PROGRESS MEASURES

THE WAY WE MOVE

JUNE 2010

DRAFT

THE CITY OF Edmonton

TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE

EXECUTIVE SUMMARY

The Way We Move is the City of Edmonton's Transportation Master Plan (TMP) that establishes a framework for how the City will address its future transportation needs. The TMP provides strategic direction for planning, designing, building, and operating the City of Edmonton's transportation system for the next thirty years.

The TMP has two companion documents: an Implementation Plan, which lays out the immediate-term transportation priorities for the City, and a Progress Measures Report, which provides insight into the City's progress towards the TMP Strategic Goals.
The seven TMP Strategic Goals define the horizon that Edmonton is travelling towards. The Goals are highly interrelated, and so success in meeting any one of these goals will require progress towards the other goals as well.

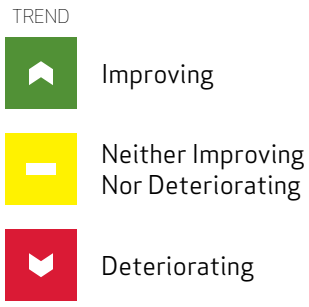
Progress measures are a way of monitoring progress toward the Goals and a way of gathering information to make well-informed decisions that will be reflected in the Corporate Budget Cycles, Capital Priorities Plans and Operating Budgets.

The Progress Measures Report outlines progress measures for each of the TMP's Strategic Goals. Similar to the Strategic Goals themselves, the progress measures are also interrelated and have been assigned to the goals whose progress they monitor most directly.

Fundamentally, progress measures provide the link between policies and the day-to-day actions of the organization, and thus enable the TMP to continue to inform the City's work. This linkage is reflected and will continue to be reflected in TMP Implementation Plans. The TMP Progress Measures Report will be updated annually.

The Progress Measures Summary Chart on the following pages summarizes the trend associated with each of the progress measures. Detailed descriptions and explanations for each measure are provided further on in this report. The trend for each measure is based on the last several sets of data; where multiple sets of data are not available, no trend is given.

The following symbols are used in the Summary Chart to describe the status of each progress measure:



PROGRESS MEASURES SUMMARY CHART

TRANSPORTATION AND LAND USE INTEGRATION

TREND	
	Average Commute Distance
	Proportion of Population and Employment near LRT Nodes, Transit Centres, and Transit Avenues
	Proportion of New Development that is Transit Oriented Development

ACCESS AND MOBILITY

TREND	
	Proportion of Missing Links of Sidewalk and Shared-Use Paths Constructed in Existing Areas of The City
	Proportion of Total Planned Kilometres of On-Street Cycling Facilities Implemented
	DATS Ride Accommodation Rate
	Number of Transportation Supply Management Tools Implemented
	Travel Time and Reliability for Goods and Services Movements on Select Corridors
	Travel Time and Reliability for Public Transit Between Select Origins and Destinations

TRANSPORTATION MODE SHIFT

TREND	
	Overall Mode Split
	Commute to Work Mode Split
	Transit Ridership per Capita
	Vehicle Registrations per Capita

SUSTAINABILITY

TREND	
↓	Transportation Sector Greenhouse Gas Emissions per Capita
	Transportation Infrastructure Gap
↓	Proportion of Average Edmonton Household Expenditures that are Spent on Transportation

HEALTH AND SAFETY

TREND	
↑	Rate of Vehicle Collisions at Intersections per 1,000 Population
↑	Rate of Transportation-Related Injuries per 1,000 Population
↑	Rate of Criminal Code Incidents on Transit per 100,000 Rides

WELL-MAINTAINED INFRASTRUCTURE

TREND	
	Condition Rating Distribution for Arterial Roads
	Condition Rating Distribution for Neighbourhood Roads
	Condition Rating Distribution for Bridges
↑	Proportion of Instances of Snow Removal from Major Roads within 48 hours of a Weather Event

ECONOMIC VITALITY

TREND	
↑	Number of People Entering the Downtown by All Modes
	Results of Satisfaction Survey of Edmonton Businesses

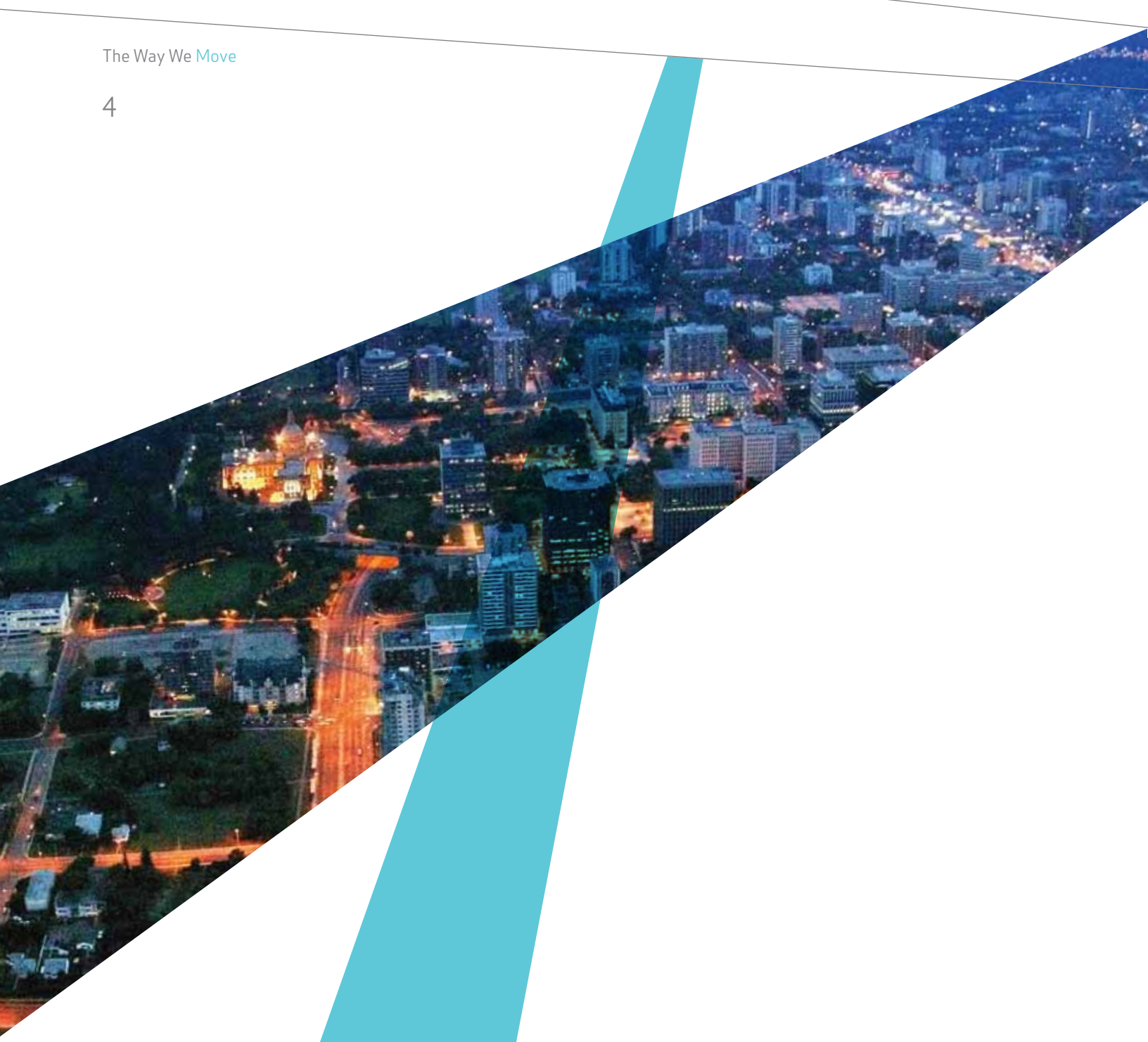


TABLE OF CONTENTS

1.0 INTRODUCTION

1.1 What is *The Way We Move*?

The Way We Move is the City of Edmonton's Transportation Master Plan (TMP) that establishes a framework for how the City of Edmonton will address its future transportation needs. Edmonton is the fifth largest of Canada's municipalities with a population of approximately 780,000 in 2009. It is part of a thriving region which currently includes over one million people.

Over the next 30 years, Edmonton's population is expected to exceed one million people, while the region is anticipated to exceed a population of 1.6 million people. This growth will bring about enormous levels of change and challenge as the City delivers services to many new people, businesses and industries.

The *The Way We Move* reflects citizens' values and directs appropriate decision-making, while considering the long-term and often indirect impacts of those decisions. Its Strategic Goals, Objectives, and Actions give direction for the management of the transportation system, and provide a basis for making strategic planning and budgetary decisions.

The Way We Move was approved by Edmonton City Council in September 2009. It was developed together with the City's Municipal Development Plan (MDP), *The Way We Grow*, which establishes the City's policy direction for future land development and redevelopment decisions. This acknowledges that land use and transportation are inextricably linked, and that they must be approached in an integrated manner. As a result, the seven TMP Strategic Goals align closely with the Strategic Goals of the MDP.

1.2 The Progress Measures Report

The Way We Move provides strategic direction for planning, designing, building, and operating the City of Edmonton's transportation system for the next thirty years. *The Way We Move* has two companion documents: an Implementation Plan, which lay out the plans, policies, and projects for the City, and a Progress Measures Report, which provides insight into the City's progress towards the TMP Strategic Goals. The Progress Measures Report will be updated annually, and the Implementation Plan will be updated every three years to align with the City's budget cycle.

The seven TMP Strategic Goals define the horizon that Edmonton is travelling towards. They are highly interrelated, and so success in meeting any one of these goals will require progress towards the other goals as well. Measures have been assigned to the goals whose progress they monitor most directly.

THE WAY WE MOVE STRATEGIC GOALS

Transportation & Land Use Integration
Access and Mobility
Transportation Mode Shift
Sustainability
Health and Safety
Well-Maintained Infrastructure
Economic Vitality

THE WAY WE GROW STRATEGIC GOALS

Sustainable Urban Form
Integrated Land Use & Transportation
Complete, Healthy & Liveable Communities
Urban Design
Supporting Prosperity
Natural Environment
Working Within Our Region
Managing Land and Resources
Food and Urban Agriculture

1.3 What are Progress Measures?

Progress measures are a way of monitoring progress toward a result or goal and a way of gathering information to make well-informed decisions. Good performance measures should:

- Reflect various goals and perspectives
- Effectively indicate how well goals and objectives are met
- Be clearly defined
- Be simple, understandable, logical, and repeatable
- Allow supporting data to be collected economically
- Be suitable for trend and comparative analysis
- Be accessible, understandable, and useful to decision-makers and other stakeholders

Context provides progress measures with meaning, so it is very important to define success clearly, and to identify the limitations of the selected methods of measurement. Where possible, measures have been developed to take advantage of data that the City already collects, and otherwise where data is cost-effective to obtain. In addition, measures were developed to align with the City's other strategic documents. Finally, some measures have been developed to align with those reported by other jurisdictions, to allow for comparisons.

1.4 A Guide to this Document

For six of the seven TMP strategic goals, progress measures have been selected to report on the actions that will be taken by the City to achieve the goals. For the TMP goal "Sustainability", three statistics have been selected to reflect broad trends in the environmental, financial, and social sustainability of the transportation system in Edmonton.

The Way We Move Progress Measures Report is organized by Strategic Goal, in the same order that they are presented in the TMP itself. The document includes 22 progress measures and 3 statistics, representing the seven Strategic Goals of the Transportation Master Plan. Currently, 4 of the 25 indicators are future measures, for which data does not yet exist. Those measures have been described and are in development in collaboration with *The Way We Grow* for inclusion in future versions of this report.

Each section starts with the relevant goal statement, which is followed by a quick-reference table of the measures. Subsequent pages then provide brief explanations of each indicator. Where available, relevant background data from the past five years has been provided as a chart to illustrate recent trends.

Not all measures are reported annually, as the collection frequency for some data is less than once per year.


Careers Realized

2.0 ALIGNING WITH OTHER STRATEGIC PLANS

The Way We Move is guided by and meant to achieve the City Vision, which is a creative description of Edmonton's future. The Vision guides our decisions, helps us set direction and encourages us to align our priorities as we work to make Edmonton the city we want it to become in 2040. The City Vision is included as Appendix I.

To further focus the City's efforts on achieving the Vision, Council developed *The Way Ahead* which identified six 10-year Strategic Goals. These goals will direct long term planning for the City and help set priorities for the delivery and improvement of services, programs and infrastructure. The 10-year Strategic Goals are:

- Preserve and Sustain Edmonton's Environment
- Improve Edmonton's Livability
- Transform Edmonton's Urban Form
- Shift Edmonton's Transportation Mode
- Ensure Edmonton's Financial Sustainability
- Diversify Edmonton's Economy

The City of Edmonton is currently aligning its strategic planning processes to ensure an integrated and holistic approach toward city building over the next three decades. There are six corporate plans that will work together to achieve the City Vision, guided by *The Way Ahead*:

- *The Way We Green*
- *The Way We Live*
- *The Way We Grow*
- *The Way We Move*
- *The Way We Finance*
- *The Way We Prosper*

The implementation of the City Vision and *The Way Ahead* is being led by the Deputy City's Managers Office through a series of Corporate and Department Strategic Roadmaps. This document has been aligned with this process to date.

CITY VISION

THE WAY **AHEAD**

Strategic Goal
TRANSPORTATION AND LAND USE INTEGRATION

The transportation system and land use / urban design complement and support each other so that the use of transit and transportation infrastructure is optimized and supports best practices for land use.

Transportation and land use are inextricably linked and impact Edmonton's environmental, financial and social sustainability. New approaches to land use planning and development will allow people to live closer to where they want to go and closer to the high quality transit service they need to get there. Building communities around major transit infrastructure helps encourage transit use, develops a compact city, maximizes public infrastructure return on investment and minimizes Edmonton's carbon and ecological footprint.

This goal encompasses the following ideas:

- Designing complete communities - where citizens can work, live and access services, entertainment and recreation - reduces the need for automobile travel.
- Ensuring regional coordination of public transportation contributes to labour force mobility.
- Focusing business and industrial developments in close proximity to corridors that move goods and services is efficient, adds to the economic vitality of Edmonton and the Capital Region and reduces goods movement traffic through residential areas.

	MEASURE	TREND	REPORTING FREQUENCY
TL.1	**Average Commute Distance (Edmonton Region)**	Deteriorating	Every 5 Years; Federal Census
TL.2	**Proportion of Population and Employment near LRT Nodes, Transit Centres, and Transit Avenues**	[In Development in Collaboration with *The Way We Grow*]	[Undetermined]
TL.3	**Proportion of New Development that is Transit Oriented Development**	[In Development in Collaboration with *The Way We Grow*]	[Undetermined]

TL.1 Average Commute Distance

What does this progress measure tell us, and why is that important?

This progress measure tells us what the average straight-line distance is between households and their places of work for the Edmonton Region. Although only 26% of daily trips made by Edmontonians are commuting trips, these are the trips that set the traffic pattern for each day and result in the periods of vehicle traffic congestion. A decrease in the distance between home and work for Edmonton households reduces demand for transportation infrastructure and reduces vehicle emissions. A shorter average commute distance also ensures that many Edmontonians have a reasonable opportunity to use active modes such as walking or cycling to get to work.

Where are we today?

Currently, in the Edmonton Region, nearly 2/3 of people live within 10 km of their place of work, and fully 1/3 live within 5 km, as illustrated in figure TI.1-2. This is particularly relevant to mode choice decisions, as people are typically willing to walk no further than 3 km nor cycle more than 8 km. Between 1996 and 2006, the Edmoton Region's average commute distance gradually increased from 7.6 km to 7.8 km (Fig. TL.1-1). This can be attributed primarily to suburban development patterns that located residential development far away from primary employment centres.

Figure TL.1 - 1: Average Commute Distance Source: Statistics Canada

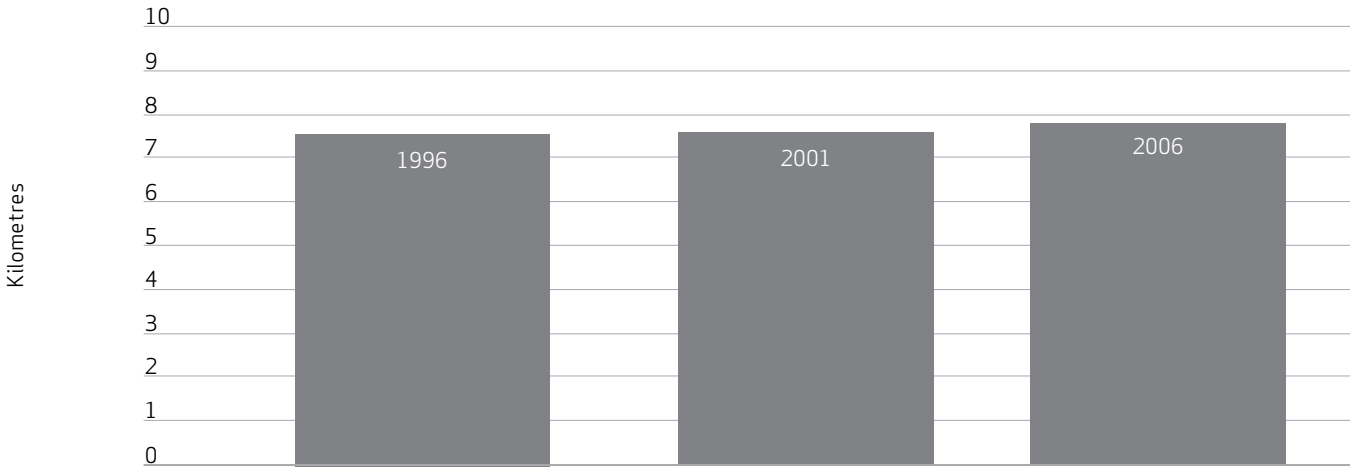


Figure TL.1 - 2: Distance from Home to Work, by Proportion of Population (2006) Source: Statistics Canada

TL.2 Proportion of Population and Employment near LRT Nodes, Transit Centres, and Transit Avenues

What does this progress measure tell us, and why is that important?

This indicator tells us how many people are living and working within a 5-10 minute walking distance of frequent transit service. Living and working within a short walk of convenient transit service allows residents to make their commute and other trips by walking to and from transit. This offers Edmontonians a healthier, more affordable, and environmentally sustainable transportation option. Increasing the number of people who have this opportunity means that a mode shift to transit becomes more practical for a larger proportion of Edmonton's population.

Where are we today?

This measure is currently in development in collaboration with *The Way We Grow*, Edmonton's Municipal Development Plan.

TL.3 Proportion of New Development that is Transit Oriented Development

What does this progress measure tell us, and why is that important?

This indicator tells us how many of the new housing units in Edmonton are built as Transit Oriented Development (TOD) annually. TOD maximizes Edmonton's return on investment from LRT expansion, and will provide Edmontonians with the opportunity to live in walkable, highly liveable communities, which may result in greater overall affordability, improved health, and reduced environmental impact. An increase in the proportion of TOD means that Edmonton is making more effective use of its land and transportation system.

Where are we today?

This measure is currently in development in collaboration with *The Way We Grow*, Edmonton's Municipal Development Plan.

Strategic Goal
ACCESS AND MOBILITY

The transportation system is interconnected and integrated to allow people and goods to move efficiently throughout the city and to provide reasonable access with a variety of modes for people across demographic, geographic, socio-economic and mobility spectrums.

Edmontonians' ability to move efficiently through the city helps define the city's livability. The economic prospects of both Edmonton and the Capital Region are affected by the efficient movement of people, goods and services. Edmonton's continuing role as a distribution and logistics centre is contingent upon an accessible and highly mobile transportation system. It is essential to the economy that commercial transportation vehicles are able to move freely throughout the region.

An accessible transportation system addresses the transportation needs of a diverse urban population regardless of mobility challenges or vehicle ownership. A twelve year old who needs to travel alone, a person living with physical or cognitive challenges, or a senior citizen should feel confident that their city's transportation system meets their needs. The ability of the growing senior population to age in place is dependent upon a transportation system that offers them a full range of options that are connected and integrated with each other.

Creating more livable complete communities where jobs, retail, medical, recreational, cultural and entertainment services are integrated within residential areas will help minimize the need to travel greater distances, increase the viability of all transportation modes and will help reduce overall vehicle traffic volumes.

	MEASURE	TREND	REPORTING FREQUENCY
AM.1	**Proportion of Missing Links of Sidewalk and Shared-Use Paths Constructed in Existing Areas of the City**	[No trend data]	Annually
AM.2	**Proportion of Total Planned Kilometres of On-Street Cycling Facilities Implemented**	[No trend data]	Annually
AM.3	**DATS Ride Accommodation Rate**	Neither improving nor deteriorating	Annually
AM.4	**Number of Transportation Supply Management Tools Implemented**	[No trend data]	Annually
AM.5	**Travel Time and Reliability for Goods and Services Movements on Select Corridors**	[No trend data]	Bi-Annually
AM.6	**Travel Time and Reliability for Public Transit Between Select Origins and Destinations**	[In Development]	[Undetermined]

AM.1 Proportion of Missing Links of Sidewalks and Shared-Use Paths Constructed in Existing Areas of the City

What does this progress measure tell us, and why is that important?

This progress measure 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 to fill gaps in the existing pedestrian network. Sidewalks are the basic infrastructure required to support walking and transit use. Shared-use paths are trails and sidewalks on which it is legal to ride a bicycle, and are marked with shared-use signs. However many areas in the city have discontinuous links. Increasing and maintaining a robust program of pedestrian infrastructure construction means that more people will have the opportunity to use an accessible network of active mode facilities.

Where are we today?

This progress measures is informed by the Sidewalk Strategy (2009), which provides criteria for assessing which absent sidewalks are 'missing' – that is, which absent sidewalks would provide meaningful connections if constructed. Missing links in the pedestrian network have been identified across the city, in residential, commercial, and industrial areas. In many locations, the City is able to meet pedestrian needs while accommodating all other active modes, including cycling, by building shared-use pathways instead of sidewalk.

2010 will be the first construction year for the Sidewalk Strategy. Progress will be reported in future versions of this report.

AM.2 Proportion of Total Planned Kilometres of On-Street Cycling Facilities Implemented

What does this progress measure tell us, and why is that important?

This progress measure tells us what proportion of the total length of on-street cycling routes the City has been able to construct to date. The planned network of on-street cycling facilities is comprised of 400 km of routes in a grid with approximately 3.2 km spacing, so that cyclists are never more than a 5 minute bike ride from a route. These on-street cycling routes will include a variety of facility types, including bike lanes, shared-use pathways, and sharrows. Maintaining a robust program of on-street cycling facility construction means that a well connected network of cycling routes will be available to an increasing number of Edmontonians.

Where are we today?

This progress measures is informed by the Bicycle Transportation Plan Update (2009), which describes a cross-city network of on-street cycling facilities of approximately 400 km in length. While none of the network is yet built, significant construction is anticipated for 2010.

2010 will be the first construction year for the Bicycle Transportation Plan Update. Progress will be reported in future versions of this report.

AM.3 Disabled Adult Transit Service (DATS) Ride Accommodation Rate

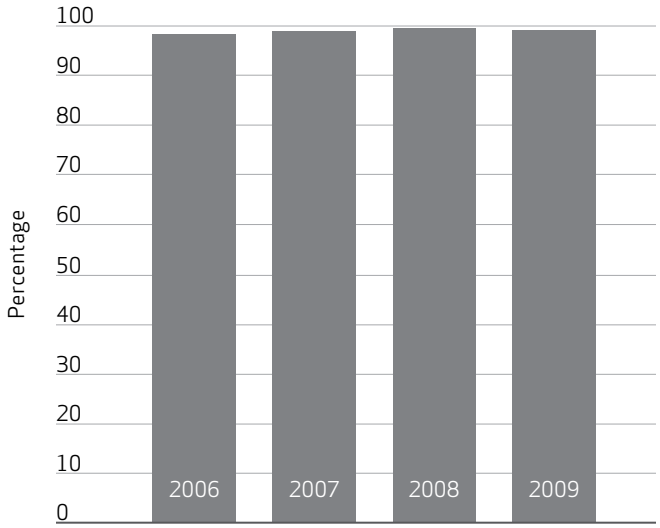
What does this progress measure tell us, and why is that important?

This progress measure tells us what proportion of calls for service DATS was able to provide. Improvements to the accessibility of Edmonton Transit's regular service can help to provide transit service to a greater range of Edmontonians, and 100% of the transit fleet is now low-floor. However, some people have mobility challenges that require additional assistance or specialized vehicles. Maintaining a high ride accommodation rate means that DATS has been able to provide service upon request.

Where are we today?

The DATS ride accommodation rate for the past few years has increased to over 99%.

Figure AM.3: Ride Accommodation Rate



AM.4 Number of Transportation System Management Tools Implemented

What does this progress measure tell us, and why is that important?

This progress measure tells us how many transportation system management tools have been added to the City's traffic management system on an annual basis. Tools include cameras, electronic signage, traffic signals, and traffic flow detectors. Investments in transportation system management tools help to maintain the efficiency of the roadways and allow for increased traffic volumes without further expansion of the roadway network.

Where are we today?

In 2008, an atypical number of tools were implemented as part of the major infrastructure projects related to Whitemud Drive and the Quesnell Bridge. However, 2009 saw a more typical annual investment.

Figure AM.4: Transportation System Management Tools

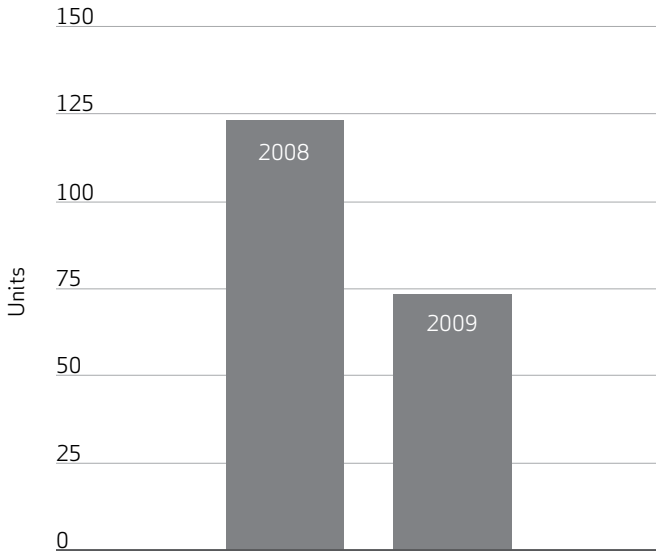


PHOTO BY HEIDI GERMANN

AM.5 Travel Time and Reliability for Goods and Services Movements on Select Corridors

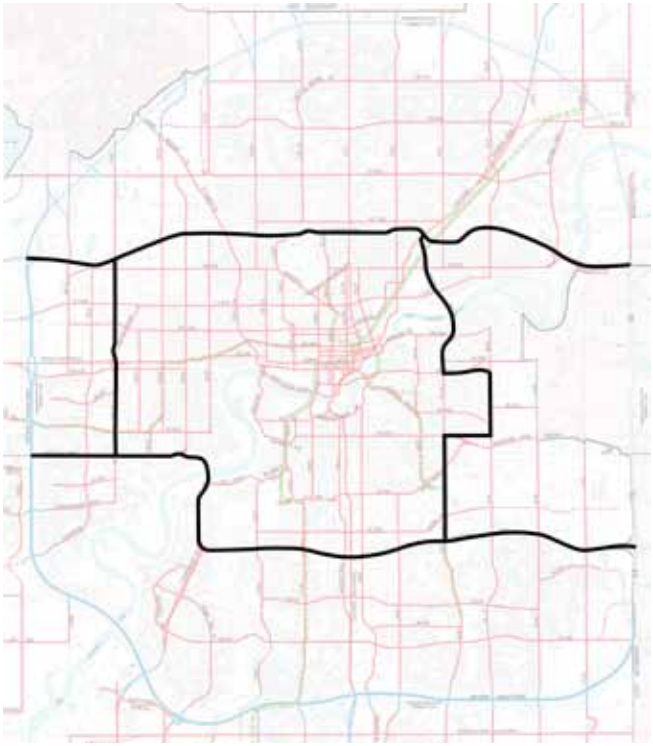
What does this progress measure tell us, and why is that important?

This progress measure gives us a weighted average of both the vehicle travel time per kilometre and travel time reliability per kilometre. The four corridors that are included are: Yellowhead Trail, Whitemud Drive, 75 Street, and 170 Street. The measure is given 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 volumes. The 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 variability of trips on goods movement corridors means that businesses in Edmonton and the Capital Region have access to an efficient and effective transportation network.

Where are we today?

The current average travel time per kilometre on the selected corridors is 68 seconds, with a variability of +/- 7 seconds. As both truck and commuter traffic volumes increase, it is anticipated that overall travel times may gradually increase.

Figure AM.5: Goods Movement Travel Time Corridors



AM.6 Travel Time and Reliability for Public Transit Between Select Origins and Destinations

What does this progress measure tell us, and why is that important?

This progress measure tells us how many minutes it takes for a transit trip, and how reliable that time is between select origins and destinations. Improving the competitiveness of transit travel times and reliabilities are a means of making transit travel more attractive to citizens. Maintaining good transit travel times and improved reliability on these select corridors increases the attractiveness of taking transit.

Where are we today?

This measure is currently in development.

PHOTO BY DAVE COURNOYER


ETS
SOUTH
CAMPUS
13c

Strategic Goal
TRANSPORTATION MODE SHIFT

Public transportation and active transportation are the preferred choice for more people making it possible for the transportation system to move more people more efficiently in fewer vehicles.

Encouraging fewer single occupant vehicle trips reduces the pressure on the roadway system and reduces the need for increased roadway investment. Moving more people in proportionately fewer vehicles adds to overall transportation system efficiency, minimizes environmental impacts and maximizes the effectiveness of financial investments in the transportation system. It also increases the efficiency of goods movement.

Mode shift will be incremental. For example, more families could choose to own one automobile instead of two because they will be confident that other transportation modes will enable them to move conveniently throughout the city. Shifts in transportation modes will yield a significant benefit to personal and urban health and to environmental sustainability.

	MEASURE	TREND	REPORTING FREQUENCY
TM.1	**Overall Mode Split**	2005 Auto Driver: +2.6% Passenger: -3.0% Transit: 0% Walk: -0.2% Cycle: +0.5%	Every 10 years; Household Travel Survey
TM.2	**Commute to Work Mode Split (Edmonton Region)**	2006 Auto Driver: -1.9% Passenger: +0.9% Transit: +0.7% Walk: +0.1% Cycle: 0%	Every 5 years; Federal Census
TM.3	**Transit Ridership per Capita**	Neither improving nor deteriorating	Annually
TM.4	**Vehicle Registrations per Capita**	Neither improving nor deteriorating	Annually

TM.1 Overall Mode Split

What does this progress measure tell us, and why is that important?

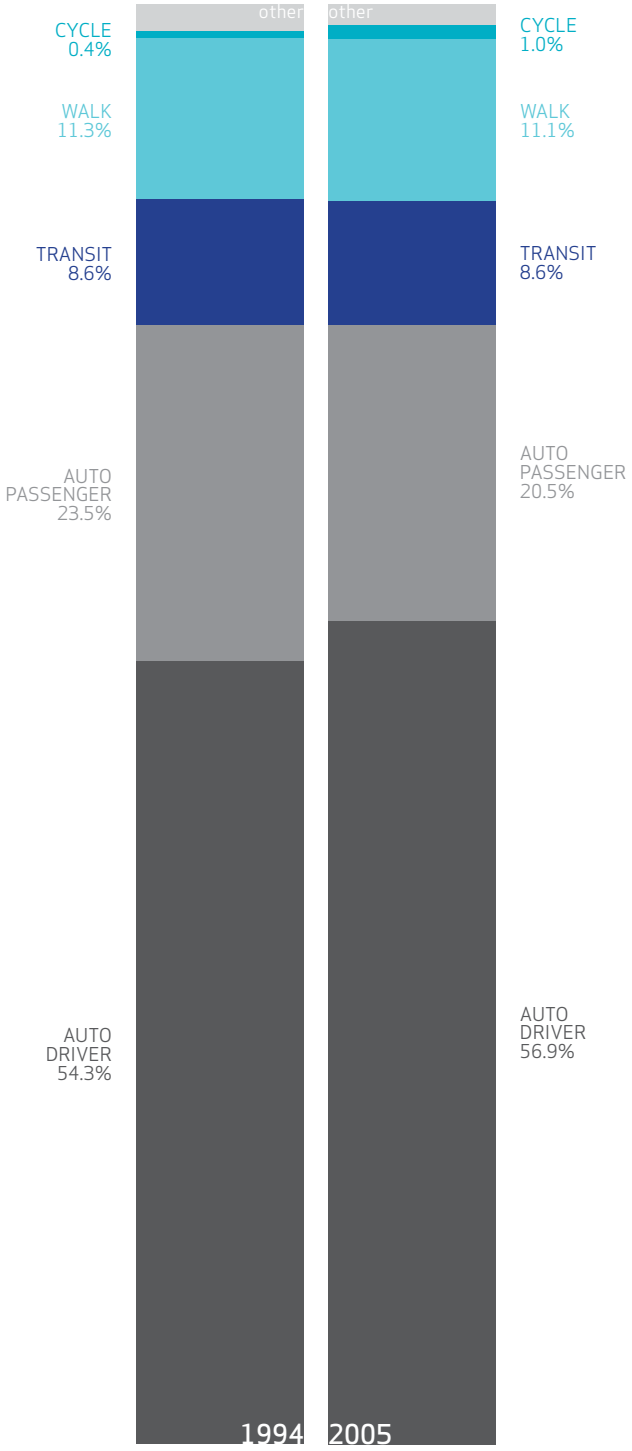
This progress measure tells us, based on an average day in Edmonton, the proportions of all daily trips that are made by the various modes of transportation. Disproportionate use of automobiles has a large negative impact on environmental sustainability. In addition, Alberta Health Services has reported on the link between automobile dependence and negative influences on population health ("Designing Healthy Places", Sept 2007), and so encouraging greater use of walking and cycling can help improve the health of Edmontonians. Reducing automobile dependence could also help mitigate Edmontonians' susceptibility to fuel price volatility, and shifting away from automobile use helps reduce exposure to vehicle collisions. Shifting from driving alone to riding transit, walking, and cycling more means that Edmontonians are making more efficient and effective use of the transportation system.

Where are we today?

Between the 1994 and 2005 Household Travel Surveys the total number of trips made by Edmontonians on an average day increased from 2,255,000 to 2,565,000. During that time, the proportion of trips made by driving alone increased, however the overall proportion of trips made by automobile remained essentially unchanged at nearly 80% as of 2005. The 'business as usual' projection for the next 10 years anticipates that this trend would continue, with driving increasing as a share of the total mode split. Since driving alone actually decreased for commute to work trips (see Figure TM.2), a focus on shifting off-peak travel patterns is clearly important to influencing the overall mode split. One goal of of *The Way We Move* and *The Way We Grow* is to reverse this trend.

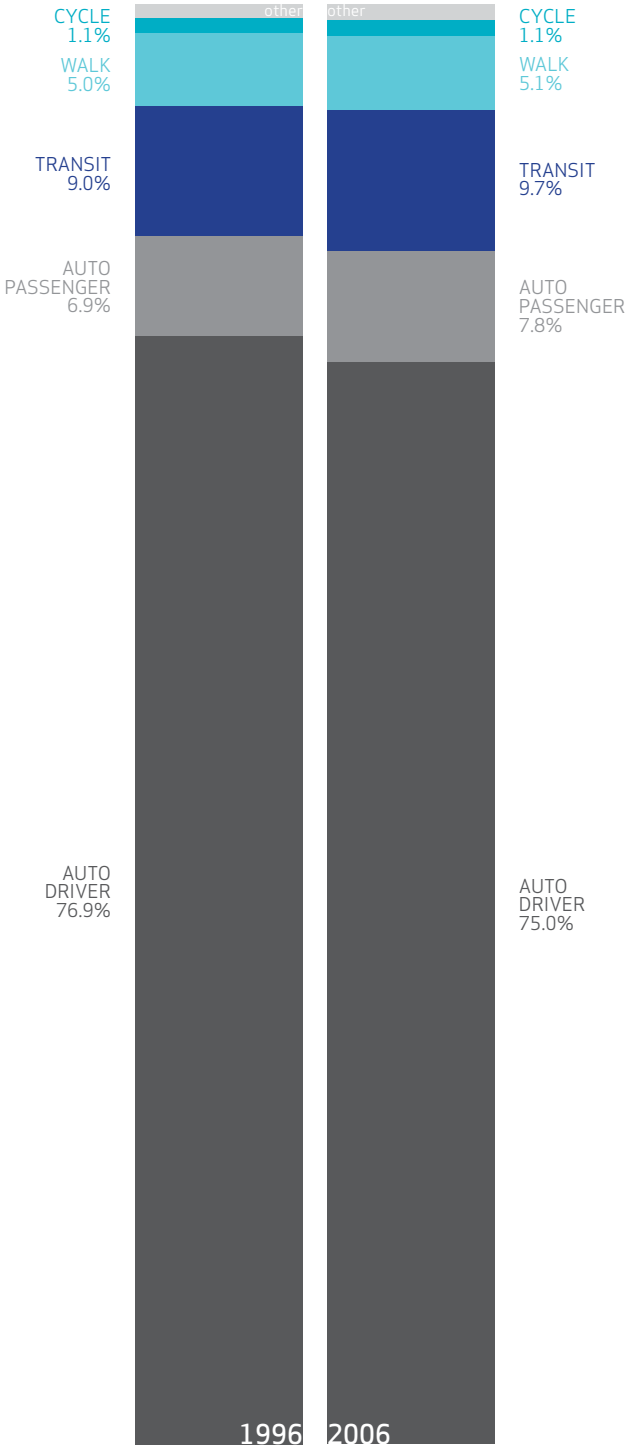
The most recent data for the overall mode split is from 2005. Gathering current data would allow the City to determine this measure's status and validate the target.

Figure TM.1: Overall Mode Split



TM.2 Commute to Work Mode Split

Figure TM.2: Commute to Work Mode Split



What does this progress measure tell us, and why is that important?

This progress measure tells us, based on an average day in the Edmonton Region, the proportions of commute to work trips that are made by the various modes of transportation. Although only 26% of daily trips made are commute to work trips, these are the trips that set the traffic pattern for each day, resulting in the periods of vehicle traffic congestion, thus influencing the capacity requirements of the transportation network, and impacting goods and service movements.

Where are we today?

As of the 2006 Federal Census, more than 3/4 of commuting trips in the Edmonton Region are made by driving alone. This was a slight decrease in the Auto Driver mode share from the 1996 Federal Census, and was balanced by slight increases in both Auto Passenger and Transit mode shares. Walking and Cycling mode shares remained essentially unchanged. While this trend would continue to gradually reduce the Auto Driver mode share, through the implementation of *The Way We Move* and *The Way We Grow* this trend can be accelerated.

The most recent data for the commute to work mode split is from the 2006 Federal Census, and in order to illustrate the trend, is given for the Census Metropolitan Region. For Edmonton alone in 2006, driving alone was 5% lower, and transit use was 4% higher. Gathering current data would allow the City to determine this measure's status and validate the target.

TM.3 Public Transit Ridership per Capita

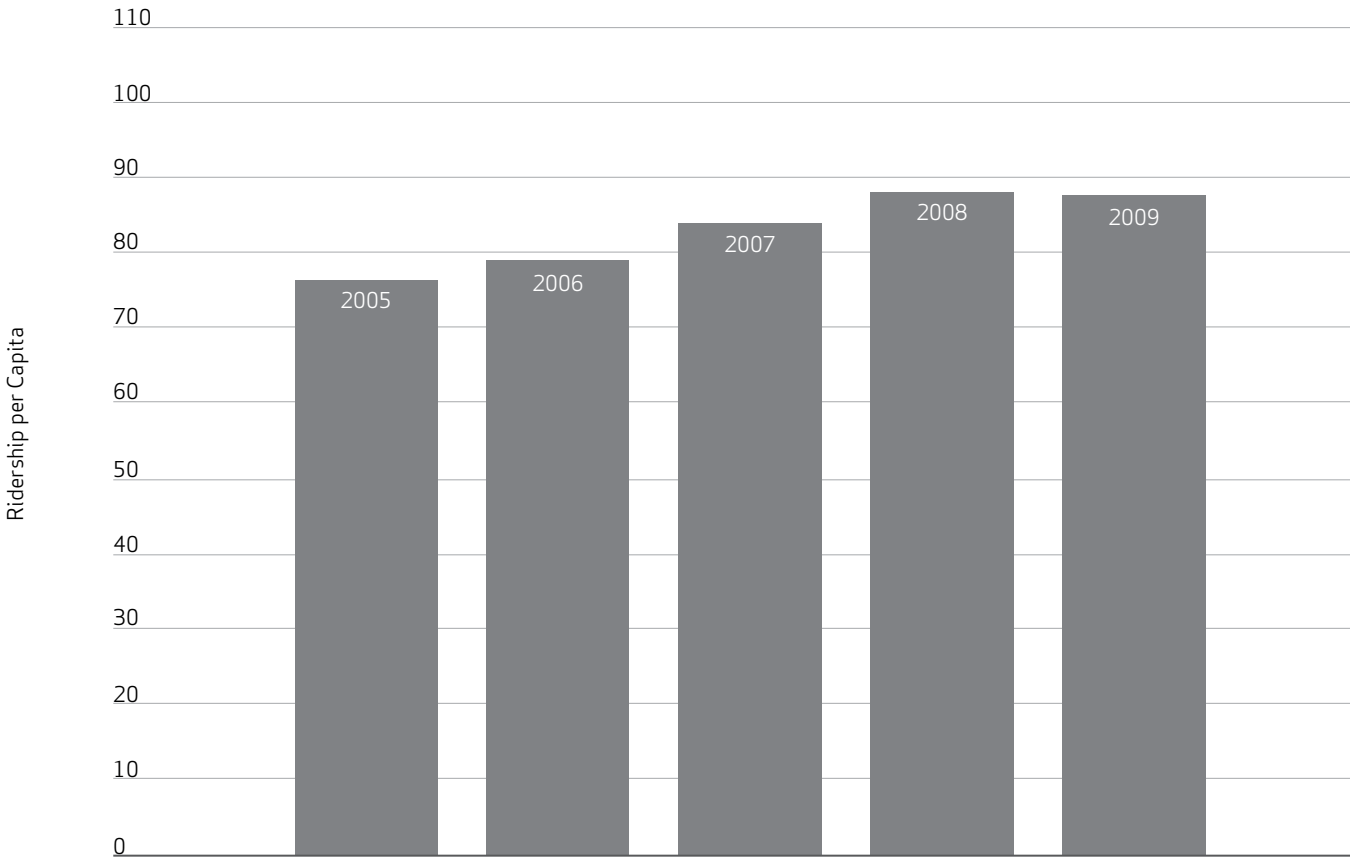
What does this progress measure tell us, and why is that important?

This progress measure tells us how many rides are made annually on transit as a rate proportional to Edmonton's population. Ridership per capita is an indication of the effectiveness of Edmonton's public transit, which is one of the most efficient means of transporting large numbers of people in an urban environment. Increasing transit ridership per capita means that more people are taking transit, and implies that a greater proportion of daily trips are being made by transit.

Where are we today?

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. In addition, the extension of the LRT system to South Campus and beyond has also increased transit use. In 2009, transit ridership had stabilized at approximately 87.5 rides annually per capita.

Figure TM.3: Public Transit Ridership per Capita



TM.4 Vehicle Registrations per Capita

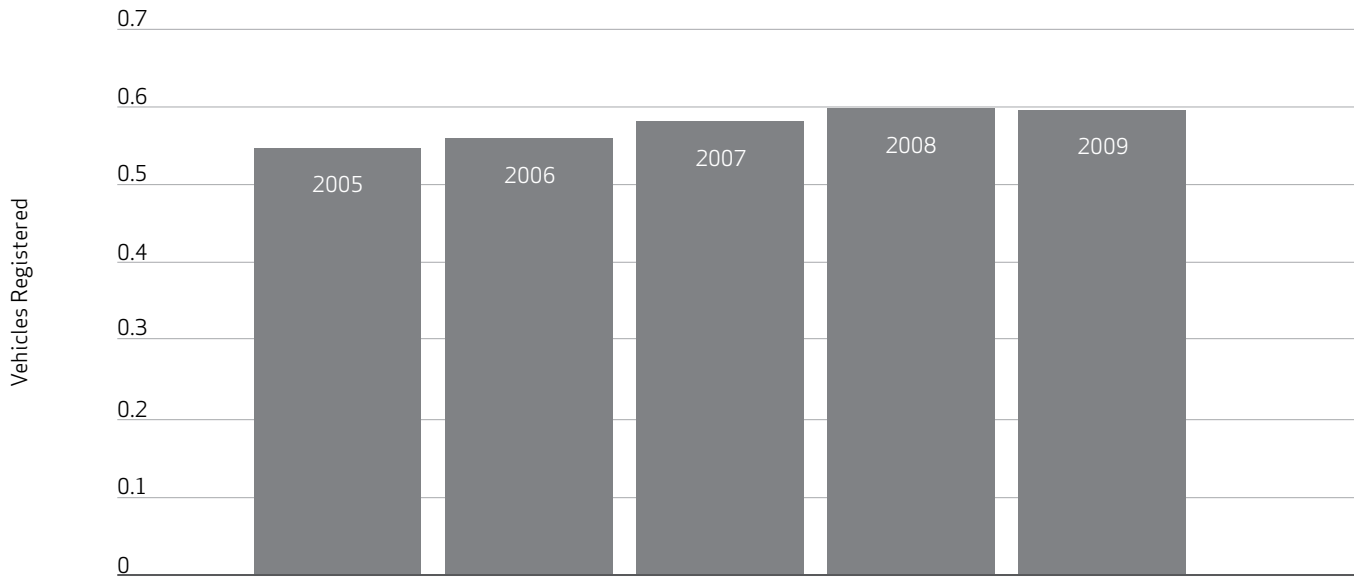
What does this progress measure tell us, and why is that important?

This progress measure tells us how many vehicles are registered to owners living in Edmonton as a rate proportional to the population of Edmonton. While other factors can influence the number of cars that people own, the per capita rate of vehicle registrations is directly related to automobile dependence. Evidence shows that increases in the number of vehicles registered result in more automobile trips being made. A decrease in the vehicle registration rate implies that citizens do not require as many vehicles for their day to day activities. For example, increased Transit Oriented Development may provide better access to transit, and thus allow more families to own one car instead of two. Improving access to other transportation modes enables similar opportunities across the city.

Where are we today?

While there are approximately 0.59 automobiles per capita in Edmonton. Many factors can influence this measure, for example a baby boom or the aging of the baby boomer demographic may decrease the proportion of the population able to drive. Vehicle registrations per capita is measured consistently across jurisdictions and so comparisons with other cities can be made.

Figure TM.4: Vehicle Registrations per Capita



Strategic Goal
SUSTAINABILITY

Transportation decisions reflect an integrated approach to environmental, financial, and social impacts thereby creating sustainable, livable communities that minimize the need for new infrastructure and increase residents' quality of life.

The way a city grows and how its population moves impacts its future livability and its environmental, financial and social sustainability. The most effective way to minimize the transportation system's environmental impact is to reduce the scope and scale of that system so it is easier to make sustainable transportation mode choices. How a city designs its transportation facilities, how the transportation system and land uses are integrated and the way people choose to travel affects a city's air, water, and land quality and impacts the natural environment.

Capital construction is the beginning of an ongoing financial commitment to operate and maintain a transportation system. A compact city requires a smaller and less costly transportation system. Integrating land uses and transit planning maximizes the effectiveness of taxpayer investment in infrastructure. Completing and servicing communities in succession rather than in parallel is a more efficient method of providing city infrastructure and services. Promoting the reuse and redevelopment of underutilized facilities that already exist will rejuvenate our neighbourhoods and help to optimize use of infrastructure, including investments in the transportation system.

Creating livable, complete communities where people of all ages and abilities have access to social, educational, recreational, employment and medical opportunities reduces the need to travel outside the community and adds to the social sustainability of individual neighbourhoods and the city as a whole.

	STATISTIC	TREND	REPORTING FREQUENCY
SU.1	**Transportation Sector Greenhouse Gas Emissions per Capita**	Deteriorating	Annually
SU.2	**Transportation Infrastructure Gap**	[No Trend Data]	Bi-Annually
SU.3	**Proportion of Average Edmonton Household Expenditures that are Spent on Transportation**	Deteriorating	Annually

SU.1 Transportation Sector Greenhouse Gas Emissions per Capita

What does this statistic tell us, and why is that important?

This statistic tells us what the greenhouse gas emissions of the transportation sector in Edmonton were annually per person, based on fuel sales in the city and electricity usage by City operations such as streetlights, traffic signals, and the LRT. Many different factors influence the amount of transportation sector greenhouse gases that are emitted, such as transportation mode choice, transit and land use integration, and the availability of a comprehensive range of transportation facilities. Shifting Edmontonians' transportation mode choices from driving to riding transit, walking, and cycling will significantly reduce GHG emissions in Edmonton. A decrease in greenhouse gas emissions would indicate that Edmonton is progressing towards one of its key goals for environmental sustainability.

Further information on the state of Edmonton's environment, and the role that the City plays, will be found in *The Way We Green*, which is currently in development.

Figure SU.1-1: Transport Sector Emissions per Capita

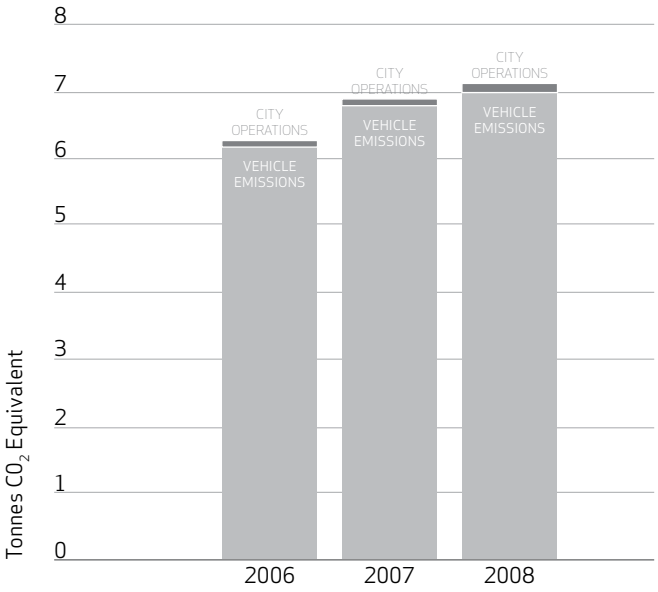
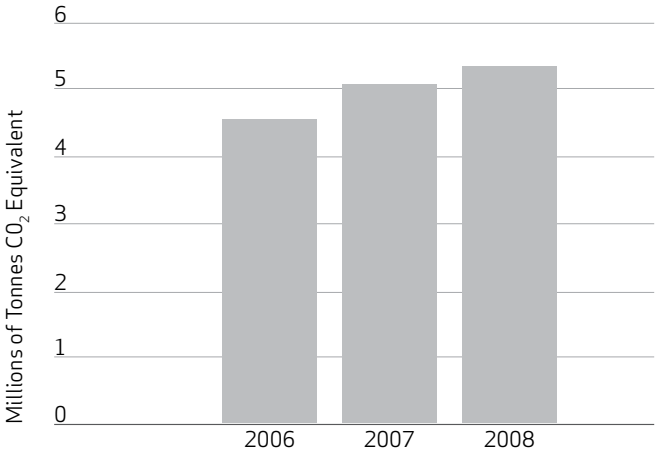


Figure SU.1-2: Total Transport Sector Emissions

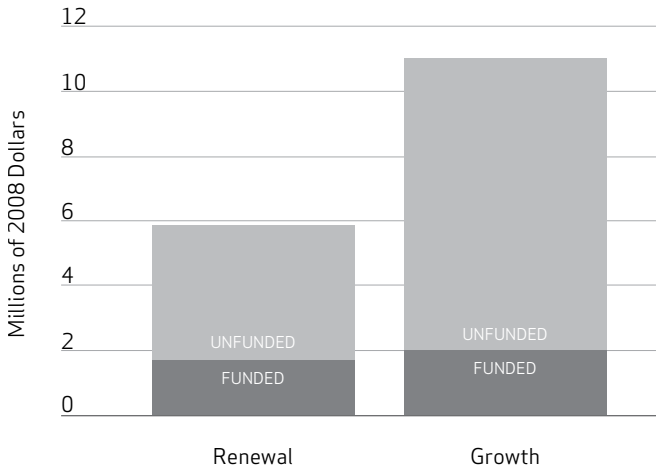


SU.2 Transportation Infrastructure Gap

What does this statistic tell us, and why is that important?

This statistic tells us the difference between the funds required for renewal and new construction of transportation-related capital infrastructure, and the total funded amount for those investments. A large infrastructure gap can result in poorly maintained infrastructure, which can mean that it costs much more to keep the roads safe and operational, and reduces livability of Edmonton's neighbourhoods. In addition, the city's economic vitality can suffer when new capacity is not provided for the movement of goods and services. Finally, if significant infrastructure for transit and active modes remains unfunded, it can be a barrier to mode shift. A decrease in the infrastructure gap would indicate that Edmonton is closer to one of its key goals for financial sustainability. The information in figure SU.2 is based on the 2008-2017 Preliminary 10-Year Capital Investment Agenda. Projects will be refined with future updates of the TMP Implementation Plan.

Figure SU.2: Transportation Infrastructure Gap



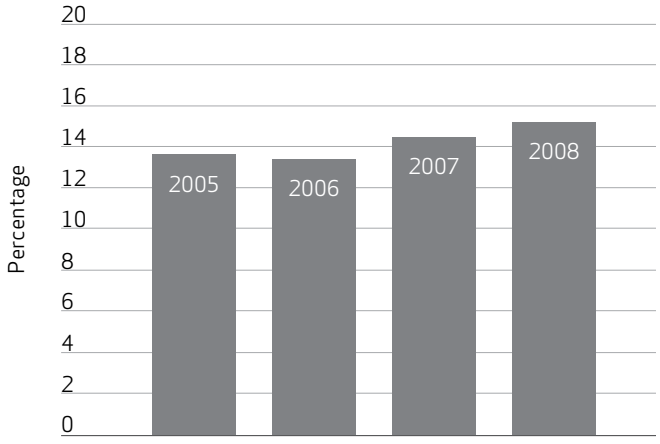
SU.3 Proportion of Average Edmonton Household Expenditures that are Spent on Transportation

What does this statistic tell us, and why is that important?

This statistic tells us, on average, what proportion of spending is on transportation related expenses annually, for an average household in the Edmonton Census Metropolitan Area. Transportation is the second largest expenditure (15.2%) of Edmonton households after shelter (18.3%) as a proportion of income. In general, land values and housing prices decrease with distance from the city centre. However, the added and potentially increasing cost of transportation may diminish the relative discount realized.

As compact neighbourhoods are built that have walkable streets, access to transit, and a wide variety of stores and services there will be increased choices for families. Although these types of developments may cost more for shelter, being able to walk, take transit and own fewer automobiles means a family can spend less on transportation costs. Further benefits may include shorter travel times, improved public health and reduced greenhouse gas emissions.

Figure SU.3: Proportion of Income Spent on Transport



Strategic Goal
HEALTH AND SAFETY

The transportation system supports healthy, active lifestyles, and addresses user safety and security including access for emergency response services, contributing to Edmonton's livability.

Community design, access to transportation opportunities and a transportation system that enables effective emergency response services affects individual, community and environmental health. Providing opportunities to safely incorporate physical exercise into daily activities in all four seasons contributes to improved livability, population health, and environmental sustainability.

Creating a city conducive to active transportation contributes to a strong sense of community. Increasing density and creating human scale, walkable communities increases citizen security by adding more eyes on the street. Walkable communities also appeal to people from a broad range of ages and abilities, thereby enhancing social health. Over the past several decades the number of children who walk to school has declined significantly. Creating and keeping more walkable, complete communities will encourage healthy, active lifestyles for future generations.

Edmonton's transportation system is one of its largest assets. The transportation system is a public amenity, and when it is designed to promote the movement of people rather than just vehicles, our transportation system can add to the enjoyment of urban living and have a positive impact on health and safety.

	MEASURE	TREND	REPORTING FREQUENCY
HS.1	Rate of Vehicle Collisions at Intersections per 1,000 Population	Improving	Annually
HS.2	Rate of Transportation-Related Injuries per 1,000 Population	Improving	Annually
HS.3	Rate of Criminal Code Incidents on Transit per 100,000 Rides	Improving	Annually

HS.1 Rate of Vehicle Collisions at Intersections per 1,000 Population

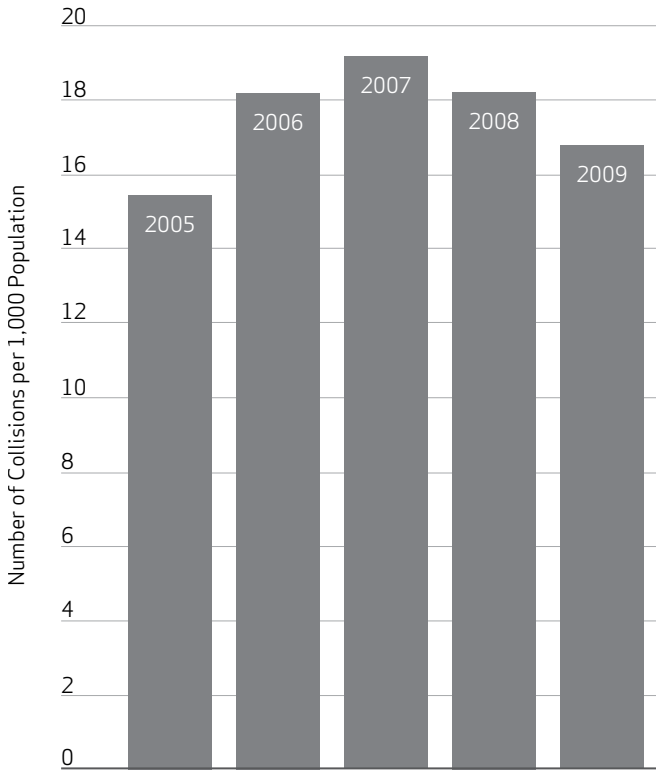
What does this progress measure tell us, and why is that important?

This progress measure tells us how many vehicle collisions in intersections are reported annually as a rate proportional to the population of Edmonton. Collisions have impacts beyond injuries, including property damage and perception of safety. Through the planning, design, operation, and maintenance of Edmonton's streets, the City has a strong influence on safety. A decrease in the number of collisions at intersections per capita is a necessary condition to reducing the magnitude of property damage from collisions, and implies that transportation safety in Edmonton has improved.

Where are we today?

Recently, the rate of vehicle collisions at intersections per 1,000 population in Edmonton has been decreasing from its 2007 high of nearly 19. Initiatives which may further reduce the collision rate include improving the design of right-turn cut-offs, addressing speeding in neighbourhoods, and addressing high collision locations.

Figure HS.1: Vehicle Collisions at Intersections



HS.2 Rate of Transportation-Related Injuries per 1,000 Population

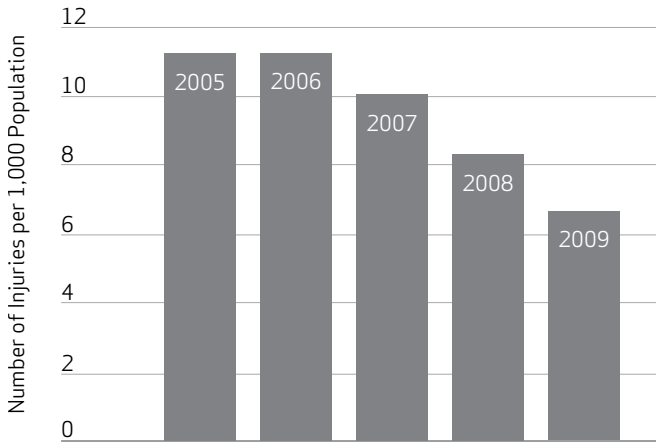
What does this progress measure tell us, and why is that important?

This progress measure tells us how many collisions resulting in injuries were reported in Edmonton as a result of people using the transportation system annually, as a rate proportional to the city's population. Injuries, including fatal injuries, are the highest severity of safety incidents for any mode of transportation. At present data is not available for transportation-related injuries that do not involve automobiles. A reduction in the rate of injuries means that the transportation system is safer to use.

Where are we today?

Edmonton's rate of transportation related injuries has decreased sharply since 2006. Initiatives which may help maintain this low injury rate include improving the design of right-turn cut-offs, addressing speeding in neighbourhoods, and addressing high collision locations.

Figure HS.2: Transportation-Related Injuries



HS.3 Rate of Criminal Code Incidents on Transit per 100,000 Ridership

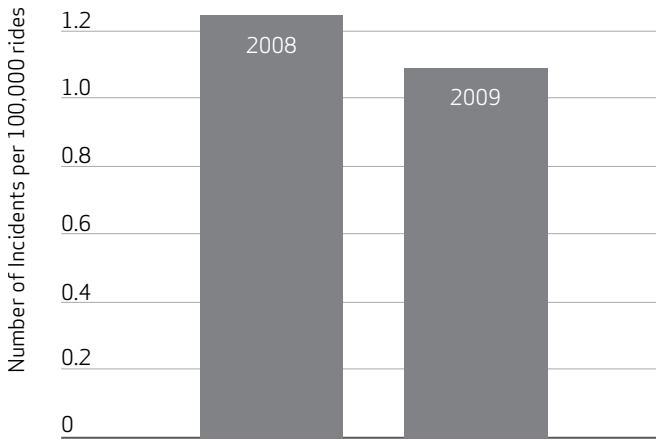
What does this progress measure tell us, and why is that important?

This progress measure tells us how many Criminal Code incidents were reported on transit as a rate per 100,000 ridership. Actual and perceived security are key factors influencing transit ridership. Reducing the rate of incidents means that transit operations are safer. Importantly, it also means that people are more likely to feel safe using transit, which implies that they are then more likely to shift to this mode of transportation.

Where are we today?

Currently, there are 1.09 criminal code incidents per 100,000 rides taken on the Edmonton Transit System.

Figure HS.3: Criminal Code Incidents on Transit



Strategic Goal
WELL-MAINTAINED INFRASTRUCTURE

The transportation system is planned and developed so that the city is able to keep it in a good state of repair, and future growth is accommodated in a fiscally responsible and sustainable manner.

A transportation system that is well-maintained in all seasons promotes economic vitality and a positive city image. Maintenance of our transportation system means keeping buses, roads, sidewalks and public spaces in good repair, clean and free from litter. This adds to Edmonton's ability to compete globally for people, investment and visitors.

The state of a city's transportation system also impacts the safety and mobility of its citizens. Sidewalks that are kept in good condition throughout all seasons greatly enhance the walkability of a city. Given the aging and diverse population, the need to ensure well-maintained sidewalks and curb ramps is imperative for a continued quality of life and safety.

Planning a transportation network with life cycle costing in mind will help meet citizen expectations for a well-maintained system now and into the future. Maintaining the current inventory of infrastructure is a primary focus and must be considered before adding new facilities; the future vitality and quality of life of our existing neighbourhoods depends upon it. Strategically managing urban growth will minimize the need for the addition of new infrastructure with its associated maintenance and operating costs, and minimizes the city's carbon and ecological footprint.

	MEASURE	TREND	REPORTING FREQUENCY
WM.1	**Condition Rating Distribution for Arterial Roads**	[No trend data]	Bi-Annually
WM.2	**Condition Rating Distribution for Neighbourhood Roads**	[No trend data]	Bi-Annually
WM.3	**Condition Rating Distribution for Bridges**	[No trend data]	Annually
WM.4	**Proportion of Instances of Snow Removal from Major Roads within 48 hours of a Weather Event**	Improving	Annually

WM.1 Condition Rating Distribution for Arterial Roads

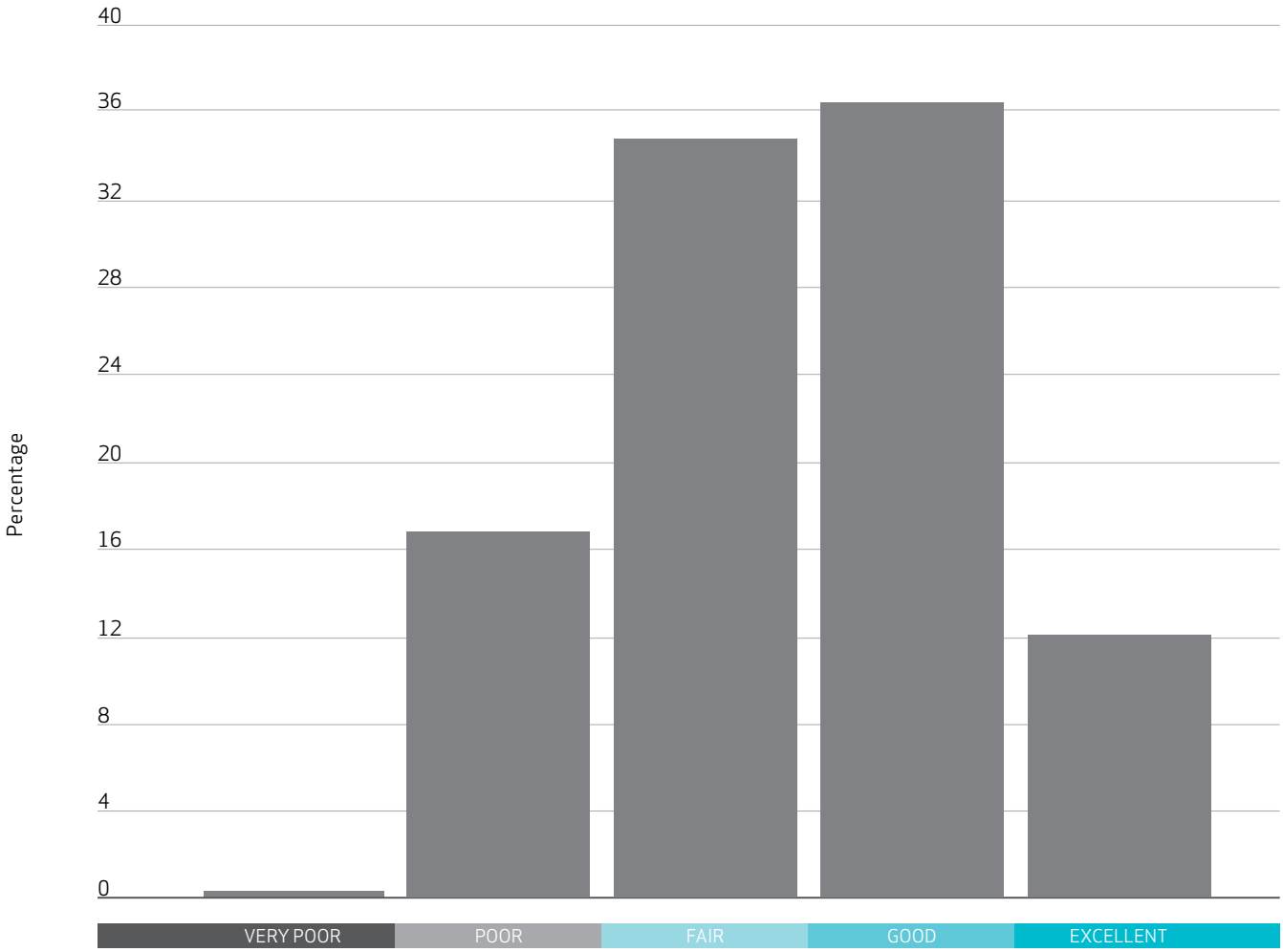
What does this progress measure tell us, and why is that important?

This progress measure tells us what the distribution of pavement quality index (PQI) ratings is for arterial roads in Edmonton. The condition of Edmonton's arterial roads is very important, as they are key routes for the movement of goods and services and traffic across the city. As well, the condition of arterial roads impacts the effectiveness of transit services and ease of travel by bicycle.

Where are we today?

Currently, less than 1% of Edmonton's arterial roads are in "Very Poor" condition, due to the high priority placed on their condition. In addition, approximately 17% are in "Poor" condition.

Figure WM.1: Arterial Road Condition, by Proportion of Inventory (2008)



WM.2 Condition Rating Distribution for Neighbourhood Roads

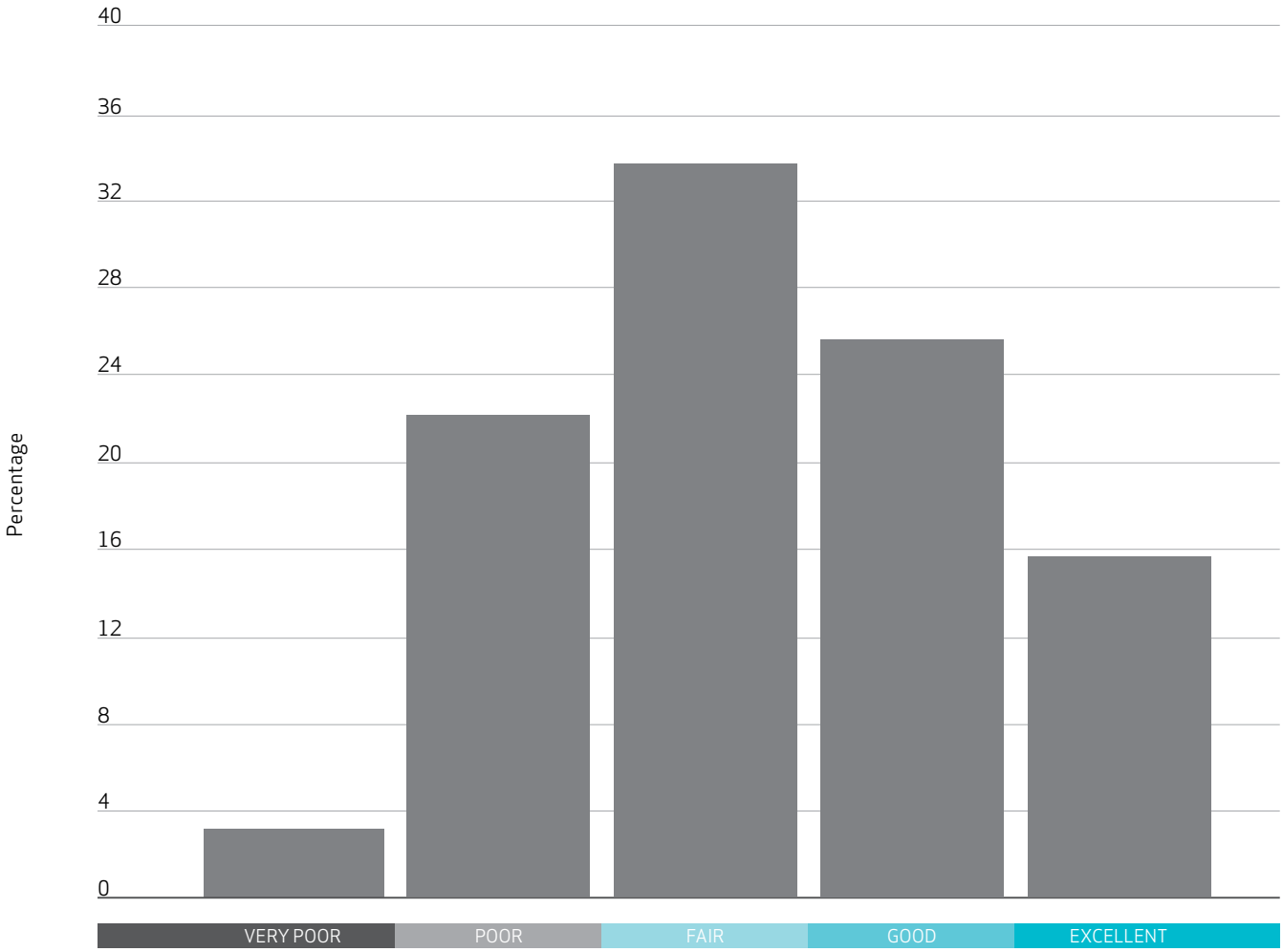
What does this progress measure tell us, and why is that important?

This progress measure tells us what the distribution of pavement quality index (PQI) ratings is for collector and local roads in Edmonton. The condition of Edmonton's Neighbourhood roads is very important, as they facilitate access in and out of communities, while contributing significantly to their character and livability. In particular, the condition of Neighbourhood roads impacts the effectiveness of transit services and the ease of travel by bicycle.

Where are we today?

Currently, approximately 3% of Edmonton's nieghbourhood roads are in "Very Poor" condition. In addition, approximately 22% are in "Poor" condition.

Figure WM.2: Neighbourhood Road Condition, by Proportion of Inventory (2009)



WM.3 Condition Rating Distribution for Bridges

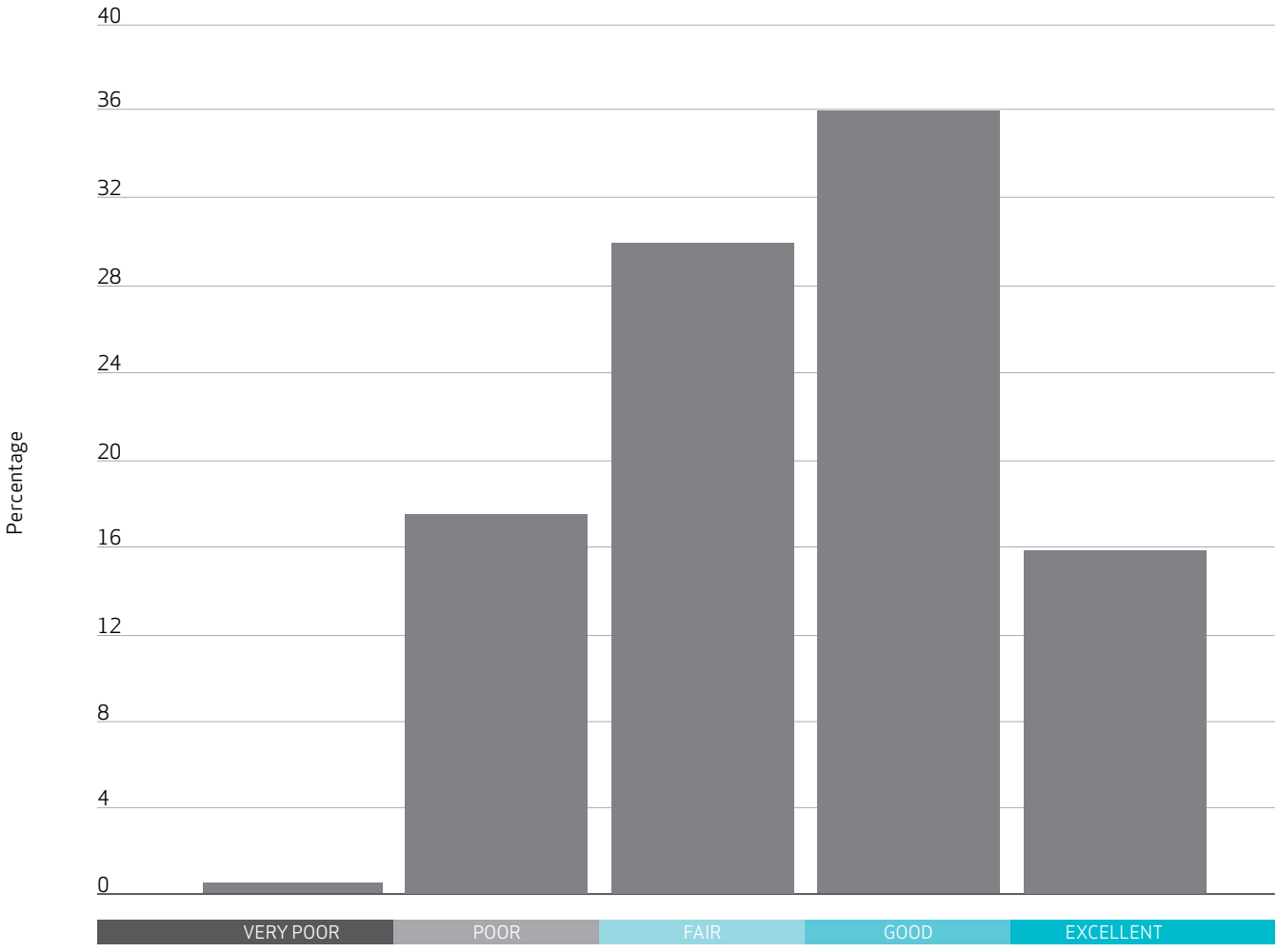
What does this progress measure tell us, and why is that important?

This indicator tells us what the distribution of condition indices are for Edmonton's bridges, including culverts, which make up 16% of the total Bridges are an integral component of Edmonton's transportation system, however they differ from roads in the way they are maintained and in the consequences of their failure. Because of this, it is particularly important that poor condition bridges be addressed quickly, and a large majority of the infrastructure be kept in fair or better condition.

Where are we today?

Currently, 82% of the City's bridge inventory is in "Fair" or better condition, and less than 1% is in "Very Poor" condition. Only one structure, a culvert, is in "Very Poor" condition, and of the infrastructure in "Poor" condition, only one is a bridge.

Figure WM.3: Bridge Condition, by Proportion of Inventory (2009)



WM.4 Proportion of Instances of Snow Removal from Major Roads within 48 hours of a Weather Event

What does this progress measure tell us, and why is that important?

This indicator tells us how often that snow is cleared from major roads within 48 hours of the weather event. Edmonton is a winter city and snow clearing is important to facilitate movement of people and goods safely and successfully. Maintaining a high standard of snow clearing means that Edmonton's roads are kept clear for regular operation. The recent review of the City's snow clearing policy may require consideration of additional factors with regard to snow clearing.

Where are we today?

During the 2008/2009 winter season, the City successfully removed snow within 48 hours of all weather events.

Figure WM4: Snow Events Cleared within 48 hours

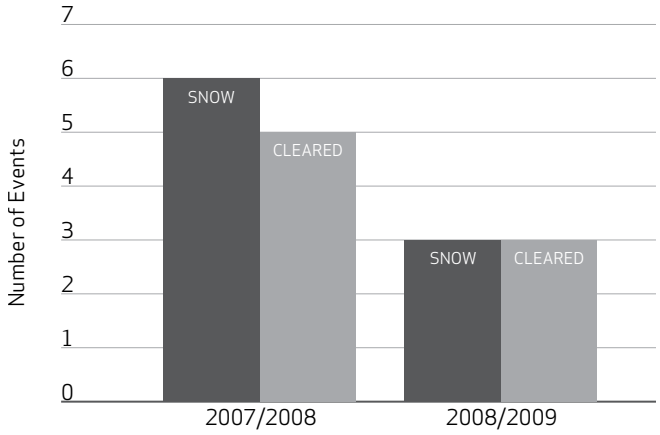


PHOTO BY DARREN KIRBY

Strategic Goal
ECONOMIC VITALITY

Efficient movement of goods, convenient mobility of the labour force and access to a vibrant city centre are features of the transportation system that enhances the economic vitality and competitive advantage of Edmonton and the Capital Region.

Effective and efficient transportation systems are essential to the economic vitality of Edmonton and the Captial Region. Businesses must attract employees to the city and employees must be able to efficiently and affordably travel to their workplaces. Businesses are dependent on the efficient movement of goods by rail, truck and/or air transport in a globally competitive environment. Service sector businesses also need efficient transportation so they can perform services for their customers and/or have their customers come to them. Efficient and effective transportation requires us to be leaders in collaborating with other interests in our Region.

Downtown is the heart of any great city, and is a major contributor to a city's economic vitality. It is the showpiece,the magnet - it defines the city's image. Supporting a robust transit system with a Downtown hub and efficient access from the Edmonton International Airport to the city's Downtown are essential to the ongoing success of the urban core, the city as a whole and the Capital Region.

	MEASURE	TREND	REPORTING FREQUENCY
EV.1	**Number of People Entering the Downtown by All Modes**	Improving	Bi-Annually
EV.2	**Results of Satisfaction Survey of Edmonton Businesses**	[In Development]	[Undetermined]

EV.1 Number of People Entering the Downtown by All Modes

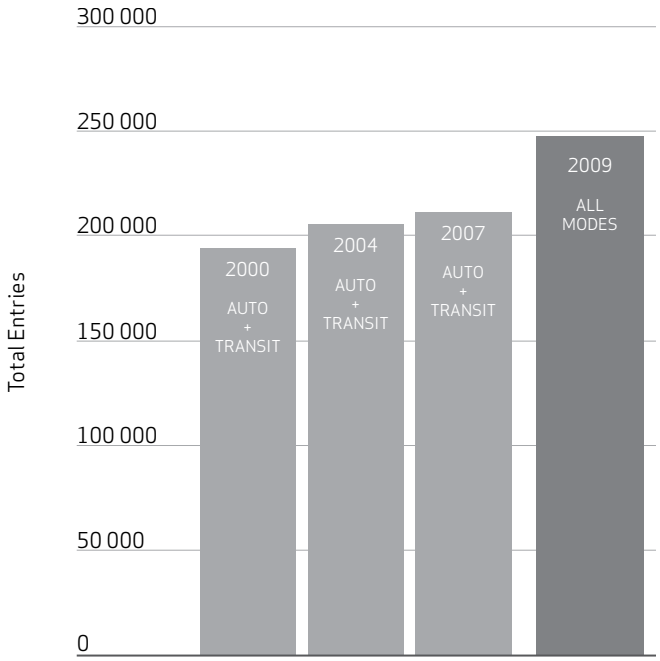
What does this progress measure tell us, and why is that important?

This progress measure tells us how many people are entering the Central Business District on an average day, and which mode of transportation they are using. A vibrant city centre is a key component of the economic vitality of Edmonton. Through transit and active modes, the City can enable more people to access Edmonton's downtown using existing infrastructure. Increasing the number of people entering the downtown means that Edmonton's downtown has a greater level of activity.

Where are we today?

As of 2009, when the last Central Business District (CBD) cordon count was conducted, entries into the downtown were slightly above 247,000 people on an average day. 4.1% of those were walking trips, and a further 1.1% were cycling trips. Employment and the residential population are anticipated to increase significantly over the next 10 years. In addition, significant development is expected within walking and cycling distance of the CBD.

Figure EV.1: Entries into the Downtown



EV.2 Results of Satisfaction Survey of Edmonton Businesses

What does this progress measure tell us, and why is that important?

This progress measure tells us how Edmonton's business community feels about the performance of the transportation system. Ensuring the effective, efficient movement of goods and services within Edmonton is important for economic vitality, and can help to attract new businesses to Edmonton.

Where are we today?

This measure is currently in development.

Appendix I

CITY VISION

A creative description of Edmonton's future, the Vision guides our decisions, helps us set direction and encourages us to align our priorities as we work to make Edmonton the city we want it to become in 2040.

Take a river boat from one shore of the world's largest urban park to the other, from the university to the legislature. From the water, look up and consider the skyline, the bustling core and the towers and urban villages to the east and west. The people on the sidewalks and trails, from First Nations to new Canadians, linked by a common purpose — to learn, to prosper, to celebrate. Take the LRT in any direction from here and you'll be in the heart of somewhere special. Welcome to Edmonton, the capital of Alberta, a northern city of art and ideas, research and energy.

Edmonton is an energy city. Energy drawn from the ground and from above; from the sun and wind. But the true power of Edmonton is the democratic spark in its people.

Edmonton is a city of design — urban design, architectural design, and environmental design. Walk its safe, leafy neighbourhoods, ride its efficient and accessible transportation system. The city has grown up; now we're building smarter.

Edmonton links the continent with the north and with Asia. This cooperative regional economy is powerful and diverse, oriented toward the future. Visit the universities and colleges, the humming research parks, the downtown office towers: Edmonton is a destination for advanced technologies, health care and green energy.

Edmonton is a recreation city, an arts city. It is a city that embraces all seasons. Run, ride or ski on its trails and fields, cheer in its arenas and stadiums. Enjoy the museums, galleries, clubs and theatres. Read its novels, watch its films. Spend an hour or a week in the glorious North Saskatchewan River Valley, the world's largest preserved park.

Edmonton is a city of many cultures, educational opportunities and all political and social orientations; yet its citizens are inspired by a shared vision and the certainty that this city on a river is one of the most special places on earth.

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