

Corporate Performance Measures for the Goals of Preserve and Sustain Edmonton's Environment, Transform Edmonton's Urban Form and Shift Edmonton's Transportation Mode

Attachment 3
Revised Outcomes and Corporate Performance Measures
DCMO 2010DCM058
Council (July 7, 2010)

Corporate Outcome	What It Means	Proposed Measures	Proposed Measures Definition
1.1 Partnerships with citizens, communities and organizations are leveraged to improve Edmonton's environmental health	<ul style="list-style-type: none"> The City undertakes joint initiatives with stakeholders to move environmental best practices forward within the broader community. Collaboration is used to influence activities not directly within the city's control. 	<ul style="list-style-type: none"> Number of tonnes of greenhouse gas emissions reduced as a direct result of CO₂RE rebate and incentive initiatives for citizens and businesses. 	<ul style="list-style-type: none"> This is a measure of the total number of greenhouse gases reduced as a result of CO₂RE rebate initiatives. Rebates and incentives are used to leverage investments in energy saving equipment by citizens, businesses and other orders of government (e.g. high efficiency furnaces). While incentives have an immediate greenhouse gas reduction outcome there is also a long-term and potentially more significant outcome of changing the market (e.g. high efficiency furnaces become the standard).
1.2 The impact of City operations on air, land, and water systems is minimized	<ul style="list-style-type: none"> Leading edge practices are utilized in City operations to minimize pollution of air, land and water, consumption of natural resources, loss of natural habitat, and generation of waste. 	<ul style="list-style-type: none"> The amount of water (in liters) recycled, reused, reclaimed from city operations Tonnes of Greenhouse gas emissions from City operations Diversion of waste to city landfills by City of Edmonton operations Reduction in City's energy consumption 	<ul style="list-style-type: none"> This measure will report on the activities of 'community sustainability partners' (businesses, community leagues, non-governmental organizations, associations, etc.) that contribute to Edmonton's environmental health. This measure is being developed as part of The Way We Green. This measure will report on the amount of water that is recycled in city run operations. Source information will be derived from recycled water operations in AMPW, Community Services and EPCOR. Emissions from city operations are broken down into buildings/facilities, municipal fleet, bus/LRT fleet, street & traffic signal lighting and operations (e.g. wastewater treatment). Measure of the total Construction & Demolition Waste recycled (Capital Construction) and the sand and aggregate recycled off of city streets (Transportation) This measure will include reduction in energy consumption that is gained by the use of renewable energy or energy substitutions as well as efficiencies in energy consumption by building improvements and retrofits.

	<ul style="list-style-type: none"> ▪ Total Priority Natural Areas Secured <ul style="list-style-type: none"> • This is a measure of the City's commitment to protect against the loss of natural areas within the city's boundaries
1.3 Edmonton strives to be a leader in environmental advocacy, stewardship, preservation, and conservation.	<ul style="list-style-type: none"> • The City of Edmonton is an environmental leader on many fronts – through programs we have developed to reduce energy consumption, to preserve and promote natural areas, as well as minimizing the use of harmful pesticides. We are a North American leader in developing, commercializing and providing training in sustainable waste management technologies, and building efficient public transportation systems that will reduce greenhouse gas emissions and reduce our carbon footprint. <ul style="list-style-type: none"> ▪ Ambient Air Quality Index (AQI) <ul style="list-style-type: none"> ▪ A measure of the contaminant concentrations in Edmonton's ambient air through an AQI which measures five continuously monitored air pollutants (carbon monoxide, fine particulate matter (PM2.5), nitrogen dioxide, ozone and sulphur dioxide) at three Edmonton stations (Central, East and South). ▪ River Water Quality Index <ul style="list-style-type: none"> ▪ The RWQI summarizes the impact of a more comprehensive suite of water quality parameters upstream and downstream of Edmonton. ▪ Edmonton Watershed Contaminant Reduction Index <ul style="list-style-type: none"> ▪ A measure of the reduction in contaminants discharged to the North Saskatchewan River, adjusted for population ▪ Proportion of waste diverted from landfill <ul style="list-style-type: none"> ▪ This is a measure of ongoing commitment to an innovative and progressive integrated waste management system in Edmonton. In the short term, it will measure the diversion of residential waste from landfill, and in the longer term may measure diversion of other waste streams. ▪ Tonnes of Greenhouse gas emission from the broader Edmonton community <ul style="list-style-type: none"> ▪ This is a measure of the total number of Tonnes of greenhouse gas emissions in Edmonton. (Can also be broken down to Tonnes of GHG produced per Edmontonian)

Transform Edmonton's Urban Form

Corporate Outcome	What It Means	Proposed Measures
Proposed Measures Definition		
3.1 Attractive and compact physical design with diverse neighbourhoods, amenities and public open spaces	<ul style="list-style-type: none"> Land-use development, transportation, libraries, parks/public open spaces and other infrastructure plans promote intensification, design excellence and meet a range of community needs. 	<ul style="list-style-type: none"> Housing Stock Density – number of units versus land within urban zones % of affordable housing units within city neighbourhoods % of Edmonton communities within (distance/time) of a park, library, major transit center, commercial centre, and/or recreational facility % of citizens that think Edmonton is a well-designed, attractive city Measure on the distribution of land uses and housing types within city neighbourhoods Ratio of Edmonton's housing stock
		<ul style="list-style-type: none"> This measure provides an indication if there is an increase in density. Council has a number of policies and funding initiatives which speak to providing affordable housing. This measures the percentage growth of affordable housing units within city neighbourhoods. This will measure the percentage of population that is within a range of accessible open spaces and variety of amenities. Distance and time will be factored to ensure that amenities that are within appropriate travel time via public and active modes of transportation are accounted for. Based on a citizen's survey, this measure will detail the perception of Edmontonians that Edmonton is a well-designed, attractive city. This will measure the degree of change in land uses and housing types to determine the success of intensification and mixed use policies of the MDP. This information is available through existing land use information from assessment data. This measure will detail the ratio split of owned housing units in Edmonton versus rental units. The information is available from municipal census. This is a measurement of the level of resident ownership.

<p>3.2 Edmonton has sustainable infrastructure that fosters and supports civic and community needs.</p> <ul style="list-style-type: none"> The design and redesign of infrastructure supports the principles of civic sustainability. Some key dimensions of infrastructure sustainability include: <ul style="list-style-type: none"> infrastructure renewal long-term analysis of infrastructure, e.g. life-cycle analysis, energy mapping, ecological footprinting assessment of infrastructure for environmental impacts protection of existing infrastructure from environmental degradation, e.g. preservation of historical buildings material selection for sustainability - quality, durability and energy conservation better use of waste water and materials remediation of damaged or contaminated soils and waters. Edmonton's by-laws, policies and plans facilitate the development of sustainable community infrastructure. 	<ul style="list-style-type: none"> % of Infrastructure in Poor/Very Poor Physical Condition in existing neighborhoods Infrastructure density % new developments that are infill out of total number of new developments Conformance reporting on the degree to which new or reviewed plans or policies meet sustainability principles as outlined in the Municipal Development Plan (MDP) <ul style="list-style-type: none"> This measures the overall health of neighborhoods to meet intended service levels. This would be applicable to existing neighborhoods as new neighborhoods do not have a high percentage of their assets in poor and very poor condition. The less infrastructure per capita the less the operating/renewal costs per person. This measure combines several elements of the Corporate Outcome. By linking infrastructure to population, this measure looks at Edmonton's effort to increase population density and decrease the amount of infrastructure by smaller design that are more efficient and provide for multiple users. This measure will detail the percentage of new units within Edmonton that are infill units out of the total number of new units within Edmonton to track the success of intensification policies. Mature Neighbourhood Reinvestment monitoring will provide this information based on building permits issued for new housing units. This will measure the estimated civic investment required to fully develop new neighbourhoods being advanced, and the measure of the extent to which density targets prescribed by the Capital Region Growth Plan are met and maintained to demonstrate alignment with sustainability policies
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Shift Edmonton's Transportation Mode

Corporate Outcome	What It Means	Proposed Measures	Proposed Measures Definition
4.1 Citizens use public transit and active modes of transportation	<ul style="list-style-type: none"> Public Transit and active transportation are the modes of choice for Edmonton citizens. Transit ridership grows as the city population grows. Transit is accessible and affordable to citizens. Active transportation is used by citizens. Citizens walk and bike to work. Commuters use smart transportation programs, such as carpools and bike paths. 	<ul style="list-style-type: none"> Transit ridership per capita Overall Transportation Mode split 	<ul style="list-style-type: none"> This indicator tells us how many rides are made annually on transit as a rate proportional to Edmonton's population. This indicator tells us, based on an average day in Edmonton, the proportions of all daily trips that are made by the various modes of transportation.
4.2 Goods and Services move efficiently through the city	<ul style="list-style-type: none"> Goods and services vehicles move efficiently throughout city boundaries. Businesses are satisfied with accessibility to major routes and to rail, airports, and highways. Traffic congestion is managed. 	<ul style="list-style-type: none"> Business satisfaction survey on the movement of goods and services Travel Time and Reliability for Goods and Services Movements on Select Corridors 	<ul style="list-style-type: none"> This indicator will tell us how Edmonton's business community rates the performance of the transportation system as it relates to their goods and services movement needs. This indicator gives us a weighted average of both the travel time per kilometer and travel time reliability per kilometer for the Inner Ring Road.
4.3 The transportation system is integrated, safe and gives citizen choice to their mode of movement	<ul style="list-style-type: none"> Citizens are safe using any mode of transportation Citizens are able to use several transportation systems during their travel. Integrated transportation systems provide alternatives to personal vehicles. Citizens have many options to choose for their main commute including biking, walking, public transit and private motor vehicles. 	<ul style="list-style-type: none"> Rate of collisions at intersections per 1,000 population Rate of transportation-related injuries per 1,000 population Proportion of Missing Links of Sidewalk and Shared-use Paths constructed in existing areas of the City Proportion of total planned kms of on-street cycling facilities implemented 	<ul style="list-style-type: none"> This indicator tells us how many vehicle collisions in intersections are reported annually as a rate proportional to the population of Edmonton. This indicator tells us how many collisions resulting in injuries (minor and major injuries and fatalities) that were reported in Edmonton as a result of people using the transportation system annually, as a rate proportional to the city's population. This indicator tells us what proportion of the total length of missing pedestrian infrastructure such as sidewalks and shared-use pathways the City has been able to construct to date as informed by the Sidewalk Strategy (2009) to fill missing gaps in the existing pedestrian network. Constructing connections within this network further integrates the City's transportation system as a whole. This indicator tells us what proportion of the total planned network of on-street cycling routes, as informed by the Bicycle Transportation Plan Update (2009), that the City has been able to construct Constructing connections within this network further integrates the City's transportation system as a whole.