



Northwest LRT – Downtown to Northwest Edmonton Study

www.edmonton.ca/LRTProjects

Public Workshops

March 23 & 24, 2010



Welcome

www.edmonton.ca/LRTProjects

Thank you all for attending



Welcome

www.edmonton.ca/LRTProjects

Introductions



Welcome

www.edmonton.ca/LRTProjects

Our Team's Commitment to You for Tonight

- **To provide you with as much information as possible about the LRT Planning process and inputs**
- **To provide an opportunity for you to provide your thoughts and comments about the planning to date and going forward**



Purpose Statement

www.edmonton.ca/LRTProjects

**To establish an LRT
connection between the
Downtown and Northwest
Edmonton**



Agenda Overview

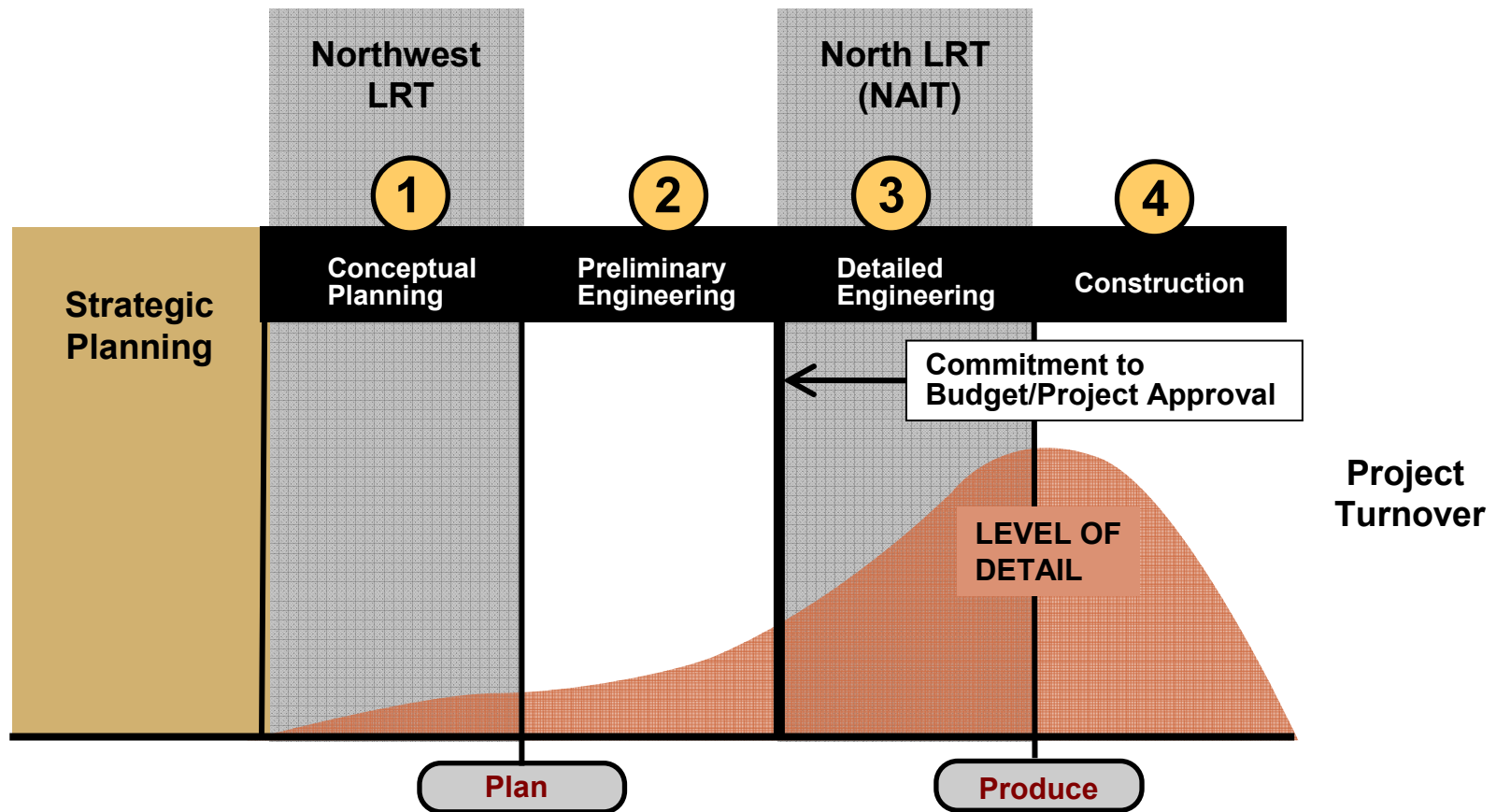
www.edmonton.ca/LRTPProjects

Four parts

- Display area with information boards and fact sheets
- Presentation
- Workshop
- Question and Answer Session

Development of LRT

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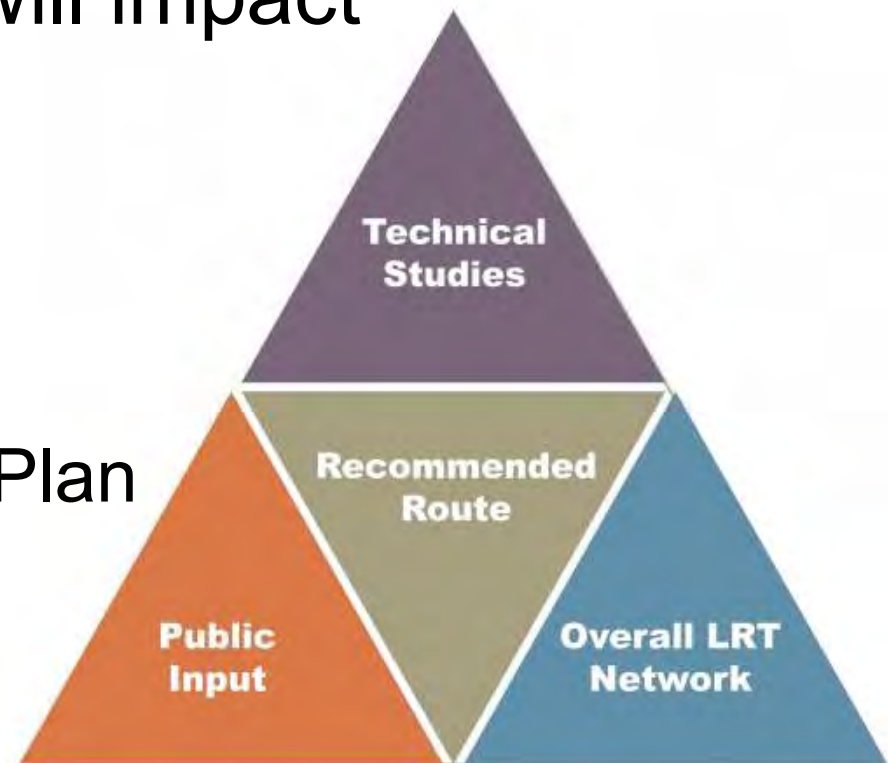


Critical Components

www.edmonton.ca/LRTProjects

Three components that will impact the decisions about the LRT Connection

- The overall LRT Network Plan
- Technical Analysis
- ***Public Input***





Council Approved Corridor Screening Criteria

www.edmonton.ca/LRTProjects

Category

Weighting

Land Use/Promoting Compact Urban Form

4

Movement of People/Goods

3

Feasibility/Constructability

2

Parks, River Valley, and Ravine System

2

Social Environment

2

Natural Environment

2



Corridor Evaluation Criteria (Level 2)

www.edmonton.ca/LRTPProjects

Land Use/Promoting Compact Urban Form

- 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

- 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

- 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



Corridor Evaluation Criteria (Level 2)

www.edmonton.ca/LRTProjects

Parks, River Valley & Ravine System

- Impacts/benefits to parks/open space/river valley access
- Need to acquire public land for the route

Social Environment

- 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

- Impact on riparian habitat
- Number of river/stream crossings
- Potential for disruption due to construction



Northwest LRT –Downtown to Northwest Edmonton Study

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Defining the Long Range Network

Edmonton's Planning Hierarchy

www.edmonton.ca/LRTPProjects



- The Way Ahead
(Strategic Plan) City Vision
- The Way We Grow
(Municipal Development Plan)
- The Way We Move
(Transportation Master Plan)
- Integrated Transit & Land Use Policy
Framework



Integrated Transit & Land Use Framework

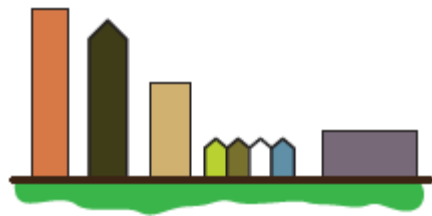
www.edmonton.ca/LRTPProjects

- Outlines land use and community investment recommendations near LRT nodes and along major bus corridors.

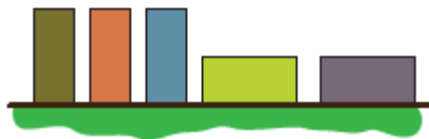


Station Typology

www.edmonton.ca/LRTPProjects



**Mixed Use /
Town Centre Stations**



**Employment
Centre Stations**



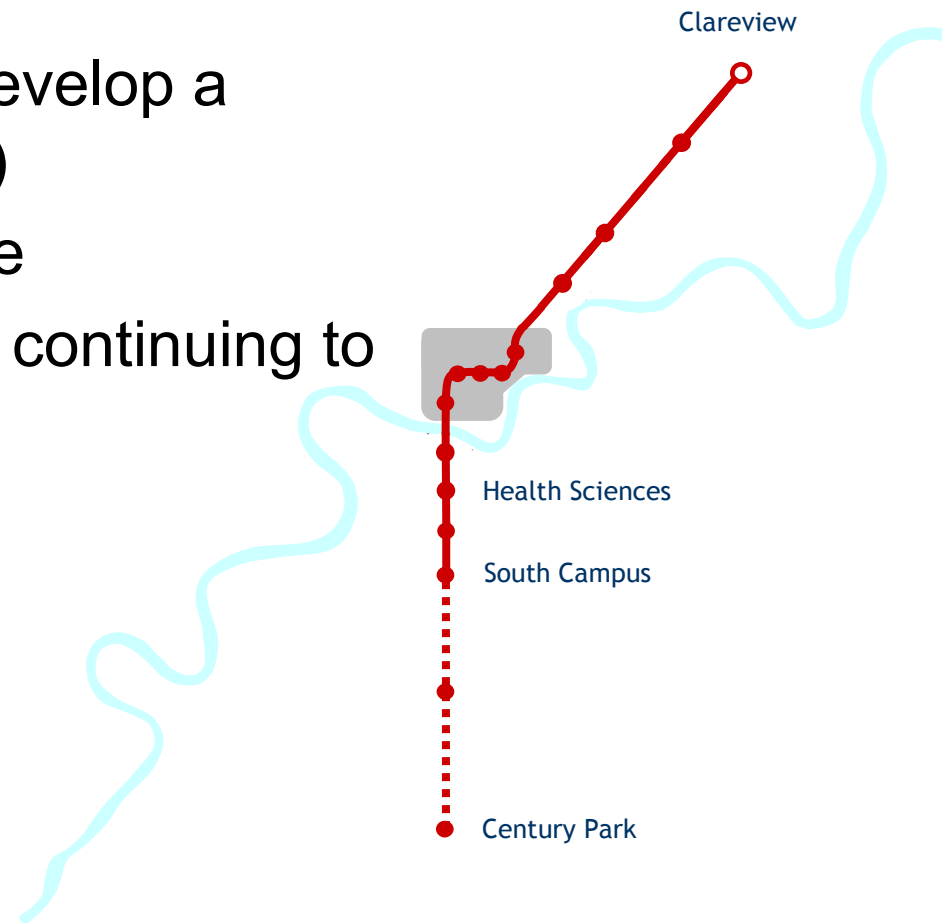
**Residential
Centre Stations**



Edmonton's LRT System

www.edmonton.ca/LRTProjects

- First city in North America to develop a modern light rail system (1978)
- System '*State of the Art*' at time
- Serves key destinations and is continuing to expand

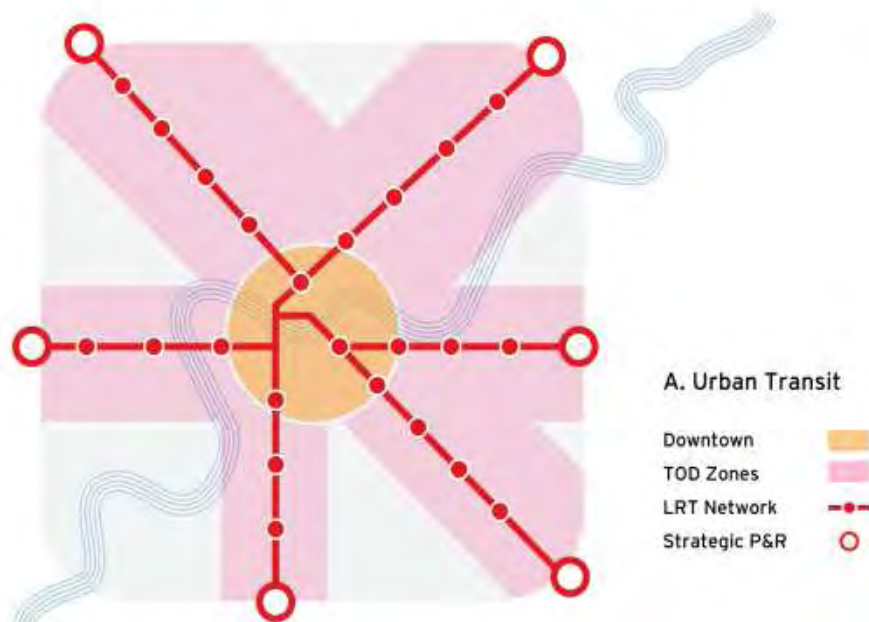


LRT System Style

www.edmonton.ca/LRTProjects

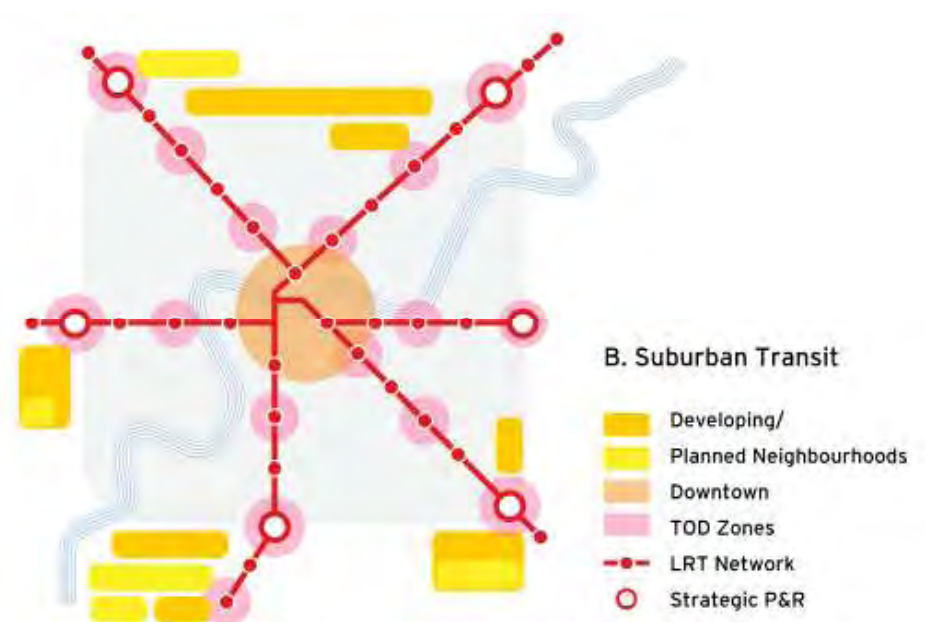
URBAN STYLE LRT

- 400m to 800m stop spacing
- 20-30 km/h average speed



SUBURBAN STYLE LRT

- 1000m to 2500m stop spacing
- 40 km/h average speed



LRT - Urban Style

www.edmonton.ca/LRTProjects

- LRT is part of the street
- Easy access for passengers
- LRT mixes with pedestrians



Closer Station Spacing

www.edmonton.ca/LRTPProjects

- Increase passenger catchment
- Support TOD, sustainable communities
- Less frequent transfers

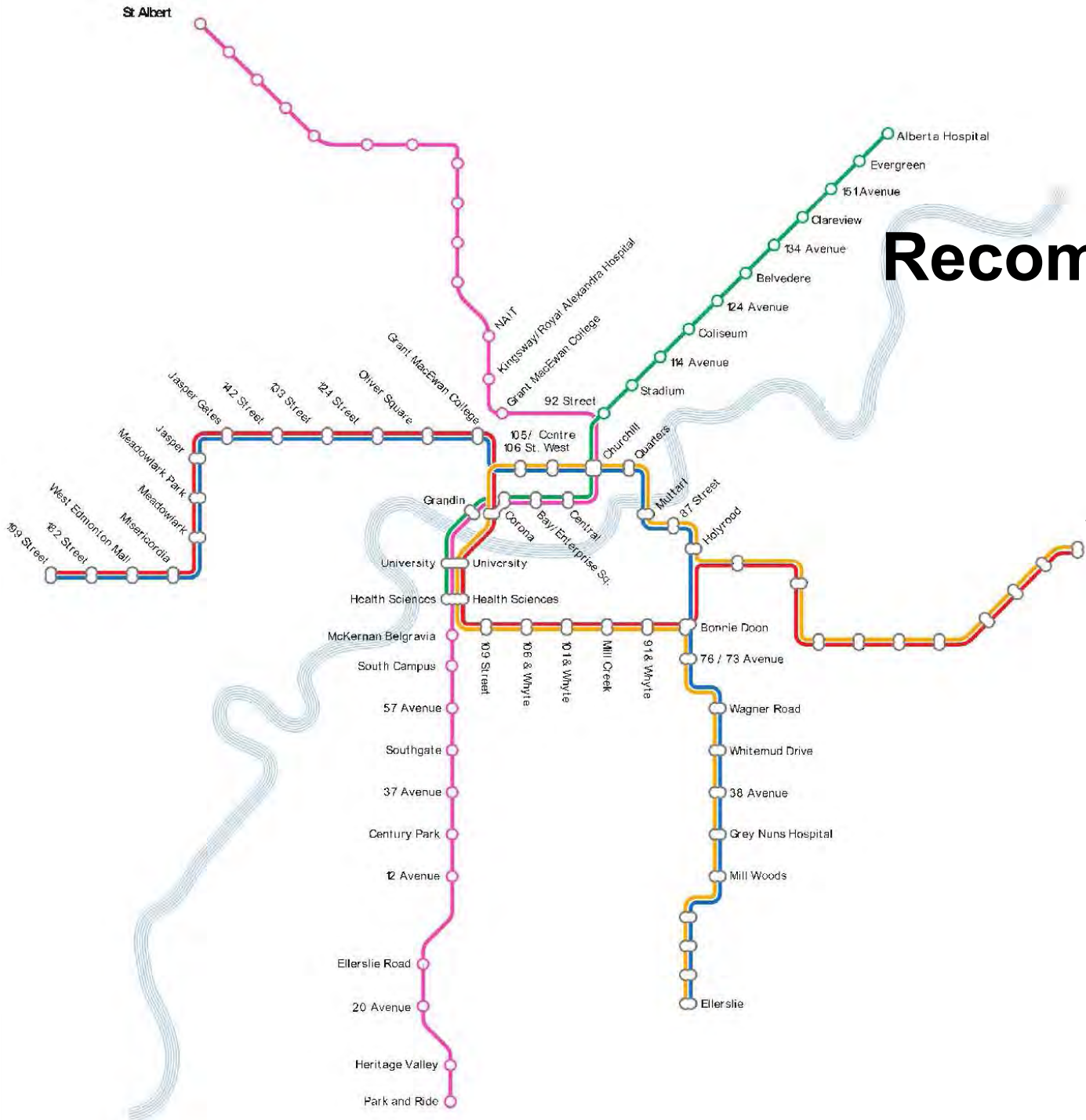


Recommendations

www.edmonton.ca/LRTProjects

- Urban style LRT system
- 6-line City-scale Network
- Design in flexibility and capacity with surface-level routes
- Downtown circulator
- Regional connections





Recommendations of the LRT Network Assessment

LRT Projects - Status

	Concept Planning		Preliminary Engineering	Detailed Engineering	Construction
	Corridor Definition	Alignment Definition			
South LRT (Health Sciences to Century Park)	✓	✓	✓	✓	Spring 2010
North LRT (Downtown to NAIT)	✓	✓	✓	Fall 2010	
South LRT (Century Park to Ellerslie Road)	✓	✓	Spring 2010		
Northeast LRT (Clarview to Gorman)	✓	✓	Spring 2010		
Southeast LRT (Downtown to Mill Woods)	✓	End 2010			
West LRT (Downtown to Lewis Estates)	✓	End 2010			
Northwest LRT (NAIT to Northwest Edmonton)	Summer 2010	TBD			



Northwest LRT – Downtown to Northwest Edmonton Study

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LRT and Transit Oriented Development (TOD)



LRT and Transit Oriented Development (TOD)

www.edmonton.ca/LRTProjects

The transit - land use connection:

- How does it work?
- What can we learn from elsewhere?

The Transit - Land Use Connection

www.edmonton.ca/LRTPProjects

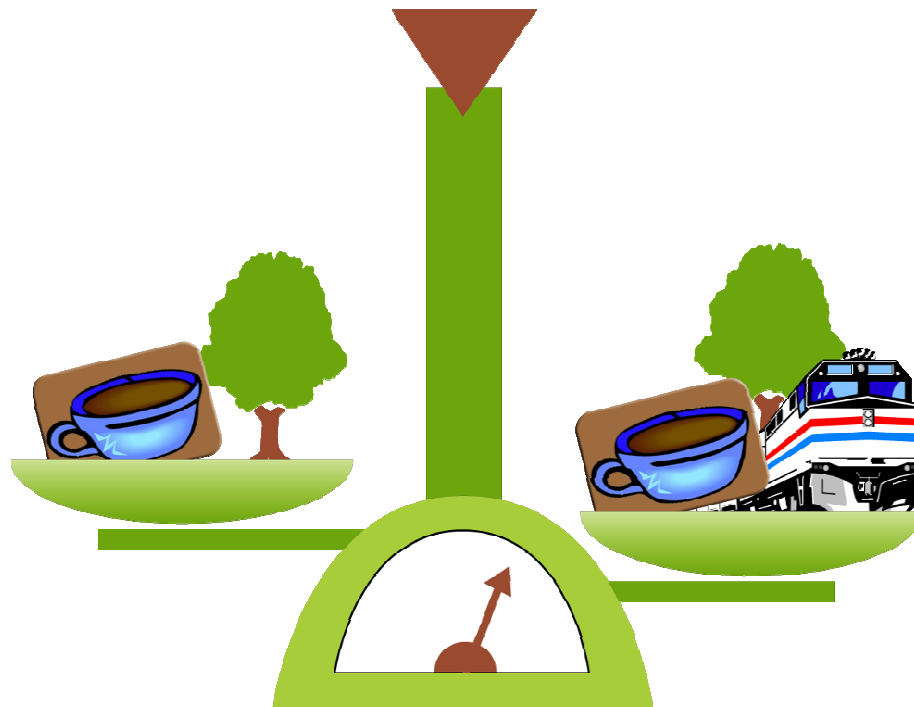
- Transit access affects location decisions



The Transit - Land Use Connection

www.edmonton.ca/LRTPProjects

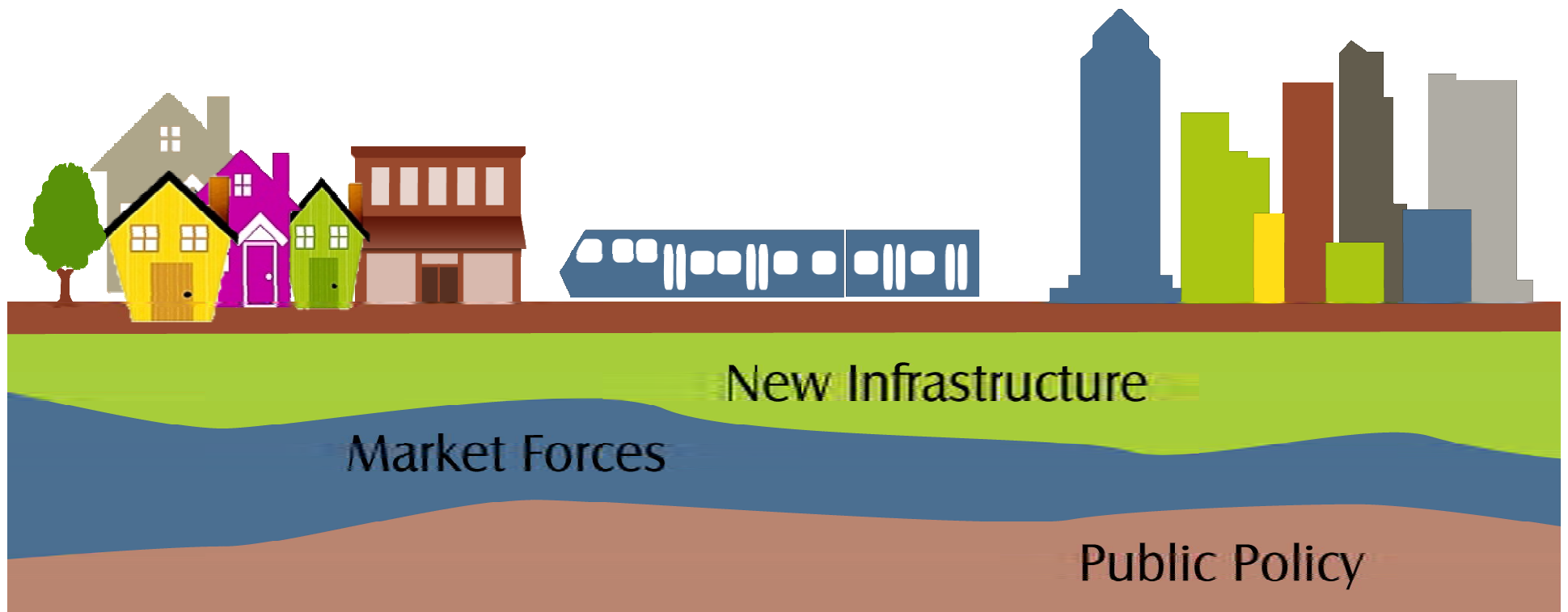
- Amenities affect location decisions



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Transit Alone Is Not Enough

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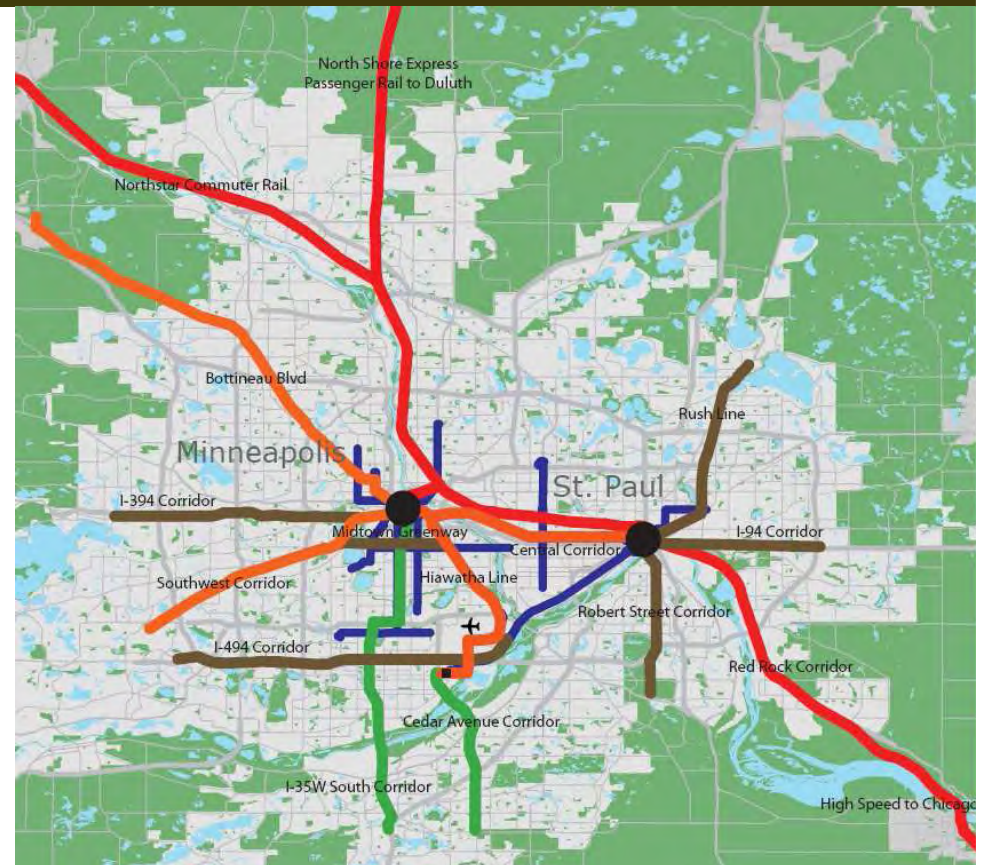


TOD_Layers_C3 ai cts

Minneapolis LRT

www.edmonton.ca/LRTProjects

- 3.3+ million population
- 4 LRT lines planned with 3 commuter rail corridors
- Region growing, with most growth projected in the urban area
- LRT viewed as a solution to traffic congestion
- Hiawatha line is 12 miles long, opened in 2004



Minneapolis TOD Policies

www.edmonton.ca/LRTProjects

- Encourage development and reinvestment in centers combining transit, housing, offices, retail, services, open space and connected street supporting walking and bicycle use
 - Livable Communities Funding
 - Planned Unit Development overlays and station area planning
 - Hennepin County TOD program



Minneapolis TOD

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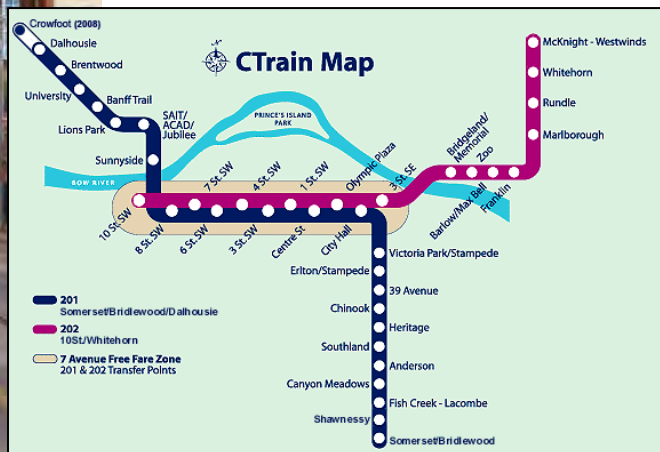


Calgary LRT

www.edmonton.ca/LRTProjects



- 1.0+ million population
- 46.0 km of LRT Service
- Downtown line opened in 1981
- Multiple lines and extensions



Calgary TOD Actions & Policies

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- Calgary TOD planning objectives:
 - Ensure transit-supportive land uses
 - Increase density
 - Create pedestrian-oriented design
 - Make each station area a “place”
 - Manage parking, bus and vehicular traffic
 - Plan in context with local communities

Calgary TOD Development

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What Actions Are Needed?

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- ✓ Steady, sustained, consistent policy
- ✓ Balanced, but consistent emphasis on the plan when conflicts arise
- ✓ Direct growth to priority areas for momentum / critical mass
- ✓ Consider impacts of other transportation investments that may not support the plan
- ✓ Consider impacts of other land use decisions in the city or region that may not support the plan



Northwest LRT – Downtown to Northwest Edmonton Study

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Clarifying Question and Answer

15 minutes



Northwest LRT – Downtown to Northwest Edmonton Study

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Public Involvement Process & Themes Heard to Date

Role of Public Involvement

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- LRT will have advantages and disadvantages
- Public involvement is NOT about identifying the most popular route
- City Council will make final decision on which LRT route will proceed



Listening and Learning

www.edmonton.ca/LRTProjects

- Online questionnaire hosted in Feb 2010
- Open-ended questions - total of 1,199 participants
- Face-to-face interviews with stakeholders
- Purpose:
 - Gain a greater understanding of benefits, issues, and impacts of LRT within the study area
 - Refine discussion points



What we heard: *Summary*

www.edmonton.ca/LRTPProjects

- Traffic congestion is a key concern in this area
- Key opportunities for transit service
 - St. Albert, shopping and recreation areas
 - Development opportunities (City Centre Airport, Castledowns, Griesbach)



- Competing themes:
 - Access to destinations vs. travel time
 - Minimize disruption while maximizing ridership

What we heard: 127 Street Corridor

www.edmonton.ca/LRTPProjects

- **Key Benefit: Access to St. Albert**
 - Access to Airport and Yellowhead Trail
 - Option to 118 Avenue provides service to Inglewood businesses
- **Key Concern: Traffic congestion**
 - Most frequently cited as corridor with no benefits
 - Misses desirable destinations
 - 127 Street too busy now – don't want to lose lanes



What we heard: *113A Street Corridor*

www.edmonton.ca/LRTPProjects

- **Key Benefit: Access to Shops and Parks**
 - Recreation centres and parks
 - Access to North West Edmonton and City of St. Albert
 - Key development areas in Griesbach and Castle Downs
- **Key Concern: Community impacts**
 - Property acquisition
 - Misses key high-density areas
 - Traffic impact on key corridors



Underway now...

www.edmonton.ca/LRTProjects

- Public workshops – *March 23/24*
- eConsultation – *March 22 to April 11*
www.edmonton.ca/LRTprojects
- Information will help identify mitigation strategies
 - for LRT Concept Plan
 - for future study





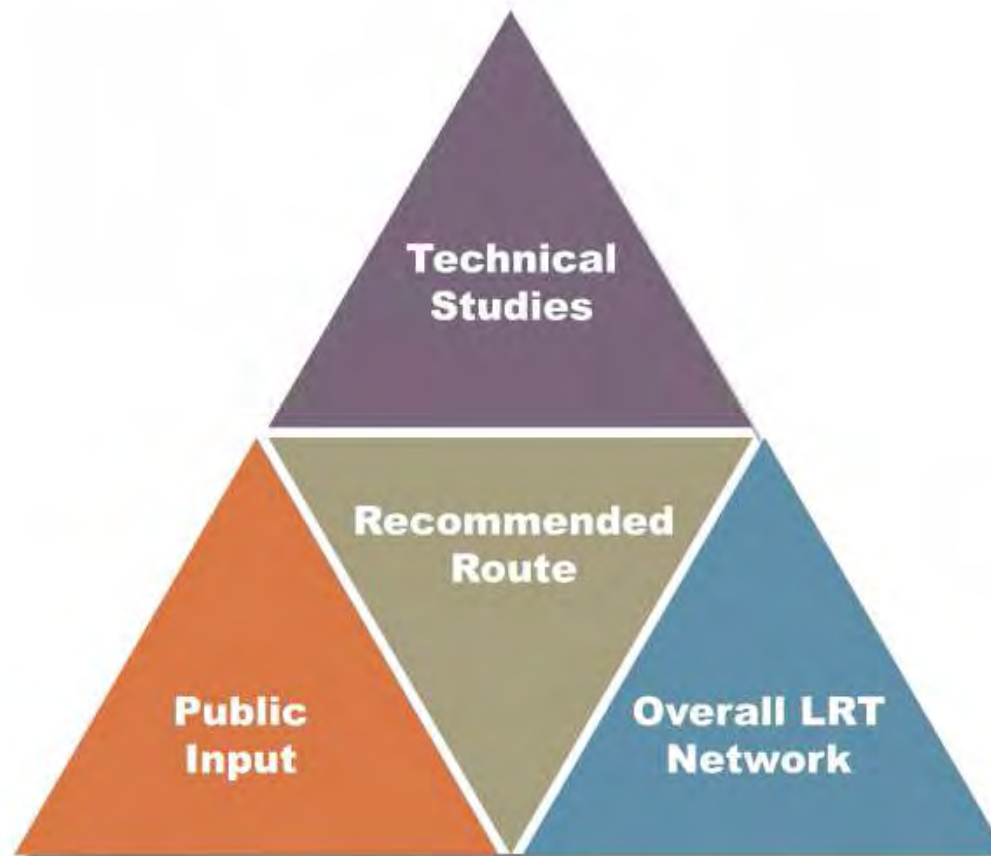
Northwest LRT – Downtown to Northwest Edmonton Study

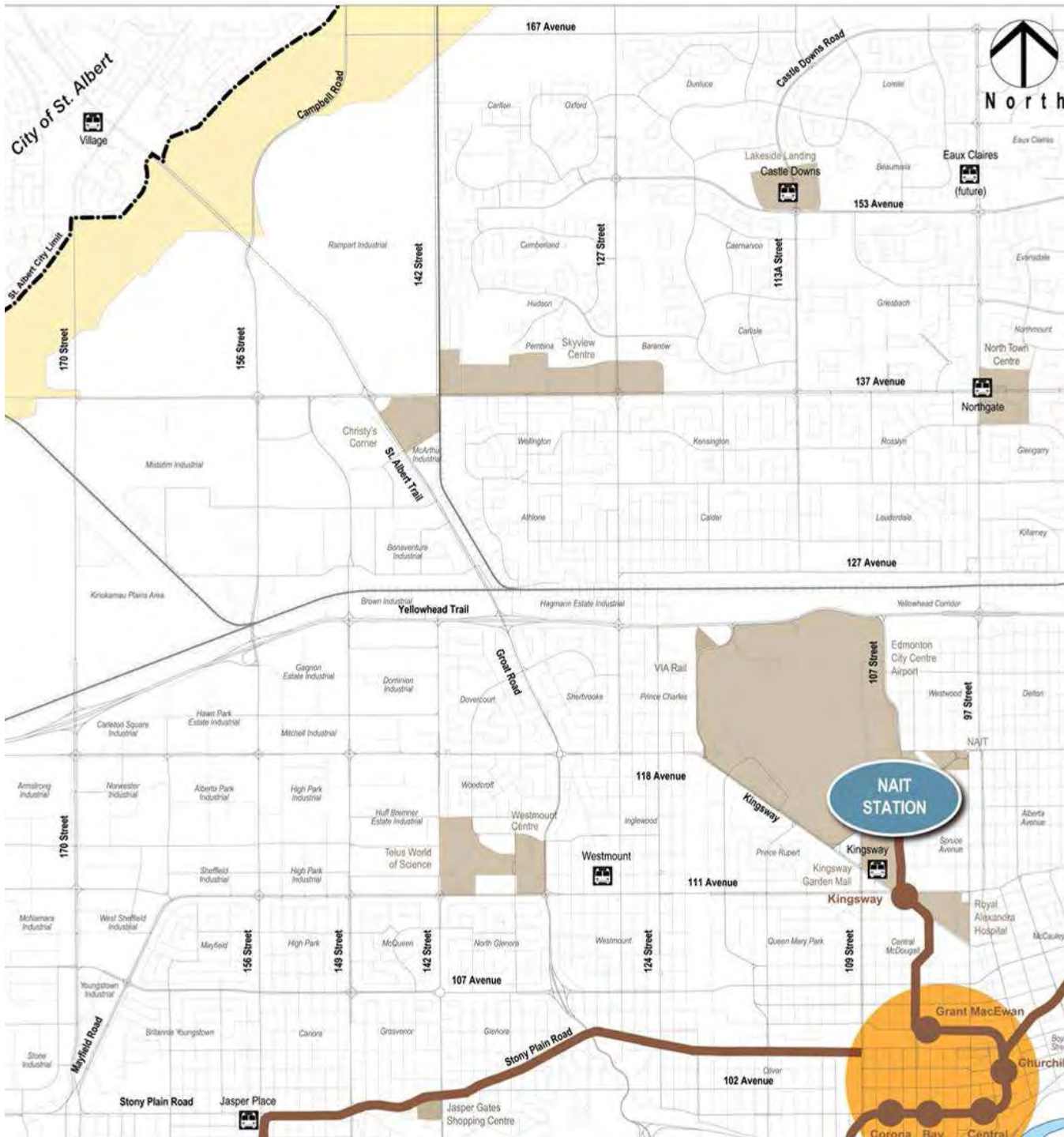
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Corridor Route Analysis

LRT Corridor Planning Process

www.edmonton.ca/LRTProjects





Study Area Overview



Purpose Statement

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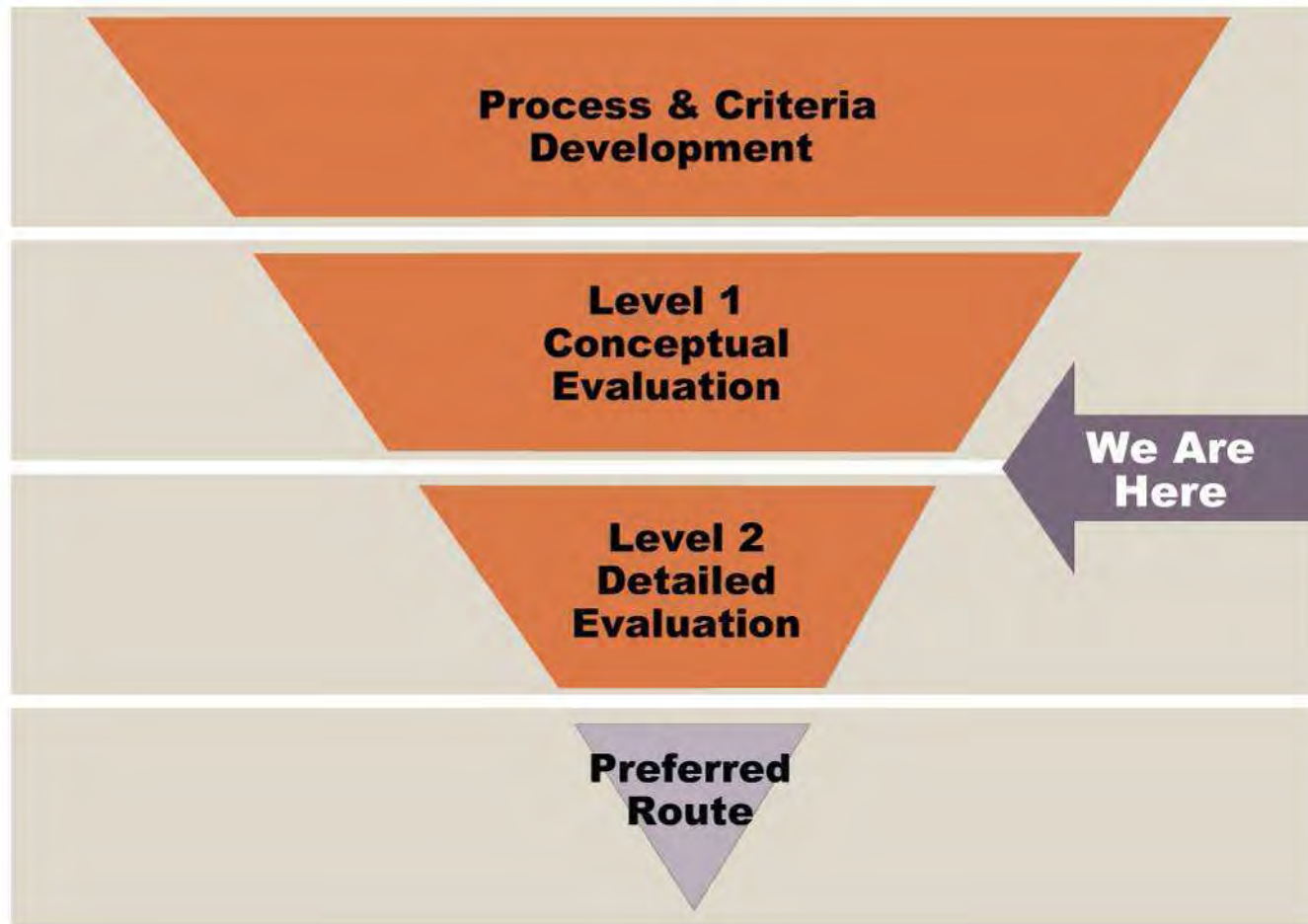
Establish an LRT connection between Downtown and Northwest Edmonton

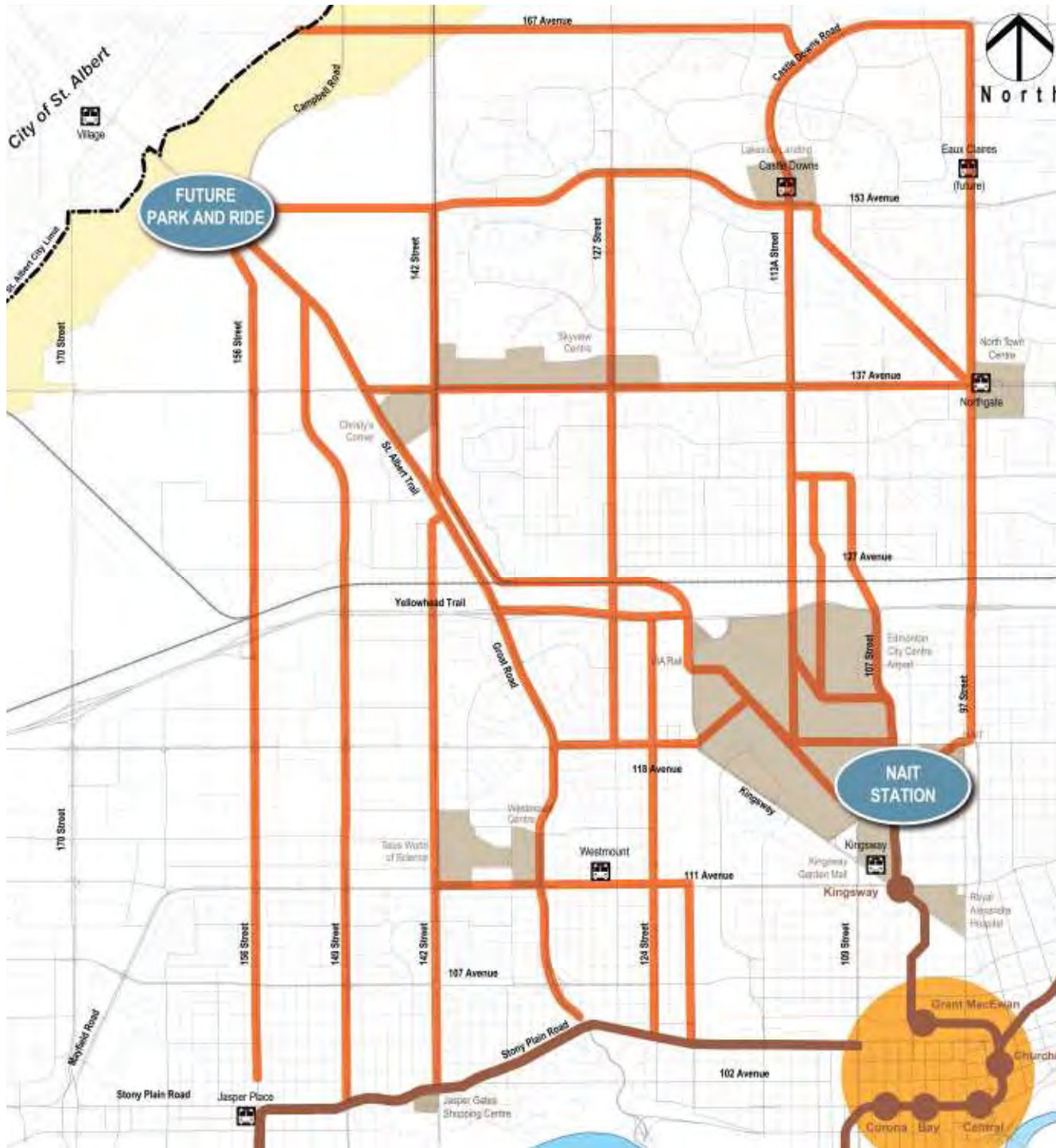
The guiding principles supporting this purpose include:

- Maintain consistency with the Transportation Master Plan (TMP), Municipal Development Plan (MDP), the City's strategic direction, LRT System Network Plan, St. Albert's TMP and integrated land use framework, as well as the Capital Region Plan
- Shape land use to promote a more compact urban form
- Maximize use of existing transportation corridors
- Connect existing and future activity centers
- Increase transit system effectiveness
- Promote economic development/redevelopment
- Respect neighborhoods
- Respect parklands, river valley and ravine system
- Maximize cost effectiveness
- Provide opportunities for future system expansion

Route Alternatives Analysis Process

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Initial Corridors Considered

North LRT Extension

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Potential Station Identification Process

www.edmonton.ca/LRTProjects



**Station Locations for Comparison
Purposes**



Council Approved Corridor Screening Criteria

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Corridor Evaluation Criteria (Level 2)

www.edmonton.ca/LRTProjects

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- Potential for park and ride locations

Feasibility/Constructability

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- Complexity to extend route in future
- Proximity to LRT maintenance facility
- Number of at-grade crossings



Corridor Evaluation Criteria (Level 2)

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- Student population near stations
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Natural Environment

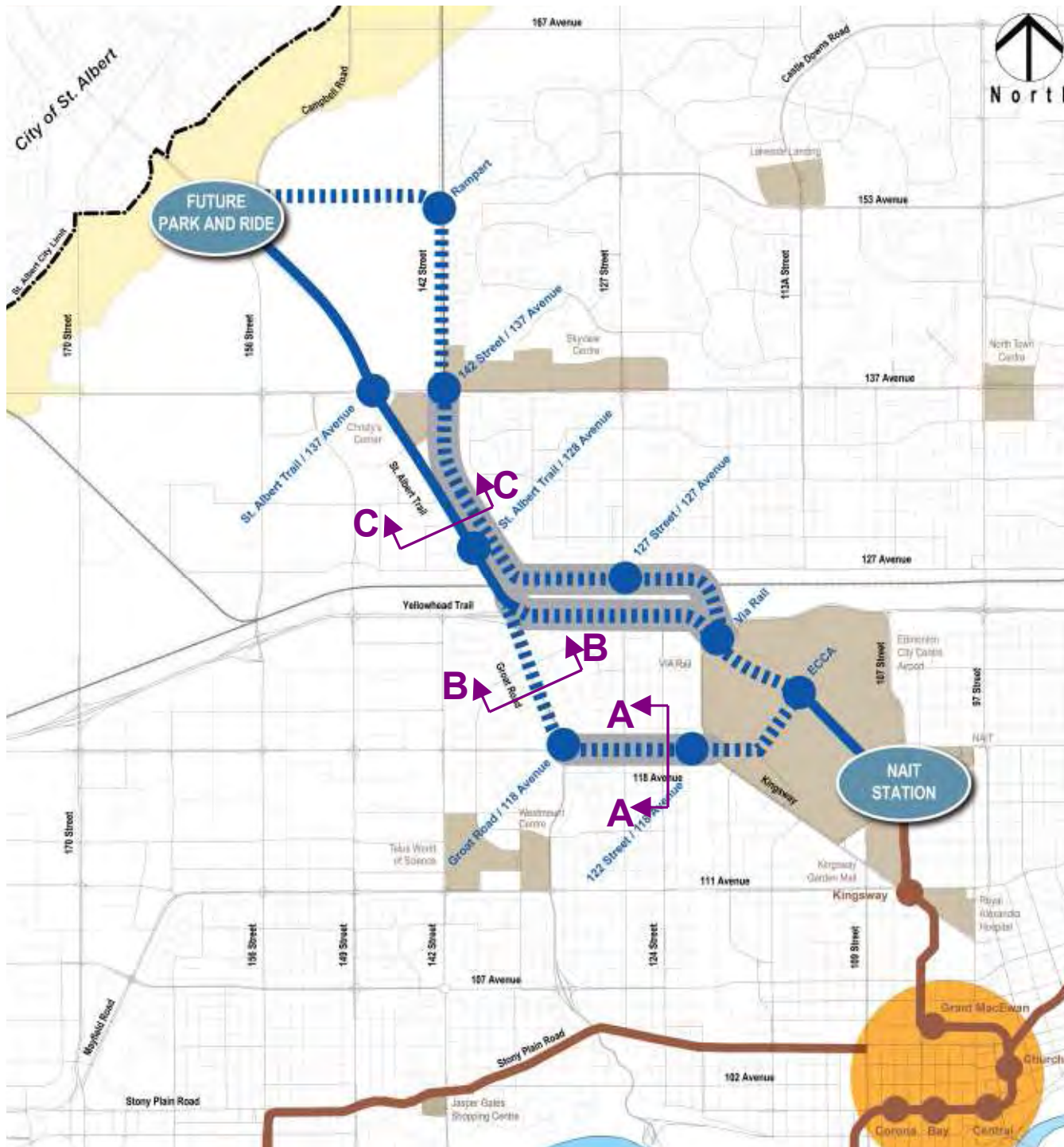
- Impact on riparian habitat
- Number of river/stream crossings
- Potential for disruption due to construction



Space Trade Offs

www.edmonton.ca/LRTProjects

- Constrained Right-of-Ways require further study
- Minimize property acquisition by removing:
 - service roads
 - traffic lanes
 - on-street parking



St. Albert Trail Corridor

St. Albert Trail Corridor – Section A-A

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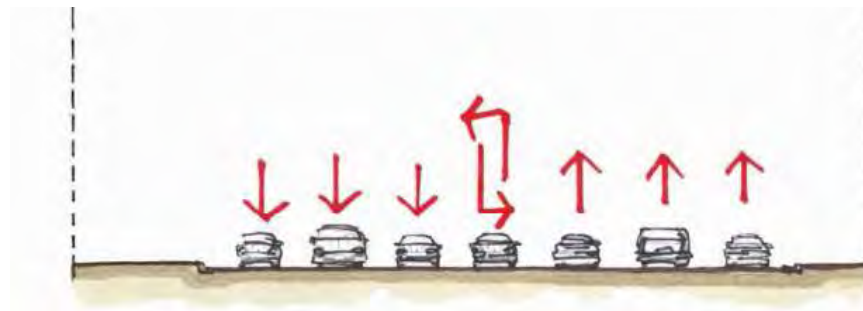
Photo Credit: Google Earth

Looking west on 118 Avenue at 125 Street

St. Albert Trail Corridor – Section A-A

www.edmonton.ca/LRTPProjects

Existing:



Option:



Looking west on 118 Avenue at 125 Street

St. Albert Trail Corridor – Section B-B

www.edmonton.ca/LRTProjects



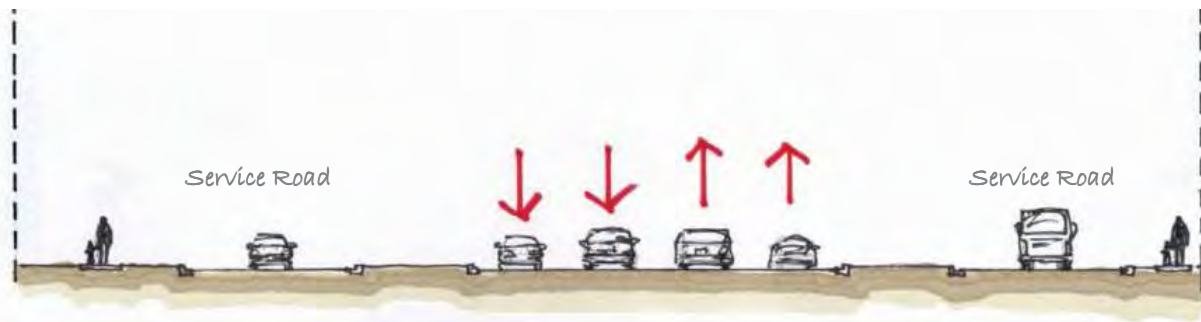
Photo Credit: Google Earth

Looking northwest on Groat Road at 121 Avenue

St. Albert Trail Corridor – Section B-B

www.edmonton.ca/LRTProjects

Existing:



Option:



Looking northwest on Groat Road at 121 Avenue

St. Albert Trail Corridor – Section C-C

www.edmonton.ca/LRTProjects

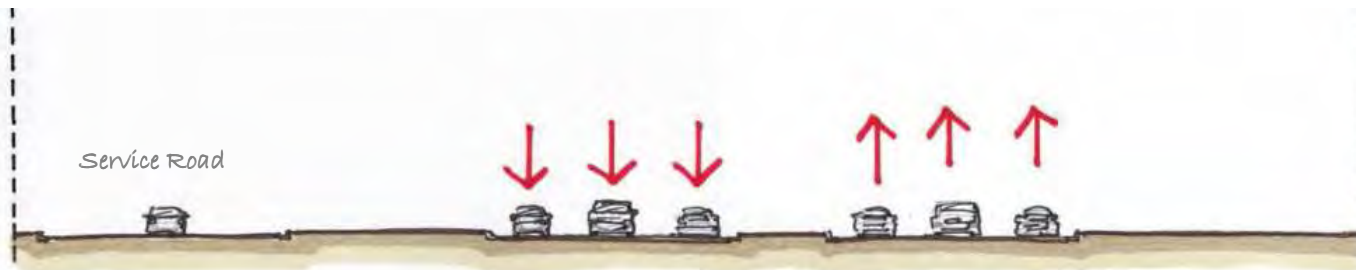


Looking northwest on St. Albert Trail at 128 Avenue

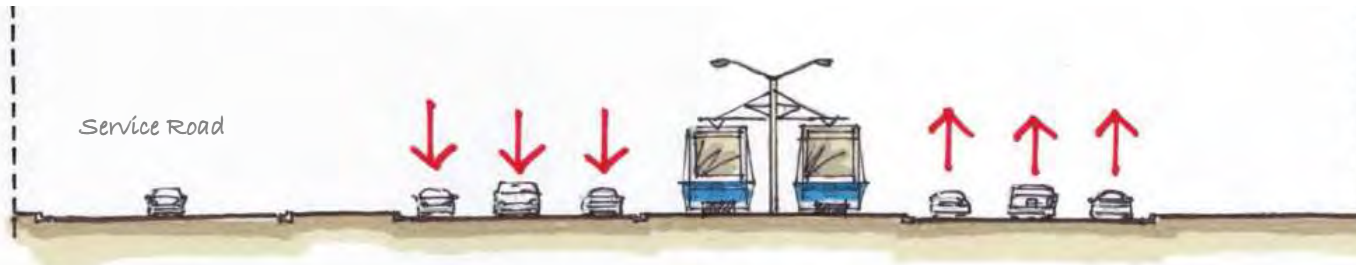
St. Albert Trail Corridor – Section C-C

www.edmonton.ca/LRTProjects

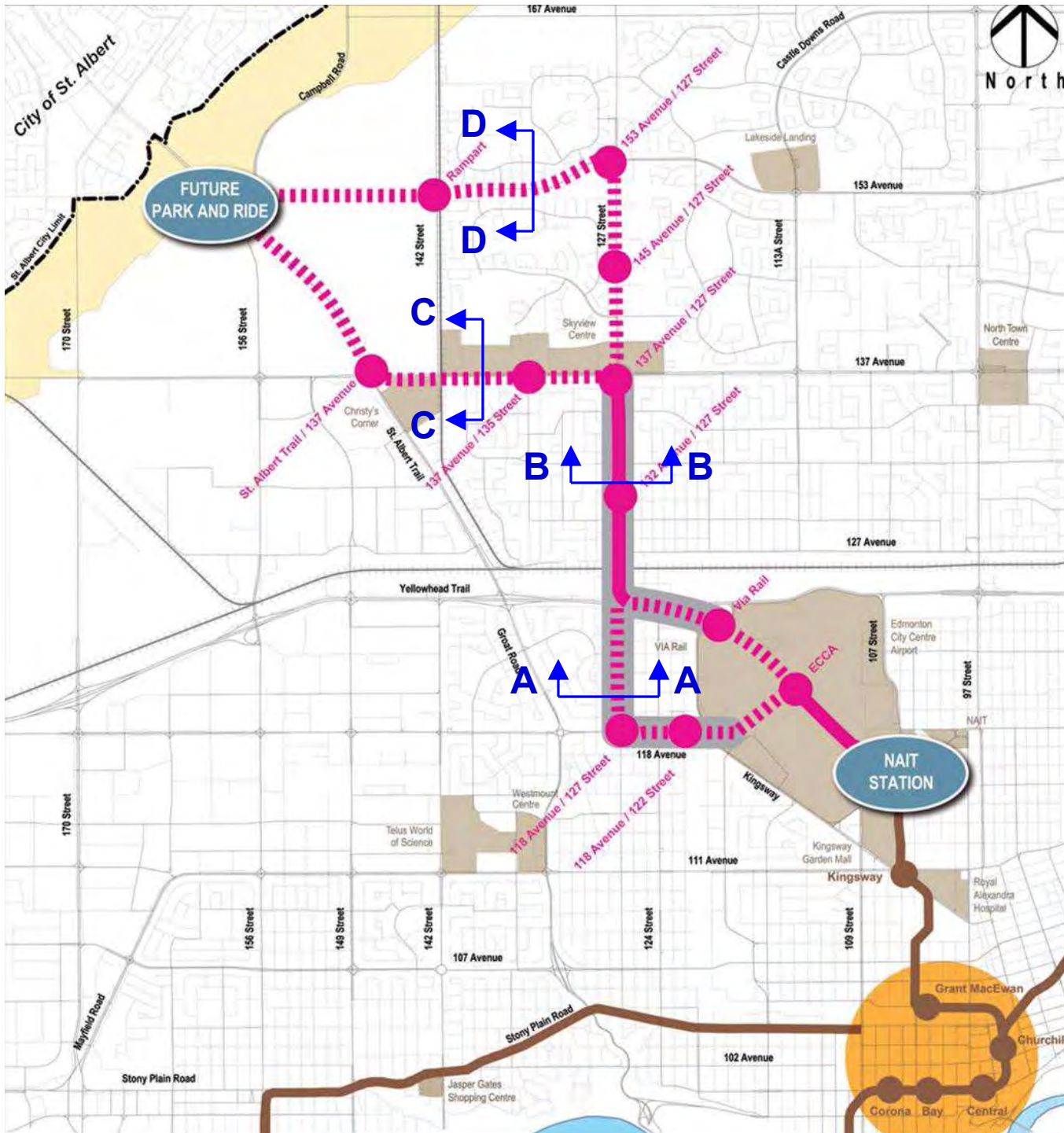
Existing:



Option:



Looking northwest on St. Albert Trail at 128 Avenue



127 Street Corridor

127 Street Corridor – Section A-A

www.edmonton.ca/LRTPProjects



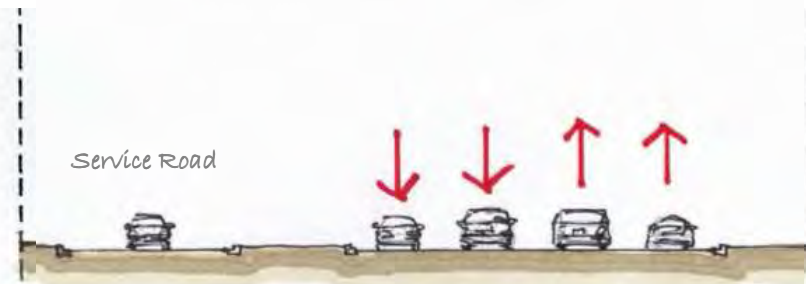
Photo Credit: Google Earth

Looking north on 127 Street at 123 Avenue

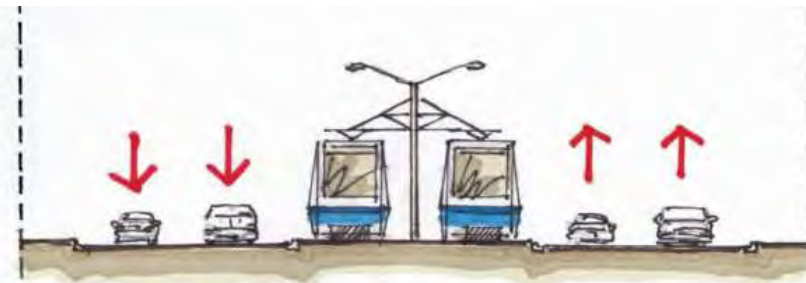
127 Street Corridor – Section A-A

www.edmonton.ca/LRTPProjects

Existing:



Option:



Looking north on 127 Street at 123 Avenue

127 Street Corridor – Section B-B

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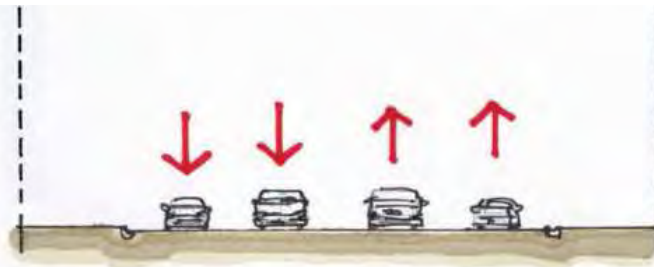
Photo Credit: Google Earth

Looking north on 127 Street at 130 Avenue

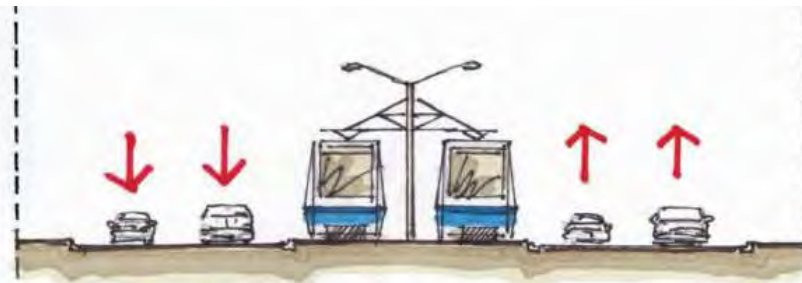
127 Street Corridor – Section B-B

www.edmonton.ca/LRTProjects

Existing:



Option:



Looking north on 127 Street at 130 Avenue

127 Street Corridor - Section C-C

www.edmonton.ca/LRTProjects



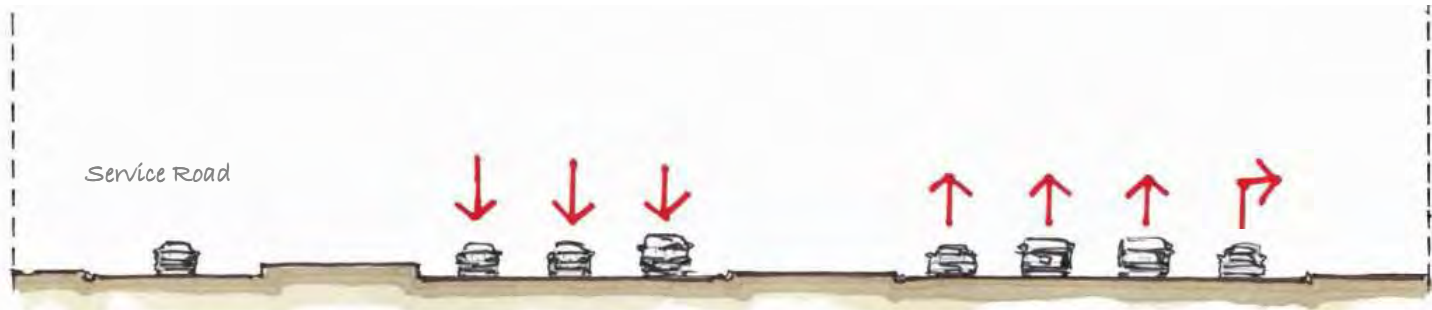
Photo Credit: Google Earth

Looking west on 137 Avenue at 135 Street

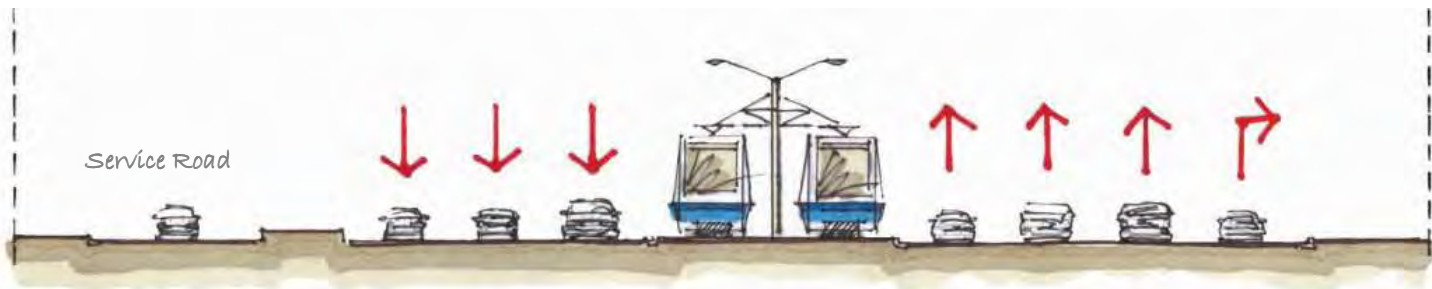
127 Street Corridor - Section C-C

www.edmonton.ca/LRTPProjects

Existing:



Option:



Looking west on 137 Avenue at 135 Street

127 Street Corridor - Section D-D

www.edmonton.ca/LRTProjects



Photo Credit: Google Earth

Looking west on 153 Avenue at 135 Street

127 Street Corridor - Section D-D

www.edmonton.ca/LRTProjects

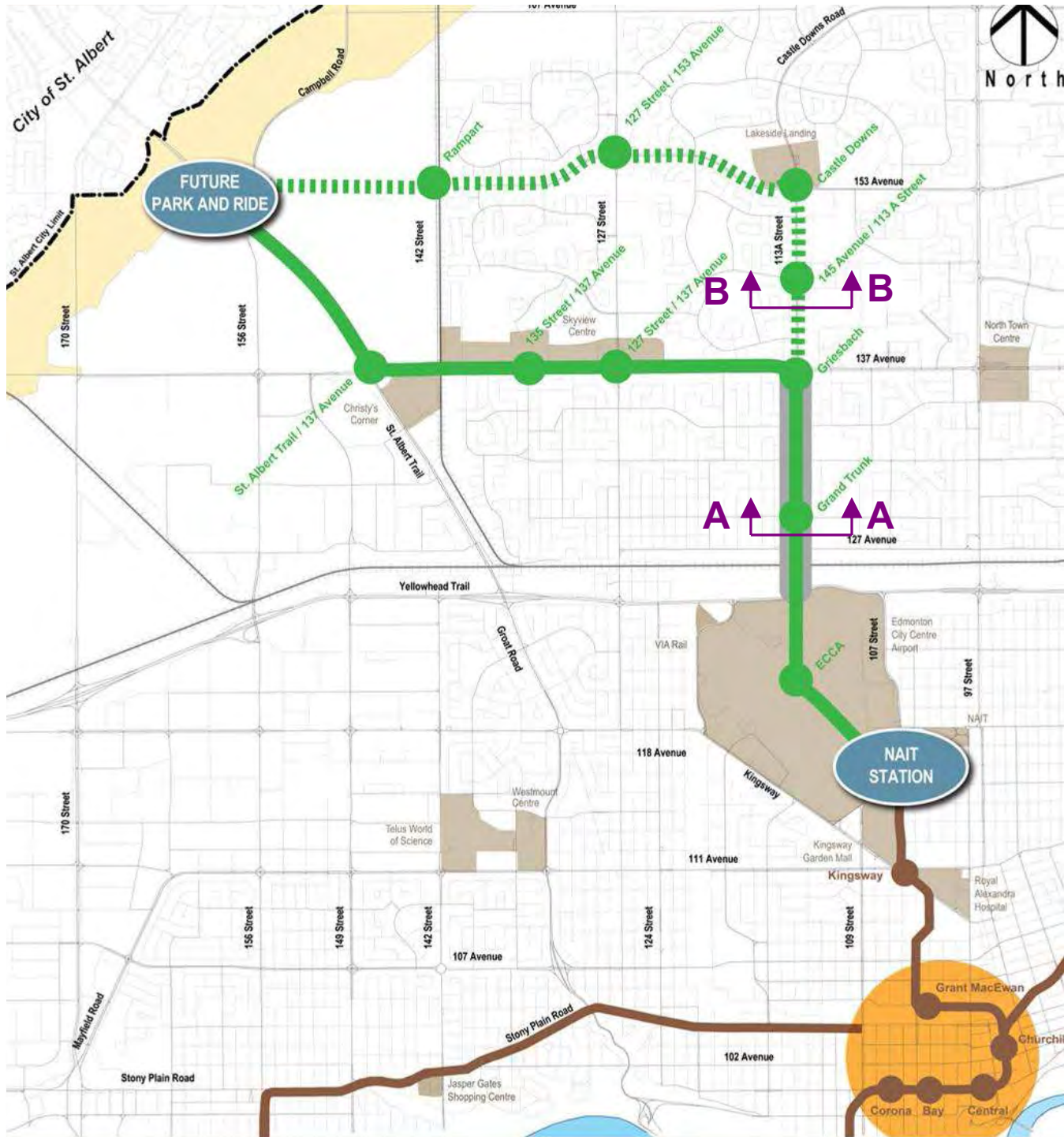
Existing:



Option:



Looking west on 153 Avenue at 135 Street



113 A Street Corridor

113 A Street Corridor – Section A-A

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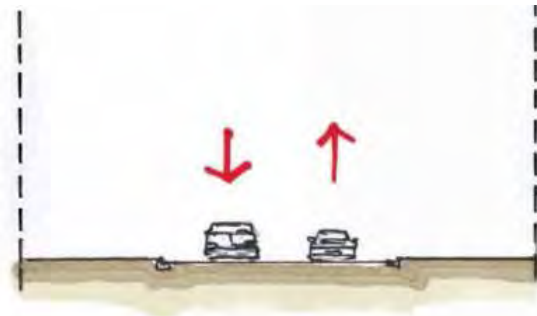
Photo Credit: Google Earth

Looking north on 113 A Street at Grand Trunk Park

113 A Street Corridor – Section A-A

www.edmonton.ca/LRTPProjects

Existing:



Option:



Looking north on 113 A Street at Grand Trunk Park

113 A Street Corridor – Section B-B

www.edmonton.ca/LRTProjects



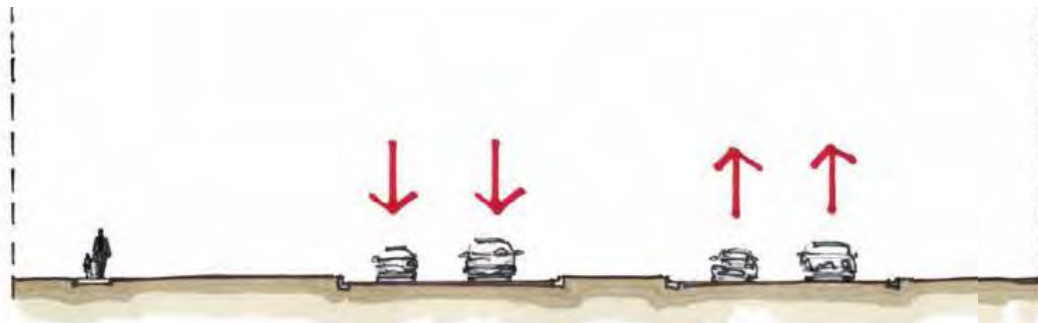
Photo Credit: Google Earth

Looking north on 113 A Street at 145 Avenue

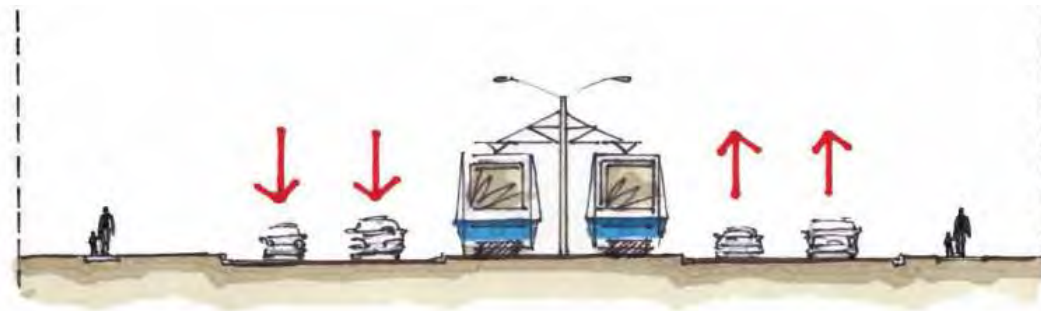
113 A Street Corridor – Section B-B

www.edmonton.ca/LRTProjects

Existing:



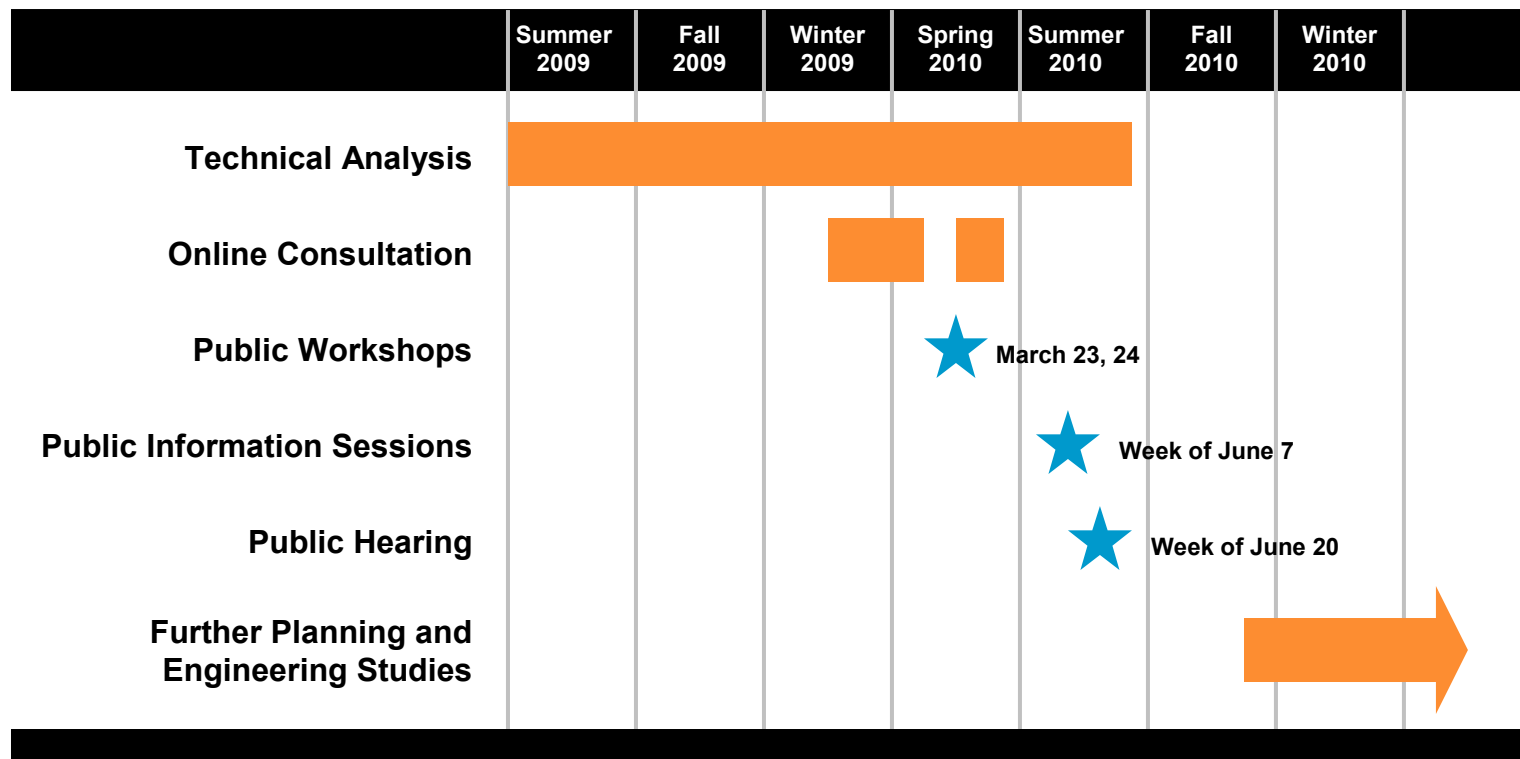
Option:



Looking north on 113 A Street at 145 Avenue

Next Steps

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Northwest LRT – Downtown to Northwest Edmonton Study

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Workshop

75 minutes



Public Involvement Objectives

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The public involvement process will identify:

- community/institution/business-specific issues that may impact the evaluation of route options.
- issues with respect to traffic and pedestrian impacts – within communities and with respect to the overall transportation network.
- community, institutional, and/or business impacts that will affect the preliminary and detailed design.



Workshop Format and “Ground Rules”

www.edmonton.ca/LRTProjects

Workshop Goals

- To focus discussion on a specific question related to ALL the route options
 - this is the information we need to take back and consider through the evaluation process
- To benefit from the wisdom of all the people around the table
 - a chance to talk about all the route options
 - and to mix it up and talk to some new people that maybe you haven't met before



Workshop Format and “Ground Rules”

www.edmonton.ca/LRTPProjects

How it Will Work

- 3 different colors of tablecloths; one for each route
 - Green for St. Albert Trail Corridor
 - Yellow for 127 Street Corridor
 - Blue for 113 A Street Corridor



Workshop Format and “Ground Rules”

www.edmonton.ca/LRTProjects

The questions for discussion and responses are:

What are the advantages of this corridor?

What needs to be addressed if this corridor is selected?



Workshop Format and “Ground Rules”

www.edmonton.ca/LRTPProjects

- After 10 minutes of discussion, I will stop you
- Each of you will have a maximum of 5 minutes to write down a maximum of 3 bullet points with your personal TOP three impacts on the route discussed at your table



Workshop Format and “Ground Rules”

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- Post-it notes on each table
- One bullet point/thought per post-it note
- If you have a concern about a specific location on that route (like a certain intersection) – make sure that is clearly marked on your post-it – we will need to know this for our reference later



Workshop Format and “Ground Rules”

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- Put your post-it notes on the blank board
- Our project staff will pick them up and the senior project leads will begin to sort them into major themes by route
- **At my cue** - switch to a table with a new route option – and a new group of people
- Begin your 10 minute discussions on the new route



“Givens” and topics *not* on the table for discussion:

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- The scope of the study is to define an LRT corridor between Northwest Edmonton and Downtown
- We will use High-Floor LRT technology on dedicated LRT right-of-way as much as we can
- All LRT will be at grade (street-level). Grade separations will only be pursued if it is required for technical reasons
- We will seek to minimize property acquisition, though some acquisition will be required



Workshop Format and “Ground Rules”

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- After you have all had a chance to discuss all three routes, we will review the major themes that have come forward on all three route options



Northwest LRT – Downtown to Northwest Edmonton Study

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Question and Answer Session

30 minutes



Question and Answer Session “Ground Rules”

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- 2 minutes for each participant to ask a question or make a comment
- One follow-up question (1 minute)
- Will recognize 4 people for each round of questions; persons with microphones will go to those participants to ask their questions
- 3 rounds of questions
- Additional questions from same person not recognized until no new participants are wanting to ask questions
- Questions and responses will be recorded; please use microphones



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**THANK YOU FOR YOUR
PARTICIPATION**