

## MOBILITY AND ACCESSIBILITY BACKGROUND

- Mobility and Accessibility Working Committee
- Broad representation
  - Transit, Transportation, Planning and Development, Facility Services, Parks, Regulatory Services
- Mandate is to: Champion community accessibility and coordinate the approach



## MOBILITY AND ACCESSIBILITY

### BACKGROUND

- DEFINITIONS
- Accessibility:

Making the environment as easy to move through, understand and use as possible for as many people as possible, whatever their physical, mental or cultural capacity to move understand or use things
- Mobility:

The ability to move or be moved freely and easily



## MOBILITY AND ACCESSIBILITY

### AGENDA

- Introductions
- Presentations
  - Facility Services
  - Parks
  - Transportation
  - Transit
  - Planning and Development Services
- Break
- Task



## FACILITY SERVICES

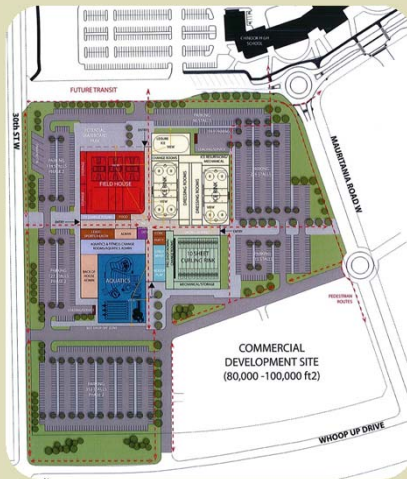
The City owns more than **270** buildings ranging in size from **small** Lift Station Shelters to **large** facilities like City Hall and the ENMAX Centre



## FACILITY SERVICES

### UPCOMING LEISURE CENTRE FACILITY

Currently we are in the planning stages for the Leisure Centre which will become one of the largest facilities in the city.



## FACILITY SERVICES

### MAJOR PROJECT RESPONSIBILITIES

- Planning of new and replacement buildings
- Project management for construction of new buildings



## FACILITY SERVICES

### MAJOR PROJECTS



Entrance Curb Cut & Ramp



- CASA

## FACILITY SERVICES MAJOR PROJECTS



Front Entrance:



Rear Entrance:

The front entrance is accessible. The pedestal location on the exterior is at a location that is difficult for someone in a scooter but works for the majority of mobility impaired individuals. The ideal location for the exterior button is 750 mm before an open door adjacent to the wall.

- The front button location could be moved back 12 inches/300 mm.
- The relay on this vestibule works very well. It is a fairly tight vestibule where button locations inside would be difficult to get at.
- In the second picture you'll notice if the button was back 12 inches/300 mm from current location it would be ideal for all members of the community with mobility impairments.



Helen Schuler Nature Centre

## FACILITY SERVICES MINOR PROJECT RESPONSIBILITIES

- Maintenance and repairs to existing buildings
- Planning for renovations to existing buildings
- Project management for renovations to existing buildings



YWCA  
WOMEN'S DORMITORY WASHROOM RENOVATION 2010



STAN SIWIK  
WASHROOM LIFT INSTALLATION



## HENDERSON LAKE TENNIS CLUB VIEWING DECK & WASHROOM RENOVATION



2014 Renovations to Club House  
Barrier Free Access for Visitors



## PUBLIC LIBRARY ACCESSIBLE WASHROOMS



EXISTING LAYOUT      NEW DOOR & LAV

**Before**      **After**

2015 Relocate sink and swing door out



## FACILITY SERVICES DESIGN PHILOSOPHY

WHEN RENOVATIONS AND UPGRADES ARE PLANNED

PRIORITIES

1. HEALTH
2. SAFETY
3. ACCESSIBILITY and
4. FUNCTIONALITY



## FACILITY SERVICES

### CHALLENGES

The Building Code only requires accessibility upgrades when major renovations are planned

Some buildings are difficult or too costly to upgrade






ALBERTA SAFETY CODE COUNCIL  
BARRIER FREE SUB-COUNCIL



FACILITY SERVICES  
FUTURE ACTIONS

SOME OF THE CURRENT ISSUES AND ACTION ITEMS SUPPORTED BY COUNCIL


1. Barrier Free Enforcement
2. Public Safety during construction
3. Senior's Housing



## PARKS

### BACKGROUND

- Parks**
  - 129 parks
  - 29 school grounds
  - 875 hectares to maintain
- Pathways**
  - 150 km paved or hard surface
  - 50 km natural
- 111 Playgrounds**
- Approx. 1,800 **Furniture Amenities**
  - Benches, picnic tables, garbage cans



## PARKS

### STANDARDS REVISIONS

- Paved Pathways**
  - Maximum allowable sustained grade is 5%
  - Standard cross slope of 2%
- Benches**
  - Increase length of bench pad to accommodate mobility device

**BEFORE**



8%

**AFTER**



2%

**BEFORE**



**AFTER**



## PARKS FIELD IMPROVEMENTS

**Paved Pathways**

- Connections to all picnic shelters
- Improved accessibility in playgrounds





## “MISSING LINKS” – PATHWAYS AND SIDEWALKS

In conjunction with Transportation, identify connectivity gaps in pathway and sidewalk networks. City Council approved a budget initiative to fill in the gaps

NORTH		SOUTH	
Pathways	6 km	Pathways	9 km
Sidewalks	10 km	Sidewalks	10 km
Industrial Collector	56 km	Industrial Collector	7 km

WEST	
Pathways	1 km
Sidewalks	11 km



## PARKS

### COLLABORATION WITH UNIVERSITY OF LETHBRIDGE

Mobility study performed as part of University's honors thesis

- 23 City parks evaluated based on specific mobility criteria for selected park amenities
  - Amenities included garbage cans, entry points, pathways, benches, picnic tables, playgrounds, sports areas, bridges, parking lots
- Parks scored a 75% for overall mobility
- Results
  - Newer parks scored higher than older parks
  - Entry points and pathways scored the highest
  - Playgrounds scored the lowest



## PARKS

### FUTURE IMPROVEMENTS

Inclusion of Mobility/Accessibility in upcoming River Valley Master Plan



Barrier Free component in Bark Park and future Park designs



Increase accessibility in playgrounds




Review standards for parks furniture, ie. Picnic tables, garbage cans




**TRANSPORTATION**

**KEEPING LETHBRIDGE ON THE MOVE**





***We're Multi-modal BABY!***




**TRANSPORTATION**  
BACKGROUND

**Inventory of Infrastructure**


Roads	525 km
Sidewalks	675 km
Pathways	44 km
Bridges	52
Intersections with accessible crossings	3,100
Intersections without pedestrian accessibility	900

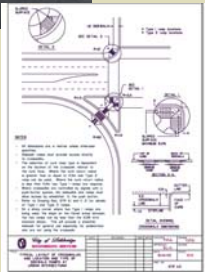

## TRANSPORTATION SIDEWALK RAMP IMPROVEMENTS




Before




After







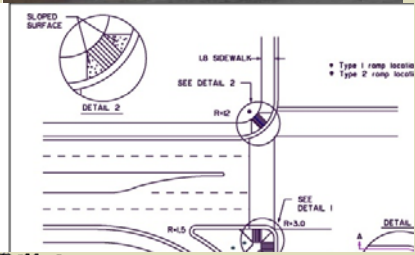
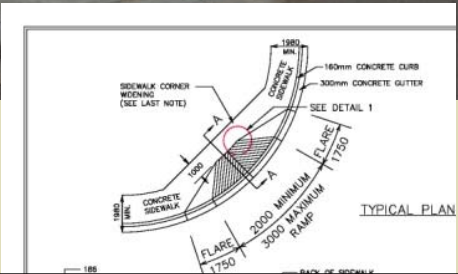
## TRANSPORTATION SIDEWALK RAMP IMPROVEMENTS




Before




After







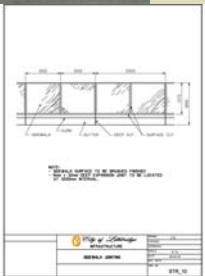
## TRANSPORTATION SIDEWALK JOINT IMPROVEMENTS




Before





After




City of Lethbridge  
Infrastructure  
Sidewalk Joints  
2/14/16




City of Lethbridge  
Infrastructure  
Sidewalk Joints  
2/14/16

## TRANSPORTATION PEDESTRIAN PUSH BUTTONS



Before





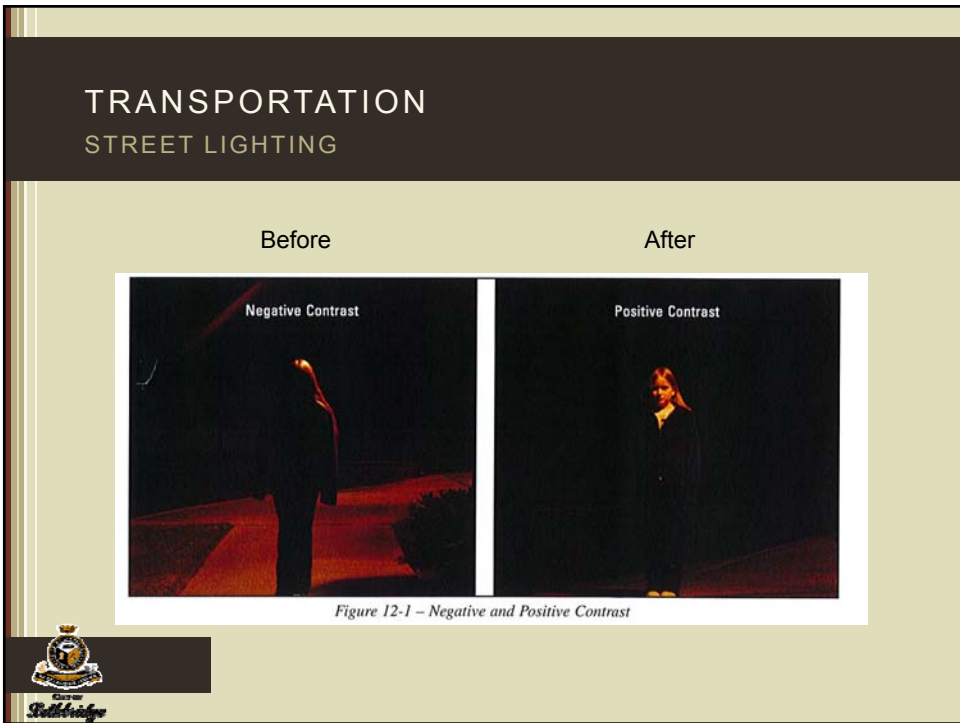
After

Push Button Height – New Standard 900mm or 35"

Authority	Recommended height	Notes
1. City of Calgary	900mm - 1200mm	Should be measured the side of push button to the sidewalk.
2. City of Winnipeg	230 mm - 1570 mm	230 mm is the most minimum mounting height.
3. City of Vancouver	760 mm - 1200 mm	They considered 910 - 917 mm for all users. They based on the recommendations from MUTCD for Canada and FHWA.
4. City of Toronto	900 mm	Push button should be level to at least 50 mm to 1200 mm from ground level for clear approach area for pedestrian.
5. TMC, FHWA	Approximately 1.06 (3500 mm) No more than 48" (1219 mm)	600mm for Canada by TMC is only proposed with FHWA. Not recommended height.
6. Clark Schubert	900 mm (2' 7")	This is within the range suggested in CAN/CSA B553-10M, Section 5.06.03.

Suggested mounting height for the City of Lethbridge: 900mm +/- 50mm





## TRANSPORTATION FUTURE PEDESTRIAN ACCESSIBILITY IMPROVEMENT

- Improved roadway lighting for pedestrian crossings
- Making pedestrian access to all development
- Para-ramps at all pedestrian crossings
- Pedestrian pushbutton at signals identified/requested
- Audible pedestrian crossings at signals as identified/requested



## LETHBRIDGE TRANSIT



## LETHBRIDGE TRANSIT BACKGROUND

### Transit

- 11 routes
- 42 buses
- All buses are low floor accessible



### Access-A-Ride (AAR)

- Door-to-door shared ride accessible service
- 20 buses
- 34 drivers
- 1,250 active customers
- 112,658 trips in 2014

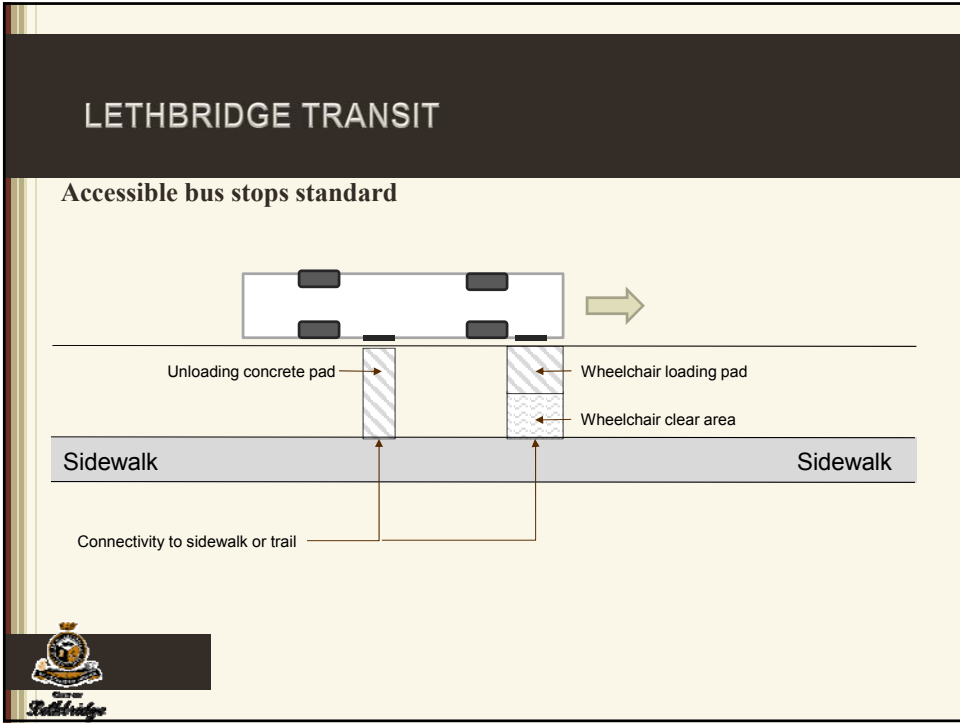


## LETHBRIDGE TRANSIT BACKGROUND

### Bus Stops

- Approximately 600 bus stops
  - 350 meet or exceed accessibility standard
  - 200 accessible but do not meet current standards
  - 50 not accessible
- 85 shelters
- 127 benches





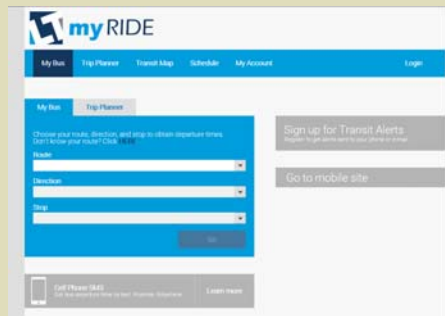
## LETHBRIDGE TRANSIT IMPROVEMENTS

1. All transit buses have been replaced with low floor, kneeling accessible buses
2. The last non-accessible buses were replaced in 2013

The photograph shows a white Lethbridge Transit bus at a stop. A yellow rectangular area is marked on the sidewalk in front of the bus, indicating a wheelchair accessible zone. The bus has 'Lethbridge Transit' written on its side.

## ACCESS-A-RIDE (AAR) IMPROVEMENTS

In 2014, Mobile Data Terminals (MDT's) were installed on all AAR buses together with new scheduling software. This provides the location of the vehicles and allows for real-time scheduling.

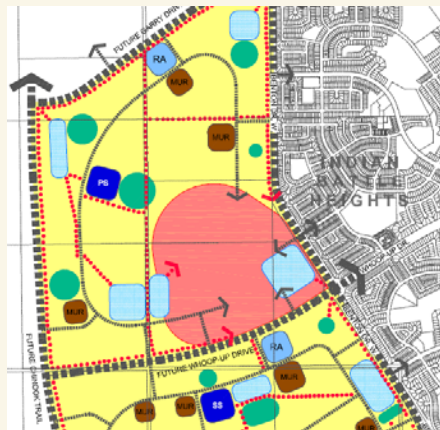


<http://myride.lethbridge.ca>




## LETHBRIDGE TRANSIT CHALLENGES

- Upgrade non-accessible bus stops to the current accessibility standards
- Grow the service as the community grows
  - Garry Station and Blackwolf subdivisions are currently under construction and it is expected by 2018, both subdivisions will require transit services.



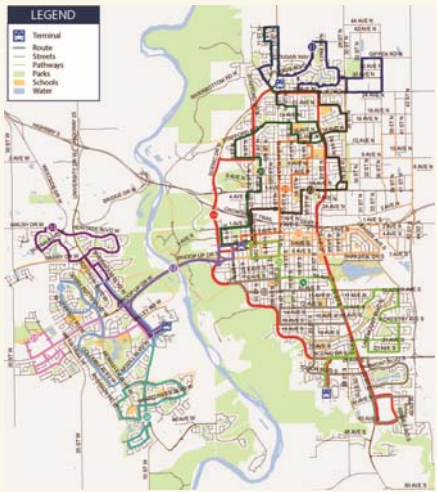

## ACCESS-A-RIDE (AAR) CHALLENGES

- AAR is still operating with the same number of buses since 2007 when it was acquired by the City. Since that time, the population has increased by 14%.
- New large care facilities continue to be built on the fringe of City limits, causing trip distances to become much longer, therefore reducing the number of trips available.
- AAR is booked 97% with subscription trips during peak hours with only 3% capacity left for demand bookings



## TRANSIT AND AAR MASTER PLAN CURRENT PROJECTS

- Lethbridge Transit will undertake a comprehensive Master Plan that will look at:
  - Levels of service (hours, frequency, walking distance)
  - Route design (today and in the future)
  - Fleet (bus sizes, configurations, spare ratio, fuel types)
- Report back to City Council near the end of 2016 with recommendations.

## TRANSIT AND AAR FUTURE PROJECTS

### GreenTRIP Grant Funding through Alberta Transportation

- Upgrade the remaining ~ 250 bus stops to bring them up to current accessibility standards
  - Should hear if we are successful before spring of 2015
- Bus Expansion
  - Transit
    - 6 additional low floor buses over the next 10 years
    - Approved service expansion
      - 2016 – Garry Station subdivision
      - 2018 – Blackwolf subdivision
  - Access-A-Ride
    - 6 additional buses over the next 10 years
    - Add 35 additional service hours per week in each year (2015 and 2016)



## PLANNING AND DEVELOPMENT SERVICES DEVELOPMENT PERMITS AND ACCESSIBILITY

Pedestrian Connectivity &  
Barrier-free Accessibility  
On Private Property

Ross Kilgour  
Planner II  
Planning and Development Services



## PLANNING AND DEVELOPMENT SERVICES BACKGROUND

- Land Use by-law regulates development on private property
- Historically, unconcerned with pedestrians. Regulations focused on car (parking stalls, drive aisles, driveways etc.)
- 2010 – 2011 – Citizens with mobility impairments made presentations to City Council



## PLANNING AND DEVELOPMENT SERVICES BACKGROUND

- Citizens presentations focused on:
  - Lack of ability to get from city sidewalks to the front doors of big box stores. How do you navigate the parking lot?
  - Barrier-free parking spaces in parking lots vary in quality from very efficient to almost dysfunctional
- Staff consciousness-raising
  - First hand experience of some of the challenges





## PLANNING AND DEVELOPMENT SERVICES

### CURRENTLY


**Land Use Bylaw 5700 passed in 2011**

- **Site Design Guidelines**
  - **Address general pedestrian accessibility**
- **CPA reviewed Land Use Bylaw barrier-free parking space design standards**

**Site Design Guidelines**  
Multi-family Residential, Commercial, Industrial, Institutional Developments

Planning and Development Services  
 September 1, 2011  
 Issue 1  
 APPENDIX B. LAND USE BYLAW 5700  
 City of Cambridge, 1010 Avenue Road, Toronto, Ontario M3H 5T4  
<http://www.cambridge.ca/Forms/Default.aspx>



## PLANNING AND DEVELOPMENT SERVICES

### SITE DESIGN GUIDELINES

**About People and Cars**


**Bicycle, Wheelchair, and Pedestrian Access and Circulation**

By providing a safe, continuous network of pathways within and between developments people can walk, cycle, or wheel themselves to buildings rather than drive. A pedestrian network that offers clear circulation paths through parking areas to building entries creates a friendlier more inviting image. The applicant is encouraged to design parking lots with dedicated pathways:

- between banks of parking so people leaving their cars can safely access the front of the building ,
- between each individual barrier free parking space in a set of two
- that will connect individual CRU's on a multi-building site,
- that will connect to the walkways of adjacent commercial developments,
- that will connect with adjacent residential developments or with an adjacent trail system or park
- that will connect to adjacent city sidewalks and transit stops

The pathways should have ramps for easy barrier free access. Landscaping should be incorporated with the pathways.

The applicant is also encouraged to provide bicycle racks near building entrances and end-of-trip facilities for employees who choose to cycle to work.





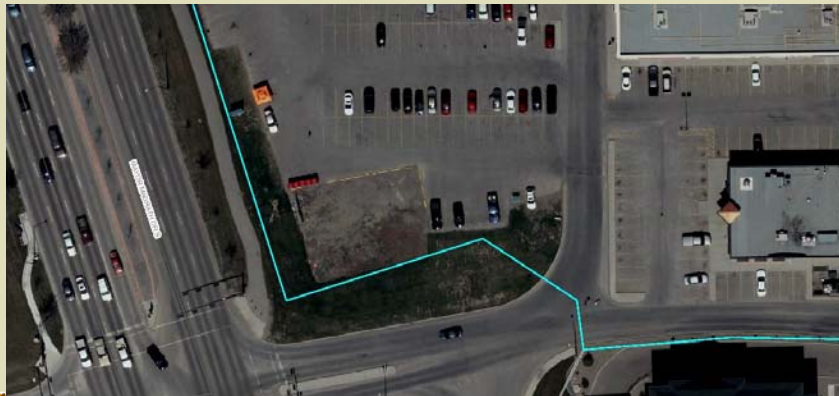
## PLANNING AND DEVELOPMENT SERVICES SITE DESIGN GUIDELINE

### CHALLENGES

- Developer resistance
- Not retroactive – have to wait for significant re-development of the site to obtain some rectification of outstanding accessibility issues
- Limited ability to gain off-site sidewalk improvements on re-development due to lack of empowering local legislation



## PLANNING AND DEVELOPMENT SERVICES OUTCOMES - 2011



## PLANNING AND DEVELOPMENT SERVICES OUTCOMES - 2013



## PLANNING AND DEVELOPMENT SERVICES NEXT STEPS

- Quantify and solidify guidelines into regulations in the Land Use Bylaw
  - Identified as a top priority on the LUB Review matrix
- Inspect and enforce correct installation of barrier-free parking spaces
  - Key duty of new Development enforcement Officer position
  - Development Completion Certificate requirements in a Development Agreement (being devised)



## MOBILITY AND ACCESSIBILITY

WE'D LIKE TO HEAR FROM YOU

How do you experience our community?

What are some of the challenges you face?

What thought or ideas do you have that could address some of those challenges?

