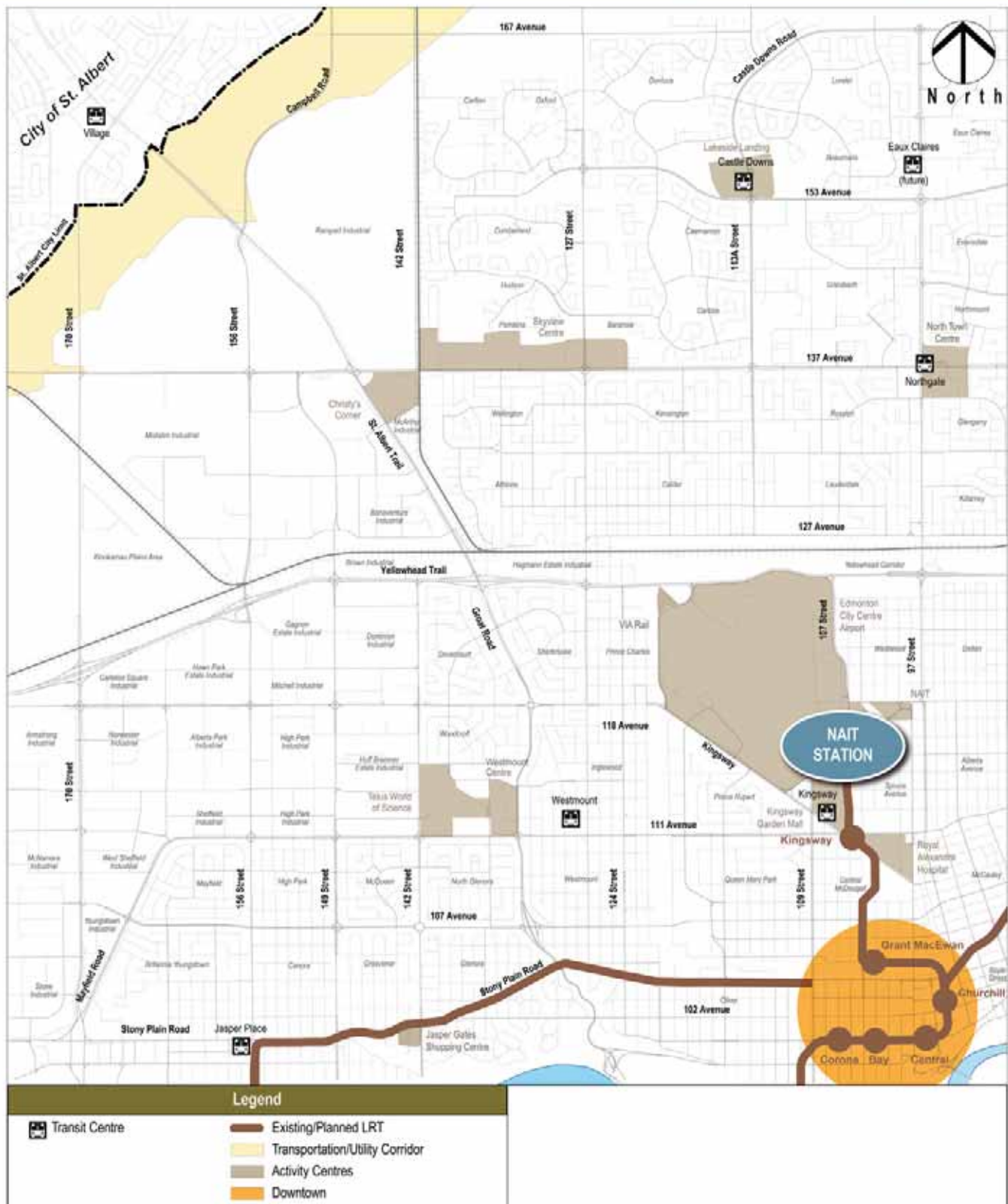


Welcome

**Northwest LRT
Corridor Planning**

March 23 and 24, 2010

Study Area Overview



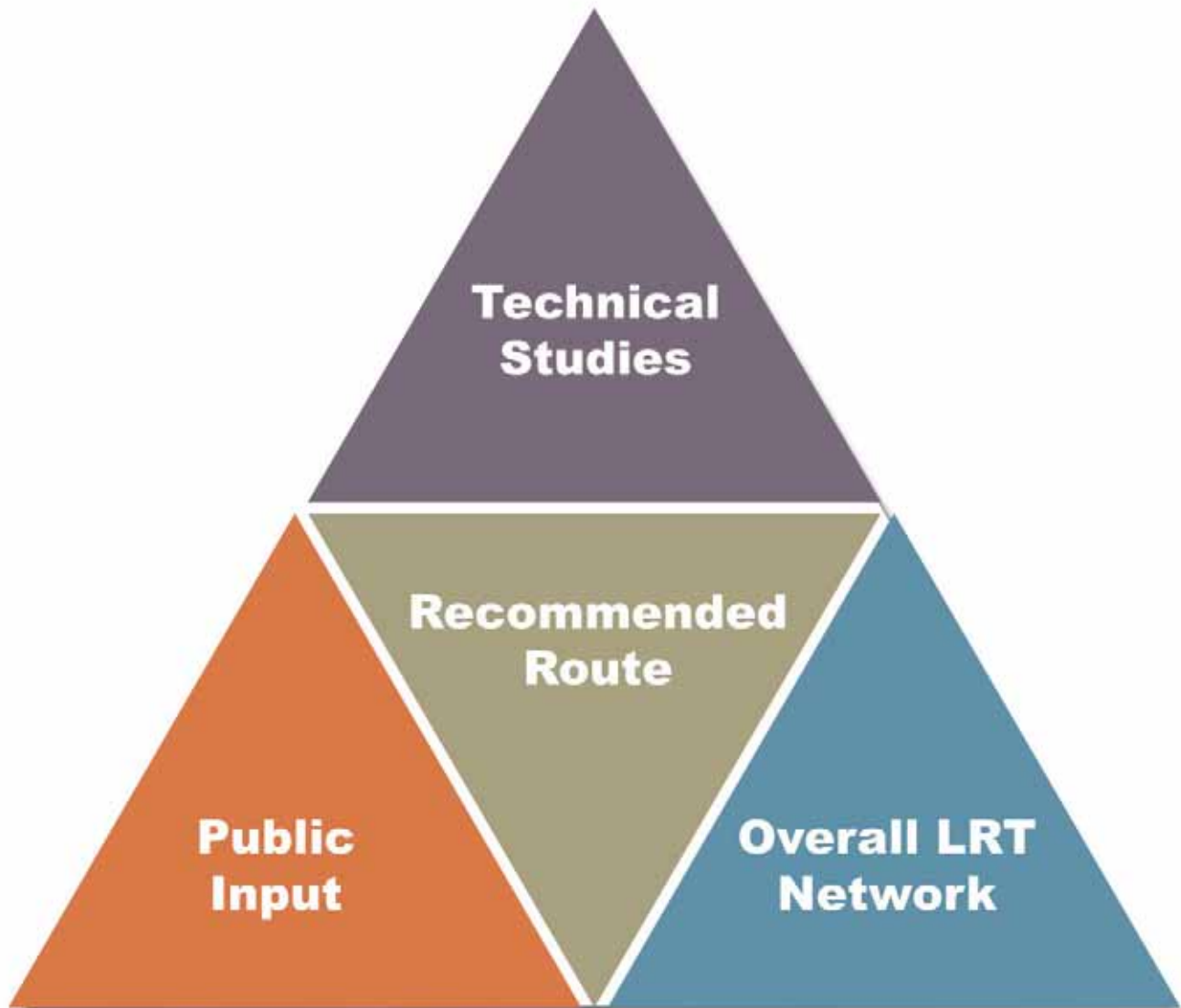
LRT Network Plan Findings

A separate LRT Network Plan developed by the City of Edmonton provides the following direction:

- **Northwest sector has need for LRT**
- **Adopt urban style elements within appropriate context**
- **Accommodate future expansion to St. Albert**



LRT Corridor Planning Process





Policy Guidance

MDP

- **Accommodate a 2040 population of 1+ million people**
- **Manage growth to become a sustainable, healthy and compact city**
- **Grow within an evolving regional context**
- **Design complete, healthy and livable communities**
- **Align medium and higher density development with key transit node and corridor locations including LRT**
- **Protect, preserve and enhance the natural environment**

TMP

- **Provide a comprehensive transit system as a cornerstone of the transportation system, offering travel choice and encouraging a shift in people's mode of transportation**
- **Expand LRT to all sectors of the city to increase ridership and spur the development of compact, urban communities**
- **Integrate transportation and land use to optimize transportation investment and create an accessible, efficient and urban city form**
- **Provide an effective regional transportation system, including transit, for the movement of people and goods**

LRT Network Plan

- **Expand the LRT to serve six sectors of Edmonton: Northeast, Northwest, West, South, Southeast and East**
- **Take advantage of urban style LRT to better integrate transit within communities**
- **Integrate LRT with existing and future communities by directly serving people and place, using a surface running LRT with more community focused stops**



Purpose Statement

The purpose of the Northwest LRT Project is to establish an LRT connection between the downtown and northwest Edmonton (with a feasible future connection to the City of St. Albert).

The guiding principles supporting this purpose include:

- **Maximize cost effectiveness**
- **Maximize transit system ridership**
- **Maximize use of existing transportation corridors**
- **Protect goods movement corridors (road and rail)**
- **Connect existing and future activity centres**
- **Provide consistency with:**
 - **Transportation Master Plan (TMP)**
 - **Municipal Development Plan (MDP)**
 - **City's strategic direction**
 - **LRT System Network Plan**
 - **St. Albert's TMP**
 - **Integrated land use framework**
 - **Capital Region Plan**
- **Provide opportunities for future system expansion**
- **Increase transit system effectiveness**
- **Shape land use to promote a more compact urban form**
- **Respect neighbourhoods**
- **Respect parklands**
- **Promote economic development/redevelopment**

Urban Style Design Elements

- **Smaller scale stations spaced closer together**
- **More direct transit, pedestrian and cyclist connections to a greater number of destinations**
- **Open space maximized to provide a safer transit environment**
- **Reduced speed in pedestrian-oriented areas**
- **Investment in aesthetics, such as landscaping, streetscaping, and architectural features**

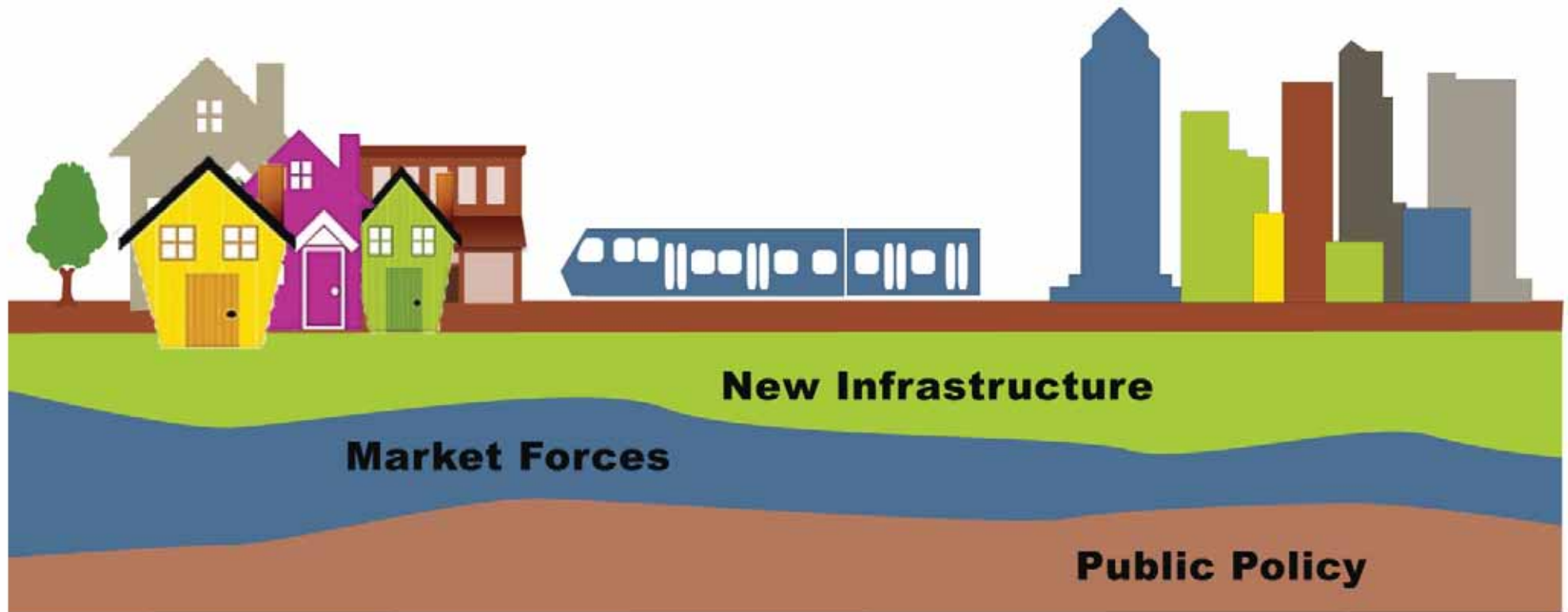


Transit access affects location decisions

When transit makes a location more accessible, more people will choose to live, work and shop there



Transit, markets, and policies must work together

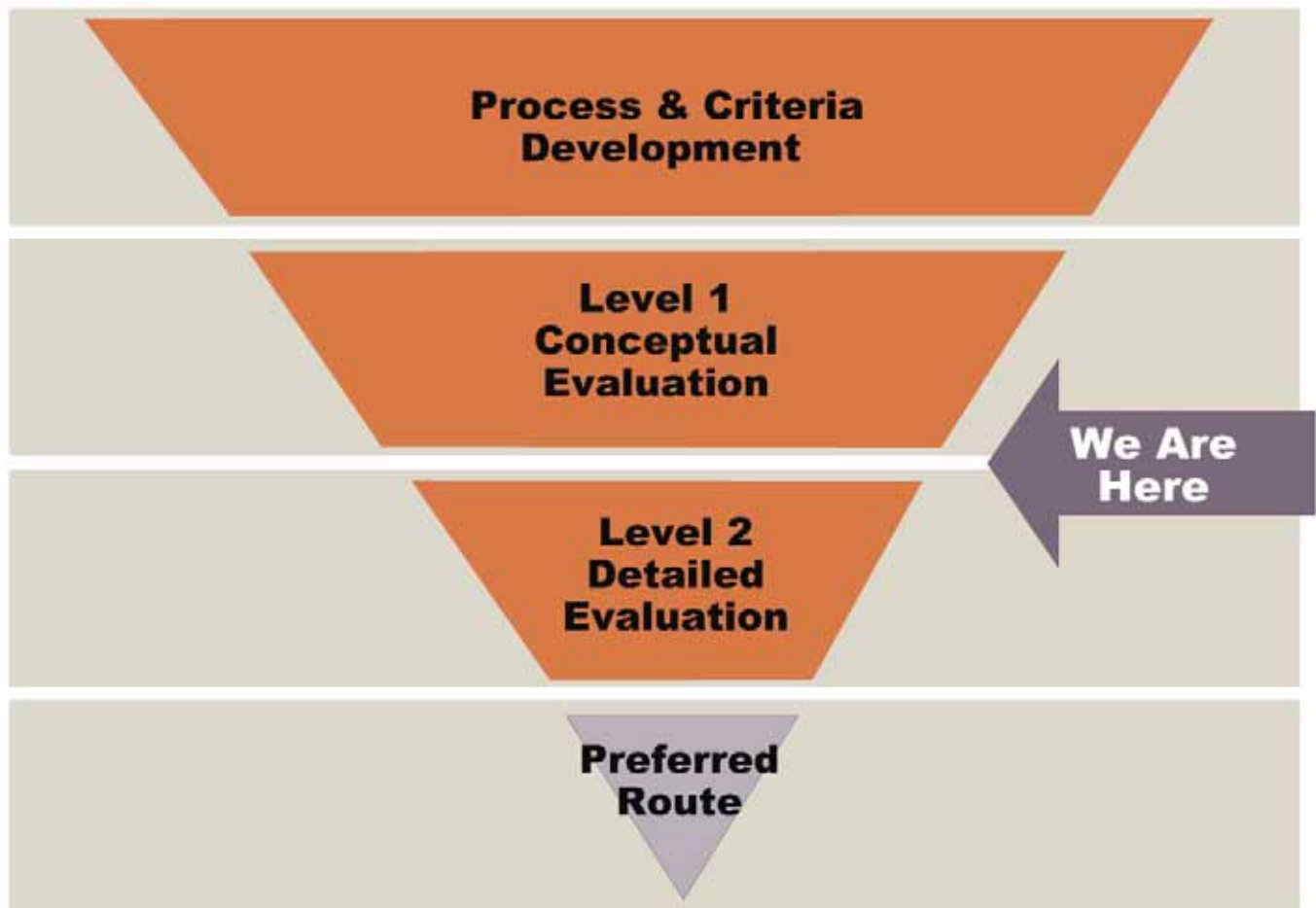


New Infrastructure = transit

Market Forces = demand for office and residential space

Public Policy = planning, and zoning

Route Alternatives Analysis Process

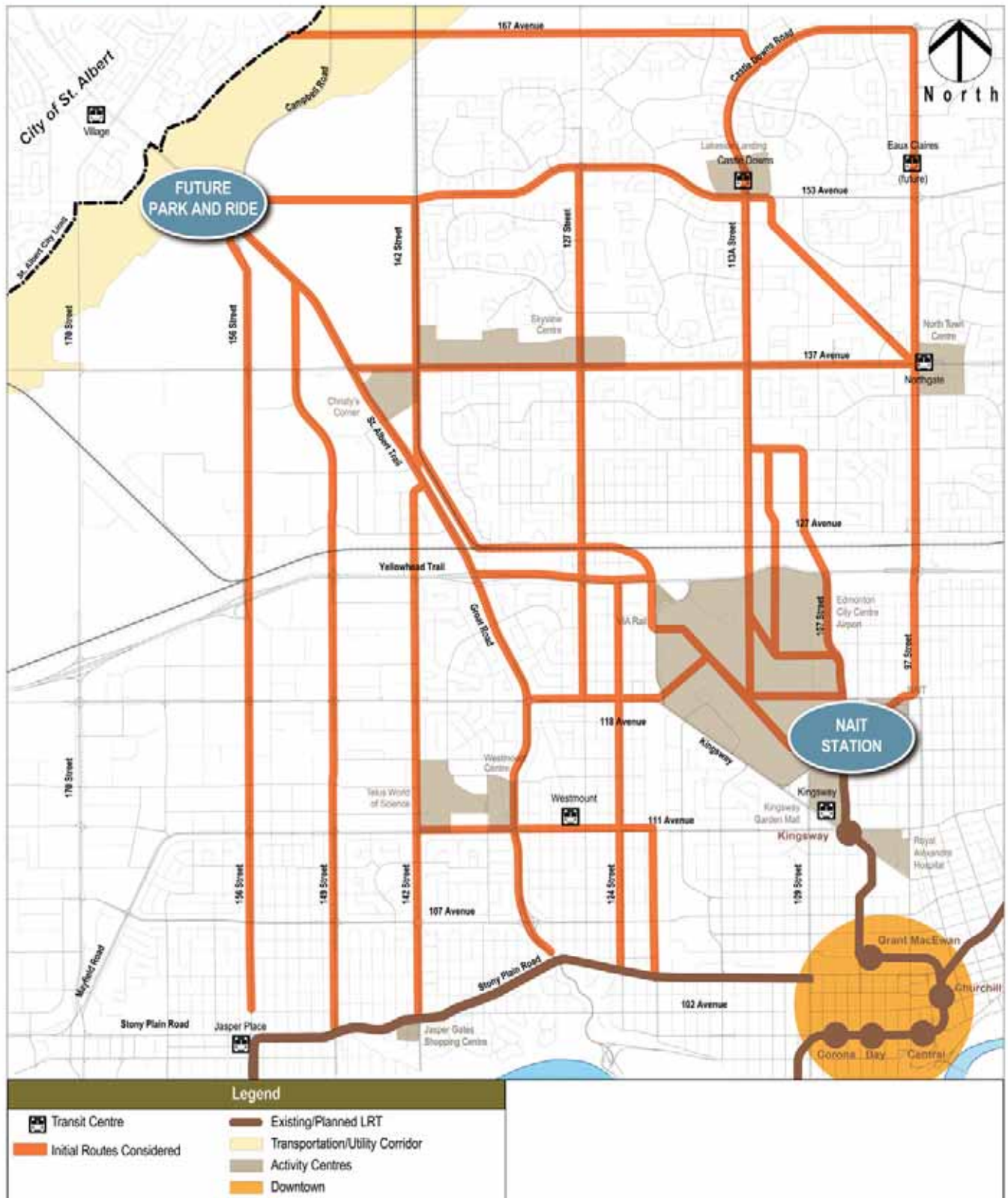


Stakeholders from a range of City Departments identified potential routes and screening criteria based on the key issues and opportunities for the corridor under study.

Two levels of evaluation have been used. Level 1 is screening focused on “fatal flaws” with respect to feasibility, community, or environmental impacts. It identifies options that are removed from further consideration.

Level 2 screening includes more details relating to financial, operational, social, and environmental issues. The criteria are grouped into categories and given a relative weighting.

Initial Routes Considered



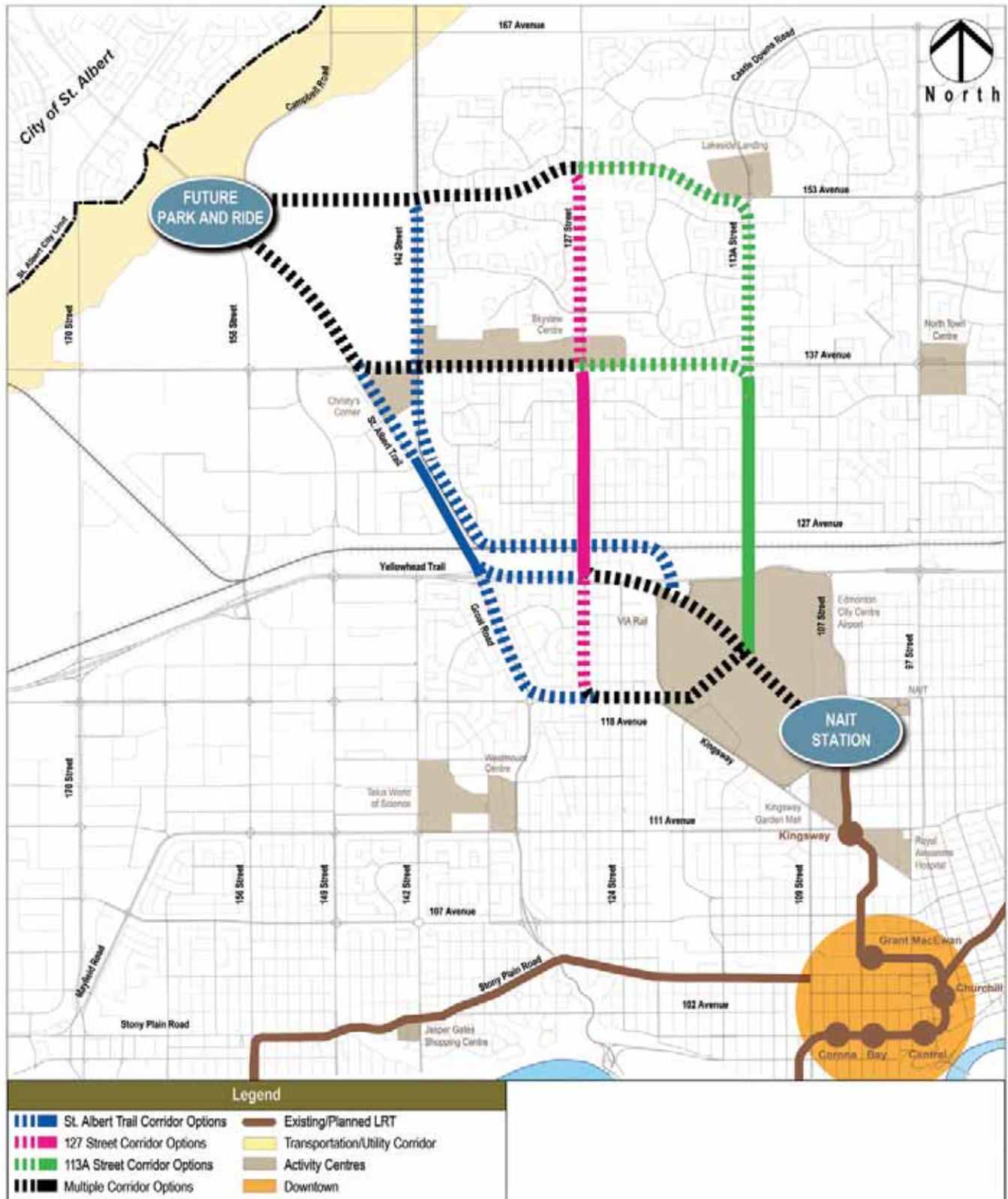


Level 1 Screening Criteria

Level 1 screening is focused on “fatal flaws” with respect to feasibility, community, or environmental impacts. All routes initially identified were analyzed and the results were carried forward into detailed evaluation.

Example Criteria	
Feasibility	<ul style="list-style-type: none"> Meets project purpose Technically feasible Primarily uses existing transportation corridors Minimizes conflict with goods movement Multimodal: Connects with bus, existing LRT Allows future extension Route is primarily at grade
Community	<ul style="list-style-type: none"> Consistent with Transportation Master Plan and Municipal Development Plan Connect priority revitalization areas Provide needed service to the area Connect to current and/or future activity centers Adjacent to transit supportive planned land use Current, future population along alignment Current, future employment along alignment Create irresolvable neighborhood barrier Potential for Station “fit” within neighborhoods
Environmental	<ul style="list-style-type: none"> Does not create irresolvable social impacts Does not create irresolvable environmental impacts Is not adjacent to multiple parks, open spaces, river valley or other protected areas

NWLRT Corridor Options

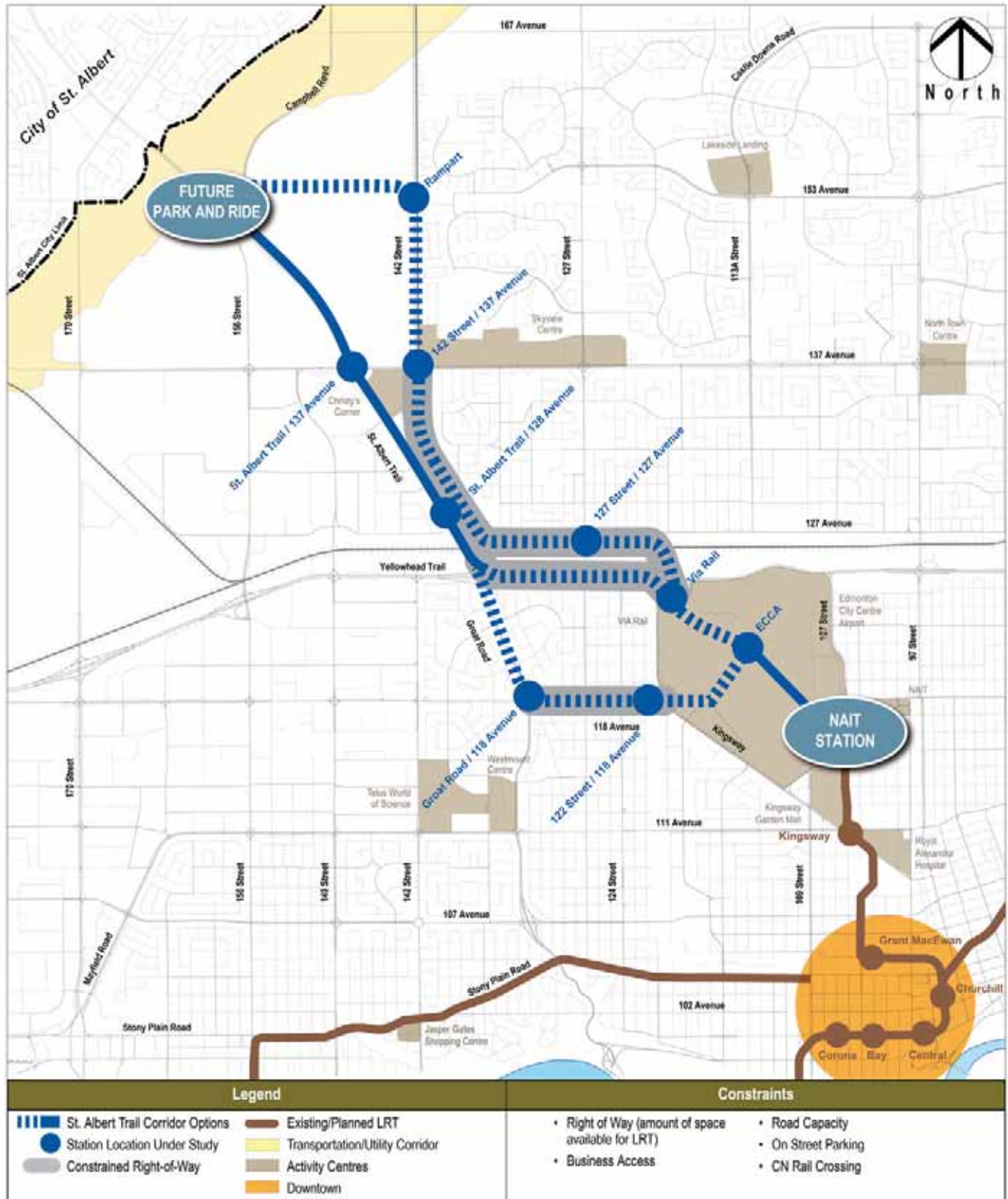


Level 2 Evaluation Criteria

Level 2 evaluation involves rating and ranking remaining route options based on a number of quantitative and qualitative criteria such as land use opportunities, ridership, constructability, neighbourhood integration, environmental challenges. Specific criteria under each of the main categories are defined in consideration of area specific needs. The findings from the second phase are weighted.

Category/Weighting	Typical Criteria
Land Use/Promoting Compact Urban Form 4	<ul style="list-style-type: none"> Existing transit centres/park and ride Existing/future activity centres/destinations Land available with potential for redevelopment Existing/future population density Existing/future employment density Existing/future mix of housing/zoning/land use types Number of large development proposals under review or construction Existing land-use plans/bylaws support development/redevelopment
Movement of People/Goods 3	<ul style="list-style-type: none"> Percentage within existing public/rail right-of-way Projected ridership Estimated cost/rider Projected travel time Potential changes in roadway capacity within existing transportation corridors Includes existing/future bicycle/pedestrian facilities Potential for park and ride locations
Feasibility/Constructability 2	<ul style="list-style-type: none"> Estimated capital/operating cost per kilometer How much of route is at grade (and grade-separated)? Complexity to extend route in future Proximity to LRT maintenance facility Number of at-grade crossings
Parks, River Valley, and Ravine System 2	<ul style="list-style-type: none"> Impacts/benefits to parks/open space/river valley access Need to acquire public land for the route
Social Environment 2	<ul style="list-style-type: none"> Need for private property acquisition Impact on local property values Ability to avoid, minimize, or mitigate neighbourhood impacts Potential for noise/vibration impacts Adjacent known cultural resource/heritage sites Student population near stations Number of low-income, no car, senior households near stations
Natural Environment 2	<ul style="list-style-type: none"> Impact on riparian habitat Number of river/stream crossings Potential for disruption due to construction

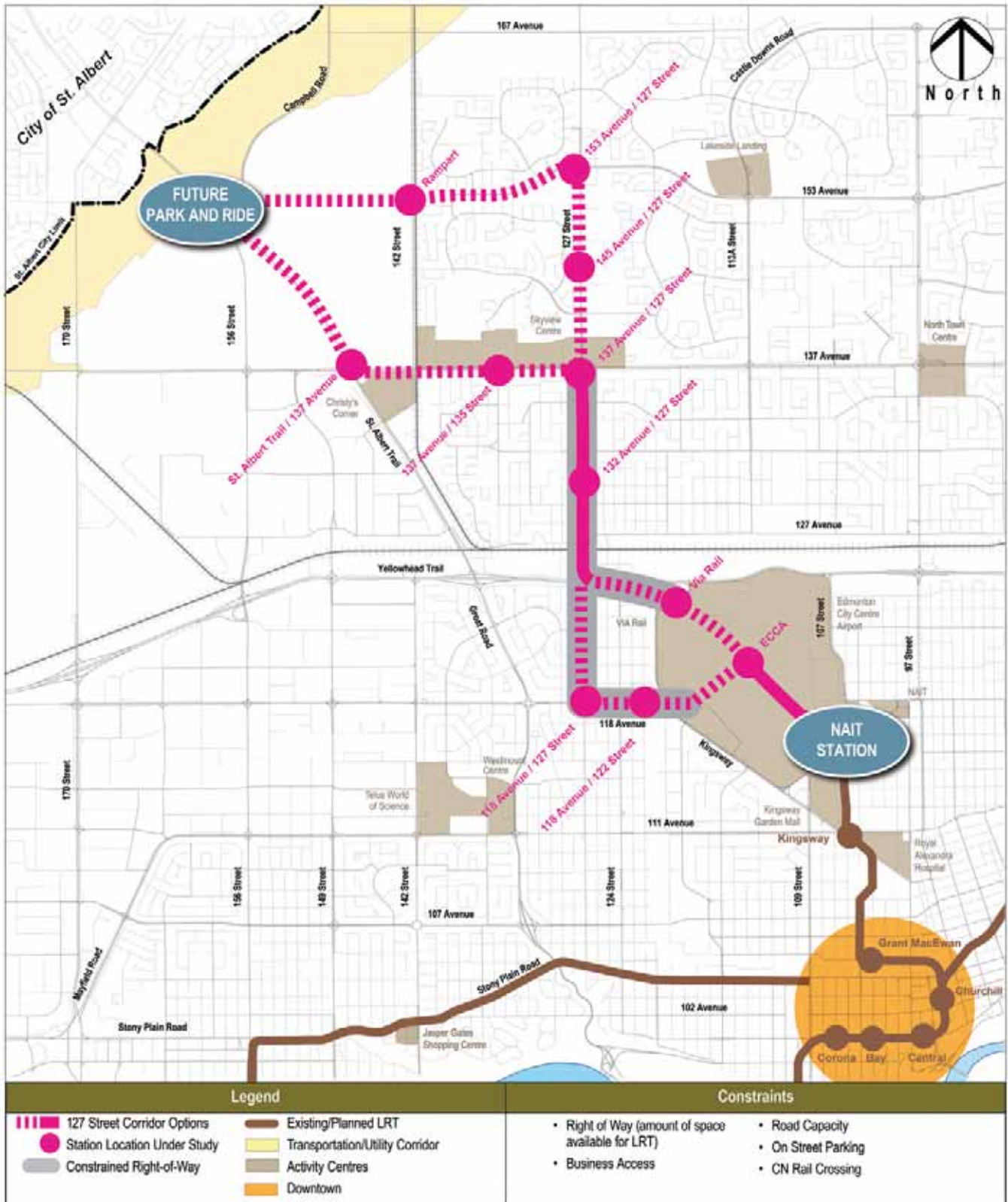
St. Albert Trail Corridor



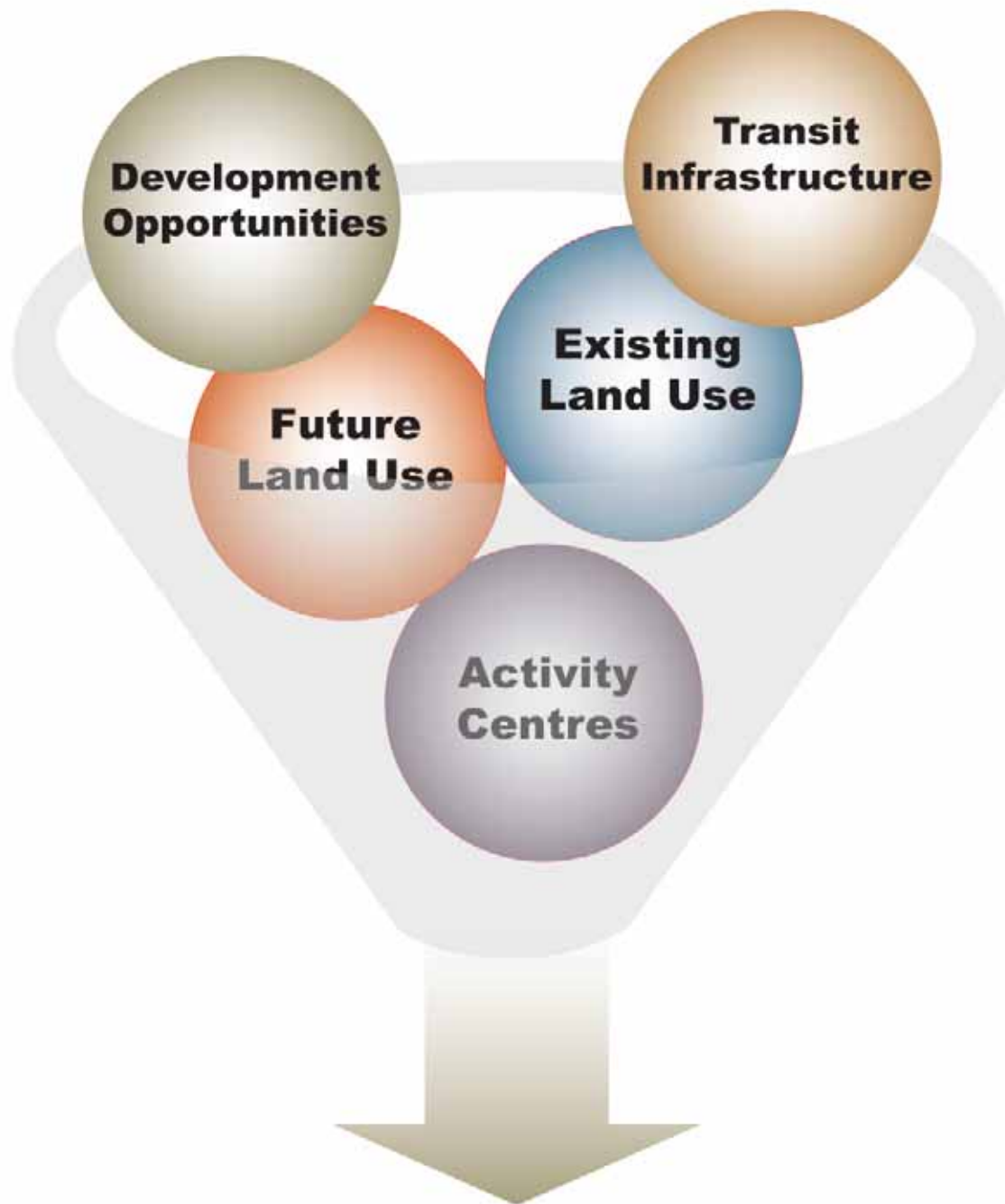
113A Street Corridor



127 Street Corridor



Potential Station Identification Process



Station Locations for Comparison Purposes



**City of Edmonton
Transportation Planning**

*Thank you for
your participation
and input!*

Your comments are being collected for possible summary reports to City Council and the civic administration regarding opinions expressed at this Open House. Information is being collected under the authority of Section 33(C) of the Freedom of Information and Protection of Privacy Act (F.O.I.P). It is protected by the privacy provisions of F.O.I.P.

NAIT LRT Project Background

September 25, 2008

City Council approved the Concept Plan for a North LRT Extension from Downtown to NAIT.

July 8, 2009

City Council instructed the Transportation Department to submit plans for the realignment of NW (NAIT)-LRT based on available access to lands currently impacted by 16-34 runway.

September 30, 2009

City Council instructed the Transportation Department to prepare an amendment to the Transportation System Bylaw 15101 to include the revised alignment.

December 15, 2009

City Council approved the realignment of the North LRT to extend across Princess Elizabeth Avenue west of 106 Street to a point east of 109 Street near the NAIT campus, with the alignment to the northwest beyond NAIT to be determined under a separate study.



NAIT Campus



Demonstration Plan
for the ECCA Lands



Princess Elizabeth Avenue