

2016-2018 Business Plan



Roads Design and Construction

TRANSPORTATION SERVICES

Branch Manager:
Barry Belcourt



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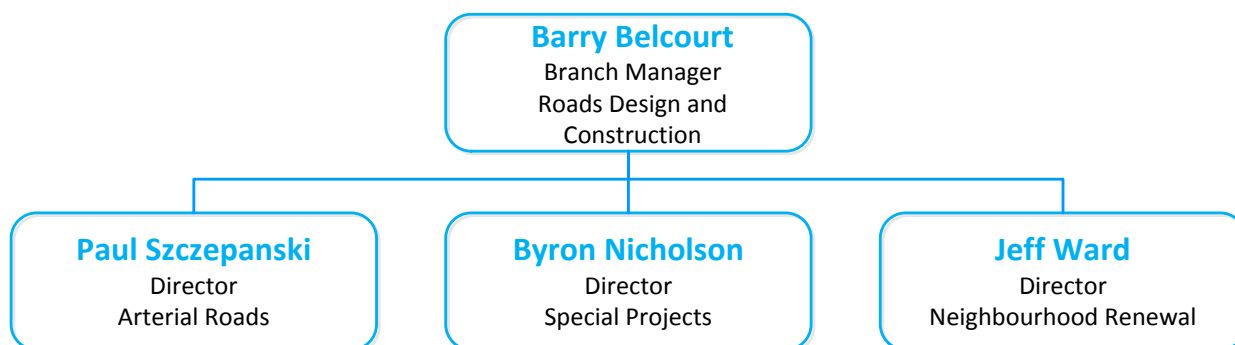
Message from the Manager

“Our employees take pride in their work and the delivery of roadway projects that make a significant contribution to ‘building a great city.’”

The Roads Design and Construction Branch is responsible for the delivery of roadway related projects approved through the Capital Budget Program. Projects are delivered utilizing both internal and external resources for the design and construction. The Transportation Department accounts for over 90% of our projects, although other clients include Sustainable Development and Community Services. The branch fulfills its mandate through the use of City personnel, as well as external engineering consultants and contractors for specialized and/or complex projects. Roads Design and Construction manages the projects through the design, procurement, construction and commission phases of the project utilizing sound project management processes.

The success of Roads Design and Construction Branch is due to the dedication and hard work of the employees. Our employees take pride in their work and the delivery of roadway projects that make a significant contribution to ‘building a great city.’

Barry Belcourt, Branch Manager
Roads Design and Construction



Our Branch

The Roads Design and Construction Branch provides services to deliver roadway related projects within the City of Edmonton. This Branch is responsible for managing the effective delivery of a high quality and full suite of capital road projects on time and within budget. These projects contribute to bringing the city's vision to life through 'The Way We Move'. A high level of technical and management expertise is utilized to implement industry best practices and lead project excellence.

Roads Design and Construction provides design services ranging from preliminary designs to detailed construction drawings for contractors to build the necessary infrastructure. The Branch's project management services (including resident engineering during construction) lead the projects from initial cost estimates right through to completion of construction.

The Roads Design and Construction Branch coordinates and administers the roadway related improvement for the City of Edmonton. As construction activities proceed, public involvement ensures ongoing communication with key stakeholders.

Typical roadway projects include, but are not limited to:

- Arterial Roads construction and rehabilitation
- Neighbourhood renewal
- Freeway interchanges
- Bridge rehabilitation and reconstruction
- Active transportation facility construction
- Improvements to street lighting, alleys, curbs, gutters, sidewalks
- Streetscape projects

Goals	Outcomes
Efficient Movement of Goods and Services	Building a transportation network that supports the efficient and effective movement of goods and services
Neighbourhood Renewal	Revitalizing Edmonton's communities
Public Engagement	Community building through public engagement
Project Excellence	Delivering projects that are on time, on budget and meet quality standards through project management principles

Contribution to the City's Vision

THE WAY AHEAD

The Roads Design and Construction Branch contributes to The Way Ahead through the construction and delivery of roadway projects in the City of Edmonton. Well maintained roads and constructed roadways are vital to effectively move citizens by mass transit and to efficiently facilitate the movement of commercial goods and services. These roadway projects support **The Way We Move** by constructing roadways that support active modes of transportation throughout the city. Design and construction of transit-orientated development promotes the use of public transportation.



Rehabilitation and renewal of arterial roads and neighbourhoods balance the need with a preventative maintenance approach supporting the sustainability of Edmonton's infrastructure. The Neighbourhood Renewal Program is responsible for the renewal and rebuilding of roads, sidewalks and streetlights in existing neighbourhoods enhancing and supporting Edmonton as an attractive city contributing to **The Way We Live**. Rehabilitation and construction services support the development of initiatives such as The Quarters encouraging smart growth and intensification contributing to Edmonton's goal of **The Way We Grow**.

Streetscapes that improve the public realm along major commercial and Business Revitalization Zone corridors contribute to supporting local businesses.

Leveraging provincial grant funding, the Neighbourhood Renewal Property Tax program provides a cost-effective way to renew neighbourhoods. The program is partially funded by a property tax levy. This cost-sharing funding model supports the needed rehabilitation and construction of our older neighbourhoods. The program is expected to be fully self-funded by 2018.

Roads Design and Construction demonstrates a commitment to ensure our operations are environmentally sustainable. The branch supports the achievement of attaining and maintaining compliance with environmental program.

The defined goals and targets for projects to be on time, meeting quality standards, and within budget using project management principles, supports Roads Design and Construction's commitment to fiscal responsibility.

THE WAY WE MOVE GOODS AND SERVICES MOVE EFFICIENTLY



Delivering roadway projects that ensure roadways are well maintained.

THE WAY WE LIVE
EDMONTON IS ATTRACTIVE AND COMPACT



Neighbourhood renewal revitalizes the older communities ensuring accessibility for all citizens.

THE WAY WE GROW
TRANSFORM EDMONTON'S URBAN FORM



Delivery of capital construction projects that are transformational to Edmonton's downtown.



COUNCIL INITIATIVES

Council initiatives bring focus and lend support to many important city objectives and priorities. Road Design and Construction supports several initiatives that have a direct and significant impact on the citizens of Edmonton and the region as a whole.

PUBLIC ENGAGEMENT

Continuous opportunities are provided for citizens to be informed, ask questions and provide feedback to the design and construction in their communities. Resident on-site City of Edmonton employees provide accessibility for citizen's questions and concerns throughout the construction projects

PORT ALBERTA

On behalf of the Province of Alberta, constructing the 41 Avenue Southwest – QE II Interchange supporting the development of Port Alberta and the North South Trade Corridor



CORPORATE LEADERSHIP TEAM - STRATEGIC FOCUS AREAS

Roads Design and Construction supports the Corporate Leadership Team's (CLT) vision for a Strategic Plan and lends its efforts to the identified Major Initiatives, as described by CLT.

PERFORMANCE OF THE ORGANIZATION	Regular status updates to the leadership team through a project management information system, highlighting cost, quality and schedule.
COMMUNICATIONS	Communication strategies within the branch are being developed to ensure employees are provided with accurate, on-time information about projects, branch and City of Edmonton business.
DEVELOPING CAPACITY	Employees are provided training for Project Management Certification to ensure high quality adherence to project management principles. Leaders have completed the Leadership Effectiveness Initiative training.
CONTINUOUS IMPROVEMENT	Streamlining the Local Improvement Citizen Notification is currently underway to ensure information to citizens is effective. Public engagement strategies are being reviewed to ensure citizens are informed and have a voice in the projects related to their communities
MAJOR INITIATIVES	Roads Design and Construction delivers roadway projects to support the City of Edmonton's major initiatives including: Downtown Arena Area; Quarters Project; Walterdale Bridge; Downtown CRL; West Rosedale Area; and Transit Oriented Development

BRANCH INITIATIVES

Well-maintained and constructed roadways are vital to Edmonton. Arterial and collector roads are required to effectively move people by mass transit and to efficiently facilitate the movement of commercial goods. Maintaining the roads in all areas of our city contributes to an attractive city. Roads Design and Construction delivers those road related construction projects to contribute to the quality of life for residents and the economic environment of the city.



Roads Design and Construction is committed to the adherence of project management principles, and is working closely with the Project Management Office to develop the tools and resources for branch projects and other construction projects in the City of Edmonton. Success is measured through the delivery of projects on time, within budget and ensuring quality standards are maintained.

BUILDING A GREAT CITY

The Roads Design and Construction Branch strives to align the programs and initiatives with the vision of the City of Edmonton and supporting the goals and outcomes of “The Way Ahead”. Programs and operational activities contribute to ‘building a great city.’

- I. Roadway related projects adhere to project management principles to deliver projects on time and within budget;
- II. Local improvement citizen notification process will be redesigned to ensure citizens receive effective communication about the renewal of their neighbourhoods;
- III. Employee engagement strategies are being reviewed to ensure tactics for citizens engagement are effective; and
- IV. The Employee Engagement Team has developed goals and strategies in the areas of communication, rewards/recognition and career advancement to support building an engaged and innovative workforce.

CULTURE ACTION PLANS

Road Design and Construction is committed to fostering a safe, healthy and productive work environment where staff members work collaboratively to advance the goals and objectives of the city.

Areas of Focus	<ul style="list-style-type: none"> ▪ I see a clear linkage between my work and the City's long-term vision. ▪ More appreciation and recognition for my contributions. ▪ In my branch, information is widely shared so that everyone can get the information when it's needed. ▪ My career aspirations can be achieved at the City. 		
Actions to be Taken	<ul style="list-style-type: none"> ▪ Strategic Coordinator will work with Directors and Supervisors to create and deliver presentations on linkage between day-to-day Branch operations and The Ways Implementation Plans. ▪ A reward and recognition program will be developed to: <ul style="list-style-type: none"> ○ identify types of behaviours to be rewarded, ○ ways to recognize employees, and ○ types of rewards to be used. ▪ Strategies/tools will be developed and implemented to increase awareness about projects and people working in our branch: <ul style="list-style-type: none"> ○ events will be created to feature people and their project, ○ newsletter and media boards will provide update on branch/City of Edmonton information, and ○ branch activities will be held to provide opportunity for individuals from sections to network. ▪ Training and career advancement opportunities will be provided to support career advancement with the City of Edmonton: <ul style="list-style-type: none"> ○ an survey will be completed to provide employee input, ○ employees and supervisors will have discussion with employees about their training needs and career aspirations, and ○ training opportunities will be made available. 		
Measures (% favourable survey response)	2012 (Actual)	2014 (Actual)	2016 (Target)
<ul style="list-style-type: none"> ▪ Overall Engagement ▪ Overall Culture ▪ Overall Workplace ▪ Overall Immediate Supervisor 	73.5	77.6	82.0
	74.4	77.0	82.0
	74.4	78.7	83.0
	84.2	84.7	88.0

Risk Identification and Emerging Issues

RISK FACTOR	LIKELIHOOD (1 TO 5)	IMPACT (1 TO 5)	MITIGATION STRATEGY	RISK OWNER
Increase demand of projects	3	3	Ensure resources are available to meet the increase in demand	Corporate
Industry capacity	3	3	Long-term contracts provide predictability for contractors, thereby securing their resources for contract	Corporate
Economic swings in contract pricing (price of oil)	3	4	Contracts support stability in project costs.	Project Owner Corporate
Decrease in provincial funding of contracts	3	4	Fewer projects will be tendered.	Corporate
EMERGING ISSUES				
FUNDING FOR CAPITAL PROJECTS	<p>Throughout the City of Edmonton, developing areas have growth pressures creating a need to expand existing or constructing new infrastructure. Some of this expansion is the responsibility of the developer, while other times it becomes the responsibility of the City of Edmonton. Without this work being completed, it will cause strain on the existing infrastructure. Roads Design and Construction works with other areas of Administration, the Province and land developers to consider strategies for funding interchanges and major transportation infrastructure, as these issues arise.</p> <p>As neighbourhoods are renewed, there is also a need to renew existing alleys that do not have a funding source at the time.</p>			
SCHEDULING CHALLENGES	<p>Fast tracking of projects to meet City vision and goals creates challenges with effectively planning, designing and coordinating projects prior to construction. During construction, challenges exist such as scheduling with utility companies and other stakeholders, which impact cost control and risk to our reputation. Roads Design and Construction is working with other areas of the organization and land developers to plan and coordinate work to meet the schedule of projects.</p>			

PROVINCIAL FUNDING	Anticipated reduction or fluctuations of provincial and/or federal funding could impact the size of the road program, and these potential changes will have a direct impact on manpower requirements.
SUCCESSION PLANNING	Throughout Edmonton, there is a competitive work environment with a high demand for skilled, knowledgeable manpower throughout the entire roadway construction industry. The increase in projects throughout the entire city, creates more demand for skilled workers. Our competitive advantage will be to attract, attain and retain skilled knowledgeable employees who have experience and expertise in the industry. Roads Design and Construction is working actively to create an engaged workforce that allows employees to fulfill their career aspirations and are valued for the work they do.

Branch Structure and Programs

NEIGHBOURHOOD RENEWAL PROGRAM	ARTERIAL ROADWAYS	SPECIAL PROJECTS
Neighbourhood Renewal Design	Arterial Roadways Design	Project Design
Construction Project Management	Construction Project Management	Construction Project Management
Project Cost Estimating	Project Cost Estimating	Project Cost Estimating
On Location Engineering Services	On Location Engineering Services	On Location Engineering Services
Contract Administration	Contract Administration	Contract Administration
Local Improvement Bylaw		



PROGRAM ONE: NEIGHBOURHOOD RENEWAL

Director: Jeff Ward

The Neighbourhood Renewal Program provides a cost-effective approach to ensure the City's neighbourhoods are maintained in a sustainable way. Renewing Edmonton's neighbourhood infrastructure enhances the livability for citizens and enhances the pride they have in their community.

Neighbourhood Reconstruction - During reconstruction, roads are rehabilitated and repaved, and sidewalks and streetlights are replaced. Reconstruction is typically a two-year process.

Other projects delivered by RDC's Neighbourhood Renewal Program include:

Neighbourhood, Collector and Industrial Overlay/Full Depth Reclamation- Roads are rehabilitated, repaved and sidewalk panels treated to eliminate trip hazards.

Local and Collector Streetscapes – Construction and building of streets to enhance walkability, connectivity and public realm through physical improvement, which may include roadway redesign, decorative street lights, tree planting and street furniture.

Active Modes Projects – Constructing, missing link sidewalks, shared use paths and pedestrian bus pads.

Northeast Edmonton Roads Projects – Installation of sub drain systems, reconstruction and repaving of roadways.

Cost Drivers

- Inventory of collector and local roads
- Condition ratings of roadways and associated infrastructure
- Changes in standards/policy for managing deteriorating infrastructure

Service Standards

This program implements various renewal techniques that will improve sidewalk and roadway conditions and increase the service life of neighbourhood infrastructure. The City's Risk-Based Infrastructure Management System (RIMS) is applied to manage the growing renewal needs. The program coordinates with the Great Neighbourhoods Capital Program and the Drainage Neighbourhood Renewal Program. Roadway and associated infrastructure improvements are assessed for local improvements, as per the Local Improvements Policy C433D.

PROGRAM TWO: ARTERIAL ROADWAYS PROJECTS

Director: Paul Szczepanski

The Arterial Roads group provides detailed design and project management services for all arterial roadway projects ranging from the construction, rehabilitation or reconstruction of arterials roads to ensure the continued effective and efficient movement of people as well as goods and services. Starting in 2015, this team will deliver the Council Approved \$55 million Arterial Road Strategy.

Cost Drivers

- Changes in budget allocated for arterial road renewal and/or growth projects
- Inventory of arterial network
- Condition ratings of arterial roadways and associated infrastructure
- Changes in standards/policy for managing deteriorating infrastructure

Service Standards

Arterial roads are assessed for surface distress and ride comfort every two years and structural integrity every five years.

An Infrastructure Management System (RIMS) evaluates asset deterioration to assist in determining annual financial needs in order to maintain the arterial network at an acceptable condition. A Pavement Management System evaluates current and future condition data to prioritize roads for rehabilitation and reconstruction by the most cost-effective method.

The Arterial Roadways Program delivers arterial growth projects within the City of Edmonton. This program works in conjunction with developers to as outlined in Arterial Roads for Development Policy C507.

Streetscape projects along arterial roadways are coordinated with the Great Neighbourhoods Capital Program, and the Downtown Community Revitalization Levy (Downtown CRL) enhance the walkability, connectivity and public realm in our communities.

PROGRAM THREE: SPECIAL PROJECTS

Director: Byron Nicholson

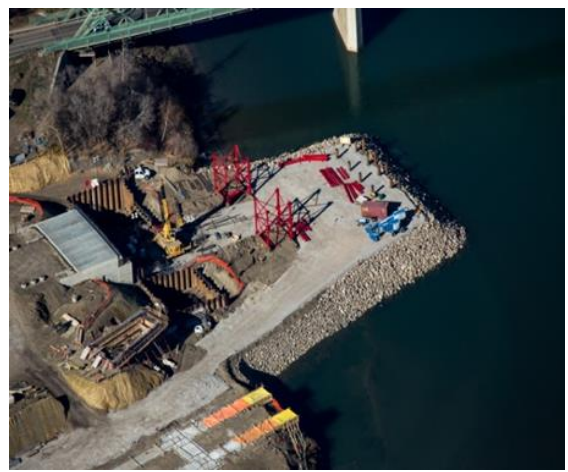
The Special Projects Program delivers design, project management, on-location engineering, inspection and contract administration for special projects in the road right-of-way, focusing on bridges and interchanges.

Cost Drivers

- Inventory of bridges and interchanges
- Condition ratings of bridges and associated infrastructure
- Changes in standards/policy for managing deteriorating infrastructure
- Changes in capital budget for special roadway projects

Service Standards

Special Projects is accountable for delivering the appropriate quality and scope of capital projects, on time and on budget. The group provides technical and management expertise to implement industry best practices and lead project excellence.



Planned Changes 2016 - 2018

Financial Impact

Roads Design and Construction is primarily a capital based program. The budget is made up of 10% operational costs and 90% capital costs. The following Branch Summary table includes the planned changes, as summarized on the following pages, to deliver the services described in the Business Plan.

ROADS DESIGN AND CONSTRUCTION

2016 - 2018 PLAN - BRANCH SUMMARY

(\$000)	2015 Budget	2016 Plan	2017 Plan	2018 Plan
Revenue & Transfers				
User Fees, Fines, and Permits	-	-	-	-
Grants	-	-	-	-
Transfer from Reserves	-	-	-	-
Total Revenue & Transfers	-	-	-	-
Expenditure & Transfers				
Personnel	13,100	13,700	13,900	14,200
Non-Personnel	(11,700)	(12,100)	(12,400)	(12,600)
Total Expenditure & Transfers	\$1,400	\$1,600	\$1,500	\$1,600
Net Operating Requirement	\$1,400	\$1,600	\$1,500	\$1,600
Full-time Equivalents	109.0	109.0	109.0	109.0

CHANGES TO MAINTAIN CURRENT SERVICE LEVELS

For the 2016 budget year personnel costs including overtime increased by \$400 for settlements with an additional \$200 for merit, step and benefits. Inter-municipal recoveries from capital have increased by \$400 due to the increase in personnel costs.

For the 2017 budget year personnel costs including overtime increased by \$100 for settlements with an additional \$100 for merit, step and benefits. Inter-municipal recoveries from capital have increased by \$300 due to the increase in personnel costs.

For the 2018 budget year personnel costs including overtime increased by \$200 for settlements with an additional \$100 for merit, step and benefits. Inter-municipal recoveries from capital have increased by \$200 due to the increase in personnel costs.

CHANGES BEYOND CURRENT SERVICE LEVELS

N/A

Capital Investment

Roads Design and Construction delivers the road related approved capital projects for the branches within the City of Edmonton; therefore, as a branch, the money is paid through contracts based on per units.

The following table is a list of the capital programs for the Branch approved in the 2015- 2018 Capital Priorities Plan with the projected spending identified below:

Capital Program Name	2016	2017	2018	2019	2020 & Beyond
Approved Road Related Projects for City of Edmonton for Branches	-	-	-	-	-
Total Growth	-	-	-	-	-
Total Renewal	-	-	-	-	-
Total Approved Capital Budget	-	-	-	-	-