

Insights on Arrival

An Intercept Survey for the Digital Age



Émilie Comeau-Sinclair

Manager of Content and Special Projects
Tourism New Brunswick
emilie.comeau-sinclair@gnb.ca

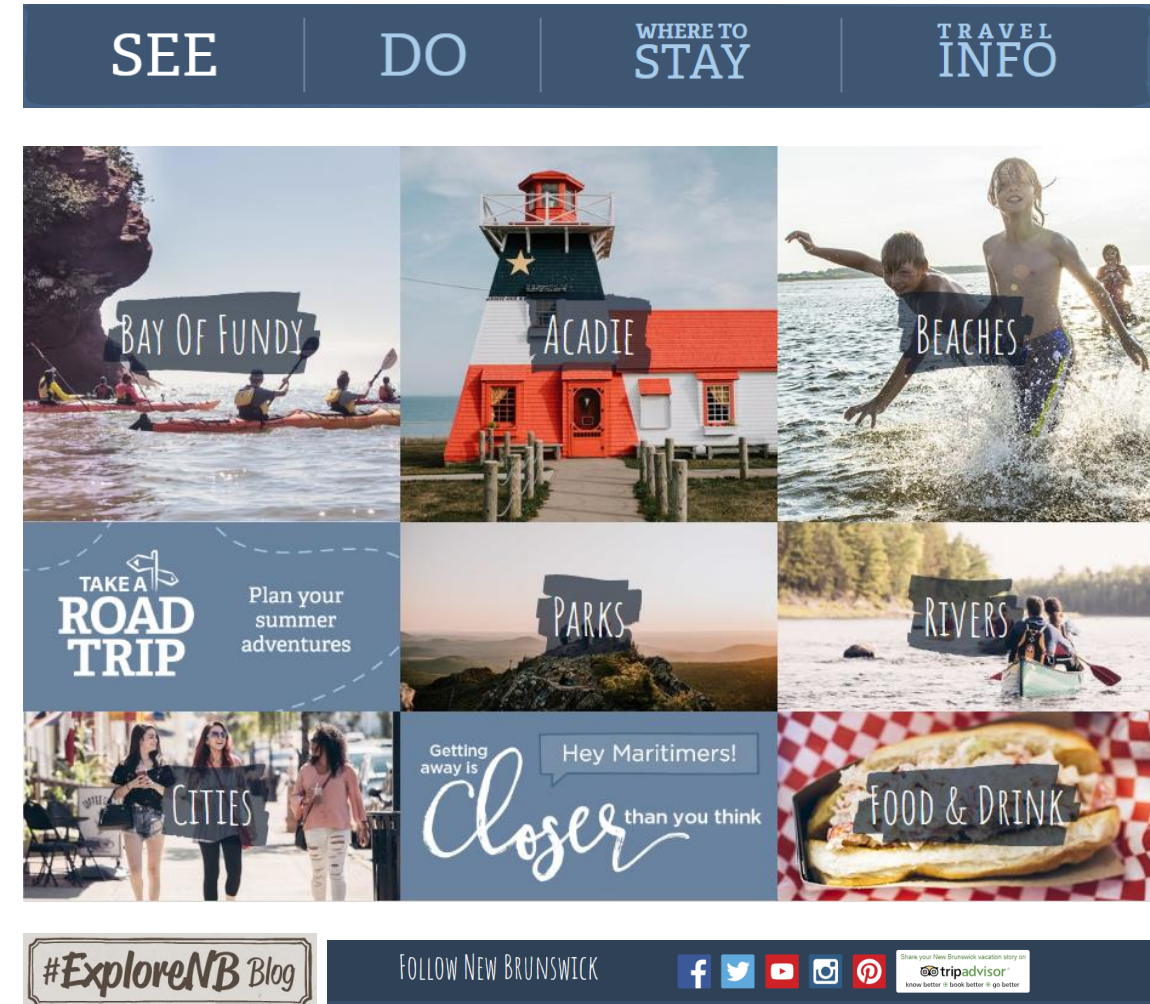
Stéphanie Robichaud

Senior Business and Data Analyst
Tourism New Brunswick
stephanie.robichaud@gnb.ca

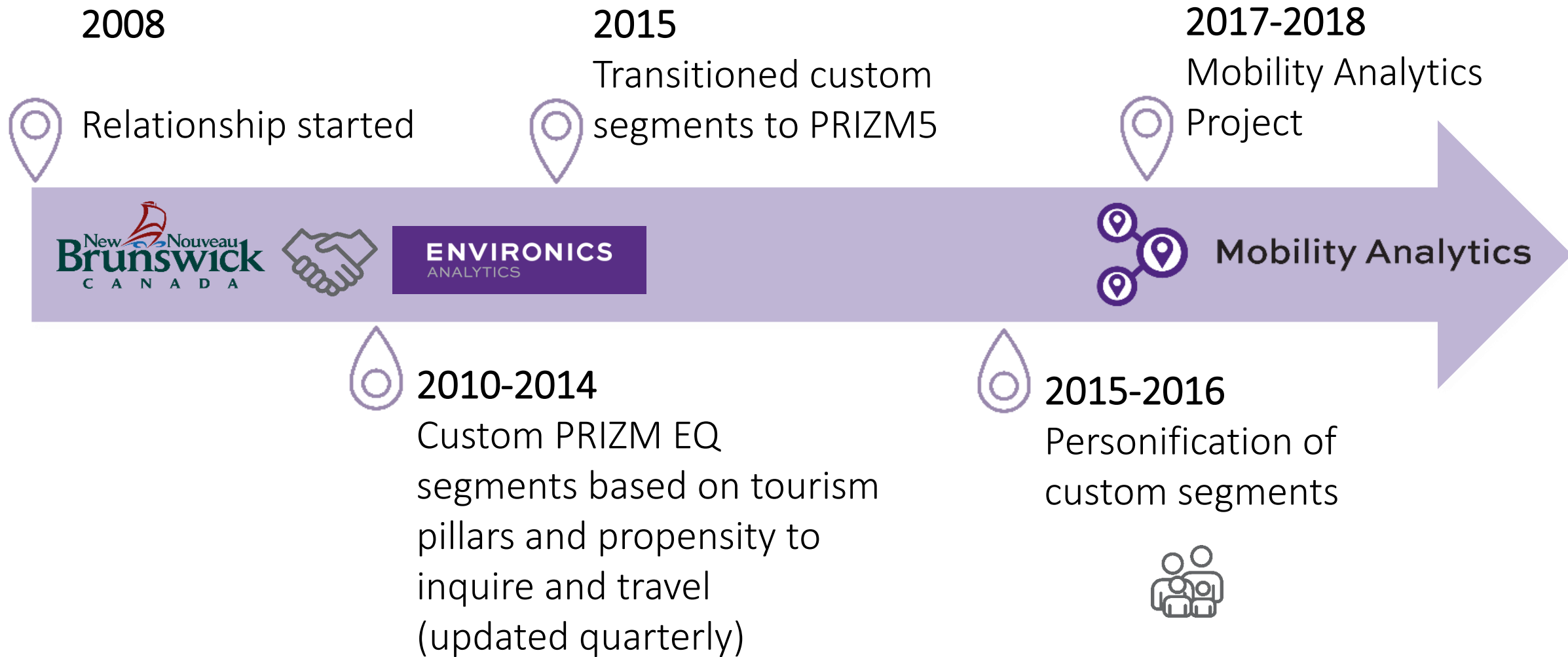


Introduction to Tourism New Brunswick

- Government-run organization
- Operates the province's official travel portal
- Partners with cities and attractions to reach target audiences
- Has been using PRIZM5 aligned to national EQ segments to plan marketing campaigns for 5+ years



The Journey: Major Milestones

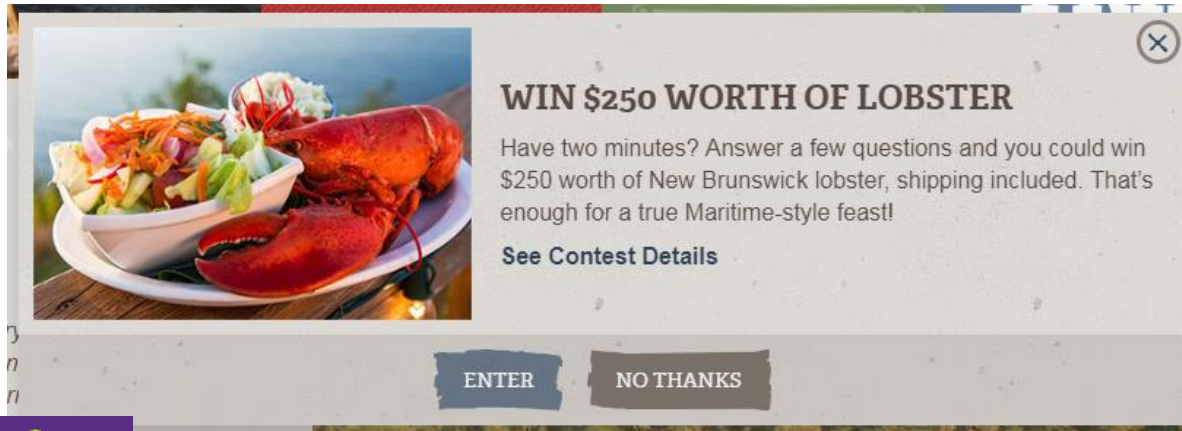
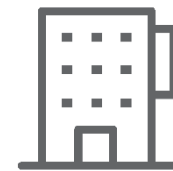


Postal Code Data Can Be Limited in the Tourism Sector

Website Surveys  



Attractions/Accommodation/Parks Attendance (*where available*)



Challenges

- Data Availability
 - Visitor data only collected in select areas
 - There is no single point of entry to monitor
 - Exit surveys across such a vast area would be too time consuming and expensive
- Is New Brunswick a “drive-through” province?

How Can We Fill in the Data Gaps to Get a Full Picture of Who is Visiting?



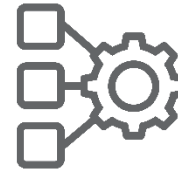
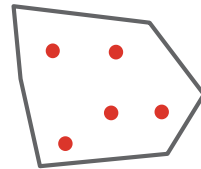
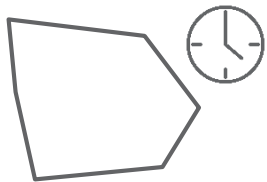
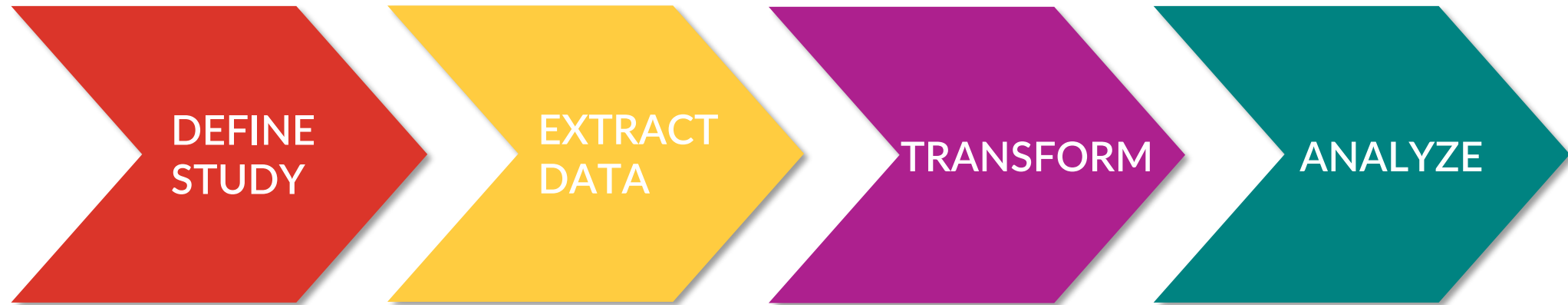
The Move to Mobility Analytics



- Anonymized, permission-based data collected from location-enabled mobile devices
- Can identify devices observed within a defined area
- Evolving sources and best practices
 - Billions of data points are generated daily

Can mobility analytics be successfully scaled-up to a project of this size?

The Mobility Analytics Process



The Art of Drawing Geofences

5 Tourism Regions

16 Entry/Exit Points
(by road, water, air)

7 Census Metropolitan Areas

8 Major Highway Segments

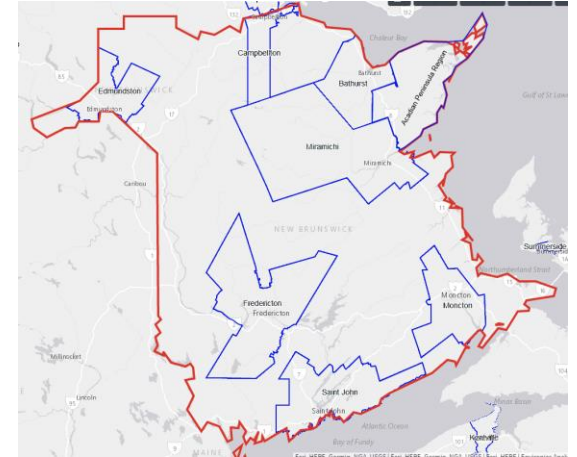
14 Scenic Drive Segments

2 National and **8** Provincial Parks

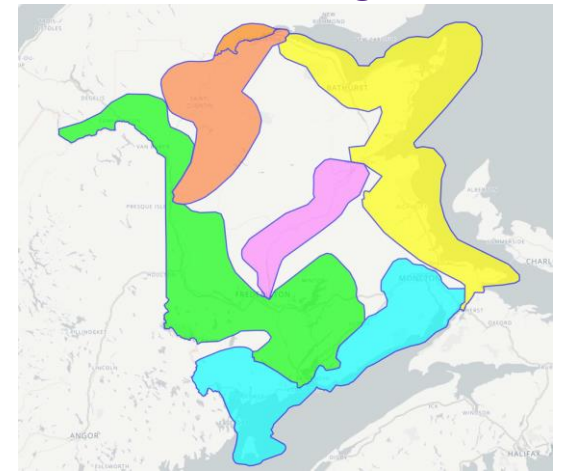
25 Town Centres

6 Other Points of Interest
(e.g. Hopewell Rocks)

Census Metropolitan Areas

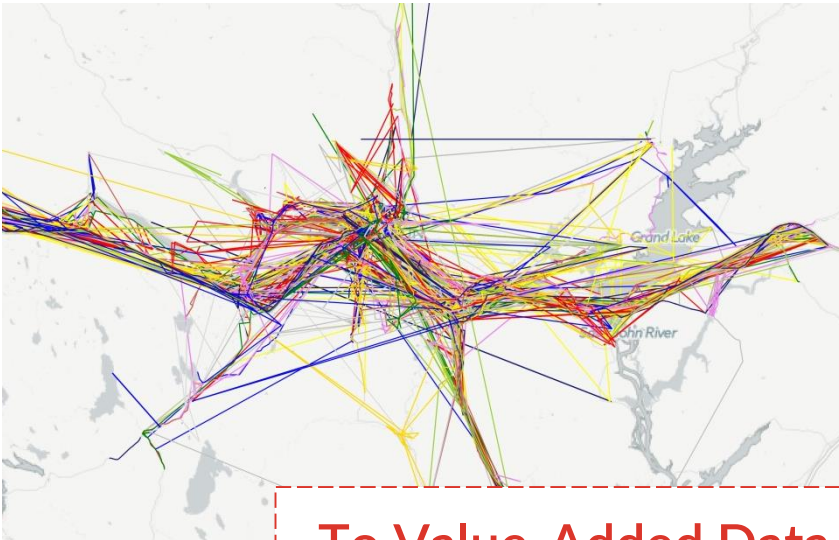


Tourism Regions



Extraction, Transformation & Enhancement

Bringing order to the chaos to drive real insights...



From Raw Data

Polygon ID	Device ID	Lat of Observation Point	Lon of Observation Point	Time before appearance in polygon	Unix Timestamp of Observation Point	Local Date	Local Time of Day	Local Day of Week	Local Timezone of Observation Point
New Brunswick	b0be92703530dbb0	40.808601	-74.186897	1116391	1455771445	2016-02-17	23:57:25	Wed	America/New_York
New Brunswick	b4cb99ea5d695742	46.43174	-63.31839	677017	1473117150	2016-09-05	20:12:30	Mon	America/Halifax
New Brunswick	02e1bd39590d5be	30.203222	-81.750458	1165236	1486697342	2017-02-09	22:29:02	Thu	America/New_York
New Brunswick	1eb735f09434da61f	43.60555	-79.73148	672694	1495682991	2017-05-24	23:29:51	Wed	America/Toronto
New Brunswick	31874b9df31d7f083	45.408735	-75.732859	699012	1500515866	2017-07-19	21:57:46	Wed	America/Toronto
New Brunswick	58f2fc83edf7ddcdf	46.405879	-66.254768	0	1502585506	2017-08-12	21:51:46	Sat	America/Moncton
New Brunswick	dfd5f6dd53aea3362	42.960338	-79.028928	1118431					
New Brunswick	fb132395b45a46ba	45.421178	-73.608132	-772445					
New Brunswick	d3f464519fb360296	43.781391	-79.233124	1063039					
New Brunswick	7fc5c5d7ab13abb2	32.951294	-96.715401	-956940					

Unstructured: ~185 million Records with 10 fields

Each row represents a **device observation**; a device will likely be seen more than once.

To Value-Added Data

Structured Trip-Level: 241,466 Records with ~250 fields

Device ID	Trip ID	Likely Home Country	Likely Home Postal Code	Attraction Count	Visited CMA: Fredericton	Visited POI: Hopewell Rocks	Visited POI: Fundy National Park	Visited Scenic Drive: Fundy Coastal
1	1	CA	B3H1B8	2	0	1	0	1
2	1	CA	J2M2A6	3	0	0		
2	2	CA	J2M2A6	2	0	1		
3	1	CA	H1Y0A1	2	1	0		
4	1	CA	N3R6A8	5	1	0		
5	1	US	02852-5801	2	0	1		
5	1	US	02852-5801	3	1	0	0	0

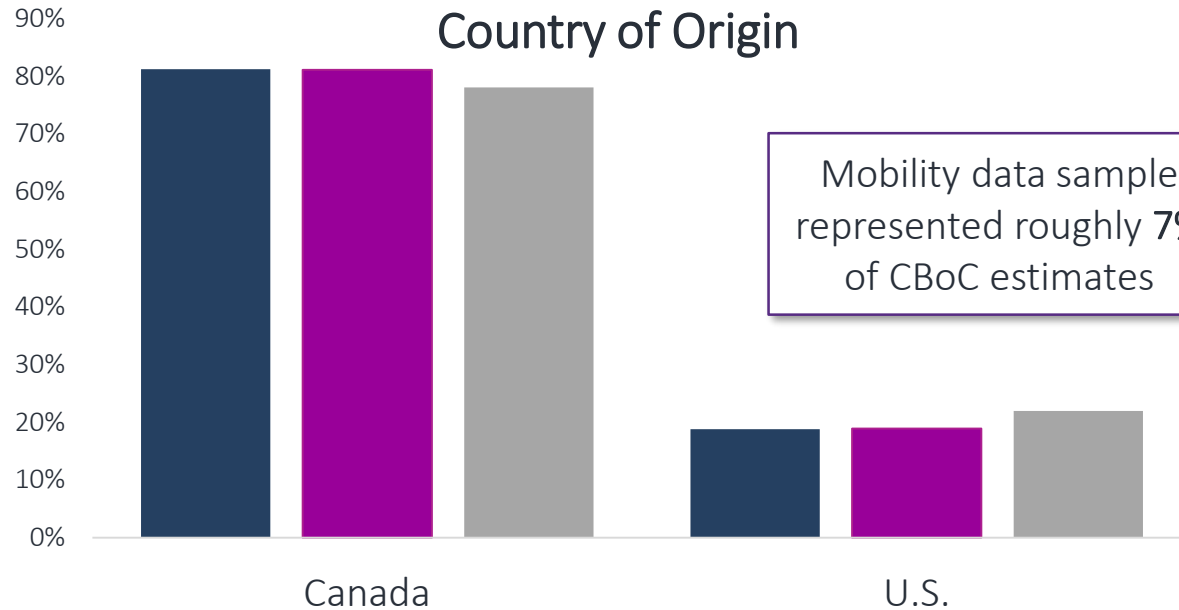
Each row represents a **unique trip** for each device; geofence observation details appended.

Mobility Data Have Good Representation



The Conference Board
of Canada

National Distribution of Observations by Country of Origin

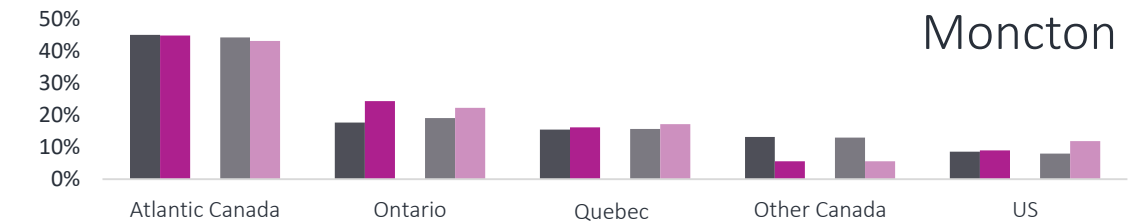
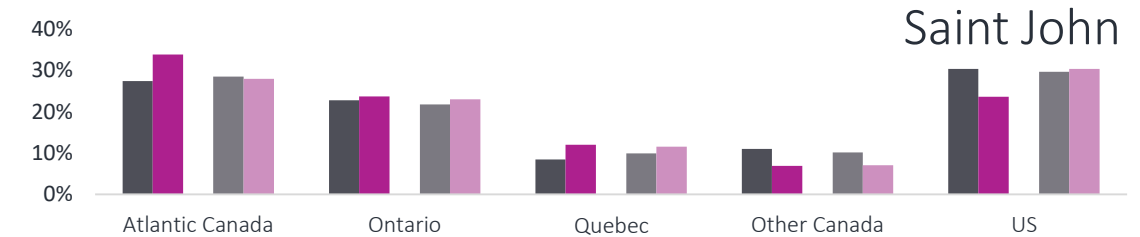
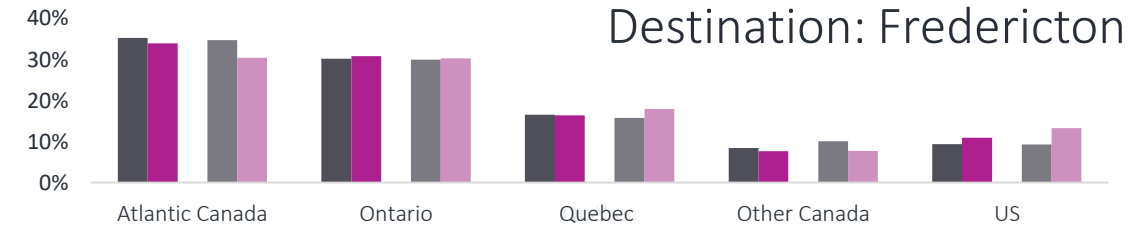


Mobility data sample
represented roughly **7%**
of CBoC estimates

■ Conference Board Nov 2017 ■ Mobility Data
■ Conference Board June 2018



Provincial Distribution of Observations by Destination and Province of Origin



■ Rooms Sold 2016 ■ Mobile Data
■ Rooms Sold 2017 ■ Mobile Data

We Can Analyze Visitor Types



Through the Lens of Custom Segments



We can identify variations of visitors for each geofence

Profile	Total Households	All Mobility Visitors		Visitors on Scenic Drives		Visitors on Highways		Visitors to River Valley Scenic Drive		Visitors to Fundy Coastal Drive	
		Penetration		Penetration		Penetration		Penetration		Penetration	
Custom Segment	% Comp	% Pen	Index	% Pen	Index	% Pen	Index	% Pen	Index	% Pen	Index
Total	100.00	0.59	100	16.14	100	8.42	100	4.25	100	7.16	100
Authentic Experiencers - Core											
	8.34	0.69	117	15.26	95	7.90	94	3.83	90	7.69	107
Authentic Experiencers - Tactical											
	7.53	0.42	71	14.72	91	7.58	90	3.81	90	6.57	92
Cultural Explorers - Core											
	4.53	0.68	116	14.72	91	7.58	90	3.81	90	6.57	92
Cultural Explorers - Tactical											
	4.46	0.7	131	14.72	91	7.58	90	3.81	90	6.57	92
No Hassle Travellers - Core											
	8.95	0.66	113	14.72	91	7.58	90	3.81	90	6.57	92
No Hassle Travellers - Tactical											
	4.41	1.14	193	14.98	93	8.02	95	3.02	71	7.21	101

Tactical No Hassle Travellers are **93% more likely** to visit than the average Canadian household

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PRIZM5

Index Legend Under 80 110 to 119 120 to 149 Over 150



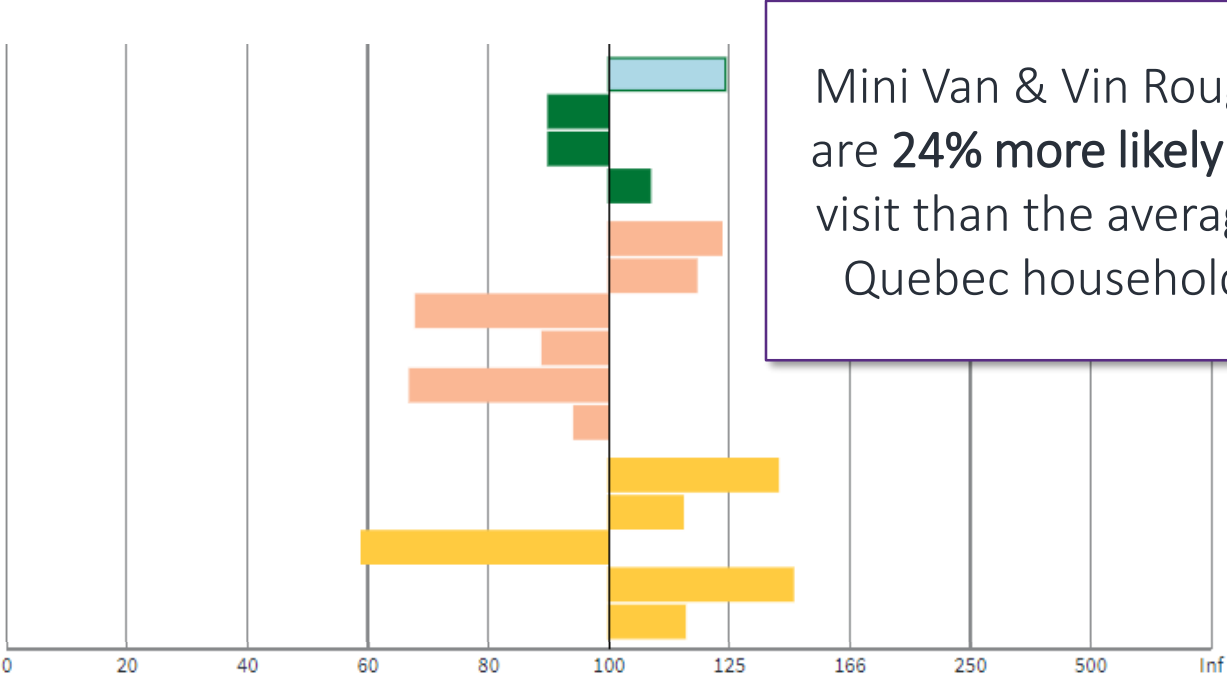
Are we
attracting who
we thought?


Are We Attracting Who We Thought?



Mini Van & Vin Rouge: previous marketing campaigns have focused on this PRIZM5 segment in Quebec

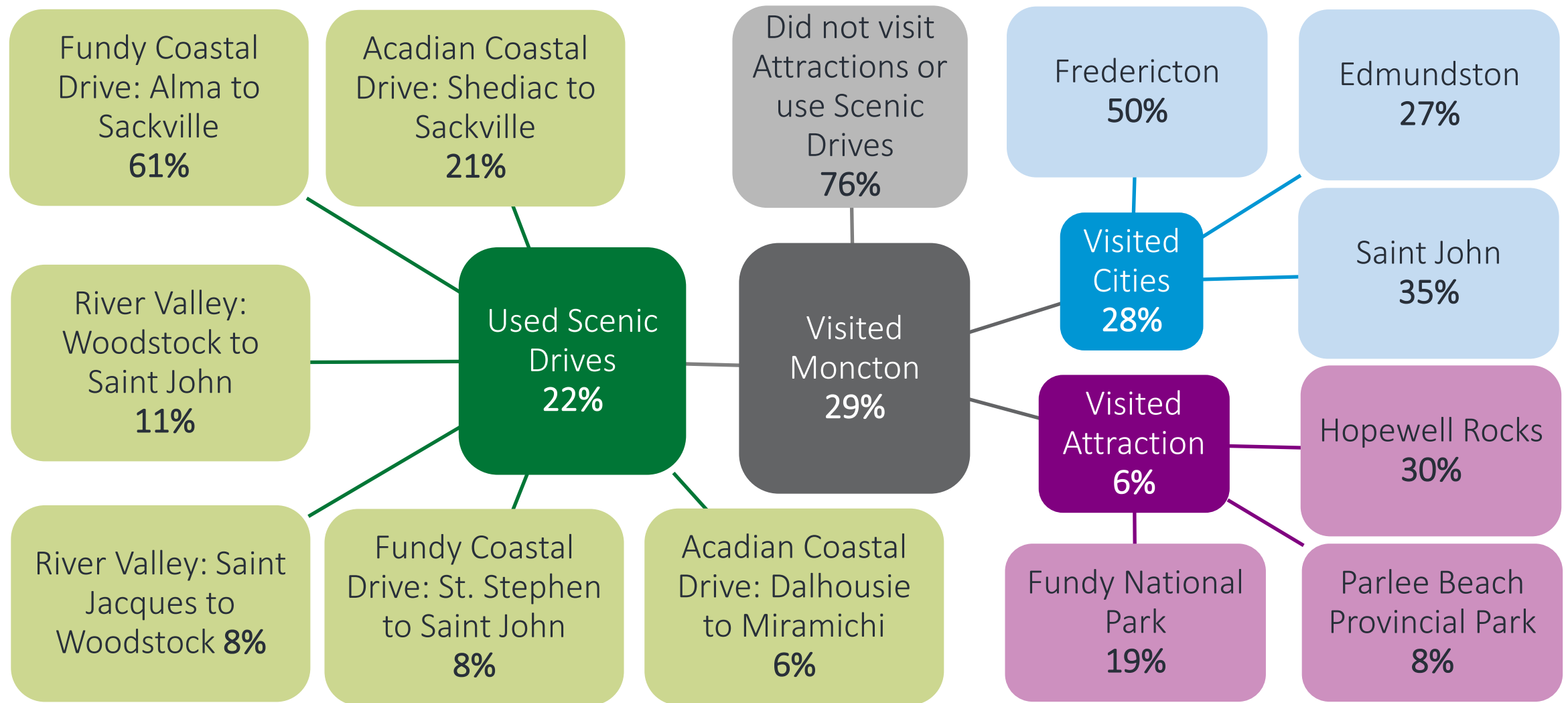
SG LG Code Name				% Pen Index	
E3	F2	32	Mini Van & Vin Rouge	0.77	124
				0.56	90
				0.56	90
Gentle No Hassle Travellers - Core				0.66	107
				0.76	123
				0.72	117
				0.42	68
				0.55	89
				0.42	67
Gentle No Hassle Travellers - Tactical				0.58	94
				0.86	139
				0.70	114
				0.37	59
				0.89	144
Gentle Authentic Experiencers				0.71	114



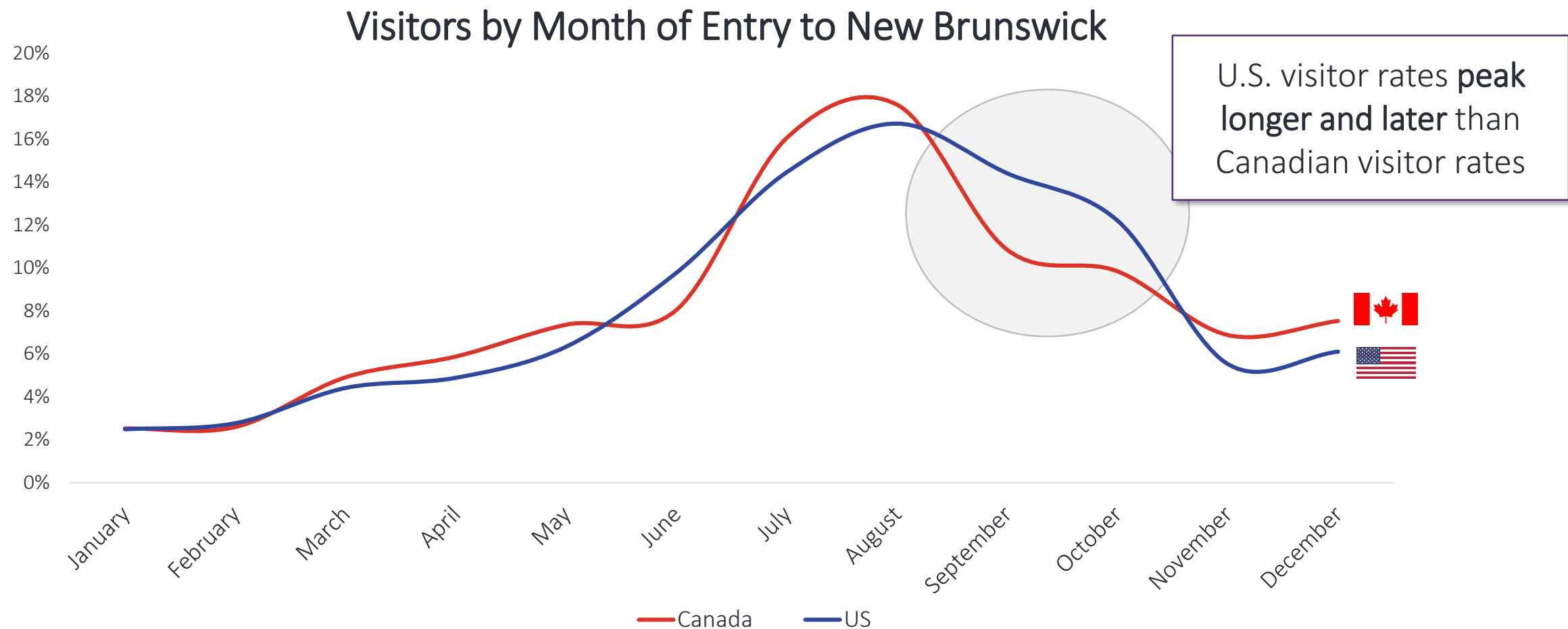


Can we spot
visitor travel
patterns?

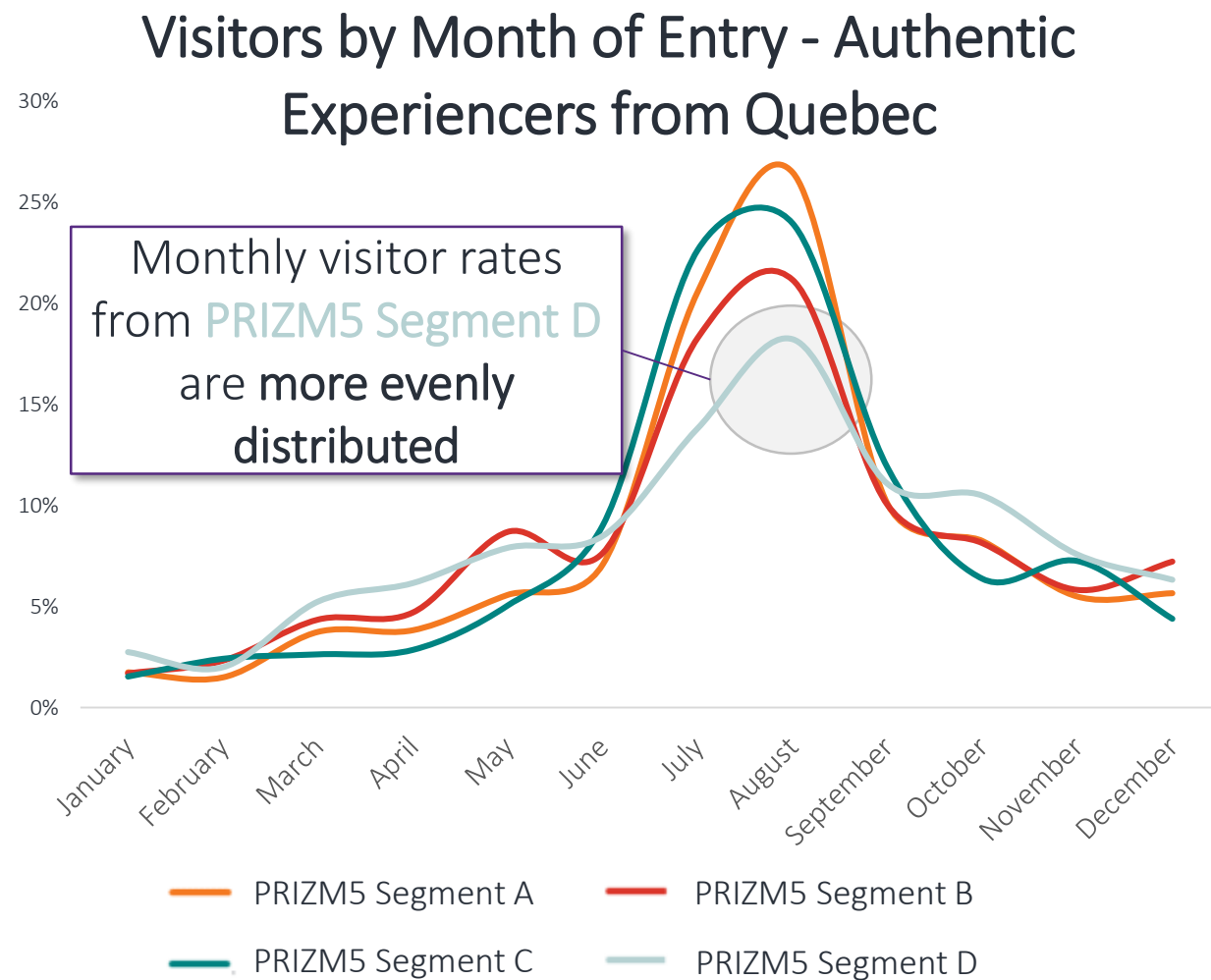
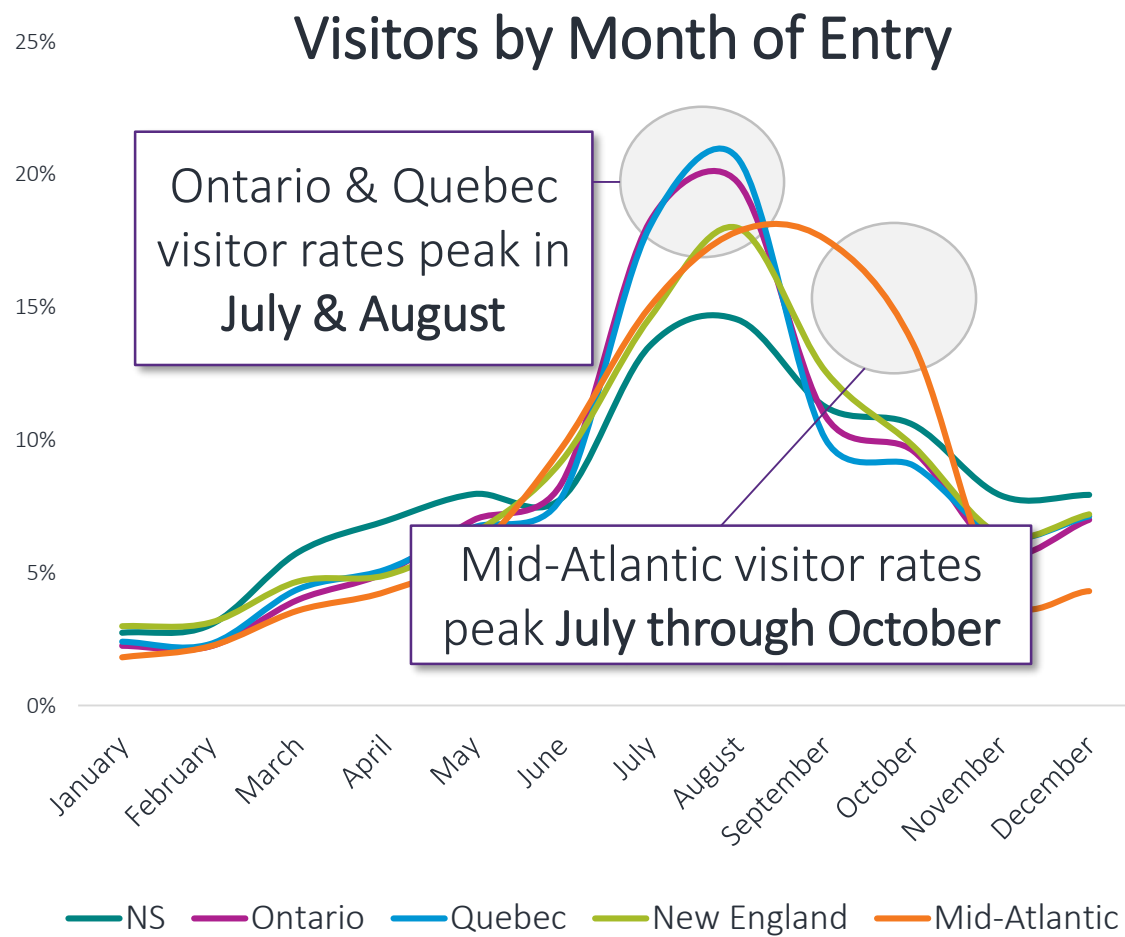
Spotting Visitor Travel Patterns



Capturing Seasonality of Visitors

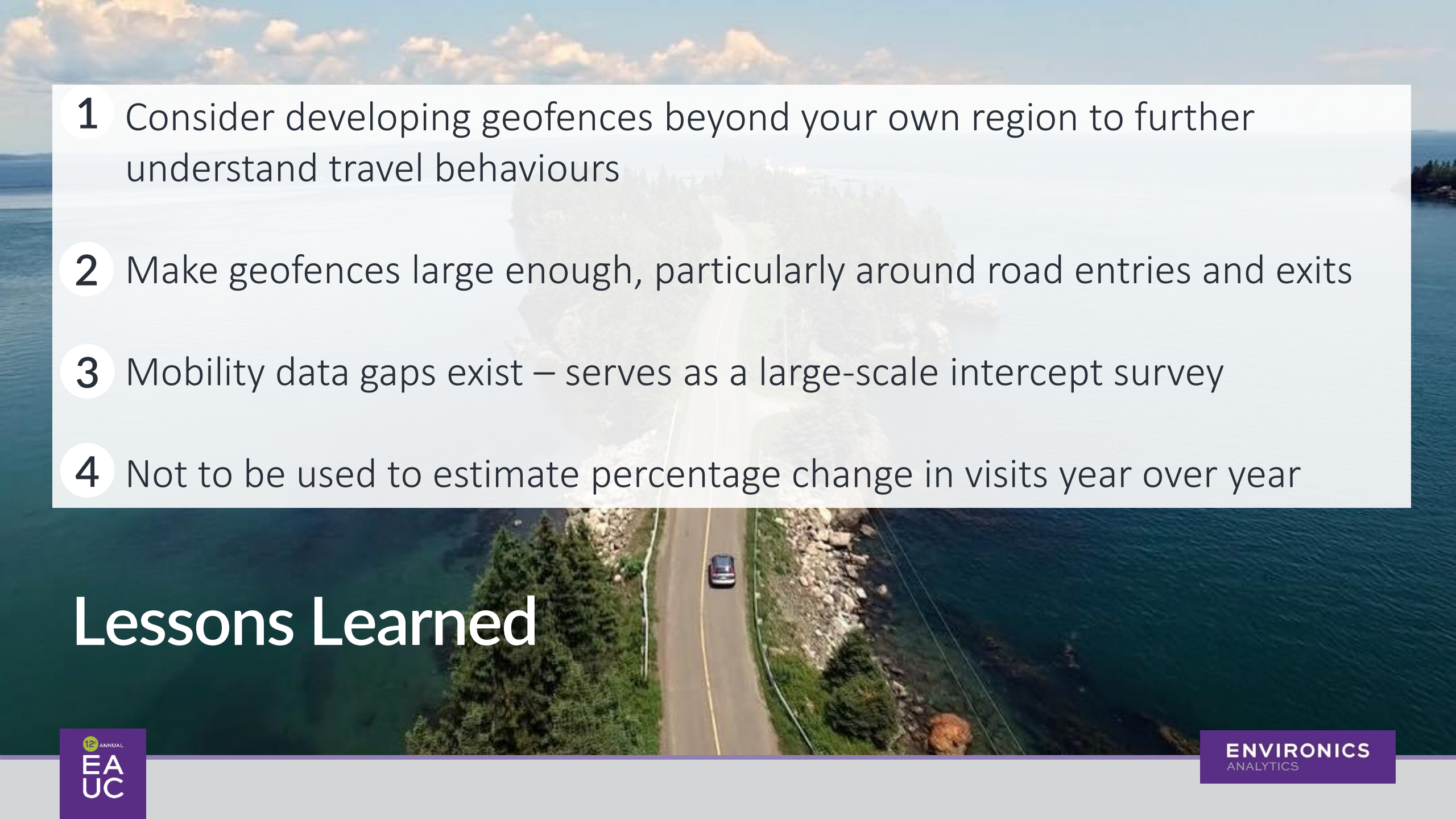


Capturing Seasonality of Visitors





Lessons Learned

- 
- An aerial photograph of a two-lane asphalt road that curves along the edge of a deep blue lake. A dark-colored car is visible on the road, moving away from the viewer. The road is bordered by green trees and shrubs on one side and a rocky shoreline on the other. The sky above is light blue with scattered white clouds.
- 1 Consider developing geofences beyond your own region to further understand travel behaviours
 - 2 Make geofences large enough, particularly around road entries and exits
 - 3 Mobility data gaps exist – serves as a large-scale intercept survey
 - 4 Not to be used to estimate percentage change in visits year over year

Lessons Learned

Looking Ahead...



Looking Ahead...

- Planning stages for 2019
- **The goal:** use these data within Tourism New Brunswick marketing efforts to be responsive to the needs of our cities and partners
 - Build partnerships
 - Digital ad campaigns

Takeaways

Takeaways

1

Mobility Analytics can provide insights for areas where there is limited or no transactional data

2

Mobility data can be linked to segmentation systems

3

The organization is able to see visitor travel patterns and measure the effects of seasonality of tourism in the province

Questions?



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