EDMONTON'S TRANSIT STRATEGY

Edmonton

This strategy acknowledges that our transit system, and indeed all of our transportation network, is situated on the traditional land of Treaty No. 6 First Nations and the Metis Nation of Alberta Zone 4. We acknowledge and thank the diverse Indigenous peoples whose ancestors' footsteps have marked this territory for centuries such as: Cree, Dene, Saulteaux, Nakota Sioux, and Blackfoot. We acknowledge this homeland of the Métis people, and that Edmonton is also home for many Inuit. It is a welcoming place for all peoples who come from around the world to share Edmonton as a home. Together we call upon all of our collective honoured traditions and spirits to work in building a great city for today and future generations.

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Transit Strategy Outcome

The Transit Strategy will result in a modernized public transit system that reflects citizen priorities in order to:

- Build transit-friendly neighbourhoods and places.
- Offer fare categories that are consistent and easy to understand.
- Provide service that reflects the different preferences of inner and outer neighbourhoods.
- Elevate the importance of safety.
- Keep up with trends in technology and the environment.

Which ultimately will encourage more citizens to choose transit.

EXECUTIVE SUMMARY

The work we do at the City of Edmonton is for our citizens. The development of the Transit Strategy was undertaken with and for Edmontonians in order to build a great city.

Our transit system can only support our city to the extent that our city supports transit. Transit has the ability to transform our city's urban form, provide sustainable mobility choices, create great neighbourhoods and address social challenges.

The core of the Transit Strategy is framed around five foundational Pillars. Under each Pillar are Guiding Principles and Actions to be implemented over the next decade. While the Guiding Principles and Actions for each of the Pillars have specific roles, they must be applied collectively and in concert to ensure the effective delivery of the Transit Strategy.

The Transit Strategy is a high level strategy that provides a comprehensive and integrated perspective on the transit system, including Light Rail Transit (LRT), bus and paratransit. The strategy was built on the input from thousands of Edmontonians, and responds to their priorities through a market based approach. The transit system will focus on customer service that is **safe, fast, convenient** and **reliable**. Through this commitment to customer service and by pursuing a suite of Guiding Principles and Actions, the Transit Strategy will result in a transit system that contributes to our city-building vision by supporting **mobility, connectivity, integration** and **sustainability**. Ultimately our objective is to provide a transit system shaped by what Edmontonians want, which will encourage more citizens to choose transit.

PILLAR 1: INTEGRATE TRANSIT WITH COMMUNITY PLANNING AND DESIGN

A great public transit system not only helps us move people, it can also help us build an efficient transportation system and more compact and lively neighourhoods, reduce our environmental footprint, link workers with jobs and customers with businesses, improve public health, and enable all citizens to fully engage in urban life. Transit must be integrated early and proactively in the planning process in order to shape great neighbourhoods and design engaging places. This pillar will inform processes and guidelines to improve this integration.

What this means to customers:

- More transit-friendly neighbourhoods
- Improved collaboration with stakeholders in development industry
- Future design of new and renewed LRT Stations and Transit Centres to improve safety, accessibility and passenger comfort.

PILLAR 2: ESTABLISH A BALANCED APPROACH TO OPERATING FUNDING AND FARE POLICY

The financial framework to fund transit operations and set transit fares is shaped by values. Value choices of equity, fairness, and affordability help establish the proportions of transit operating costs to be covered by fares and taxes, the types of fares offered, and who should receive fare

discounts. Such policies provide clarity and consistency to guide the development of operating budgets and adjustments to fare values and transit service levels over time. The major outcomes of this pillar include guidance for updating the transit fare policy and establishing a target for cost recovery.

What this means to customers:

- A new fare structure that is:
  - Easier to understand
  - More consistent in how discounts are offered
  - Encourages ridership by continuing to provide discounts to frequent users
- In order to achieve these improvements, the fare structure will need greater consistency in discounts between fare categories and demographic groups. Improving consistency may require adjustments to some fare discounts. The impacts of these changes will need to be further assessed during the development of the new fare policy, and the approach to implementing the changes will require discussion with decision makers.

PILLAR 3: DEVELOP A MARKET RESPONSIVE APPROACH TO TRANSIT NETWORK DESIGN

Preferences expressed by Edmontonians have shaped a new approach to transit network design. Citizens expectations vary by where they live, the lengths and types of travel they make, their current primary transportation mode, and their current stage of life. Public engagement revealed common preferences and differences in preferences between residents in the inner and outer neighbourhoods. This suggested that a new approach be pursued that matches transit service to the needs of people from various parts of the city based on land use, street layout, demography and customer preferences. Most significantly, this pillar provides direction for a major redesign of the bus network. This new bus network will be structured around Primary Transit Network, consisting of a Light Rail Transit (LRT), precursor Bus Rapid Transit (BRT), a Frequent Transit Network, Rapid Bus and Crosstown routes.

What this means to customers:

- Transit becomes a lifestyle option for inner area residents, due to the Frequent Transit Network enabling spontaneous travel.

- Transit becomes a more competitive commuter option for outer areas, with greater reliability and higher operating speeds, achieved through implementation of Rapid Bus Routes and transit priority measures

- Local service is more direct and easier to understand, but less customized.

- Travel times while on-board transit are minimized.

- There are longer walking distances to transit stops in many areas.

- Areas of high demand receive more fixed route transit service, while areas with low demand receive less fixed-route service.

- The impacts of this approach are partially softened through the use of local routes that connect to seniors complexes, schools and local activity centres.

- Impacts may also be mitigated by exploring options with private sector transportation services to provide new mobility choices in areas with low demand.

PILLAR 4: IMPROVE THE CUSTOMER EXPERIENCE

Delivering transit service over a redesigned network that better meets the travel needs of Edmontonians is fundamental but not sufficient to attract and retain customers. The whole experience of using public transit, including various points along the customer journey, is equally important. Edmontonians want a service that is safe and secure, easy to use, clean and comfortable, less expensive than a personal vehicle, and easy to understand. The results of this pillar will renew commitments to customer service, information, education, safety, and security.

What this means to customers:

- Safer experience for the whole customer journey while riding transit and in and around transit facilities

- Clear, timely and accessible customer information

- Easier to navigate the system

- More engagement on decisions that affect transit service

PILLAR 5: DEVELOP TRANSIT ORGANIZATIONAL CAPACITY

Providing high quality transit service is complex. Doing this well requires a well-functioning organization resourced with the necessary skills, experience, technology, and funding to carry out its mandate. The City's capacity to deliver on the Transit Strategy will be advanced through improved strategies to address human resources, technology, energy, and resilience.

What this means to customers:

- Transit service considering the social, economic and environmental implications and opportunities created by trends in technology and private sector, such as autonomous vehicles, electric vehicles and new transportation options

- Quality customer service supported by greater staff satisfaction

NEXT STEPS

Developing a plan for implementation for the full suite of Actions is the next step to move the Transit Strategy forward. Concurrent with the development of the Transit Strategy Implementation Plan, an immediate next step should be a major redesign of the bus network based on the principles outlined in this strategy. This will build on the momentum and important public conversation initiated through the Transit Strategy by creating an opportunity to discuss changes to routes and service levels with the people directly affected. The outcome will be a transit system that optimizes resources to better meet the needs of citizens in our growing city.

1.0
INTRODUCTION

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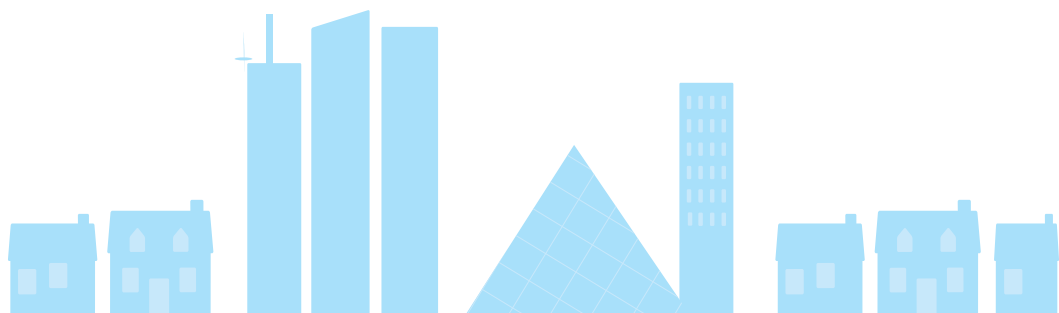
1.0 INTRODUCTION

1.1 BACKGROUND

In 2015, we embarked on a journey to explore what matters to Edmontonians in their transit system. Following on the heels of a comprehensive and technically-driven Transit Review, we wanted to hear from citizens how transit could best serve their needs and what choices would best reflect their values. We recognized that the recent city growth, levels of available funding, and trends in numbers of transit riders was resulting in an increasing challenge to continue effectively delivering transit service. A new approach was needed, grounded in a community conversation about the role of transit in our future city.

The Transportation Master Plan, *The Way We Move*, provides direction to develop an integrated, efficient, effective, and accessible transit network. A foundational element of this network is the long-term LRT network plan, approved by Council in 2009. Urban-style LRT is identified to extend into each quadrant of the city, connecting to a central area circulator LRT. The Transit Strategy complements and supports the LRT network plan, providing a comprehensive public transit service Strategy for the future.

From August 2015 to June 2016, we heard from over 20,000 Edmontonians through an extensive four-phase public engagement program. It was essential that this process engage citizens in more effective and innovative ways, including going to where people are rather than asking they come to us, and connecting with groups who traditionally face barriers to engagement. We spoke with all sorts of people - car drivers and transit riders, young children and seniors, suburbanites and urban dwellers, indigenous Edmontonians, people with disabilities, and many others. We heard from them while they rode the bus or train, while they celebrated at community events and festivals, and when they attended workshops. What we heard from Edmontonians through this process has directly informed the development of this Strategy.

This Transit Strategy defines a long-term vision for transit service in Edmonton. The elements of this Strategy - Values, Pillars, Guiding Principles, and Actions - provide a framework to guide how transit service is delivered and how we invest in transit over the next decade.

FIGURE 1: TRANSIT STRATEGY PHASES

PHASE 1 **Awareness** Jun '15 - Jul '15	**PHASE 2** **Vision** Gather Ideas Prioritize Ideas Aug '15 - Dec '15	**PHASE 3** **Explore Trade Offs** Customer Experience Network Priorities Jan '16 - Oct '16	**PHASE 4** **Strategy Development** Strategic Direction Strategy Council Approval Nov '16 - Jun '17

1.2 CONTEXT

Our transit system can only support our city to the extent that our city supports transit. Transit is part of our city, so it is part of a complex system. Our city is growing up, in, and out. Our city is young - one of the youngest in Canada - so we are literally growing up together. All of the diverse aspects of our city - its people, places, infrastructure, and activities - shape how our transit system works. A transit system for all Edmontonians is influenced by many factors:

- Where people are going - whether to a shopping centre, downtown, a university or a recreation facility - is shaped by how our city is planned. Quality transit service is influenced by quality land use planning.

- The design of our neighbourhoods is shaped by the process of land development and renewal. Quality transit service is influenced by the quality of neighbourhood planning and urban design.

- Perception of security in our city is shaped by complex and interconnected social factors, such as poverty and racism, which are amplified in a shared space like transit. While the transit system can not resolve these issues, it can contribute to solutions, thereby improving the transit experience for all Edmontonians.

In these and many ways, the future success of transit is influenced by our ability to transform Edmonton's urban form, create great neighbourhoods, and address our social challenges.

As Edmonton fast approaches a population of one million, and moves towards a city of two million, it is imperative that the Transit Strategy be considered within the overall context of our vision for the city. While our foundational strategic plans - *The Way Ahead* and *The Way We Grow, Move, Live, Green, Finance and Prosper* - provide overall direction, this Transit Strategy provides the additional definition needed to chart a course for future success.

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1.3 STRATEGY OVERVIEW

This report articulates the complete Transit Strategy, including the various components of the Strategy and their relationships as illustrated in Figure 2. This includes how the Strategy aligns with the City's foundational plans, *The Way Ahead* and the *Way We Grow, Move, Live, Green, Finance and Prosper*. The Strategy contains four Values and Key Transit System Attributes. The core of the Strategy is framed around five foundational Pillars:

1. Integrate transit with community planning and design
2. Establish a balanced approach to operating funding and fare policy
3. Develop a market responsive approach to transit network design
4. Improve the customer experience
5. Develop transit organizational capacity

Within each Pillar, a set of Guiding Principles outlines the Strategy goals, and corresponding Actions detail the activities necessary to achieve these goals.

The Strategy also contains the outline of a conceptual transit network design, identification of the components of a comprehensive Transit Service Policy, a framework for implementation, and a performance monitoring approach to track progress over time.

FIGURE 2: TRANSIT STRATEGY COMPONENTS

THE WAY AHEAD & THE WAYS PLANS

STRATEGIC ALIGNMENT

VALUES & ATTRIBUTES

PILLARS
1. Planing & Design
2. Funding and Fare Policy
3. Network Design
4. Customer Experience
5. Organizational Capacity

GUIDING PRINCIPLES

ACTIONS

2.0
—
STRATEGIC ALIGNMENT AND VALUES

2.0 STRATEGIC ALIGNMENT AND VALUES

2.1 STRATEGIC ALIGNMENT

The fulfillment of Edmonton's city vision relies on the success of the transit system. The following describes the alignment between the Transit Strategy and the City's vision and supporting 10-year Strategic Goals as articulated in the City's strategic plan, *The Way Ahead*.

The Transit Strategy provides a broad approach which is sufficiently flexible to accommodate shifts in strategic direction. As we look towards the renewal of *The Way Ahead*, the Transit Strategy will continue to support our goals for building a great city. Our urban shift will be driven by an innovative, resilient approach to transit service delivery. The Transit Strategy helps deliver on the City's 10-year strategic goals in the following ways:

Enhance Use of Public Transit and Active Modes of Transportation

Transit will provide choice and reasonable access for people across various demographic, geographic, socioeconomic, and mobility spectrums. By periodically revisiting how transit service is delivered, the transit network will be appropriately integrated in the current transportation and land use context of our city. Transit will continue to be essential for the overall efficiency of the transportation system, and will be adaptable over time to embrace changes in technology and service delivery models.

Transform Edmonton's Urban Form

Transit will focus service in areas with highest demand currently and anticipated highest future demand. Nodes and corridors with more intensive land use will be supported by appropriate service levels and this will support more compact urban form. High standards will be needed in the design of the public space created by transit infrastructure.

Improve Edmonton's Livability

Transit will foster inclusion and welcome all people. Transit will support a safe environment by increasing natural surveillance through land development and ridership, and appropriately balancing enforcement with education. Active lifestyles will be encouraged through the effective integration of active transportation into transit planning and infrastructure. Transit will continue to provide individuals with opportunities to access the places they want to go. Building on the momentum created by the Transit Strategy, citizens will continue to be engaged in important decisions affecting their transit service.
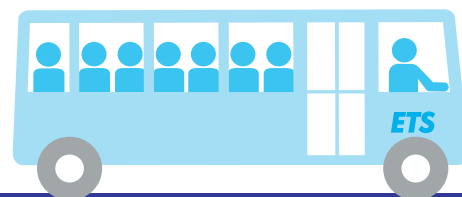
Preserve and Sustain Edmonton's Environment

Transit will motivate a shift to sustainable transportation and contribute to the goals of the Energy Transition Strategy. A shift to sustainable transportation will be achieved by better reflecting what Edmontonians want in their transit service, and through improved integration with other sustainable transportation modes such as walking, cycling, carsharing, ridesourcing, and other new mobility options. Transit will contribute to our shift to a low carbon city through integration of new technology in vehicle fleets and operations.

Diversify Edmonton's Economy

Transit will enhance workforce mobility and access to multiple employment hubs. High quality transit service will reinforce the urban core as an attractive location for companies looking to be part of a hub of industry, knowledge, and innovation. Transit will continue to support access to commercial and industrial areas.

Ensure Edmonton's Financial Sustainability

Transit will more effectively deliver service to meet our objectives in a context of limited resources. Transit is a good investment of public funds, reducing direct and indirect costs to individuals and society, including costs to transportation, health and environmental systems. High quality transit service will support growth in transit ridership, thereby contributing to continued balance in financial support between transit users and the broader community.

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30 minute
too long to wait

What do you like about
Edmonton's Bus/LRT system?

2.2 VALUES

The following values form a core philosophy for transit. The focus of our transit system will be getting people around, connecting them to places and to each other, effectively integrating our transit network internally and with the rest of transportation and land use systems, and continually striving for sustainability. Fulfilling these values is essential to meeting Edmontonians' expectations for our transit system.

Mobility

Transit is one piece of the puzzle in getting people where they need to be. To meet the needs of a growing, diverse city, our transit system provides greater choice for all Edmontonians as part of a suite of integrated mobility solutions. Collaboration with other modes of transportation are leveraged to increase choice and flexibility.

Connectivity

Transit is an important structuring element to our city, connecting both places and people. Our transit system gets people where they want to go by providing vital links between major destinations as well as appropriate levels of service to other important population and employment centres. By sharing their journey with other passengers, transit users feel more connected to our diverse society and city.

Integration

Transit is an integral part of how our city lives, moves, and grows. Our transit system demonstrates integration in many ways. As an essential building block for a great city, transit service and infrastructure are integrated with our city's growth and urban development. Different types of transit services, such as LRT, precursor BRT, the Frequent Bus Routes, Rapid Bus Routes, Crosstown Routes, Local Routes, DATS, and regional services, are integrated seamlessly into one, cohesive network. The transit system is integrated with other sustainable transportation, such as walking and cycling, as well as new, emerging ways of getting around - such as ridesourcing, carsharing, and bikesharing.

Sustainability

Transit is a sustainable way of getting around our city and is an efficient use of space and infrastructure. This efficiency translates into greater environmental sustainability and contributes to achieving the goals of the Energy Transition Strategy. Transit is also a good investment of public funds, reducing the amount of road infrastructure, operations, and maintenance needed to keep our city moving. With minimal barriers to entry, transit supports a more equitable community by providing reasonable access for all people regardless of age, ability, or economic circumstance.

2.3 KEY ATTRIBUTES OF OUR TRANSIT SYSTEM

In addition to these Values, a set of Key Attributes of our transit system is used to describe the transit user experience in Edmonton.

These attributes provide a simpler description of core priorities. The Guiding Principles expand on this in greater detail. These attributes, along with values, help define a system to measure performance of this Strategy.

Edmonton's public transit service provides a fast, safe, convenient, and reliable way to move around our city. Key attributes include:

Safe:

Passengers feel respected, included, and free from any physical and psychological threat.

Convenient:

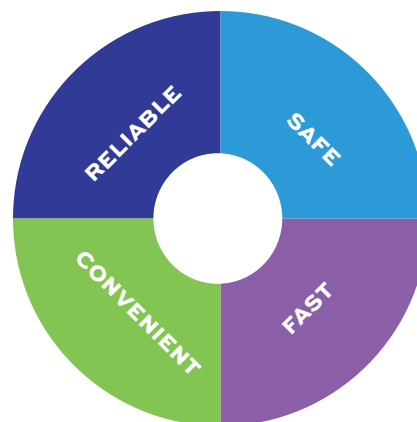**Customers find the service easy to understand and easy to use.**

Reliable:

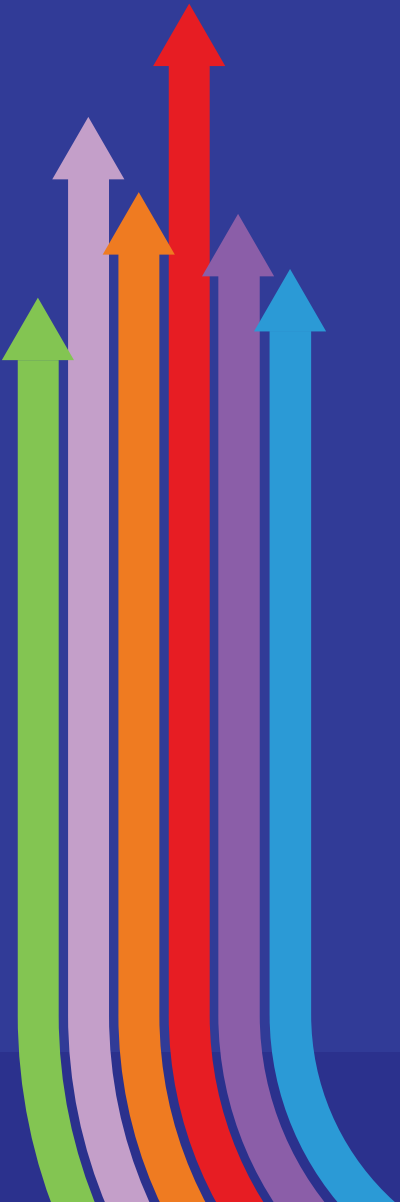**Customers can count on service being there as advertised.**

Fast:

Customers are offered an attractive alternative to other modes of transportation when and where transit service is needed the most.

FIGURE 3: KEY ATTRIBUTES OF OUR TRANSIT SYSTEM

3.0

PILLARS OF THE TRANSIT STRATEGY

3.0 PILLARS OF THE TRANSIT STRATEGY

The Transit Strategy addresses three fundamental policy questions:

1. What is the broad policy framework necessary to enable success?
2. What is the approach to service delivery?
3. What organizational capacity is required to support implementation?

To address these, the Strategy is structured on five fundamental Pillars. Table 1 illustrates the specific Pillars that address each of the policy questions.

TABLE 1: POLICY QUESTIONS AND ASSOCIATED PILLARS

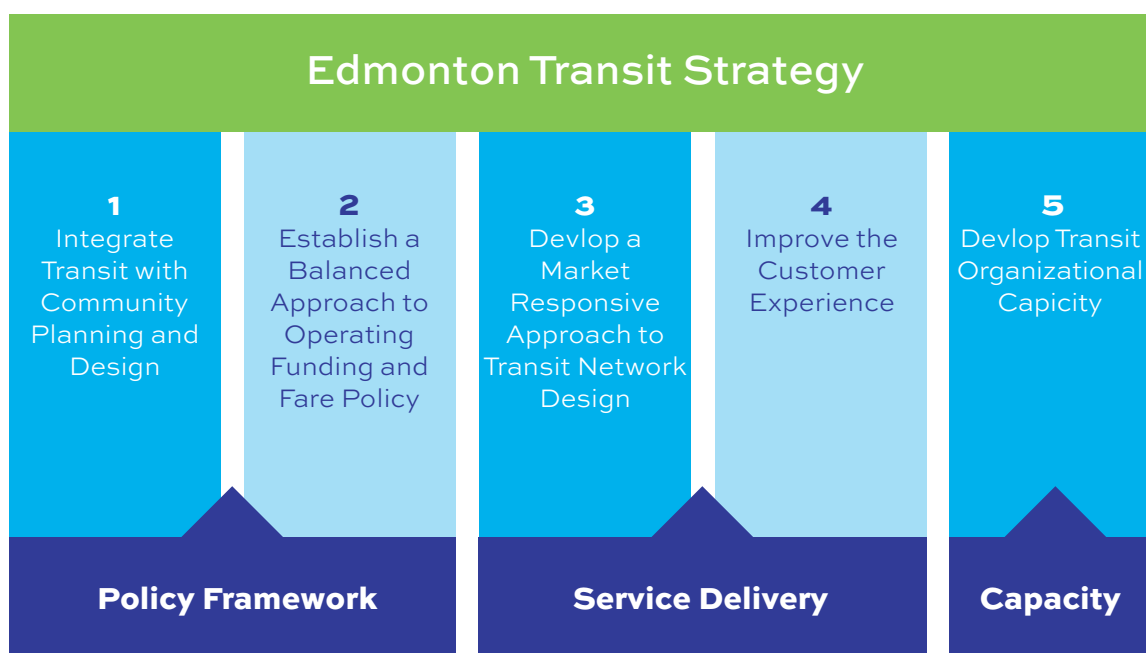| Policy Question	Pillars
Policy Framework	1. **Integrate Transit with Community Planning and Design:** Provides guidance to coordinate transit system development with the City's urban planning goals and with community planning and design. 2. **Establish a Balanced Approach to Operating Funding and Fare Policy:** Provides guidance to establish the financial context within which the transit system is to operate.
Approach to Service Delivery	3. **Develop a Market-Responsive Approach to Transit Network Design:** Provides guidance to define the nature of the transit network and the types of services to be provided. 4. **Improve the Customer Experience:** Provides guidance to define how customers will experience the services delivered through the transit network.
A Commitment to Organizational Development	5. **Develop Transit Organizational Capacity:** Provides guidance to develop organizational competencies required for effective and efficient transit service delivery (e.g. human resources, technology, sustainability, funding).

For each of the five Pillars, the Transit Strategy contains an overview of key issues, a review of the Guiding Principles, and a list of associated Actions to be implemented over the next decade. For Pillar 3, the Strategy includes a Conceptual Network Plan and outlines the components of a comprehensive Transit Service Policy.

While the Guiding Principles and Actions for each of the Pillars have specific roles, it is important that they be applied collectively to ensure the effective delivery of the Transit Strategy. This is illustrated in Figure 4.

While this strategy provides a robust suite of actions, it is critical that the strategy be adaptable over time to allow for the implementation of additional actions that are consistent with the overall strategy direction and the more specific guidance providing by the guiding principles.

FIGURE 4: TRANSIT STRATEGY PILLARS

Edmonton Transit Strategy

1	2	3	4	5
Integrate Transit with Community Planning and Design	Establish a Balanced Approach to Operating Funding and Fare Policy	Devlop a Market Responsive Approach to Transit Network Design	Improve the Customer Experience	Devlop Transit Organizational Capicity

Policy Framework | **Service Delivery** | **Capacity**

MUSIC
& (Radio) ARM
Rests :)

One thing to make our transit system greater in the FUTURE?

Like seasonal/yearly pass available to seniors. Good value. Easy to use card.

One great thing about our transit system NOW?

$$ for more frequency & more access to reduce walking time to get to the bus.

thanks for asking.!

One thing to make our transit system greater in the FUTURE?

...ew LRT line ...reat!!!
NAIT LINE

One great thing about our transit system NOW?

More frequent, more direct bus lines, fewer milk runs. More frequent trains off-peak.

One thing to make our transit system greater in the FUTURE?

It would be great if people working downtown could be encouraged to take the Clairview train so NAIT students can get on the new NAIT line.

One thing to make our transit system greater in the FUTURE?

3.1 PILLAR 1: INTEGRATE TRANSIT WITH COMMUNITY PLANNING AND DESIGN

Coordinate transit system development with the City's urban planning goals and with community planning and design.

3.1.1 Transit's Role in the Community

Transit plays a vital and diverse role in shaping our urban communities. Beyond contributing to meeting the mobility needs of a broad cross-section of citizens, a great transit system can also help us create a more efficient transportation system, build more compact and lively neighourhoods, reduce our environmental footprint, link workers with jobs and customers with businesses, improve public health, and enable all citizens to fully engage in urban life.

In this sense, great transit service helps us meet many other seemingly unrelated goals – reducing congestion, enhancing the street environment, generating economic prosperity, sustaining a healthier environment, and advancing social justice. For citizens, great transit service provides access to jobs, education, services, recreation, and social opportunities.

These benefits to communities and individuals do not necessarily occur on their own, they are truly realized when transit is well integrated with community planning. This requires that the development of transit be coordinated and integrated with ongoing urban planning processes.

While transit's role is prominent in the City's official plans, it is particularly important that community designs make transit travel an attractive option. Good community design enables transit services to operate efficiently, and integrates transit infrastructure into the design of streets and public space. Transit must be incorporated early in the planning process. Interdisciplinary collaboration amongst City departments and with external stakeholders, including the development industry, is critical to success.

3.1.2 Guiding Principles and Actions

GUIDING PRINCIPLE

1.1   Recognize the contribution of transit to city building goals

ACTIONS

a. Instill the importance of transit's role in a variety of planning, policy and education initiatives, such as:

- Collaborative conversation with the development industry on new approaches to neighbourhood design and service delivery;

- Embedding a transit planning perspective in major city-building activities;

- Internal and external education efforts to explain transit's contribution to congestion management, economic prosperity, environmental improvements, public health, and citizen mobility.

GUIDING PRINCIPLE

1.2. Improve the integration of transit with community and neighbourhood planning

ACTIONS

a. Include proactive transit planning early in planning processes.

- Include proactive transit planning input early in neighbourhood planning processes for street network design, urban design, transit infrastructure design (e.g. stops, shelters, loops, etc.), and modal integration.

- Assess and improve current City processes to review development proposals at the strategic, conceptual, and detailed design levels.

- Establish a framework to align redevelopment planning along key transit corridors to leverage and maximize investment and support growth objectives.

- Establish new approaches to facilitate the co-location of transit hubs with other major amenities and services such as recreation centres and schools.

b. Support effective planning by developing tools to inform decision-making.

- Develop a Station Access Strategy which expands on the forthcoming Park and Ride Strategy, and considers variations in levels of modal priority (i.e. local bus, walking, cycling, park and ride, passenger drop-off, vehicle for hire, etc.) for different station types.

- Employ data to support evidence-based decision-making in transit planning and perform retrospective analysis of policy outcomes and implementation efficiency.

- Create information materials and checklists for transit-friendly design for use by the development industry (e.g. best practices for passenger access, operational requirements, land use layout, etc.).

- Establish new tools to assess the the impact of neighbourhood design on transit performance and communicate the results.

GUIDING PRINCIPLE

1.3. Elevate the interdependent relationship of transit, urban design and placemaking.

ACTIONS

a. Enhance the quality of urban design of transit infrastructure to create accessible, attractive, and safe places.

- Update and expand the Sustainable Urban Integration Guidelines for LRT Stations to include Transit Centres and major bus stops in order to:

- Replace the ETS Planning Handbook.

- Ensure consistency with other City design documents (e.g. TOD Guidelines, Urban Design Framework, Complete Street Guidelines, Main Streets Guidelines, New Streets Design Standards).

- Apply Crime Prevention Through Environmental Design (CPTED) and accessibility principles to the planning and design of new or renewed transit infrastructure.

b. Embed transit considerations in the design of major developments.

3.2 PILLAR 2: ESTABLISH A BALANCED APPROACH TO OPERATING FUNDING AND FARE POLICY

Establish the financial context within which the transit system will operate.

3.2.1 Operating Funding Considerations for Transit

This pillar provides guidance on the financial framework the City uses to fund transit operations and to set transit fares. Based on considerations of equity, fairness, and affordability, these are value choices made by the City to establish the proportions of transit operating costs to be covered by system-generated revenues and tax-supported revenues, the types of fares to offer, and the nature and scale of fare discounts to provide to specific groups of citizens. Such policies provide clarity and consistency from year to year to guide the development of operating budgets, adjustments to fare values, and transit service levels.

While transit fare policy objectives vary between municipalities, the common elements typically include:

- Establish targets for the proportion of annual operating costs covered by system-generated revenues (e.g. fare revenues and advertising revenues);

- Designate the demographic groups for which fare discounts or special fare programs are offered;

- Designate the types of fare categories (i.e. cash, ticket, pass types) offered within each demographic group; and

- Establish consistent relationships amongst the values of the various fare categories.

Cost Recovery

While a specific target for cost recovery is not included in the City's current transit fare policy, a number of recent reports including the 2016 City Auditor's report on Edmonton Transit suggested that one should be established. Cost recovery in Edmonton is currently somewhat less than in similar cities (i.e. 40% to 45% in Edmonton as compared to 45% to 60% in cities with populations between 400,000 and 2 million).

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Establishing a target range for cost recovery would demonstrate what the City considers an appropriate balance of the social and individual benefits of public transit. Any target for cost recovery needs to be considered within the context of affordable access, the City's financial situation, and broader urban goals.

While the City Auditor's report did not recommend a specific target, adoption of one will establish policy to guide adjustments to fares during the development of the operating budget and will make the process more predictable and transparent. A cost recovery target within the lower range of those used by similar cities, 45% to 50% for example, could be realized through a more consistent approach to fare discounts, regular annual inflationary adjustments to fare values, increased patronage gained from service improvements, and operating efficiencies. During budget deliberations, it is particularly important that adjustments to fare levels be made in a manner consistent with the overall fare policy, rather than in response to specific issues whose resolution might otherwise undermine it.

Transit Fare Structure

The City currently offers cash, ticket, and pass fares in various combinations to the broad demographic categories of adult, seniors, youth, and post-secondary students. Low income monthly passes are planned to be added in 2017 for adults and youth.

While the public engagement results showed strong support for fare discounts for seniors, youth, and students, for those in financial need, and for those with physical disabilities, the current fare structure lacks consistency in the scale of discount used for fare categories within each demographic group. In addition, there is significant variation in the value of the multiplier of the ticket fare used to establish the prices of monthly passes. Although a more consistent approach to fare discounts will impact some customers, it will result in a fare structure that is more fair, easier to understand, and easier to administer.

An electronic fare system is under development in Edmonton. While such systems provide additional flexibility for different types of fares (e.g. rolling passes that start on the day of initial use, distance based fares), the fundamental principles on which an electronic fare system is based are no different from the ones used for traditional fare systems currently in use.

3.2.2 Guiding Principles and Actions

GUIDING PRINCIPLE

2.1. Balance annual requirements for operating revenues with affordability for users

ACTIONS

a. Conduct a review of the transit fare policy to:

- Establish consistent relationships amongst fare categories across demographic groups.

- Assess and establish a target range for cost recovery.

GUIDING PRINCIPLE

2.2. Develop a fare structure that is:
- Easy to implement, comprehend, and operate
- Equitable in its offering of discounts
- Sensitive to the urban travel market
- Encourages ridership

ACTIONS

a. Develop a fare structure that:

- Specifies the demographic groups within which separate sets of fare categories are to be provided (e.g. adults, youth, seniors, post-secondary, low income, families, etc.).

- Specifies the fare categories to be provided within each demographic group (e.g. cash, ticket, pass, etc.).

- Specifies the scale of a common discount for all fare categories within each demographic group (for example, each Youth fare category is x% of the corresponding Adult fare category).

- Establishes a common approach across all demographic groups that uses a consistent multiplier of the corresponding ticket fare to calculate the value of pass fares within each demographic group.

- Establishes a maximum duration for transfers that permits unlimited use of transit service while the transfer is valid, and that permits passengers to complete lengthy one-way journeys without the requirement to pay an additional fare.

- Offers higher rates of discount to frequent users than to moderate and infrequent users.

- Applies equitably to users of both conventional and DATS services.

b. Conduct industry benchmarking during the review and development of the transit fare policy.

c. Implement periodic adjustments to fare values in conjunction with the adoption of the operating budget that:

- Respect the relative relationships amongst fare categories established in the revised fare policy.

- Consider the general rate of inflation in the community and in transit operating costs.

- Consider the trends in out-of-pocket costs for urban automobile travel (e.g. fuel and parking) and the influence of these costs on mode choice.

GUIDING PRINCIPLE

2.3. Explore the potential for new fare structure opportunities made possible by the Smart Fare initiative

ACTIONS

a. Prepare a regional transit fare integration plan with neighbouring municipalities in the Edmonton Metropolitan Region.

b. Consider a regional fare structure that relates fares for inter-municipal transit travel to the operating costs to supply the inter-municipal service.

c. Develop fare payment procedures that reduce the time required to board and alight passengers.

GUIDING PRINCIPLE

2.4. Communicate to the public how fare principles translate into the fare structure

ACTIONS

a. Conduct a public engagement program during the review and development of the transit fare policy.

b. Conduct periodic public communication programs following Council adoption of the revised fare policy that explains:

- The nature and rationale for the revised fare structure.

- The relative proportions of transit operating costs paid by users and by the City's taxpayers.

- The savings in individual transportation costs that result from using transit rather than driving.

3.3 PILLAR 3: DEVELOP A MARKET RESPONSIVE APPROACH TO TRANSIT NETWORK DESIGN

The nature of the transit network and the types of services to be provided.

3.3.1 Transit Network Design – Edmonton Context

The process of designing the transit network and establishing service levels lays the groundwork for deploying the service across the city. While the approach to design can vary between cities, the design of a transit network and the service operated over that network can be informed by many factors as well as the adopted service standards. These factors include travel patterns, trip lengths, trip purposes, residential and employment densities, street patterns, neighbourhood demographic characteristics, automobile ownerships levels, historical transit demand levels, and customer preferences.

In Edmonton, a fundamental component of the transit network is the LRT network. The future LRT network has been identified in the Council approved LRT Network Plan. The bus network design will complement and function in concert with the LRT network to provide an integrated transit service. During development of LRT, precursor BRT may be implemented in some segments prior to construction of rail in order to provide a high level of service while ridership levels increase.

The transit market characteristics which are used to inform transit network design are not uniform across any city. Their mix varies and, consequently, the transit needs of neighbourhoods varies with them. It is important that transit network and service design be responsive to these variations and to public preferences revealed through public engagement.

The responses to the Explore Trade-Offs component of the public engagement process provide some guidance on how to approach transit network design in Edmonton. The results indicated that citizen expectations of the transit system vary by the type of neighbourhood in which people live, the lengths and types of travel they routinely make, their current primary transportation mode, and their current stage of life.

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While the public engagement revealed preferences common to all Edmontonians (i.e. focus service on benefiting the largest number of Edmontonians, improve service frequencies, match service levels to ridership demand, utilize bus priority measures, improve the walk/wait portion of transit travel), some particular differences in preferences emerged between residents in:

- **Inner Neighbourhoods** - Generally those within the inner ring road, characterized by a grid street network and a finer grain mix of residential and non-residential land uses, and where transit use is higher; and

- **Outer Neighbourhoods** - Generally those beyond the inner ring road, characterized by more circuitous street patterns and more homogeneous land uses, and where there is more reliance on automobile use.

The following map illustrates the general boundary between the inner and outer areas. It is important to keep in mind that, while each area is predominantly characterized by their described features, there are neighbourhoods in each that more closely resemble the characteristics of neighbourhoods in the other area. Consequently, the boundary between the two areas is somewhat fluid.

The differences in preferences between Inner and Outer neighbourhoods are summarized in Table 2.

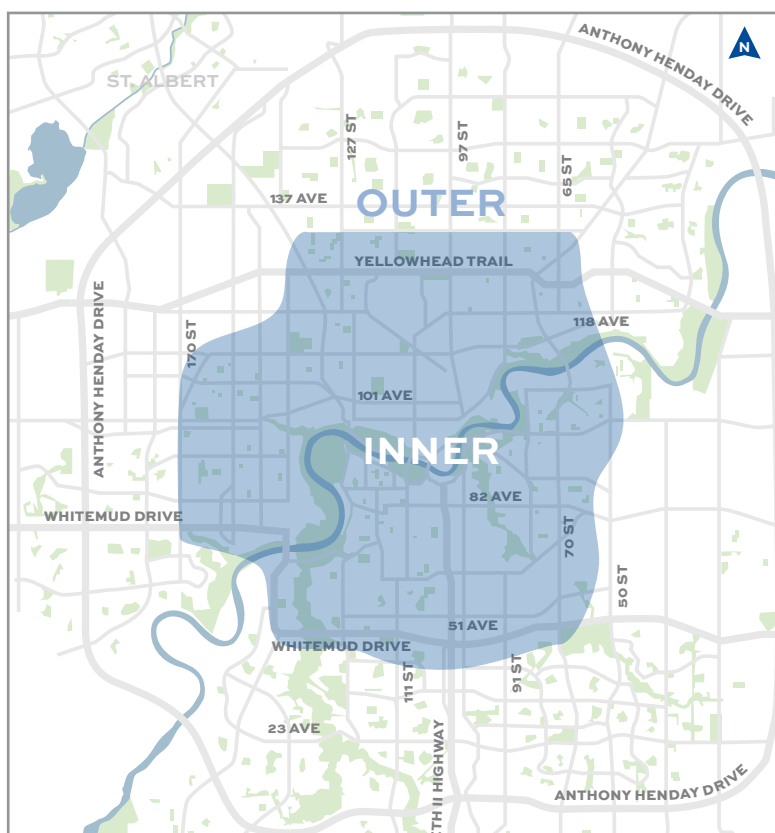## FIGURE 5: INNER AND OUTER AREAS

Table 2: Preferred Transit Service Attributes - What Was Heard During the Public Engagement

Inner Neighbourhoods	Outer Neighbourhoods
• More frequent service • Transfer-based travel amongst high-frequency routes • Both peak and off-peak services are important • Local bus service preferred to Park and Ride	• More frequent service • Minimize overall travel time, but current auto users have divided preferences between transfer-based travel vs. direct routes • Preference for weekday peak period service • Divided preferences between local buses and Park and Ride to access rapid transit

This suggests that a more market-responsive approach to transit network design be pursued. This approach tailors transit service to variations in the patterns of land use, street layout, demographics, and customer preferences in different parts of the city. This general variation in transit market conditions is shown in Table 3.

Table 3: Transit Market Conditions

	Inner Neighbourhoods	Outer Neighbourhoods
Land Use and Street Layout	• Higher mix of densities/uses, with some areas of low density • Grid-like street patterns	• Predominantly lower-density, with some recent areas built to medium densities • Curvilinear street patterns
Demographic Characteristics	• Household Size < Average • Vehicle Ownership < Average	• Household Size > Average • Vehicle Ownership > Average
Transit Primarily Desired for...	• All Trip Purposes during all time periods of the week	• Work/Post-Secondary/School trips during weekday peak periods
Transit Attributes Valued Most	• Frequent • Available throughout the day on all days of the week • Reliable	• Fast, comparable to travel times by automobile • Direct service to major destinations (especially for peak period work and post-secondary travel) • Easy access to fast routes (by auto, bike, walk, feeder bus) • Reliable

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Based on the public engagement results and the transit market conditions, Table 4 illustrates the general package of network features that best meet the needs of different types of neighbourhoods in the city.

Table 4: Desirable Network Features

Inner Neighbourhoods	Outer Neighbourhoods
• Mainline corridors operating frequently throughout the day on all days of the week • Convenient access to frequent service corridors: 　» Safe, secure walking and cycling paths 　» Bicycle parking at major stops and stations 　» Local feeder routes where required • Transit priority measures where beneficial • High quality, weather-protected waiting areas at stations and major stops • Real-time customer information	• Fast, reliable services to major destinations: 　» LRT, Rapid Bus Routes, Crosstown Routes • Direct access to the fast services: 　» Park and Ride, feeder routes, new mobility providers 　» Safe, secure walking and cycling paths 　» Bicycle parking at major stops and stations • Transit priority measures where beneficial • Attractive frequencies during peak periods • Local routes that connect to local destinations and to fast, reliable services • High quality, weather-protected waiting areas at stations and major stops • Real-time customer information
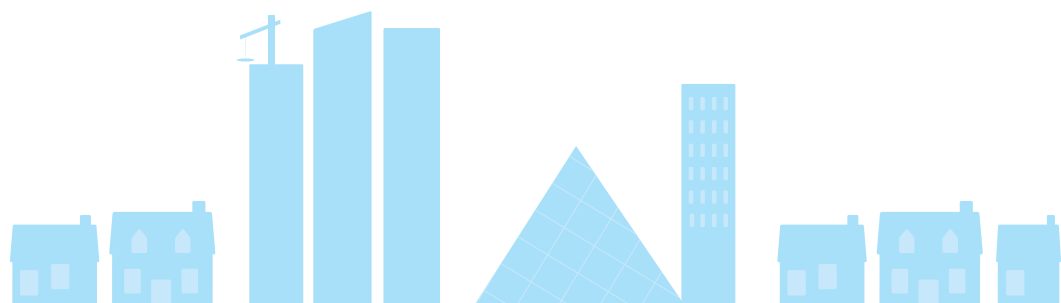
3.3.2 Guiding Principles

Following adoption of the Transit Strategy, a detailed redesign of the transit network is to be undertaken. This redesign work is to be based on Guiding Principles developed from the approach discussed above. The Guiding Principles are in three categories:

- General principles for the entire network;
- Network design principles for inner areas; and
- Network design principles for outer areas.

General Principles for Transit Network Design

GUIDING PRINCIPLE
3.1. Continue to expand the long-term LRT Network.

GUIDING PRINCIPLE
3.2. Deploy a variety of service types to meet the various types of travel needs throughout the city.

GUIDING PRINCIPLE
3.3. Provide service spans and service frequencies commensurate with the level of customer passenger demand, land use density and land use mix.

GUIDING PRINCIPLE
3.4. Implement transit priority measures (e.g. transit signal priority, queue jumps, reserved lanes), where required in congested areas in major arterial corridors, to improve service reliability and operativ ng speeds.

GUIDING PRINCIPLE
3.5. Improve the customer waiting environment at major stops and stations, particularly along high frequency corridors.

GUIDING PRINCIPLE
3.6. Improve pedestrian access to the transit network, particularly to high frequency corridors.

Network Design Principles for Inner Areas

GUIDING PRINCIPLE

3.7. Develop a network of high frequency services in major corridors that operate throughout the day on all days of the week.

GUIDING PRINCIPLE

3.8. Develop a network of local routes, where required, to provide service in proximity to seniors complexes, schools, and local activity centres.

GUIDING PRINCIPLE

3.9. Coordinate network improvements with infill and intensification initiatives in mature neighbourhoods.

Network Design Principles for Outer Areas

GUIDING PRINCIPLE

3.10. Develop a network of LRT, precursor BRT, Rapid Bus, and Crosstown services in suburban areas for travel to downtown, post-secondary institutions, major employment sites, and major shopping/mixed use areas.

GUIDING PRINCIPLE

3.11. Develop a network of local routes and explore options with new mobility services (e.g. shared taxi, transportation network companies) for the provision of local services in proximity to seniors complexes, schools, and local activity centres.

GUIDING PRINCIPLE

3.12. Integrate city-owned Park and Ride facilities, local bus access, and TOD initiatives at LRT stations and major transfer points in the bus network.

3.3.3 Characteristics of the Revised Transit Network

The application of the Guiding Principles will result in a transit network structure such that the service types (e.g. LRT, precursor BRT, Frequent Service Bus Routes, Rapid Bus Routes, Crosstown Bus Routes, Local Routes) are distinguishable and appropriately branded to make their functions understandable to the public. The characteristics of these service types are described in Table 5:

Table 5: Transit Service Type Characteristics

Service Types	Characteristics
LRT and precursor BRT	• Very frequent service at all times with station spacing at intervals of 500 metres or greater. • Local bus connections and TOD integrated with LRT stations. • Park and Ride facilities at LRT stations and transit centres, primarily at locations distant from the city centre.
Frequent Bus Routes	• Located in major corridors within the inner ring road. • Operates throughout the day on all days of the week. • Operates at frequencies of 15 minutes or better during days and evenings on weekdays and Saturdays, and at frequencies of 20 minutes or better during late nights and Sundays. • Serves stops spaced at intervals of 250 to 500 metres. • Uses frequent service, rather than timed transfers, to provide convenient connections amongst frequent routes and with the LRT and precursor BRT services.

Rapid Bus Routes	• Providing connections between areas not served by LRT or precursor BRT and major destinations, including:
	  » Peak period non-stop and limited stop services between residential areas and major employment/post-secondary destinations and
	  » Limited stop services in suburban corridors connecting major activity centres.

Crosstown Routes	• Connecting major suburban destinations that:
	  » Operate during those time periods when there is sufficient demand.
	  » Operate at frequencies of 20 to 30 minutes.
	  » Serve stops spaced at intervals of 300 to 800 metres.

Local Routes	• Less circuitous than current routes. • Provide connections with LRT and precursor BRT, high frequency services and local activity centres, while minimizing duplication of service. • Operate during those time periods when there is sufficient demand. • Operate at frequencies based on demand.

The provision of efficient and effective service on this transit network will require that:

- The span of service and the service frequencies operated on each route be governed by the level of passenger demand. **This will result in the redeployment of some service from lower-density areas during periods of low demand to higher density areas that generate higher levels of transit demand.**

- The pedestrian network of sidewalks, trails, and crosswalks be upgraded where necessary to provide direct and safe walking access to/from transit stops. **Features of the reconfigured network (high frequency corridor services, less circuitous local routes) will result in longer walking distances to transit service in many areas and it is important that walking access be made as direct as possible.**

- Investments at major stops and stations on the LRT, precursor BRT, and Frequent Transit Network (e.g. heated shelters, benches, branded signage, real-time digital displays, landscaping) be made to improve comfort and security, reduce uncertainty about bus arrivals, and physically define the parts of the network on which high levels of service are operated.

- Transit priority measures (e.g. transit signal priority, queue jumps, reserved lanes) be implemented in major transit corridors, where warranted, to improve service reliability and operating speeds.

- A service branding approach for the different components of the network be developed to improve the public's comprehension of the functions of the various service types. Examples of branding components include route numbering series assignments by service type, improved transit maps (both paper and electronic/digital), route information displayed at and on major bus stops, stop and station signage, etc.

- The need for existing and planned Transit Centres in the revised network be evaluated and plans prepared for modifications to these facilities, where warranted.

Implementation of a revised network will require a phased approach, with some changes being introduced in the near term and others requiring longer timelines for completion. Service improvements will be most successful if they are packaged with the implementation of infrastructure improvements such as transit priority features, stop/station upgrades, and improvements to the pedestrian realm.

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3.3.4 Actions

Building on the Guiding Principles and Characteristics of a revised network, the following actions are required in order to implement a market-responsive approach to transit network design:

ACTION

3.a. Complete planning and engineering necessary to support LRT growth, including:

- Complete preliminary engineering for the west leg of the Valley Line, extension of the Metro Line to St. Albert, and extension of the Capital Line south.
- Complete the planning study for the Downtown Circulator LRT.

ACTION

3.b. Undertake a major redesign of the bus network, including:

- Detailed design of the bus network plan (service types, routings, service spans, headways, vehicle requirements, operating cost impacts) and a staged implementation plan;
- Review and update of the Transit Service Policy, as discussed in section 3.3.6;
- Service branding plan for the redesigned bus network (route numbering scheme, bus signage conventions, bus stop signage, network maps, etc.);
- Assessment of the impacts of the redesigned bus network on the demand for paratransit service; and
- Evaluation of the impacts of the redesigned bus network on the utilisation of existing and planned transit centres, and identify where opportunities for changes may exist.

ACTION

3.c. Identify infrastructure improvements necessary to support the transit network, including:

- Conducting a feasibility study for the application of bus priority measures in the arterial corridors in which the Frequent Bus Route and the Rapid Bus Route are proposed to operate;
- Identifying major stops and stations on the LRT and Frequent Transit Network that warrant upgrades (e.g. heated shelters, benches, branded signage, real-time digital displays, landscaping) to improve comfort and security, reduce uncertainty about bus arrivals, and physically define the parts of the network on which high levels of service are operated; and
- Assessing pedestrian access to stops/stations served by LRT, the Frequent Transit Network, and Rapid Bus Route services and recommend prioritized improvements.

> **⇒ ACTION**
>
> **3.d. Explore options with other mobility providers (e.g. taxi companies, transportation network companies) to provide service in areas where the level of transit demand is low and/or where the street network creates difficult transit operating conditions.**

3.3.5 Conceptual Network Plan

During the development of the Transit Strategy, the Guiding Principles were used to prepare a draft Conceptual Network Plan. The intent was to test whether the principles could be successfully applied within Edmonton Transit's existing complement of annual bus hours, to develop an initial framework to guide a later detailed redesign of the network, and to provide decision-makers with a vision of the overall structure of the future system.

The maps in Appendix A exhibit the proposed Primary Transit Network that includes:

- LRT Network
- Frequent Transit Network
- Rapid Bus Services
- Crosstown Services
- LRT Stations and Transit Centres

A typical alignment of local services is shown in Appendix B for each of three example areas: one in the Inner Area (Capilano) and two in Outer Areas (Heritage Valley and northeast Edmonton). For each area, maps of existing and proposed local services are shown for comparison. In general, the local services proposed for the new network feature:

- More direct, less circuitous routings;
- Longer walking distances in some areas;
- Peak and midday service frequencies similar to ones on existing local services;
- Fewer routes with less overlapping/redundant service; and
- Reduced levels of service during periods of low demand.

It is anticipated that, following adoption of the Transit Strategy, delivery of the revised bus network can be accommodated within current budget resources of Edmonton Transit (based on the Fall 2016 service schedule). Table 6 compares the annual bus hours required for the Conceptual Network Plan with those of the existing network. Table 7 shows the proposed distribution of resources amongst the various service types in the Conceptual Network.

Table 6: Estimated Resource Requirements Existing Network vs. Conceptual Network

	Per Weekday	Per Saturday	Per Sunday	Weekly Total
Bus Hours:				
Existing Network	7,509	3,897	2,752	44,192
Conceptual Network	7,412	3,965	3,333	44,358
Difference	-97	+68	+581	+166(+0.4%)

Table 7: Percentage Distribution of Bus Hours Amongst Service Types - Conceptual Network

Frequent Transit Network	Per Weekday	Per Saturday	Per Sunday	Weekly Total
LRT Service	5%	7%	7%	5%
Frequent Bus Routes	24%	27%	31%	25%
Rapid Bus Routes	7%	2%	2%	6%
Crosstown Routes	5%	5%	5%	5%
Local Services	59%	59%	55%	59%

3.3.6 Components of Transit Service Policy

The City has established Transit Service Standards to guide the design of transit service and the level of service. In conjunction with the detailed redesign of the transit network, a review and update of the Transit Service Policy is necessary to ensure that the policy is consistent with and applicable to a transit network and service design strategy based on the Guiding Principles.

During this review and update, it is recommended that consideration be given to broadening the Transit Service Policy to expand on the the following components, which are discussed in greater detail in Appendix C:

1. Service Warrants
These guide the introduction or extensions of service, expansion of service hours, and route deviations.

2. Network Design Guidelines
These guide the detailed development of the transit network and, while based on the Guiding Principles, they provide more precise guidelines for network design.

3. Service Quality Standards
These guide the adjustment of service levels on routes.

4. Service Productivity Standards
These are used in the assessment of route performance.

3.4 PILLAR 4: IMPROVE THE CUSTOMER EXPERIENCE

How customers will experience the services delivered through the transit network.

3.4.1 The Whole Journey Experience

While delivering a transit network and service that meets the travel needs of Edmontonians is fundamental to providing service to citizens, it is not sufficient to attract and retain customers. The whole experience of using public transit is equally important. This experience includes various points along the customer journey:

- The planning of the journey
- The ease of access to the network
- The waiting environment at stops
- The fare transaction
- The availability of en-route information
- The comfort and cleanliness of transit vehicles, stops, and stations

- The ease of transferring
- The interactions with transit staff
- The reliability of the service
- The sense of safety and personal security

Edmonton describes the whole journey experience through the customer experience map, shown in Figure 7. Initiatives to improve the customer experience for all parts of the transit journey are an essential component of high quality transit service.
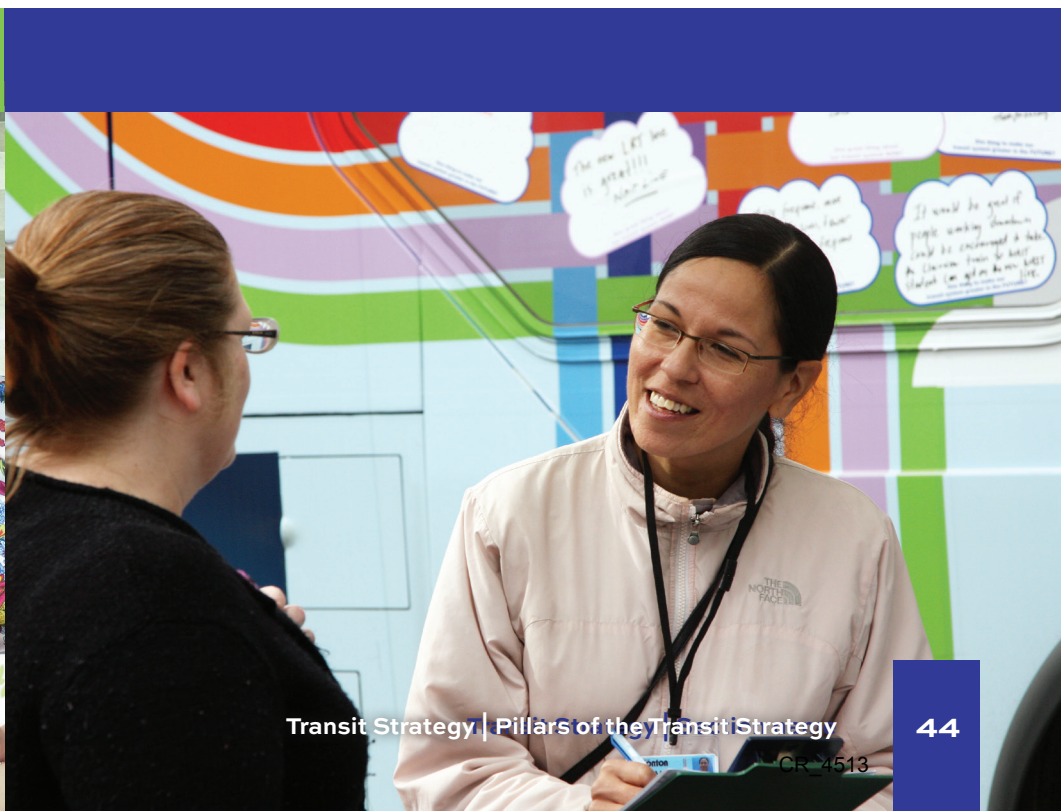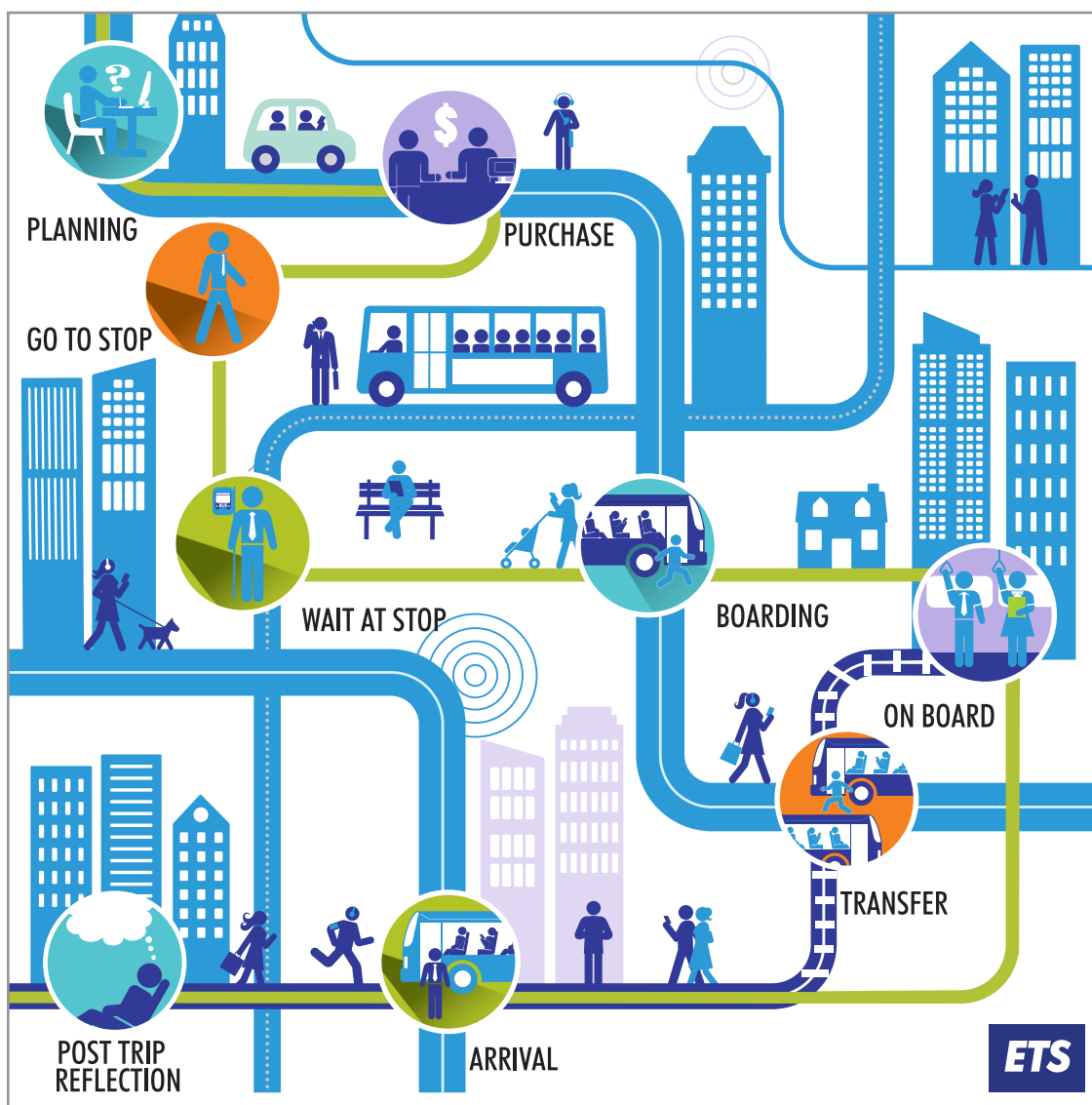
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Figure 6: Edmonton Transit Customer Experience Map

PLANNING

GO TO STOP

PURCHASE

WAIT AT STOP

BOARDING

ON BOARD

TRANSFER

POST TRIP REFLECTION

ARRIVAL

ETS

Citizens who use transit service have the same expectations of that service as they do of any other product or service they purchase – they expect it to meet their individual needs and expectations, and work the way it is supposed to when it is supposed to. It is clear from public engagement that Edmontonians have these expectations of their transit system. When asked what terms best describe the ideal future experience using Edmonton's transit system, citizens prioritize a service that is safe and secure, easy to use, clean and comfortable, less expensive than a personal vehicle, and easy to understand.

Edmonton's transit service already emphasizes customer service and the customer experience. This is not an area, however, where accepting the status quo is sufficient. Continuously focusing on and improving the customer experience is vital for growing and retaining customers.

3.4.2 Guiding Principles and Actions

GUIDING PRINCIPLE

4.1. Prioritize safety and security through:
- Sustained investment in security infrastructure and operations
- Education and training of staff and citizens
- Community partnerships

ACTIONS

a. Review infrastructure and operational needs to enhance security:

- Conduct an assessment of LRT stations, Transit Centres, and major bus stops for security infrastructure needs with consideration of Crime Prevention Through Environmental Design Principles (CPTED), identify improvements to address identified issues and prioritize for budget consideration.

- Account for the costs of safety and security infrastructure and personnel when considering transit system expansion to new areas or time periods.

- Explore new and innovative ways to deploy security resources in a context of limited resources.

b. Educate citizens and train front-line staff (i.e. operators, peace officers) to:

- Expand approaches used in recent initiatives related to diversity, respect, discrimination, and harassment awareness/prevention.

- Clarify the security roles of the Edmonton Police Service, Transit Peace Officers, transit supervisors, and transit operators.

- Inform customers on the transit system safety features and how to use them.

- Publish annual reports to the public that summarize safety initiatives and trends in the types and volumes of safety and security incidents to improve transparency and address differences between perception and reality.

c. Further develop community partnerships to address root causes of security concerns:

- Expand partnerships with community organizations with a focus on incident prevention, understanding social barriers, and poverty reduction.

- Participate as an active partner in the development of the City's Extreme Weather Protocol to increase safety for homeless Edmontonians.

- Continue to collaborate and support deployment of Edmonton Police Service members in the transit network.

d. Transit service will support the Council Initiative on Gender-Based Violence and Sexual Assault Prevention and the City of Edmonton's commitment to the UN Women Safe Cities and Safe Public Spaces Initiative by contributing to collaborative gender-based violence and sexual assault prevention initiatives and strategies and increasing awareness of, and understanding about, gender-based violence and sexual assault.

GUIDING PRINCIPLE

4.2. Reinforce the commitment to customer service

ACTIONS

a. Develop and promote a Customer Charter that:

- Outlines the commitments of the transit system to provide safe, respectful, and reliable service.

- Includes a Code of Conduct that specifies the respective responsibilities of customers and transit staff.

- Is connected to annual performance measuring and reporting.

b. Update the Conduct of Transit Passengers Bylaw 8353, as required, to be consistent with the Customer Charter.

c. Improve customer access to information and assistance:

- Evaluate the deployment of station staff at LRT stations to provide customer assistance, to monitor safety and security,

and to oversee routine station maintenance needs.

- Improve reporting, tracking, analysis, and resolution of customer complaints and suggestions made to 311 and to transit staff.

- Develop and implement mechanisms to provide customers with timely notifications of service disruptions, interim adjustments, and service restorations.

d. Advance new tactics for outreach to new and potential customers:

- Expand the transit travel training program to meet the needs of new users (e.g. youth, seniors, immigrants and newcomers to Edmonton, etc.).

- Further develop partnerships with the tourism industry and with organizers of major events to facilitate transit use by tourists and spectators.

GUIDING PRINCIPLE

4.3. Continue ongoing programs for accessibility for persons with disabilities

ACTIONS

a. Review and update transit operational policies to improve accessibility (e.g. request stop program, deployment of bus kneeling, priority seating designations on vehicles, etc.).

b. Expand opportunities for DATS customers to use conventional transit for a portion of their journeys, including the provision of individual travel training for such opportunities.

c. Commit to the application of Universal Design principles in the renewal of transit infrastructure as well as connecting infrastructure.

d. Assess and improve the accessibility of customer information for user groups with visual, auditory, and other impairments.

GUIDING PRINCIPLE
4.4. Provide comprehensive customer information

ACTIONS

a. Develop new strategies to improve the orientation of customers to transit service including a:

- Customer Information Strategy that considers stop/station identification, bus stop signage, and the provision of service information at stations, transit centres and stops that is consistent with the service types and branding strategy of the revised transit network.

- Comprehensive Transit Wayfinding Strategy that is aligned with downtown wayfinding approach.

- Marketing strategy including new transit maps and service information materials (both physical and electronic/digital) consistent with the service types and branding strategy of the revised transit network.

b. Leverage advances in technology to provide customers with accurate, accessible, and timely information:

- Expand and enhance the full suite of real-time customer information tools, including web-based, telephone, SMS, and mobile apps for trip planning, route schedules, stop schedules, service alerts, and fares; on-board next-stop display and enunciation; bus destination announcements at bus stops; and digital displays of trip departures and service alerts at stations and stops.

- Enhance the Open Data Web Service to provide third party developers access to real-time transit data in an accepted industry standard format.

c. Assess the potential for a mobility management service in Edmonton (i.e. Mobility as a Service - an integrated trip planning, trip management and fare payment service that offers transportation options to individuals across all urban travel modes in real time), and identify an appropriate role for the City in such a service.

GUIDING PRINCIPLE
4.5. Improve the comfort of transit customers

ACTIONS

a. Identify on-board improvements to increase customer comfort (e.g. seating design, air conditioning, etc.) for inclusion in future vehicle procurements.

b. Prepare typical designs and cost estimates for station/stop upgrades (type of waiting amenities, signage, platform layout by scale of stop passenger activity).

GUIDING PRINCIPLE

4.6. Elevate the importance of ongoing public engagement

ACTIONS

a. Conduct ongoing public engagement and market research (e.g. surveys, focus groups, anonymous riding, workshops, social media exchange, etc.) to:

- Assess current services,

- Identify and understand customer needs; and

- Gain public input on such major initiatives as the fare policy review, the detailed redesign of the transit network, the development of a Customer Charter and the design of wayfinding and customer information tools.

b. Identify, assess, and apply leading edge tools for use in public engagement and market research activities.
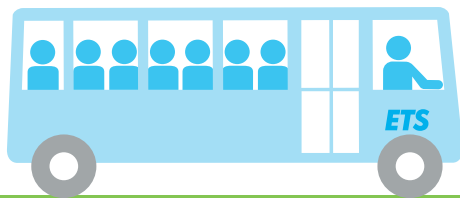
3.5 PILLAR 5: DEVELOP TRANSIT ORGANIZATIONAL CAPACITY

Develop organizational competencies required for effective and efficient transit service delivery.

3.5.1 Enabling the Transit Strategy

Providing high quality transit service is complex. Doing this well requires a well-functioning organization resourced with the necessary skills, experience, technology, and funding to carry out its mandate.

While Edmonton Transit Service is a long-established organization, there is an ongoing requirement to develop its capacity to deliver current services, to meet customer needs, to respond to evolving changes in the urban travel market, and, most importantly, to collaborate with other City staff and with the community to successfully implement the Transit Strategy. The capacity of the City Administration as a whole is also vital to delivering many elements of this Strategy, including the design and construction of the LRT network, delivery of new and renewed infrastructure, and integration of transit with land use planning, and multi-modal transportation planning.

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3.5.2 Guiding Principles and Actions

GUIDING PRINCIPLE

5.1. Support the City's commitment to energy transition

ACTIONS

a. Develop an energy and climate adaptation strategy for transit operations and facilities to reduce energy consumption and greenhouse gas emissions and to prepare for future climate disturbances.

b. Develop a phased strategy for the use of alternative energy technology for the transit bus fleet, transit support vehicles, and transit facilities.

GUIDING PRINCIPLE

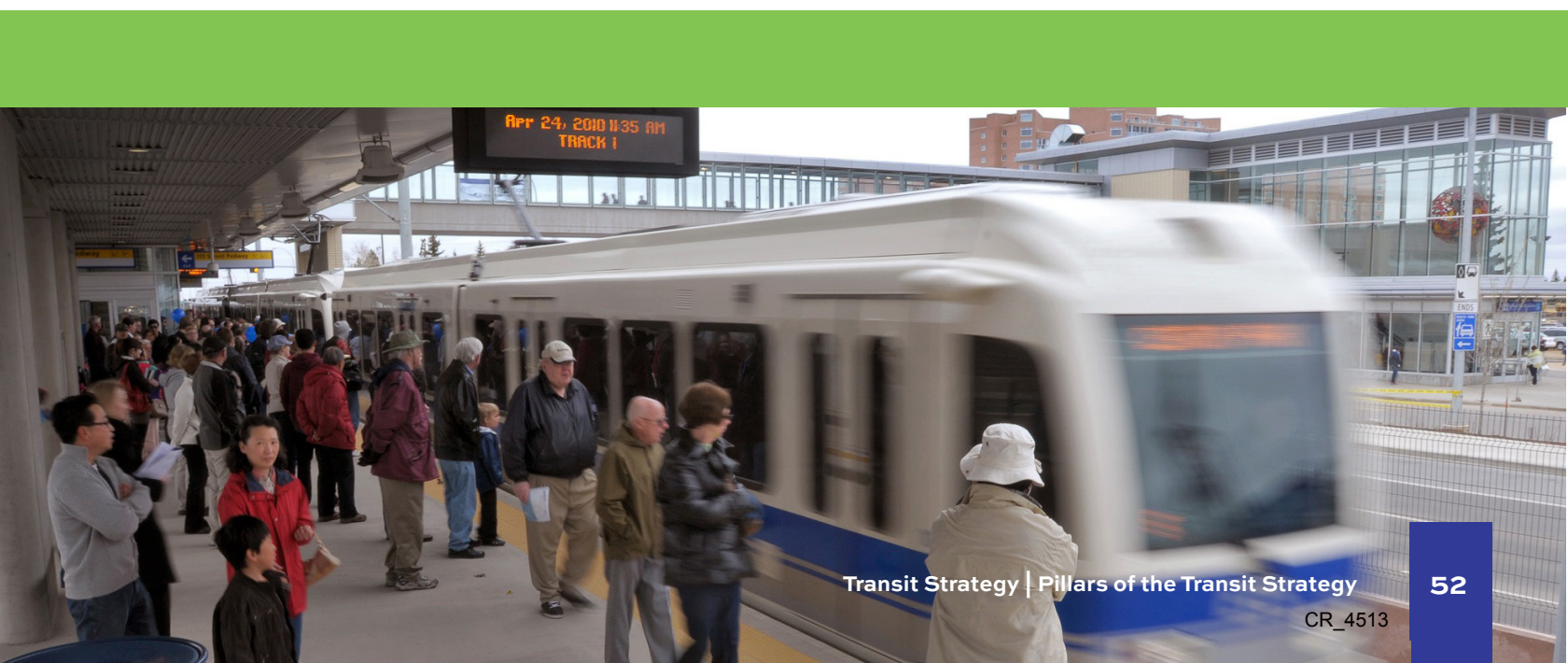**5.2. Implement technology and support innovation**

ACTIONS

a. Implement technology and support innovation

- A review of industry best practice,

- An assessment of existing legacy systems,

- A status review of current technology initiatives (e.g. Smart Bus, Smart Fare),

- A projection of future technology needs,

- An estimate of required investments,

- A phased implementation plan; and

- An integrated approach to data definition, data management, and data access across technology applications to support business intelligence and decision-support systems.

b. Collaborate across City departments and with external stakeholders to monitor and prepare for emerging transportation technologies (e.g. automated, connected, and electric vehicles).

GUIDING PRINCIPLE

5.3. Support human resources

ACTIONS

a. Develop a workforce plan that:

- Attracts and retains the best staff, provides training and retraining to meet evolving skill requirements, and reflects the diversity of Edmonton's population.
- Collaborates with staff to increase job satisfaction, morale, commitment, and safety in the workplace.
- Considers succession planning for technical, planning, supervisory, and management positions.
- Encourages and supports staff engagement in the Canadian transit industry.

GUIDING PRINCIPLE

5.4. Implement technology and support innovation

ACTIONS

a. Implement technology and support innovation

- A review of industry best practice,
- An assessment of existing legacy systems,
- A status review of current technology initiatives (e.g. Smart Bus, Smart Fare),
- A projection of future technology needs,
- An estimate of required investments,

- A phased implementation plan; and
- An integrated approach to data definition, data management, and data access across technology applications to support business intelligence and decision-support systems.

b. Collaborate across City departments and with external stakeholders to monitor and prepare for emerging transportation technologies (e.g. automated, connected, and electric vehicles).

4.0

SUMMARY OF GUIDING PRINCIPLES AND ACTIONS
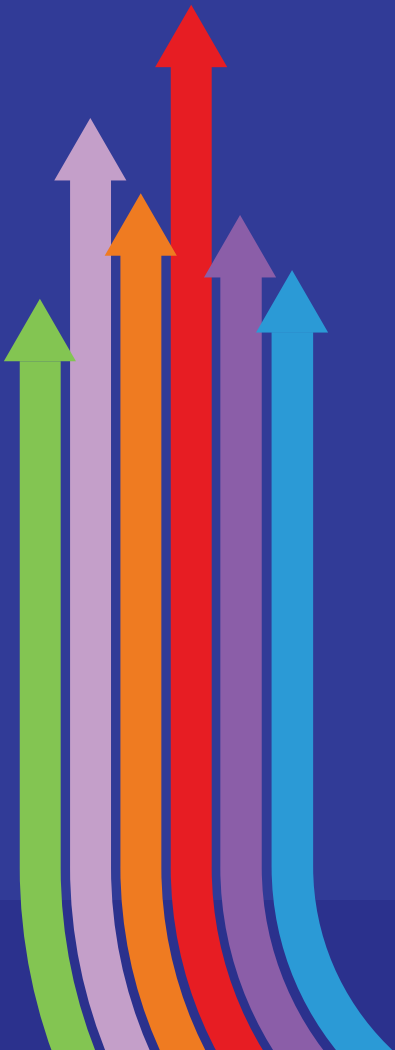
4.0 SUMMARY OF GUIDING PRINCIPLES AND ACTIONS

The following provides a summary of the Guiding Principles and Actions in the Transit Strategy.

PILLAR 1: Integrate Transit with Community Planning and Design

GUIDING PRINCIPLE

1.1. Recognize the contribution of transit to city-building goals

ACTIONS

a. Instill the importance of transit's role in a variety of planning, policy and education initiatives.

GUIDING PRINCIPLE

1.2. Improve the integration of transit with community and neighbourhood planning

ACTIONS

a. Include proactive transit planning early in planning process:

- Include proactive transit planning input early in neighbourhood planning processes for street network design, urban design, transit infrastructure design, and modal integration.

- Assess and improve process to review of development proposals at the strategic, conceptual, and detailed design levels.

- Establish a framework to align redevelopment planning along key transit corridors.

- Establish new approaches to facilitate the co-location of transit bus with other major amenities.

b. Support effective planning by developing tools to inform decision-making:

- Develop a Station Access Strategy which considers variations in levels of modal priority for different station types.

- Employ data to support evidence-based decision-making and retrospective analysis of policy outcomes.

- Create information materials and checklists for transit-friendly design.

- Establish new tools to assess the impact of neighbourhood design on transit performance and communicate the results.

GUIDING PRINCIPLE

1.3. Elevate the interdependent relationship of transit, urban design, and placemaking

ACTIONS

a. Enhance the quality of urban design of transit infrastructure to create accessible, attractive, and safe places.

- Update and expand the Sustainable Urban Integration Guidelines.
- Apply Crime Prevention Through Environmental Design (CPTED) and accessibility principles to the planning and design of new or renewed transit infrastructure.

b. Embed transit considerations in the design of major developments.

PILLAR 2: Establish a Balanced Approach to Operating Funding and Fare Policy

GUIDING PRINCIPLE

2.1. Balance annual requirements for operating revenues with affordability for users

ACTIONS

a. Conduct a review of transit fare policy.

GUIDING PRINCIPLE

2.2. Develop a fare structure that is:

- Easy to implement, comprehend and operate
- Equitable in its offering of discounts
- Sensitive to the urban travel market
- Encourages ridership

ACTIONS

a. Develop a revised fare structure.

b. Conduct industry benchmarking during the review and development of the transit fare policy.

c. Implement periodic adjustments to fare values in accordance with the revised fare policy.

GUIDING PRINCIPLE

2.3. Explore the potential for new fare structure opportunities made possible by the Smart Fare initiative

ACTIONS

a. Prepare a regional transit fare integration plan with neighbouring municipalities in the Edmonton Metropolitan Region.

b. Consider a regional fare structure that relates inter-municipal fare values to the cost of service operation.

c. Develop fare payment procedures that reduce the time required to board and alight passengers.

GUIDING PRINCIPLE

2.4. Communicate to the public how fare principles translate into the fare structure

ACTIONS

a. Conduct public engagement during the review of the transit fare policy.

b. Conduct periodic public communication programs following Council adoption of the revised fare policy.
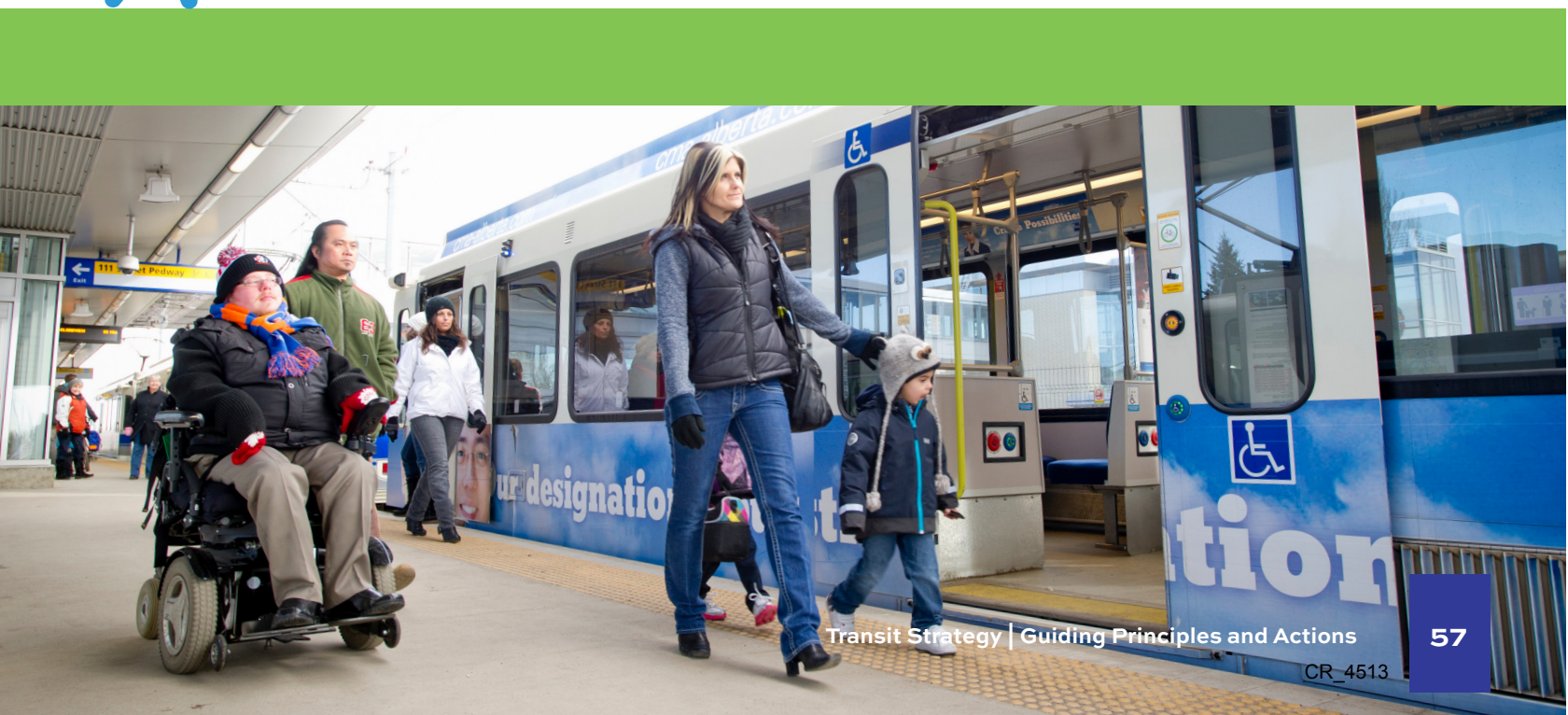
PILLAR 3: Develop a Market Responsive Approach to Transit Network Design

GUIDING PRINCIPLE
General Principles for Transit Network Design

3.1 Accelerate growth of the LRT Network.

3.2 Deploy and brand a variety of service types to meet the various types of travel needs throughout the city.

3.3 Provide service spans and service frequencies commensurate with the level of passenger demand, land use density and land use mix.

3.4 Implement transit priority measures, where required in congested areas in major arterial corridors, to improve service reliability and operating speeds.

3.5 Improve the customer waiting environment at major stops and stations, particularly along high frequency corridors.

3.6 Improve pedestrian access to the transit network, particularly to high frequency corridors.

GUIDING PRINCIPLE
Network Design Principles for Inner Areas

3.7 Develop a network of high frequency services in major corridors that operate throughout the day on all days of the week.

3.8 Develop a network of local routes, where required, to provide service in proximity to seniors complexes, schools, and local activity centres.

3.9 Coordinate network improvements with infill and intensification initiatives in mature neighbourhoods.

GUIDING PRINCIPLE
Network Design Principles for Outer Areas

3.10 Develop a network of LRT, precursor BRT, Rapid Bus, and Crosstown services in suburban areas for travel to downtown, post-secondary institutions, major employment sites, and major shopping/mixed use areas.

3.11 Develop a network of local routes and explore options with new mobility providers for the provision of local services in proximity to seniors complexes, schools, and local activity centres.

3.12 Integrate Park & Ride facilities, local bus access and TOD initiatives at LRT stations and major transfer points in the bus network.

ACTIONS

General Principles for Transit Network Design

3.a Complete planning and engineering necessary to support LRT growth, including:

- Update of preliminary engineering for the west leg of the Valley Line.
- Preliminary engineering for the extension of the Metro Line to Blatchford.
- Planning study for the Downtown Circulator LRT.

3.b Undertake a major redesign of the bus network, including:

- Detailed design of the bus network plan,
- Review and update of the Transit Service Policy,
- Service branding plan,
- Assessment of impacts of the redesigned network on the demand for paratransit service, and
- Evaluation of the impacts of the redesigned network on the utilization of transit centres.

3.c Identify infrastructure improvements necessary to support the transit network, including:

- Conducting a feasibility study for the application of bus priority measures in corridors where the Frequent Bus Routes and Rapid Bus services will operate.
- Identifying major stops and stations on the LRT and Frequent Transit Network that warrant upgrades.
- Assessing pedestrian access to stops/stations serviced by LRT, the Frequent Transit Network and Rapid Bus services.

3.d Explore options with other mobility providers in low demand areas.
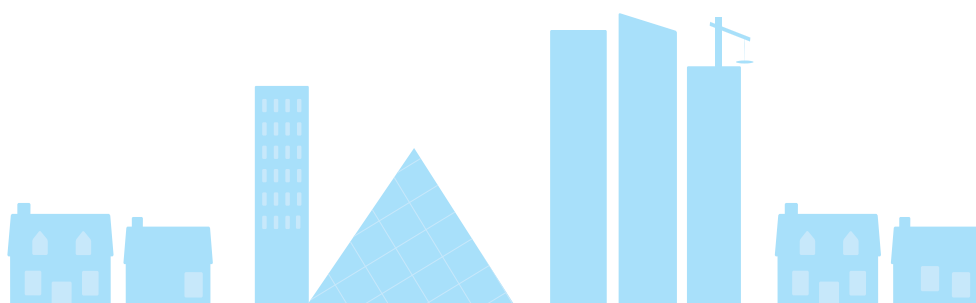
PILLAR 4: Improve the Customer Experience

GUIDING PRINCIPLE

4.1. Prioritize safety and security

ACTIONS

a. Review infrastructure and operational needs to enhance security:

- Conduct an assessment of security infrastructure needs, identify improvements and prioritize for budget consideration.
- Account for the costs of safety and security infrastructure and personnel when considering transit system expansion.
- Explore new and innovative ways to deploy security resources in a context of limited resources.

b. Educate citizens and train front-line staff to:

- Expand approaches used in recent initiatives related to diversity, respect, discrimination, and harassment awareness/prevention.
- Clarify the security roles of the Edmonton Police Service, Transit Peace Officers, transit supervisors, and transit operators.
- Inform customers on the transit system safety features and how to use them.
- Publish annual reports to the public that summarize safety initiatives and trends to improve transparency and address differences between perception and reality.

c. Further develop community partnerships to address root causes of security concerns:

- Expand partnerships with community organizations with a focus on incident prevention, understanding social barriers, and poverty reduction.
- Participate as an active partner in the development of the City's Extreme Weather Protocol to increase safety for homeless Edmontonians.
- Continue to collaborate and support deployment of Edmonton Police Service members in the transit network.

d. Transit service will support the Council Initiative on Gender-Based Violence and Sexual Assault Prevention and the City of Edmonton's commitment to the UN Women Safe Cities and Safe Public Spaces Initiative by contributing to collaborative gender-based violence and sexual assault prevention initiatives and strategies and increasing awareness of, and understanding about, gender-based violence and sexual assault.
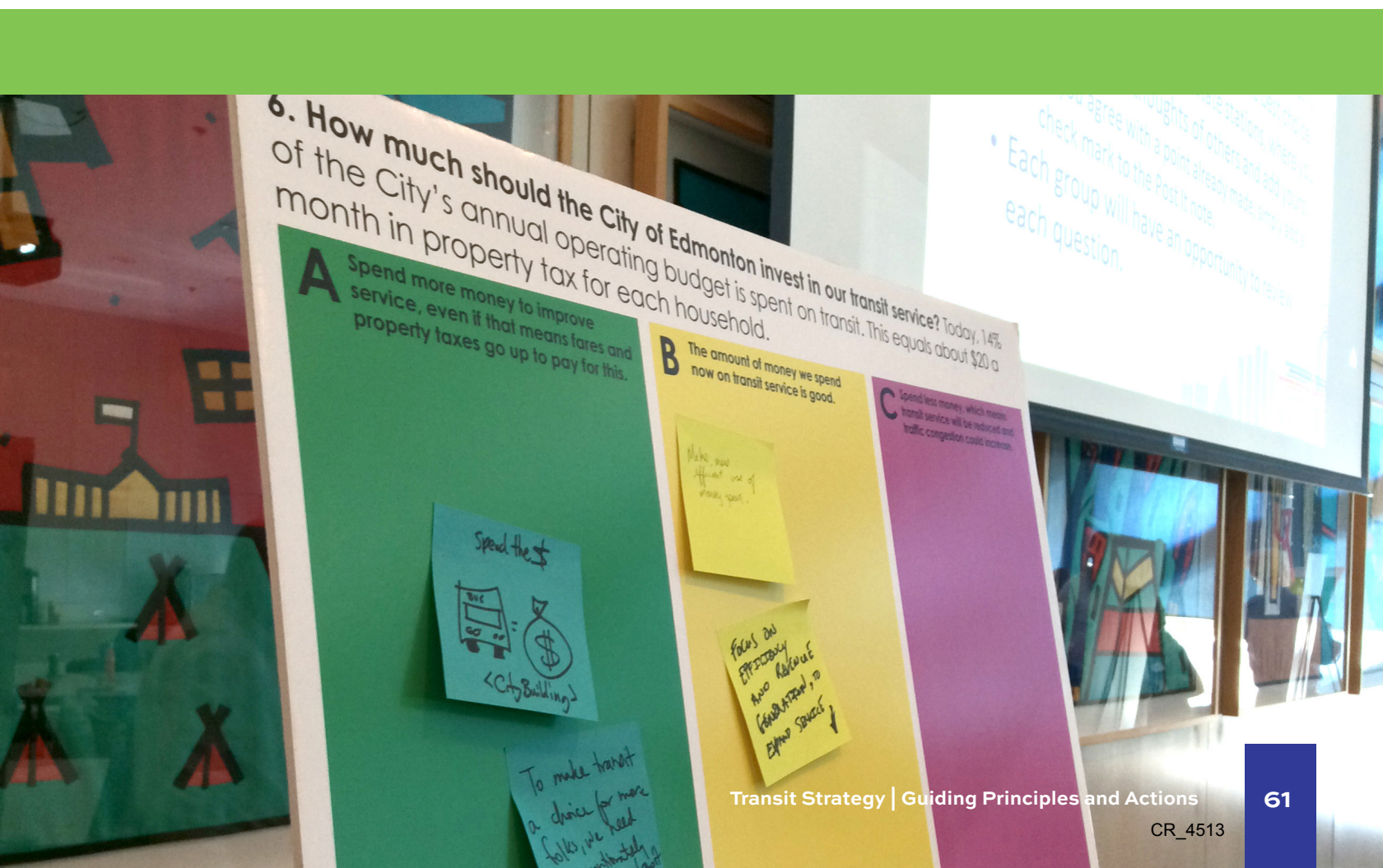
GUIDING PRINCIPLE

4.2. Reinforce the commitment to customer service

ACTIONS

a. Develop a Customer Charter.

b. Update the Conduct of Transit Passengers Bylaw 8353, in alignment with the Customer Charter.

c. Improve customer access to information and assistance:

- Evaluate the deployment of station staff at LRT stations.

- Improve reporting, tracking, analysis, and resolution of customer complaints.

- Develop and implement mechanisms to provide customers with timely notifications of service disruptions, interim adjustments, and service restorations.

d. Advance new tactics for outreach to new and potential customers:

- Expand the transit travel training program.

- Further develop partnerships with tourism industry and organizers of major events.

GUIDING PRINCIPLE

4.3. Continue ongoing programs for accessibility for persons with disabilities

ACTIONS

a. Update operational policies to improve accessibility.

b. Expand opportunities for DATS customers to use conventional transit for a portion of their journeys.

c. Commit to application of principles of Universal Design in the renewal of transit infrastructure as well as connecting infrastructure.

d. Assess and improve the accessibility of customer information for user groups with visual, auditory, and other impairments.

GUIDING PRINCIPLE

4.4. Provide comprehensive customer information

ACTIONS

a. Develop new strategies to improve the orientation of customers to transit service including a:

- Customer Information Strategy
- Comprehensive Transit Wayfinding Strategy
- Marketing strategy

b. Leverage advances in technology to provide customers with accurate, accessible, and timely information:

- Expand and enhance the full suite of real-time customer information tools.
- Enhance the Open Data Web Service.

c. Assess the potential for a mobility management service in Edmonton

GUIDING PRINCIPLE

4.5. Improve the comfort of transit customers

ACTIONS

a. Identify on-board improvements to increase customer comfort for inclusion in future bus procurements.

b. Prepare typical designs and cost estimates for bus stop and station upgrades.

GUIDING PRINCIPLE

4.6. Elevate the importance of ongoing public engagement

ACTIONS

a. Conduct ongoing public engagement and market research to:

- Assess current services,
- Identify and understand customer needs; and
- Gain public input on major initiatives.

b. Identify, assess, and apply leading edge tools for public engagement and market research activities.

PILLAR 5: Develop Transit Organizational Capacity

GUIDING PRINCIPLE

5.1. Support the City's commitment to energy transition

ACTIONS

a. Develop an energy and climate adaptation strategy.

b. Develop a phased strategy for the use of alternative energy technology for the transit fleet and facilities.

GUIDING PRINCIPLE

5.2. Implement technology and support innovation

ACTIONS

a. Develop a Technology Road Map.

b. Monitor and prepare for emerging transportation technologies.

GUIDING PRINCIPLE

5.3. Support human resources

ACTIONS

a. Develop a workforce plan that:

- Attracts and retains skilled staff that reflect Edmonton's diversity.

- Collaborates with staff to increase job satisfaction, morale, commitment, and workplace safety.

- Considers succession planning for technical, planning, supervisory, and management positions.

- Supports staff engagement in the Canadian transit industry.

GUIDING PRINCIPLE

### 5.4 Plan for sustainable growth and renewal of transit assets

ACTIONS

a. Develop consistent approach to budget planning in order to improve predictability, including:

- Annual bus replacement program.

- Renewal of transit infrastructure.

b. Identify transit capital and operating funding opportunities available through provincial and federal programs and advocate for higher levels of investment.

5.0

PERFORMANCE MONITORING

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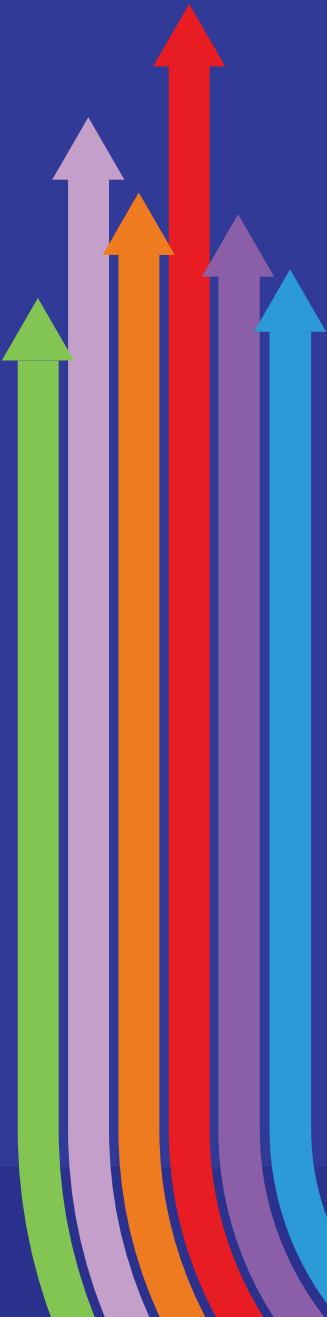
5.0 PERFORMANCE MONITORING

A performance monitoring system is critical to assess the ongoing impacts of the Transit Strategy. While it will be important to track implementation of each action, the ultimate success of any strategy rests on the cumulative effect of these actions towards the intended outcomes. Progress towards outcomes will be reported annually to inform Council and the public on the state of transit in Edmonton.

The performance monitoring framework proposed in Table 9 is structured around the five pillars of the Transit Strategy and is directly associated with the Values and Attributes of transit. In this way, direct links are provided between the performance indicators and the foundational elements of the Strategy.

As part of the strategy implementation process, each performance indicator will need to establish a baseline and consider industry benchmarking to establish an appropriate target. While some of these indicators have previously been tracked in Edmonton, some are new and require the development of a new methodology

for collecting and analyzing the data. It is important that the performance monitoring system allow some flexibility over time to adjust measures as new data becomes available and improved methodologies are developed.

When reviewing progress over time, consideration should be given not only to trends for each indicator, but also the relationships amongst them. For example, an improvement in cost recovery could be associated with a decreasing customer satisfaction with affordability or with various elements of service quality (frequency, speed, reliability). This is because cost recovery can be increased by raising user fees or decreasing investment in the system. On the other hand, increasing customer satisfaction with service quality can also contribute to higher ridership which would, in turn, improve cost recovery. For these reasons, each indicator must be considered as part of a balanced system. Ultimately this performance monitoring system seeks to understand the relationship between resources and outcomes in the City's efforts to meet the transit needs of Edmontonians.
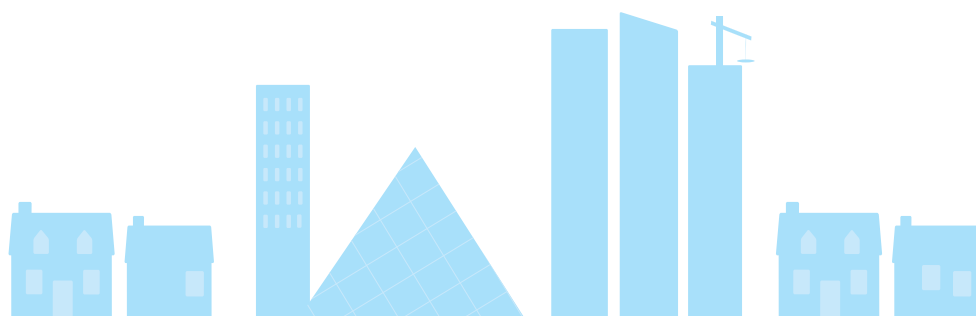
TABLE 8: PERFORMANCE MONITORING FRAMEWORK

| Pillar	Measure	Outcome	Values & Attributes
Pillar 1: Planning and Design	1. Number of street intersections per square kilometre in new neighourhoods	Neighbourhood transportation network design supports effective transit service delivery.	Integration Connectivity
	2. Percent of new transit centres, LRT stations and major bus stops that are co-located with other community amenities	Transit is integrated with community amenities.	Integration
	3. Percent of annual development (for each land use classification) within the city that is located within 500 metres of the Primary Transit Network	Growth is aligned with and supports transit service and infrastructure.	Integration Sustainability Convenient
Pillar 2: Finance	4. Cost recovery ratio This should be reported annually with: • Average operating cost per revenue-passenger • Average fare per revenue-passenger	Transit balances user fees with societal benefit.	Sustainability

| Pillar	Measure	Outcome	Values & Attributes
	5. Customer satisfaction with transit affordability	Transit is an affordable travel choice.	Sustainability Mobility
	6. Ratio of monthly pass cost to average Alberta Works core income support benefit for families	Transit is an affordable travel choice.	Sustainability Mobility
Pillar 3: Network Design	**7.** Average travel time between key origins and destinations for each service type	Transit travel travel times are reliable.	Mobility Fast Reliable
	8. Customer satisfaction with frequency on the Primary Transit Network.	Transit provides frequent service on main corridors.	Mobility Fast Convenient Reliable
Pillar 4: Customer Experience	**9.** ETS Customer Satisfaction Index score	Transit customers are satisfied with service quality.	All Attributes
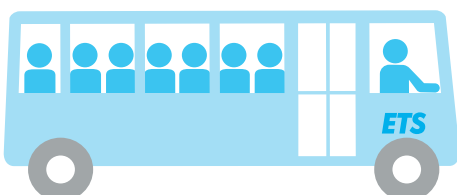
Pillar	Measure	Outcome	Values & Attributes
	10. Customer satisfaction with comfort and information provided at bus shelters, transit centres, and LRT stations	Transit is comfortable and easy to understand.	Mobility Convenient
	11. Number of passenger injuries per 100,000 boardings and number of operator injuries per 100,000 platform hours	Transit is safe.	Safe
	12. Customer satisfaction with personal safety on transit vehicles and at transit facilities	Transit is safe.	Safe
	13. Security disorder rate per 100,000 boardings	Transit is secure.	Safe
	14. On-time performance by each service type (% of departures early, on-time, late by time period)	Transit is reliable.	Reliable

Pillar	Measure	Outcome	Values & Attributes
Pillar 5: Organizational Capacity	**15.** Percent of transit staff agreeing that they have the tools, training, and information needed to perform their job, as measured In the Corporate Employee Engagement survey	Transit is an employer of choice.	Sustainability
	16. Percent of transit staff with a favourable overall engagement, as measured In the Corporate Employee Engagement survey	Transit is an employer of choice.	Sustainability

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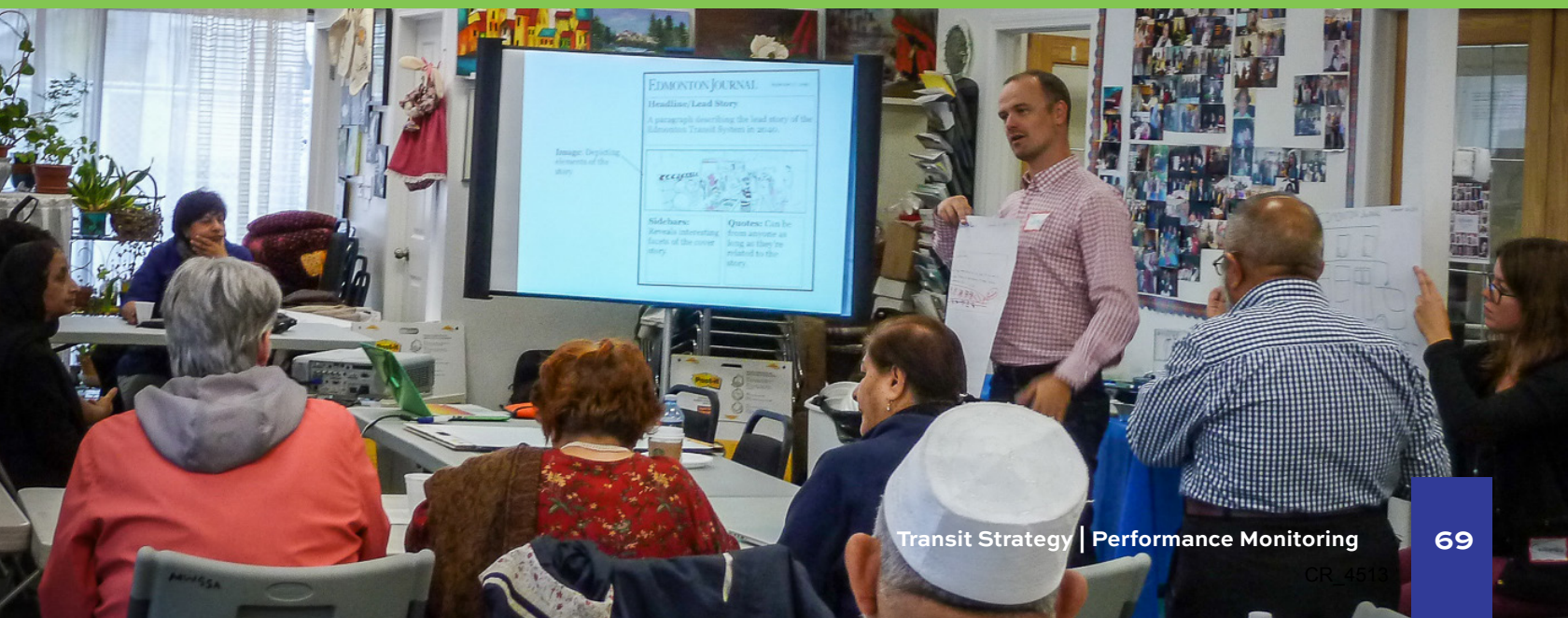
6.0
SUMMARY
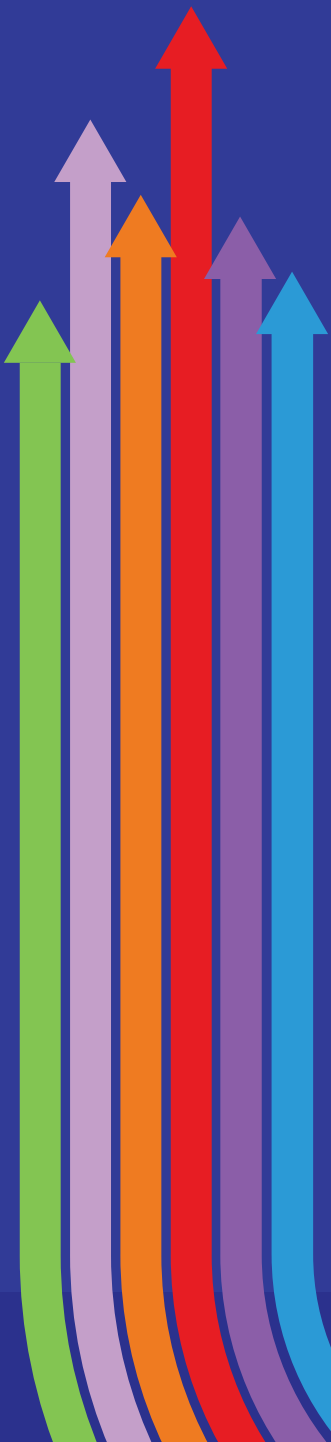
6.0 SUMMARY

The Transit Strategy is a high level strategy that provides a comprehensive and integrated perspective on the transit system, intended to guide decisions about how best to serve citizens, steward public assets and manage system growth. The strategy was built on the input from thousands of Edmontonians, and responds to their priorities through a market based approach. The transit system will focus on customer service that is **safe, fast, convenient and reliable**. Through this commitment to customer service and by pursuing a suite of Guiding Principles and Actions, the Transit Strategy will result in a transit system that contributes to our city-building vision by supporting **mobility, connectivity, integration and sustainability**. Ultimately our objective is to provide a transit system shaped by what Edmontonians want, which will encourage more citizens to choose transit.

The Transit Strategy is an initiative to define the long term vision for transit service in Edmonton. The Strategy's intent is to guide the decision-making process in how best to serve citizens, steward public assets and manage system growth.

The Transit Strategy has been developed within the context of:

- Approved City policies as documented in The Ways and supporting technical reports;

- Previous studies and reviews of public transit in Edmonton;

- Citizen preferences as revealed through an extensive four-stage public engagement process conducted from August 2015 to June 2016;

- Collective feedback from members of City Administration throughout the Strategy development process; and

- Feedback received from the Urban Planning Committee during its consideration of the Strategic Direction Report in December 2016.

The Transit Strategy is structured on five fundamental Pillars that contain guidelines to address three fundamental policy questions:

1. What is the broad policy framework necessary to enable success?

2. What is the approach to service delivery?

3. What organizational capacity is required to support implementation?

To address these, the Strategy is structured on five fundamental Pillars. The guidance provided by these pillars and what they mean to customers are as follows:

Pillar	What this means to customers
1. **Integrate Transit with Community Planning and Design:** Provides guidance to coordinate transit system development with the City's urban planning goals and with community planning and design.	• More transit-friendly neighbourhoods • Improved collaboration with stakeholders in development industry • Future design of new and renewed LRT Stations and Transit Centres to improve safety, accessibility and passenger comfort.

Pillar	What this means to customers
2. **Establish a Balanced Approach to Operating Funding and Fare Policy:** Provides guidance to establish the financial context within which the transit system is to operate.	• A new fare structure that is: – Easier to understand – More consistent in how discounts are offered – Encourages ridership by continuing to provide discounts to frequent users • In order to achieve these improvements, the fare structure will need greater consistency in discounts between fare categories and demographic groups. Improving consistency may require adjustments to some fare discounts. The impacts of these changes will need to be further assessed during the development of the new fare policy, and the approach to implementing the changes will require discussion with decision makers.
3. **Develop a Market-Responsive Approach to Transit Network Design:** Provides guidance to define the nature of the transit network and the types of services to be provided.	• Transit becomes a lifestyle option for inner area residents, due to the Frequent Transit Network enabling spontaneous travel. • Transit becomes a more competitive commuter option for outer areas, with greater reliability and higher operating speeds, achieved through implementation of Rapid Bus Routes and transit priority measures • Local service is more direct and easier to understand, but less customized. • Travel times while on-board transit are minimized. • There are longer walking distances to transit stops in many areas. • Areas of high demand receive more fixed route transit service, while areas with low demand receive less fixed-route service. • The impacts of this approach are partially softened through the use of local routes that connect to seniors complexes, schools and local activity centres. • Impacts may also be mitigated by exploring options with private sector transportation services to provide new mobility choices in areas with low demand.

Pillar	What this means to customers
4. **Improve the Customer Experience:** Provides guidance to define how customers will experience the services delivered through the transit network.	• Safer experience for the whole customer journey while riding transit and in and around transit facilities • Clear, timely and accessible customer information • Easier to navigate the system • More engagement on decisions that affect transit service
5. **Develop Transit Organizational Capacity:** Provides guidance to develop organizational competencies required for effective and efficient transit service delivery (e.g. human resources, technology, sustainability, funding).	• Transit Service considering the social, environmental and economic implications of trends in technology and private sector, such as automated vehicles, electric vehicles and new transportation options • Quality customer service supported by greater staff satisfaction

The Transit Strategy contains 29 Guiding Principles and 43 associated Actions to be undertaken over the next decade and an approach to performance monitoring to track progress over time. Included in the Strategy, as part of Pillar 3, is a proposed Conceptual Network Plan (upon which a detailed redesign of the bus network is to be based) and recommended components of a comprehensive Transit Service Policy.

Major Actions include:
- A review of transit fare policy and the development of a revised fare structure
- A review and update of the Transit Service Policy
- A detailed redesign of the bus network
- A Bus Priority feasibility study
- Identification of major stops and stations that warrant upgrades
- Development of a Customer Charter
- Assessment of the potential for a mobility management service in Edmonton
- Development of comprehensive strategies for transit wayfinding, signage, and service information and a full suite of real-time customer information tools
- On-board improvements to increase customer comfort
- Development of a Technology Road Map
- Development of a phased strategy for the use of alternative energy for transit fleet and facilities.

NEXT STEPS

The development of the Transit Strategy Implementation Plan is a critical next step to move the Transit Strategy forward. This plan should include prioritization and phasing of actions, resource requirements and identification of organizational responsibility. This plan will be developed collaboratively across City departments, and will be an important tool to inform business plans and budgets.

Building on the momentum generated through the Strategy development process, an immediate priority is to move forward with a major redesign of the bus network based on the principles outlined in Pillar 3. This project would involve further public engagement to discuss specific changes to routes and service levels with the people directly affected. Further analysis will also be conducted on the impact of service changes to passengers and specific customer groups. While this planning and engagement should be completed as one comprehensive project for the full network, implementation should be conducted in a phased approach over the course of 3-4 years to allow for on-going learning and adjustment.
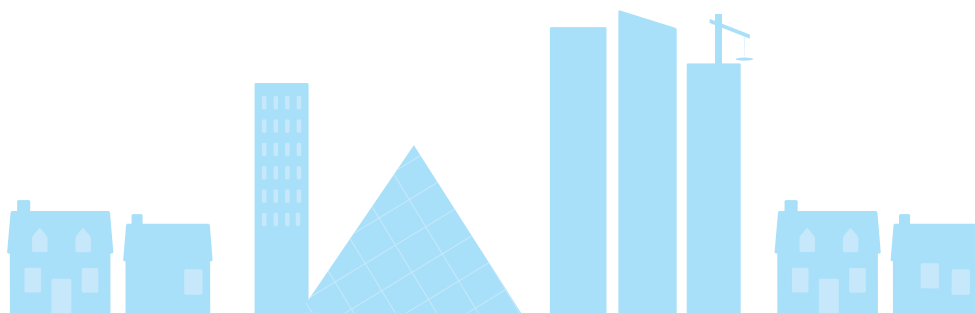
ACKNOWLEDGEMENTS

Project Sponsors

Transit Strategy Guiding Perspectives Committee

Project Team

Consulting Team
- Dillon Consulting Limited
- Intelligent Futures Inc.
- zag creative
- Sticks and Stones

City of Edmonton Office of Public Engagement

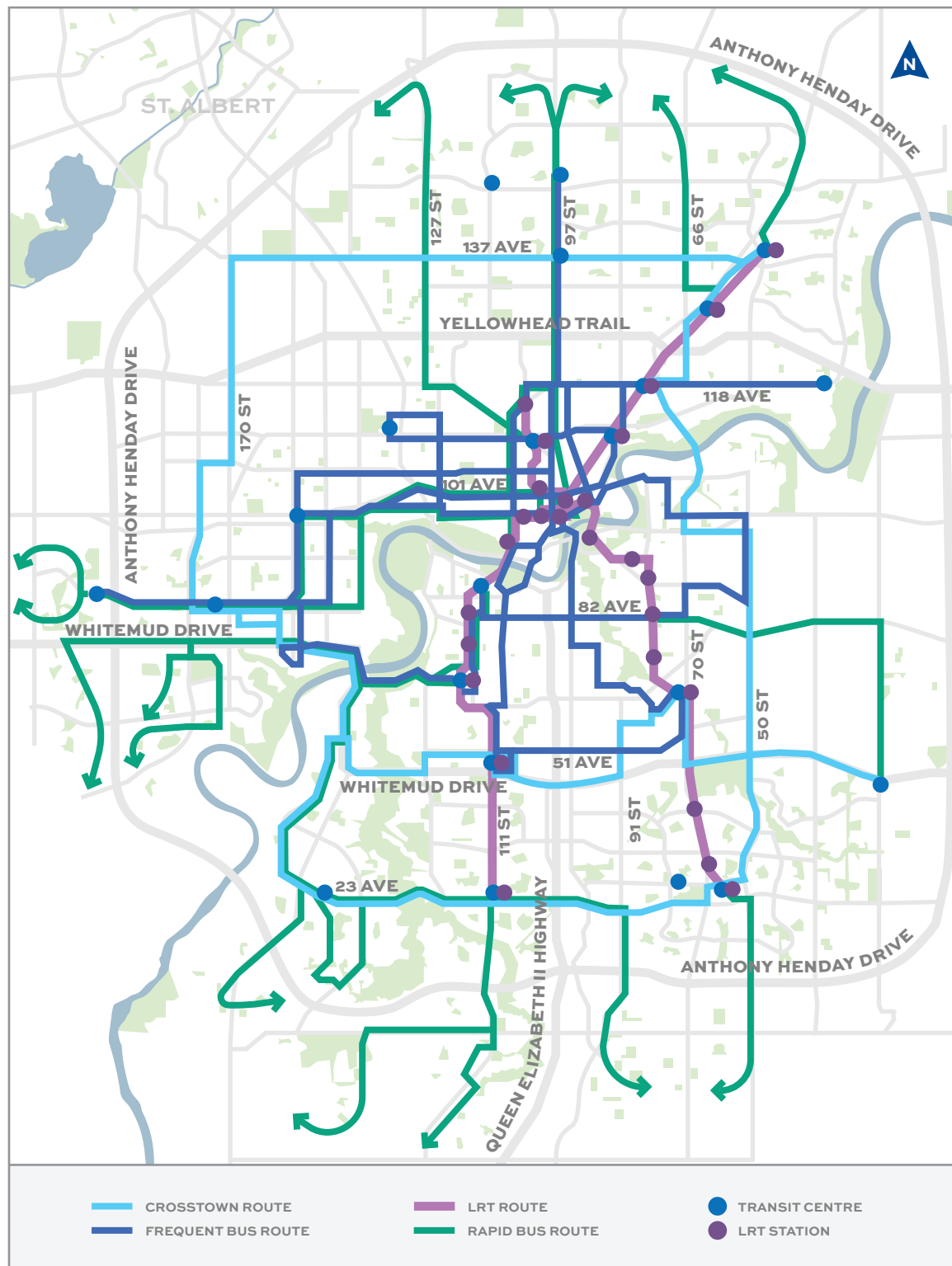Community Organizations that partnered in the development of the *Transit Strategy*

Edmonton Transit System Advisory Board (ETSAB)
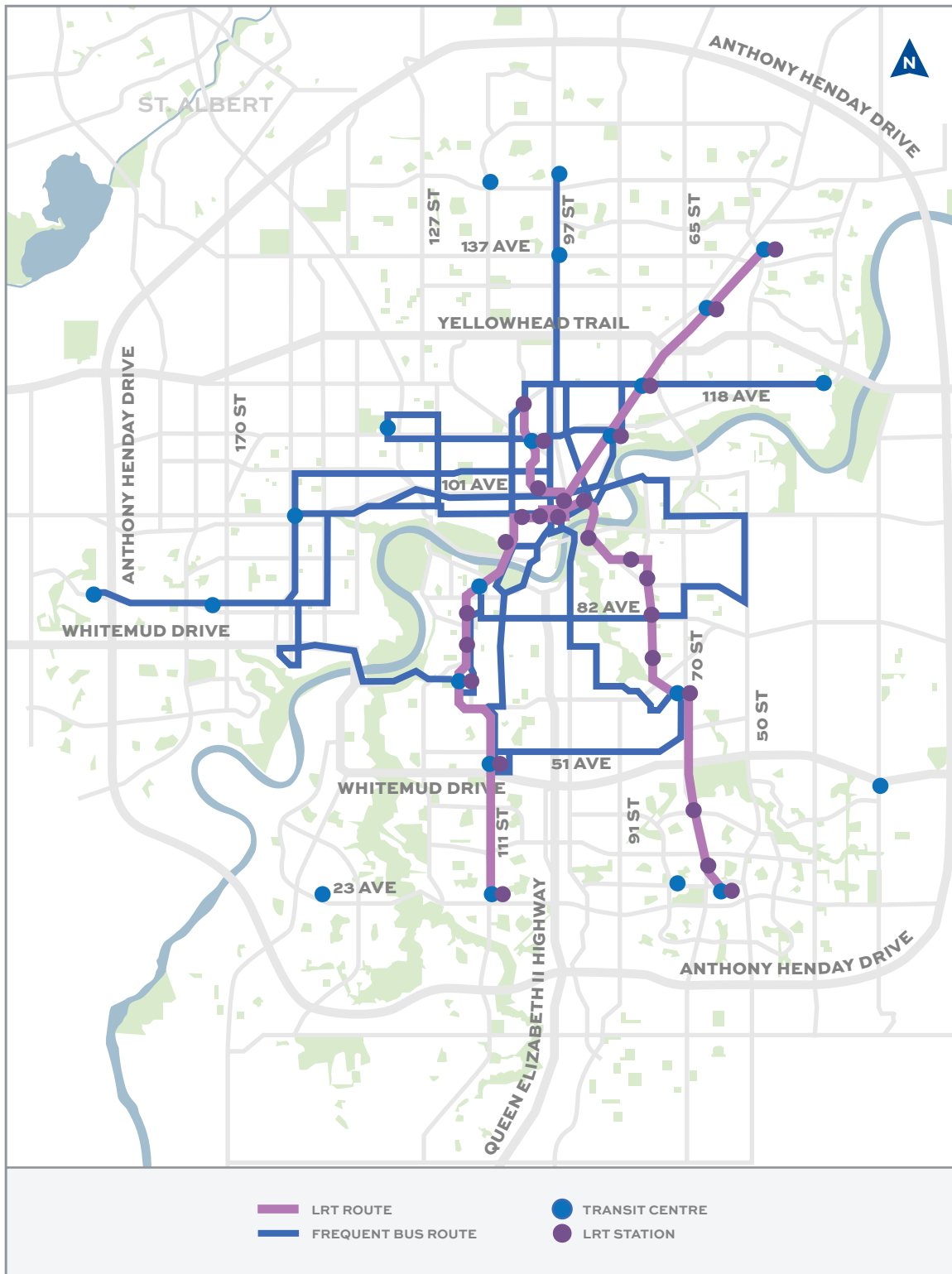
Edmonton Transit Management Team and Supporting Teams

APPENDIX A: CONCEPTUAL TRANSIT NETWORK

Conceptual Primary Transit Network

Legend:
- **CROSSTOWN ROUTE**
- **FREQUENT BUS ROUTE**
- **LRT ROUTE**
- **RAPID BUS ROUTE**
- **TRANSIT CENTRE**
- **LRT STATION**

Conceptual Frequent Transit Network

LRT ROUTE
FREQUENT BUS ROUTE
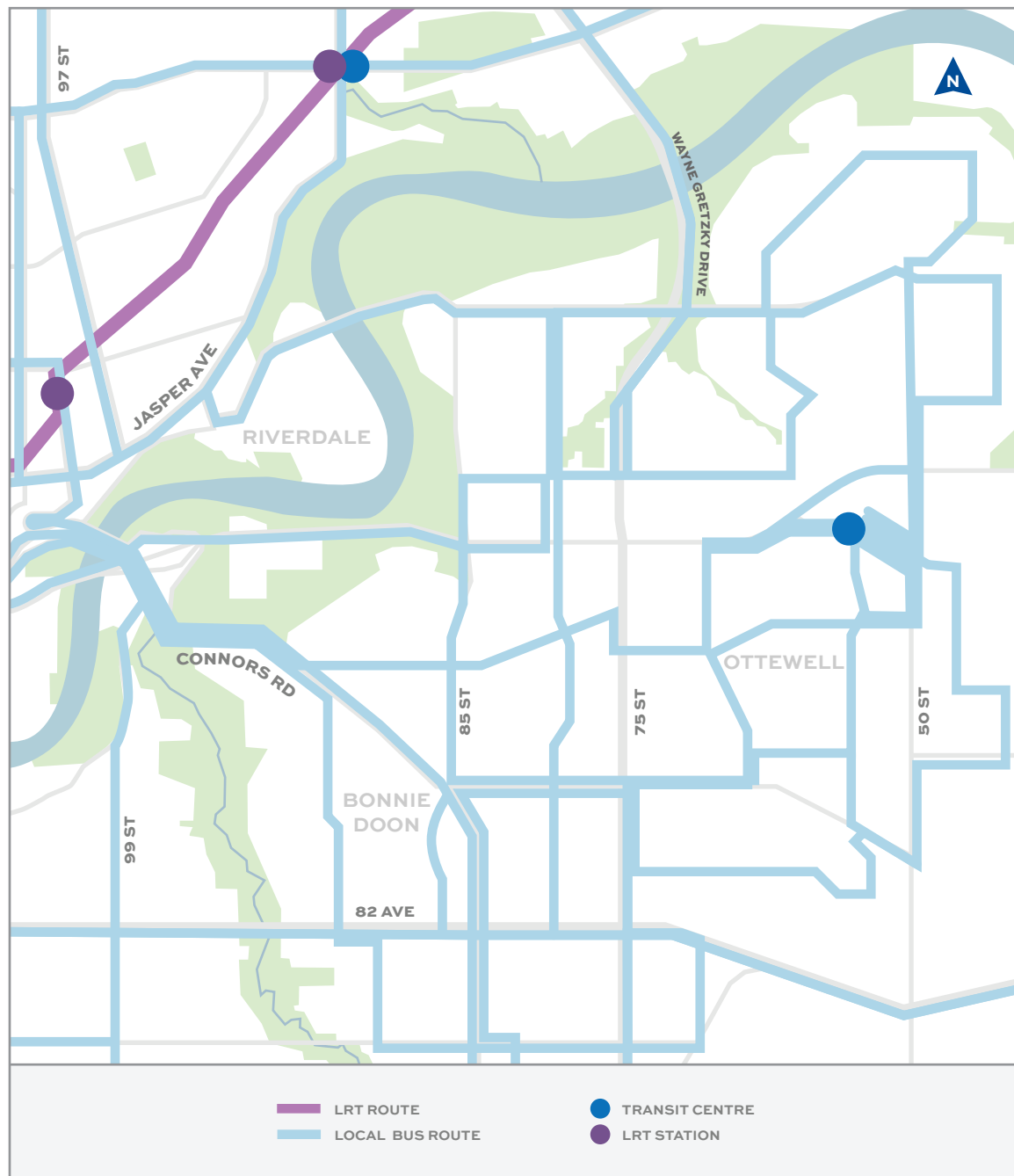**TRANSIT CENTRE**
LRT STATION
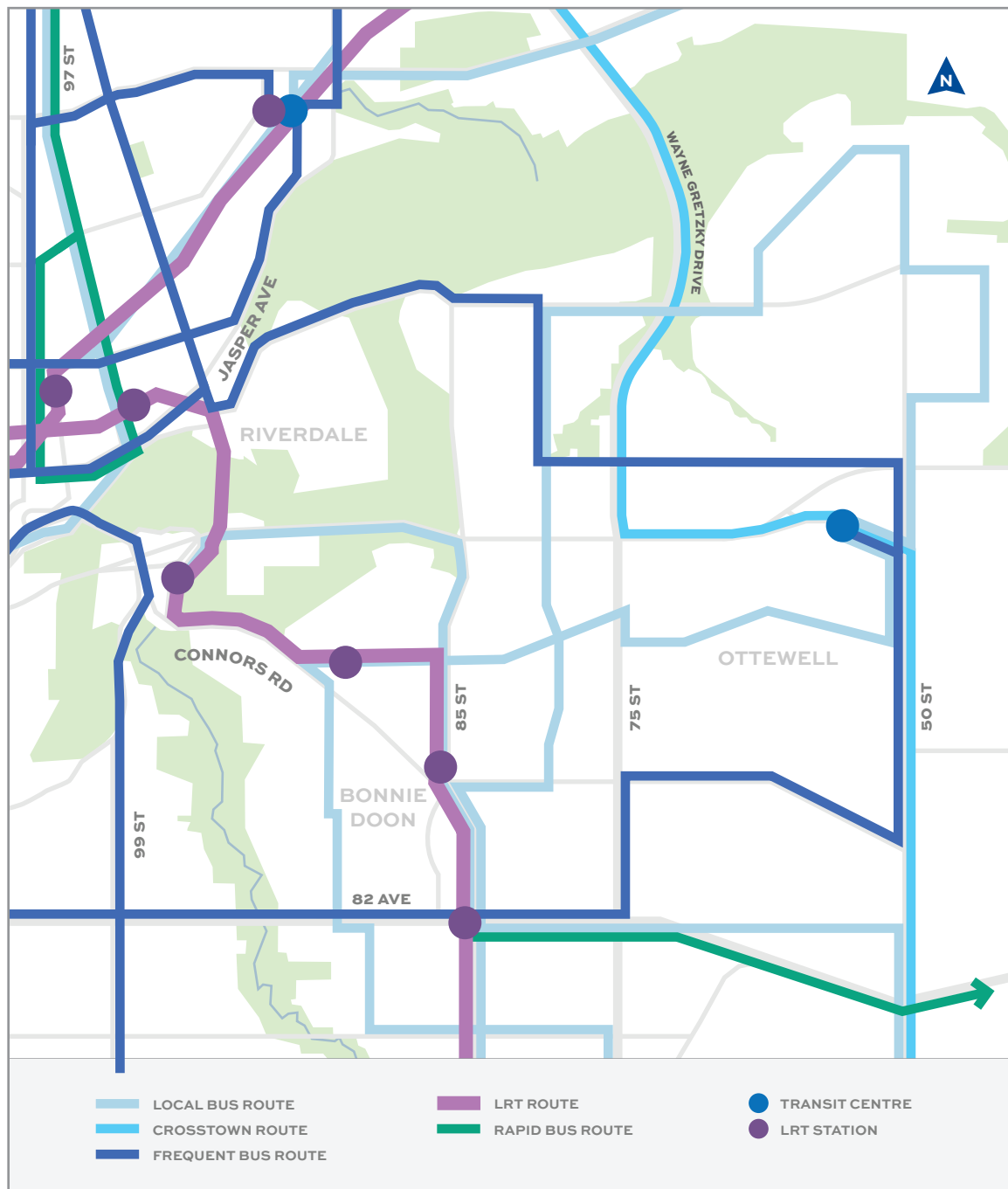
APPENDIX B: EXAMPLES OF LOCAL SERVICES

Example 1: Capilano

This example illustrates a reduction in the number of routes in the Capilano and Bonnie Doon area. The new routes provide less circuitous and more direct routing between major destinations such as Bonnie Doon Mall, Capilano Mall and Transit Centre, and King's University. This example retains a 400 metre walking distance for the majority of area residents.

Current Network

Proposed Network Concept

Legend:
- LOCAL BUS ROUTE
- CROSSTOWN ROUTE
- FREQUENT BUS ROUTE
- LRT ROUTE
- RAPID BUS ROUTE
- TRANSIT CENTRE
- LRT STATION

Map labels: 97 ST, JASPER AVE, RIVERDALE, WAYNE GRETZKY DRIVE, CONNORS RD, 99 ST, 85 ST, 75 ST, 50 ST, OTTEWELL, BONNIE DOON, 82 AVE

Example 2: Northeast Edmonton

The proposed network between Fort Road and 97 Avenue uses fewer routes that are more linear than the current network and follow a grid-like orientation. In the proposed network, most local service is provided by routes running between LRT stations on the Capital Line and either Northgate or Eaux Claires Transit Centres, with additional connectivity provided by a single route running north-south along 66 Street and 82 Street. This ensures that only a single transfer is required to reach the Frequent Bus Route and most common destinations (such as downtown, the University of Alberta and West Edmonton Mall).

Current Network
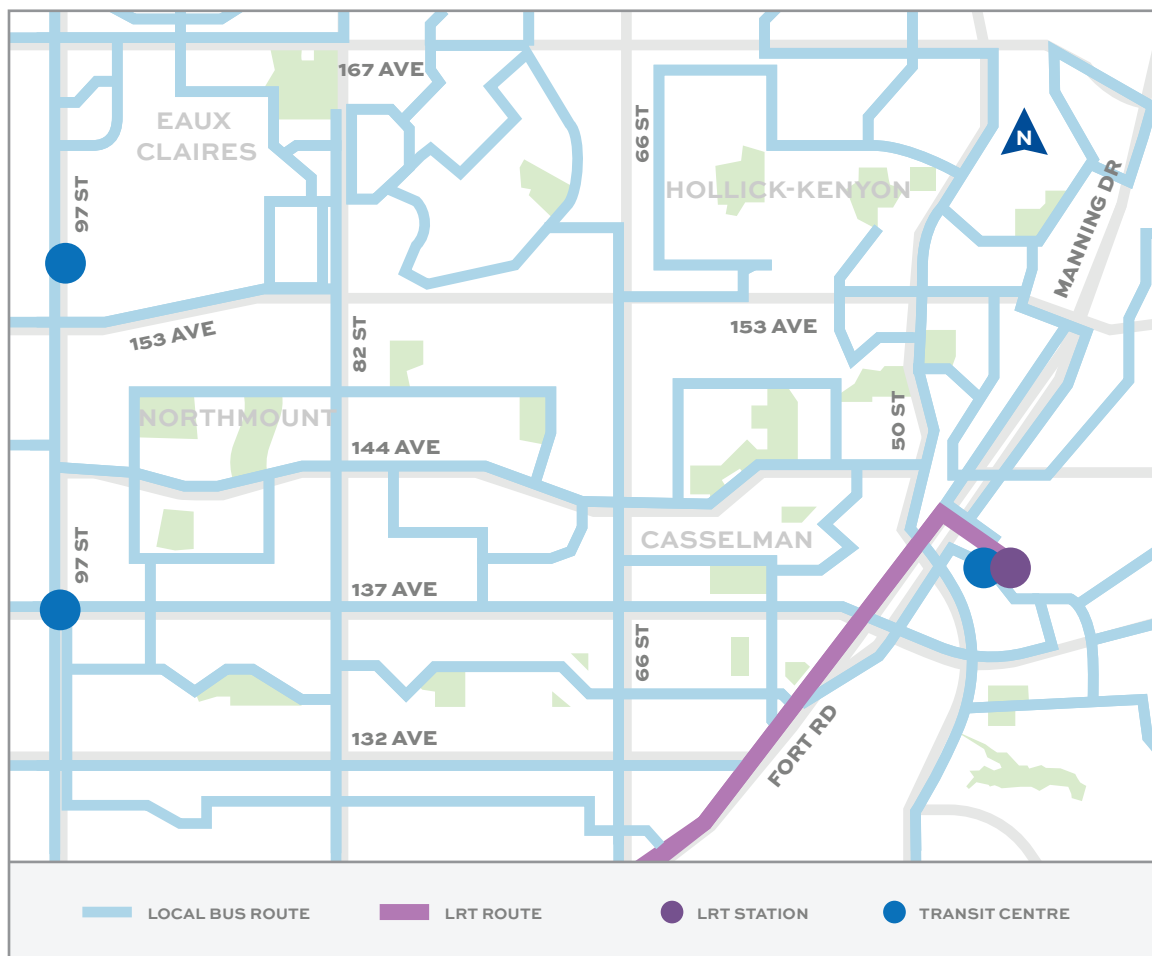
Due to the larger geographic area covered in this example, and the significant amount of overlapping routes, all of the routes in this example are shown as one colour.
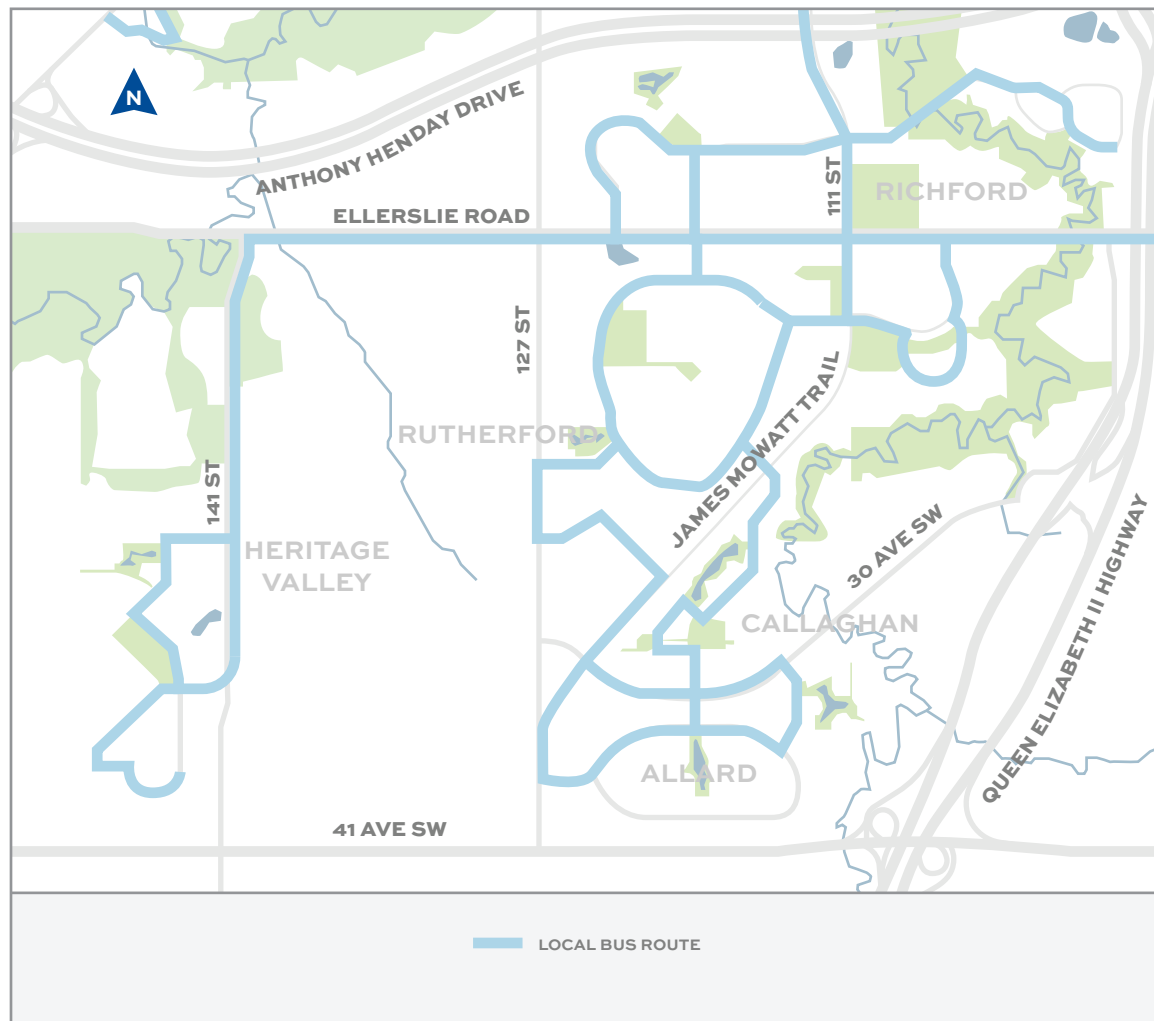
Proposed Network Concept

LEGEND

- LOCAL BUS ROUTE
- LRT ROUTE
- LRT STATION
- TRANSIT CENTRE
- FREQUENT BUS ROUTE
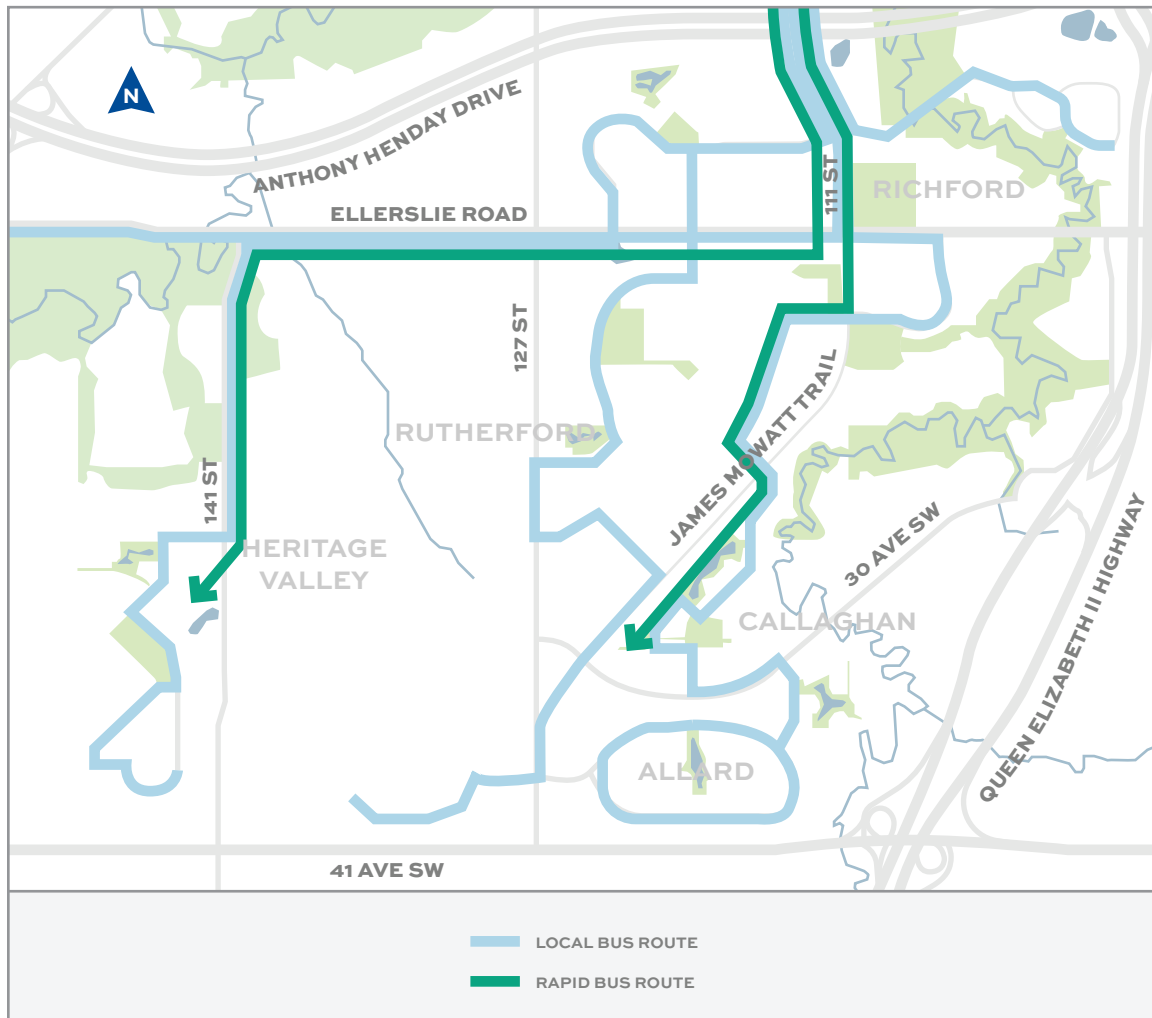- CROSSTOWN ROUTE
- RAPID BUS ROUTE
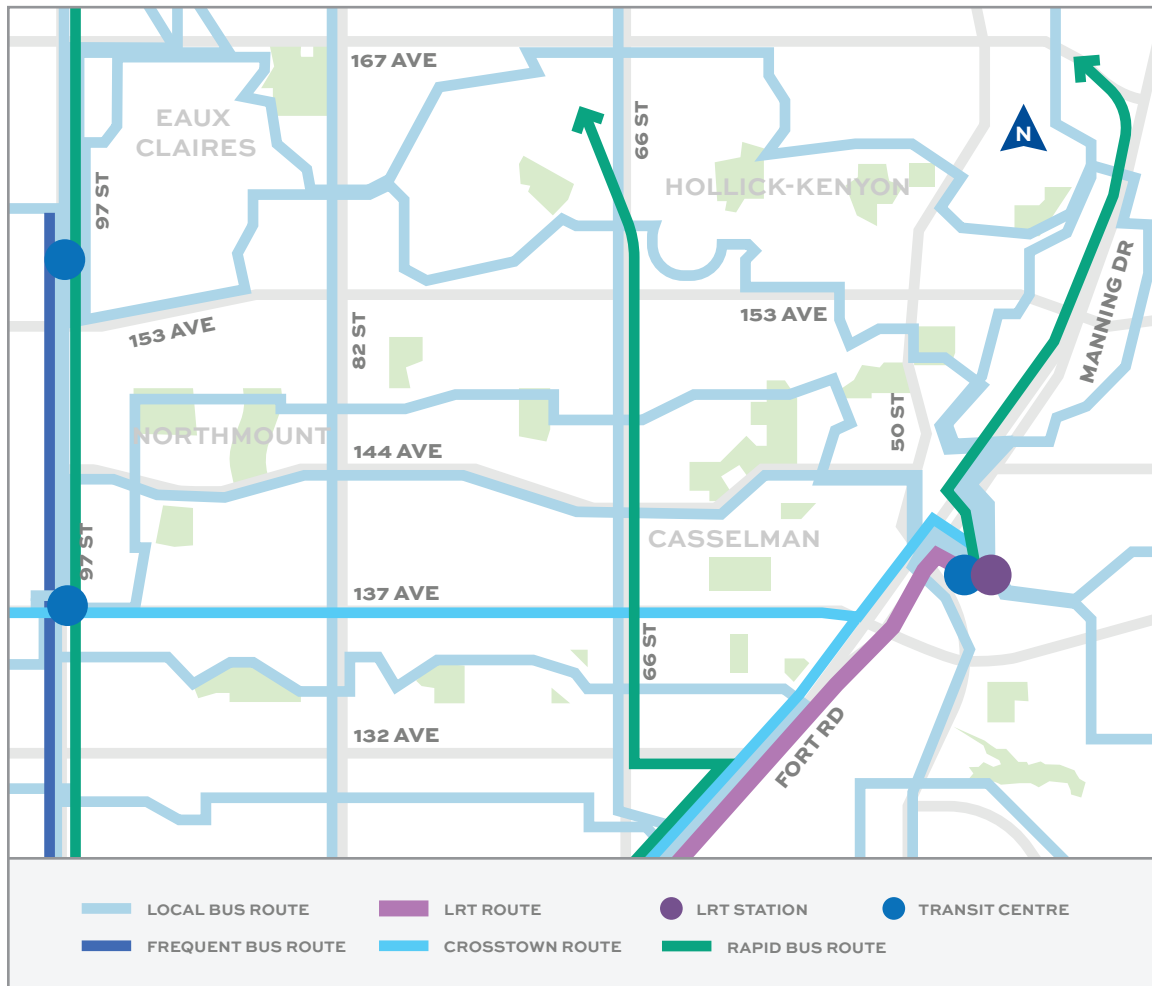
Example 3: Heritage Valley

This is an example of a network in a developing outer area. The proposed network reduces the overall number of routes and reduces overlapping service south of Ellerslie Road. The resulting service provides all areas with excellent service to Century Park LRT, but with few internal connections.

Current Network

LOCAL BUS ROUTE

Proposed Network Concept

ANTHONY HENDAY DRIVE
ELLERSLIE ROAD
111 ST
RICHFORD
127 ST
141 ST
RUTHERFORD
JAMES MOWATT TRAIL
30 AVE SW
QUEEN ELIZABETH II HIGHWAY
HERITAGE VALLEY
CALLAGHAN
ALLARD
41 AVE SW

LOCAL BUS ROUTE
RAPID BUS ROUTE

APPENDIX C: COMPONENTS OF TRANSIT SERVICE POLICY

The City has established Transit Service Standards to guide the design of transit service and the level of service. The current policy provides specific service standards and planning guidelines for the following:

- Definition of the start of service and end of service for weekdays and weekends;
- Definition of the start time and end time of each transit service time period for each of weekday, Saturday, and Sunday;
- Maximum walking distances by time period for each of residential areas and employment areas;

- Maximum service headways by time period for each of residential areas and employment areas, and for transit corridors and Community Bus Routes;;
- Minimum and maximum route performance standards (e.g. boardings per bus hour) by time period for each service type
- Guidelines for the introduction and staging of service to new development areas; and
- On-time performance.

In conjunction with the detailed redesign of the transit network, a review and update of the Transit Service Policy is necessary to ensure that the policy is consistent with and applicable to a transit network and service strategy based on the Guiding Principles.

During this review and update, it is recommended that consideration be given to broadening the Transit Service Policy to expand on the following components:

1. Service Warrants

Typical examples include warrants for the:

- Introduction of a new or an extended route for each of the major service types (Frequent Service Route, Rapid Bus Route, Crosstown Bus Route, Local Route)
- Introduction of route deviations
- Expansion of a route's hours of service

2. Network Design Guidelines

These guide the detailed development of the transit network and, while based on the Guiding Principles, they provide more precise guidelines for network design. These typically cover the following topics:

- Route coverage (i.e. maximum walking distances) disaggregated by, for example, service type, time period, and type of land use served
- Route directness targets by service type (ratio of route length to length of shortest path)
- Maximum number of transfers to complete common types of transit trips
- Minimum stop spacing by service type
- Span of service by service type
- Minimum service frequencies by service type
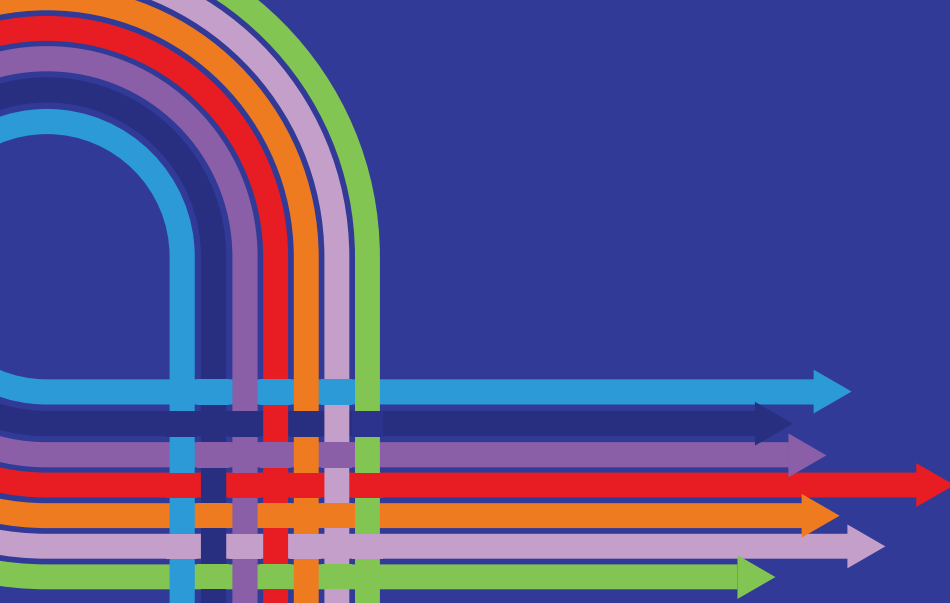
3. Service Quality Standards

These standards are used to guide the adjustment of service levels on routes. These typically include:

- Maximum occupancy standards (e.g. loading standards) by service type to identify crowding thresholds at which service adjustments are considered
- Service reliability standards (e.g. on-time performance) to identify thresholds at which running time adjustments, frequency adjustments, or transit priority measures are required

4. Service Productivity Standards

These standards are used in the assessment of route performance. These typically include:

- Minimum route utilization standards (e.g. boardings/bus hour, boardings/bus km, boardings/trip, passenger-kms/seat-kms, average load, etc.) by service type and time period
- Minimum route cost productivity standards (e.g. variable operating cost/boarding) by service type and time period