Integrating Edmonton’s Downtown Light Rail Transit (LRT)

Adapting Urban LRT

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Edmonton’s Downtown LRT
Presentation ‘Take Aways’

- Understanding of Edmonton’s ambitious LRT expansion plan
- Edmonton’s challenge prioritizing transit
- ‘Fitting’ the Downtown LRT Connector into the urban fabric
Introducing Edmonton
The Great North... Alberta’s Provincial Capital

Building Livable Communities with Transit
Edmonton, Alberta in Context

- A ‘winter’ city with 1 million + residents
- Lowest density city in Canada
- Employment, financial, & energy centre
- 100,000+ jobs in downtown
- Inefficient growth patterns (underutilizing infrastructure)
Building Livable Communities with Transit
Edmonton’s LRT System

- First city in North America to develop a modern light rail system (1978)
- Line length 20 kilometres (~12.5 miles)
- Ridership 94,000 daily
- Peak service frequency 5 minutes
- Average spacing 1.5 kilometres (~1 mile)
Building Livable Communities with Transit
Edmonton’s Vision
Edmonton’s New Approach

City Vision
- Making Edmonton the City we want it to become in 2040
- “A city growing upwards, not outwards”

The Way Ahead (Strategic Plan)
- The Way We Grow (Municipal Development Plan)
- The Way We Move (Transportation Master Plan)
- Integrated Transit & Land Use Policy Framework
- Edmonton’s Downtown Plan
Edmonton’s Future LRT
Edmonton’s LRT Expansion Plan

- 100-year land-use projections - including 3m+ population
- Considered regional, suburban, urban style
- Transit priority along critical corridors
  - Removing traffic lanes
- 44 kilometres (~27 miles) of new lines
Edmonton’s LRT Expansion Plan

- Supports the City’s wider objectives
- Focuses on an urban style LRT network
- Integrates LRT designs with local communities
  - Low floor
  - Surface running
  - Increase passenger catchment
  - Support TOD, sustainable communities
  - Single seat journey opportunities
- Utilized extensive outreach
- Provides lifestyle choice (transit, bike, walk)
  - Puts the passenger first...
Downtown LRT
Downtown LRT Connector

- Surface running
- Downtown core
- ‘Fit it in’ with urban environment
- Sensitivity to mature communities
- Ease of connection
  - Existing underground LRT
  - Bus network

Building Livable Communities with Transit
Accessible, Simple Infrastructure

Building Livable Communities with Transit
Transit Integration & Complete Streets

Building Livable Communities with Transit
Community Integration
Seamless

Building Livable Communities with Transit
Identity

Building Livable Communities with Transit
Wayfinding & Accessibility

Building Livable Communities with Transit
Building Livable Communities with Transit

- Simple stop infrastructure
- Modern low-floor vehicles
- ‘Fit it in’ approach
- Direct connections
- Enhanced urban realm
- Multi modal (pedestrian, cycle, transit, auto)
- Traffic lane & access
- Focused on accessibility
- Barrier free
- 7.5 metre (~24.5 feet) track width
Edmonton - The Future...
Conclusions

- 30+ years of low density growth
- Focus on livable, compact, healthy communities
- Political championing & extensive consultation
- The radical shift is in place
  - ‘Fit it in’
  - Simple infrastructure
  - Operational solutions
  - Accessibility
  - Direct community & land use integration
- Next steps (PE, funding)
Thank you
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