

# 2016-2018 Business Plan



## Transportation Operations

TRANSPORTATION SERVICES

Branch Manager:  
Gord Cebryk



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## Message from the Manager

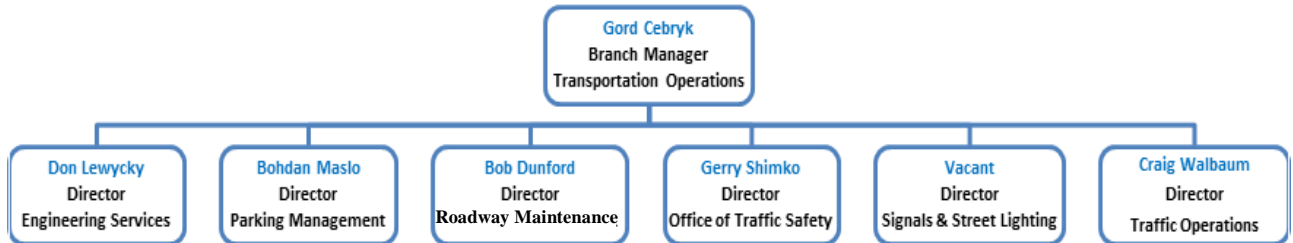
**“Our reach is broad and the work we do every day touches all Citizens of Edmonton. Valued and engaged employees allow us to provide high quality, essential services to the city.”**

Transportation Operations ensures that the existing transportation network operates efficiently and safely. By providing good driving conditions throughout the year, maintaining a clean and safe road network, testing and researching construction materials that are used to build the city’s infrastructure, and overseeing effective traffic control management, the Branch’s reach is broad and the work we do every day provides essential services to citizens throughout the city.

For 2016-2018, Transportation Operations will focus on environmental stewardship and improving service to citizens through the implementation of technology and a change in culture. Opportunities for improvement include the implementation of LED Street lighting to reduce greenhouse gas generation and introduction of new technologies for the delivery of parking services to citizens and the business community. A shift in culture will focus on encouraging input and empowering staff to look at ways in which services can be delivered to Citizens using a concept of owning the issue and working towards overcoming obstacles.

Our branch has over 800 employees who work to ensure that thousands of pedestrians, motorists and cyclists can move safely and efficiently in the city. The success of our branch can be directly attributed to the employees who take great pride in the successful completion of their work. All the items outlined in this document are possible because of the commitment and dedication of the employees who make up Transportation Operations. I sincerely thank all Transportation Operation employees for the part they play in building a great city.

Gord Cebryk, Branch Manager  
Transportation Operations



## Our Branch

Operation of the City's road network is a vital component in allowing citizens to move about the City and is critical in relation to supporting business access along with goods and services movement. Safe and efficient operation of the road network is the core function that allows citizens to move about the City through several different modes and is a key support to business success. The Transportation Operations Branch provides services to facilitate this movement based on a customer-focused approach with a significant emphasis on safety, accessibility and promotion of active modes. Continuous improvement in relation to services to citizens is based on the concept of innovation in addition to reducing environmental impact through technology and process improvements.

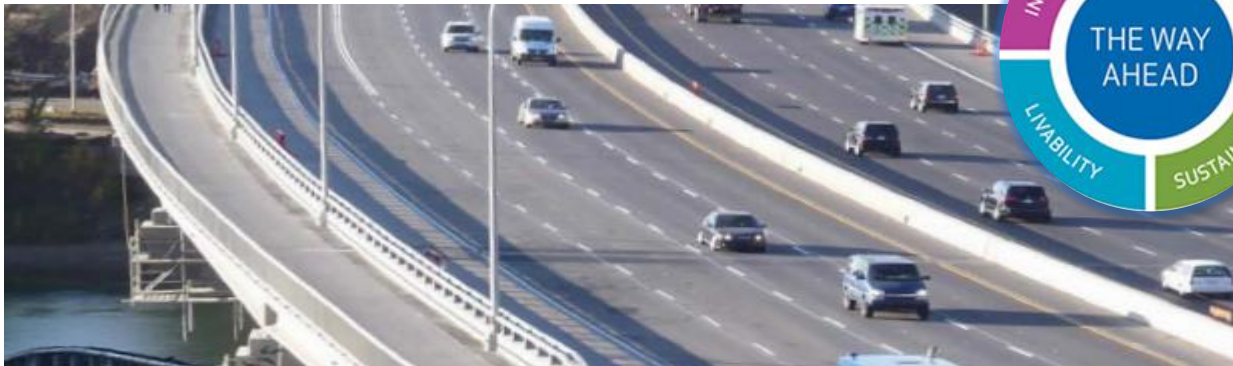
Over the past 10 years the City has encountered extensive growth along with changing needs of citizens. This increased demand for services in operations is addressed through the delivery of programs by the Transportation Operations Branch which is made up of up of six business areas with a have a common focus of delivering service in an integrated approach that engages citizens and values the inputs and ideas of the staff that make up the Branch.

Over the course of the next three years, Branch's goals include implementing technology opportunities to improve customer service, efficiency and environmental stewardship. Branch goals also include enhancing service through process and service reviews, along with continuation of a culture shift, with the intent of having a more engaged and empowered workforce.

## Department Outcomes

<i>Goals</i>	<i>Outcomes</i>
Enhanced Customer Service Experience	Implement new parking technology to allow citizens better access to business and services.
Increase Workforce Engagement	Empower staff through relationship building, two-way communications and support. Staff own the issues and solutions and feels valued and rewarded.
Environmental Stewardship	Provide new infrastructure and processes to reduce energy consumption and Greenhouse Gases generation through the use of new technologies, such as LED Lighting and enhanced salt usage management. Monitor and manage Branch environmental issues through application of ENVISO/ISO 14001.
Urban Form	Establish infrastructure standards, which allow for efficient and sustainable maintenance, along with preservation of facility aesthetics.
Optimize Value for Money	Execute service deliver model reviews to ensure that the City receives optimum value for services that it delivers, including the evaluation of Transportation Electrical Services Delivery Model.

## Contribution to the City’s Vision



### THE WAY AHEAD

Transportation Operations proudly advances the City’s vision through multiple avenues. Our Joint Road Traffic Safety Strategy and Smart Roads Strategies projects are identified as direct contributors to the City’s vision. Indirectly, Transportation Operations provides support to the Active Transportation Strategy Renewal, Energy Transition Plan and Complete Streets Implementations projects – all projects identified as direct contributors to the City’s vision. Additionally, the branch supports the 10 year Strategic Goals identified in the Way Ahead of “Edmontonians Use Public Transit and Active Modes of Transportation” and “Goods and Services Move Efficiently”.

#### THE WAY WE MOVE JOINT ROAD TRAFFIC SAFETY STRATEGY



City Council established the Office of Traffic Safety to reduce the prevalence of fatal, injury, and property damage collisions in Edmonton. The 2015-2020 Road Safety Strategy, a Traffic Safety initiative of Council, will focus our efforts towards “Vision Zero” where no Edmontonian will be fatally or seriously injured from a motor vehicle collision.

#### THE WAY WE MOVE SMART ROAD STRATEGY



Transportation Systems Management has the potential to significantly improve the operation of existing roadways and transit. To coordinate the delivery of this technology-based approach, including Intelligent Transportation Systems and Transit Signal Priority, an overall strategy is needed which would include linkages to current transit and operations projects. The current plan was developed in 1999 and is obsolete.

**THE WAY WE MOVE****EDMONTONIANS USE PUBLIC TRANSIT AND ACTIVE MODES OF TRANSPORTATION**

Winter maintenance activities ensure appropriate transportation network accessibility levels of service for bus routes, transit centers, LRT Stations, Park & Ride Lots, Shared Use Paths and designated Bicycle lanes.

**THE WAY WE MOVE****GOODS AND SERVICES MOVE**

Ongoing management of traffic through active incident management, snow and ice control, pavement repairs, evaluation and adoption of new construction materials and techniques and signal system optimization on goods movement corridors.

**COUNCIL INITIATIVES**

Council Initiatives bring focus and lend support to many important City objectives and priorities. Transportation Operations supports several initiatives that have a direct and significant impact on its citizens.

**TRAFFIC SAFETY**

City Council has identified that Traffic Safety is a priority for the citizens of Edmonton and has sponsored a Council initiative for the promotion of Traffic Safety. Working with the Council Sponsors, the Branch, through Office of Traffic Safety, is committed to delivering programs which are intended to deliver Council's goals around this initiative. Goals and outcomes of the Traffic Safety Initiative will be delivered in conjunction with the Edmonton Police Service programs and through partnerships with Traffic Safety Stakeholders, such as the AMA and the Public and Separate School boards.

**PUBLIC ENGAGEMENT**

Transportation Operations is actively working with Department and Corporate Leadership in enhancing public engagement as it relates to Branch Programs, including the Neighbourhood Renewal and Arterial Reconstruction Programs. In addition, the Branch is also reallocating resources to provide improved engagement in regards to neighbourhood traffic and parking issues, business association services and traffic safety programs.

## CORPORATE LEADERSHIP TEAM - STRATEGIC FOCUS AREAS

Transportation Operations 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. The branch works closely with other City business areas to develop, integrate and coordinate program and policy efforts.

<b>CONCEPT PLANNING FOR TRANSPORTATION INFRASTRUCTURE FOR ALL MODES</b>	Concept planning for multi-modal transportation projects, including major bike routes, with public engagement activities at all stages, completed effectively by collaborating with communities
<b>ADMINISTRATIVE GOVERNANCE</b>	Transportation Operations has refocused existing resources to align and dedicate to the increased activity in downtown construction to better support traffic management and construction activities for the foreseeable future.
<b>CITY COUNCIL INTERFACE</b>	Transportation Operations primarily liaises with City Council by way of numerous reports to both Council and its Committees, and works with the Branch Manager's office to streamline these processes and improve the quality of information being presented. The Branch Manager's staff also has day-to-day contact with Councillors' offices in order to address individual citizen concerns related to transportation issues.
<b>ENTERPRISE RISK MANAGEMENT</b>	Much of the signal and traffic control infrastructure has reached the end of its functional life. The branch is replacing both the existing central signal system and traffic controllers throughout the city in order to reduce the risk of equipment failures that would directly reduce the efficiency of goods movements and transit throughout the city. Additionally the branch has developed and continues to manage and improve the corporation's Environmental Site Information Database, which is being used to inventory and quantify the financial risk associated with contaminated sites owned by the City.
<b>FISCAL STRATEGY</b>	Transportation Operations is conscious of potential operating impacts of corporate wide capital projects, and continues to align and request resources that will best support the ongoing operation and maintenance levels of service for citizens.
<b>COMMUNICATIONS APPROACH AND EXPECTATIONS</b>	The branch works actively with communications support to deliver traffic impact notifications to the public, and to educate and interact with key stakeholders including citizens, Councillors and internal partners.



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## EXTERNAL INTERFACE

The branch continues to work with Alberta Transportation to manage and improve traffic flow and construction staging of Anthony Henday Drive. Transportation Operations also contributes to the coordination of corporate Civic events such as ITU World Triathlon, FIFA, RED Bull Crashed Ice and Tour of Alberta, through active membership and participation on planning and implementing high profile activities. Engineering Services continues to collaborate with a variety of governmental agencies and academic groups in the research and development of new roadway construction materials and techniques.

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## BRANCH INITIATIVES

The branch will continue to develop and review long-term and short-term plans and programs to create a safe and robust multi-modal transportation system in support of *The Way Ahead* corporate outcomes.

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## PARKING TECHNOLOGY

Implementation of modern parking technology for on-street locations and off-street facilities will enable customers to purchase parking time at pay stations, on the web, by phone, and link payment to their vehicle license plate. Benefits include providing a variety of payment options, increasing customer service, finding efficiencies in parking enforcement, better pricing flexibility and real time parking occupancy data. The new technology will enable parking strategies to be developed that will assist in managing the finite supply of on-street curbside parking spaces in residential communities to help achieve a balance between meeting the parking needs of both residents and businesses. Strategic pricing alternatives will contribute to promoting the use of transit, multi-modal and alternative methods of travel.

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## ROADS STRATEGY

Transportation Operations is developing an overarching roads strategy integrating the Neighbourhood Renewal Program, the Arterial Road Renewal Program and the Bridge Investment Strategy. This strategy will define how the capital investment in renewal of these roads assets is determined and managed.

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## LED CONVERSION

City-wide LED conversion will be completed in 5 years once funding is approved. Ongoing efforts include LED upgrade on all capital programs that incorporate street light infrastructure replacement. Energy cost savings, maintenance cost and greenhouse gas emission reductions can all be achieved through this initiative.

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**ROAD SAFETY STRATEGY**

The 2015-2020 Road Safety Strategy, based on Vision Zero and the Safe Systems approach, outlines the 5 E's of education, engineering, enforcement, evaluation, and engagement that will be undertaken to continue reducing the prevalence of fatalities, injuries and property damage collisions in Edmonton. The Strategy is a joint initiative of Transportation Services and the Edmonton Police Service, and includes an action plan and identifies budget implications. The Strategy outlines projected targets through until 2020 based on City Council direction.

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## BUILDING A GREAT CITY

Building a great city requires continuous improvement and innovation. The dedication of our managers and employees is reflected in many positive change projects that Transportation Operations is leading, which go beyond benefiting the City's transportation network to help shape our great city. Programs include:

- I. City-wide LED Conversion
- II. Reducing Environmental Impacts of Salt Abrasives
- III. Aggregate Recycling

TRANSPORTATION OPERATIONS PROGRAMS	
I. <b>CITY-WIDE LED CONVERSION</b>	City-wide LED conversion will to be completed in five years, once funding is approved. Ongoing efforts on this include LED upgrade on all capital programs that incorporate street light infrastructure replacement. Energy cost savings, maintenance cost and greenhouse gas emission reductions can all be achieved through this initiative.
II. <b>REDUCING ENVIRONMENTAL IMPACTS OF SALT ABRASIVES</b>	Research continues on determining the optimal amount of salt being added to winter street abrasives in order to minimize overall costs and reduce environmental impacts, while maintaining operational effectiveness and safe road conditions. Additional investigation is underway to develop better tools to detect and to communicate the risk to drivers of black ice conditions on city roadways.
III. <b>AGGREGATE RECYCLING</b>	The branch continues to build on its financial and environmentally successful construction aggregate recycling program. New equipment is continually evaluated and incorporated.

## CULTURE ACTION PLAN

Building a great city involves cultivating a positive work culture in which employees have high moral, are engaged and motivated to contribute. Transportation Operations has decided to hone in on workplace communication in response to the recent corporate wide Engagement and Diversity survey.

<b>Areas of Focus</b>	<ul style="list-style-type: none"> <li>▪ In my branch information is widely shared so that everyone can get the information when it is needed</li> <li>▪ Better two way communication between management and staff</li> </ul>
<b>Actions to be Taken</b>	<ul style="list-style-type: none"> <li>▪ Branch Manager to complete monthly yard and site visits to engage with employees and be available to answer any questions.</li> <li>▪ 14 Electronic Messaging Boards installed on every floor and yard with Transportation Operations staff including:             <ul style="list-style-type: none"> <li>○ Century Place – main floor, 15<sup>th</sup> floor, 16<sup>th</sup> floor (3)</li> <li>○ Office of Traffic Safety (2)</li> <li>○ Five Roadway Maintenance District Yards (5)</li> <li>○ Traffic Field Operations – Central Yard (1)</li> <li>○ Engineering Services (2)</li> <li>○ Roadway Maintenance Administration Building, Central District Yard (1)</li> </ul> </li> <li>▪ Publication plan created to ensure Organizational (including Corporate Culture items), Department, branch and section relevant news is included in every messaging cycle including a Branch Manager message and a director message.</li> <li>▪ Directors with field and operations staff (Roadway Maintenance and Traffic Operations) to attend monthly section meetings and tailgate talks in various yards to engage with employees and answer any questions.</li> <li>▪ Directors to attend monthly team meetings at various levels with in respective sections to:             <ul style="list-style-type: none"> <li>○ Discuss branch and section relative information</li> <li>○ Share positive news stories</li> <li>○ Answer any employee questions</li> </ul> </li> <li>▪ Increase frequencies of Branch Manager Communiques to</li> </ul>

	<p>all branch staff highlighting:</p> <ul style="list-style-type: none"> <li>○ Employee awards or nominations</li> <li>○ Branch/department/ organizational relative information</li> <li>○ Outstanding employee, team, section contributions</li> </ul> <ul style="list-style-type: none"> <li>▪ Transportation Operations Leadership Team to identify a branch and/or employee positive news story for communication to their sections.</li> <li>▪ Increase Director Team involvement in Cultural Ambassador team meetings and expand branch Cultural Ambassador group.</li> </ul>		
Measures (% favourable survey response)	2012 (Actual)	2014 (Actual)	2016 (Target)
<ul style="list-style-type: none"> <li>▪ Overall Engagement</li> <li>▪ Overall Culture</li> <li>▪ Overall Workplace</li> <li>▪ Overall Immediate Supervisor</li> </ul>	61.7	66.1	71.5
	59.9	62.2	67.5
	61.4	64.9	70
	63.9	63.9	69

## Risk Identification and Emerging Issues

RISK FACTOR	LIKELIHOOD (1 TO 5)	IMPACT (1 TO 5)	MITIGATION STRATEGY	RISK OWNER
Central Signal System Failure	3	2	City Wide Migration to new CENTRACS system currently underway	Branch Manager
Union Strike	1	3	Strike Contingency Planning	Corporate
Major Snow Emergency	1	4	Snow Emergency Planning	Corporate
Climate Change Impacts on Road Infrastructure	5	3	Roads Strategy	Branch Manager
EMERGING ISSUES				
<b>DOWNTOWN CONSTRUCTION</b>	High level of construction activity in the Downtown Core limiting options for motorists and increased congestion commuting into and through the downtown. Transportation Operations is developing an overall Managing Downtown Accessibility Strategy to ensure accessibility is maintained throughout this period.			
<b>DEMAND INCREASE FOR ACTIVE MODES</b>	Citizens are incorporating more active modes of travel in their daily lives. Transportation Services is incorporating more active transportation options into the current road infrastructure landscape including bike lanes and trail systems. Transportation Operations is investigating how to best maintain these additions to the road network to ensure proper maintenance and longevity of infrastructure.			
<b>BUSINESS ASSOCIATIONS ENHANCED SERVICE REQUIREMENTS</b>	Improve engagement with Business Associates to meet increase requests for road and signage related services in order to support the local economy and ensure Edmonton is a vibrant and livable city.			
<b>INVENTORY GROWTH</b>	The city's roadway inventory continues to grow in conjunction with the city's expansion and infill. Transportation Operations will investigate options to maintain necessary services to the expanded infrastructure network.			
<b>CITIZEN EXPECTATION</b>	Transportation Operations is dedicated to maintaining the city's road network through our diverse weather conditions. Transportation Operations will utilize public engage-			

	<p>ment to gain a better understanding of citizens summer and winter road maintenance requirements and investigate options to integrate these into the current governing road maintenance policies.</p>
<p><b>CITIZEN ACCESS TO INFORMATION</b></p>	<p>The new media landscape has increased access to services through social media and other avenues. Transportation Operations will work to ensure branch activities are communicated through appropriate public engagement and social media avenues.</p>

## Branch Structure and Programs

ROADWAY MAINTENANCE	SNOW AND ICE CONTROL	ENGINEERING SERVICES	TRAFFIC OPERATIONS SIGNALS AND STREET LIGHTING	TRAFFIC SAFETY AND AUTOMATED ENFORCEMENT	PARKING MANAGEMENT
Roadways General Operations and Facilities	Winter Road Maintenance	Geotechnical Engineering	Traffic Control and Traffic By-lays	Speed Management	On-Street Parking Services
Bridges, Pedways and Auxiliary Structures		Environmental Engineering	Traffic Management, Signals and Streetlights	Research, Analytics and Engineering	Off-Street Parking Operations
Gravel and Oiled Road Maintenance		Construction Services	Engineering Detailed Design Review		Automated Parking Enforcement
Street Cleaning and Spring Cleanup		Aggregate Materials and Recycling			Strategic Planning
Railway Grade Crossings		Winter Street Sand Recycling and Mixing			
Concrete Maintenance and Asphalt Repairs		Geomatics			



## PROGRAM ONE: ROADWAY MAINTENANCE

Director: Bob Dunford

Maintenance of the transportation system means keeping roads, sidewalks and public spaces in good repair, clean and free from litter. A transportation system that is well-maintained in all seasons promotes economic vitality and a positive city image. The Roadway Maintenance group strives to manage the roads, sidewalks and active mode infrastructure to minimize total life cycle costs, yet sustain levels of service and safety.

### **Road Repairs**

This program includes repair of paved roads, including potholes and road patching; repair of sidewalks and curbs; maintenance and repair of auxiliary structures, such as guardrails, wood walks and stairs, bollards, and noise attenuation walls. The restoration of roads, sidewalk and curbs after maintenance of installation of various utilities is also part of this program.

### **Bridge Maintenance**

Bridge maintenance focuses on the management of the City's Bridge Inventory and the Bridge Investment Strategy. This program includes bridge inspection, maintenance, and repair.

### **Gravel and Oiled Roads**

This program includes the maintenance of the inventory of unpaved roads and alley. These roads can be graveled surfaced, oil stabilized surface or a cold mix rolled asphalt surface.

### **Street Cleaning**

Street cleaning includes the annual spring clean-up program and regularly scheduled street cleaning on arterial and collector roads from the end of May through the summer and fall to the start of the winter season. Service levels for street cleaning are set out in Council Policy C550.

### **Pavement Management**

Pavement management includes the continuous monitoring of Transportations Services inventory of roads and sidewalks. This program also includes maintenance paving, pavement crack-sealing and the programming of micro-surfacing contracts.

## PROGRAM TWO: SNOW AND ICE CONTROL

Director: Bob Dunford

The Snow and Ice Control program provides effective winter maintenance to allow for reliable transportation through the winter season for all modes of travel, including the movement of private and commercial vehicles, pedestrians and cyclists. A priority route system is used to ensure roads, sidewalks, shared use paths and transit facilities allow for safe reliable movement during any given snow event. Snow removal, hauling and storage are also part of this program.



## PROGRAM THREE: ENGINEERING SERVICES

Director: Don Lewycky

The Engineering Services Section provides engineering expertise in several specialized areas for both City departments and other governmental clients and external agencies.

### Geotechnical Engineering

This area provides a wide variety of geotechnical services, including the management of the City's landslide and erosion remediation program, foundation investigations and designs, construction monitoring of earthworks, as well as site characterizations and investigations for road and underground utility works.

### Environmental Engineering

The Environmental Engineering area is a multi-disciplinary team with experience in environmental science, consulting and regulation. This group manages environmental projects for a wide variety of City departments, including Phase I and Phase II Environmental Site Assessments, contaminated site remediation, decommissioning of buildings and hazardous waste removal.

### Construction Services

The Construction Services area provides Quality Control (QC) and Quality Assurance (QA) testing on the various road construction materials purchased by the City. The purpose of this testing is to ensure conformance to City of Edmonton construction specifications. It also provides consulting services to various City Departments, Contractors and Suppliers regarding testing procedures, materials and placement problems, materials selection, specification changes and interpretation.

### Aggregate Materials and Recycling

The City's aggregate recycling operations were established in 1978 to provide an economical source of aggregates for use in the construction of the City's roadway system. In excess of 4 million tonnes of material have been recycled, which has extended the life of the City's landfill by nearly five years.

### Geomatic Services

The Geomatic Section's primary responsibility is to provide the survey and geomatic services required for the Roadways Design and Construction program including preliminary surveys for design and engineering surveys for construction.



## PROGRAM THREE: TRAFFIC OPERATIONS, SIGNALS AND STREETLIGHTING

Director: Craig Walbaum

Traffic Operations, Signals and Street Lighting designs and manages Edmonton's traffic signals and streetlights to optimize traffic flow for all road users, with emphasis on transit and goods movement. The group oversees the maintenance of signals, signage and streetlight infrastructure in coordination with EPCOR. The Traffic Management Centre controls traffic signals, traffic cameras, message signs, and other technology to move traffic safely and efficiently through the City.

Traffic Operations manages traffic control and traffic bylaws. This group is responsible for traffic signing and on-street traffic control, including temporary approvals and detours for construction projects or special events.

### **Traffic Control and Traffic Bylaws**

Traffic Operations manages traffic control and traffic bylaws. This group is responsible for traffic signing and on-street traffic control including temporary approvals and detours for construction projects or special events. Traffic control also manages on-street parking, parking management and the bylaws regarding parking, traffic and speed.

Traffic Control manages, coordinates, and monitors all temporary traffic control events on road right-of-way for construction, special event activities, and overweight/over dimensional vehicle moves.

### **Traffic Management, Signals and Street Lighting**

Traffic Operations designs and manages Edmonton's traffic signals and streetlights to optimize traffic flow for all road users with an emphasis on transit and goods movement. The group manages maintenance of signals, signage and streetlight infrastructure in coordination with EPCOR. The Traffic Management Centre operates traffic signals, traffic cameras, message signs and other technology to move traffic safely and efficiently through the city.

### **Right of Way and Mapping Services**

The Right of Way group manages agreements with utilities; administration and approval of permits for Underground Line Assessments. Coordination of construction activities with various utility partners and impacted parties to create an efficient construction schedule that minimizes impact to the infrastructure and the public. This group also leads and coordinates the GeoEdmonton alliance, which coordinates and manages the spatial data sets for key utility partners.

## PROGRAM THREE: TRAFFIC SAFETY AND AUTOMATED ENFORCEMENT

Director: Gerry Shimko

Traffic safety is important for citizens and a major priority for the City of Edmonton. The Office of Traffic Safety (OTS) is committed to maintaining a safe Transportation System in the City of Edmonton through education, engineering, enforcement and evaluation.

The Office of Traffic Safety evaluates traffic data to manage local traffic, reduce speed, deter risky driver behavior, and reduce collisions, especially ones that result in either injury or death. Additionally, the OTS installs and manages intersection safety cameras and photo radar enforcement at various locations throughout the city.

The Office of Traffic Safety also works closely with many organizations, such as the Edmonton Police Service, Edmonton Federation of Community Leagues and various school districts to delivery traffic safety education and involve Edmontonians in traffic safety initiatives within their community.

### Speed Management

Traffic related issues like speeding and careless driving continue to be the number one community concern for Edmontonians. The Office of Traffic Safety uses an evidence-based speed management continuum to prioritize and manage speed related complaints. The continuum provides an increasing level of speed management interventions from education, to engineering countermeasures, to automated photo enforcement and finally to manned enforcement to encourage compliance to speed limits. This systems approach coupled with research provides for continuous improvement.

### Research, Analytics, & Engineering

Collision data is collected for traffic safety analysis through the use of business intelligence tools, which provides information for engineering improvements, advanced research on traffic safety related initiatives, educational campaigns, enforcement activities and publication of an annual collision report. Present traffic safety practices are reviewed and improved through academic evaluation and review. The ongoing research, analytics, and engineering assessments continue to help reduce the prevalence of fatal, injury, and property damage collisions. This integrated process provides for ongoing continuous improvement and with measurable results.



## PROGRAM SIX: PARKING MANAGEMENT

Director: Bohdan Maslo

Parking Management provides the centralized management of on-street parking services, City owned/leased off-street parking operations, and automated parking enforcement.

### On-Street Parking Services

On-street parking services include the complete management of the City's 3300 metered parking spaces. On-street services include the planning, design, approval and implementation of parking programs and administration of permitted/non-permitted parking uses on public road right of way (i.e. disabled parking, loading zones & time restricted parking areas).



### Off-Street Parking Operations

The off-street parking inventory consists of five City-owned and leased parkade facilities and four surface lots totaling 3,262 parking spaces, providing parking stalls for both the public and internal City staff. Off-Street operations include negotiation and execution of management agreements, contract administration, monitoring of capital programs and maximizing revenue generation through competitive and strategic rate setting reflective of market conditions.

### Automated Parking Enforcement

Parking Management includes an automated parking enforcement business component being developed along with the rollout of new pay-by-plate parking technologies. Enforcement is automated using license plate recognition technology mounted on vehicles.

### Strategic Planning

A function of the Parking Management Section is to make the best use of public parking availability including application of parking restrictions for safe, efficient traffic flow, on street bike lanes, special needs/event parking and residential parking permit program. Parking technology will enable strategies to be developed to optimize the finite supply of on-street curbside parking spaces in residential communities to help achieve a balance, thereby meeting the parking needs of residents and businesses.

## Planned Changes 2016 - 2018

### Financial Impact

#### TRANSPORTATION OPERATIONS

#### 2016 - 2018 PLAN - BRANCH SUMMARY

(\$000)	2015 Budget	2016 Plan	2017 Plan	2018 Plan
<b>Revenue &amp; Transfers</b>				
User Fees, Fines, and Permits	14,300	14,800	15,000	15,000
Grants	-	-	-	-
Transfer from Reserves	19,400	19,600	19,700	19,700
<b>Total Revenue &amp; Transfers</b>	<b>\$33,700</b>	<b>\$34,400</b>	<b>\$34,700</b>	<b>\$34,700</b>
<b>Expenditure &amp; Transfers</b>				
Personnel	79,400	82,900	85,300	88,300
Non-Personnel	96,300	100,000	102,600	104,900
<b>Total Expenditure &amp; Transfers</b>	<b>\$175,700</b>	<b>\$182,900</b>	<b>\$187,900</b>	<b>\$193,200</b>
<b>Net Operating Requirement</b>	<b>\$142,000</b>	<b>\$148,500</b>	<b>\$153,200</b>	<b>\$158,500</b>
<b>Full-time Equivalent</b>	<b>863.8</b>	<b>876.4</b>	<b>883.9</b>	<b>889.9</b>

### **CHANGES TO MAINTAIN CURRENT SERVICE LEVELS**

For the 2016 budget year, personnel costs including overtime and settlements increase by \$2,200 with an additional \$100 for merit, step and benefits. Fleet changes are \$1,500, inflation increases are \$600, and utility increases are \$100. Increased recoveries requested from the Automated enforcement revenue reserve to offset increased expenses are \$200.

For the 2017 budget year, personnel costs including overtime and settlements increase by \$1,500 with an additional \$400 for merit, step and benefits. Inflation increases are \$1,000, Fleet changes are \$400, and utility increases are \$200. Increased recoveries requested from the Automated Enforcement revenue reserve to offset increased expenses are \$100.

For the 2018 budget year, personnel costs including overtime and settlements increase by \$1,800 with an additional \$700 for merit, step and benefits. Inflation increases are \$800, Fleet changes are \$500, and utility increases are \$200.

### **CHANGES BEYOND CURRENT SERVICE LEVELS**

#### **Impact of Capital:**

New Parking Control Technology will provide the required on-going operational support and maintenance of a fully integrated pay by plate parking system for on and off-street parking facilities. The extra revenue generated from this will fund the additional expenses.

Additional resources are required to support the successful implementation and ongoing maintenance of streetlight infrastructure identified within the scope of the LED Streetlight Conversion capital project (15-66-2561) approved by Council in the Capital Priorities Plan for 2015-2018, and as indicated in the Accelerated LED Street Light Conversion Funding Options Report.

The Streetlight Capital Priorities service package is to maintain service levels to the public in response to the increasing capital investments approved in the 2015-2018 Capital Priorities Plan in order to successfully manage the entire process of design, construction and coordination of work, ongoing maintenance programs, and database management of various streetlight infrastructure affected by various capital projects.

The Traffic Controller System Conversion capital project (15-66-2511) approved by Council in the Capital Priorities Plan for 2015-2018 is to equip all traffic signal controllers to new Ethernet based and wireless technologies in order to communicate remotely with the CENTRACS central traffic signal management system. Doing so offers efficiencies in remote traffic management towards achieving The Way We Move. Full conversion will result in a cost savings to the City by utilizing wireless communications versus existing leased phone lines, thereby reducing communication costs.



In Traffic Management a maintenance repairman is required to maintain and repair a growing inventory of DMS (Dynamic Messaging Systems) and speed display trailers used in daily traffic controls and capital construction programs.

### Impact of Contributed Assets:

The Roadway Maintenance and Ice Control Inventory growth requires additional resources of approximately \$900 and 3 permanent FTEs per year to maintain inventory increases in the roadway network for snow and ice control from developer contributions, estimated at 1.5% each year.

The Roadway Maintenance Street Cleaning, Asphalt and Concrete Repair Inventory Growth identifies approximately \$440 and 3.0 FTEs required per year from 2016 to 2018 to maintain inventory increases in the roadway network. The growth is estimated at 1.5% each year from developer contributed assets and increased streetscape maintenance with the completion of Capital Boulevard (108 Street) in 2016 and the Quarters in 2017.

## Capital Investment

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
Arterial Reconstruction	6,842	9,234	15,409	9,593	10,019
Arterial Rehabilitation	48,157	45,747	39,583	-	-
Bridge Reconstruction	1,500	5,000	15,552	17,465	-
Bridge Rehabilitation	7,759	7,250	16,599	-	-
Facilities Development	3,723	3,907	4,034	-	-
Neighbourhood Reconstruction	106,328	126,123	117,889	117,103	209,239
Neighbourhood Rehabilitation	35,091	32,494	47,601	-	-
Streetlight	6,184	7,142	7,542	-	-
Traffic Control	6,530	6,022	6,079	2,614	1,171
Traffic Safety	2,879	2,896	2,923	-	-
Traffic Signals	2,824	2,841	2,868	-	-
<b>Total Approved Capital Budget</b>	<b>227,817</b>	<b>248,656</b>	<b>276,078</b>	<b>146,776</b>	<b>220,430</b>
	2016	2017	2018	2019	2020 & Beyond
Total Growth	5,703	5,737	5,791	-	-
Total Renewal	222,114	242,919	270,287	146,776	220,430
<b>Total Approved Capital Budget</b>	<b>227,817</b>	<b>248,656</b>	<b>276,078</b>	<b>146,776</b>	<b>220,430</b>