.

Legal Counsel & Advocacy

Software Sustainment

Executive Summary	Rationalization of the technology used to deliver legal counsel and advocacy and insurance and claims services to clients to ensure that we can meet our clients needs and the data requirements related to One Calgary.									
Document Date	2018/09/11	2018/09/11								
Service	Legal Counsel & Advocacy	Sector Affected	Multiple Sectors							
Activity #	481100	Ward(s)	All Wards							
Project Identifier (PID)	3000226	Citizen Priority	Enabling Services							
Business Unit	LAW DEPARTMENT	Capital Investment Plan Alignment	Other.Other							
Department	LAW AND LEGISLATIVE SRVICES	City Resilience Framework Dimension	Leadership and Strategy							
Service Type	Essential	City Resilience Framework Driver	Promotes leadership & effective management							
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels							

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	456,000	1,000	66,000	194,500	194,500	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross ((\$			estic Product (\$)	Income (\$)	Employment (Person-Years)
	623,4	442	39	7,861	291,085	3
MUGS	Mainte	nance	Up	grade	Growth	New Services
	200	%	8	0%	0%	0%

Triple Bottom Line - Social	
Triple Bottom Line – Environmental	
Triple Bottom Line – Economic	This will increase the opportunity to improve cost effective service delivery and manage the increasing volume of corporate legal matters.
Expected Key Benefits	Provides Law with the ability to intentionally manage the legal counsel and advocacy service, meet the needs of corporate projects such as One Calgary and collect the data required to support intentional management of the service.

			Techno	logy				
Executive Summary Document Date	Organizational Health, Safety and Wellness (OHSW) helps to protect the most important asset to our organization, our employees, who in turn provide most City services. We provide strategic corporate leadership of health, safety and wellness risks and impacts in the delivery of our services, to optimize productivity and reduce injury. As a result, capital initiatives put forward will position The City to maintain our Corporate Occupational, Safety and Wellness systems, while continuing to address risk management for employees, as well as maintain legislative compliance. Initiatives within this program include: Critical safety data management systems maintenance and compliance analytics/reporting. 2018/09/11							
Service		onal Health Safety Sector Affected Internal / The City of Calgary						Calgary
Activity #	& Wellness 410717		Ward(s)					
Project Identifier (PID)	3000235		Citizen Priority			Enabling	Services	
Business Unit	ENVIRONMENT SAFETY MGMT	AL &	Capital Investment	Plan Alignmen	t	Other.Ot	her	
Department	UTILITIES ENVII PROTECTION	RON	City Resilience Fra	mework Dimen	sion	Health a	nd Wellbeing	
Service Type	Essential		City Resilience Fra	mework Driver		Supports	s livelihoods &	employment
Investment Category	Program - A Prog grouping of proje related and bene being planned ar together	cts that are fit from	Capital Infrastructure Investment Principles			Support the delivery of City of Calgary services at approved service levels		
		Total	2019	2020	2021		2022	2023+
Recommended Fundin	g Allocation (\$)	495,000	139,000	142,000	109,00	0	105,000	0
Funding Status		For Approva	ı					
Operating Impact Of Ca	apital	No						
Economic Impacts of 2 Recommended Fundin		Gr	Gross Output (\$)		Gross Domestic Product (\$)		Income (\$)	Employment (Person-Years)
		704,670		437,546			303,181	4
MUGS		Maintenance		Upgrade			Growth	New Services
		85%		5%			5%	5%
impact of soci proper changi wellne		pact of socia social issues operly, can o langing demo ellness. By er	rts health, safety and lissues in the workpla. Increased incidents ut-weigh any program graphics (e.g. aging inbracing the broader ty and wellbeing but o	ace. It includes in the workplace is offered by the workforce), as the concept of OHS	greater under e (e.g. haras City. It is imerer ere is a direr W, there is a	erstanding ssment/bu nperative of timpact	i, prevention a illying etc.), if social issues to employees	and management not managed pertaining to 'health safety and
targeted mai well-run proje		rgeted mainly ell-run project	al investments within OHSW have a slight impact on the environment, as the investments are ed mainly toward the critical maintenance of current technology and supporting safety aspects of in projects. It should be noted that safe operation of equipment preserves its longevity and ore reduces the environmental footprint.					
A productive w business costs		opports a productive workforce with systems that support employee health, safety and wellness. we workforce drives the economic benefits of the entire organization. This includes: reduced costs and disruptions, increased productivity, enhancement of employees' commitment and tof The City's culture. Continued capital investment supports aspects of well-run projects.						
Expected Key Benefits The capital interpretation the health, sating on home safe costs, while an corporate lead services to enguidance, data			estment will support a sty and wellness of Ci at the end of every shinering to evolving legership in the pursuit of bloyees that adhere to tools and resources apployees. (e) Provide igation.	ty employees, so ift. (b) Support r islation and man f creating a safe b health and safe to integrate heal	o they can co educing emp aging risk at and healthy ety legislation th, safety an	ontinue to bloyee inju City work workplace n. City lea d wellnes	deliver servicuries and add ksites and face. (d) Provision ders are provisions into their se	tes to citizens and ress rising claims ilities. (c) Provide on of support ided with strategic ervices to manage

Business Applications and Technology Maintenance U

Executive Summary	Procurement Compliance Technology is focused on regulatory compliance with public procurement law. This investment is necessary to meet The City's obligations under the New West Partnership Trade Agreement, Canadian Free Trade Agreement and Comprehensive Economic Trade Agreement between Canada and Europe. These obligations include: data collection and management; data reporting; and transparency. In addition, the trade agreements require public entities to achieve value for money through strategic procurement processes.
Document Date	2018/09/11

Service	Procurement & Warehousing	Sector Affected	Internal / The City of Calgary
Activity #	414302	Ward(s)	All Wards
Project Identifier (PID)	3000133	Citizen Priority	Enabling Services
Business Unit	SUPPLY	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Leadership and Strategy
Service Type	Essential	City Resilience Framework Driver	Promotes leadership & effective management
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Build an adaptable resilient and smart city

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	900,000	250,000	400,000	250,000	0	0
Funding Status	For Approval			'		·
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	1,230,	,478	78	5,252	574,510	6
MUGS	Mainter	nance	Up	grade	Growth	New Services
	65%	%	3	5%	0%	0%

Triple Bottom Line – Social	Procurement Compliance Technology program supports an inclusive city through technology that facilitates collaboration, transparency and creates openness with all parties involved.
Triple Bottom Line – Environmental	Procurement Compliance Technology program supports the reduction of the carbon footprint through reduction in vehicle emissions and paper requirements.
Triple Bottom Line - Economic	Procurement Compliance Technology program supports investing and leveraging technology to create efficiencies and a foundation for transparency, evidence based decision making, and controls.
Expected Key Benefits	- Strengthened process controls - Increased transparency of procurement process - Enhanced reporting and process monitoring - Efficiency in procurement process - Decrease in non-value added activities

Fueling Systems

Executive Summary	
	Supply Management (Procurement and Warehousing) maintains and operates 21 fuel sites located across Calgary to serve The City and are required to be compliant with safety and environmental legislation. Fuel storage and dispensing equipment need ongoing maintenance and upgrades to minimize failure events (leaks / spills) which negatively impact the environment, City reputation and safety, and customer service delivery.
Document Date	2018/09/11

Service	Procurement & Warehousing	Sector Affected	Internal / The City of Calgary, Multiple Sectors
Activity #	414310	Ward(s)	All Wards
Project Identifier (PID)	3000159	Citizen Priority	Enabling Services
Business Unit	SUPPLY	Capital Investment Plan Alignment	Targeted Theme Investments.Resilience
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Promote the well-being of communities- environment and economy

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,242,000	405,000	279,000	279,000	279,000	0
Funding Status	For Approval	For Approval				<u>'</u>
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years
	2,047	159	93	4,115	601,490	6
MUGS	Mainter	nance	Up	grade	Growth	New Services
	100	%		0%	0%	0%

Triple Bottom Line - Social	Fuel safety and compliance program supports a safe city through the replacement of the lifecyle of fuel equpment to comply with safety regulations.
Triple Bottom Line – Environmental	Fuel safety and compliance program supports a safe city through the replacement of the lifecyle of fuel equpment to comply with safety regulations.
Triple Bottom Line - Economic	Fuel safety and compliance program supports a safe city through the replacement of the lifecyle of fuel equpment to comply with safety regulations.
Expected Key Benefits	Management of risk related to environmental aspects associated with existing fuel storage sites and fuel management.

Qualification Perform Mgmt

Executive Summary	Supplier Qualification and Performance Management is focused on ensuring qualified suppliers are performing and are managed in accordance with The City's expectations. This is necessary to not only protect the public health and safety of the people we serve but also safeguard critical assets and infrastructure of The City are protected. This investment is critical to mitigate risk of asset failure due to supplier performance. This system will create the ability to effectively track supplier qualifications and performance.
Document Date	2018/09/11

Service	Procurement & Warehousing	Sector Affected	Internal / The City of Calgary
Activity #	480950	Ward(s)	All Wards
Project Identifier (PID)	3000561	Citizen Priority	Enabling Services
Business Unit	SUPPLY	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Leadership and Strategy
Service Type	Essential	City Resilience Framework Driver	Empowers a broad range of stakeholders
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Build an adaptable resilient and smart city

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	950,000	250,000	450,000	250,000	0	0
Funding Status	For Approval					'
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	1,298	,838	828	3,877	606,427	7
MUGS	Mainte	nance	Up	grade	Growth	New Services
	0%	6	10	00%	0%	0%

Triple Bottom Line – Social	Procurement prequalification and performance management project supports an inclusive city through technology that facilitates collaboration, transparency and creates openness with all parties involved.
Triple Bottom Line – Environmental	Procurement prequalification and performance management project supports the reduction of the carbon footprint through reduction in vehicle emissions and paper requirements.
Triple Bottom Line - Economic	Procurement prequalification and performance management project supports investing and leveraging technology to create efficiencies and a foundation for transparency, evidence based decision making, and controls.
Expected Key Benefits	Empowering stakeholders with the ability to act on information reported Adds rigour to the supplier qualification and performance management process Strengthened process controls- Increased transparency of procurement process- Enhanced reporting and process monitoring

Warehouse

Executive Summary	Supply Management (Procurement and Warehousing) operates warehouses for 23 customer business units within The City requiring ongoing maintenance of storage infrastructure (racking, binning, parts towers, mezzanine) to ensure tools, equipment, systems, and the work environment are safe. Warehouse Storage Safety Compliance is focused on regulatory compliance with occupational and safety law. This program is necessary to not only protect public health and safety, but also to safeguard The City's critical assets and infrastructure.
Document Date	2018/09/11

		T T T T T T T T T T T T T T T T T T T	1
Service	Procurement & Warehousing	Sector Affected	Internal / The City of Calgary
Activity #	414301	Ward(s)	All Wards
Project Identifier (PID)	3000157	Citizen Priority	Enabling Services
Business Unit	SUPPLY	Capital Investment Plan Alignment	Targeted Theme Investments.Resilience
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Essential	City Resilience Framework Driver	Ensures continuity of critical services
Investment Category	Program - A Program is a grouping of projects that are related and benefit from being planned and managed together	Capital Infrastructure Investment Principles	Build an adaptable resilient and smart city

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	540,000	90,000	180,000	90,000	180,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years
	741,6	653	466	6,532	306,744	3
MUGS	Mainte	nance	Upç	grade	Growth	New Services
	709	%	1	5%	15%	0%

Triple Bottom Line - Social	Warehouse safety compliance program supports a safe city through the replacement of depreciating warehouse infrastructure and creates a safe work environment for employees and city assets.
Triple Bottom Line – Environmental	Warehouse safety compliance program supports environmental stewardship and protection through safe storage of materials that could pose an environmental impact or hazard (e.g. oil, batteries, fluids).
Triple Bottom Line – Economic	Warehouse safety compliance program supports the investment in infrastructure through ongoing maintenance of warehouse infrastructure (e.g. parts towers, racking, mezzanine, and binning, load docks) and includes lifecyle replacement.
Expected Key Benefits	Address storage safety concerns relating to staff and inventory.

Real Esta

Business Systems

Executive Summary	Real Estate & Development Services (RE&DS) has a mandate to manage its asset portfolio efficiently to realize the maximum value from our facilities on behalf of Calgarians. Consequently, RE&DS is committed to developing a sustainable service model that will enable us to continue meeting our business targets and levels of service. To ensure the sustainability of our levels of service, a replacement for JDE (leasing management system) is required. Land and Asset Management (LAM) is defining the scope of a suitable technology solution to replace JDE. When the new system is in place, it will require additional resources to develop an adequate sustainment plan, including licensing costs. Other initiatives under this program include Corporate Land Administration's circulations process review and Land Administration work intake process.
Document Date	2018/09/11

Service	Real Estate	Sector Affected	Internal / The City of Calgary
Activity #	403350	Ward(s)	
Project Identifier (PID)	3000089	Citizen Priority	Enabling Services
Business Unit	REAL ESTATE AND DEV SERV	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Leadership and Strategy
Service Type	Current	City Resilience Framework Driver	Promotes leadership & effective management
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	850,000	155,000	445,000	125,000	125,000	0
Funding Status	For Approval					'
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	1,162	,118	74	1,627	542,593	6
MUGS	Mainter	nance	Upg	grade	Growth	New Services
	0%	, o	4	.0%	0%	60%

Triple Bottom Line – Social	Increasing transparency of stewardship data to citizens.
Triple Bottom Line – Environmental	Improved software enables the Corporation to rely less on hard copy files and reduces our overall footprint in terms of printing and storage requirements.
Triple Bottom Line – Economic	Audit trails will be more accurately created and maintained regarding leased assets and City owned real estate.
Expected Key Benefits	* Improved processes, accuracy of reported information * Improved metrics and clarity of time to complete processes * Improved asset management practices and mid-long term planning for real estate assets * Improved efficiency and effectiveness of: circulations review, monitoring, reporting, communication * Increased data reliability

Corporate Land Management Framework 2

This includes, but is not limited to, sustainment of CLMF Program through development, maintenance and improvement of Corporate land management processes. The CLMF has been in effect for nearly three years and is not fully implemented. A gap analysis is required to identify, implement, and where necessary adapt processes or standards to improve alignment between standards, process and practice. The purpose of this business case is to request a budget to retain the resources required for conducting a comprehensive review of the CLMF's Standards in order to identify gaps in alignment with existing processes and/or amend existing processes where necessary to improve the efficiency and effectiveness of the Corporation's land management practices. This project will also identify gaps in alignment with a Corporate Land Strategy which will not be complete, approved and implemented until 2019. Document Date

Service	Real Estate	Sector Affected	Internal / The City of Calgary
Activity #	403371	Ward(s)	
Project Identifier (PID)	3000112	Citizen Priority	Enabling Services
Business Unit	REAL ESTATE AND DEV SERV	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Leadership and Strategy
Service Type	Essential	City Resilience Framework Driver	Fosters long-term & integrated Planning
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,000,000	250,000	250,000	250,000	250,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	Output		estic Product (\$)	Income (\$)	Employment (Person-Years)
	1,423,	575	88	3,931	612,487	8
MUGS	Mainter	nance	Up	grade	Growth	New Services
	0%)	10	00%	0%	0%

Triple Bottom Line - Social	NA NA
Triple Bottom Line – Environmental	NA
Triple Bottom Line – Economic	N/A
Expected Key Benefits	1 Improved sustainability of CLMF and the Revolving Fund for General Land Purchases 2. Improved efficiency and effectiveness of: Corporate Land Management Practices 3. Increased reliability & consistency 4. Enhanced optimization of Corporate land assets

Enhanced Rationalization

Executive Summary	In April 2018, CLC approved a request for funding to establish a tactical team (TT) who will support enhancing the sustainability of the Revolving Fund by providing a team of SMEs to assist the Corporation and business units identify underutilized land available for disposition; this effort will be carried out through an enhanced rationalization program. This program will allow the corporation to realize opportunities aimed to optimize value (co-location, servicing, subdivisions or grouping/combination of parcels) as well as the timing to sell these assets while maximizing the revenue from land sales.
Document Date	2018/09/11

Service	Real Estate	Sector Affected	Internal / The City of Calgary
Activity #	480856	Ward(s)	All Wards
Project Identifier (PID)	3000590	Citizen Priority	Enabling Services
Business Unit	REAL ESTATE AND DEV SERV	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Leadership and Strategy
Service Type	Enhanced	City Resilience Framework Driver	Fosters long-term & integrated Planning
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Integrate coordinate and optimize The City's investment

	Total	2019	2020	2021	2022	2023+	
Recommended Funding Allocation (\$)	3,900,000	975,000	975,000	975,000	975,000	0	
Funding Status	For Approval						
Operating Impact Of Capital	No						
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years	
	5,551,	1,944 3,447,330		2,388,699	29		
MUGS	Mainter	nance	Up	grade	Growth	New Services	
	0%	ó	(0%	0%	100%	

Triple Bottom Line – Social	NA NA
Triple Bottom Line – Environmental	NA NA
Triple Bottom Line - Economic	This initiative enables the sustainability of the Revolving Fund while optimizing the value of the City's real estate portfolio
Expected Key Benefits	This will be a self-funded initiative utilizing the Revolving Fund for general land sales. Forecasted revenue between \$30M to \$40M over the next 4-year business cycle, based on an objective to identify 85 acres (0.25%) of the Corporations land inventory as surplus to Municipal need. Underutilized land assets will be identified and made available for lease or disposition. Allows the Corporation to realize opportunities aimed to optimize value (co-location, servicing, subdivisions or grouping/combination of parcels) as well as the timing to sell these assets while maximizing the revenue from land sales.

General Land Improvements

Executive Summary	This activity is for general improvements to the land. This activity funds projects and initiatives that allow RE&DS to maximize the value of the corporate real estate portfolio, including pre-development and development work, consulting, engineering, etc. Included in this activity is the Shawnessy BV/Macleod Tr SE interchange that Transportation Infrastructure asked RE&DS to become involved in the project in April 2013 in order to help meet the outstanding obligations to the third party. Parcel consists of a surplus parcel of land, south of the Shawnessy Bv/Macleod Tr SE interchange, in addition to two parcels that are committed to a third party as a result of a previous land deal related to the Shawnessy LRT Park N' Ride.
Document Date	2018/09/11

Service	Real Estate	Sector Affected	Multiple Sectors
Activity #	403000	Ward(s)	
Project Identifier (PID)	3000119	Citizen Priority	Enabling Services
Business Unit	REAL ESTATE AND DEV SERV	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems
Service Type	Current	City Resilience Framework Driver	Provides & enhances natural and manmade assets
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	6,000,000	1,500,000	1,500,000	1,500,000	1,500,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	8,240,	40,588 5,183,694		33,694	3,408,266	34
MUGS	Mainter	nance	Upg	grade	Growth	New Services
	0%)	10	00%	0%	0%

Triple Bottom Line - Social	Improvements to lands that will ultimately be brought to market as development sites contribute to overall community plans and enable access to services by citizens.
Triple Bottom Line – Environmental	This fund may also be used to perform environmental remediation on lands as required.
Triple Bottom Line - Economic	Provision of land for development at highest and best use generates economic stimulus for communities.
Expected Key Benefits	General improvements to land. Specific projects include the Shawnessy BV/Macleod Tr SE interchange in support Transportation Infrastructure as well as future TOD sites.

Land Acquisition Other Civic

Executive Summary Document Date	The purpose of this business case is to request budget for anticipated acquisitions to be funded through the revolving fund based on historical spend rates and commitments. 2018/09/11						
Service	Real Estate	Sector Affected	Multiple Sectors				
Activity #	401850	Ward(s)	All Wards				
Project Identifier (PID)	3000151	Citizen Priority	Enabling Services				
Business Unit	REAL ESTATE AND DEV SERV	Capital Investment Plan Alignment	Community Investments.Growth Infrastructure				
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Infrastructure and Ecosystems				
Service Type	Current	City Resilience Framework Driver	Ensures continuity of critical services				
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Integrate coordinate and optimize The City's investment				

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	50,000,000	20,000,000	10,000,000	10,000,000	10,000,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years
	62,327	7,307	46,64	42,477	41,605,439	336
MUGS	Mainte	nance	Upç	grade	Growth	New Services
	0%	6	()%	25%	75%

Triple Bottom Line - Social	Acquired sites for capital projects contribute to overall community plans and development while enabling better access to services by citizens.
Triple Bottom Line – Environmental	Acquisitions funded may also have an impact on environmental risk mitigation/remediation work as required
Triple Bottom Line – Economic	Provision of land for development at highest and best use generates economic stimulus for communities.
Expected Key Benefits	This project provides the resources necessary for The Corporation to be strategic with respect to how it acquires real estate required for capital projects, as well as, the flexibility to act on emerging time sensitive opportunities as they present themselves.

Land Inventory

Executive Summary	maintenance, sustainment, a	5-2018 business cycle on the Mobile Application and new functionality will be required throughout t	
Document Date	2018/09/11		
Service	Real Estate	Sector Affected	Internal / The City of Calgary
Activity #	402070	Ward(s)	
Project Identifier (PID)	3000117	Citizen Priority	Enabling Services
Business Unit	REAL ESTATE AND DEV SERV	Capital Investment Plan Alignment	Other.Other
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Leadership and Strategy
Service Type	Current	City Resilience Framework Driver	Fosters long-term & integrated Planning
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	500,000	125,000	125,000	125,000	125,000	0
Funding Status	For Approval					<u> </u>
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross (•		estic Product (\$)	Income (\$)	Employment (Person-Years)
	683,5	599	436,251		319,172	3
MUGS	Mainter	nance	Up	grade	Growth	New Services
	509	%	5	0%	0%	0%

Triple Bottom Line – Social	N/A
Triple Bottom Line – Environmental	N/A
Triple Bottom Line - Economic	N/A
	Improved sustainability* Improved efficiency and effectiveness of accessing the information required to make informed coordinated decisions.* Increased reliability * Adaptability

Longterm Leases

Executive Summary	Funds are required for two main purposes: 1. To move forward with the environmental abatement, demolition of buildings that are past their useful and safe economic life; and remediation / rehabilitation of land. 2. Capital rehabilitation and lifecycle maintenance of real estate portfolio buildings that have been held well past project timelines that now require some investment to continue to be leasable. Buildings that will be invested in are expected to remain in the portfolio over the mid to long term. Greenline has funded a property manager for the first two years of the business cycle. Operating cost of capital is requested to cover the cost of a second LTE for the remaining two years of the business cycle.
Document Date	2018/09/11

Service	Real Estate	Sector Affected	Multiple Sectors	
Activity #	402050	Ward(s)	All Wards	
Project Identifier (PID)	3000049	Citizen Priority	Enabling Services	
Business Unit	REAL ESTATE AND DEV SERV	Capital Investment Plan Alignment	Other.Other	
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Leadership and Strategy	
Service Type	Current	City Resilience Framework Driver	Fosters long-term & integrated Planning	
Investment Category	Annual Investment Program- A recurring program focused on maintaining or upgrading current in-service assets or for ongoing purchases of similar assets	Capital Infrastructure Investment Principles	Enhance the long-term value of City assets	

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	5,000,000	1,250,000	1,250,000	1,250,000	1,250,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross C (\$)	. •		estic Product (\$)	Income (\$)	Employment (Person-Years)
	7,985,	712	3,75	54,732	2,674,131	31
MUGS	Mainter	nance	Upg	grade	Growth	New Services
	100	%	(0%	0%	0%

Triple Bottom Line - Social	The City's reputation benefits from being a good neighbor on sites that we hold for future use. Ensuring our assets do not decay is important to communities and mitigates risks and liabilities.			
Triple Bottom Line – Environmental	This fund may also be used to perform environmental remediation in buildings as required.			
Triple Bottom Line – Economic	The City can only derive the highest value from sites by ensuring they are leasable or saleable as appropriate. Investment in buildings ensures they can generate revenue over the long term.			
Expected Key Benefits	In addition to the efficient use of limited resources, reducing operational costs (e.g. monitoring of abandoned or closed-off sites) and mitigating liability risks, there are indirect benefits to the public: * Public safety - reducing the risk of trespassing in vacant buildings. * Avoid nuisance to neighbors - avoid the impact of unsightly buildings in established communities.			

Technology Advancement

Executive Summary	Real Estate and Development Services is currently undertaking a Continuous Improvement initiative to identify and implement more efficient and effective systems and processes to support an enhanced way of doing business. As part of this initiative, it has been identified that multiple systems and technology enhancements are required to execute a more scalable and sustained future state of strong customer focused service delivery. A preliminary scan of the operations has identified a need to develop, purchase or enhance systems related to Customer Relationship Management, Sales and Marketing Channels of Distribution, Information Management, Valuation, Risk and Strategic Analytics, Workflow Management, and Data and Reporting Management/warehousing. The ability to advance the scale and scope of the Real Estate and Development Services deliverables is contingent on the enhancements of the s
Document Date	2018/09/11

Service	Real Estate	Sector Affected	Internal / The City of Calgary	
Activity #	403781	Ward(s)		
Project Identifier (PID)	3000139	Citizen Priority	Enabling Services	
Business Unit	REAL ESTATE AND DEV SERV	Capital Investment Plan Alignment	Other.Other	
Department	DEPUTY CITY MANAGER	City Resilience Framework Dimension	Leadership and Strategy	
Service Type	Current	City Resilience Framework Driver	Promotes leadership & effective management	
Investment Category	Project -A Project is an investment that is planned-delivered and evaluated on its own merit and has a well-defined scope; cost and schedule resulting in new or substantially improved assets	Capital Infrastructure Investment Principles	Support the delivery of City of Calgary services at approved service levels	

	Total	2019	2020	2021	2022	2023+
Recommended Funding Allocation (\$)	1,425,000	625,000	550,000	150,000	100,000	0
Funding Status	For Approval					
Operating Impact Of Capital	No					
Economic Impacts of 2019-2022 Recommended Funding	Gross Output (\$)			estic Product (\$)	Income (\$)	Employment (Person-Years)
	1,948,	3,257 1,243,316		909,640	10	
MUGS	Mainter	nance	Up	grade	Growth	New Services
	20%	%	į į	5%	5%	70%

Triple Bottom Line - Social	Adopting technology and building processes around systems will allow us to be a lot more transparent, open and easier to transact and do business with.
Triple Bottom Line – Environmental	This Program will assist with moving a lot of our processes and transactions from physical files to an electronic format, thus reducing our environmental impact and footprint.
Triple Bottom Line – Economic	This Program will allow Real Estate and Development Services to offer more, quicker and higher quality transactions which will assist with driving more, diverse real estate development and growth for The City.
Expected Key Benefits	The Technology Advancement Program will allow Real Estate and Development Services to become more automated and streamlined in its operations, thus allowing quicker turnaround times and a higher volume of transactions to meet customer demands and timelines. Potential to reduce number of disparate legacy systems.