Downtown LRT Connector Concept Plan

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Transportation & Public Works Committee May 25, 2011



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Edmonton LRT Network

Brian Latte Branch Manager Transportation Planning



Public Transportation - Strategic Objective 5.1

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"The City will pursue expansion of the LRT to all sectors of the city with a goal to increase transit ridership and transit mode split, and spur the development of compact, urban communities."

- Transportation Master Plan





LRT Planning



	Concept Planning				Construction
	Corridor Definition	Alignment Definition	Preliminary Engineering	Detailed Engineering	Complete & Opened
South LRT (Health Sciences to Century Park)	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
North LRT (Downtown to NAIT)	\checkmark	\checkmark	\checkmark	End 2010	End 2014
South LRT (Century Park to Ellerslie Road)	\checkmark	\checkmark	\checkmark		
Northeast LRT (Clarview to Gorman)	\checkmark	\checkmark	\checkmark		
Southeast LRT (Downtown to Mill Woods)	\checkmark	\checkmark	Fall 2012		
West LRT (Downtown to Lewis Estates)	\checkmark	\checkmark	Fall 2012		
Downtown LRT	\checkmark	Spring 2011	Fall 2012		
Northwest LRT (NAIT to Northwest Edmonton)	\checkmark	2012			
Central Area Circulator	TBD	TBD			
East LRT (Downtown to Sherwood Park)	TBD	TBD			

Evaluation & Concept Details

- Critical components three components impacted decisions about the Downtown LRT Connection
 - The overall LRT Network
 Plan
 - Technical Analysis
 - Public Input





Concept Plan

- Next step after Corridor approval
- Defines major infrastructure requirements, including:
 - LRT Alignment within corridor (center or side running)
 - Station Locations
 - Neighbourhood, business and pedestrian access
 - Further refinement of cost estimates





Capital City Downtown Plan









- Integrates new and emerging City policy
- Guides development of the downtown
 - Vibrant
 - Attractive
 - Higher-density
 - Mixed-use
 - Walkable
- Supports the integration of at-grade LRT as a catalyst for mixed-used



Urban-Style Low-Floor LRT



- Operates on the surface
- Electrically powered from overhead lines.
- Low-floor vehicles
- Low-level platforms
- Integrated LRT stops in the Downtown streetscape
- Integrated facilities for pedestrians & bikes
- Urban design, redevelopment opportunities
- Encourage higher density & mixed use



Urban-Style Low-Floor LRT













Urban-Style Low-Floor LRT













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Adam Laughlin

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Public Involvement



Public Outreach to Date





Public Involvement Process

- 40 Events with over 500 participants
- Focused stakeholder discussions to get input on alignment options, station locations, and access management
- 2 Public Info Sessions
- Additional meetings held with:
 - community leagues
 - major institutions
 - property owners
 - business owners





Feedback

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- LRT is a benefit Downtown should be a focal point
- Competing theme:
 - Desire for transit and pedestrian/cyclist focused environment vs. preserving vehicle access
- Safety and security enhance at LRT stops and in adjacent areas
- Chinese/Boyle/Riverdale community concerned with approved corridor and portal location
- Access & circulation concerns
- Architectural features

Address public concerns with design process...







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Concept Plan





Benefits & Trade Offs

- Benefits and impacts exist
- Potential positive transportation and land use effects:
 - Creating improved mobility options
 - Encouraging density and redevelopment
 - Creating active streets
 - Supporting pedestrian/bike connections and network
 - Implementing the vision of Capital City Downtown Plan





Changes Since Nov. 2010

- Campus Stop has been moved to 107 Street (between 104 & 103 Avenue)
- LRT vehicle parking lane provided on 107 Street (between 102 & Jasper Avenue)
- Dedicated two way cycle lane provided on 102 Avenue (between 107 & 99 Street)
- Continuous eastbound traffic lane provided on 102 Avenue (between 107 & 95 Street)
- On street parking provided on 102 Avenue
- Parking loading provided between 96 & 95 Street
- Pedestrian crossing provided west of 95 Street on 102 Avenue







107 Street Stop

Looking south on 107 Street, from 104 Avenue





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Edmonton LRT EXPANSION 102 Avenue at 107 Street



Phatworks
 Cycle fastition
 Stendin
 On-street parking





105/106 Street Stop

Looking west on 102 Avenue between 105 Street & 106 Street





Centre West Stop

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Centre West Stop Location



Cycle facilities
Cycle facilities
Sidewalk
On-street parking

Centre West Stop

Looking West on 102 Avenue between 101 Street & 102 Street



Churchill Square Stop

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Churchill Stop Location

Underground URT URT stop platform Property Requirement

Cycle facilities ScienceR On-street parking

Churchill Square Stop

Looking West on 102 Avenue between 99 Street & 100 Street



Churchill Square Stop

Looking West on 102 Avenue between 99 Street & 100 Street





Quarters Stop



China Gate



Quarters Stop

Looking east on 102 Avenue from 96 Street





Connection to Southeast LRT



Sample Portal Pictures



102 / 102 A Route Option

- 102 Avenue is the most direct corridor connection
- 102 Avenue is preferred by Quarters area development team
- 102 A route would be 200 metres longer
- Journey times would increase by 1.5 minutes
- Increase in journey time impacts
 ridership
- Cost for 102A route increase by approximately \$20 million
- Route would move portal from 102 to 102 A, not mitigate or remove the impact





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THANK YOU

