### **CITY OF EDMONTON** CORPORATE PERFORMANCE MEASUREMENT

## SHIFT EDMONTON'S TRANSPORTATION MODE TARGET SETTING INFORMATION





DRAFT

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## TRANSFORMATIVE PLANNING

Established by City Council in 2008, The Way Ahead – the City's Strategic Plan- provides the City's vision for Edmonton in 2040 and establishes 6 ten-year strategic goals to provide a clear focus for the future. The plan forms the foundation for the work of the City and guides us in our continued commitment to enhance the quality of life for residents.

#### Transparent progress measurement

City Council has set outcomes for the strategic goals in order to guide decision-making that will move us towards the attainment of those goals. Progress is to be measured against the achievement of the outcomes associated with each goal through the identification of appropriate and reliable performance measures for each outcome.

Effective internal and external communications are key to successful performance measurement and this will be accomplished through access to up-to-date performance information for Council, staff and the public as the City's performance measurement system evolves.

#### Plans drive resource allocation

Capital and operational plans that are driven by the "Ways" plans will need to include the identification of actions and, where required, related resources necessary to achieve the outcomes approved by Council. The relationship between planning and outcome achievement is focused through the performance measurement process and setting targets for short (3 years) and longer (10 years) term performance.

Setting targets for each of the approved performance measures will facilitate decision-making by Council related to the prioritization of resource allocation for programs, services, and infrastructure renewal, replacement and development.

#### Inside the Report

This publication provides information to assist the Transportation and Public Works Committee and City Council in beginning to establish targets for the approved Corporate Performance Measures for the goal of "Shift Edmonton's Transportation Mode" which is supported by an approved directional plan. Other Corporate Performance Measures with supporting direction plans (The Way We Grow; The Way We Live) will be reviewed by Committee before going to City Council for final review.

Publications will be produced at a later date that provides target setting information for the Corporate Performance Measures for the three goals that do not have approved directional plans:

- Preserve and Sustain Edmonton's Environment
- Ensure Edmonton's Financial Sustainability
- Diversify Edmonton's Economy

The following information is provided for each of the three goals that have approved directional plans:

- **The Goal/Outcome/Performance Measure** each Goal, Outcome, and Performance Measure are listed.
- **Performance Measure Definition** each Performance Measure is defined by taking a "What does it mean?" approach.
- **City of Edmonton's historical performance** historical results for each specific performance measure are provided including the frequency at which the data is collected and analyzed.
- Administration's recommended target 3 and 10 year target recommendations and rationale are identified.
- **Policy implications** presents information on existing policies that were considered in setting the targets as well as the implications the targets may have for those policies.
- Additional highlights supplemental information that provides relevant context about the measures or the targets.



What is not included at this time is comparator information on the performance measures. Appropriate and relevant comparator information is being collected and will be provided to Council. However, in the first stages of setting Corporate Performance Measures, the emphasis is on setting targets that are reflective of Edmonton's Vision focused through Council approved outcomes and performance measures and that are informed by the City's unique circumstances. As our performance measurement process matures, the utilization of appropriate benchmarks from leaders in municipal service and performance will form part of the validation of our performance targets and will allow us to gain information that will assist the organization in taking action to improve performance.

#### **Target Setting**

The targets presented in this report have been set with consideration given to historical performance, the external environment where applicable, and approved City plans, policies and standards. However, potential resource requirements have not been developed at this stage. Where applicable, the capital and operating budget processes will identify cost impacts associated with the targets presented. Capital budget implications will be captured for any three-year targets through the 2012 to 2014 capital budget process and will be included for Council's consideration when the plan is presented for approval. Council deliberations will determine the prioritization of projects and allocate funding accordingly.

Where potential operating cost impacts associated with targets are identified, implications for the 2012 operating budget will be identified and approval sought during operating budget approvals. Potential impacts for 2013 and 2014 will also be identified, but will not be approved as operating budgets are approved on an annual basis.

Administration suggests that any performance measure targets that the Transportation and Public Works Committee and City Council is comfortable with at this point in time, be given approval in principle, with final approval to be given after the budget deliberations in the fall.

Accountability for results must be clearly assigned and well-understood and this will be accomplished through the setting of not only corporate performance measures but also through planning at the department level that drives improvement and successfully translates strategy into action. Successful performance measurement systems are learning systems that help the organization identify what works and what does not so as to continue with and improve on what is working and repair or replace what is not working. Performance measurement is one tool that lets the organization track progress and direction toward strategic goals and objectives.

One consistent theme in literature about effective performance measurement systems is that they take time: time to design, time to implement, time to perfect. Performance measurement must be approached as an iterative process in which continuous improvement is a critical and constant objective.

## GOAL FOUR: SHIFT EDMONTON'S TRANSPORTATION MODE

#### CORPORATE OUTCOME 4.1

Citizens use public transit and active modes of transportation

#### **CORPORATE MEASURE** 4.1.1 Transit ridership per capita

#### Lead Department

**Champion** Bob Boutilier

#### Lead Department

Transportation

#### What does it mean?

This indicator tells us how many transit rides are made annually as a rate proportional to Edmonton's population.

### What are the administration's recommended targets?

#### 3-year Recommended Target:

• Increase to 100 rides per capita.

The 10 year target was developed based on an assumption of the LRT expanding to include the north line to NAIT, the west line, central, and southeast line between Lewis Estates and Mill Woods.

#### 10-year Recommended Target:

• Increase to 107 rides per capita.

### What are the City of Edmonton results?



Ridership per capita is calculated by dividing the number of transit rides made by the population served.

#### Annual Percent Growth in Ridership Per Capita

Year	2005	2006	2007	2008	2009	2010
Growth	13%	3%	7%	5%	0%	10%

#### Are there any policy implications?

• There are no policy implications.

#### Additional Highlights

Recently, transit ridership has benefited from the introduction of the U-Pass programs for University of Alberta and Grant MacEwan students, as well as success in encouraging employers to participate in the ETS@Work program.The extension of the LRT system to Century Park has also increased transit use.

4.1.2 Overall transportation mode split

#### Lead Department

**Champion** Bob Boutilier

#### Lead Department

Transportation

#### What does it mean?

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.

Auto Driver refers to a trip made by a person in an automobile where that person is driving the vehicle. Auto Passenger refers to a trip made by a person in a vehicle as a passenger. Transit refers to a trip made by a person on an ETS bus, LRT, St. Albert Transit bus or Strathcona County bus. Walking refers to a trip where a person completes an entire trip from origin to destination by walking. Cycling refers to a trip where a bicycle is used to complete an entire trip from origin to destination. Other refers to trips made using modes such as school buses, taxis, limousines, van pools, shuttles, skateboarding, and roller blading.

### What are the administration's recommended targets?

#### 3-year Recommended Target:

• As the overall mode split is typically measured once a decade only, it is not appropriate to set targets for a 3-year timeframe.

The 10 year target was developed based on an assumption of the LRT expanding to include the north line to NAIT, the west line, central, and southeast line between Lewis Estates and Mill Woods.

#### 10-year Recommended Target:

	Auto Driver	Auto Passenger	Transit	Walk	Cycle	Other
Target*	-2%	+0.5%	+1%	+0.3%	+0.2%	-

\*as a share of total trips

Based on trends shown in the 2016 Regional Travel Model and the Household Travel Survey, meeting this goal could potentially affect the daily number of trips as shown in the table below.

#### Change in Daily Trips

Auto Driver	Auto Passenger	Transit	Walk & Cycle
-120,000	+80,000	+30,000	+7,000

This reduction in auto driver trips could correspond to approximately 30,000 tonnes of  $CO_2$  not being released into the atmosphere everyday. For another comparison, this reduction in auto driver trips would be roughly equivalent to removing all the traffic on the Quesnell Bridge every day.

This progress measure and target is based on the City of Edmonton Household Travel Survey (HTS), which is a travel-log based survey of 2% of the population, undertaken by the City approximately every 10 years. Target recommendations were made in consultation with a wide range of City business areas, including Transportation Planning Branch, Transportation Operations Branch, Edmonton Transit System, and the Planning and Development Department. It is well documented that mode choice is strongly influenced by land use patterns.

As the City has grown substantially outward, the trend has been an increased reliance on automobiles. With a land use target of 25% in of growth to locate in downtown, mature neighbourhoods and around LRT stations and transit centers, further population growth will continue to expand the city outward. It is therefore expected that the trend of the Auto Driver segment would increase. While it is expected that the LRT expansion of the north line to NAIT and the west, central and southeast line between Lewis Estates and Mill Woods would influence the use of transit, the actual construction and shift in mode due to LRT would occur over a period of several years. As such, the 10-year targets for mode split are more ambitious than they seem, because they reverse the trend. Note that the recommended targets are relative targets. Since no data for 2010 is available, absolute targets for the 2010-2020 period cannot be set.

This is considered an aspirational target.

**Overall Mode Split** 

#### What are the City of Edmonton results?



Edmonton residents made around 2.5 million trips on a typical fall weekday (an average trip rate of 3.6 trips per day). Of these trips, 57% are made as a car driver, with the remaining trips being made by car passenger (20%), walking (11%), transit (9%), and cycling (1%). Since the previous HTS in 1994, the proportion of trips made by driving alone increased. The overall proportion of trips made by automobile remained essentially unchanged at nearly 80%.

Overall mode split information is costly to collect. Journey-to-work data is more readily available from Statistics Canada. As a significant proportion of people travel for work, journey to work information is available to use as an indicator of overall mode split.

#### Why People Travel



Source: 2005 Edmonton Household Travel Survey, Daily Trip Purpose From Home

#### Are there any policy implications?

- A higher percentage of development directed to these areas would likely tend to increase the share of citizens using public transit and active modes of transportation and further align with this corporate outcome.
- The Capital Region Board Land Use Plan's principles of Minimizing Regional Footprint and Increasing Transportation Choice broadly support this corporate measure.
- The Active Transportation Policy (C544) supports the growth of the active transportation modes (including walking and cycling).

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#### Additional Highlights

**Comparison of Journey to Work, 2006** Percent



Edmonton Auto Driver (75.0%) Auto Passenger (7.8%) Transit (9.7%) Walk (5.1%) Cycle (1.1%) Other (1.2%)

#### Calgary

Auto Driver (69.1%) Auto Passenger (7.5%) Transit (15.6%) Walk (5.4%) Cycle (1.3%) Other (1.0%)

#### Hamilton

Auto Driver (76.1%) Auto Passenger (8.5%) Transit (8.7%) Walk (5.0%) Cycle (0.9%) Other (0.8%)

#### Saskatoon

Auto Driver (78.7%)
Auto Passenger (7.5%)
Transit (3.7%)
Walk (6.2%)
Cycle (2.4%)
Other (1.6%)

#### Toronto

Auto Driver (63.6%) Auto Passenger (7.5%) Transit (22.2%) Walk (4.8%) Cycle (1.0%) Other (0.9%)

#### Vancouver

Auto Driver (67.3%)
Auto Passenger (7.1%)
Transit (16.5%)
Walk (6.3%)
Cycle (1.7%)
Other (1.1%)

#### Winnipeg

Auto Driver (69.8%) Auto Passenger (8.9%) Transit (13.0%) Walk (5.8%) Cycle (1.6%) Other (0.9%)

**Journey to Work Mode Shift by CMA** From 1996 to 2006

		. let	senger			
	AutoD	AutoPr	Transit	Walk	Cycle	Other
Winnipeg	1.6%	-0.1%	-1.3%	-0.4%	0.2%	0.0%
Vancouver	-3.3%	0.5%	2.2%	0.5%	0.0%	0.1%
Toronto	-1.7%	0.8%	0.2%	0.2%	0.2%	0.2%
Saskatoon	0.9%	0.2%	-1.4%	-0.2%	0.4%	0.2%
Hamilton	-2.0%	1.3%	0.7%	-0.2%	0.2%	0.1%
Calgary	-3.7%	0.3%	3.0%	0.0%	0.2%	0.1%
Edmonton	-1.9%	0.9%	0.7%	0.1%	0.0%	0.2%

Note: Data for Journey to Work is for entire Census Metropolitan Area. For Edmonton this includes the city and the Region.



#### **CORPORATE OUTCOME 4.2**

Goods and Services move efficiently through the city

#### What are the City of Edmonton results?

As this survey has not yet been developed, there are no results to report.

Are there any policy implications?

• There are no policy implications.

#### Additional Highlights

The City will be working with relevant stakeholders, including Edmonton Economic Development Corporation, to develop the survey and recommended targets.

#### **CORPORATE MEASURE**

4.2.1 Business satisfaction survey on the transportation system

#### Lead Department

**Champion** Bob Boutilier

#### Lead Department

Transportation

#### What does it mean?

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.

### What are the administration's recommended targets?

#### 3-year Recommended Target:

- A business satisfaction survey on the movement of goods and services is being developed in 2011.
- Targets will be developed once the survey has been conducted.

#### 10-year Recommended Target:

• Targets will be developed once the survey has been conducted.

4.2.2 Travel Time and Reliability for Goods and Services Movements on Select Corridors

#### Lead Department

**Champion** Bob Boutilier

#### Lead Department

Transportation

#### What does it mean?

This indicator gives us a weighted average of both the travel time per kilometre and travel time reliability per kilometre for the Inner Ring Road. The four corridors that are included are: Yellowhead Trail. Whitemud Drive. 75 Street and 170 Street. as shown in the graphic. The measure is reported per kilometre to account for the fact that the four corridors have significantly different lengths. The weighting is based on actual truck traffic, and assigns increased importance to routes with higher truck volumes. The efficient movement of goods and delivery of services are key to the economic vitality of Edmonton. Businesses need to be able to count on effective and reliable corridors for transportation. Maintaining the time and reducing the variability of time of trips on goods movement corridors means that businesses in Edmonton and the Capital Region have access to an efficient and effective transportation network.

#### **Goods Movement Travel Time Corridors**



### What are the administration's recommended targets?

#### 3-year Recommended Target:

• Maintain a weighted average trip time below 75 +/- 7 seconds per kilometre.

#### 10-year Recommended Target:

• Maintain a weighted average trip time below 75 +/- 7 seconds per kilometre.

#### What are the City of Edmonton results?

The 2008 average travel time per kilometre on the selected corridors is 68 +/- 7 seconds. The 2010 average travel time per kilometre on the selected corridors is 74 +/- 6 seconds. As both truck and commuter traffic volumes increase, it is anticipated that overall travel times may gradually increase.

Data was not collected in 2009.

#### Travel Time and Variability on Goods Movement Corridors

Corridor (see map, left)	2008 Time per kilometre (s/km)	2008 Variability (+/-s)	2010 Time per kilometre (s/km)	2010 Variability (+/-s)	Weighting based on truck volumes)
Yellowhead Trail	64.7	6.0	70.3	4.8	50%
Whitemud Drive	48.9	3.5	49.2	1.6	30%
75 Street	95.7	19.1	117	12.5	10%
170 Street	116.6	11.2	122.3	17.0	10%
Aggregate Corridors	68.2	7.08	73.8	5.86	

#### Are there any policy implications?

• There are no policy implications.

#### Additional Highlights

Goods and service movement vehicles are more sensitive to changes in variability.

Permitting trucks to travel on 75 Street between 90 Avenue and 98 Avenue would reduce travel time for goods movement and would improve variability.

#### **CORPORATE OUTCOME 4.3**

The transportation system is integrated, safe and gives citizen choice to their mode of movement

#### **CORPORATE MEASURE**

4.3.1 Rate of collisions at intersections per 1,000 population

#### Lead Department

**Champion** Bob Boutilier

#### Lead Department

Transportation

#### What does it mean?

This indicator tells us how many vehicle collisions in intersections are reported annually as a rate proportional to the population of Edmonton. Collisions are defined as all police-reported collisions on public property with greater than \$1,000 damage, or that result in an injury or fatality, which is based on provincial collision reporting requirements. Note that the requirement for reporting collisions is changing and this will affect the definition of what is reported as a collision.

### What are the administration's recommended targets?

#### 3-year Recommended Target:

• 15.8 vehicle collisions at intersections per 1,000 population

#### 10-year Recommended Target:

• 13.5 vehicle collisions at intersections per 1,000 population

#### What are the City of Edmonton results?

#### Rate of Vehicle Collisions at Intersections



	2005	2006	2007	2008	2009
Collisions	10,993	13,286	14,232	13,722	13,137
Population	712,391	730,372	741,392	752,412	782,439

#### Are there any policy implications? There are no policy implications.

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#### Additional Highlights

Direct costs of collisions in 2007 were in the order of \$473,000,000. Direct costs of collisions in 2009 were in the order of \$433,000,000. These costs were calculated using the method outlined in the February 2010 Capital Region Intersection Safety Partnership Cost of Collisions Report. Costs included were property damage costs, emergency response costs, health services costs, miscellaneous costs, travel delay and pollution costs, and short-term productivity costs.

4.3.2 Rate of transportation-related injuries per 1,000 population

#### Lead Department

**Champion** Bob Boutilier

#### Lead Department

Transportation

#### What does it mean?

This indicator tells us how many collisions resulting in injuries (including minor injuries, major injuries and fatalities) were reported in Edmonton as a result of people using the transportation system annually, as a rate proportional to the city's population.

### What are the administration's recommended targets?

#### 3-year Recommended Target:

• 7 or fewer transportation related injuries per 1,000 population

#### 10-year Recommended Target:

• 7 or fewer transportation related injuries per 1,000 population

#### What are the City of Edmonton results?

Transportation related Injuries are currently reported as motor vehicle collision related injuries as data is not collected for other modes.

#### Rate of Transportation Related Injuries



	Injury Rate per 1000		Injuries as a result of a motor
City	Population	Population	vehicle collision
Vancouver	1.98	611,869	1212
Calgary	2.33	1,065,455	2487
Montreal	3.08	1,896,206	5831
Winnipeg	4.22	678,554	2862
Ottawa	4.47	895,000	4000
Hamilton	4.68	504,559	2362
Toronto	6.24	2,645,980	16505
Edmonton	6.65	782,439	5203

Source: *Injury, Collision Summary Leaflet.* City of Toronto, Transportation Services, Traffic Management Centre, Traffic Safety Unit, March 2010.

#### Are there any policy implications?

• There are no policy implications.

#### Additional Highlights

Promoting an urban form that emphasizes transit, walking, and cycling has the potential to reduce injuries related to transportation.

4.3.3 Rate of Criminal Code incidents on transit per 100,000 rides

#### Lead Department

**Champion** Bob Boutilier

#### Lead Department

Transportation

#### What does it mean?

This indicator tells us how many Criminal Code incidents were reported on transit as a rate per 100,000 ridership.

Criminal Code incidents are incidents that are specified in the Criminal Code of Canada, including assault, homicide, sexual assault, robbery, weapons offences, harassment/stalking, or threatening. Incidents not included in this measure are those listed in provincial or municipal legislation such as open liquor or fare evasion.

### What are the administration's recommended targets?

Targets are based on a 2% annual decrease in Criminal Code incidents per 100,000 riders on transit.

#### 3-year Recommended Target

• The three-year recommended target is 1.02 incidents per 100,000 ridership

#### 10-year Recommended Target

• The ten-year recommended target is 0.87 incidents per 100,000 ridership

### What are the City of Edmonton results?

#### **Rate of Criminal Code Incidents**

Per 100,000 Ridership 📃 Past Performance 📃 Target



#### Are there any policy implications?

• There are no policy implications.

#### Additional Highlights

The overall number of criminal code incidents per capita in the city has been decreasing since 2008.

4.3.4 Proportion of Missing Links of Sidewalk and Shared-use Paths constructed in existing areas of the City

#### Lead Department

**Champion** Bob Boutilier

#### Lead Department

Transportation

#### What does it mean?

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. Providing more pedestrian infrastructure provides people with more options for walking and connecting to transit.

### What are the administration's recommended targets?

#### 3-year Recommended Target

• 60 km of sidewalks and shared use paths to be constructed.

#### 10-year Recommended Target

- 200 km of sidewalks and shared use paths to be constructed.
- Meeting the 10-year target would contribute to the 10-year infrastructure plan of the Sidewalk Strategy which is one aspect of the Sidewalk Strategy.

These targets are considered aspirational.

#### What are the City of Edmonton results?

Progress results are not yet available.

#### Are there any policy implications?

• The Active Transportation Strategy, Policy Number C544, supports this goal.

#### Additional Highlights

Providing pedestrian infrastructure will provide people with the opportunity to walk more often which in turn can shift the city's mode split.

A large portion of the sidewalks to be constructed is in industrial areas.

4.3.5 Proportion of total planned kms of on-street cycling facilities implemented

#### Lead Department

**Champion** Bob Boutilier

#### Lead Department

Transportation

#### What does it mean?

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), the City has been able to construct. Constructing connections within this network further integrates the city's transportation system as a whole. Providing more cycling infrastructure provides people with more options for biking.

### What are the administration's recommended targets?

#### 3-year Recommended Target

• 120 km of the on-street cycling network constructed.

#### 10-year Recommended Target

- 400 km of the on-street cycling network constructed.
- Meeting the 10-year target would contribute to the 10-year infrastructure plan of the Bicycle Transportation Plan which is one aspect of the Bicycle Transportation Plan.

These targets are considered aspirational.

#### What are the City of Edmonton results?

18 km of the on-street cycling network have been constructed since the 2009 Bicycle Transportation Plan was developed.

#### Are there any policy implications?

• The Active Transportation Strategy, Policy Number C544, supports this goal.

#### Additional Highlights

Providing cycling infrastructure will provide people with the opportunity to cycle more often which in turn can shift the city's mode split.

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Information on the City of Edmonton is available through the internet www.edmonton.ca

Inquiries may also be directed to:

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