



# Universal Design Workshop

Edmonton

Presentation to Safety Codes Council Summit 2023  
19 October 2023 - Breakout Session #3 - 1:00pm  
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Principal Urban Designer, City of Edmonton

# Acknowledgement

I wanted to thank all of the staff at SCC for organizing this Summit and of course to all of you for joining us. I hope that you will find the workshop interesting and of course useful!



# Disclaimer

Please note that the views, thoughts, and opinions expressed in the following presentation belong solely to the authour, and do not necessarily reflect the views of the authours' employer(s), organization, committee or other group or individual.



# A bit about me first...

## Current

- Principal Urban Designer - [City of Edmonton](#) provide reviews in urban design, universal design & CPTED - 7+ years;
- Member - [Technical Committee on Outdoor Space - Fed Gov't](#);
- Member - [Barrier Free Sub-Council](#) - [Safety Codes Council](#); and
- Instructor - Online & Continuing Education at the [University of Alberta](#).

## Previous work -

- Urban Designer at [Auckland Transport](#) (AT)/[Auckland Council](#) - 10 years;
- Community Planner - [City of Toronto](#) for 7 years; and
- Planner - [MBTW Group](#) in Don Mills, Ontario - 3 years
- Plus much more...!



# Things to discuss today...

- Quick discussion on the principles of Universal Design
- Introduce the Mechanized River Valley Project - aka the 'funicular'
- Work in smaller groups using selected project to apply learnings
- Report back to larger group about findings

# What is Universal Design (UD)?

The design of all products and environments to be usable by all people to the greatest extent possible without the need for **adaptation** or specialized design.

*Basically, it's about creating  
places/things for as many  
people as possible!*

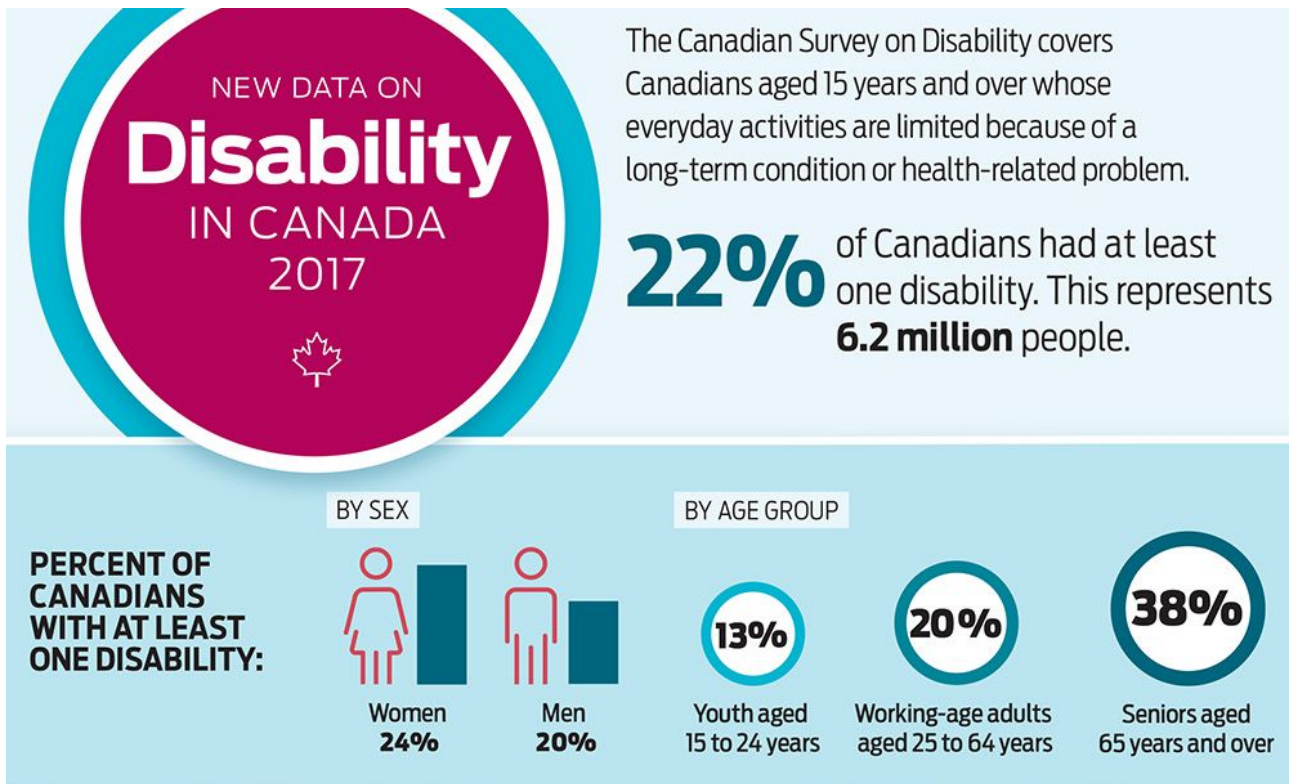
# Why is UD important?

Create built environments that work for all:

- Seniors;
- People with disabilities;
- Parents pushing strollers;
- People carrying bags;
- Design once, not differently for each group;
- Improved productivity, sustainability, efficiency and injury prevention.



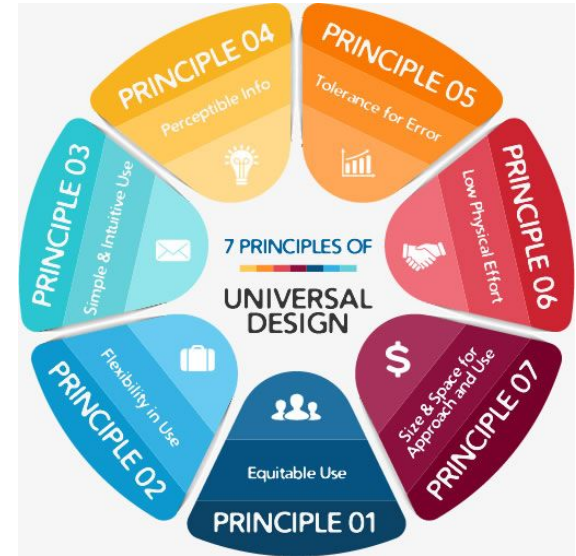
# Why important? Many are affected...



Source: Statistics Canada 2017

# Seven Principles of Universal Design

1. Equitable Use
2. Flexibility in Use
3. Simple and Intuitive Use
4. Perceptible Information
5. Tolerance for Error
6. Low Physical Effort
7. Size and Space for Approach and Use



**Key opportunity\***... in some instances while striving to make things easier for some users they limit the opportunity to challenge others.



# #1 Equitable Use

The design is useful and marketable to people with diverse abilities.





## #2 Flexibility in Use

The design accommodates wide range of individual preferences and abilities.



*Key opportunity\**

Edmonton

# #3 Simple and Intuitive Use

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills or education level.





## #4 Perceptible Information

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.



## #5 Tolerance for Error

The design minimizes hazards and the adverse consequences or unintended actions.



## #6 Low Physical Effort

The design can be used efficiently and comfortably and with a minimum of fatigue.



*Key opportunity\**



## #7 Size & Space for Approach & Use

Appropriate size and space is provided for approach, reach, manipulation and use regardless of user's body size, posture or mobility.





# Mechanized River Valley Project ‘funicular’ - a new link to the river valley for all?

## Lots of ballyhoo as Edmonton funicular goes into service

CLARE CLANCY

Updated: December 10, 2017

Earnest riders jumped aboard Edmonton's new funicular this past weekend to enjoy a scenic view of the river valley while coasting uphill and downhill 48 seconds at a time.

The \$24-million project — formally named the Mechanized River Valley Access — opened Saturday with a ribbon-cutting ceremony and a performance by local operatic comedians the PreTenors at the top scenic promontory south of the Fairmont Hotel Macdonald.



# Mechanized River Valley Project 'funicular' - a new link to the river valley for all?





# Here's what the top looks like...



# Design description - “Rocks in a waterfall”





# Some artwork and a ramp/bridge down...



# Great views and some hard work...





# Made it down to the bottom!



## The Task...

1. Review the photos that are on your table and identify some Universal Design issues;
2. Use own experience and knowledge to suggest some potential design solutions to mitigate or potentially eliminate the identified issue(s); and
3. Each table shall present back to the larger group about at least 2 different issues and their suggested solution(s).



## 00 Street Funicular buse McKinney Riverfront Park



Abbreviations	Terms	Key
(A) All India Medical Entrance Examination	1. All India Medical Entrance Examination	Q. All India
(A) All India Engineering Entrance Examination	2. All India Engineering Entrance Examination	Q. All India
(A) All India Law Entrance Examination	3. All India Law Entrance Examination	Q. All India
(A) All India Veterinary Entrance Examination	4. All India Veterinary Entrance Examination	Q. All India
(A) All India Nursing Entrance Examination	5. All India Nursing Entrance Examination	Q. All India
(A) All India Dental Entrance Examination	6. All India Dental Entrance Examination	Q. All India
(A) All India Architecture Entrance Examination	7. All India Architecture Entrance Examination	Q. All India
(A) All India Commerce Entrance Examination	8. All India Commerce Entrance Examination	Q. All India
(A) All India Management Entrance Examination	9. All India Management Entrance Examination	Q. All India
(A) All India Social Science Entrance Examination	10. All India Social Science Entrance Examination	Q. All India
(A) All India Physical Science Entrance Examination	11. All India Physical Science Entrance Examination	Q. All India
(A) All India Biological Science Entrance Examination	12. All India Biological Science Entrance Examination	Q. All India
(A) All India Environmental Science Entrance Examination	13. All India Environmental Science Entrance Examination	Q. All India
(A) All India Health Science Entrance Examination	14. All India Health Science Entrance Examination	Q. All India
(A) All India Information Science Entrance Examination	15. All India Information Science Entrance Examination	Q. All India
(A) All India Language Entrance Examination	16. All India Language Entrance Examination	Q. All India
(A) All India Literature Entrance Examination	17. All India Literature Entrance Examination	Q. All India
(A) All India Music Entrance Examination	18. All India Music Entrance Examination	Q. All India
(A) All India Fine Arts Entrance Examination	19. All India Fine Arts Entrance Examination	Q. All India
(A) All India Sports Entrance Examination	20. All India Sports Entrance Examination	Q. All India
(A) All India Entertainment Entrance Examination	21. All India Entertainment Entrance Examination	Q. All India
(A) All India Professional Entrance Examination	22. All India Professional Entrance Examination	Q. All India
(A) All India Research Entrance Examination	23. All India Research Entrance Examination	Q. All India
(A) All India Innovation Entrance Examination	24. All India Innovation Entrance Examination	Q. All India
(A) All India Creativity Entrance Examination	25. All India Creativity Entrance Examination	Q. All India
(A) All India Leadership Entrance Examination	26. All India Leadership Entrance Examination	Q. All India
(A) All India Communication Entrance Examination	27. All India Communication Entrance Examination	Q. All India
(A) All India Teamwork Entrance Examination	28. All India Teamwork Entrance Examination	Q. All India
(A) All India Problem Solving Entrance Examination	29. All India Problem Solving Entrance Examination	Q. All India
(A) All India Critical Thinking Entrance Examination	30. All India Critical Thinking Entrance Examination	Q. All India
(A) All India Analytical Skills Entrance Examination	31. All India Analytical Skills Entrance Examination	Q. All India
(A) All India Logical Reasoning Entrance Examination	32. All India Logical Reasoning Entrance Examination	Q. All India
(A) All India Numerical Skills Entrance Examination	33. All India Numerical Skills Entrance Examination	Q. All India
(A) All India Mathematical Skills Entrance Examination	34. All India Mathematical Skills Entrance Examination	Q. All India
(A) All India Scientific Skills Entrance Examination	35. All India Scientific Skills Entrance Examination	Q. All India
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(A) All India Creative Skills Entrance Examination	43. All India Creative Skills Entrance Examination	Q. All India
(A) All India Innovative Skills Entrance Examination	44. All India Innovative Skills Entrance Examination	Q. All India
(A) All India Entrepreneurial Skills Entrance Examination	45. All India Entrepreneurial Skills Entrance Examination	Q. All India
(A) All India Business Skills Entrance Examination	46. All India Business Skills Entrance Examination	Q. All India
(A) All India Financial Skills Entrance Examination	47. All India Financial Skills Entrance Examination	Q. All India
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(A) All India Sales Skills Entrance Examination	49. All India Sales Skills Entrance Examination	Q. All India
(A) All India Customer Service Skills Entrance Examination	50. All India Customer Service Skills Entrance Examination	Q. All India
(A) All India Project Management Skills Entrance Examination	51. All India Project Management Skills Entrance Examination	Q. All India
(A) All India Time Management Skills Entrance Examination	52. All India Time Management Skills Entrance Examination	Q. All India
(A) All India Stress Management Skills Entrance Examination	53. All India Stress Management Skills Entrance Examination	Q. All India
(A) All India Decision Making Skills Entrance Examination	54. All India Decision Making Skills Entrance Examination	Q. All India
(A) All India Problem Solving Skills Entrance Examination	55. All India Problem Solving Skills Entrance Examination	Q. All India
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(A) All India Innovative Skills Skills Skills Entrance Examination	70. All India Innovative Skills Skills Skills Entrance Examination	Q. All India
(A) All India Entrepreneurial Skills Skills Skills Entrance Examination	71. All India Entrepreneurial Skills Skills Skills Entrance Examination	Q. All India
(A) All India Business Skills Skills Skills Entrance Examination	72. All India Business Skills Skills Skills Entrance Examination	Q. All India
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(A) All India Stress Management Skills Skills Skills Entrance Examination	79. All India Stress Management Skills Skills Skills Entrance Examination	Q. All India
(A) All India Decision Making Skills Skills Skills Entrance Examination	80. All India Decision Making Skills Skills Skills Entrance Examination	Q. All India
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**Louise McKinley Riverfront Park**  
Park Hours  
**5 am – 11 pm**

Adjacent to downtown Edmonton and immediately south of the Shaw Conference Centre, this park is the front door to the river valley parks system and gateway to trails throughout the city. The park encompasses 12.9 hectares of land with a 500 metre boulevard, walking, undisturbed river view. The park is named after Louise McKinley, who was one of the "Famous Five" who championed the rights of women to be considered "Persons" under the British North America Act.



Image 2





# Image 3





Image 4





**Image 5**





**Image 6**





**Image 7**





Image 8





Image 9





Image 10





Image 11





Image 12





Image 13





Image 14





Image 15





Image 16





Image 17





Image 18





Image 19



# Thank you, I hope you enjoyed the workshop!



Robert Lipka

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