Taking Trails From Good to Great

PTBA Sustainable Trails Conference

March 2018
Welcome!

Boring Cake
- Cookie cutter
- Basic, boring, plain
- Not very exciting
- Works but could be better

Ingredients
- Lots of options
- Using the right ones can make a big difference
- Know what you want at the end = success

Successful Cake
- Creates excitement
- Gets eaten right away
- Knowing how to use all the ingredients = successful cake
- Makes me happy!
Parks Canada 101

Places we manage

- National Parks and National Park Reserves
- National Historic Sites
- National Marine Conservation Areas
- National Urban Parks
- National Monuments
A look at Parks Canada’s trails

Johnson Canyon Trail, Banff NP
West Coast Trail, Pacific Rim NP
Our trails before…

• used to be considered simply as “an appropriate activity”.

• have been in most cases inherited or developed organically over time, not planned.
The results ... 

• difficult to maintain
• expensive to maintain
• negative impact on environment
• negative impact on wildlife
The results ...

• bad visitor experience
• visitors that are discouraged from coming again
• bad media
The National Trail Program

• Trails are offered in all Parks Canada’s sites.

• Trails include all surface material from natural surface to paved pathway, and include single tracks and double tracks, and waterways.
The National Trail Program

• Provides national direction (standards, guidelines, etc).

• National Trail Team’s role: develop tools and support sites in the planning, implementation, and maintenance of their trail systems.
Trails as an Asset

• Maximo and "2017 Asset Report Card data":
  • 1,192 Trails (records) worth $ 513 M (in 2017$)* with $ 69 M in DW (2017$)*.
  • More than 60% in Mountain Parks.

*these figures do not include associated bridges, as we currently don`t have that information in Maximo.
Trails as an Asset

- CH/VE Investments – approved projects:
  - Trails B16 Funds
    $103,970,000*
  - Trails and Boardwalks FII/CAI Funds
    $59,809,000**
  - Backcountry FII/CAI Funds
    $1,020,000

Total Investments
$164,799,000

*New trail development
**Maintenance and upgrades to existing trail
Trails as a VE Product

• From short trails in NHSs to world-renowned day-use and overnight trails in NPs, trails are a core product common to all of our sites.

• Trails are more than VE products; they are intimately tied to Canada's history and identity as a nation.

Fundy National Park
“13% would come back because of the hiking trails and 9% for the camping.”
Parks Canada 2014 VIP Survey

Chilkoot Trail National Historic Site
“a 53 kilometre / 33 mile trip through history and one of North America’s most fabled treks”
Parks Canada Website
Overall Trail Program Goals

Information
- Tools
- Guidelines
- Standards
- Procurement
  - design
  - maintenance
  - assessment
  - inspection
  - construction
  - more ...

Innovation
- New Products
- Out-of-the-box Ideas
- Ground Breaking
  - ebikes
  - adaptive trails
  - signage
  - competitions
  - alternative material
  - signature experiences
  - More ...

Influence
- Value
- Better Product
- Better Decisions
- Promotion
  - fact sheets
  - value of trails
  - sales pitch
  - communities of practice
  - More ...
Overall Trail Program Tools
Process to Create Successful + Sustainable Trail Systems

Old Process

Planning
Design
Construction
Monitoring Maintenance

NOT GOOD!

New Process

Monitoring Maintenance
Construction
Design
Planning

GOOD!
Now, our trails...

... provide memorable visitor experiences by leading visitors to inspirational places
Now, our trails...

... protect natural and cultural resources through appropriate routing, design, and construction.
Now, our trails...

... create educational opportunities by facilitating interactions with places.
Now, our trails...

...decrease long-term maintenance costs.
The results ...

... trails are one of the key ways that Parks Canada Agency delivers upon its mandate.
Trail Principles
Trail Principles

• Apply to all trail development and upgrades.
• Provide direction to the planning, development, and management of trails to ensure an integrated approach fundamental to successful and sustainable trail systems.
Trail Principles

Trail principles flow from Parks Canada mandate which includes 3 key elements:

- **Protection**
- **Visitor Experience**
- **Education**
Trail Principles

In addition to the 3 key elements, Trail Principles integrate key elements of sustainable and successful trail systems:

**Natural & Cultural Resources**

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**Trail Management**

**Visitor Needs**

**Trail Design**
7 Core Principles

[What we want the trail system to achieve]

42 Principle-based guidelines

[How it can be achieved]
Principle 1: Respect the Character of the Place

Principle-Based Guidelines: (examples)

1.1 Respect Cultural Landscape Patterns.

1.2 Fit in the Landscape.

1.3 Ensure the Right Trail and Activity for a Given Area.
Principle 2: Respect Natural and Cultural Resource Protection Goals

Principle-Based Guidelines: (examples)

2.4 Relocate, Close, and Restore Inappropriate Trails.

2.5 Use Previously Disturbed Areas.
Principle 3: Facilitate Opportunities for Meaningful and Enjoyable Visitor Experiences

Principle-Based Guidelines: (examples)

3.3 Meet the Needs of the Users.
3.9 Connect Destinations.
3.10 Create New Destinations Opportunities.
Principle 3: Facilitate Opportunities for Meaningful and Enjoyable Visitor Experiences

Principle-Based Guidelines: (examples)

3.11 Facilitate Navigation.

3.12 Address Trail User Comfort.
Principle 3: Facilitate Opportunities for Meaningful and Enjoyable Visitor Experiences

Principle-Based Guidelines: (examples)

3.14 Filter Users Based on their Trail Abilities.
Principle 4: Promote Understanding and Appreciation

Principle-Based Guidelines: (examples)

4.1 Offer Learning Opportunities (Informal).

4.2 Integrate Interpretation Opportunities (Formal).
Principle 5: Value and Involve Local Communities

Principle-Based Guidelines: (examples)

5.1 Engage Early and Broadly.

5.2 Engage Indigenous Groups.

5.3 Promote Trail Stewardship.
Principle 6: Use Appropriate Design Approach and Construction Techniques

Principle-Based Guidelines: (examples)

6.3 Eliminate Short-term Solutions.

6.5 Avoid Fall Lines.

6.7 Favour Contour Trails.
Principle 7: Ensure Effective Management

Principle-Based Guidelines: (examples)

7.1 Ensure a Cross Functional Collaboration.

7.2 Provide Level of Service Based on Trail Type.

7.4 Close Trails When Required.
Trail Principles Help You...

- Have constructive discussions around trails.
- Build arguments or a case for trail development or improvement projects.
Trail Principles help you...

• Evaluate trail projects against approved criteria.
• Guide decisions regarding the planning, development, and management of trails.
## Planning Principles Checklist

<table>
<thead>
<tr>
<th>Does the proposed trail system ...</th>
<th>Meet</th>
<th>Do Not Meet</th>
<th>N/A</th>
</tr>
</thead>
</table>

### Principle 1: Respect the Character of the Place
Trails and activities they facilitate respect the value of heritage places or the unique character of a specific protected heritage place.

1.1 Respect Cultural Landscape Patterns.
1.2 Fit in the Landscape.
1.3 Ensure the Right Trail and User for a Given Area.

### Principle 2: Respect Natural and Cultural Resource Protection Goals
Trails and activities they facilitate are consistent with resource protection goals. Natural and cultural resources determine where, how, and what type of trails are built to ensure that trails respect the land capacity and cultural resources.

2.1 Ensure Ecological Integrity.
2.2 Protect and Present Cultural Resources.
2.3 Stay far Enough from Areas Visitor Should Avoid.
2.4 Relocate, Close, and Restore Inappropriate Trails.
2.5 Use Previously Disturbed Areas.

### Principle 3: Facilitate Opportunities for Meaningful and Enjoyable Visitor Experiences
Trail Classification System
Trail Classification System

- is central to our approach to trail planning, management, and promotion.

- is common across our sites to ensure that visitors can plan a trip that meets their expectations.
Trail Classification System

- offers a diversity of experiences ranging from very easy to difficult trails, and from regularly maintained trails to unmaintained routes.
Trail Classification System

1) Trail Type (specifications for trail management)

2) Trail Rating (Information for visitors / level of difficulty)

Type 1: Paved surface
Rating: Easy difficulty
# Trail Classification System

## 1) Trail Rating

### Trail Rating Classification (for the Visitor)

<table>
<thead>
<tr>
<th>Element / Rating</th>
<th>Easy</th>
<th>Moderate</th>
<th>Difficult</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition</td>
<td>• Suitable for all visitors including those with no trail experience. Visitor may be prepared for trail or may not be prepared (proper equipment and water). Hard packed surface with no obstacles and minimal stairs. Estimated time to complete the trail is no longer than two hours. Little or no elevation gain or loss.</td>
<td>• Suitable for most visitors who have some basic trail experience and are generally prepared (proper equipment and water). Mostly stable surface with infrequent obstacles, stairs may be present. Estimated time to complete the trail is no longer than five hours. May experience moderate elevation gain with some short steep sections.</td>
<td>• Suitable for visitors who have trail experience and are prepared (proper equipment and water). Variety of surface types including non-established surface. Estimated time to complete the trail may exceed five hours. May experience major elevation gain with long steep sections.</td>
<td>• Suitable for visitors who have exceptional trail and navigation experience and are well prepared (proper equipment and water). Non-established trail only a suggested trail route, not maintained. Estimated time to complete ranges from 1 day to 10 days or longer. May experience a variety of terrain including wet areas, loose rocks, exposure, and thick forest.</td>
</tr>
<tr>
<td>Symbol</td>
<td><img src="image1.png" alt="Green Circle" /></td>
<td><img src="image2.png" alt="Blue Square" /></td>
<td><img src="image3.png" alt="Black Diamond" /></td>
<td><img src="image3.png" alt="Black Diamond" /></td>
</tr>
<tr>
<td>Distance (return)</td>
<td>0 – 5 km</td>
<td>0 – 15 km</td>
<td>0 – 15+ km</td>
<td>N/A</td>
</tr>
<tr>
<td>Trail Profile</td>
<td>Flat to gently rolling</td>
<td>Gently rolling with short steep sections</td>
<td>Rolling with many steep sections that may continue for long periods</td>
<td>N/A</td>
</tr>
<tr>
<td>Typical Elevation Gain</td>
<td>0 – 100 metres</td>
<td>100 – 500 metres</td>
<td>500+ metres</td>
<td>N/A</td>
</tr>
<tr>
<td>Trail Surface</td>
<td>Paved or surfaced</td>
<td>Surfac ed or natural surface</td>
<td>Firm and stable</td>
<td>Natural surface</td>
</tr>
<tr>
<td>Material Type and Average Width</td>
<td>Hard packed</td>
<td>Natural surface</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Typical Average Width</td>
<td>0.5 – 1.5 metre</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of Marking</td>
<td>Trailhead information, interpretive panels, route markers, trail orientation maps</td>
<td>Basis trail head information, route markers, and trail orientation maps</td>
<td>Basic trail head information and minimal route markers, or no signage provided</td>
<td>N/A</td>
</tr>
<tr>
<td>General Signage and Information</td>
<td>Maximum information provided</td>
<td>Moderate information provided</td>
<td>Minimal or no information provided</td>
<td>N/A</td>
</tr>
<tr>
<td>Obstacles or Stairs</td>
<td>Few or no obstacles, minimal use of stairs</td>
<td>Infrequent obstacles, stairs may be present</td>
<td>Obstacles common, steps common</td>
<td>N/A</td>
</tr>
<tr>
<td>Visitor Facilities</td>
<td>Parking lot, restroom, bridges, benches</td>
<td>Parking lot, outhouse/toilet, bridges</td>
<td>Bridges or other water crossing including fording</td>
<td>N/A</td>
</tr>
<tr>
<td>Recommended Experience</td>
<td>Little or no experience required</td>
<td>Some experience recommended</td>
<td>Experience recommended</td>
<td>N/A</td>
</tr>
<tr>
<td>Level or Service</td>
<td>High</td>
<td>Moderate</td>
<td>Low</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Rating Details

- **Easy**
  - Distance: 0 – 5 km
  - Trail Profile: Flat to gently rolling
  - Typical Elevation Gain: 0 – 100 metres
  - Trail Surface: Paved or surfaced
  - Material Type and Average Width: 0.5 – 1.5 metre
  - Quality of Marking: Trailhead information, interpretive panels, route markers, trail orientation maps
  - General Signage and Information: Maximum information provided
  - Obstacles or Stairs: Few or no obstacles, minimal use of stairs
  - Visitor Facilities: Parking lot, restroom, bridges, benches
  - Recommended Experience: Little or no experience required
  - Level or Service: High

- **Moderate**
  - Distance: 0 – 15 km
  - Trail Profile: Gently rolling with short steep sections
  - Typical Elevation Gain: 100 – 500 metres
  - Trail Surface: Surfac ed or natural surface
  - Material Type and Average Width: N/A
  - Quality of Marking: Basis trail head information, route markers, and trail orientation maps
  - General Signage and Information: Moderate information provided
  - Obstacles or Stairs: Infrequent obstacles, stairs may be present
  - Visitor Facilities: Parking lot, outhouse/toilet, bridges
  - Recommended Experience: Some experience recommended
  - Level or Service: Moderate

- **Difficult**
  - Distance: 0 – 15+ km
  - Trail Profile: Rolling with many steep sections that may continue for long periods
  - Typical Elevation Gain: 500+ metres
  - Trail Surface: Firm and stable
  - Material Type and Average Width: N/A
  - Quality of Marking: Basic trail head information and minimal route markers, or no signage provided
  - General Signage and Information: Minimal or no information provided
  - Obstacles or Stairs: Obstacles common, steps common
  - Visitor Facilities: Bridges or other water crossing including fording
  - Recommended Experience: Experience recommended
  - Level or Service: Low

- **Route**
  - Distance: N/A
  - Trail Profile: Rolling with many steep sections that may continue for long periods
  - Typical Elevation Gain: N/A
  - Trail Surface: Natural surface
  - Material Type and Average Width: N/A
  - Quality of Marking: Basic trail head information and minimal route markers, or no signage provided
  - General Signage and Information: Minimal or no information provided
  - Obstacles or Stairs: Obstacles common, steps common
  - Visitor Facilities: Bridges or other water crossing including fording
  - Recommended Experience: Experience recommended
  - Level or Service: N/A
Trail Classification System

Type 1: Developed
- Easy
- Well-marked
- Level of service: High

Type 2: Natural Tread
- Difficult
- Few signage
- Level of service: Low

Type 3: Not developed
- Very difficult
- No signage
- Level of service: N/A

Type 4: Route

Developed
Easy
Well-marked
Level of service: High

Natural Tread
Difficult
Few signage
Level of service: Low

Not developed
Very difficult
No signage
Level of service: N/A
### Trail Classification System

#### 2) Trail Type: Trail Description

<table>
<thead>
<tr>
<th>Trail Type Classification (for Asset, Resource Conservation, and Visitor Experience Management)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Element / Trail Type</strong></td>
</tr>
<tr>
<td><strong>Definition</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Park Zone (applies to National Parks only)</strong></td>
</tr>
<tr>
<td><strong>Typical Visitor Type</strong></td>
</tr>
<tr>
<td><strong>Trail Rating</strong></td>
</tr>
<tr>
<td><strong>Image</strong></td>
</tr>
</tbody>
</table>
## Trail Classification System

1) Trail Type: Technical Details

<table>
<thead>
<tr>
<th>Technical Details</th>
<th>Distance (km/m)</th>
<th>Trail Profile (general description and typical elevation gain)</th>
<th>Trail Surface (Material Type and Typical Average Width)</th>
<th>Quality of Marking (General Signage and Information Provided)</th>
<th>Obstacles or Stairs</th>
<th>Visitor Facilities</th>
<th>Level of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Typical distance of trail does not exceed 10 km.</td>
<td>Flat to gently rolling</td>
<td>Paved or surfaced</td>
<td>Trailhead information, interpretive panels, route markers, trail orientation maps</td>
<td>Few or no obstacles, no stairs or minimal use of stairs</td>
<td>Parking lot, washroom, bridges, benches</td>
<td>Maximum visitor facilities</td>
</tr>
<tr>
<td></td>
<td>Typical distance of trail does not exceed 20 km.</td>
<td>Gently rolling with short steep sections</td>
<td>Surfaced or natural</td>
<td>Basic trailhead information, route markers, and trail orientation maps</td>
<td>Infrequent obstacles, stairs may be present</td>
<td>Parking lot, outhouse/pit toilet, bridges</td>
<td>Moderate visitor facilities</td>
</tr>
<tr>
<td></td>
<td>May exceed 20 km.</td>
<td>Rolling with steep sections that may continue for long periods</td>
<td>Natural</td>
<td>Basic trail head information and minimal route markers, or no signage provided</td>
<td>Obstacles common, stairs may be present</td>
<td>Bridges or other water crossing including fording</td>
<td>Minimal visitor facilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No visitor facilities</td>
</tr>
</tbody>
</table>
1) Trail Type: Level of Services and Visitor Safety

<table>
<thead>
<tr>
<th>Level of Service</th>
<th>TYPE 1</th>
<th>TYPE 2</th>
<th>TYPE 3</th>
<th>TYPE 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspection</td>
<td>Weekly/monthly or upon visitor comment</td>
<td>Seasonal or as required upon visitor comment</td>
<td>Yearly or as required upon visitor comment</td>
<td>N/A</td>
</tr>
<tr>
<td>Deadfall Clearing</td>
<td>As required</td>
<td>As required</td>
<td>Yearly</td>
<td>N/A</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Major (bridge, boardwalk, viewing platform)</td>
<td>Moderate (bridge, boardwalk, viewing platform)</td>
<td>Low or none (bridge, boardwalk)</td>
<td>N/A</td>
</tr>
<tr>
<td>Trail Materials and Surface Preparation</td>
<td>Asphalt, concrete or crushed rock, Repair cracks, fill holes, repack surface, create drainage, clear corridor</td>
<td>Crushed rock or natural mineral soil and rock, Fill holes, repack surface, create drainage, clear corridor</td>
<td>Natural mineral soil and rock or natural ground cover, Create drainage, clear corridor</td>
<td>N/A</td>
</tr>
<tr>
<td>Equipment</td>
<td>ATV, mechanized equipment, horse, hand or bicycle</td>
<td>ATV, mechanized equipment, horse, hand or bicycle</td>
<td>Non-motorized, horse, hand or bicycle</td>
<td>N/A</td>
</tr>
</tbody>
</table>

| Visitors Definition    | Visitor may not understand all risks and may not be self-reliant in the event of an incident. | Visitor may have a general understanding of some risks and may be partially self-reliant in the event of an incident | Visitor has an understanding of most risks and may be self-reliant in the event of an incident. | Visitor has an understanding of risks and will be self-reliant in the event of an incident. |
| Risk Mitigation        | Maximum effort made to mitigate risk. | Moderate effort made to mitigate risk. | Low effort made to mitigate risk. | Low too little effort made to mitigate risk. |
| Risk Identification (Cautions and Warnings) | High detailed explanation of risk – typically provided at trailhead, on maps and at areas of risk along the trail. | Moderate detailed explanation of risk – only significant risks identified. Information typically provided at trailhead and at areas along the trail. | Low detailed explanation of risk – only site-specific or unusual risks. Information typically provided at trailhead. | Low detailed explanation of risk – only site-specific or unusual risks. Information typically provided at trailhead. |
| Risk Inspection        | Weekly/monthly or upon visitor comment. Risk inspection can occur during level of service inspection | Seasonal or as required upon visitor comment. Risk inspection can occur during level of service inspection. | Yearly or as required upon visitor comment. Risk inspection can occur during level of service inspection. | N/A |
## Type I

<table>
<thead>
<tr>
<th>Description</th>
<th>Paved or hard packed surfaced double track trail, all weather use, with no obstacles in surface</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trail Surface</td>
<td>Hard packed imported materials or hardened with asphalt or concrete</td>
</tr>
<tr>
<td>Average Gradient</td>
<td>up to 7%</td>
</tr>
<tr>
<td>Typical Tread Width</td>
<td>1.5 to 3 meters</td>
</tr>
<tr>
<td>Clearing Width</td>
<td>3 meters +</td>
</tr>
<tr>
<td>Level of use</td>
<td>High to Very High</td>
</tr>
<tr>
<td>Level of service</td>
<td>High</td>
</tr>
<tr>
<td>Typical Ratings</td>
<td>Easy or Moderate</td>
</tr>
<tr>
<td>Description</td>
<td>Natural surfaced packed single track trail or double track trail</td>
</tr>
<tr>
<td>------------------------------</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>Trail Surface</td>
<td>Hard packed Natural material or loosely packed natural material</td>
</tr>
<tr>
<td>Average Gradient</td>
<td>up to 15%</td>
</tr>
<tr>
<td>Typical Tread Width</td>
<td>1 to 1.5 meters</td>
</tr>
<tr>
<td>Clearing Width</td>
<td>2 – 3.5 meter</td>
</tr>
<tr>
<td>Level of use</td>
<td>Moderate to High</td>
</tr>
<tr>
<td>Level of service</td>
<td>Moderate</td>
</tr>
<tr>
<td>Typical Ratings</td>
<td>Easy, Moderate, or Difficult</td>
</tr>
</tbody>
</table>
### Type III

<table>
<thead>
<tr>
<th>Description</th>
<th>Natural surface single track trail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trail Surface</td>
<td>Natural material, May be packed or loose</td>
</tr>
<tr>
<td>Average Gradient</td>
<td>up to 20% +</td>
</tr>
<tr>
<td>Typical Tread Width</td>
<td>0.25 to 1 meter</td>
</tr>
<tr>
<td>Clearing Width</td>
<td>1 – 2 meter</td>
</tr>
<tr>
<td>Level of use</td>
<td>Low to Moderate</td>
</tr>
<tr>
<td>Level of service</td>
<td>Low</td>
</tr>
<tr>
<td>Typical Ratings</td>
<td>Easy, Moderate, or Difficult</td>
</tr>
</tbody>
</table>
## Type IV

<table>
<thead>
<tr>
<th>Description</th>
<th>Suggested trail route</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trail Surface</td>
<td>Trail tread may not exist or may consist of wildlife paths</td>
</tr>
<tr>
<td>Average Gradient</td>
<td>N.A.</td>
</tr>
<tr>
<td>Typical Tread Width</td>
<td>N.A.</td>
</tr>
<tr>
<td>Clearing Width</td>
<td>N.A.</td>
</tr>
<tr>
<td>Level of use</td>
<td>Very Low</td>
</tr>
<tr>
<td>Level of service</td>
<td>Low</td>
</tr>
<tr>
<td>Typical Ratings</td>
<td>Typically Difficult</td>
</tr>
</tbody>
</table>
Results

• Completing the trail type and trail rating classification provides a complete picture of the site’s trail system.

• This information provides guidance on how to manage the trails:
  • Are trails over maintained or under maintained?
  • What resources are required and where?
  • What level of visitor safety should be provided?
  • What trails are in need of improvement?
  • Are there gaps in the trail system?
  • What information is provided to visitors?
  • How/to whom are trails promoted?
Trail Information Management System
Parks Canada

Trails

Elk Island National Park of Canada

Activities: Snowshoe

Beaver Pond Trail OPEN

Hayburner Trail OPEN

Lakeshore OPEN

Moss Lake OPEN

riding OPEN

Shirley Lake Trail OPEN

Simons Trail OPEN

Taywiy Lake Trail OPEN

Amisk Wuche Trail OPEN

Activities: Snowshoe

Beaver Pond Trail OPEN

Activities: Snowshoe

Lakeshore OPEN

Activities: Cross-country Skiing (Classic), Snowshoe

Moss Lake OPEN

Activities: Snowshoe

Shirley Lake Trail OPEN

Activities: Cross-country Skiing (Classic), Snowshoe

Simons Trail OPEN

Activities: Cross-country Skiing (Classic), Snowshoe

Taywiy Lake Trail OPEN

Activities: Cross-country Skiing (Classic), Snowshoe
Beaver Pond Trail OPEN
Elk Island National Park of Canada

Trail Details

Easy
Easy trails are suitable for all visitors including those with little or no trail experience. These trails have a hard surface with few or no obstacles and are generally flat.

Activities
Snowshoe

Elevation

Trail Conditions
Last Parks Canada Inspection: 2017-06-04
2017-06-04 Unknown
Additional potential for the visitor information tool

- Adding the location of visitor centers, toilets, parkings lots, trailheads and other information relevant for our visitors.

- Releasing the trail information as « open data ». 
Market segmentation as a tool to plan appealing trail systems
One Activity = Multiple Experiences
People who participate in the same activity can have different experiences

This is great! Snow, friends and blue sky! This is real life!

Do we have enough hot water?

Come on gang! Let’s move on before the storm starts! And keep the topo map handy!
Market segmentation

- Breaks market into groups of individuals that have similar needs, desires, and characteristics that cause them to seek out similar experiences.
Market Segmentation

PRIZM® Lifestages
(Based on socio-economics, lifestyle, etc.)
Young years  Family years  Mature years

Explorer Quotient® (EQ)
(Based on travel values)
Learning Explorers  Social Explorers  Reluctant Explorers

https://quiz.canada.travel/caen
Market Segmentation

• Each market segment enjoys trails differently and enjoys different trails.

• Goal is to match the trail offer to the trail preferences of target markets.
## Trail Planning Considerations by Market Segment

<table>
<thead>
<tr>
<th>PRIZM</th>
<th>Tend to enjoy:</th>
<th>Tend to avoid:</th>
<th>Who are they?</th>
</tr>
</thead>
</table>
| **Singles Scene**   | **Trail type:** 1 and 2  
**Trail rating:** EASY and MODERATE  
**Trail activities:** in-line skating and bicycle riding  
**Trail characteristics:**  
• Urban trails  
• Paved trails  
• Interpretive trails related to cultural history and playful experience trails (including the use of new technologies)  
• Short easy trails connecting to beaches and day use areas | **Trail type:** 3 and 4  
**Trail rating:** DIFFICULT and ROUTE  
**Trail activities:** mountain biking and snowmobiling  
**Trail characteristics:**  
• Extreme and challenging trails (e.g. long distance, backcountry trails)  
• Remote trails | • Young, ethnically diverse singles and couples  
• Seek a sense of purpose, where spirituality, global consciousness and the quest of who they are play important roles in their life  
• Not outdoorsy and do not own recreational equipment  
• Heavy users of technology |
| **Family Traditions - Tween Years** | **Trail type:** 1, 2, and 3  
**Trail rating:** EASY and MODERATE  
**Trail activities:** cross-country skiing, bird watching, snowmobiling, and fishing  
**Trail characteristics:**  
• Family-friendly trails  
• Kid-friendly outdoor activities (sharing nature experiences with their children)  
• Trails adjacent to campgrounds | **Trail type:** 3 and 4  
**Trail rating:** DIFFICULT and ROUTE  
**Trail activities:** walking/hiking, mountain biking, and ice and in-line skating  
**Trail characteristics:**  
• Extreme and challenging trails (e.g. long distance, backcountry trails)  
• Cultural events or happenings of all sorts  
• Interpretive panels about cultural history  
• Explora or other technology applications | • Conservative, middle aged and younger couple with a mix of tweens and younger kids, located in exurban and rural areas  
• Prefer to be in nature to enjoy their simple and authentic way of life by owning all kinds of sports/outdoor equipment  
• When they travel, they tend to go back to the same places year after year  
• Not enthusiastic about new technology |
# Trail Planning Considerations by Market Segment

<table>
<thead>
<tr>
<th><strong>Explorer Quotient</strong></th>
<th><strong>Tend to enjoy:</strong></th>
<th><strong>Tend to avoid:</strong></th>
<th><strong>Who are they?</strong></th>
</tr>
</thead>
</table>
| **Authentic Experiencers** | Trail type: 1, 2, 3, and 4  
Trail rating: EASY, MODERATE, DIFFICULT, and ROUTE  
Trail characteristics:  
• Trails providing an authentic experience and allowing to be fully immersed  
• Interpretive trails and playful experience trails  
• Challenging, backcountry, and long distance trails  
• Using a trail on their own/in small groups | Trail type: -  
Trail rating: -  
Trail characteristics:  
• Crowded trails  
• Guided tours (unless that’s the only way they can access an area or be provided an authentic experience)  
• Trails through a busy part of the park (e.g. trailhead is a busy parking lot, trailhead next to a busy road) | • Understated travellers looking for authentic, tangible engagement with destinations they seek, with a particular interest in understanding the history of the places they visit  
• Eco-conscientious, flexible, risk takers  
• Appreciate the understated beauty of natural and cultural environments  
• Supporters of PC mandate  
• Show a tendency to reject order |
| **Gentle Explorers** | Trail type: 1  
Trail rating: EASY  
Trail characteristics:  
• Trails that are easy to access and navigate (e.g. trailhead, maps, wayfinding, clear trail markings)  
• Well-defined, safe, groomed/maintained trails  
• Urban trails  
• Trails connecting to beaches, day use areas, and comfortable viewing platform  
• Guided tours | Trail type: 2, 3, and 4  
Trail rating: MODERATE, DIFFICULT, and ROUTE  
Trail characteristics:  
• Trails that are difficult to access and navigate  
• Trails that have a high level of risk or that are perceived as dangerous or threatening  
• Extreme and challenging trails (e.g. long distance, backcountry trails)  
• Isolated or remote trails | • Prefer familiar locations, reluctant to venture far beyond the comfort of their home  
• Not big travellers but usually go along with spouse or family  
• Afraid of trying the unknown  
• Less comfortable with new cultures  
• Prefer destinations that they can return to relive past experiences  
• Like to see main attractions |
Other ways to get visitor information

Qualitative
• Surveys (on-site, on-line, phone)
• Sounding boards (engagement tool)
• Observations

Quantitative
• Trail user counts
• Strava app
• Statistics Canada
Trail Concept Planning Process

Guiding Document
Trail Concept Planning Goals

• Ensure that plans follow an integrated approach to trail planning (protection/education/visitor experience).
• Ensure that plans integrate and meet national standards and guidelines.
• Build support to the plan.
Trail Concept Planning Benefits

• Decrease maintenance costs (human and financial resources).
• Meet current and future visitor’s needs.
• Fill gaps in the trail offer.
• Protect trail corridors for future opportunities.
• Help plan and phase investments.
• Help achieve natural and cultural resource protection objectives.

Sustainable and successful trail systems
Trail Planning Process…

- **Builds on strategic direction.** It is informed by, and integrates, plans and policies.
- **Is collaborative.** It engages public/stakeholders at key phases.
- **Is flexible.** It is a ‘road map’ that allows flexibility in terms of level of effort.
- **Is comprehensive.** It provides a list of tools available for each of the step and which information to look for. It allows to document each step.
The first four (4) phases of the planning process could be referred to as the Trail Concept Plan Foundation. This provides strategic direction to the development of the Trail Concept Plan and Implementation Plan.

The trail concept planning process is a six (6) phase process where each phase builds upon the previous ones.

1. PLANNING CONTEXT
   - Identify which elements have an influence on the trail concept planning and understand their implications.

2. ANALYSIS
   - Assess the current state of the trail (current offer) by identifying current users, issues, constraints, and opportunities.

3. VISION, GOALS AND OBJECTIVES
   - Identify the long-term desired state of the trail system or a trail, and the goals and objectives to achieve the vision.

4. GAP ANALYSIS
   - Identify elements that need to change, or be added, to align with strategic direction (PMP, VES), achieve the vision, address the issues and constraints, realize the opportunities, and meet target markets.

5. TRAIL CONCEPT PLAN
   - Develop trail concept, including proposed new trails and proposed upgrades to existing trails (including trail types and ratings), and other trail-related recommendations.

6. TRAIL IMPLEMENTATION PLAN
   - Identify implementation strategies and other requirements to facilitate the implementation of the Trail Concept Plan.
Trail Concept Planning Process
Successful Projects

Fundy National Park

• Road-to-Trail Conversion (Road-to-Trail Conversion Guidelines).

• Conversion of an abandoned campground into a pumptrack.

• Rebuild of trails that were not properly designed and constructed.
Successful Projects

Jasper National Park
• Three Valley Confluence Trail Plan

Resulting projects:
• Discovery Trail
• Easy Trail Network
• Jasper Trail Alliance

Bighorn Alley Trail, Jasper NP
Public and Stakeholder Engagement Tools
Why is engaging so important?

• To build support for the plan/project.
• To improve the plan/project (e.g. more creative and effective solutions, meet the needs of the users).
Why is engaging so important?

• To integrate knowledge from different perspectives and build capacity (e.g. users knowledge vs. decision-makers knowledge).
• To build relationships and trust in organizations.
Engagement Fundamentals

- There is a decision to be made (i.e. engagement is not a check box).
- The public has the opportunities to influence decisions.
- The public knows how their input will be used (e.g. different level of engagement with different commitments).
- People interact differently. It is important to offer different ways to provide input.
- People are busy! It is important to provide some opportunities that fit their schedule.

Need to plan for engagement
Planning for Engagement

A good engagement plan should include:

• **Why** we engage
• **Who** should be engaged
• **How** they would be engaged, **How** the input is going to be used, and **How** we will report back
• **When** they would be engaged
• **What** activities they are going to participate in
Engagement Process

Key period of time we are engaging

**Stages**

1. **Foundation**
   - Purpose: Foster an understanding among stakeholders/partners of the planning context and analysis, gather input on trail values, issues and opportunities, and develop collaboratively the foundation of the Trail Concept Plan.
   - Potential Activities: Workshops, surveys, online mapping tool, sounding boards, site visits (walkabouts), open houses, etc.
   - Tasks: Present planning context, present, validate, and complete analysis, develop and confirm draft vision statement, develop draft goals and objectives, develop preliminary trail concepts ('Big Moves' brainstorming mapping exercise).

2. **Draft Concept Plan**
   - Purpose: Present draft Trail Concept Plan to stakeholders/partners, gather feedback, and evaluate the draft concept options.
   - Potential Activities: Workshops, surveys, open houses, etc.
   - Tasks: Evaluate draft concept or options, identify preferred concept, identify priorities.

3. **Final Concept/Implementation Plan**
   - Purpose: Present and validate the Trail Concept Plan and Implementation Plan with stakeholders/partners.
   - Potential Activities: Meetings, online presentation, open houses, etc.
   - Tasks: Present Trail Concept Plan, present Trail Implementation Plan.

**Input Usage**

- Stakeholders/partners input inform the development of Phase 2, 3 and 4.
- Stakeholders/partners input is used to evaluate options and refine the draft Trail Concept Plan during Phase 5 into a final plan.
- Stakeholders/partners input is used to validate the final Trail Concept Plan and Implementation Plan and minor changes are made if required.
Engagement

Public engagement:
• International Association for Public Participation (IAP2)

Facilitation:
• Inter-Connex Consulting
• Ten Directions
Process Facilitation

• Basic facilitation skills, methods and group behavior.

• 3 breakout/process facilitation exercises
Groups need more than expertise, resources and commitment in order to be effective. Groups also need a structured method of thinking (process) and skills in group management (facilitation) to enable a group to explore and understand its own needs and how best to address them.
Facilitator’ Role is to…

... lead the discussion in such a way as to “facilitate” the group’s ability to meet its objective.

... not participate by contributing to the content/outcome.

... monitor the session, the keep the discussion focused on the topic and channel the energy and behavior.

... draw out the maximum information and to record the output
Facilitation basics

1. Organize physical setting
2. Identify task
3. Define roles
4. Choose the process
5. Plan visibly
6. Set depth of work
7. Get energy up fast
8. Check in
9. Close
10. Write everything down

“If you don’t write it down, it didn’t happen”
Structured thinking approaches relevant to particular tasks.

Lots of process to choose from:
• Issue Analysis
• Problem Analysis
• Action Planning
• ... and more

We are going to work through 3 processes today:
• Vision Creation
• Creating Goals and Objectives
• Setting Priorities
Breakout Sessions
Elk Island National Park
Information for Trail Planning Exercise

Trailhead Canada Pre-Conference Workshop, November 21, 2017
Disclaimer!

The information provided is for the purpose of the exercise only.
Where is Elk Island NP?
Context

• Elk Island is a short 30 minute drive from Edmonton: Population 1.3 million.

• Edmonton is among the largest Census Metropolitan Areas in Canada.

• Elk Island’s bison conservation story has national and international significance.

• Edmonton Tourism and others are actively marketing the bison story.
Context

- Consistent and significant growth in visitation – rate of growth now increasing.
- + 500,000 visitors in 2017.
- Currently 35% of visitation is in winter.
## Target Market (Task 1.5)

<table>
<thead>
<tr>
<th>PRIZM</th>
<th>Tend to enjoy:</th>
<th>Tend to avoid:</th>
<th>Who are they?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Singles Scene</strong></td>
<td>Trail type: 1 and 2&lt;br&gt;Trail rating: EASY and MODERATE&lt;br&gt;Trail activities: in-line skating and bicycle riding&lt;br&gt;Trail characteristics: • Urban trails • Paved trails • Interpretive trails related to cultural history and playful experience trails • Short easy trails connecting to beaches and day use areas</td>
<td>Trail type: 3 and 4&lt;br&gt;Trail rating: DIFFICULT and ROUTE&lt;br&gt;Trail activities: mountain biking and snowmobiling&lt;br&gt;Trail characteristics: • Extreme and challenging trails (e.g. long distance, backcountry trails) • Remote trails</td>
<td>• Young, ethnically diverse singles and couples&lt;br&gt;• Seek a sense of purpose, where spirituality, global consciousness and the quest of who they are play important roles in their life&lt;br&gt;• Not outdoorsy and do not own recreational equipment&lt;br&gt;• Heavy users of technology</td>
</tr>
<tr>
<td><strong>Young Metro</strong></td>
<td>Trail type: 1 and 2&lt;br&gt;Trail rating: EASY&lt;br&gt;Trails activities: jogging and mountain biking&lt;br&gt;Trail characteristics: • Family-friendly trails • Urban trails • Short distance trails in the front-country • Short easy trails connecting to beaches and day use areas</td>
<td>Trail type: 3 and 4&lt;br&gt;Trail rating: MODERATE, DIFFICULT, and ROUTE&lt;br&gt;Trails activities: bird watching, cross-country skiing, and snowmobiling&lt;br&gt;Trail characteristics: • Trails with a focus on bird-watching or wildlife viewing • Hiking trails (they might hike if it is a fun family activity, but otherwise not really interested in hiking – they would rather go biking) • Backcountry trails and high risk or extreme trails • Remote trails</td>
<td>• Younger, ethnically diverse group of couples and first and second generation immigrant families with young children&lt;br&gt;• Interested in getting away from the stress of everyday life and building families memories&lt;br&gt;• Look for ways to relax and de-stress but at the same time have activities that will keep the kids entertained&lt;br&gt;• As for the outdoors, nature is not a place for them, preferring sightseeing and packaged nature&lt;br&gt;• Users of technology</td>
</tr>
</tbody>
</table>
# Target Market

(Task 1.5)

<table>
<thead>
<tr>
<th>PRIZM</th>
<th>Tend to enjoy:</th>
<th>Tend to avoid:</th>
<th>Who are they?</th>
</tr>
</thead>
</table>
| Diverse Families | **Trail type:** 1 and 2  
**Trail rating:** EASY  
**Trails activities:** prefer indoor activities like fitness exercises over outdoor activities  
**Trail characteristics:**  
• Family-friendly trails  
• Urban trails  
• Short easy trails connecting to beaches and day use areas  
• Trail-related infrastructure in the front-country that would provide a challenge or emotional high (e.g. viewing tower, platform) | **Trail type:** 2, 3, and 4  
**Trail rating:** MODERATE, DIFFICULT, and ROUTE  
**Trails activities:** prefer indoor activities like fitness exercises over outdoor activities  
**Trail characteristics:**  
• Extreme and challenging trails (e.g. long distance, backcountry trails)  
• Trails that involve a high level of risk  
• Remote trails | • Mainly younger and middle-aged couples and families who settled in Canada before 2001, mostly in urban and suburban neighbourhoods  
• Like being challenged once in a while by activities associated with an emotional high  
• Mobile devices intersect with many aspects of their lives |
## Trail Classification (Task 2.1)

<table>
<thead>
<tr>
<th>Type</th>
<th>Amount</th>
<th>%</th>
<th>Graphic</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1</td>
<td>6.3 km</td>
<td>7%</td>
<td>Trail Amount Per Type</td>
<td>2 trails</td>
<td>18%</td>
</tr>
<tr>
<td>Type 2</td>
<td>68.6 km</td>
<td>75%</td>
<td>8 trails</td>
<td>72%</td>
<td></td>
</tr>
<tr>
<td>Type 3</td>
<td>16.0 km</td>
<td>18%</td>
<td>1 trail</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Type 4</td>
<td>0.0 km</td>
<td>0%</td>
<td>0 trails</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>90.9 km</td>
<td>100%</td>
<td>11 trails</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rating</th>
<th>Amount</th>
<th>%</th>
<th>Graphic</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy</td>
<td>9.3 km</td>
<td>10%</td>
<td>Trail Amount Per Rating</td>
<td>3 trails</td>
<td>27%</td>
</tr>
<tr>
<td>Moderate</td>
<td>65.6 km</td>
<td>72%</td>
<td>7 trails</td>
<td>64%</td>
<td></td>
</tr>
<tr>
<td>Difficult</td>
<td>16.0 km</td>
<td>18%</td>
<td>1 trail</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Route</td>
<td>0.0 km</td>
<td>0%</td>
<td>0 trails</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>90.9 km</td>
<td>100%</td>
<td>11 trails</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

- **Graphic Count**:
  - Type 1: 3 trails
  - Type 2: 1 trail
  - Type 3: 1 trail
  - Type 4: 0 trails

- **Graphic**:
  - Type 1: 3
  - Type 2: 1
  - Type 3: 2

- **Route**:
  - Easy: 3
  - Moderate: 7
  - Difficult: 1

- **Graphic**:
  - Easy: Blue
  - Moderate: Green
  - Difficult: Yellow
Trail Users
(Task 2.2)

- Hikers
- Mountain bikers
- Nature walkers
- Road bikers
- Horseback riders
- Off-road strollers
- Fat bikers
- Cross-country skiers
- Winter walkers
- Snowshoers
Site Issues and Constraints  (Task 2.3)

Trails
- Lack of diversity of trail types. The majority of trails are of type 2. Few options for type 3 (single track) and type 1 (developed).
- Lack of trail loops or stacked loops.
- Lack of easy trail loops from day use areas and campgrounds.
- Hard to access trails from Astotin Lake Rec Area (major day use area).
- Lack of infrastructure for accommodate horseback riders.

Visitor Safety
- Wayfinding deficiencies and bison interactions with visitors have been identified as a major contributor to search and rescue responses.

Natural Resources
- Receding water level trend reduces viewing opportunities from existing trails.
Site Opportunities (Task 2.4)

- Adjacent trail system in the Cooking Lake-Blackfoot Provincial Recreation Area (south of Elk Island NP).
- Beaver Hill Dark Sky Preserve (e.g. walks, viewing platforms, interpretation).
- Bison viewing opportunities (large herds) and other wildlife opportunities.
- Multiple lakes and water viewing opportunities (but water is receding).
Vision

• The purpose of establishing a vision of the future is to get a sense of where the organization wishes to be, and how to get there.
• Establish a timeframe most appropriate (5, 10, 20 years)
• Describe the future environment:
  1. What types of trails do we offer?
  2. Who are our users? What do they need?
  3. What type of activities do we cater too?
  4. What type of technology do we use?
Vision Exercise

Situation:
A writer is coming to your site to write an article in a travel magazine. What would you show to the writer that showcases the essence of the place?

• Create a title of the article
• Write down words/short sentences describing the essence of the place (content of the article) and the trail system
• Create a quote that capture the spirit of the article
• Draw a picture for the article
"As I was restless in bed,"

3054 we were looking the Prairie landscape
My kids were back at the resort
Town of Wasagaming Enjoying
Beach/Bike park/ Play ground... 
play in their grand parents.

[Note: Handwritten text and a diagram of a park area]
Back in time to.

Swag up the changing seasons and faces at the
landscapes of the Bar U.

- Towers of the trade
- Spraying rangeland
- Picturesque mountain views
- Livestock
- Farming

Sustainable

- Ranching
- Herd management
- Storytellers, cowboys.
- Roping
- Hearing of ranching history
- Self-regenerating cow country
- Step back in time

I found a peaceful
moment atop the polo
field, imagining the men
working in the corral and gate
and the Stony camp
across the way.
Vision Exercise

Vision Statement:
Refine the content of the article into a vision statement for the long-term desire state of the trail system.

Riding Mountain National Park

Bar U Ranch National Historic Site
Case Study: Fundy National Park
From trail consideration to trail destination.
Experience the world’s highest tides – not to mention pristine forests, deluxe campgrounds and a taste of Atlantic Canada culture – at Fundy National Park. Paddle in a kayak as the waters rise up to 12 metres or more. Walk the otherworldly sea floor at low tide. Or venture inland where trails lead to waterfalls deep in Acadian forests. With unique camping options – including yurts – and even regular music performances, Fundy is a Maritime treasure.
“Fundy National Park’s trail system will be recognized as a leading destination in New Brunswick offering a variety of visitors with numerous opportunities for enjoyable, accessible and educational trail experiences to discover the park’s highlands, forests, ocean views and waterfalls. The trail system will be a regional hub connecting communities, trails and trail users.”
Goals, Objectives and Priorities

- Fundy National Park- Trail Visioning Results
- Fundy National Park- Proposed TransCanada Trail

Legend:
- Trail Vision Ideas
- TransCanada Trail Priority
- Trail Vision Ideas
- Trail

Improvements to Fundy Trail System:
1. Moosehorn to Forks
2. Link to Village from Upper Salmon Trail
3. Link to from Goose River to Fundy Footpath
Success  Black Horse Trail
Success more trails
Success  more trails
Success more trails
Breakout Sessions
Goals and Objectives

Goals
• establish where you intend to go and tell you when you get there. They help improve your overall effectiveness.

Objectives
• are the specific steps you need to take in order to reach each of your goals. They specify what you must do — and when.
Goals and Objectives

<table>
<thead>
<tr>
<th>GOALS</th>
<th>OBJECTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>tell you where you want to go</td>
<td>tell you exactly how to get there</td>
</tr>
<tr>
<td>increase your effectiveness</td>
<td>back your goals and make you more efficient</td>
</tr>
<tr>
<td>typically described in words</td>
<td>often come with numbers and specific dates</td>
</tr>
</tbody>
</table>
Goals and Objectives

Step 1: Individually, write down as many opportunities as possible to realize the vision.
Step 2: Group the opportunity by theme
Step 3: Find a title for each group
Breakout Sessions
Priorities and Phases

The fact or condition of being regarded or treated as more important

• a thing that is regarded as more important than another

• the right to take precedence or to proceed before others
“Big Moves” Mapping Exercise

Think big... Visually represent the future trail system:

• What are the signature trails?
• What are the potential new trails?
• What are the must keep trails?
• What are the cool things we do on trails? Or go see?
• What are the messages?
• What are the potential trail-related infrastructures?
5 take home
1

Don’t settle for boring cake!
If you didn’t write it down it didn’t happen
3

Start the discussion with your values rather than with a pre-conceived project. Find the best solutions collaboratively.
Partnerships are beneficial to land managers, partners, visitors and TRAILS.
5
We contribute to building tomorrow’s trails community.
Wrap-Up

• Questions & Answers
• Comments?
Books & References
Thank you!