City of Hamilton Rapid Transit
Revitalizing, Reconnecting and Regenerating through LRT

Ashley Curtis, Associate
Steer Davies Gleave

Tuesday 18 October 2011
Steer Davies Gleave
2500 - 120 Adelaide Street West
Toronto, M5H 1T1, Canada
+1 647 280 4861
www.steerdaviesgleave.com
Introduction and Overview
Key Facts:

- 4th largest City in Ontario, 9th in Canada
- 68 kms from Toronto; 71 kms from U.S. border
- Current Population: 510,000
- Steel Town – in transition
- 8.5% unemployment
- 25% working age population no certificate, diploma or degree
- 20% population poverty
The Faces of Hamilton
City of Hamilton Rapid Transit - Rail-Volution 2011
The Rapid Transit Vision

“Rapid Transit is more than just moving people from place to place. It is about providing a catalyst for the development of high quality, safe, environmentally sustainable and affordable transportation options for our citizens, connecting key destination points, stimulating economic development and revitalizing Hamilton.”
Existing B-Line Service

- **BRT Lite**
- **10 min headway**
- **Within 800m:**
  - 17% Population
  - 20% employment
- **80% of Hamilton transit routes connect to B-Line**

Existing B-Line Service
Background

- Hamilton studying Rapid Transit on B-Line
- Metrolinx Regional Review & prioritisation of transit projects
- Benefit case assessment of projects
  - "Multiple Account Evaluation" approach
    - Transportation
    - Financial
    - Environment
    - Economic development
    - Socio-community
- Hamilton B-Line in initial project review list (Top 15)
- B-Line BCA examined BRT & LRT options
- B-Line LRT option selected for further study
- Metrolinx / City of Hamilton contribution agreement
- Planning, Design and Engineering (PDE), and Making the Case
Urban Style LRT - the key components
Modern “Urban style” LRT

- 30m Vehicles
- 200 passengers
- Low floor level boarding
Level – Low Floor Boarding
Urban Style LRT

- LRT segregated from traffic
- Stops part of sidewalk
- Integrated into urban fabric
LRT & Transit Oriented Development
Project Overview - Preferred B-Line LRT Option Alignment
## B-Line LRT Operations

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening Year</td>
<td>Assumed Mid 2018</td>
</tr>
<tr>
<td>Route Length</td>
<td>13.7 km</td>
</tr>
<tr>
<td>Number of stops</td>
<td>18</td>
</tr>
<tr>
<td>Headway</td>
<td>4 minutes</td>
</tr>
<tr>
<td>Travel time (end-to-end)</td>
<td>31 minutes</td>
</tr>
<tr>
<td>LRT Vehicles for service</td>
<td>19</td>
</tr>
<tr>
<td>LRT Vehicles</td>
<td>22</td>
</tr>
<tr>
<td>Capacity per LRT Vehicle</td>
<td>200</td>
</tr>
<tr>
<td>System Passenger Carrying Capacity (phpd)</td>
<td>3,000 (maximum) 1,950 (planned)</td>
</tr>
<tr>
<td>Average stop spacing</td>
<td>760m</td>
</tr>
</tbody>
</table>
Planning Design & Engineering: Scope of Work

“Taking the project to a state of maximum implementation readiness”

B-Line Completed:

- Developing the B-Line route - design workbooks
- Ridership forecasting
- Traffic modelling
- Initial Costs - capital and operating
- BLAST System Operations Plan
- Stakeholder Engagement / Public Consultation
- Benefits Case Tracker
Planning Design & Engineering: Scope of Work

B-Line

Almost complete:
- Functional planning analysis - light rail vehicles, light rail stops and other system components
- 30% design outputs - scheme design

B-Line Operating plan

System Design Guide

Implementation Plan

More detailed costs

Environmental Project Report
PDE: Engineering & Design

Our Approach

- **Network-wide approach**
  - Demand-led
  - Putting the Passenger First
  - An Integrated Transit Solution
  - Wider corridor designs for traffic/buses

- **Transit as a “City Shaping Tool”**
  - Linear Urban Development, featuring LRT

- **Best Practice Design Principles**
  - Design Work Books
Best Practice Design Principles

- **Competitive journey times (100% segregated)**
- **Journey time reliability**
- **Maximising ridership**
- **Affordable capital and operating cost**
- **Create opportunities to enhance urban realm and add TOD**
- **Minimise adverse impacts on:**
  - environment
  - frontage property owners & occupiers including servicing
  - Property take
  - other traffic
Project Development: Engagement

- **Council**
- **SMT**
- **Rapid Transit Team**
- **Technical Team**
- **Corporate Working Team**
- **Rapid Transit Citizen Advisory Committee (RTCAC)**
- **Public & extensive number of Stakeholders including:**
  - BIA’s
  - Chamber of Commerce
B-Line Approach

- Centre running with two way traffic lanes
  - McMaster to 403
  - Queenston Traffic Circle to Eastgate Square
- No vehicular movements across except at signalled intersections
- Private accesses right in, right out

Lyon

City of Hamilton Rapid Transit - Rail~Volution 2011
Queenston Road East
Side running LRT with 2 one way traffic lanes

- 403 to Downtown
- Wellington to Queenston Traffic Circle
- Fits within existing 4 lane roads
- Allows parking, deliveries etc in nearside lane
- Left turns at signalised intersections only
- Allows access to property on traffic side
- Private accesses on LRT side forward in, forward out

Montpellier
King Street West

Illustrative only
**B-Line - Traffic Circulation**

- Through westbound traffic diverted away from B-Line
- No designated alternative routes for traffic displaced from B-Line route (particularly between Queenston Traffic Circle and Downtown)
- King Street East at International Village limited to frontage access traffic only (shared running)
Transit Network Changes - Principles

- Grow total ridership - LRT and bus
- An Integrated Transit Solution - network wide
- Provide links to jobs, homes, leisure and key services
Transit Network Changes - Principles

- Through services from beyond ends of corridors retained, at reduced frequency linking with stopping transit services rather than B-Line Express

- Through bus transit services in the B-Line corridor retained but at lower frequency, to retain some flexibility for people of reduced mobility (in terms of stop spacing and need for transfer)

- Some increases in the frequency of transit routes acting as feeders to LRT
Integrated Planning
TOD Guidelines 2010

- Support and facilitate future transit use by providing guidance on how OP policies can be implemented
- Encourage development that facilitates easier access to transit
- Approved by Council in August 2010
- Additional guidance for Nodes and Corridor Planning

Transit Oriented Development Guidelines for Hamilton

Public Works Department
Planning and Economic Development Department
Identification of corridor vision, goals, development principles

Corridor-wide Land Use Strategies/Options

Develop and Evaluate Plans for Transit Station Areas

Develop Urban Design Guidelines for Station Areas

Develop Implementation Strategy
Design Charrette

Imagine 10 years from now... the rapid transit line has been complete for a couple of years and you are a developer that has just purchased several properties at this LRT stop.

Working as a team with your architect develop a conceptual design for a multi-storey mixed use building for the site(s) that will:

- Maximize the positive effect on the neighbourhood, especially increasing the local population;
- Minimize any negative effects on adjacent properties and the neighbourhood; and
- Enhance the characteristics of the local neighbourhood that make it unique.
Engagement: Design Charrette - King and Wentworth
Engagement: Design Charrette - King and Wentworth
Engagement: Design Charrette - King and Wentworth
Engagement has been extensive

- Newsletters
- Website, Facebook, Twitter
Engagement

- Open Houses - Sept 2010, Jan/Feb and August 2011
- Many meetings with stakeholders
- Community events

Wide-scale interest amongst public and stakeholders
Delivering the Vision
Delivering the Development

5 questions:

■ What are the mechanisms that could encourage development?
■ What other initiatives or incentives could help?
■ What is the likely impact of LRT on the potential for new investment and development activity?
■ What strategies have the highest potential to deliver Hamilton’s Vision?
■ What is the role of LRT in encouraging people and employers to return to the downtown?

Three methods:

■ Case study analysis
■ Development Industry web survey
■ One-on-one Development Industry interviews
Delivering the Development: Case Studies

Ten Cities examined:

**Canada**
- Edmonton, AB
- Toronto, ON
- Waterloo, ON

**USA**
- Portland, OR
- Minneapolis, MN
- Dallas, TX
- Buffalo, NY
- Phoenix, AZ

**Europe**
- Sheffield, UK
- Dublin, Ireland

Focus on what made them successful and transferable lessons to Hamilton
Delivering the Development: Case Studies

**Successful mechanisms:**

- **Pre-implementation planning & zoning revisions**
  - Good: Portland, Minneapolis, Phoenix
  - Poor: Buffalo, Sheffield

- **Land Assembly**
  - Good: Portland, Dublin

- **Infrastructure Improvements, especially public realm**
  - Good: Minneapolis, Toronto

- **Financial Incentives**
  - Most offer them but based around economic development generally rather than encouraging investment in LRT corridors
Delivering Development: Web Survey

Distributed to:

- 100 senior figures
- Industry groups who circulated to their membership:
  - Building Industry and land development Association (BILD), including Hamilton Halton Homebuilders Association (HHHBA) - 1000
  - Commercial Real Estate Development Association (NAIOP)
  - Hamilton Chamber of Commerce - 1500

45 responses - most from developers
Key Messages:

- 88% had heard of LRT proposals
- 87% think LRT is important for Hamilton and its attractiveness as a location to develop
- 6% think LRT is not important
- View is LRT has modern, efficient image that:
  - is proven to encourage development
  - Will increase property values
  - Will improve the image of Hamilton
  - Will provide accessibility to those who might want to live/work downtown
- Low level awareness for current incentives on offer by City
- The most important things Hamilton can do are:
  - improving the approvals process and
  - provision of public realm and other infrastructure
Delivering Development: Development Industry Interviews

- 20 firms targeted, 10 arranged, 5 conducted
- 3 developers (residential and commercial), 1 commercial real estate, 1 economic development advisory firm
- None of the developers currently active in Hamilton

Findings:

- Perceptions of City varied:
  - “Building up the image of the City is probably the single most important thing Hamilton can do”
- Poor processes and understanding are barriers to Development:
  - “if we have to fight to get what we need, to be able to do what we think is smart and appropriate development, why fight in Hamilton when you can develop in other places where they really want you”
Delivering Development: Development Industry Interviews

- “there has to be a willingness, more so than there is now, for anybody walking into City Hall to figure out how staff can make their proposals work - instead of throwing up road blocks. Here’s why you can’t do it - let’s all sit down and figure out how we can”

All felt LRT was hugely important for the City:

- “I don’t think there’s a developer out there who would say “Oh no we don’t want LRT” there’s an attraction for developers for sure”

- “We couldn’t care less about bus. There’s a sexiness about LRT, as in Portland, and there is a usability comfort to LRT”

- “LRT is very important. We like to build close to public transit..”

Infrastructure investment and process/mindset improvement was preferred to other City incentives:

- “I don’t think you have to buy people to come here. I think you just need to make it easy for them to do what they want to when they get here”
Delivering Development: Development Industry Interviews

- “why should I invest in the city if they don’t invest in themselves”
- “Infrastructure is very important. Community facilities, civic buildings, public places, this is where the City should be spending their money”
- “Infrastructure is the number one priority. Its not about financial incentives. Its about having the right infrastructure, the right amenity space, the public realm”
- “The conditions of the neighbourhood and the investment the City can do are important. Once you step off LRT you have to have good public place, good public spaces, good places that have good urban scale. That can start to generate development”
Delivering Development: Conclusions

What are the mechanisms that could encourage development?

- Infrastructure improvements, incl. public realm
- Incentives to developers to also improve public realm
- Assistance with land assembly
- Pre-implementation planning - area planning & zoning

What other incentives or programs could the City use to attract development?

- Improved application process
- Planning policy that supports desired development
- Municipal staff with priority to assist TOD delivery
Delivering Development: Conclusions

**What is the likely impact of LRT on the potential for development?**

- Investment in LRT would help change image
- Would improve accessibility
- 87% of web respondents thought LRT would approve Hamilton’s attractiveness as a location for development

**What strategies have the highest potential to deliver Hamilton’s Vision?**

- TOD policy & zoning in place before LRT
- Invest in public realm in targeted locations aligned with TOD policies
- Overhaul approvals process - to ensure efficient & predictable for the right sort of development
- Consider creating a body/department that can purchase/assemble land to support development objectives
- Re-focus incentives to support station area planning and economic development objectives
Delivering Development: Conclusions

What is the role of LRT in encouraging people and employers to return to the downtown?

- Connectivity/accessibility
- Development industry sees LRT as key as a high quality, long term infrastructure investment
- LRT will improve image of downtown
- Can act as a catalyst to attract residential and employment development
Conclusions
Conclusions

- Comprehensive development of project has been undertaken - integrated approach- moved from regional option to 30% project design

- LRT as a City Shaper and to encourage economic activity

- Wide-scale engagement & interest

- Integrated policy and delivery approach - to maximise likelihood of development

- Development industry view: LRT can help make Hamilton more attractive

- The B-Line is well positioned to deliver the Rapid Transit Vision Statement
For more Information:

Ashley Curtis, Associate
Steer Davies Gleave

2500-120 Adelaide Street West
Toronto, Ontario
Canada

Tel: 1-647-280-4861

ashley.curtis@sdgworld.net

www.steerdaviesgleave.com/na
Thank You