TELUS Insights

Analytics for the real world

City of Revelstoke

May 2019 – October 2019

Destination Marketing Executive Summary

Prepared for:
The City of Revelstoke

Prepared by:
TELUS Insights

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This study utilizes de-identified and aggregated TELUS mobile subscriber data. In order to protect the privacy of TELUS subscribers, all personal information is removed. Proprietary algorithms were developed to aggregate, calculate and extrapolate impressions to the general population of Canada. These algorithms were also used to derive demographic profiles based on Statistics Canada's 2016 Census and National Household Survey.

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Data and privacy

To protect the privacy of subscribers, several frameworks and measures are in place:

- **All data is de-identified meaning it cannot be traced back to an individual.**

- **All data is aggregated into large data pools ensuring privacy is fully protected at all times.**

- **All data is extrapolated to be representative of the total Canadian population.**

- **All data is stored on secured TELUS assets.**

This study utilizes 153 days of data passively collected by TELUS. Traffic volumes were calculated by using algorithms that calculate the distance and time between different user events as generated by the TELUS network.

Location analytics are possible using this data because specific cell towers have an associated geographic coordinate. By aggregating and de-identifying this data, it is possible to perform geographic and movement analysis, while respecting individual privacy.

Methodology

Definitions

Cellular data was collected passively from the TELUS network between the months of May 2019 and October 2019. This data was then de-identified, and aggregated according to the details laid out in the Data and Privacy section. Once this data set was built, a series of algorithms were run on the data to determine important traits, such as the monthly unique count of visitors, the monthly unique count of trips by length of stay, and daily unique counts for visitors or residents of the Revelstoke Study Areas.

The goal of this study was to provide The City of Revelstoke insights for two contexts: city planning and destination marketing. To do this, TELUS Insights studied, on a monthly basis, the visitor and resident populations of two Study Areas: the Total Area and the City Area, which is within the Total Area.

In order to distinguish visitors from residents, a proprietary Assumed Home Neighbourhood algorithm is used. This algorithm takes into account many factors about the device, over a period of 60 days ending at the completion of the study period. Using this larger trailing data set, a location with a significant amount of time spent is identified and categorized as the assumed home neighbourhood.

For International visitors, the Mobile Country Code (MCC) from the device is used to identify which country the device originated from. This unique code is assigned to a country, and is based on the origin of the SIM card within the device. For this reason, some devices may be misidentified as being from a specific country, even though the owner of the device is from another country. These numbers provide a good representation of who has come from a given place, but are not necessarily capturing 100% of those visiting. For this reason, a market share that takes into consideration the number of observed versus the total number of visits from a given country is applied to the data in order for it to be representative.

The Canadian demographics provided are based on the 2016 Statistic Canada Census. In order to calculate the demographics of Canadian visitors to Revelstoke for a specific month, every visitors assumed home neighbourhood's demographics from the census are summed together, being weighted to the number of visitors coming from the specific neighbourhood. These adjusted values represent the probability of any given visitor having that specific demographic.

Monthly Unique Count
The total number of unique devices observed in a Study Area during a given month. This number is extrapolated to the population.

Study Month
This is the month that was studied. In the case of Monthly Unique Counts, counts would only be considered to the Study Month.

Study Area
A Study Area is a geo-fenced area. A device must have been within a Study Area to be counted.

Canadian Visitors
Canadian cellular devices with assumed home locations outside of the indicated Study Area.

International Visitors
The number of visitors with non-Canadian cellular devices.

Length of Stay
The Length of Stay is how long a visitor stayed in a Study Area for a unique trip. Lengths of stay are grouped by the amount of time spent. The groups are 8-24 hrs, 25-72 hours.

Revelstoke Study Area Defintions

Study Area

A Study Area is a geo-fenced area. A device must have been within a Study Area to be counted. There are two distinct Study Areas.

Total Area

The Total Area is the largest boundary of the study. It extends North to the top of Lake Revelstoke and South to where Highway 23 meets Upper Arrow Lake. The Area includes the entire Mount Revelstoke National Park of Canada. The Eastern edge of the Area includes the Trans Canada Highway and a portion of the Glacier National Park. The Western edge of the Area stops before the Mount Griffin Provincial Park.

City Area

The City Area boundary is based on the CSD or City boundary of Revelstoke.

Legend:
- City Area
- Total Area
- Park or Protected Area
- Water Body
- Highway or Expressway

Map labels: Total Area, City Area, Glacier National Park, Golden, Mount Revelstoke National Park, Mountain Resort, Blanket Creek Provincial Park, Greenbush Lake Protected Area, Salmon Arm, Monashee Provincial Park, Nakusp, Vernon

0 km — 100 km
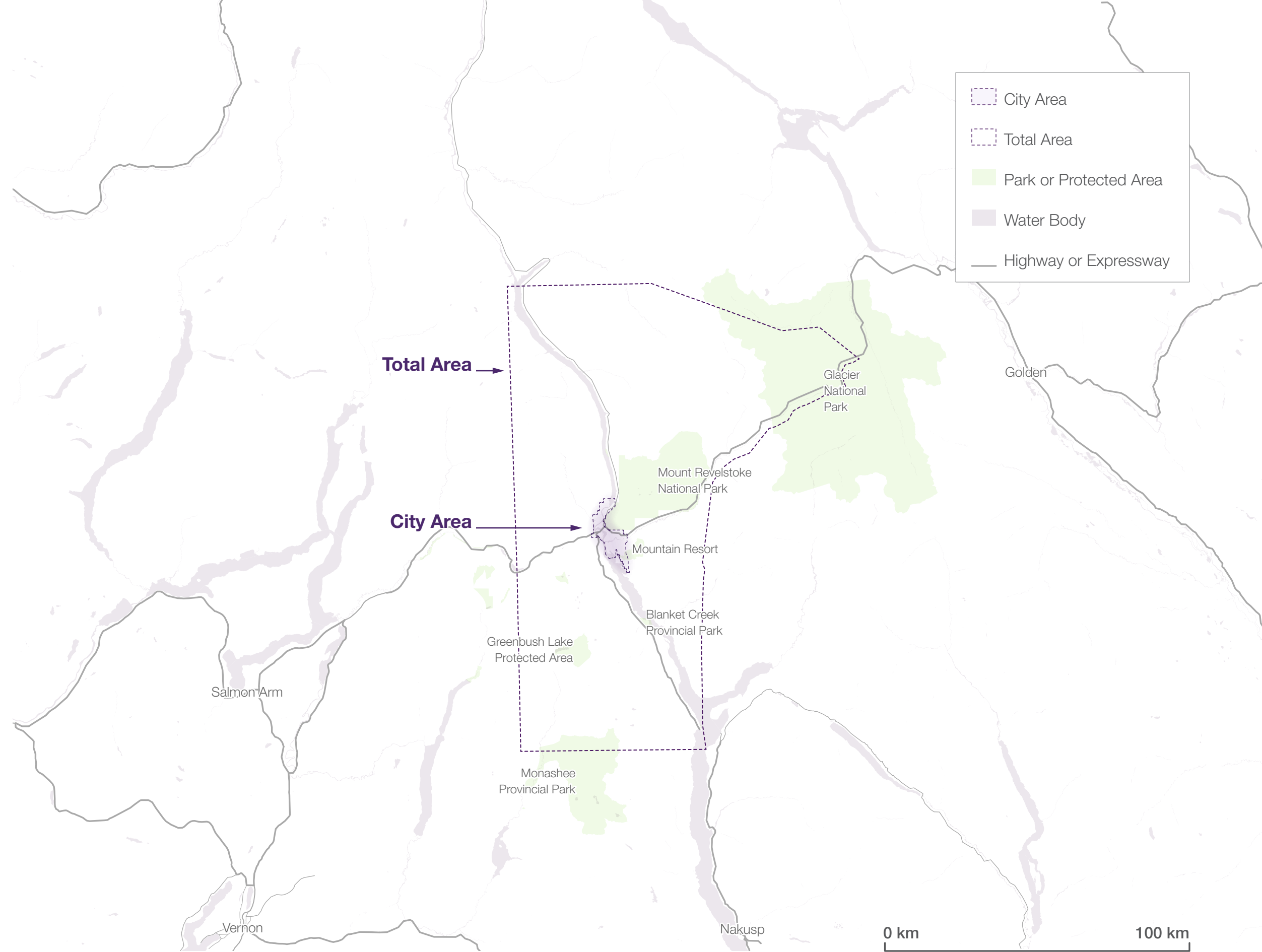
TELUS Insights

Executive Summary

Beginning in May 2019, TELUS Insights has conducted a monthly analysis of
the visitors in the Revelstoke Total Area. The goal of this 6 month analysis was to
provide Revelstoke with qualified insights to support strategic tourism planning.

This summary addresses key questions including:

- What was the total number of unique visitors each month?

- How many visitors are in the Total Area but not visiting the City?

- How many visitors are coming from key Canadian and International markets?

- Which key markets are visiting during the spring and fall shoulder seasons?

- How do the total number of short one-night trips compare to quality multi-
  night trips?

- How many short one-night trips and quality multi-night night trips are being
  taken by visitors from key Canadian and International markets?

- What are the monthly trends in Canadian visitor demographics for millenials,
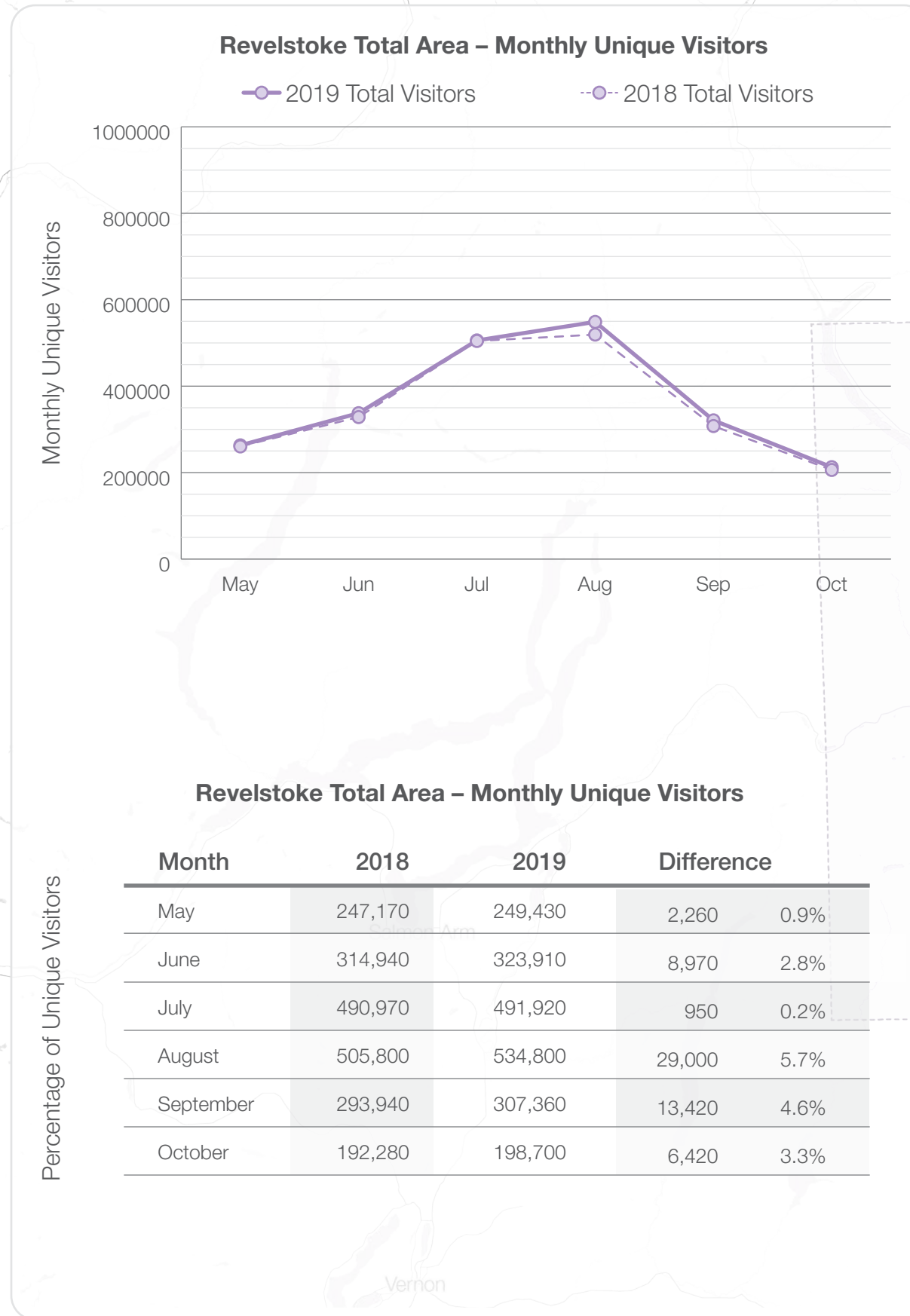 zoomers, and families?

Monthly Unique Visitors

2018 Vs 2019 Total Visitors

May – October

This line charts shows the monthly unique counts of total visitors in the Revelstoke Total Area. The table shows the monthly comparison of 2018 and 2019 unique counts of total visitors of Revelstoke Total Area.

Monthly unique counts of total visitors include all Canadian and International visitors across the entire month. Canadian visitors are people with an assumed home neighbourhood in Canada but outside of the Revelstoke Total Area. International visitors are distinguished by the mobile country code associated with the device sim card.

Revelstoke Total Area – Monthly Unique Visitors

Revelstoke Total Area – Monthly Unique Visitors

Month	2018	2019	Difference	
May	247,170	249,430	2,260	0.9%
June	314,940	323,910	8,970	2.8%
July	490,970	491,920	950	0.2%
August	505,800	534,800	29,000	5.7%
September	293,940	307,360	13,420	4.6%
October	192,280	198,700	6,420	3.3%

534K Total
534K Total unique visitors were seen during August at the height of the summer season.

29K More
29K more total unique trips were seen during August 2019 at the height of the summer season.

5.7%
There was a peak of 5.7% of total unique visitors visiting Revelstoke in the month of August, 2019.

Length of Stay
Total Trip Counts

Total Visitors

May – October

These charts show the total number of trips taken by all Canadian and International visitors to the Revelstoke Total Area. The table shows the monthly comparison of 2018 and 2019 unique counts of total visitors of Revelstoke Total Area. A trip is considered a consecutive period of time within the Total Area before being seen outside of it. Total trip counts were grouped by length of stay. These two line plots compare the monthly counts of 8-24 hour trips to 25-72 hour trips. 8-24 hour trips can be used as a proxy for short one night trips and 25-72 hour trips as a proxy for multi-night quality trips.

156K in summer
During July and August 165K short one-night trips were taken by visitors.

23K in summer
During July and August 23K multi-night quality trips were taken by visitors.

Revelstoke Total Area – Monthly Unique Short and Quality Trips

Short Trips 8-24 hour
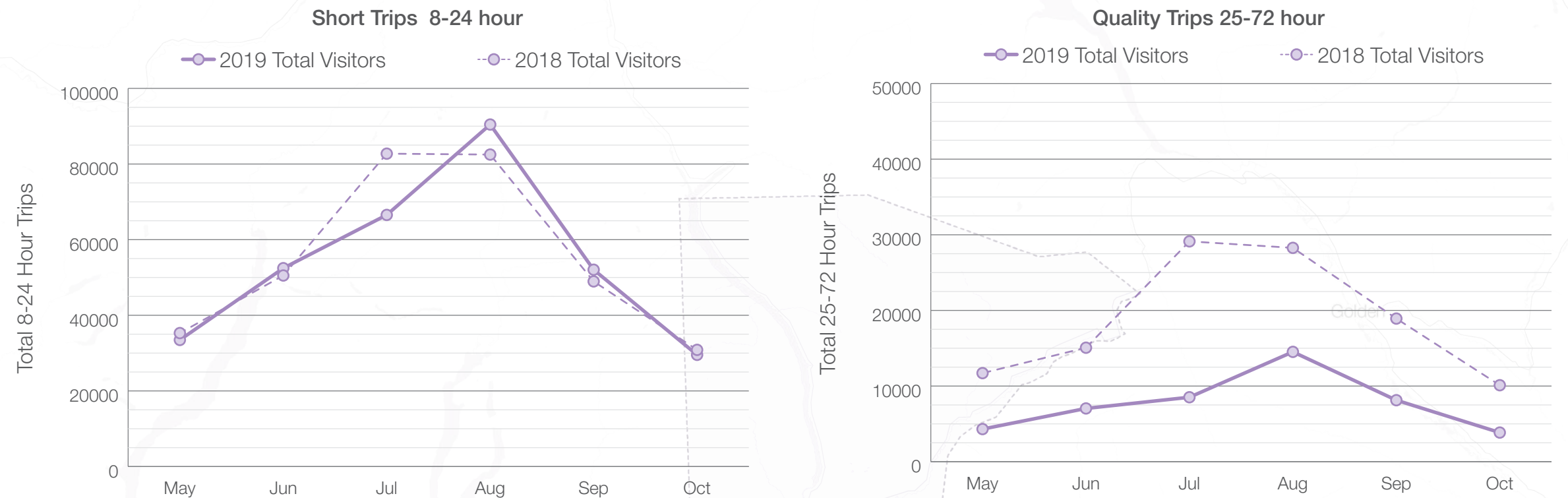
Quality Trips 25-72 hour

Revelstoke Total Area – Monthly Unique Short and Quality Trips

Total 8-24 Hour Trips

Month	2018	2019	Difference	
May	35,300	33,480	(1,820)	-5.16%
June	50,520	52,460	1,940	3.84%
July	82,740	66,540	(16,200)	-19.58%
August	82,500	90,440	7,940	9.62%
September	48,960	52,050	3,090	6.31%
October	30,860	29,540	(1,320)	-4.28%

Total 25-72 Hour Trips

Month	2018	2019	Difference	
May	11,710	4,310	(7,400.00)	-63.19%
June	15,070	7,040	(8,030.00)	-53.28%
July	29,130	8,520	(20,610.00)	-70.75%
August	28,270	14,520	(13,750.00)	-48.64%
September	18,920	8,130	(10,790.00)	-57.03%
October	10,110	3,850	(6,260.00)	-61.92%

Monthly Unique Visitors

2018 Vs 2019 Total Visitors

May – October

This line charts shows the comparison of 2018 and 2019 monthly unique counts of total visitors in the Revelstoke Total Area. The table shows the comparison of monthly unique counts of total visitors that did not enter the Revelstoke City Area as a percentage of the total visitors in the Revelstoke Total Area, representing a missed market opportunity.

Monthly unique counts of total visitors include all Canadian and International visitors across the entire month. Canadian visitors are people with an assumed home neighbourhood in Canada but outside of the Revelstoke Total Area. International visitors are distinguished by the mobile country code associated with the device sim card.

More Visitors
Compared to 2018, there were more monthly unique Total Area visitors that did not visit the city during 2019.

Revelstoke Total Area – Monthly Unique Visitors
who entered the City Area while visiting Revelstoke vs. those who did not

Revelstoke Total Area – Monthly Unique Visitors

Revelstoke Total Area – Monthly Unique Visitors not in the City Area

Revelstoke Total Area - Monthly Unique Visitors
who entered the City Area while visiting Revelstoke vs. those who did not

Revelstoke Total Area – Monthly Unique Visitors

Month	2018	2019	Difference	
May	247,170	249,430	2,260	0.9%
June	314,940	323,910	8,970	2.8%
July	490,970	491,920	950	0.2%
August	505,800	534,800	29,000	5.7%
September	293,940	307,360	13,420	4.6%
October	192,280	198,700	6,420	3.3%

Revelstoke Total Area – Monthly Unique Visitors not in the City Area

Month	2018	2019	Difference	
May	40,050	54,260	14,210	35.5%
June	53,890	67,770	13,880	25.8%
July	82,540	97,500	14,960	18.1%
August	87,010	102,000	14,990	17.2%
September	56,660	65,010	8,350	14.7%
October	32,960	40,870	7,910	24.0%

Short Trips vs Quality Trips

2018 Vs 2019 Total Trip Count

May – October

These charts show the total number of trips taken by all Albertan visitors to the Revelstoke Total Area. The table shows the monthly comparison of 2018 and 2019 total trip counts of total Albertan visitors to the Revelstoke Total Area. A trip is considered a consecutive period of time within the Total Area before being seen outside of it. Total trip counts were grouped by length of stay. These two line plots compare the monthly counts of 8-24 hour trips to 25-72 hour trips. 8-24 hour trips can be used as a proxy for short one night trips and 25-72 hour trips as a proxy for multi-night quality trips.

24K Short Trips
The AB visitors took 24K short one-night trips in August, the highest between May and October.

2.9K Quality Trips
The AB visitors took 2.9K unique quality one-night trips in August, the highest between May and October.

Revelstoke Total Area – Monthly Unique Short and Quality Trip Count

AB Visitors Short Trips 8-24 hour

AB Visitors Quality Trips 24-72 hour

Revelstoke Total Area – Monthly Unique Short and Quality Trip Count

AB Visitors - Short Trips 8-24 hour
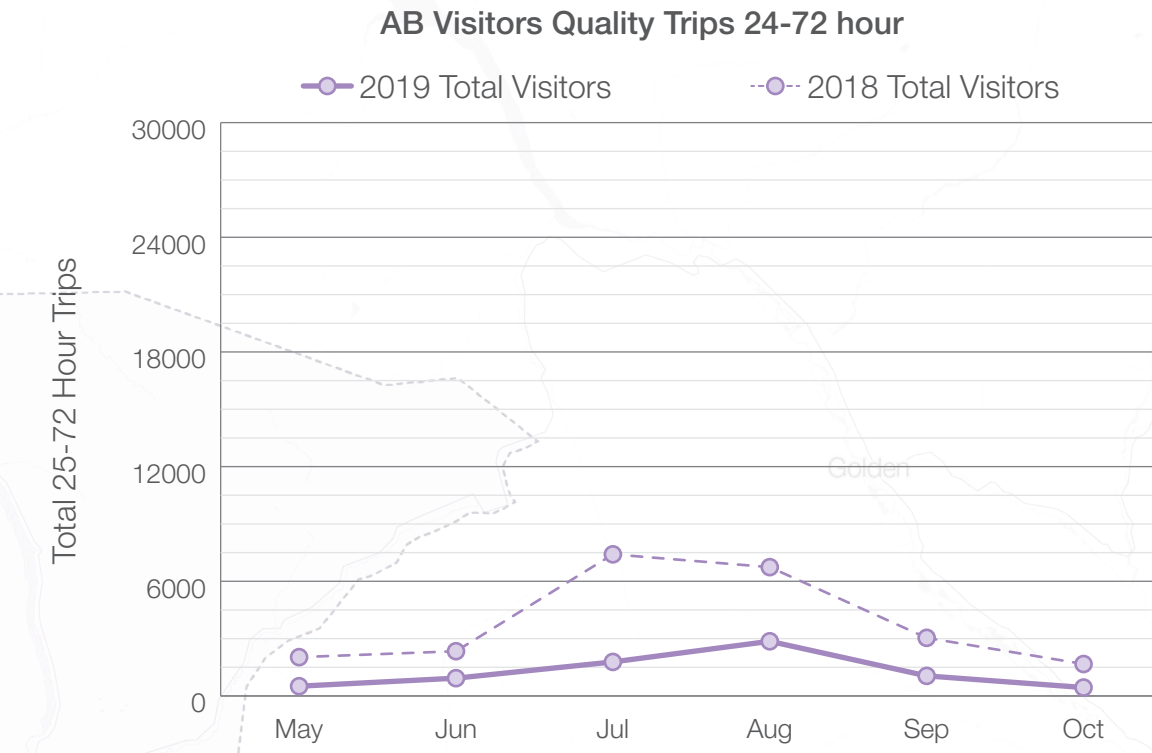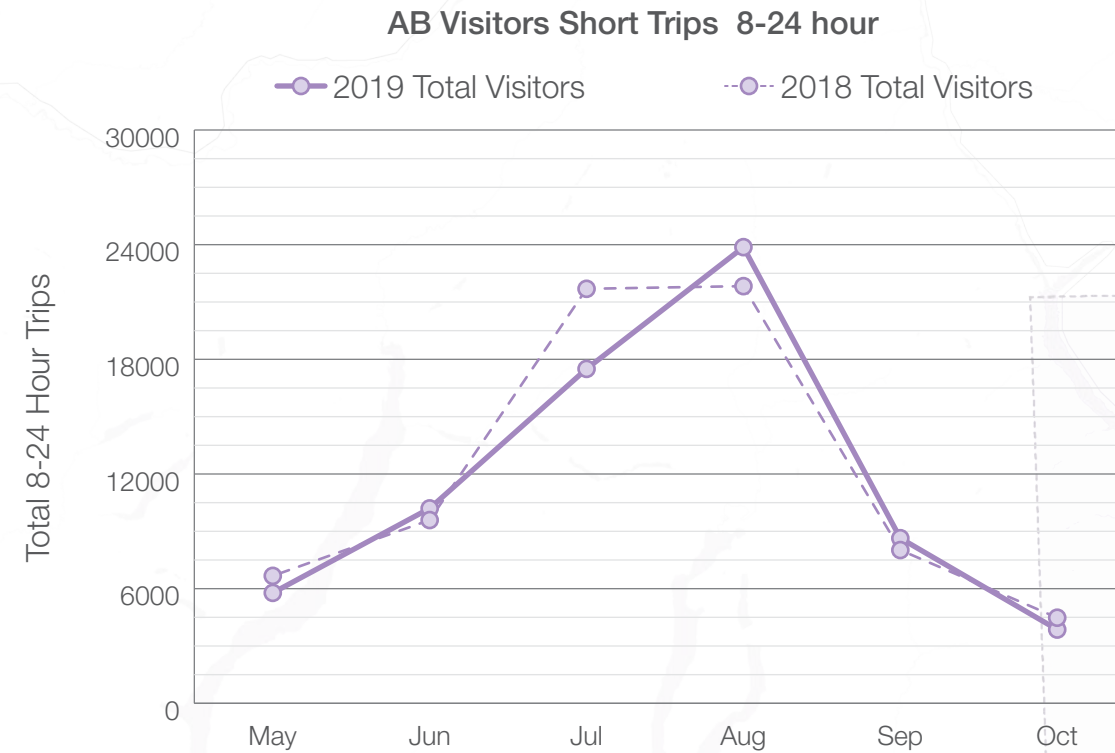
Month	2018	2019	Difference	
May	6,670	5,780	(890)	-13.34%
June	9,590	10,200	610	6.36%
July	21,690	17,500	(4,190)	-19.32%
August	21,830	23,870	2,040	9.34%
September	8,020	8,640	620	7.73%
October	4,480	3,860	(620)	-13.84%

AB Vistors - Quality Trips 24-72 hour

Month	2018	2019	Difference	
May	2,030	510	(1,520.00)	-74.88%
June	2,340	930	(1,410.00)	-60.26%
July	7,410	1,780	(5,630.00)	-75.98%
August	6,740	2,860	(3,880.00)	-57.57%
September	3,040	1,050	(1,990.00)	-65.46%
October	1,670	440	(1,230.00)	-73.65%

Short Trips vs Quality Trips

2018 Vs 2019 Total Trip Count

May – October

These charts show the total number of trips taken by all British Columbian visitors to the Revelstoke Total Area. The table shows the monthly comparison of 2018 and 2019 total trip counts of total British Columbian visitors to the Revelstoke Total Area. A trip is considered a consecutive period of time within the Total Area before being seen outside of it. Total trip counts were grouped by length of stay. These two line plots compare the monthly counts of 8-24 hour trips to 25-72 hour trips. 8-24 hour trips can be used as a proxy for short one night trips and 25-72 hour trips as a proxy for multi-night quality trips.

39K Short Trips

The BC visitors took 39K short one-night trips in August, the highest between May and October.

6.4K Quality Trips

The BC visitors took 6.4K unique quality one-night trips in August, the highest between May and October.

Revelstoke Total Area – Monthly Unique Short and Quality Trip Count

BC Visitors Short Trips 8-24 hour

BC Visitors Quality Trips 24-72 hour

Revelstoke Total Area – Monthly Unique Short and Quality Trip Count

BC Visitors - Short Trips 8-24 hour
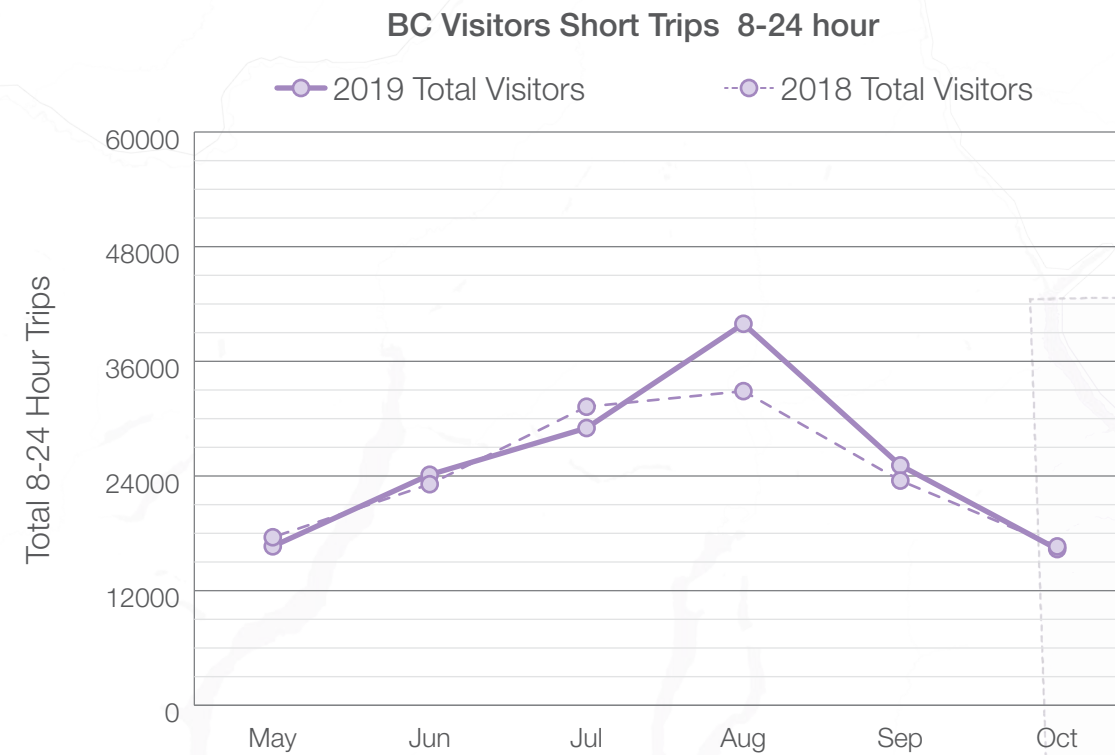
Month	2018	2019	Difference	
May	17,590	16,640	(950)	-5.40%
June	23,140	24,130	990	4.28%
July	31,250	29,020	(2,230)	-7.14%
August	32,880	39,930	7,050	21.44%
September	23,520	25,110	1,590	6.76%
October	16,630	16,350	(280)	-1.68%

BC Vistors - Quality Trips 24-72 hour

| Month	2018	2019	Difference	
May	7,170	2,530	(4,640.00)	-64.71%
June	8,710	3,510	(5,200.00)	-59.70%
July	12,790	4,220	(8,570.00)	-67.01%
August	13,210	6,370	(6,840.00)	-51.78%
September	10,830	3,570	(7,260.00)	-67.04%
October	6,840	2,080	(4,760.00)	-69.59%

Monthly Unique Domestic Visitors

2018 Vs 2019

May – October

This line charts shows the monthly unique counts of total domestic visitors in the Revelstoke Total Area. The table shows the monthly comparison of 2018 and 2019 unique counts of total domestic visitors of Revelstoke Total Area.

Monthly unique counts of total visitors include all Canadian visitors across the entire month. Canadian visitors are people with an assumed home neighbourhood in Canada but outside of the Revelstoke Total Area.

Revelstoke Total Area – Monthly Unique Domestic Vistors
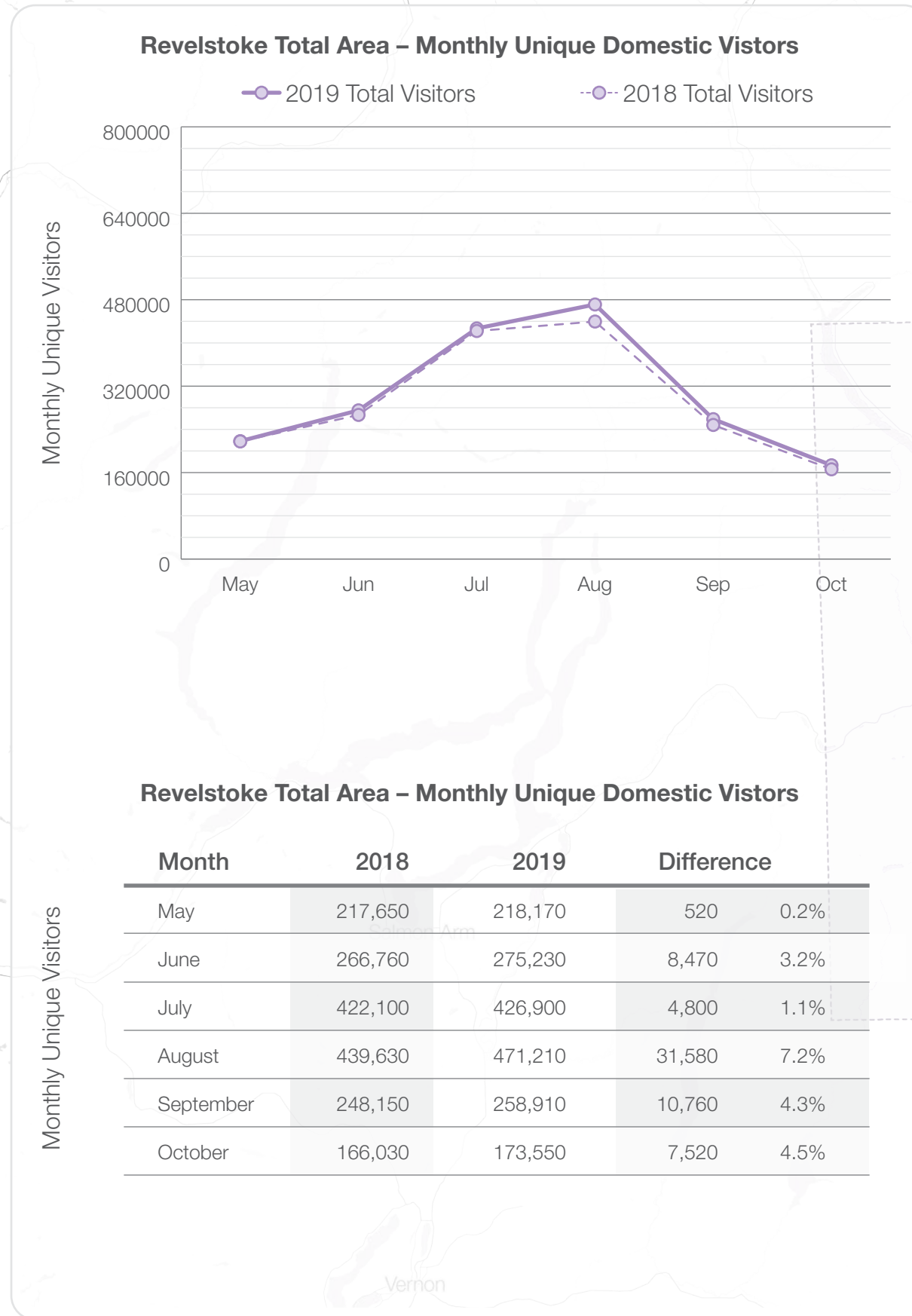
31.5K More

31.5K more unique domestic visitors were seen in August 2019 compared to 2018.

7.2%

There were 7.2% more unique domestic visitors during August compared year over year.

Revelstoke Total Area – Monthly Unique Domestic Vistors

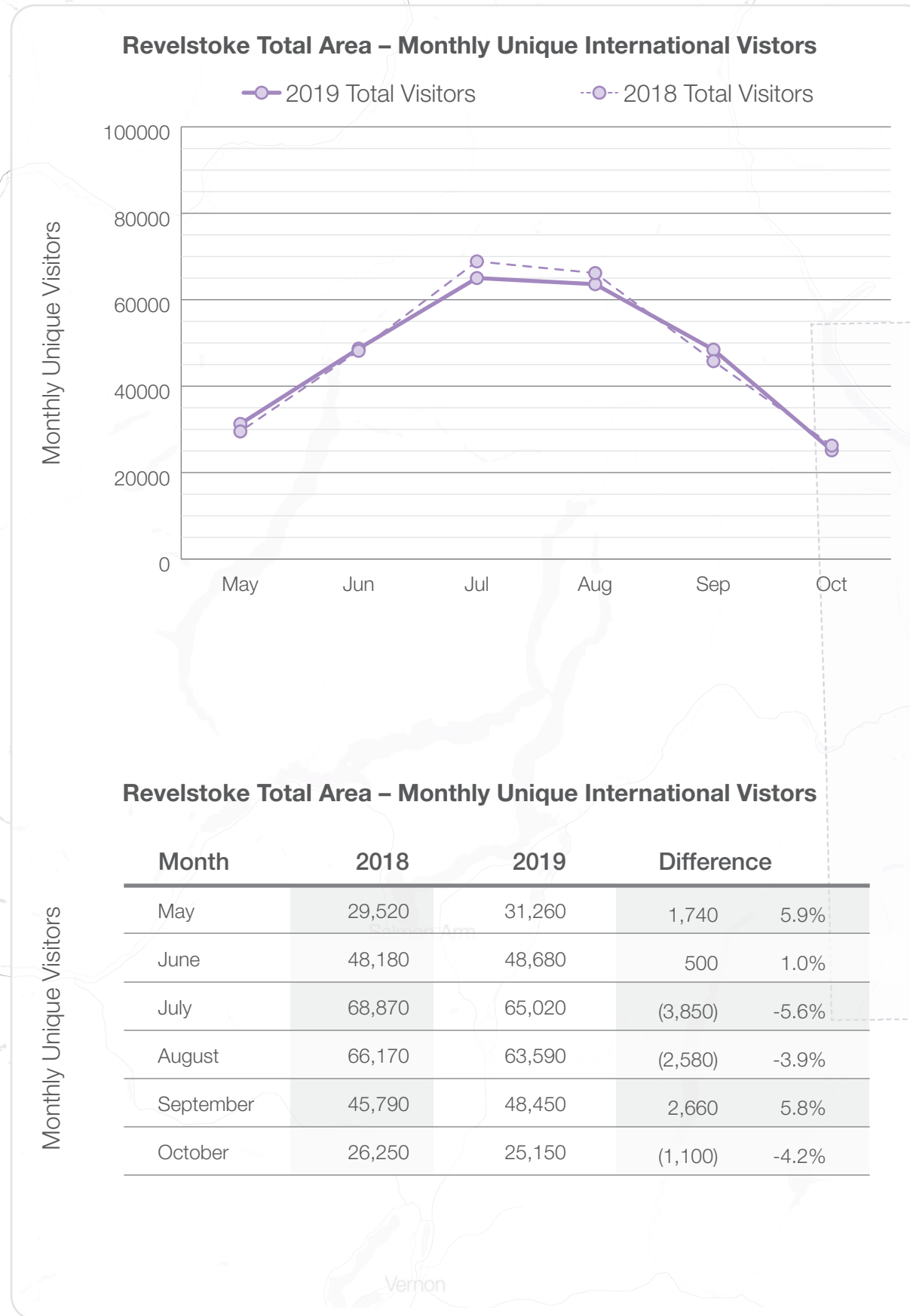| Month	2018	2019	Difference	
May	217,650	218,170	520	0.2%
June	266,760	275,230	8,470	3.2%
July	422,100	426,900	4,800	1.1%
August	439,630	471,210	31,580	7.2%
September	248,150	258,910	10,760	4.3%
October	166,030	173,550	7,520	4.5%

Monthly Unique International Visitors

2018 Vs 2019

May – October

This line charts shows the monthly unique counts of total international visitors in the Revelstoke Total Area. The table shows the monthly comparison of 2018 and 2019 unique counts of total international visitors of Revelstoke Total Area.

Monthly unique counts of total visitors include all International visitors across the entire month. International visitors are distinguished by the mobile country code associated with the device sim card.

Revelstoke Total Area – Monthly Unique International Vistors

Revelstoke Total Area – Monthly Unique International Vistors

Month	2018	2019	Difference	
May	29,520	31,260	1,740	5.9%
June	48,180	48,680	500	1.0%
July	68,870	65,020	(3,850)	-5.6%
August	66,170	63,590	(2,580)	-3.9%
September	45,790	48,450	2,660	5.8%
October	26,250	25,150	(1,100)	-4.2%

65K in Summer

The highest number of visitors were seen in the month of July 2019.

5.9%

There were 5.9% more unique international visitors during May compared year over year.

Monthly Unique Visitors Aggregate Demographics

Millenial vs Zoomer

May – October

These line charts shows the monthly unique counts of total Millenial and Zoomer visitors in the Revelstoke City Area. The table shows the monthly comparison of 2018 and 2019 unique counts of total visitors of Revelstoke Total Area.
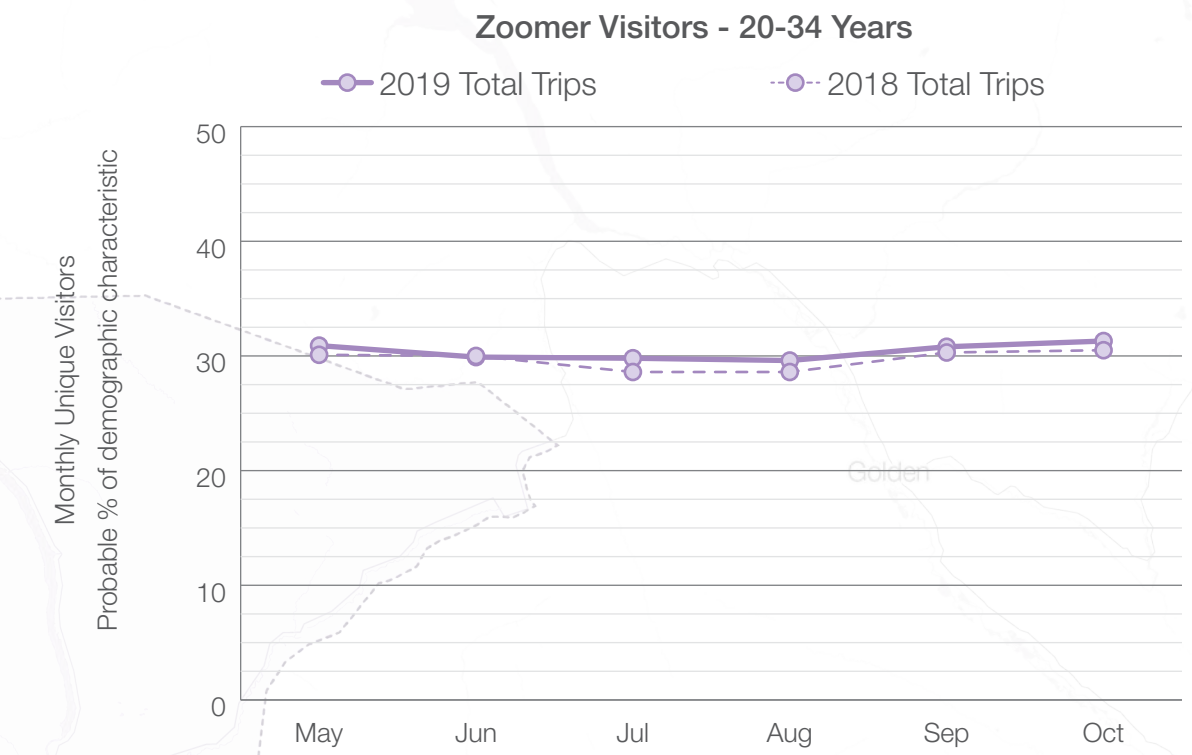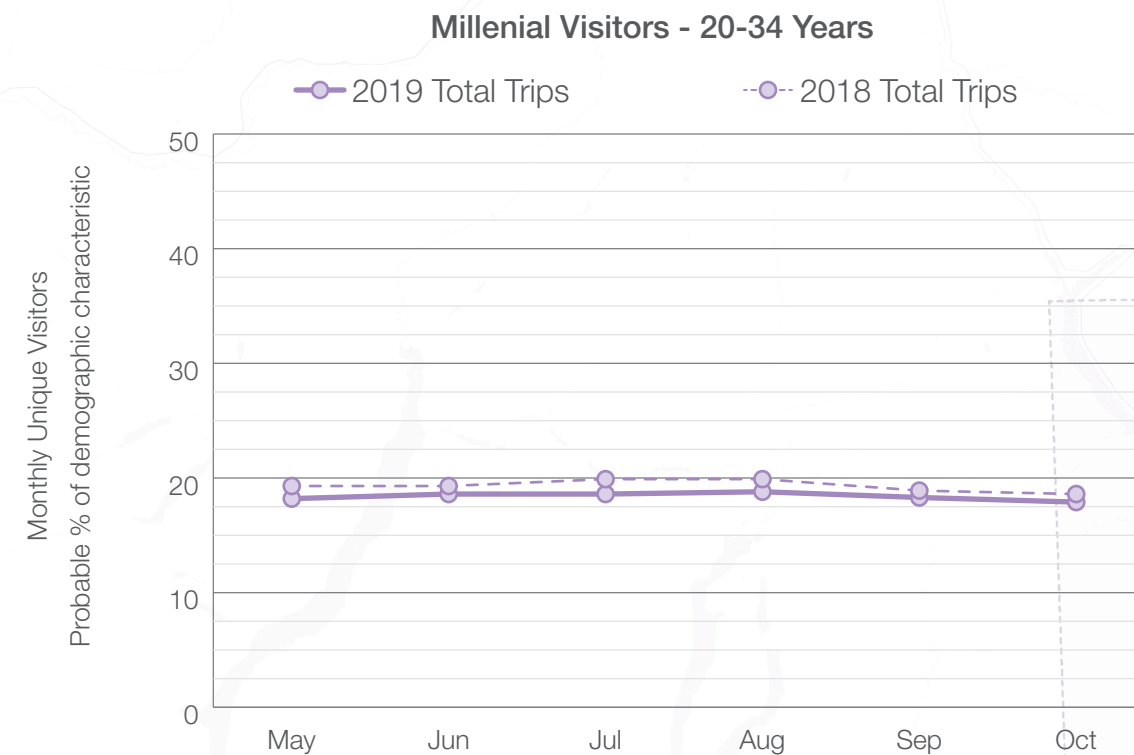
Millenials are identifies as visitors between the age group of 20-34 and Zoomers are the visitors between the age group of 50-69. The Canadian aggregated demographics provided are based on the 2016 Statistic Canada Census. In order to calculate the demographics of Canadian visitors, every visitor's assumed home neighbourhood's demographics from the census are summed together, being weighted to the number of visitors coming from the specific neighbourhood. These adjusted values represent the probability of any given visitor having that specific demographic characteristic.

The Age Characteristic provided does not show any ages below 20 years, based on TELUS policy to not report on anybody under the age of 18. The census age breakdowns result in 20 being the lowest age reported.

18% and 30%
The average unique millenial visitors are 18% and the average unique zoomer visitors are 30% in 2019.

Revelstoke City Area – Monthly Unique Visitors: Age Characteristics

Millenial Visitors - 20-34 Years

Zoomer Visitors - 20-34 Years

Revelstoke City Area - Monthly Unique Visitors: Age Characteristics

Millenial Visitors - 20-34 Years

Month	2018	2019	Difference
May	19.3	18.2	(1.0)
June	19.3	18.6	(0.7)
July	19.9	18.6	(1.3)
August	19.9	18.8	(1.1)
September	18.9	18.3	(0.6)
October	18.6	17.9	(0.7)

Zoomer Vistors - 50-69 Years

Month	2018	2019	Difference
May	30.1	30.9	0.8
June	30.0	29.9	(0.1)
July	28.6	29.8	1.2
August	28.6	29.6	1.0
September	30.3	30.8	0.5
October	30.5	31.3	0.8

Monthly Unique Visitors Aggregate Demographics

Canadian Visitors

May – October

The top bar chart compares probable family size of all Canadian and International visitors to the Revelstoke City Area.

Revelstoke Total Area – Monthly Unique Visitors: Family Size

Family Size: 2 Persons — 2018 - 2 Person, 2019 - 2 Person

Family Size: 3 Persons — 2018 - 3 Person, 2019 - 3 Person

Family Size: 4 Persons — 2018 - 4 Person, 2019 - 4 Person

Revelstoke Total Area – Monthly Unique Visitors: Family Size

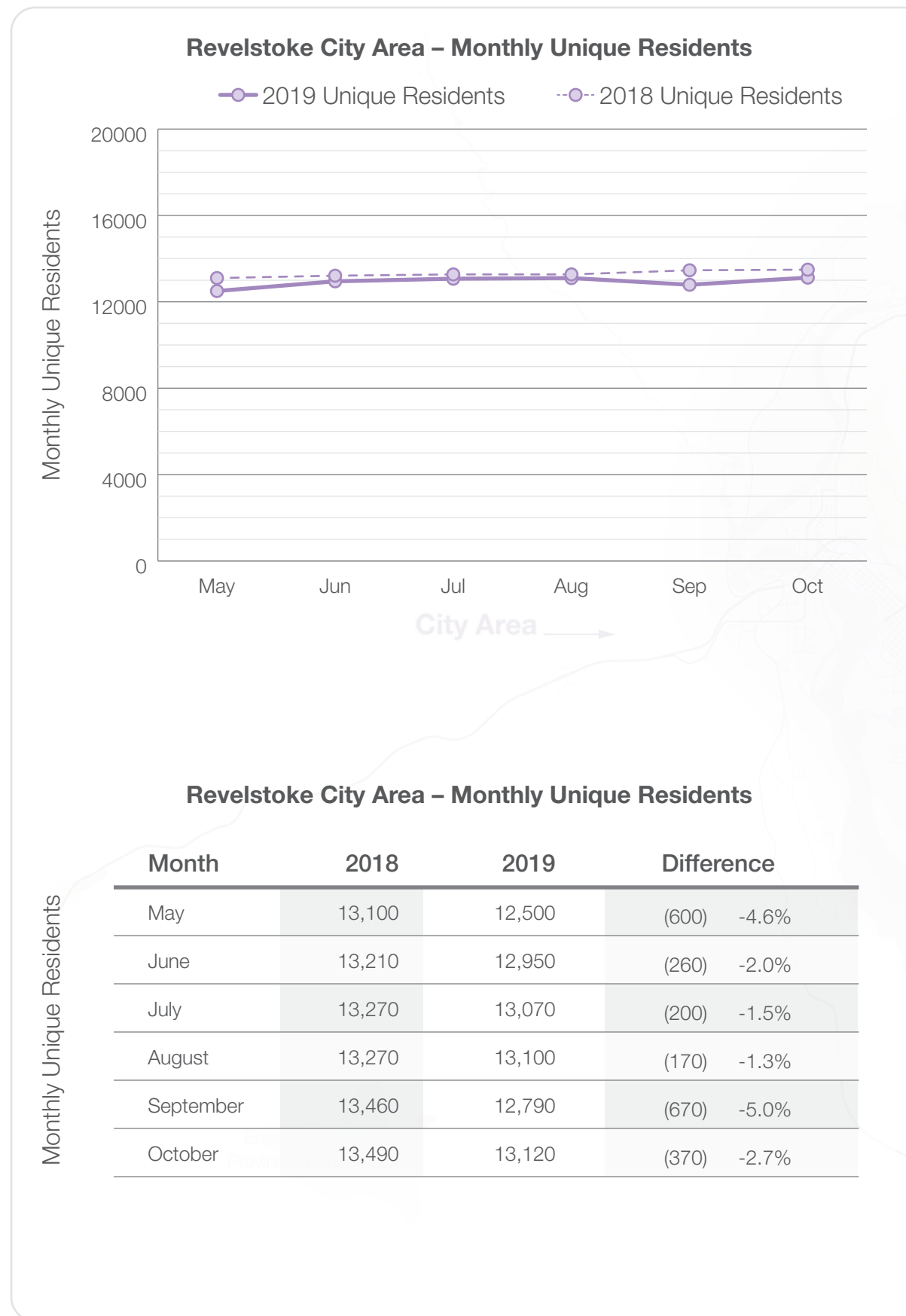| Month	Family Size: 2 Persons			Family Size: 3 Persons			Family Size: 4 Persons		
	2018	2019	Difference	2018	2019	Difference	2018	2019	Difference
May	59.9	59.6	(0.31)	18.8	18.5	(0.26)	15.1	15.6	0.56
June	59.8	58.8	(1.02)	18.8	18.7	(0.04)	15.3	15.9	0.63
July	58.0	57.8	(0.20)	19.0	19.1	0.09	16.1	16.3	0.20
August	57.8	57.9	0.08	19.2	19.1	(0.14)	16.1	16.2	0.03
September	59.3	59.2	(0.16)	18.8	18.8	(0.03)	15.4	15.6	0.14
October	59.7	59.7	(0.01)	18.8	18.5	(0.38)	15.1	15.6	0.48

TELUS Insights

Monthly Unique City Area Residents

2018 Vs 2019 Residents

May – October

This line charts shows the monthly unique counts of Revelstoke total area residents. The table shows the comparison of 2018 and 2019 monthly unique counts of city area residents. In order to distinguish visitors from residents, a proprietary Assumed Home Neighbourhood algorithm is used. This algorithm takes into account many factors about the device, over a period of 60 days ending at the completion of the study period. Using this larger trailing data set, a location with a significant amount of time spent is identified and categorized as the assumed home neighbourhood

Revelstoke City Area – Monthly Unique Residents

Revelstoke City Area – Monthly Unique Residents

Month	2018	2019	Difference	
May	13,100	12,500	(600)	-4.6%
June	13,210	12,950	(260)	-2.0%
July	13,270	13,070	(200)	-1.5%
August	13,270	13,100	(170)	-1.3%
September	13,460	12,790	(670)	-5.0%
October	13,490	13,120	(370)	-2.7%

77.5K Total

The total number of unique trips was 77.5K in 2019 between May and October.
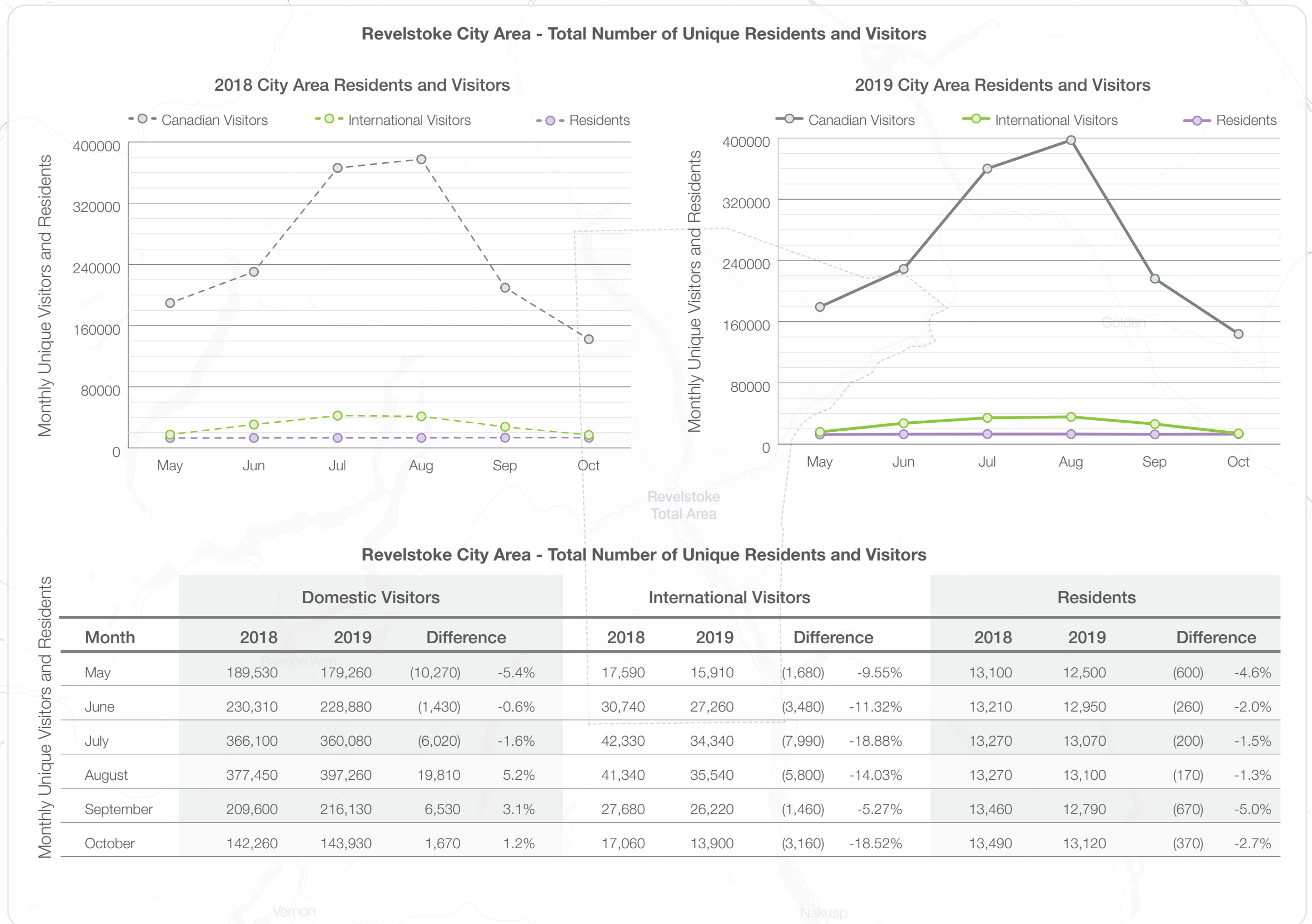
Monthly unique count of City area residents and visitors

2018 Vs 2019

May – October

This line charts shows the monthly unique counts of total visitors and residents in the Revelstoke City Area. The table shows the monthly comparison of 2018 and 2019 unique counts of total visitors and residents of Revelstoke City Area.

Monthly unique counts of total visitors include all Canadian and International visitors across the entire month. Canadian visitors are people with an assumed home neighbourhood in Canada but outside of the Revelstoke Total Area. International visitors are distinguished by the mobile country code associated with the device sim card.

In order to distinguish visitors from residents, a proprietary Assumed Home Neighbourhood algorithm is used. This algorithm takes into account many factors about the device, over a period of 60 days ending at the completion of the study period.

Revelstoke City Area - Total Number of Unique Residents and Visitors

2018 City Area Residents and Visitors

2019 City Area Residents and Visitors

Revelstoke City Area - Total Number of Unique Residents and Visitors

	Domestic Visitors			International Visitors			Residents		
Month	2018	2019	Difference	2018	2019	Difference	2018	2019	Difference
May	189,530	179,260	(10,270) -5.4%	17,590	15,910	(1,680) -9.55%	13,100	12,500	(600) -4.6%
June	230,310	228,880	(1,430) -0.6%	30,740	27,260	(3,480) -11.32%	13,210	12,950	(260) -2.0%
July	366,100	360,080	(6,020) -1.6%	42,330	34,340	(7,990) -18.88%	13,270	13,070	(200) -1.5%
August	377,450	397,260	19,810 5.2%	41,340	35,540	(5,800) -14.03%	13,270	13,100	(170) -1.3%
September	209,600	216,130	6,530 3.1%	27,680	26,220	(1,460) -5.27%	13,460	12,790	(670) -5.0%
October	142,260	143,930	1,670 1.2%	17,060	13,900	(3,160) -18.52%	13,490	13,120	(370) -2.7%

Monthly unique count of City area residents and visitors
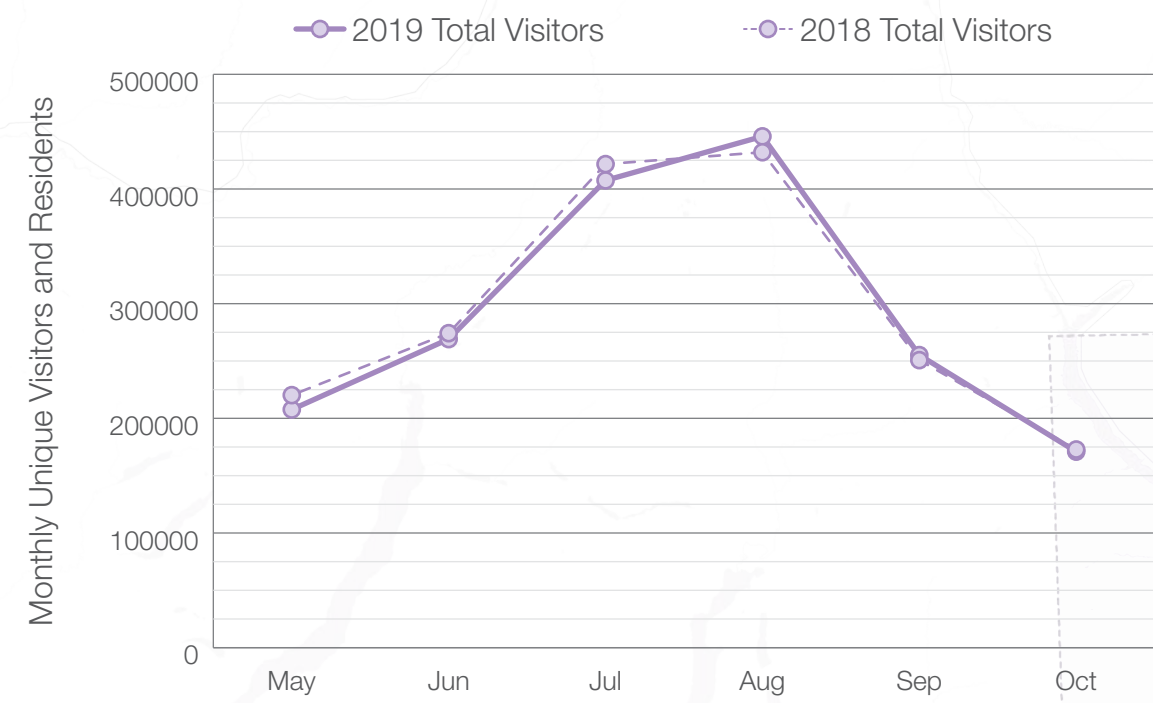
2018 Vs 2019

May – October

This line charts shows the monthly unique counts of total visitors and residents in the Revelstoke City Area. The table shows the monthly comparison of 2018 and 2019 unique counts of total visitors and residents of Revelstoke City Area.

Monthly unique counts of total visitors include all Canadian and International visitors across the entire month. Canadian visitors are people with an assumed home neighbourhood in Canada but outside of the Revelstoke Total Area. International visitors are distinguished by the mobile country code associated with the device sim card.

In order to distinguish visitors from residents, a proprietary Assumed Home Neighbourhood algorithm is used. This algorithm takes into account many factors about the device, over a period of 60 days ending at the completion of the study period.

Revelstoke City Area - Total Number of Unique Residents and Visitors

446K Total
The total number of unique visitors were 446K in August 2019, the highest between May and October

Revelstoke City Area - Total Number of Unique Residents and Visitors

Month	2018	2019	Difference	
May	220,220	207,670	(12,550)	-5.7%
June	274,260	269,090	(5,170)	-1.9%
July	421,700	407,490	(14,210)	-3.4%
August	432,060	445,900	13,840	3.2%
September	250,740	255,140	4,400	1.8%
October	172,810	170,950	(1,860)	-1.1%

3.2%
There was a 3.2% increase in the total visitors in the month of August 2019 compared to August 2018

TELUS

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