

Transportation Association of Canada Sustainable Urban Transportation Award 2009

Nomination

Transportation Planning Branch City of Edmonton Wednesday, February 24, 2010



Wednesday, February 24, 2010

Katarina Cvetkovic Program Manager Transportation Association of Canada 2323 St. Laurent Boulevard Ottawa, Ontario Canada K1G 4J8

Dear Ms. Cvetkovic:

Please find attached the City of Edmonton Transportation Planning Branch's nomination for the Transportation Association of Canada's Sustainable Urban Transportation Award for 2009.

If you require any further information, please do not hesitate to contact the undersigned.

Sincerely,

Brian Latte, Branch Manager

Transportation Planning City of Edmonton 13th Floor, 9803-102A Avenue Edmonton, AB T5J 3A3

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# TAC's Sustainable Urban Transportation Award Application Form

#### **NOMINATION BY**

TAC Member Organization: \_City of Edmonton Key employee representative: \_\_\_\_\_ Latte, Branch Manager **NOMINATION FOR** Title: Transportation Planning Branch 2009 Achievements Program Project Process or X Other Please provide a brief summary about the initiative being nominated: Over the course of 2009, the City of Edmonton's Transportation Planning Branch completed a number of initiatives that set the direction for Edmonton to become a sustainable, urban city. TAC Member Organization: <u>City of</u> Edmonton Contact Person: Rhonda Toohey Title: Director, Policy Implementation & Evaluation Address: 13 Flr, 9803 102A Ave, Edmonton, AB T5J 3A3 Telephone: 780.496.1797 Email: rhonda.toohey@edmonton.ca **ATTACHED** - six paper copies of complete nomination submission package (no longer than 7 pages - 8.5" x 11") - one PDF electronic file of submission on CD - supporting documents (diagrams, photos, etc.) if needed Deadline: Friday, March 12, 2010 Send to: 2323 St. Laurent Boulevard, Ottawa, Ontario K1G 4J8 Please note that information on the evaluation criteria and process is provided at http://www.tac-atc.ca/english/awards/tacawards/urban.cfm If you have any questions or need clarification, please call (613) 736-1350, ext. 227 or email kcvetkovic@tac-atc.ca.

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### **INTRODUCTION**

Edmonton is the capital city of Alberta and, with its neighbouring communities, encompasses the sixth largest metropolitan region in Canada with a population of 1,034,945 (2006 Census). Similar to other major Canadian cities, Edmonton is experiencing strong growth combined with a trend towards further suburbanization, which is affecting travel patterns across the city by increasing both car usage and trip distance. Recent Statistics Canada data shows that 77% of Edmonton's daily trips are made by automobile. On a typical day there are 625,000 commuter trips made in Edmonton, with the average daily commute time slightly exceeding one hour. Over the next 30 years, the City of Edmonton's population is expected to exceed one million people, while the CMA is expected to exceed a population of 1.6 million. This growth will bring about enormous levels of change and challenge as services are delivered to many new people, businesses, and industries.

Over the course of 2009, the City of Edmonton's Transportation Planning Branch completed a number of initiatives that set the direction for Edmonton to become a sustainable, urban city. Five key projects are introduced below, with detailed descriptions in terms of "Development and Enhancement of Sustainable Urban Transportation", "Degree of Innovation", "Transferability to other Canadian Communities and Organizations", and "Added Value" provided for each on the following pages. The electronic version of this submission can be used to link to referenced documents and resources.

Taken together, these five projects clearly show that 2009 was a banner year for the City of Edmonton's Transportation Planning Branch, a year without comparison, and a year worthy of being awarded the TAC Sustainable Urban Transportation Award. The commitment to sustainable transportation that the branch was able to achieve is a bold step toward urban and transportation sustainability for Edmonton – a step towards a future where Edmontonians will have a comprehensive set of interconnected transportation options to get them to and from home, work, entertainment, shops, and school.

### TRANSPORTATION MASTER PLAN

Building upon Edmonton's 10-year corporate strategic plan, *The Way Ahead*, the City has had a number of high-level plans in development, including an updated Transportation Master Plan, *The Way We Move*, and Municipal Development Plan, *The Way We Grow*. The new Transportation Master Plan was approved by Edmonton City Council in September of 2009, and was developed together in an integrated manner with the Municipal Development Plan to reflect the interconnectedness between transportation and land use.

# LIGHT RAIL TRANSIT PLANNING

One of the key supporting elements of the Transportation Master Plan is the expansion of Edmonton's Light Rail Transit (LRT) system. From the current single line to the northeast, LRT service would expand into a network of multiple lines radiating from the city core to all sectors

of Edmonton, with potential for connections into the Capital Region. A network plan for LRT was approved by Edmonton City Council in June of 2009, and specific alignments for the west and southeast lines were approved in December of 2009. A City policy on Park and Ride, which included clear rationale as to where and why Park and Ride facilities should be located and the considerations for implementing user fees, was approved by City Council in October of 2009.

# INTEGRATED TRANSIT AND LAND USE FRAMEWORK

As the LRT expands throughout Edmonton, land development and redevelopment will occur. To ensure that it occurs in a constructive and beneficial approach for the existing and future residents, businesses, and employers, the City of Edmonton has prepared the Integrated Transit and Land Use Framework. The Framework is a set of regulatory and advisory tools for successfully integrating transit and land use near transit facilities, with a focus on LRT stations, that will foster development that is complementary with and supportive of the significant public investment in transit infrastructure. An integrated transit and land use system manages the growth occurring in the Edmonton area by accommodating growth in a way that will enhance rather than detract from the region's economy, building in a more environmentally sustainable pattern, and making better places to live and work. The Framework is based on the philosophy that "Transit's role as a shaper of urban form can be as important as its transportation function."

# ACTIVE TRANSPORTATION POLICY

Over the past several years, the City has been developing three separate strategies related to active transportation in Edmonton. The active transportation policy combines these strategies into one coherent policy to address sidewalk infrastructure, walkability, and cycling, and was approved by City Council in November of 2009. At that same time, Council also made a commitment to increase the funding for active mode projects by 50% for 2009-2011, recommendations for a 500% increase from current levels for 2012-2022, and a recommendation that funds from other projects coming in under budget should be directed toward active transportation.

# TRANSPORTATION DEMAND MANAGEMENT INITIATIVES

In 2009, the Transportation Planning Branch launched three new major Transportation Demand Management (TDM) initiatives. They included: a one-year pilot of an online commute tracking tool for City staff, a one-year pilot program to monitor the effectiveness of providing carpool parking stalls at Park and Ride locations, and a one-month pilot of a single-neighbourhood project to encourage residents to shift their transportation mode from driving alone to walking, cycling, and riding transit. In each, the goal was to learn how projects of this nature could be applied more effectively and broadly across Edmonton to encourage mode shift.

*The Way We Move* is the Transportation Master Plan that establishes a framework for how the City of Edmonton will address its future transportation needs. The TMP gives direction through Strategic Goals, Objectives and Actions for the management of the transportation system, and provides the basis for making strategic planning and budgetary decisions.

The TMP emphasizes moving people and goods rather than vehicles. Key directions include: expansion of the LRT network; transportation demand, supply, and operation management initiatives to improve roadway operations; limiting roadway expansion to goods movement and transit corridors; and improving and expanding Edmonton's network of active transportation facilities.

# Contributions to Sustainable Urban Transportation:

*The Way We Move* marks a shift towards sustainable transportation in Edmonton's priorities: from single passenger vehicles to more public transit, cycling, and walking; from building outward to building a compact urban form; from an auto-oriented transportation system to a more interconnected, multi-modal transportation system. The TMP sees Edmonton as a place where citizens can walk, bike, bus, and ride the train efficiently and conveniently to their desired destinations.

# Innovation:

The Transportation Master Plan was developed in conjunction with Edmonton's Municipal Development Plan, and their goals were carefully aligned. Both plans have a chapter acknowledging the importance of transportation and land use integration in creating a sustainable and efficient city that maximizes the effectiveness of its infrastructure investment. To ensure that the TMP is acted upon, a ten-year Implementation Plan and a Progress Measures report are under development to direct and to track action on the goals.

# Transferability:

Due to the strategic nature of the policies in *The Way We Move*, the concepts are fully transferable to other communities in Canada. In addition, the concept of integrating the development of land use plans and transportation plans is transferable.

# Added Value:

The integrated and concurrent development of *The Way We Move* and *The Way We Grow* resulted in a strengthened relationship between the planning and transportation departments. This momentum, built by working together, will only be strengthened as joint plans such as the Integrated Transit and Land Use Framework are developed and implemented.

The City's communication strategy for *The Way We Move* incorporated innovative media. An online video is available to internal city staff and external stakeholders through the City's website and on YouTube, as is the blog for the Transforming Edmonton initiative, which also includes information on *The Way We Move*. Links to both are provided in Appendix I.

# LRT PLANNING | Project Leads: Rhonda Toohey, Adam Laughlin

After a comprehensive review of its approach to LRT planning and operation, the City of Edmonton has developed an LRT Network Plan for the whole city. The six-line LRT network – radiating to the Northwest, Northeast, East, Southeast, South, and West – is illustrated in Appendix II. LRT lines not tying in to the existing LRT system will feature surface operation and will provide convenient connections to the existing LRT system in multiple locations. For both the existing system and for new lines, an urban-style, frequent-stop system design will be pursued. New lines will adopt low-floor LRT technology, enabling better integration with the urban fabric. In addition to the radial lines, a central area circulator system that ties the Downtown and University together is also proposed.

Building on the LRT Network Plan, LRT alignment planning has proceeded on the West and Southeast lines, and has identified specific routes, short to medium term ridership estimates, land use development potential, and preliminary costing. The evaluation was completed using screening criteria approved by City Council, an analysis of impacts including operations and social, environmental, and economic sustainability. The approval of these two alignments sets the stage for an unprecedented \$3 billion expansion of Edmonton's LRT that would see the system grow by over 60%. Access planning for the envisioned LRT expansion has included the development of a Park and Ride policy that outlines the rationale for using park and ride and user fee financing options.

# Contributions to Sustainable Urban Transportation:

Developing a LRT Network Plan with a Council-approved vision allows the City departments to work towards a common goal in planning and designing the LRT and supporting bus system. Additionally, pursuing an urban style system allows for more people to access the stations by walking or cycling, and as a result there is less reliance on large scale bus transfers and Park and Ride. Finally, an urban-style system balances accessibility and mobility while encouraging more compact urban communities by providing smaller scale stations closer together and enhancing connectivity to a greater number of destinations.

### Innovation:

The LRT Network Plan was nominated in the 'Worldwide Project of the Year' category at the Light Rail Awards in London, England. The plan received a 'Highly Commended' honour in the category based on the plan's vision for transit oriented development, compact urban form, and a shift in transportation modes.

### Transferability:

The concepts behind the development of the LRT Network Plan, specific route alignments, and evaluation criteria are fully transferable to other Canadian cities.

### Added Value:

A very extensive public communications and involvement plan was implemented for both the LRT Network Plan and the specific route alignment planning. Videos were created and published on both the City's website and YouTube to explain concepts such as transit oriented development. Public involvement will continue for each stage of LRT network construction.

The Integrated Transit and Land Use Framework (ITLU) outlines the way in which development of land uses surrounding transit services will occur in order to support transit ridership, create liveable communities, and maximize the City's return on investment in LRT through increased tax revenues from intensified development. As the LRT expands throughout Edmonton, the ITLU Framework will provide clear direction on how the surrounding lands will be developed by focusing on minimum requirements for connectivity, urban design, residential density and employment intensity, retail space, and transitions. The ITLU Framework reflects that not all LRT stations are expected to develop in the same way, and that much of the intensification along the existing and proposed LRT alignments will occur through incremental infill, which requires appropriate guidance. Please see Appendix III for links to the report.

# Contributions to Sustainable Urban Transportation:

The Integrated Transit and Land Use Framework contributes to Edmonton's sustainable urban transportation by explicitly highlighting the interconnectedness of land use and transportation decisions and outlining the mutually beneficial requirements of the transportation network and the associated land uses to create liveable, vibrant, urban communities. The ITLU Framework was developed by a coordinated team from the Transportation Planning Branch and the Planning Department to ensure that the result would have buy-in and ownership from the two primary departments responsible for shaping the city's urban from.

# Innovation:

The Integrated Transit and Land Use Framework is innovative as these types of explicit standards are rarely created proactively prior to major LRT expansion. The ITLU Framework is also innovative as it completely reorients the philosophy of the local land development industry by increasing the importance of community accessibility and pedestrian connectivity versus the more typical focus on limited connections between land uses and within the street network. The Framework establishes regulatory standards for land within 400 m of LRT stations and guidelines for the land between 400 and 800 m. The regulatory focus within a five minute walk reflects the crucial importance of these lands in establishing a transit oriented area. The land development requirements between a five and ten minute walk are slightly relaxed to reflect the retail and land development market realities but establishes the area's critical elements such as block structure to allow it to transform over time as market conditions change to reflect climate change, peak oil, and land values.

# Transferability:

The concepts of the Integrated Transit and Land Use Framework are fully transferable to any other community in Canada that wants to clearly outline the development vision for lands surrounding LRT or Premium Bus stations that will maximize the community's return on investment and achieve their broader community building goals.

### Added Value:

The ITLU Framework incorporates conclusions, recommendations, and public input from the Transportation Master Plan, the Municipal Development Plan, and the LRT Network Plan to provide a unified approach to urban transportation and land use development.

#### ACTIVE TRANSPORTATION POLICY

The Active Transportation Policy combines the recommendations of three strategic plans - the Sidewalk Strategy, Bicycle Transportation Plan, and Walkability Strategy - into a single coherent policy. The purpose of the Active Transportation Policy is "to optimize Edmontonians' opportunities to walk, roll, and cycle, regardless of age, ability, or socio-economic status; to enhance the safety, inclusivity and diversity of our communities; and to minimize the impact of transportation activities on the City of Edmonton's ecosystem." Please see Appendix IV for the detailed policy.

# Contributions to Sustainable Urban Transportation:

The Active Transportation Policy explicitly outlines the City's commitment to active modes and walkability, as well as defining the actions and initiatives that will be undertaken to enhance and optimize the active transportation network. The policy identifies the need to: provide infrastructure including sidewalks, curb ramps, bicycle facilities, and end-of-trip facilities; enact bylaws, policies, and programs to support active transportation; raise awareness of active mode options for citizens; and enhance the safety, security, accessibility, and convenience of active modes. The intent of the Policy is to enable a shift in transportation modes away from single-occupant vehicles.

### Innovation:

The Active Transportation Policy incorporates three separate projects that are not typical to urban communities in Canada – a comprehensive strategy dedicated to sidewalk infrastructure, including constructing missing sidewalks and curb ramps; a multi-disciplinary strategy to enhance walkability by focusing on infrastructure, policies and programs, the quality of the journey, and urban form; and a bicycle transportation plan that outlines a grid network of bicycle facilities, an education and awareness program, integration with transit, and the provision of end-of-trip facilities. To our knowledge, no other jurisdiction in Canada has developed a comprehensive plan that addresses all three of these subjects.

### Transferability:

In many ways, Edmonton typifies the suburban development and behaviour patterns found across North America, with the added challenge of a Canadian winter. As a result, strategies that work for active transportation in Edmonton can be applied to a broad range of contexts.

### Added Value:

The Active Transportation Policy builds upon the multi-disciplinary requirements of active transportation by including members from the City's Community Services, Planning, and Transportation Departments, as well as user groups, to provide input and feedback on how to safely and effectively enhance opportunities for the active modes in Edmonton.

The City of Edmonton currently has dozens of Transportation Demand Management (TDM) initiatives in progress, for City staff, for major employers, and for the public at large. However, in 2009 three major new projects were launched:

- "reRoute" is a one-year pilot of an online commute tracking tool. The purpose of "reRoute" is to determine the effectiveness of providing feedback to several hundred City staff on the impacts of their commute choices, with the goal of encouraging mode shift.
- "LocalMotion" was a one-month project that partnered with a single neighbourhood of several thousand people in June 2009 to encourage walking, cycling, and transit use. It was funded through Transport Canada's EcoMobility program, and one of the main goals was to develop transferable knowledge.
- Finally, a one-year pilot of reserved Carpool Parking at Park and Ride locations is underway. Reserved stalls are located in the most attractive and convenient locations in existing Park and Ride lots, and are available to anyone who carpools to or from the facility. The purpose of the pilot is to determine whether a program like this can be run without enforcement.

# Contributions to Sustainable Urban Transportation:

Each of these projects has a direct impact on the travel behaviour of its participants. However, the fundamental goal behind all of them is innovation in developing new strategies for encouraging a shift away from single-occupant vehicles towards walking, cycling, and riding transit, to achieve the benefits to environmental, fiscal, and social sustainability that result.

# Innovation:

For each of these projects, the goal was to apply untested TDM practices to the Edmonton context to learn how to make them succeed. Ultimately, each was conceived with an eye to how the concept could be applied at a broader scale. In the case of LocalMotion, the question was: how do we convince one neighbourhood to leave their cars at home for a month, and then how do we take that message to the rest of the city? With reRoute, the question was: how do we use this program to encourage mode shift among office employees, and then how can we use the tool as a nucleus for taking LocalMotion to the whole region? Finally, for Carpool Parking: will commuters respect the 'honour system' for reserved parking?

# Transferability:

One of the main points of scepticism that is typically expressed about TDM is that the level of buy-in or take-up by a target demographic in one centre will be different from experiences elsewhere. The completion of these projects provides data and information on how these types of strategies can be applied in a northern Canadian context. The videos prepared for LocalMotion can also be used by other communities to learn about options and apply similar tools (See Appendix V).

# Added Value:

TDM strategies are by their nature innovative, and as a result projects are frequent and varied. Because of this, the awareness generated by publicity for the projects improves the City's image.

# APPENDIX I: Transportation Master Plan

The full version of the Transportation Master Plan, *The Way We Move*, and related strategic documents for the City of Edmonton are available through the following links: <u>Transportation Master Plan</u> and <u>Transforming Edmonton Plans</u>

The completion of the TMP has also initiated a communications plan that will target the public, stakeholders, and other departments within the City. The following links provide examples of initiatives being carried out to communicate the intention and direction of the TMP:

- Video on City Website:
- Transportation Master Plan Video
- Blog on City website:
- Transforming Edmonton Blog TOD Video
- YouTube videos:

The following is an excerpt showing how the transportation goals of the TMP and the land use development goals from the Municipal Development Plan (MDP) were integrated. The transportation and land use goals supported by each chapter are identified at the beginning of each chapter in both the TMP and MDP reports in order to clearly communicate the intent of the objectives and actions in the chapter.

4.0 TRANSPORTATION A LAND USE INTEGRAT	
The integration of transportation and l	
TMP STRATEGIC GOALS:     Transportation and Land Use Integration	MDP STRATEGIC GOALS:  • Sustainable Urban Form
<ul> <li>Access and Mobility</li> <li>Transportation Mode Shift</li> <li>Sustainability</li> <li>Health and Safety</li> <li>Well-Maintained Infrastructure</li> <li>Economic Vitality</li> </ul>	<ul> <li>Sustainable of ban Point</li> <li>Integrated Land Use and Transportation</li> <li>Complete, Healthy and Livable Communities</li> <li>Urban Design</li> <li>Supporting Prosperity</li> <li>Natural Environment</li> </ul>

# EXECUTIVE SUMMARY

Transportation is more than moving people, goods and services on Edmonton roads, rails, buses, sidewalks, and light rail transit. It is essential infrastructure that shapes our urban form, impacts our economic well being and is a primary determinant of our city's environmental, financial and social sustainability.

How easily we move through our city, the distances we must travel, the transportation choices we have and how readily we can move between different transportation modes profoundly affects our relationship with the city, the environment and each other. As the major urban centre of regional industrial development, our city's transportation system is a contributing factor to the economic vitality and competitive advantage of Edmonton and the Capital Region.

We are building a 21st century city, shaping an Edmonton that will meet the needs of our diverse and growing urban and regional population. Growing environmental concerns, acknowledgment of the ongoing investment needed to maintain our transportation infrastructure and the rapid growth of our city demand a shift in transportation priority setting. It is a shift from single passenger vehicle use to more public transit; from building outward to a compact urban form. From an auto oriented view of transportation to a more holistic view of an interconnected, multi-modal transportation system where citizens can walk, bike, bus and train efficiently and conveniently to their desired location.

In 2007, Edmontonians offered their experiences and insights into the kind of city they envisioned Edmonton to be by 2040, resulting in the City Vision. Edmontonians also offered their views on our approach to land use (The Municipal Development Plan, *The Way We Grow*) and on transportation and the movement of people, goods and services (The Transportation Master Plan, *The Way We Move*).

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To achieve the City Vision, City Council has identified six 10-year Strategic Goals that are outlined in The City of Edmonton's 2009-2018 Strategic Plan, *The Way Ahead*: 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; and Diversify Edmonton's Economy. The Transportation Master Plan (TMP) is consistent with and supportive of these goals.

The Transportation Master Plan is guided by and intended to achieve the City Vision. It establishes the framework for how the City of Edmonton will address its future transportation needs and is aligned with the Municipal Development Plan, *The Way We Grow*, to acknowledge that land use and transportation are inextricably linked. The Transportation Master Plan is based on seven Transportation Strategic Goals that define a vision for the transportation system. Each of these goals embodies the four guiding principles (integration, sustainability, livability, innovation) of *The Way Ahead*. These will guide City policies and direction on how best to manage the transportation system to contribute to the City Vision. Together these goals contribute to creating the kind of safe, vibrant, economically robust, culturally active and environmentally sustainable city Edmontonians said they envision.

# TRANSPORTATION STRATEGIC GOALS: (CHAPTER 2)

# Transportation and Land Use Integration

The transportation system and land uses/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.

#### 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.

#### 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 quality of life.

#### 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.

#### Transportation Mode Shift

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

#### 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.

#### 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.

# CURRENT AND FUTURE CONDITIONS (CHAPTER 3)

In 2009, Edmonton is home to approximately 750,000 people and by 2040 will grow by 400,000 people. Edmonton's 2005 Household Travel Survey showed that of the 2.5 million trips made each day, Edmontonians traveled by car (77%), walking (11%), public transportation (9%), and bicycle (1%). This is one of the highest car dependence rates in Canada.

Edmontonians are spending more time in their cars, driving longer distances and dealing with increasingly congested streets. Between 1994 and 2005, Edmonton's population increased 13%. At the same time, the total amount of kilometres traveled by automobile in the city increased 32%. This shows that the amount of automobile travel is increasing at a much faster rate than the population. The result is increased roadway congestion that impedes the efficient movement of people, goods and emergency response services.

This car dependence contributes to a cycle of increased kilometres traveled, increased road congestion and the perceived need to build more roadways which will require more taxpayer dollars for operation and maintenance.

This is a fiscally and environmentally unsustainable cycle. In addition, there are major health risks associated with long trip distances and automobile dependence such as physical inactivity, air pollution, motor vehicle collisions and mental health effects.

# TRANSPORTATION AND LAND USE INTEGRATION (CHAPTER 4)

The City will integrate land use planning and transportation decisions to create a compact and efficient urban form.

Transportation provides access to land, thereby affecting its desirability and value, while the mix and intensity of land uses results in activities that generate demands on the transportation system. Building communities around effective transit service will decrease the need for other public infrastructure investment throughout the region, and provide viable alternative transportation modes that lower Edmonton's carbon and ecological footprint and lessen demand on energy and natural resources.

Focusing industrial developments in close proximity to goods and services movement corridors is efficient, adds to the economic vitality of the city and Capital Region and reduces goods and services movement traffic through residential areas.

# PUBLIC TRANSPORTATION (CHAPTER 5)

Developing and expanding the existing public transportation system while capitalizing on new opportunities for public transportation within the greater Edmonton area are cornerstones of the Transportation Master Plan. To make public transportation the preferred choice of more people, Edmonton must make a large series of improvements to the transit system as well as to its physical, social and economic context. A comprehensive public transportation system made up of a variety of service strategies, including premium transit, bus service and disabled adult transit service (DATS) is a key to achieve the City Vision and Strategic Goals.

To achieve this, the City will:

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- Pursue expansion of the LRT to all sectors with a goal to increase transit ridership and transit mode split, and spur the development of compact, urban communities.
  - Pursue implementation of an expanded, city-wide premium transit network which will provide faster, more reliable service with direct connections to major destinations.
    - Develop an efficient, effective, accessible and integrated bus, premium bus and LRT network to serve Edmonton with connections to the Capital Region. The network will include services for persons with mobility challenges.
      - Use technology such as transit priority, passenger information systems and ITS to improve the reliability, efficiency and passenger information systems to make
        - transit a more competitive mode of travel.

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# ACTIVE TRANSPORTATION (CHAPTER 6)

Active transportation is any mode of transportation by which people use their own energy to power their motion such as biking or walking. Some of the benefits of active modes of transportation are that it builds health and exercise into one's daily routine, helps to create a strong sense of community, and reduces the greenhouse gas emissions related to transportation by reducing vehicle volumes and maximizing the effective use of existing infrastructure.

To encourage more active transportation, the City will create a more walkable environment, a cycle-friendly city and an integrated network of multi-use trail facilities.

Active transportation should be viewed as being year round and available for all citizens; therefore the city must have a robust maintenance policy for all seasons.

# **ROADS (CHAPTER 7)**

Roads are the foundation of Edmonton's transportation system. Roads significantly affect the economic vitality and competitiveness of Edmonton and the Capital Region, as they facilitate the movement of goods and services, emergency response services, and people using public transit, vehicles, taxis, bicycles and active modes. As Edmonton evolves from a mid-size prairie city to a large metropolitan area, it is inevitable that congestion levels will increase, particularly during peak periods. Physical, financial and community constraints in many areas make it unfeasible or even undesirable to build or expand roads to alleviate congestion. As such, the City of Edmonton will need to place greater emphasis on strategies to optimize the use of the existing road system.

These strategies include:

- Land use development strategies
- Promoting use of transit and active transportation modes
- Managing existing roadways more efficiently
- Transportation Demand Management (TDM)
- Selectively adding more roadway capacity

The City will attempt to maintain or improve the level of service for transit and goods and services movement by giving priority to roadway projects that enhance these movements. Adding roadway capacity to serve commuter traffic will not be a priority for major road projects. The focus of improvements for commuter traffic will be on optimizing the existing roadway operations.



# **GOODS AND SERVICES MOVEMENT (CHAPTER 8)**

The Capital Region, including Edmonton, is a major manufacturing, logistics and distribution centre. It is essential to the economy that commercial transportation is able to move freely throughout the Region. Safe, efficient and effective movement of people, goods and services is essential to supporting and fostering the economic vitality and competitive advantage of Edmonton and the Region. An efficient system is cost effective in terms of time, energy consumption and infrastructure needs.

Key corridors for the movement of goods and services are:

- Outer Ring Road Anthony Henday Drive
- Inner Ring Road Consists of Yellowhead Trail, 170 Street, 75 St/Wayne Gretzky Drive, Whitemud Drive
- Highway Connectors Yellowhead Trail, Whitemud Drive, Calgary Trail, and others

In addition to these corridors, rail and air transport are important components of the regional transportation network. The City of Edmonton will work with other jurisdictions to ensure that Edmonton has a safe and efficient goods movement network that connects well with other transportation modes and facilities.

# REGIONAL INTERFACE (CHAPTER 9)

As Alberta's capital city and the major urban centre within the Capital Region, Edmonton has become the focus of complex issues that demand a regional perspective. The Capital Region Board, made up of Edmonton and twenty-four surrounding municipalities, is a decision making body that was established by Provincial legislation in April 2008. The Board's mandate is to create a comprehensive plan to manage regional growth, the Capital Region Growth Plan, with the initial phase having been completed in June 2009.

The City, as part of the Capital Region Board, will work constructively with the Capital Region Board as it prepares the Capital Region Growth Plan and conform to the plan once it is formally adopted. In addition, the City will work with the Capital Region Board to cooperatively plan and implement system improvements such as:

- Region-wide system of inter-municipal transit
- Region-wide land use planning principles to support compact growth
- Inter-modal facilities and connections to support rail and air transportation
- Roads of regional significance within the city as well as highway facilities with cooperation of the Province.
- Regional multi-use facilities and TDM initiatives.





# ASSET MANAGEMENT AND MAINTENANCE (CHAPTER 10)

City-owned infrastructure, valued in the billions of dollars, include significant transportation assets that are in continuous need of maintenance, repair, rehabilitation or replacement. With limited budgets and increasing demands on the transportation network, the City is challenged to manage its assets in a way that minimizes total life-cycle costs yet sustains expected levels of service and safety. The City will use best asset management practices to preserve infrastructure and minimize total life cycle costs.

Operational maintenance of the transportation system such as cleaning and snow plowing are critical to maintaining system safety and accessibility, particularly for active modes. The City will have robust maintenance practices to facilitate year round transportation.

# **IMPLEMENTATION (CHAPTER 11)**

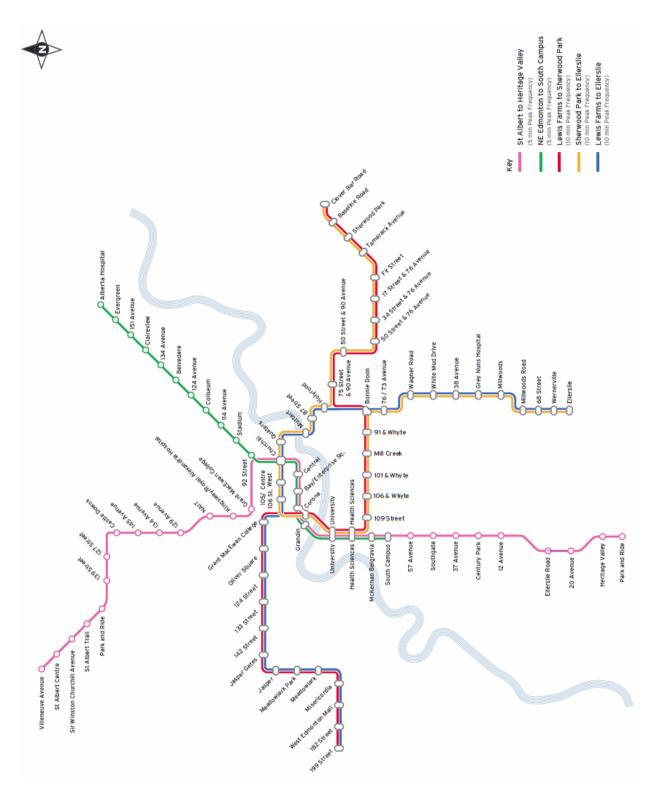
The Transportation Master Plan and its policies are strategic in nature. An Implementation Plan that outlines plans, program and actions will be developed to bring the policies into reality. The Implementation Plan, to be updated every three years, will outline the specific projects, programs and initiatives that will be carried out to achieve the Transportation Strategic Goals.

Progress measures will be developed and reported yearly to create an effective monitoring framework for the TMP that closely considers the Transportation Strategic Goals and Objectives. Emphasis will be placed on progress measures that track system-wide, long-term changes and that are easily understood by the public.

# APPENDIX II: LRT Planning

The LRT Network Plan can be found on the City's website through the following link: <u>LRT</u> <u>Network Plan</u>. This site includes fact sheets and presentations that were prepared during the development of the LRT Network Plan for communicating the concepts of the plan to the public, stakeholders, and City Council. There is also a video on YouTube regarding LRT expansion and compact, urban form found at <u>LRT Expansion</u>.

In addition to the LRT Network Plan, the development and approval of the <u>West LRT</u> and <u>Southeast LRT</u> alignments included extensive public consultation and the evaluation of numerous route options. The evaluation used City Council approved criteria that can be found at <u>Route Planning and Evaluation Criteria</u>. Both sites include summaries of the extensive public involvement programs that were carried out for the projects.



The implementation of the LRT Network Plan could ultimately result in a system as described below:

In preparation of the Park and Ride Policy, a position paper was drafted by the Transportation Planning Branch that outlined the diverse and interrelated issues that are involved in making decisions about Park and Ride facilities and services. The paper can be found at: <u>Park and Ride: Transportation Planning Branch Position Paper</u>.

		POLICY NUMBER: C554
REFERENC	<u>CE</u> :	ADOPTED BY:
Transporta	ation Master Plan: The Way We Move (2009)	City Council
		28 October 2009
		<u>SUPERSEDES</u> : New
PREPAREI	<b>D BY:</b> Transportation Department	DATE: 22 September 2009
TITLE:	Park and Ride	
Policy Sta	itement:	
b. c. 2. Park an a. b. c. d.	transit ridership by providing easier access to tran Target trips to Edmonton's downtown and Unive from regional areas and increasing the attractive areas with population densities that do not supp Accommodate travel to special events. In the facilities will be located: At selected LRT stations and transit centres serve services in areas along or outside of the Inner Rin Whitemud Drive, and 75 Street/Wayne Gretzky I downtown or University of Alberta North Campu Spacing between park and ride sites should be a Direct access to/from the park and ride site will be road of regional significance; and Located primarily at sites where more intensive of as the Transportation Utility Corridor or other ma development is not expected to occur in the imr	ersity areas by intercepting commuter trips ness of public transit for those living in bort feeder or regular bus services; and d by LRT, premium bus, or express bus ng Road (Yellowhead Trail, 170 Street, Drive) and preferably at least 8 km from the us; minimum of 2 km; be within 800 m of an arterial roadway or development is not possible or feasible such ajor utility rights of way or where such
3. Park an a. b.	nd ride design will ensure: Hard surfaced lots will be used for permanent fac provided for temporary facilities (5 years or less) surfaces; Disabled parking is provided in a number and loc Zoning Bylaw; The entire park and ride facility is within 250 m of	cilities, while gravel lots will only be or where lease agreements preclude hard cation consistent with the Edmonton

transit centres, the scale of which will be site specific; and

- e. Marked walking routes will be provided.
- 4. Park and ride facilities may be transitioned into transit oriented developments (TOD) over time.
- 5. Parking fees may be charged at park and ride facilities based on:
  - a. Downtown and University parking supply, cost, and demand management;
  - b. Park and ride user demands; and
  - c. Providing ancillary services such as reserved stalls.

### The purpose of this policy is to:

- 1. Provide guidelines regarding park and ride facility location and design; and
- 2. To provide criteria used to determine parking fees at park and ride facilities.

# APPENDIX III: Integrated Transit and Land Use Framework

In addition to the integrated composition of the TMP and MDP, the development of the joint Integrated Transit and Land Use Framework reinforces the commitment of the Transportation Planning Branch and their colleagues in the Planning Department to shifting transportation modes and creating a sustainable city.

The following is a link to the Council Report that was presented in November, 2009 to update Council on progress of the development of the Framework:

#### Integrated Transit and Land Use Framework

The following is an excerpt from the Integrated Transit and Land Use Framework and highlights the regulatory standards that will apply to developments within 400 m of LRT stations.

# **Executive Summary**

Edmonton's transportation and land use planning work together to support *The Way Ahead*, Edmonton's Strategic Plan which sets Edmonton on a course for a vibrant, sustainable future.

The integration of transit and land use is a strong direction that emerged through the development of Edmonton's Transportation Master Plan, *The Way We Move*, and draft Municipal Development Plan, *The Way We Grow*. Both plans recognize that Edmonton's growth will continue to place significant pressure on the City's transportation systems, civic infrastructure and public services.

One of Edmonton's largest investments is in transportation infrastructure. Edmonton is embarking on a major expansion of the light rail transit (LRT) system to create a more sustainable transportation system. Integrating transit and land use provides direction for focusing denser development and civic infrastructure around LRT stations, transit centres and Transit Avenues. This integration will allow Edmonton to support a sustainable transit system and concentrate Edmonton's future urban form.

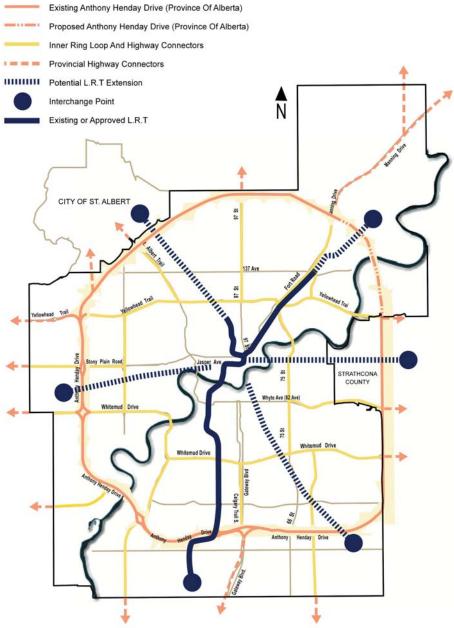
The success of Edmonton's transit system in providing a viable transportation option for Edmonton is dependant on the development of supportive land use and circulation around Edmonton's transit investments – LRT stations, transit centres and Transit Avenues.

#### The Integrated Transit and Land

*Use Framework* (Framework) is a set of regulatory and advisory tools for successfully integrating transit and land use near transit facilities, with a focus on LRT stations. The Framework will foster development that is complementary with and supportive of the significant public investment in transit infrastructure by ensuring that:

- Incremental infill development does not preclude future transit oriented development (TOD).
- Station Area Plans around future or existing LRT stations are developed where appropriate to create successful TOD.





FOR INFORMATION PURPOSES ONLY

The existing or desired community form around each LRT station is unique. Development must be sensitive to the important differentiation between the various places and destinations within Edmonton. To support context sensitive development, guidelines and standards are provided for each of Edmonton's four LRT station-area types:

- Central Area
- Mixed Use/Town Centre
- Employment Centre
- Residential Centre

### Framework Tools

#### The Integrated Transit and Land Use

*Guidelines* (ITLU Guidelines) are an advisory tool applicable to the areas near transit facilities: within 800m area around each existing or proposed LRT station, within a 400m area around major transit centres and along Transit Avenues. The Guidelines:

- Provide development targets
- Provide guidelines and targets for community characteristics
- Should be the basis of LRT Station Area Plans

#### The Transit Oriented Development

*Standards* (TOD Standards) are a regulatory tool applicable to the 400m area around each existing and planned LRT station platform. The TOD Standards:

- Provide development and community characteristic requirements
- Must be the basis of LRT Station Area Plans

#### The Station Area Plan Triggers (SAP

Triggers) is an advisory tool that guides the selection of existing or planned LRT stations for the development of a Station Area Plan.

# Framework Implementation

The TOD standards will be implemented through City of Edmonton Zoning Bylaw amendments and revisions to the Design Construction Standard Manual in order to allow City staff to apply the standards as a regulatory tool in reviewing development proposals.

# **TOD Standards Table** Use in conjunction with TOD Standards Descriptions

se in conjunction with TOD Standards Des Platform Environment (within 200 metres of the station platform)	CENTRAL AREA	MIXED USE / TOWN CENTRE	EMPLOYMENT CENTRE			
Direct Platform Access	Required	Required	Required	Required		
Block Dimensions (Maximum)	75 m face* 300 m perimeter	75 m face* 300 m perimeter	75 m face* 300 m perimeter	75 m face* 300 m perimete		
2 Pedestrian & Bicycle Access (within 400 metres of the station platform)	CENTRAL AREA	MIXED USE / TOWN CENTRE	EMPLOYMENT CENTRE	RESIDENTIAL CENTRE		
Block Dimensions (Maximum) between 200-400 metres of station platform	75 m face* 450 m perimeter	75 m face* 450 m perimeter	75 m face* 450 m perimeter	75 m face* 450 m perimete		
Active Edge Treatments	Required	Required	Required	Required		
Build-to Line (Maximum)	0 metres	0 metres	6 metres	3 metres		
Public Boulevard Width (Minimum)	4 metres	4 metres	4 metres	4 metres		
Bicycle Facilities	Required	Required	Required	Required		
Residential Uses (within 400 metres of the station platform)	CENTRAL AREA	MIXED USE / TOWN CENTRE	EMPLOYMENT CENTRE	RESIDENTIAL CENTRE		
Net Density (Minimum)	250 units/hectare	125 units/hectare	125 units/hectare	80 units/hectare		
Employment Uses (within 400 metres of the station platform)	CENTRAL AREA	MIXED USE / TOWN CENTRE	EMPLOYMENT CENTRE	RESIDENTIAL CENTRE		
Net Intensity (Minimum)	6.0 FAR	1.0 FAR	1.0 FAR	0.5 FAR		
Net Intensity (Maximum)	-	_	_	1.0		
Retail Uses (within 400 metres of the station platform)	CENTRAL AREA	MIXED USE / TOWN CENTRE	EMPLOYMENT CENTRE	RESIDENTIAL CENTRE		
Building Area (Minimum, Cumulative)	14,000 m <sup>2</sup>	14,000 m <sup>2</sup>	_	_		
Building Area (Maximum, Cumulative)	-	_	9,300 m <sup>2</sup>	14,000 m <sup>2</sup>		
Transitions (within 400 metres of the station platform)	CENTRAL AREA	MIXED USE / TOWN CENTRE	EMPLOYMENT CENTRE	RESIDENTIAL CENTRE		
Building Height Compatibility	-	Required	Required	Required		
Requirement refers only to those block faces that are parallel with the station platform						

# APPENDIX IV: Active Transportation Policy

The policy incorporates the extensive work completed during the preparation of the following strategies/plans to increase the accessibility, inclusivity, and convenience of active modes to foster a sustainable and healthy community.

- Sidewalk Strategy: <u>Sidewalk Strategy Summary Report</u> and <u>Sidewalk Strategy</u> <u>Poster Summary</u>
- Walkability Strategy: <u>Walkability Strategy Website</u> with links to reports.
- Bicycle Transportation Plan: <u>Bicycle Transportation Plan Website</u>, <u>Bicycle</u> <u>Transportation Plan Summary Report</u>, <u>Bicycle Transportation Plan Network Maps</u>

# **REFERENCE: ADOPTED BY:** Ten Year Active Transportation Strategy City Council 24 November 2009 SUPERSEDES: New DATE: 5 October 2009 **PREPARED BY: Transportation Department** TITLE: **Active Transportation Policy Statement:** Page 1 of 1 The City of Edmonton strives to be pedestrian- and bicycle-friendly. The City supports all forms of Active Transportation by providing infrastructure, facilities, programs and initiatives to: 1. Enhance accessibility, safety, security, and convenience through strategic improvement, expansion, and maintenance of the infrastructure and facilities that support Active Transportation, including sidewalks, curb ramps, shared pathways, marked bicycle and shareduse lanes, and end-of-trip facilities; 2. Raise awareness of the Active Transportation options available to Edmonton's citizens and the benefits of active, healthy living, recreation, and sustainable communities, through special events and promotions; 3. Educate users of Edmonton's transportation systems about their rights and responsibilities, including drivers, cyclists, and pedestrians, through targeted outreach and educational campaigns; 4. Enact bylaws, policies, procedures, directives, strategic plans, processes, programs, and guidelines to support and encourage Active Transportation modes; and, 5. Share the responsibility for the provision of infrastructure, facilities, programs, and initiatives to support and encourage Active Transportation through collaboration, cooperation, and partnerships. The purpose of this policy is to: Active Transportation includes any form of human-powered transportation, the most common modes being walking and cycling. The purpose of the Active Transportation Policy is to optimize Edmontonian's opportunities to walk, roll, and cycle, regardless of age, ability, or socio-economic status; to enhance the safety, inclusivity and diversity of our communities, and to minimize the impact

**POLICY NUMBER: C544** 

of transportation activities on the Edmonton's ecosystem.

# APPENDIX V: Transportation Demand Management

The LocalMotion project was documented through a series of videos that were posted on the City website and on YouTube. Links to these videos are provided as follows:

Video 1, Video 2, Video 3, Video 4, Video 5, Video 6, Video 7, Video 8