



TELUS Insights

Analytics for the real world



Tourism Golden

May 2021

Tourism Golden Visitor Report



Prepared for:
Tourism Golden

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.



Table of contents

Data and Privacy	3
Methodology	4
Definitions	5
Monthly Unique Visitors	6

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 31 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

Cellular data was collected passively from the TELUS network for the month of May 2021. 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 assumed home neighbourhoods of visitors and a time-line of the visitor generated network events. These traits were used to produce the insight provided in this report.

The goal of this study was to provide The Tourism Golden Society insights into the visitation patterns of visitors to the Golden Area. To do this, TELUS Insights has provided:

- **Monthly Unique and Total Trip Counts of Visitors**
- **Monthly Average Length of Stay in Nights of Visitors**
- **A visitor must have stayed overnight in the Golden Area to be counted.**
- **International visitors have been broken down by country of origin. When possible reported countries include: United States of America, China, Hong Kong, Germany, France, Australia, United Kingdom, Brazil, South Korea, Mexico, India, and Japan.**

In order to distinguish visitors to the Golden Area, a proprietary Assumed Home Neighbourhood algorithm is used. This algorithm takes into account many factors about the device, over a period of 30 days ending at the completion of the study month. Using this trailing data set, a location with a significant amount of time spent is identified and categorized as the assumed home neighbourhood. Devices with assumed home neighbourhoods outside of the Golden Area are categorized as visitors. Using TELUS' proprietary market share each visitor device is given a multiplier based on its assumed home neighbourhood. This produces an extrapolated result, representative of the entire Canadian population.

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.



Definitions

Study Month

This is the month that was studied and network generated events occurred during. Unique Visitors or Total Trips counts referring to the study month are representative of that month.

Study Area

A Study Area is a geo-fenced area. A device must have been within a Study Area to be counted. The Golden Area includes the City of Golden, Lake Country, West Golden, and Peachland.

Unique Visitor (or Unique Tourist)

A device not categorized as having an assumed home neighbourhood in the Golden area and stayed overnight at least once during the study month is considered a unique visitor or unique tourist. Devices are extrapolated to be representative of the entire Canadian population.

Overnight Stay

A visitor must have spent more than 3 hours in the Golden Area between 2 AM and 6 AM to be counted as an overnight stay during a given month, week, or day.

Assumed Home Neighbourhood

TELUS has developed a proprietary algorithm to determine the neighbourhood that a device resides in. This algorithm uses Machine Learning to look at a series of factors, such as time spent in an area, number of days spent, frequency of visits, consecutive hours, and others, to decide the most likely home neighbourhood of a device. This algorithm uses training data to validate and ensure the model works in a broad range of conditions, including rural, and urban

areas. The algorithm has also been built in such a way as to handle complex work behaviours, including shift workers, night workers, part-time employees, and stay-at-home workers. This ensures that work places are not confused with home neighbourhoods by the algorithm.

Canadian Visitors (Domestic)

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

International Visitors

Visitors with non-Canadian cellular devices. The Mobile Country Code (MCC) from the device is used to identify which country the device originated from.

Average Length of Stay (LOS)

Average Length of Stay is calculated by dividing the total length of trips (nights) by the total number of trips.

Forward Sortation Area (FSA)

Forward Sortation Area, the first three digits of a Canadian Postal code. These areas are geographically unique and the first character of the code represents a province, or a region within a province.

Golden Area

The Golden Area includes the City of Golden and three point-of-entry: POE-1 Glacier National Park, POE-2 Columbia Wetlands and POE-3 Yoho National Park. The orange line in the map below depicts the geo-fenced boundary of the Golden Area.



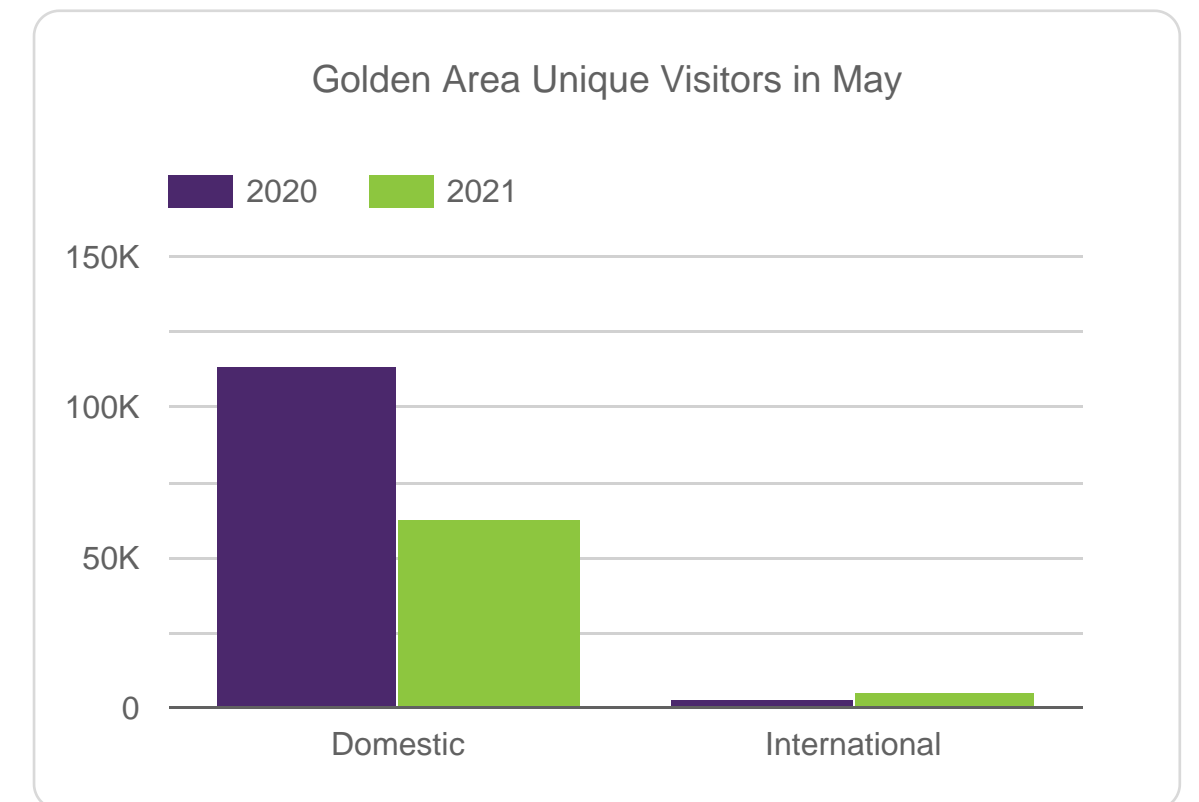
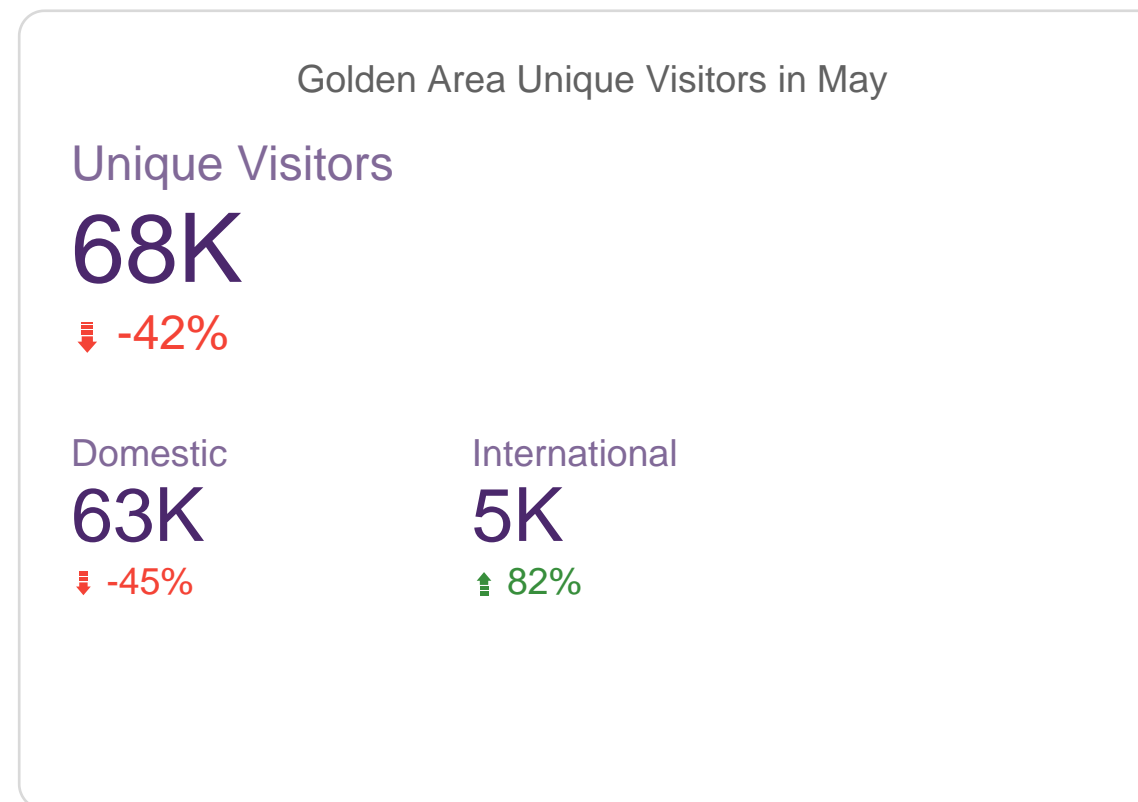
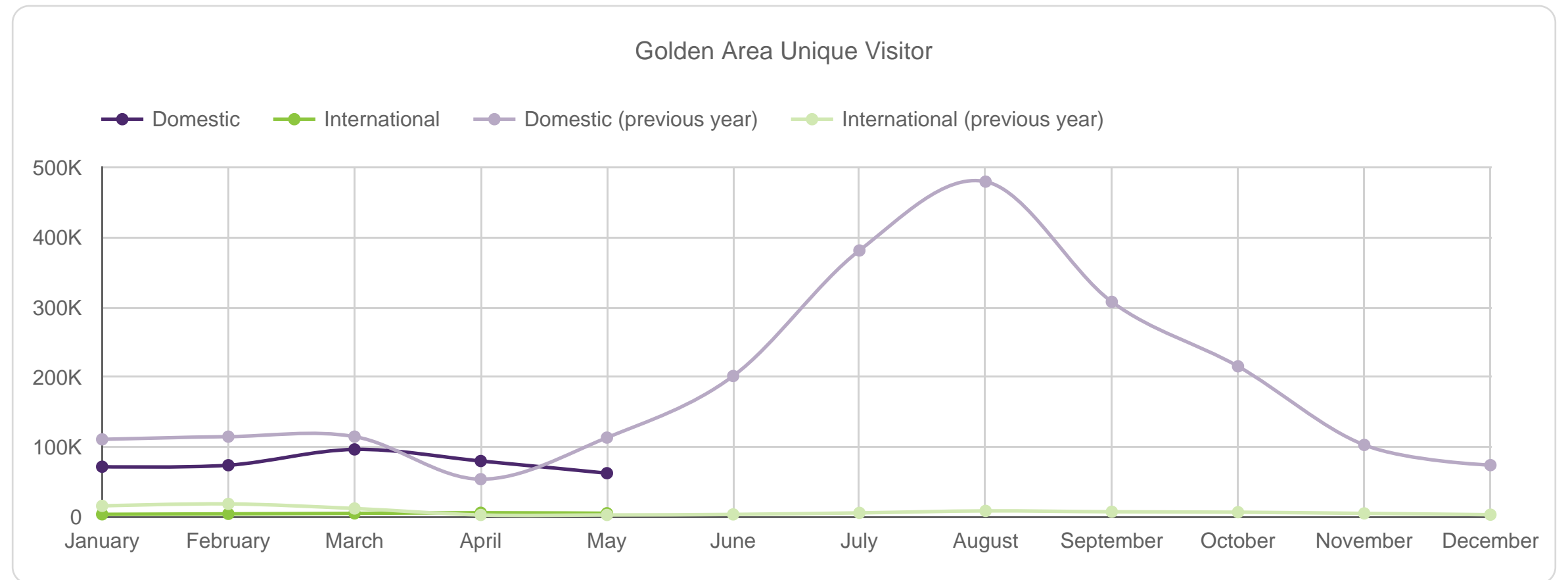
Monthly Unique Visitors

Monthly Unique Count

Canadian and International Visitors

May 2021

The line chart on this page shows the counts of all Monthly Unique Visitors broken down Canadian and International Visitors.

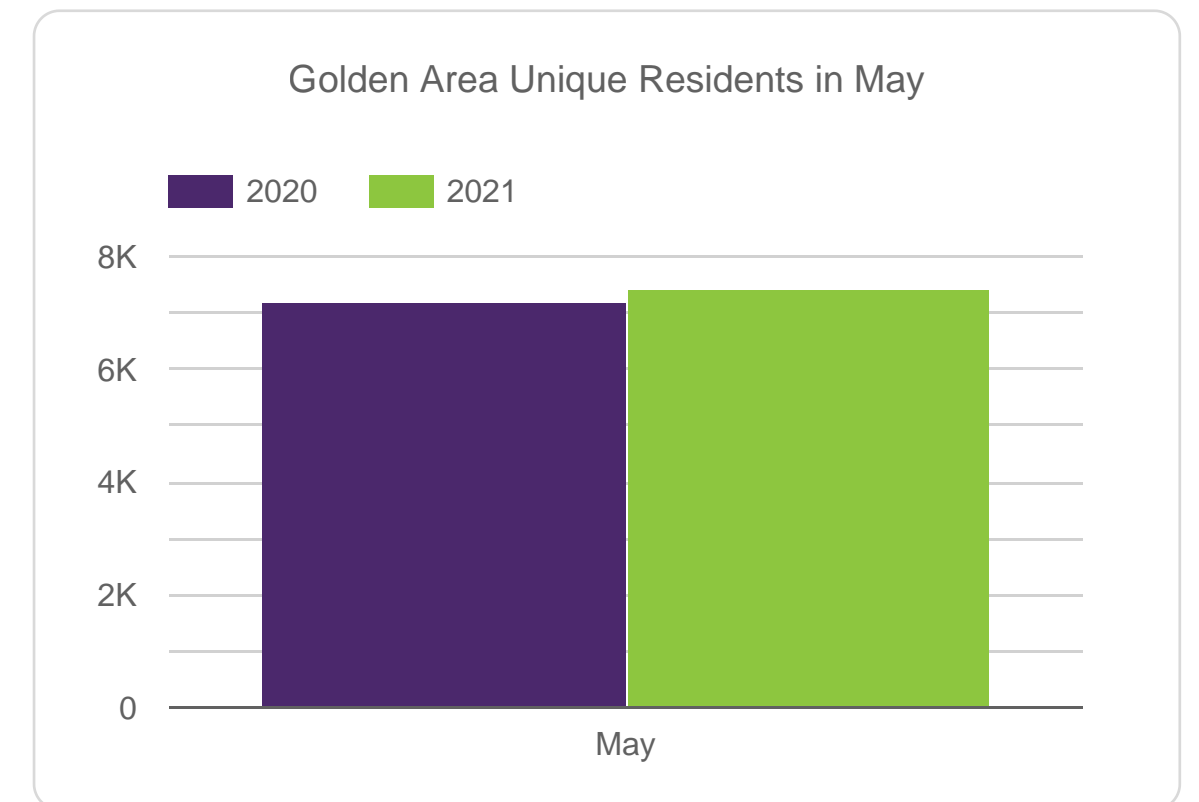
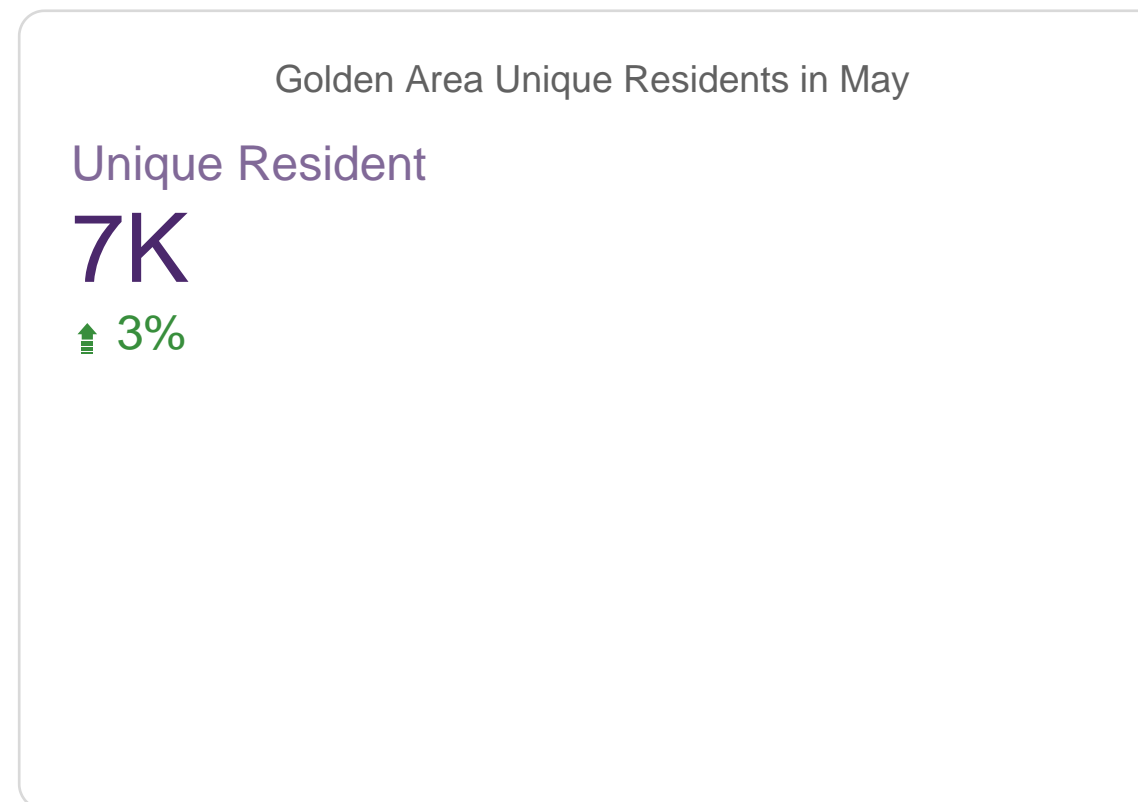
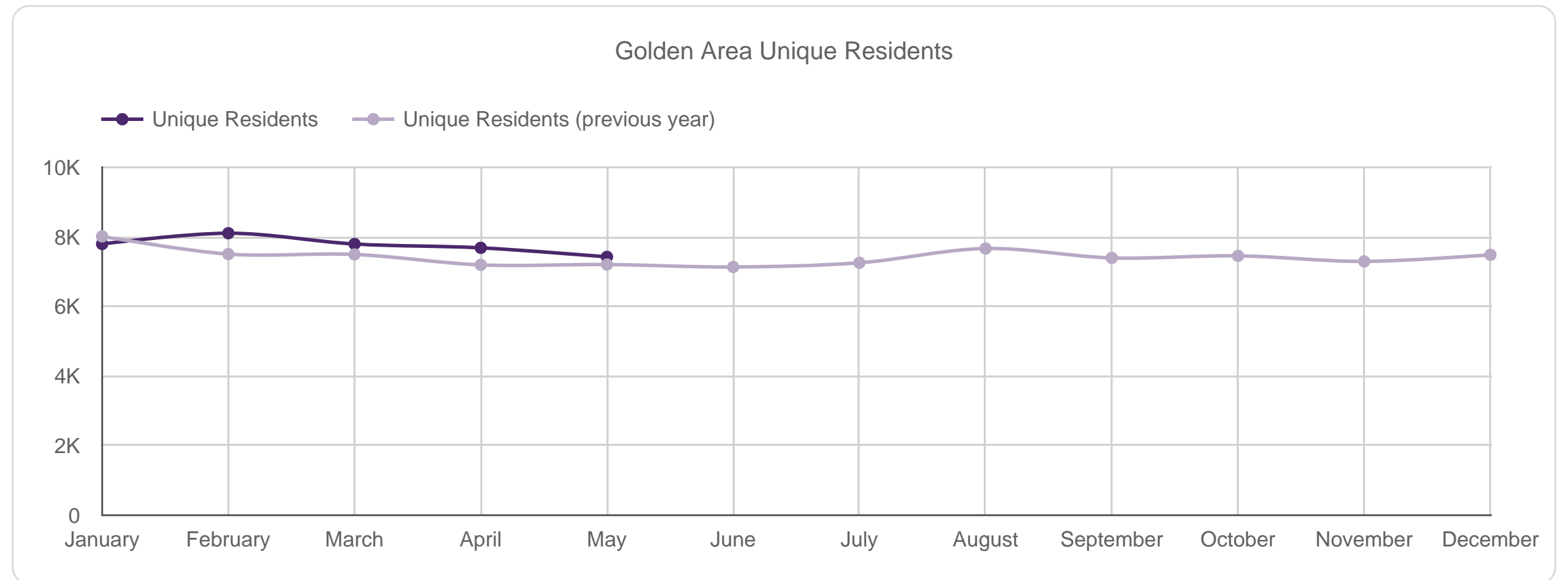


Monthly Unique Count

Residents

May 2021

The line chart on this page shows the counts of all Monthly Unique Residents.

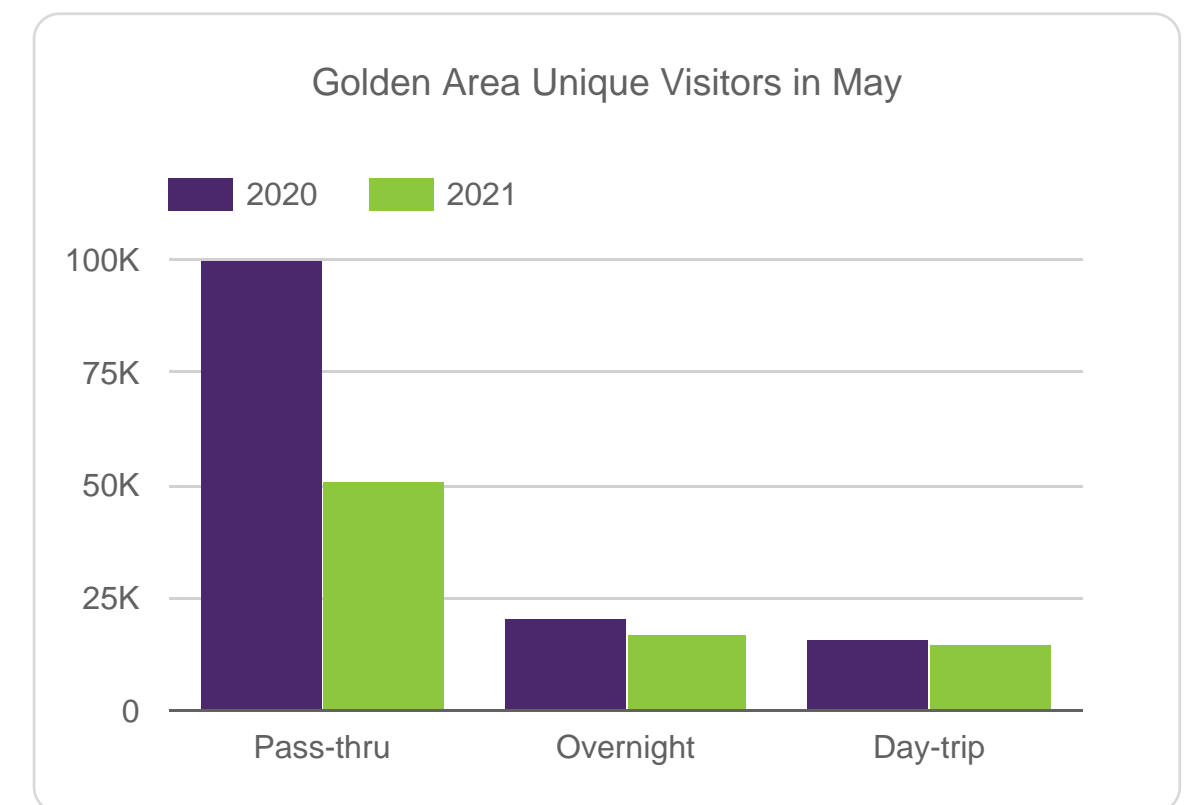
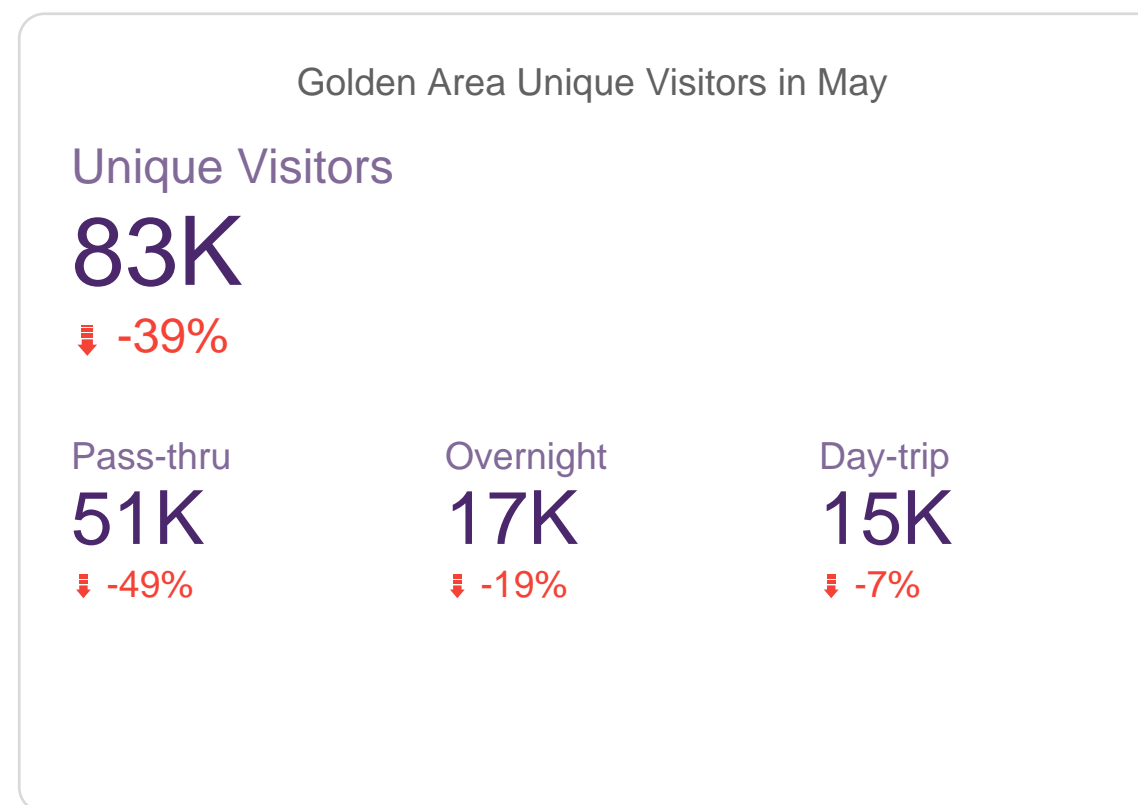
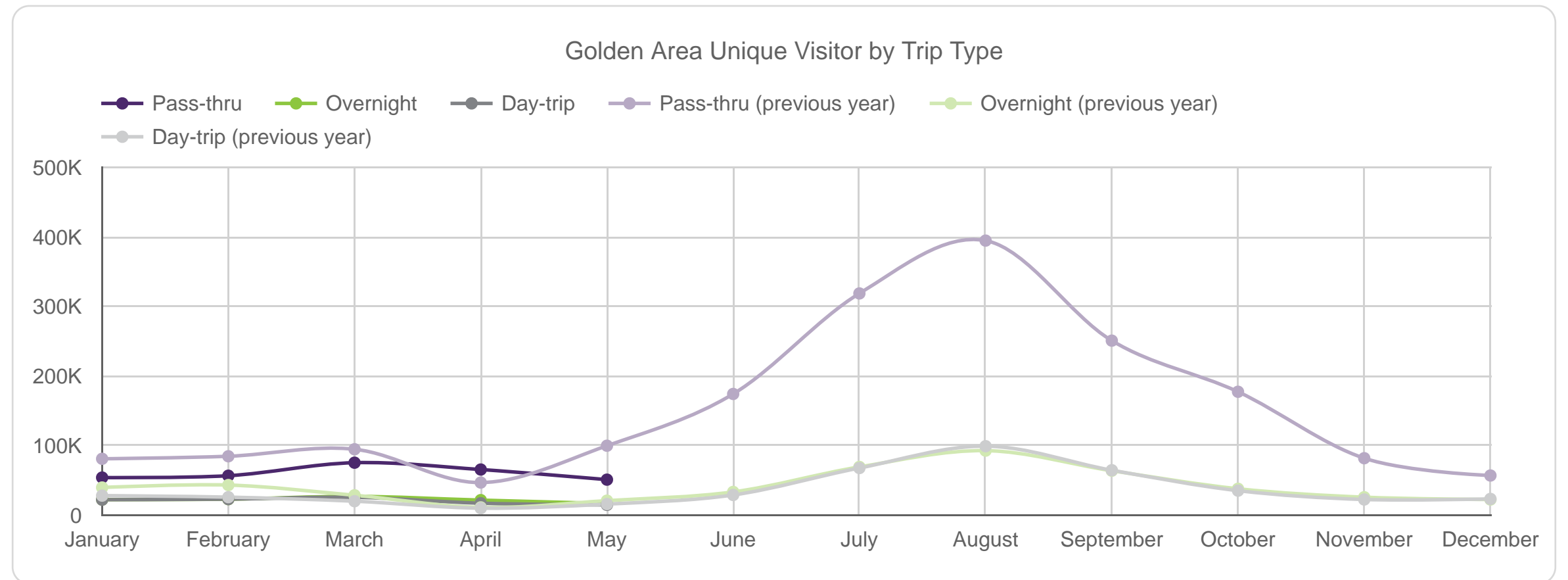


Monthly Unique Count

Canadian Visitors
Broken down by trip-type

May 2021

The line chart on this page shows the counts of all Monthly Unique Visitors broken down by trip-type.

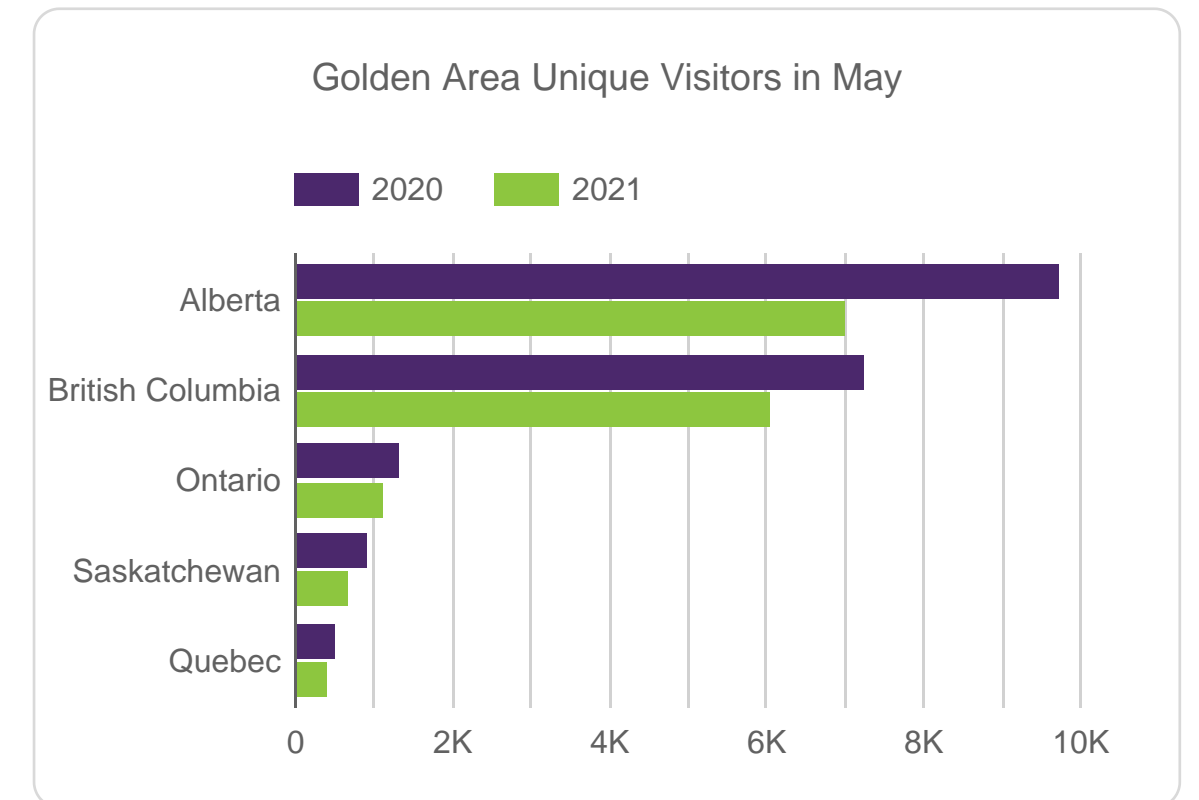
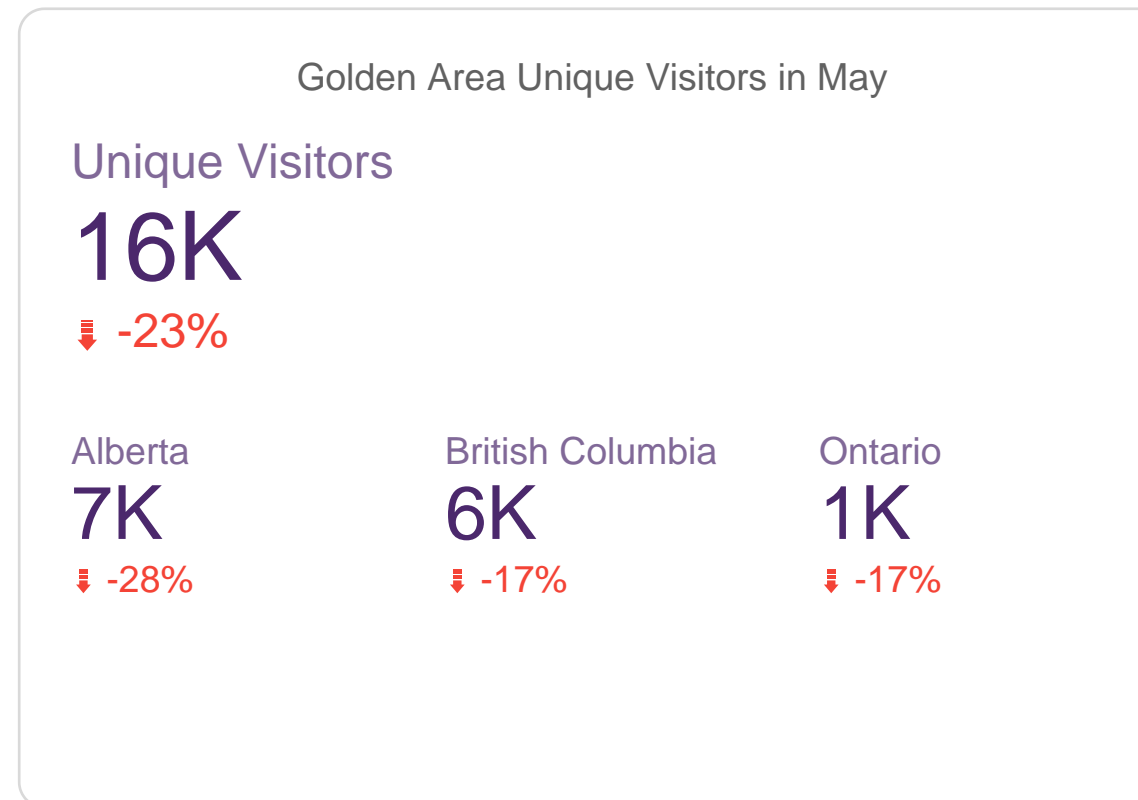
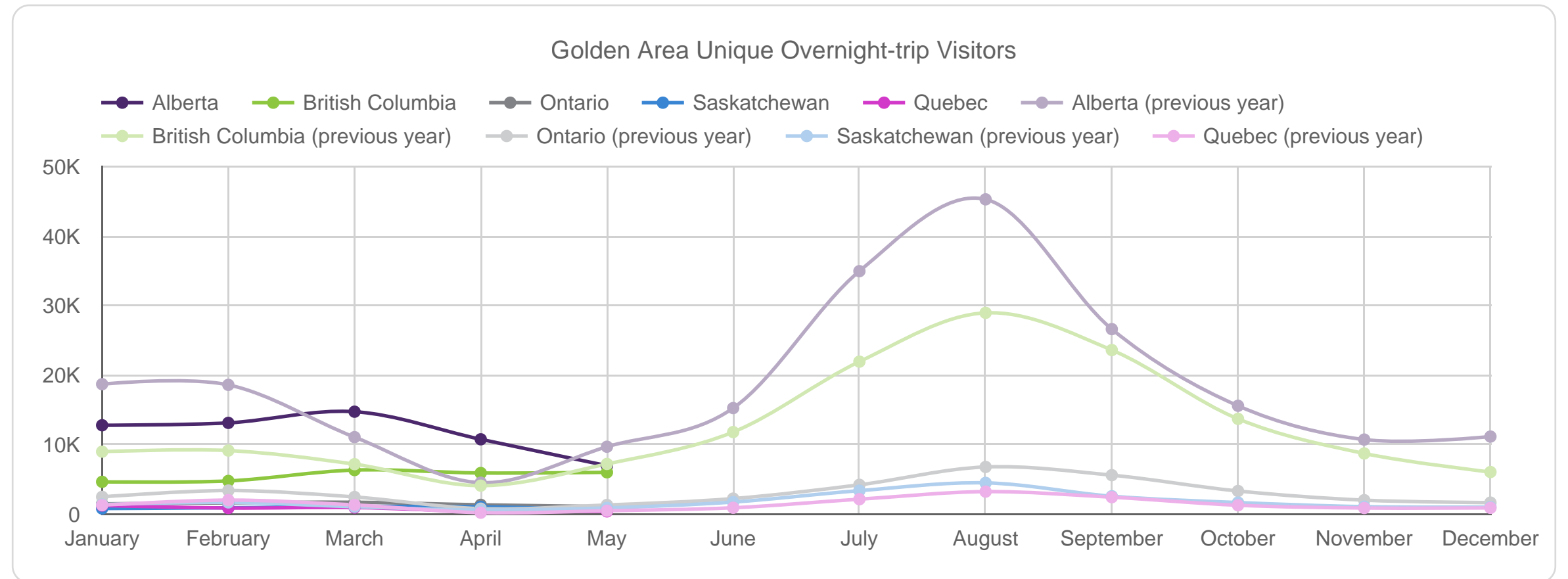


Monthly Unique Count

Canadian Overnight Visitors
Broken down by province

May 2021

The line chart on this page shows the counts of all Monthly Unique Overnight Visitors broken down by top five provinces.

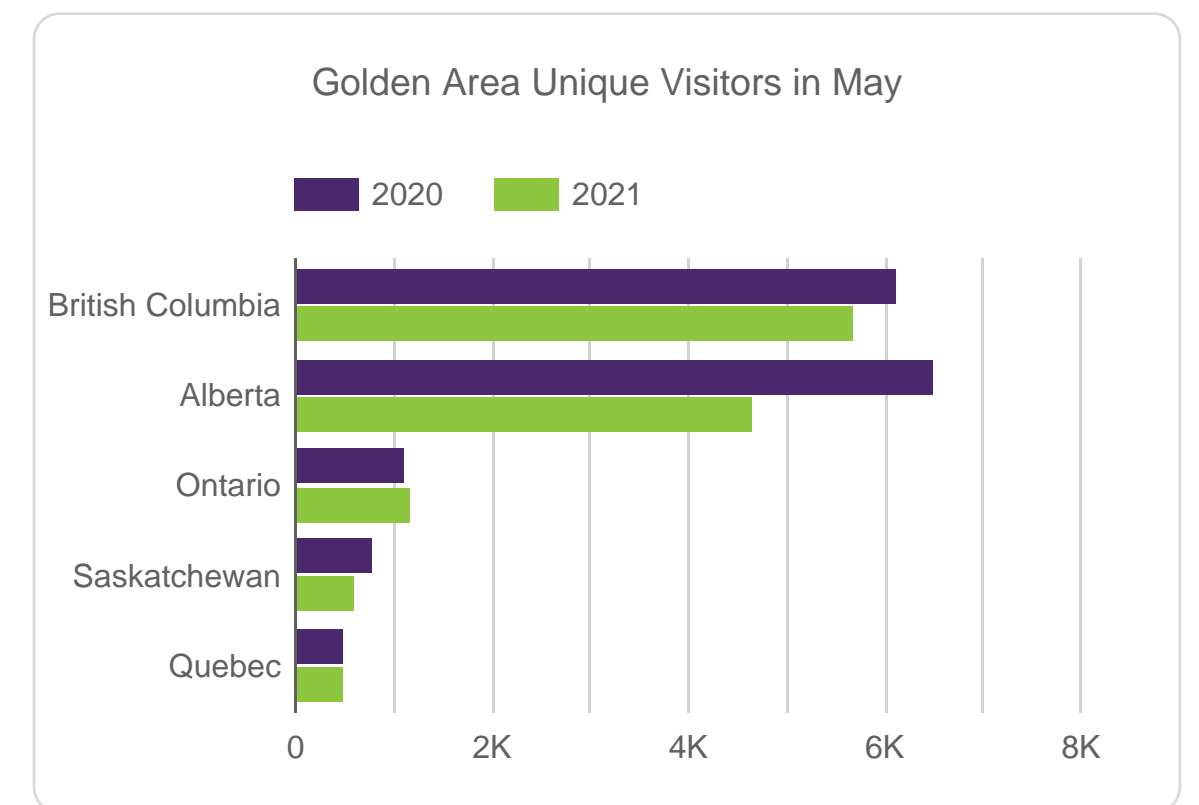
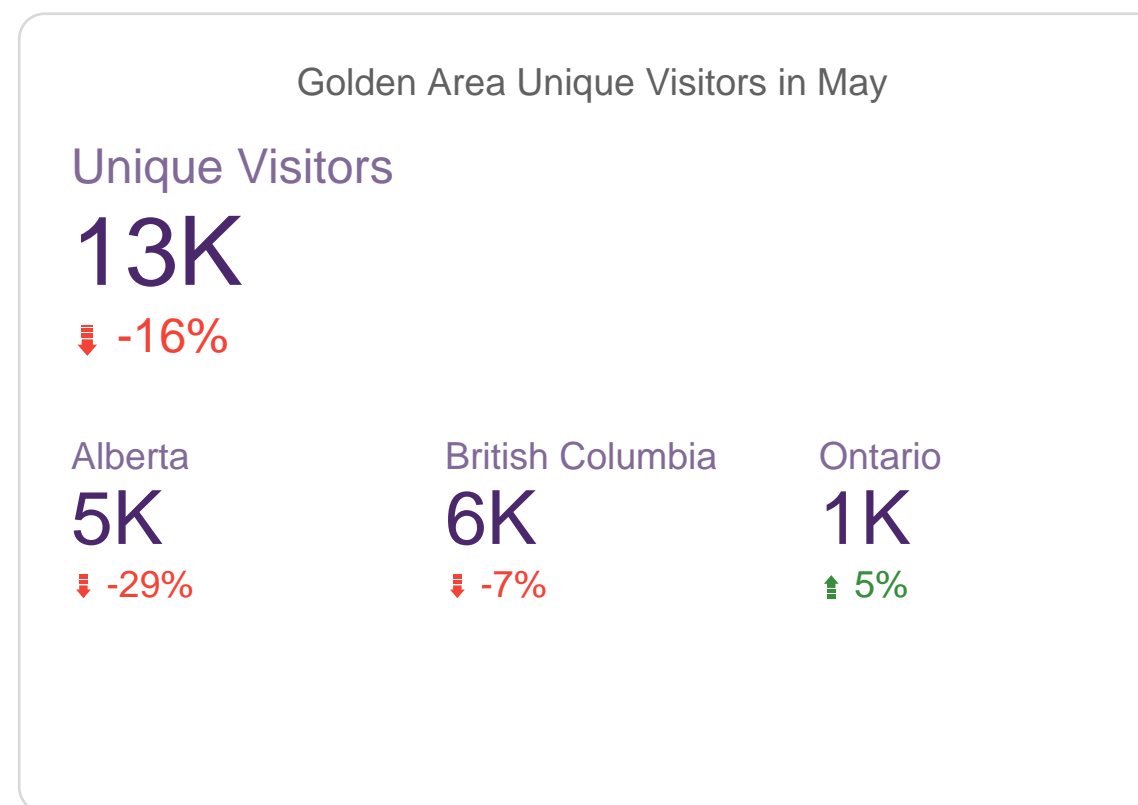
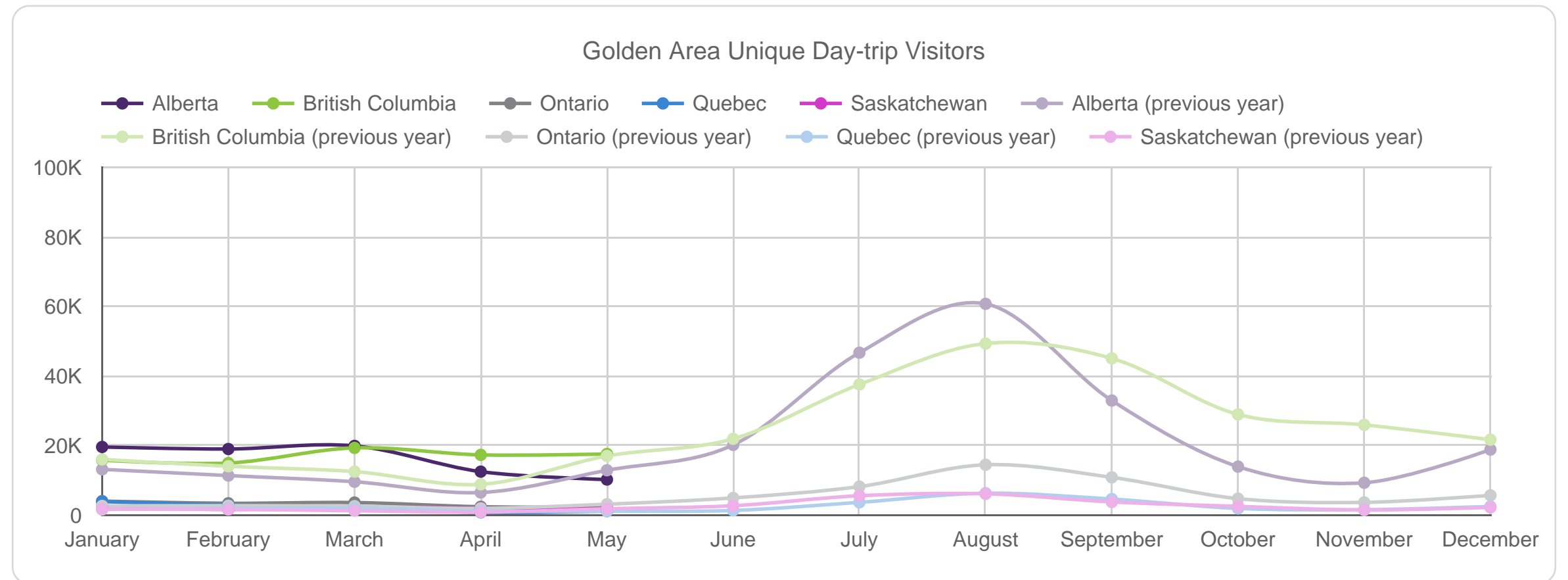


Monthly Unique Count

Canadian Day-trip Visitors
Broken down by province

May 2021

The line chart on this page shows the counts of all Monthly Unique Day Visitors broken down by top five provinces.

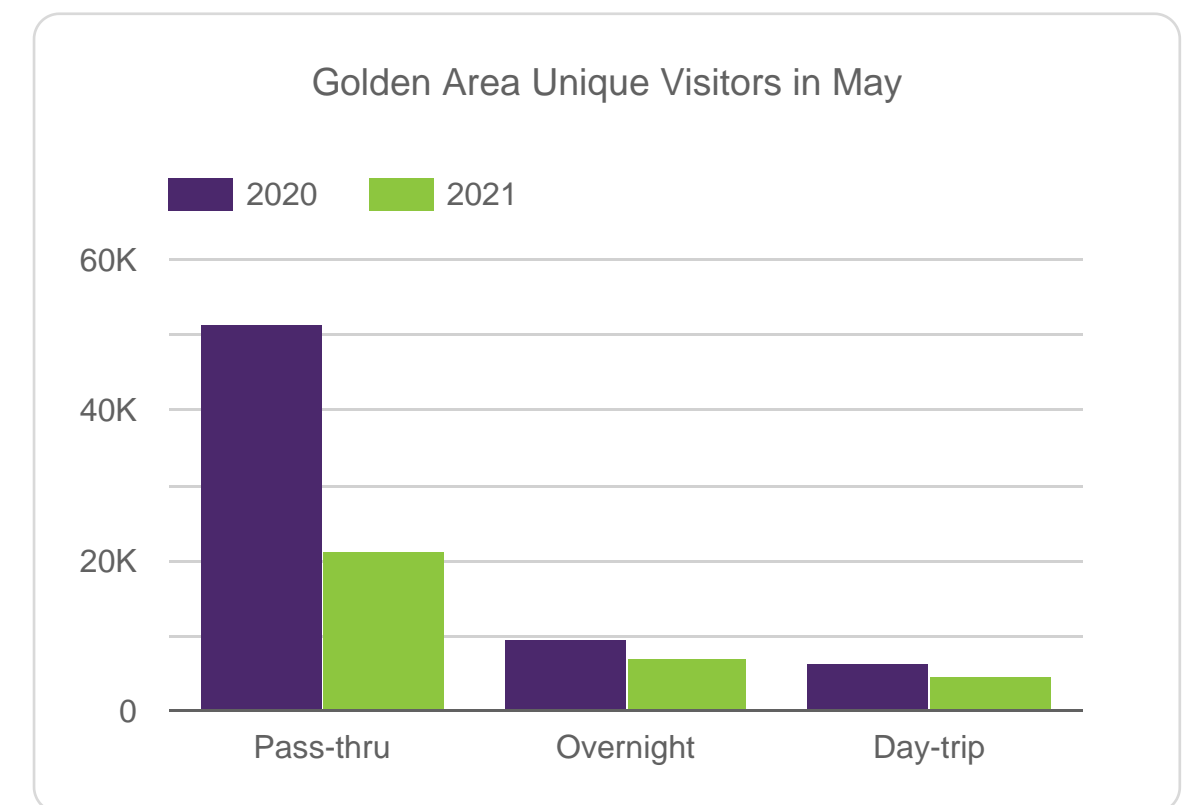
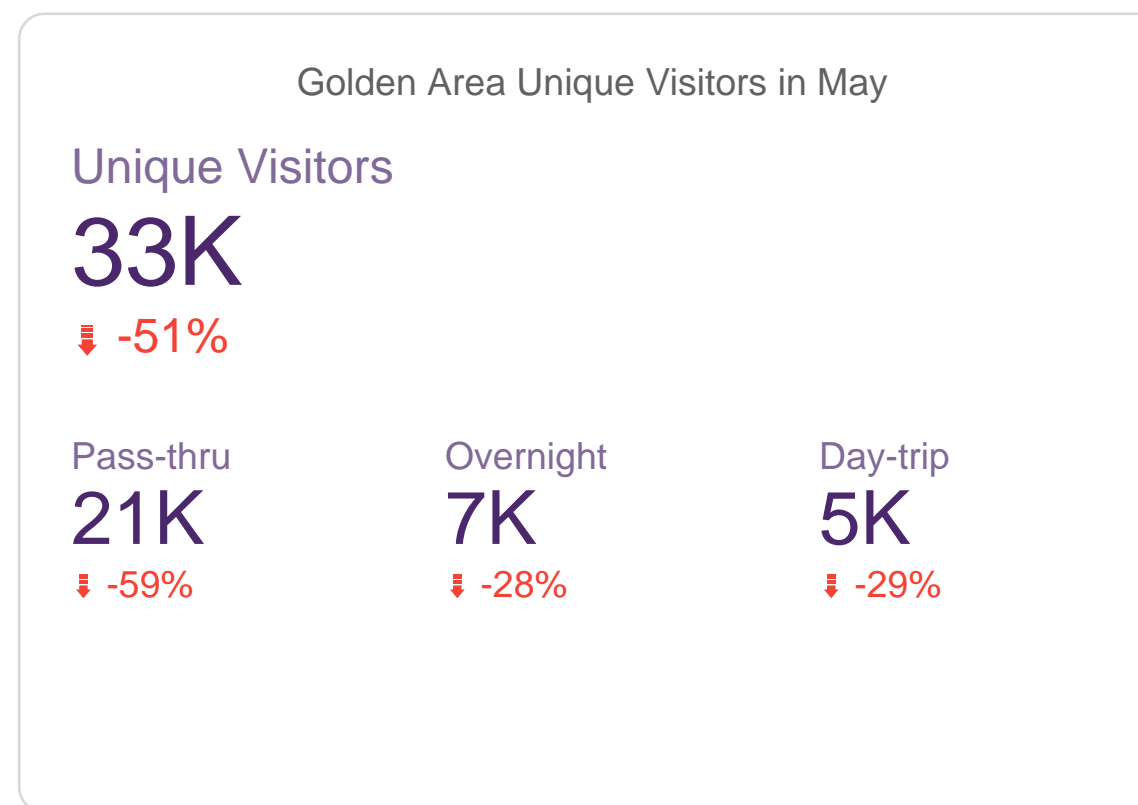
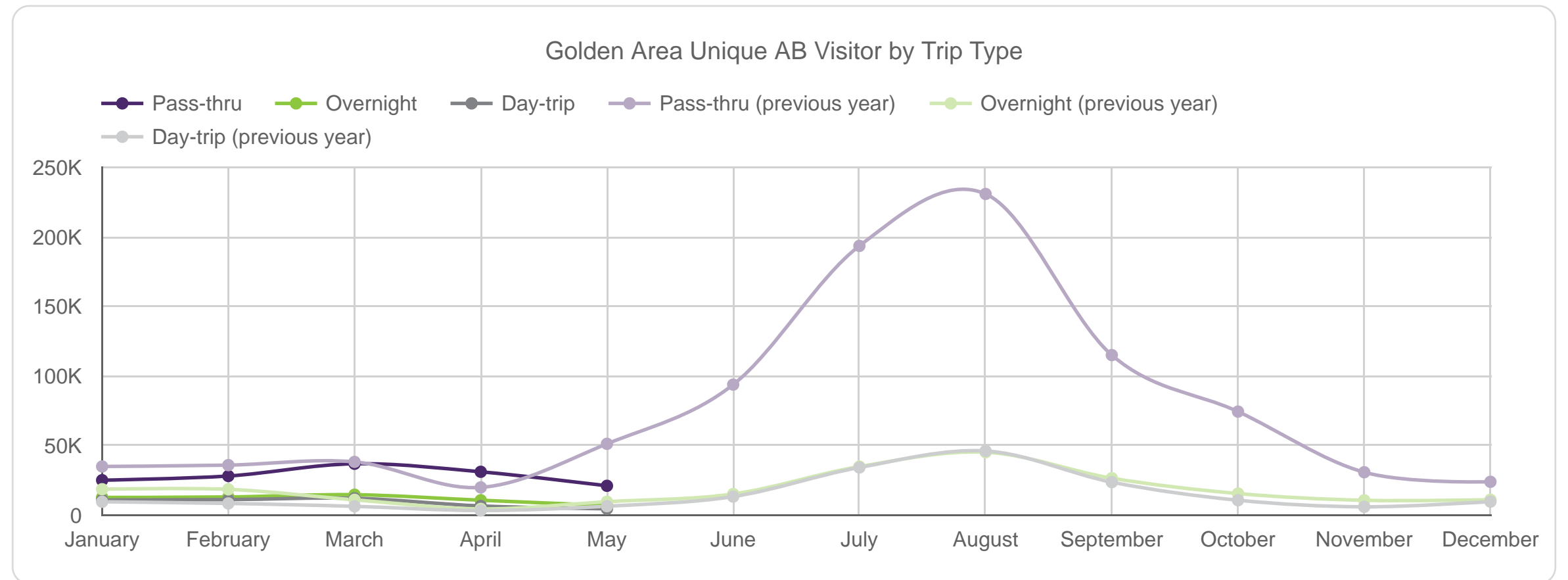


Monthly Unique Count

Albertan Visitors
Broken down by trip type

May 2021

The line chart on this page shows the counts of all Monthly Unique Albertan Visitors broken down by trip type.

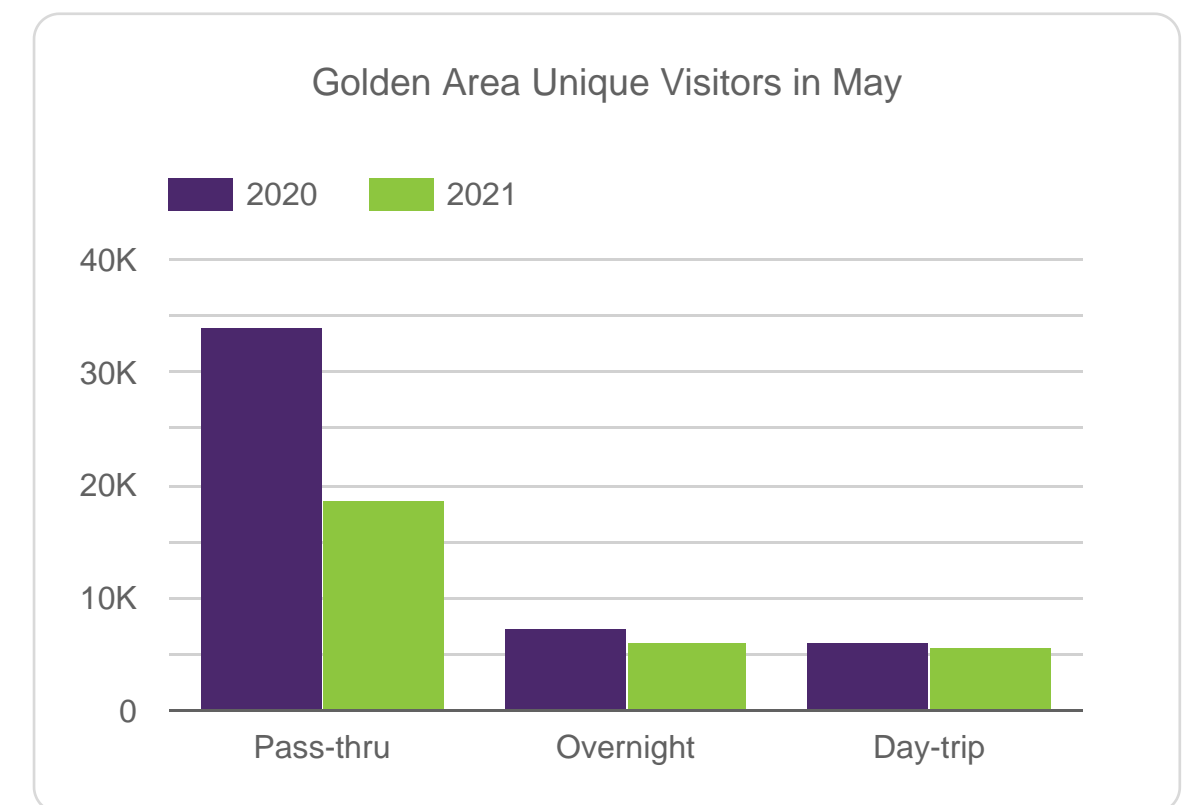
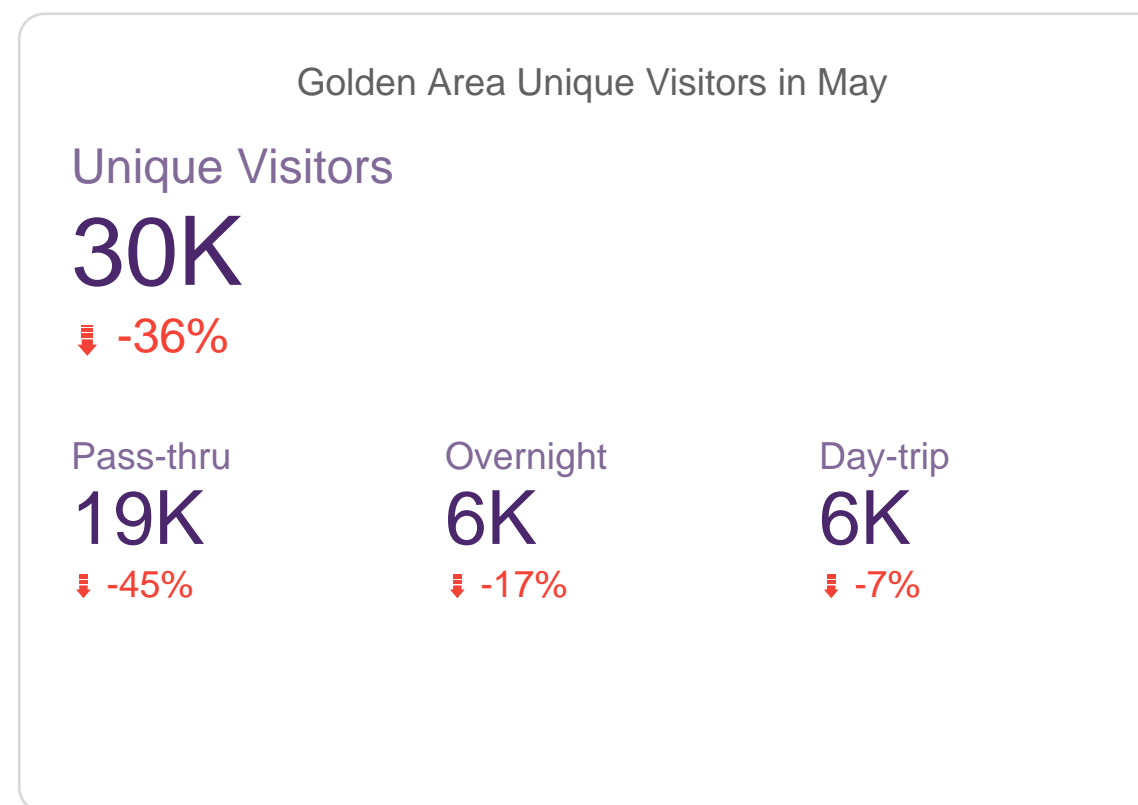
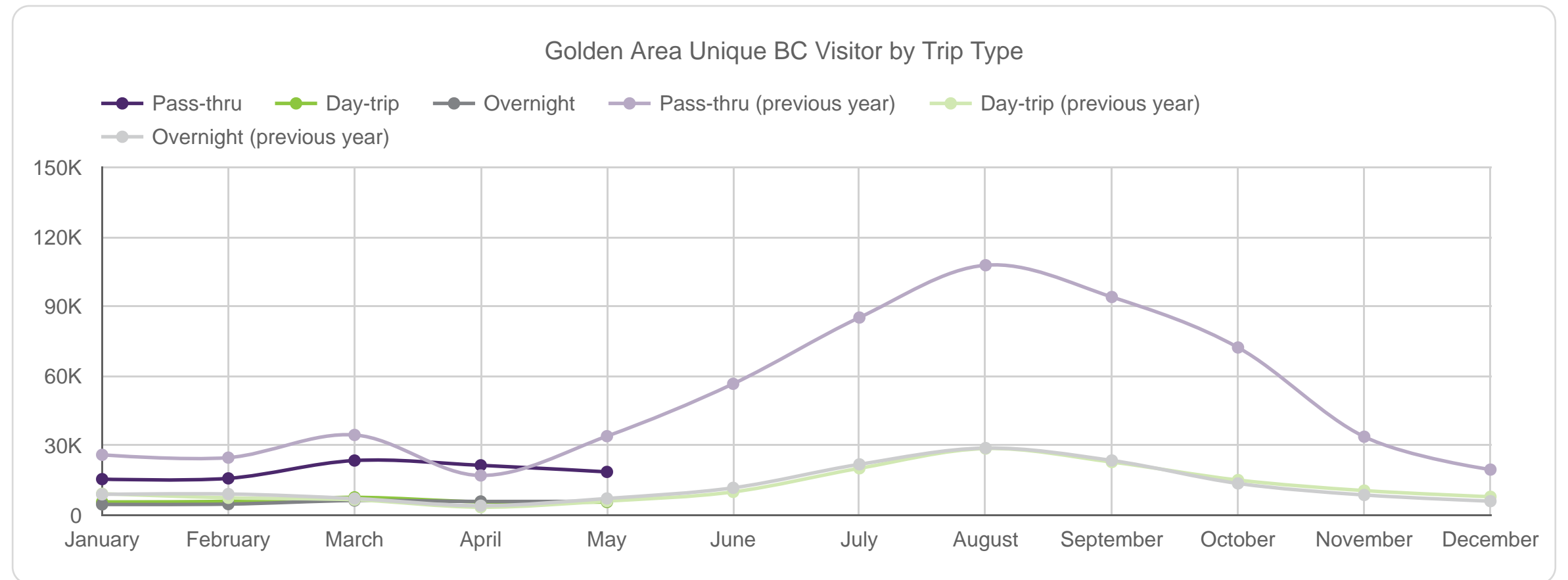


Monthly Unique Count

British Columbian Visitors
Broken down by trip type

May 2021

The line chart on this page shows the counts of all Monthly Unique British Columbian Visitors broken down by trip type.

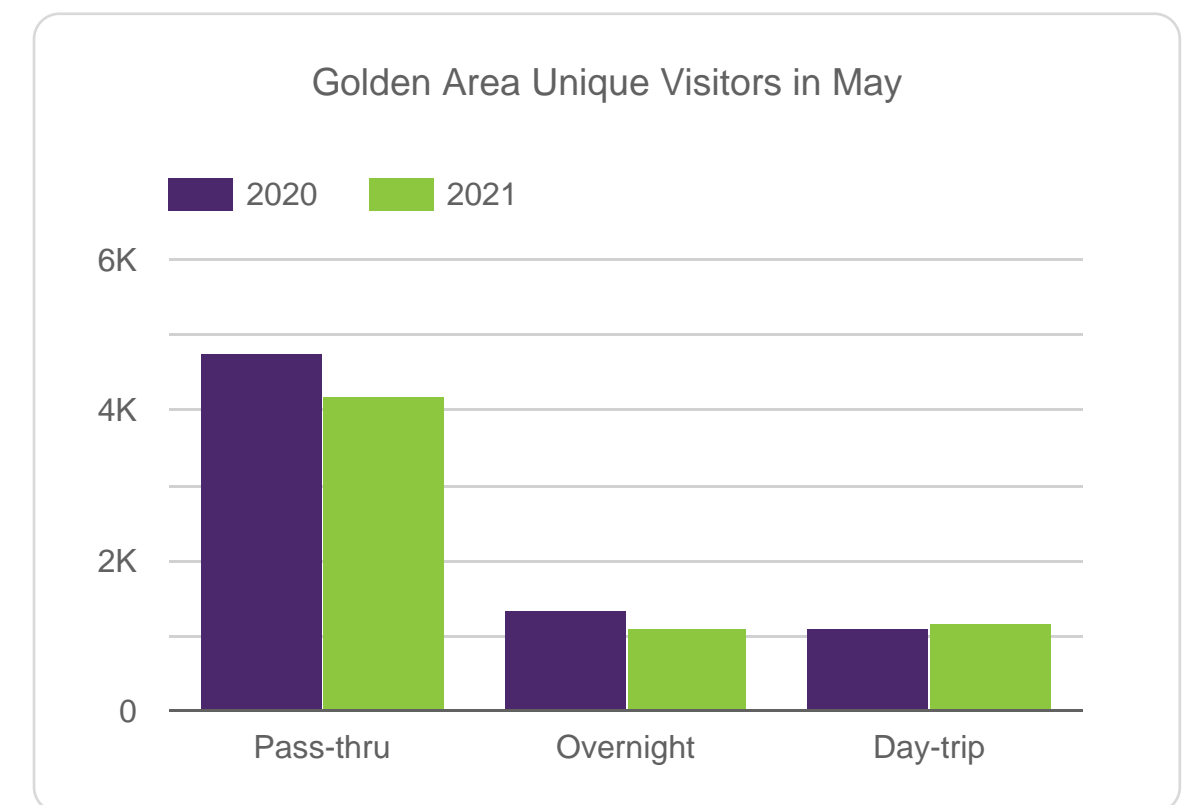
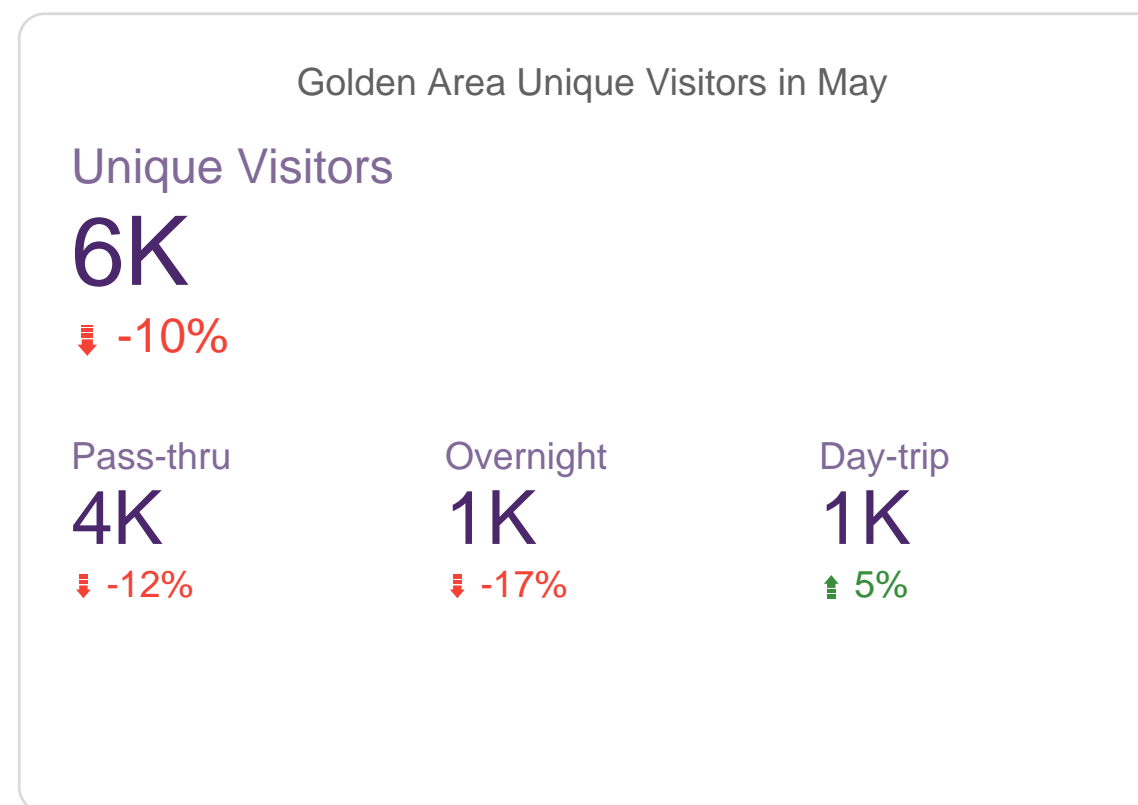
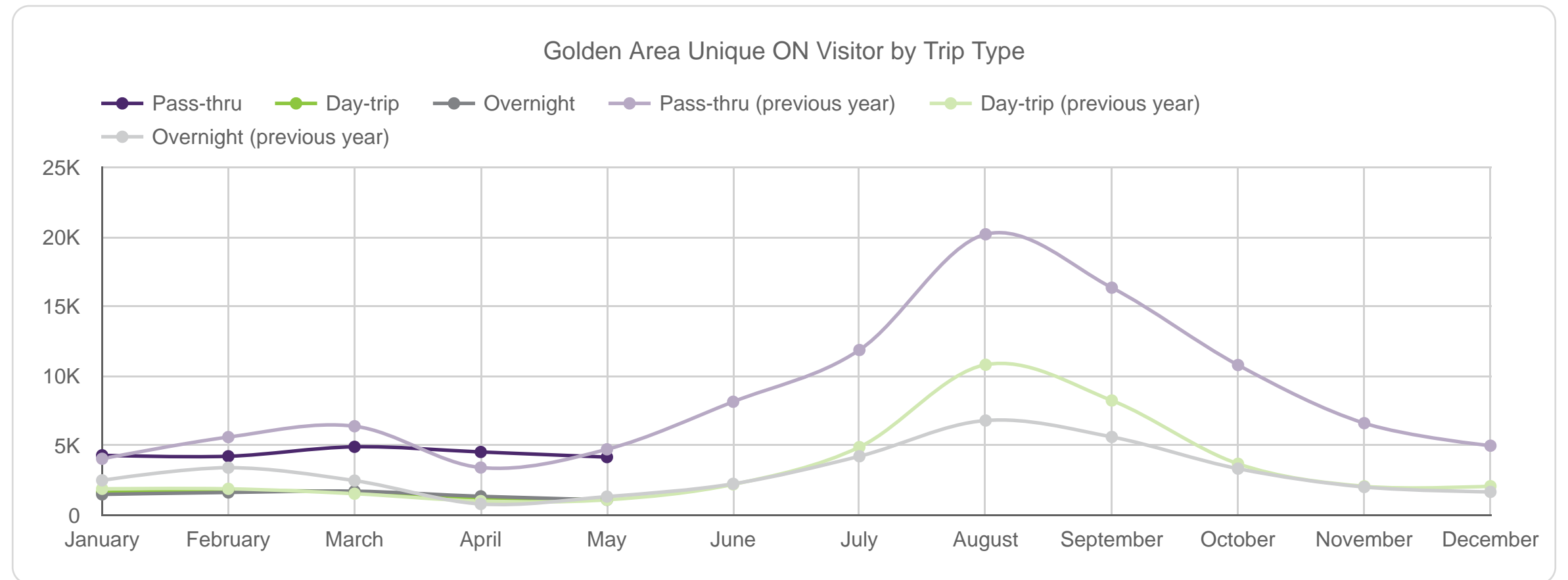


Monthly Unique Count

Ontarian Visitors
Broken down by trip type

May 2021

The line chart on this page shows the counts of all Monthly Unique Ontarian Visitors broken down by trip type.

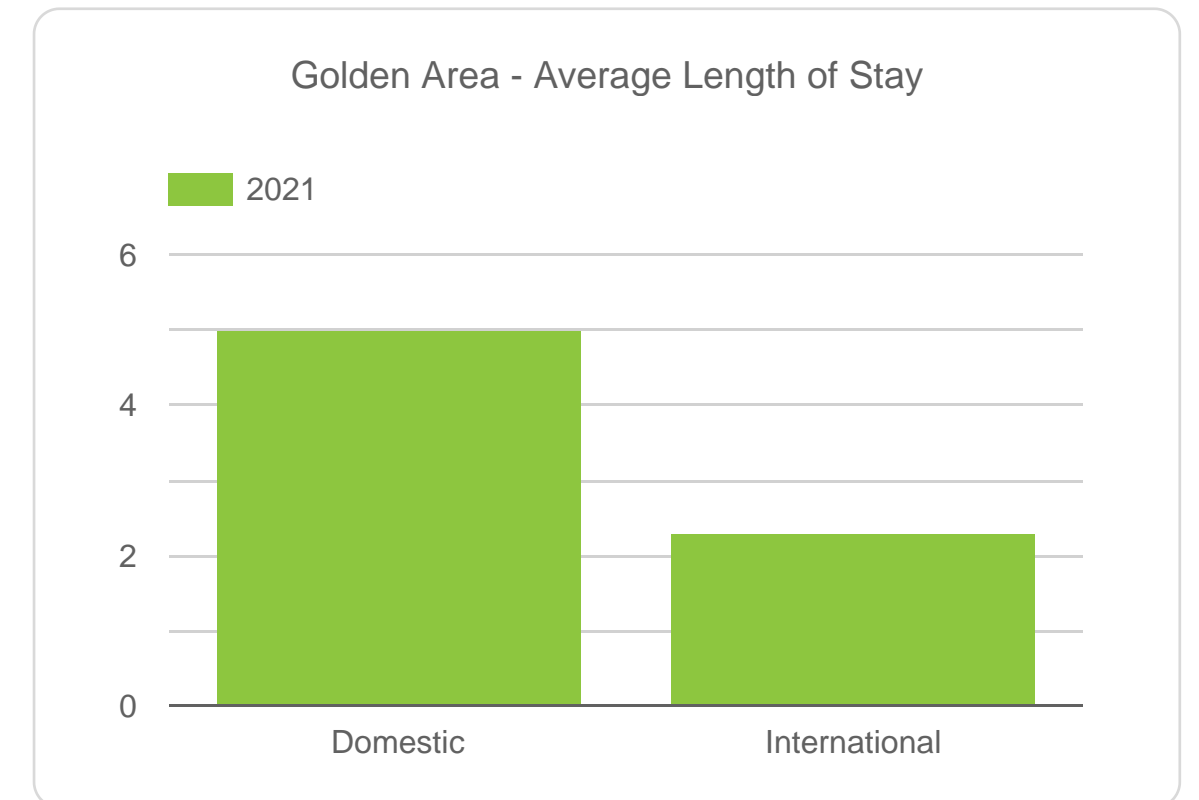
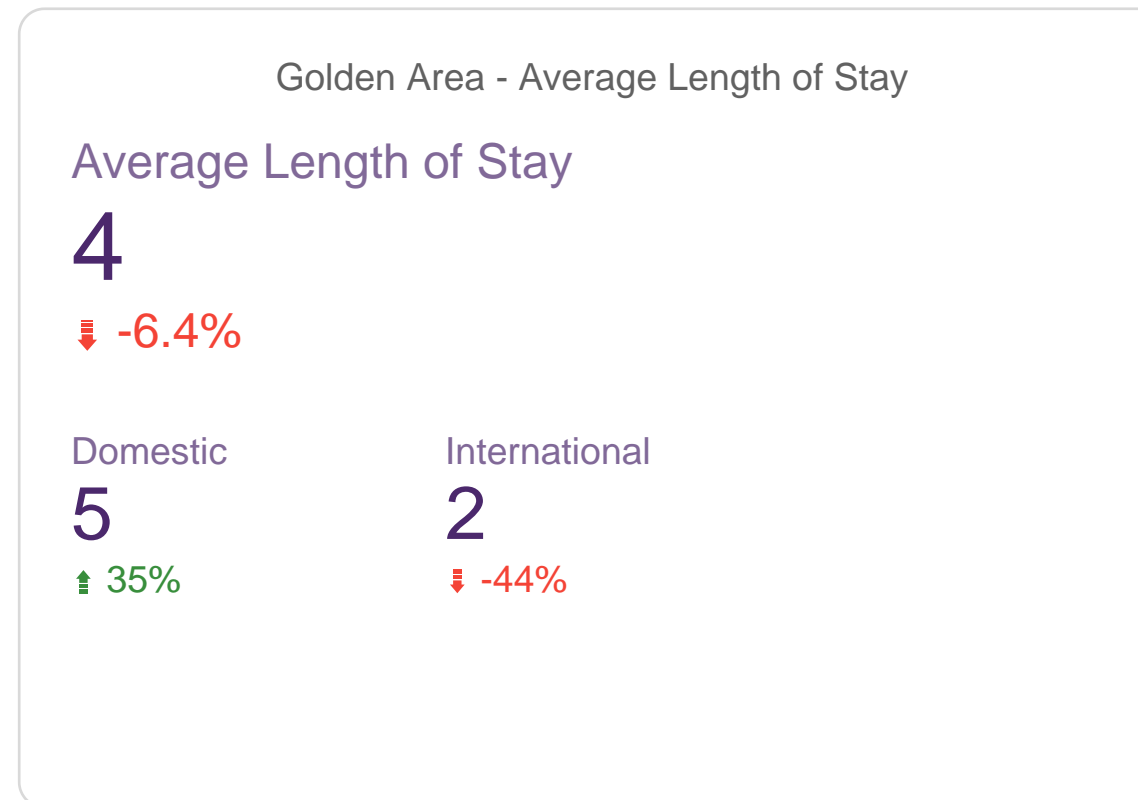
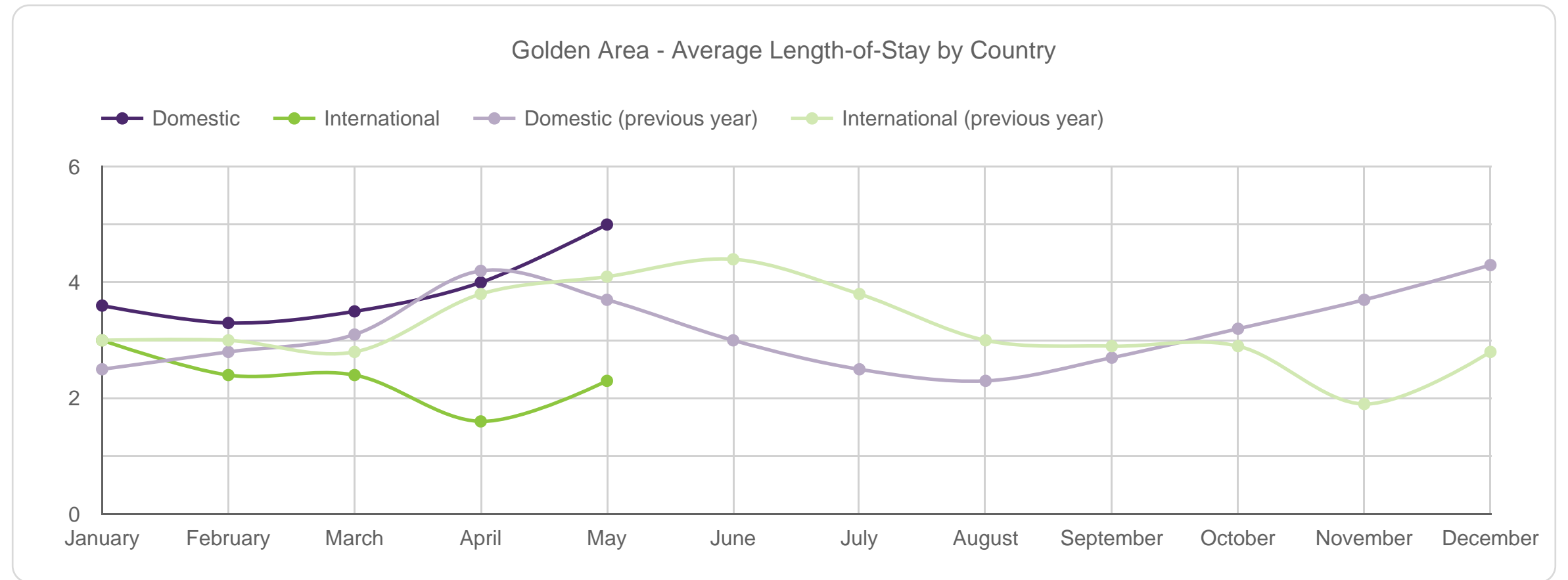


Monthly Average Length of Stay

Average Length of Stay
Broken Down by Country

May 2021

The line chart on this page shows the average length of stay broken down by country.

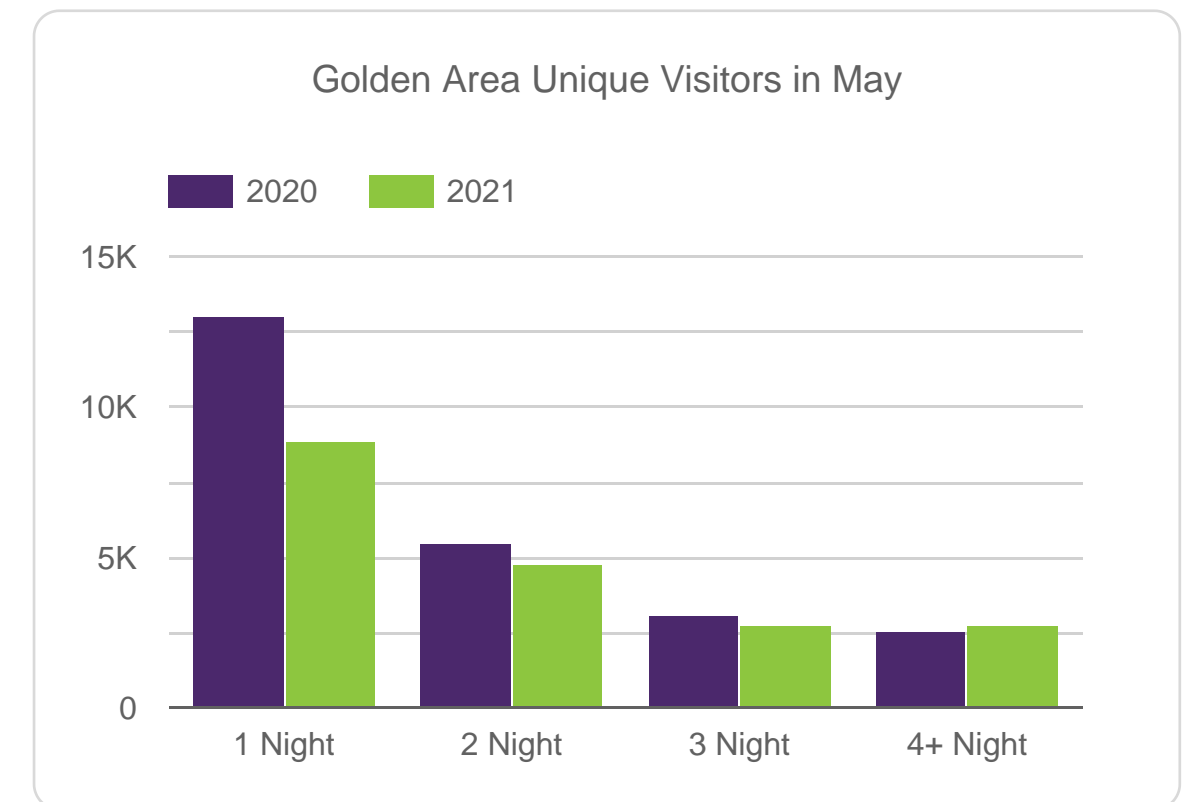
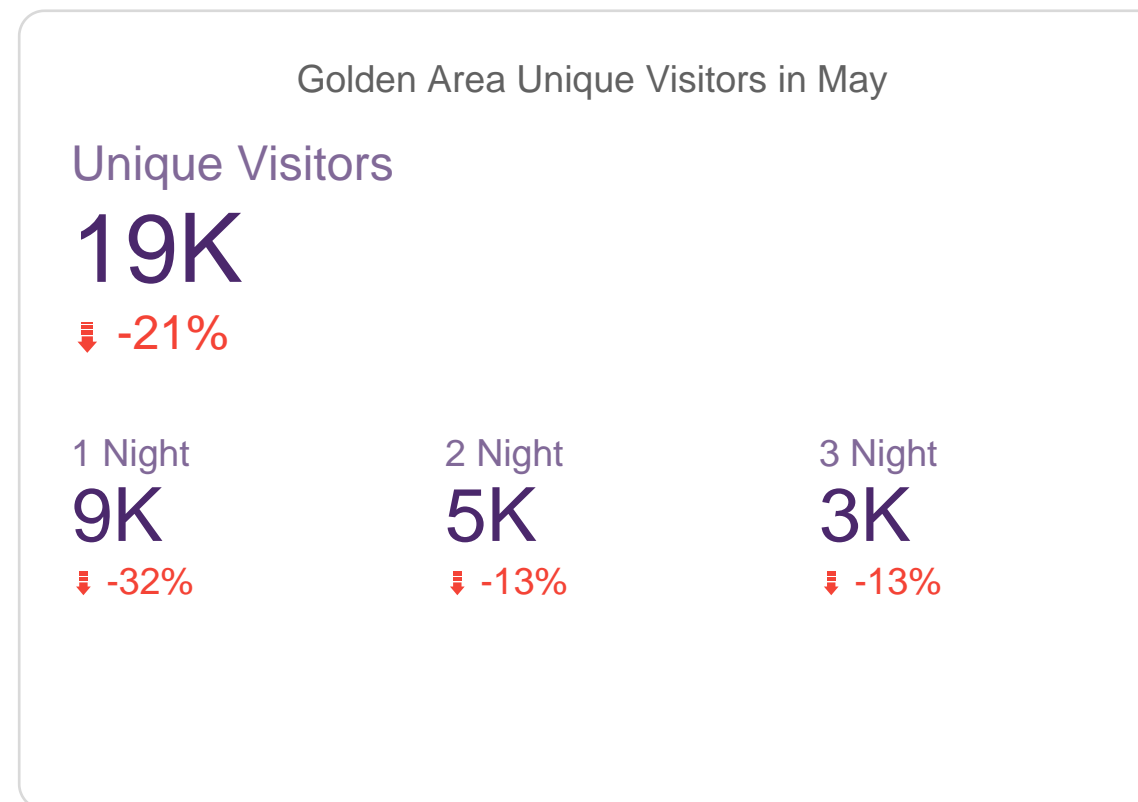
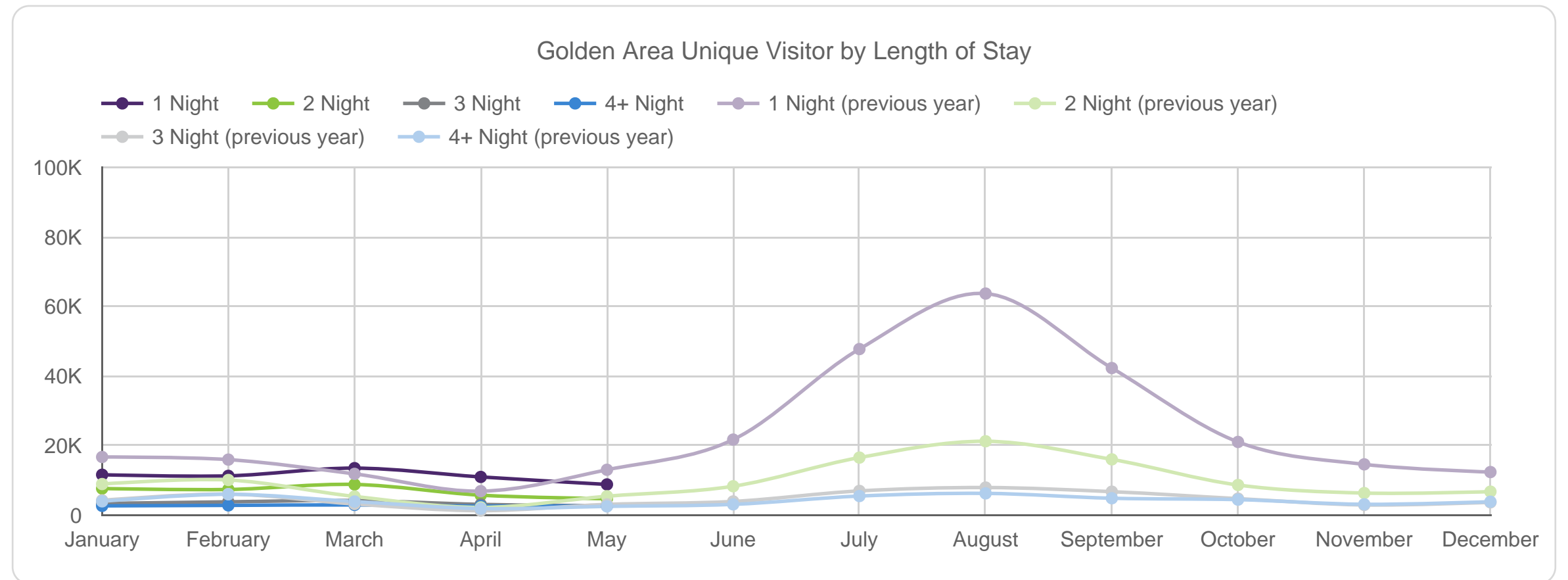


Monthly Unique Count

Canadian Visitors
Broken down by Length of Stay

May 2021

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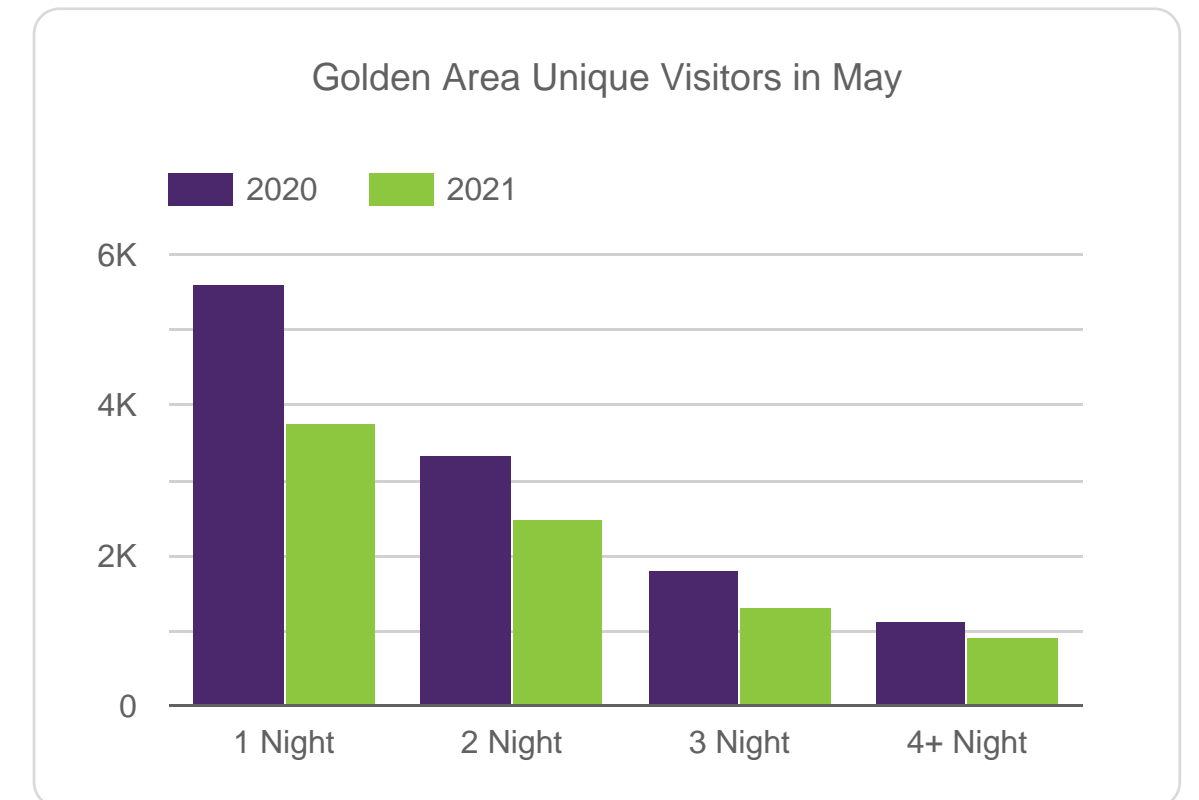
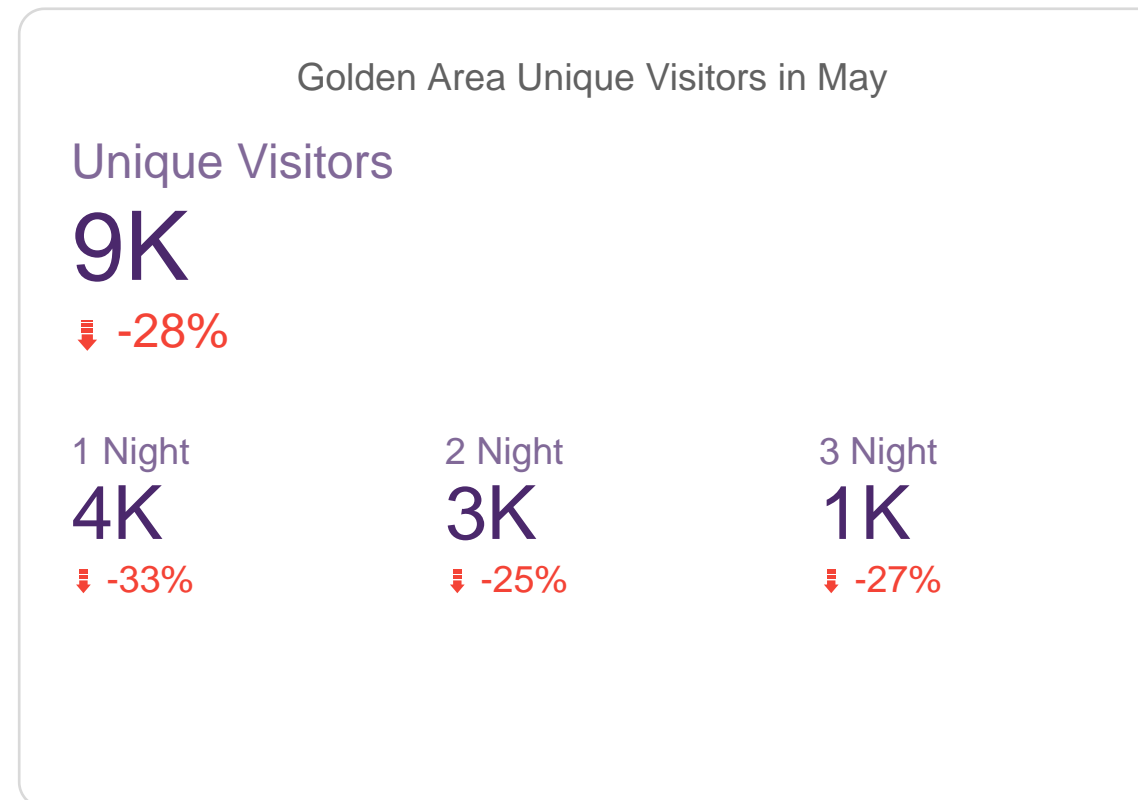
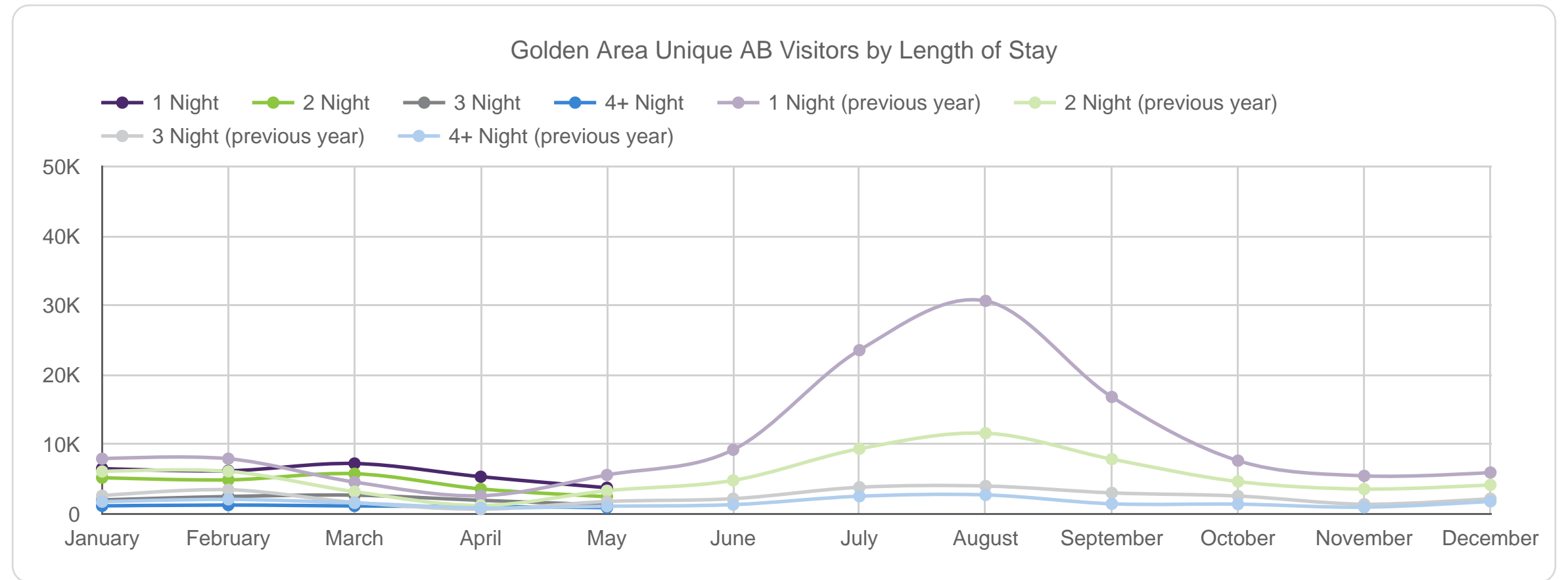


Monthly Unique Count

Albertan Visitors
Broken down by Length of Stay

May 2021

The line chart on this page shows the counts of all Monthly Unique Albertan Visitors broken down by length of stay.

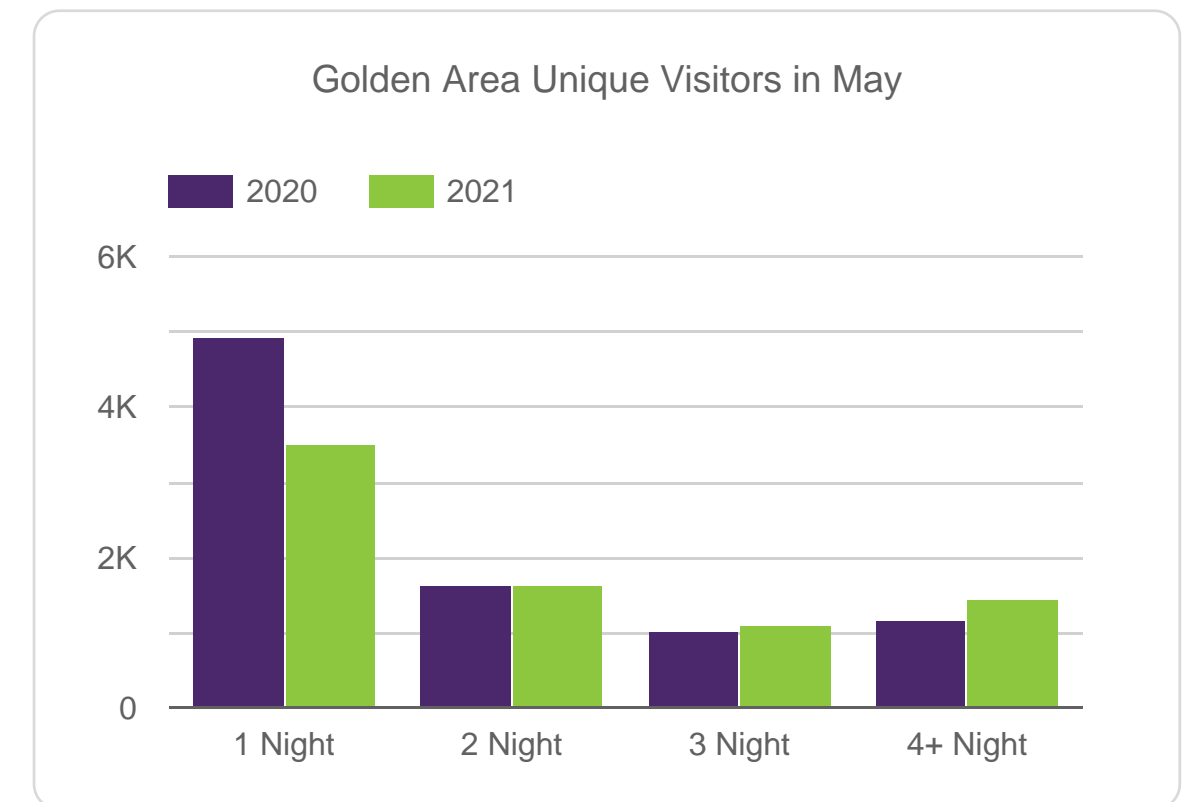
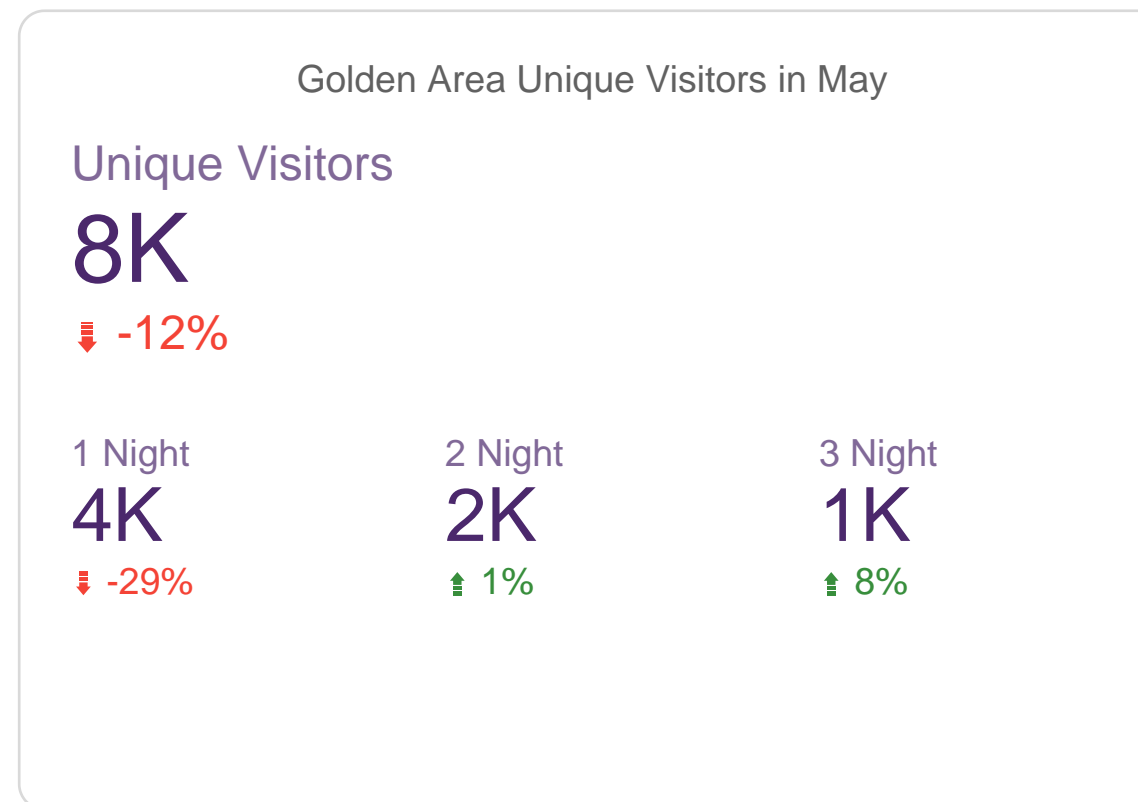
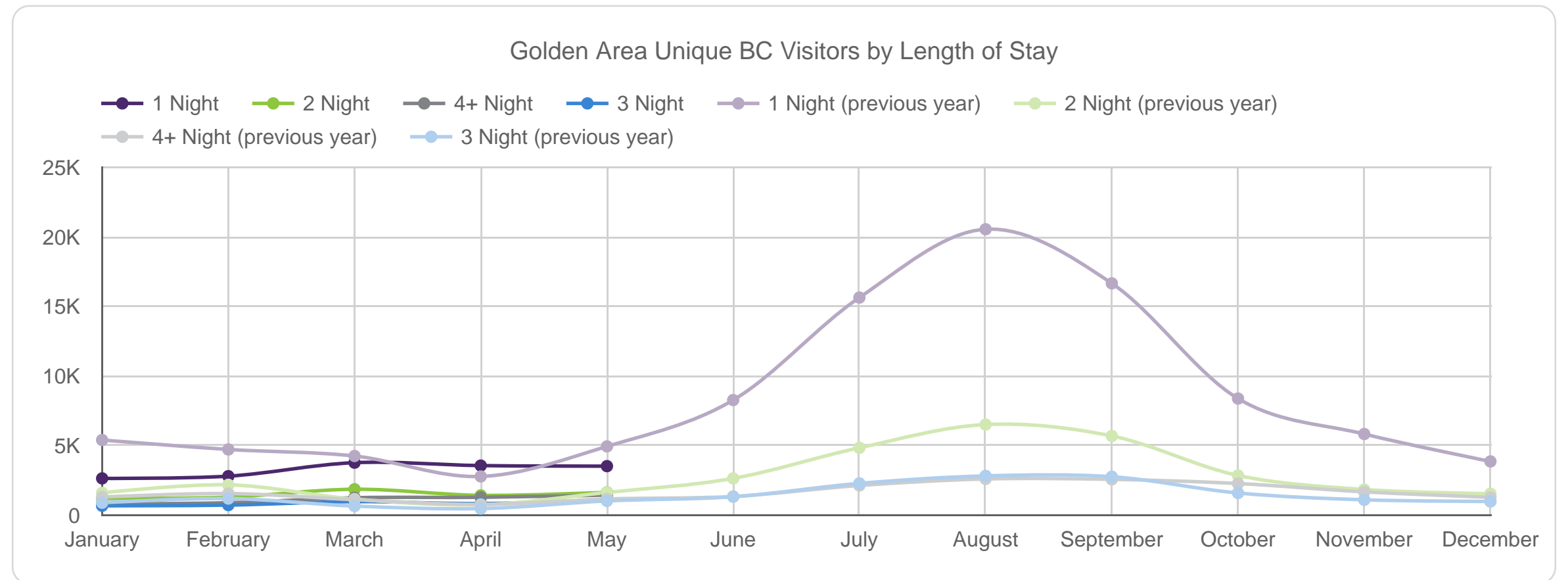


Monthly Unique Count

British Columbian Visitors
Broken down by Length of Stay

May 2021

The line chart on this page shows the counts of all Monthly Unique British Columbian Visitors broken down by length of stay.

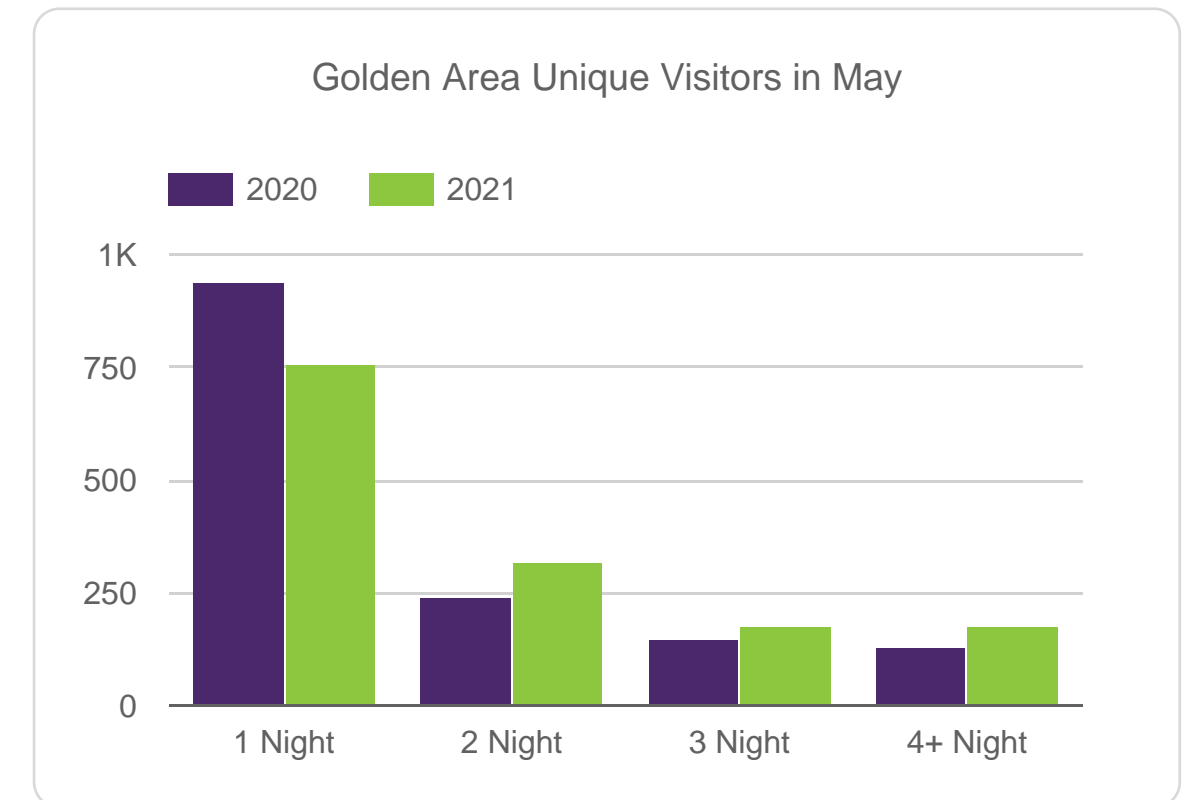
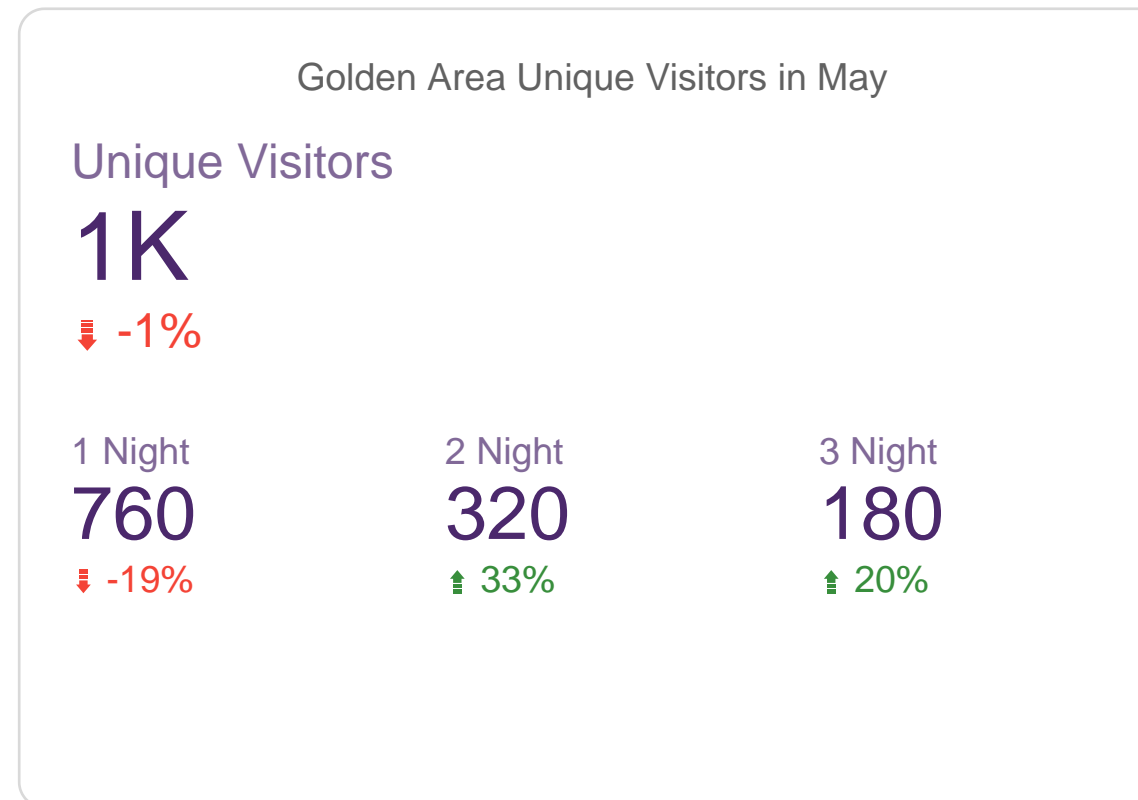
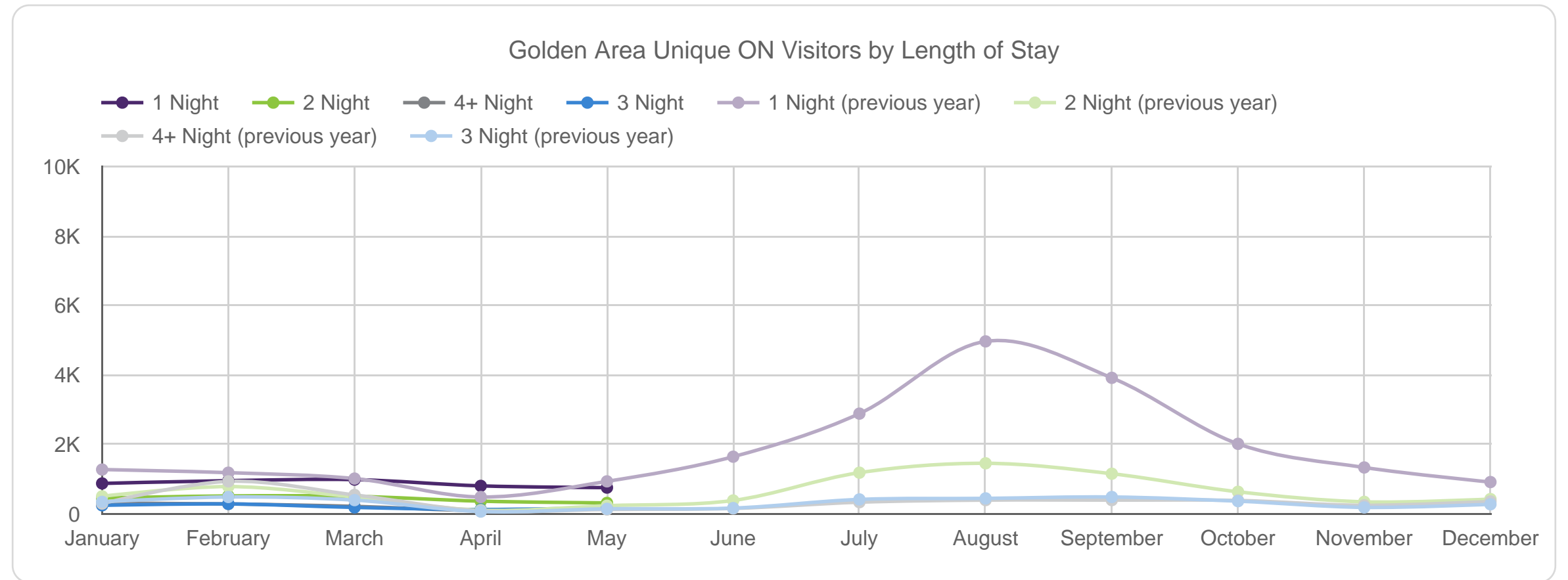


Monthly Unique Count

Ontarian Visitors
Broken down by Length of Stay

May 2021

The line chart on this page shows the counts of all Monthly Unique Ontarian Visitors broken down by length of stay.

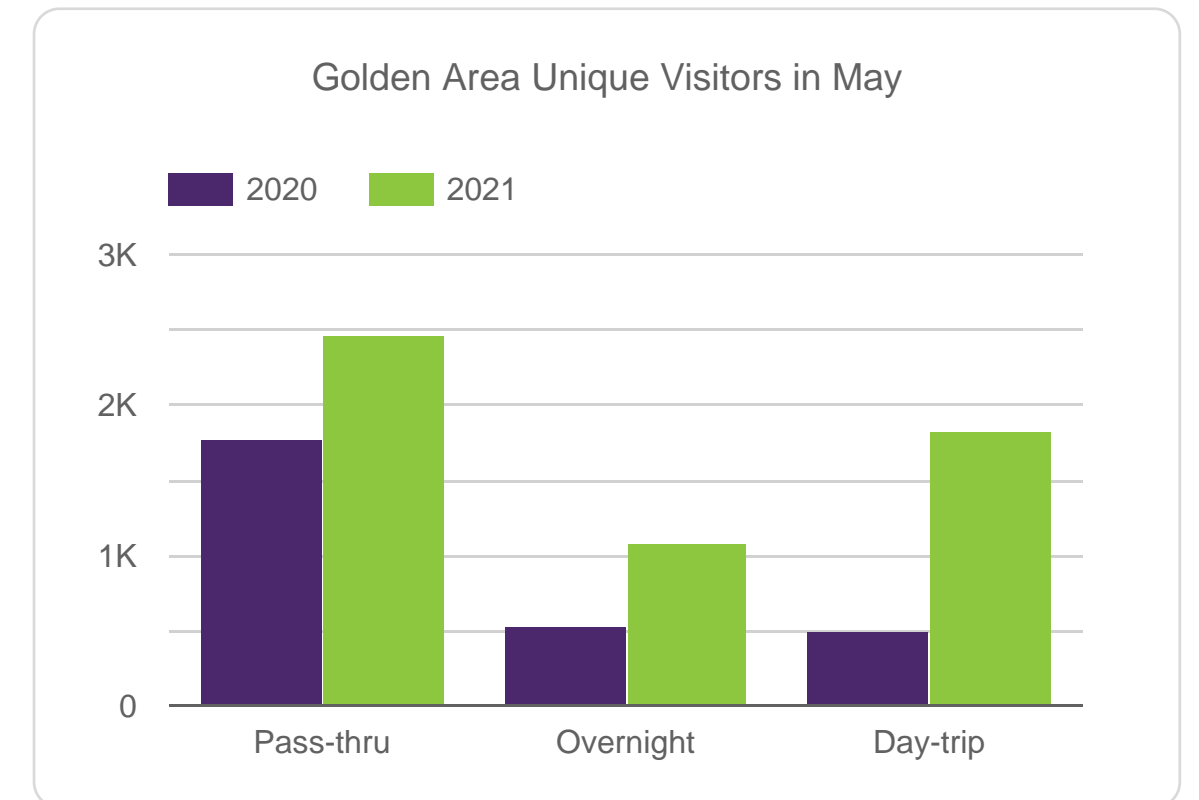
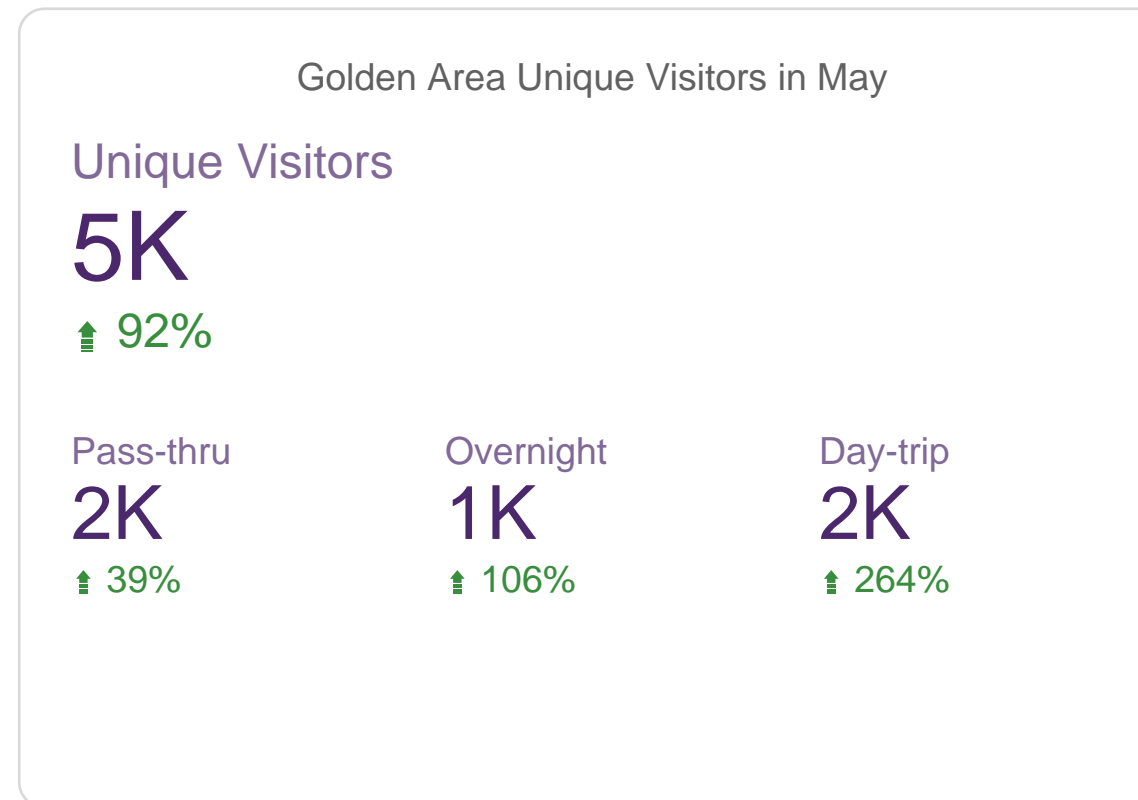
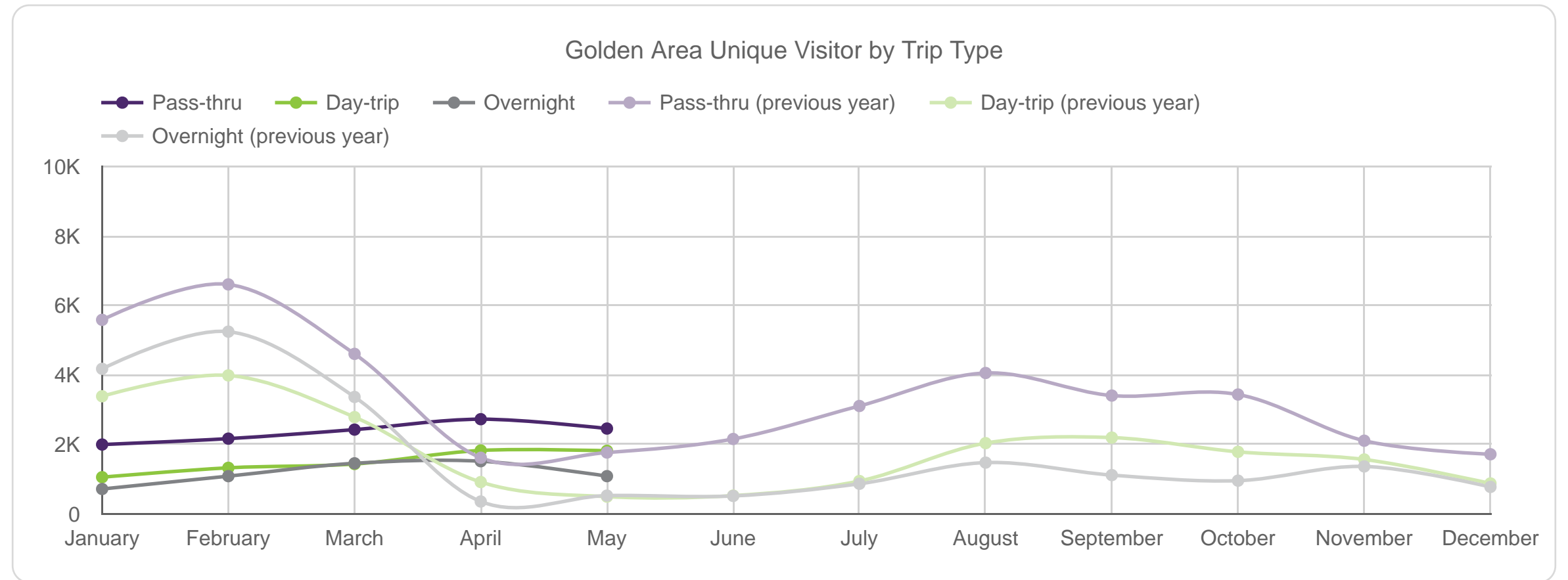


Monthly Unique Count

American Visitors
Broken down by trip type

May 2021

The line chart on this page shows the counts of all Monthly Unique American Visitors broken down by trip type.

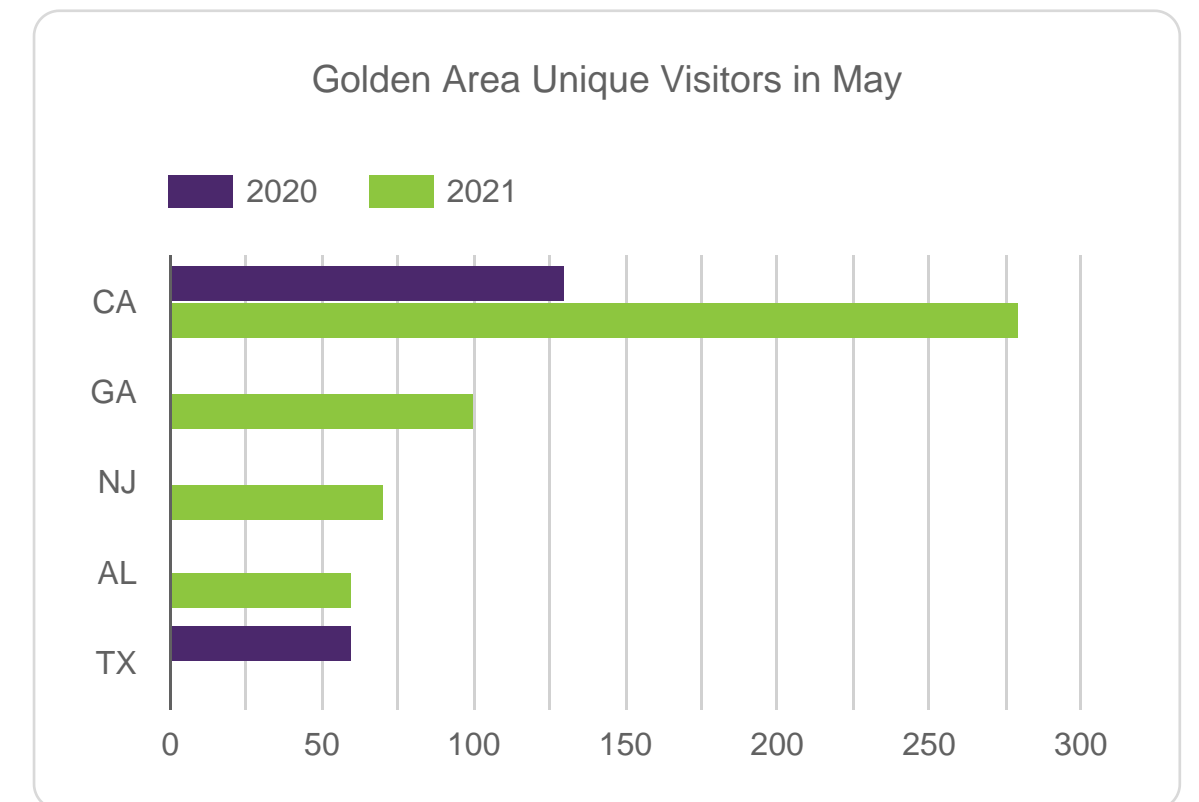
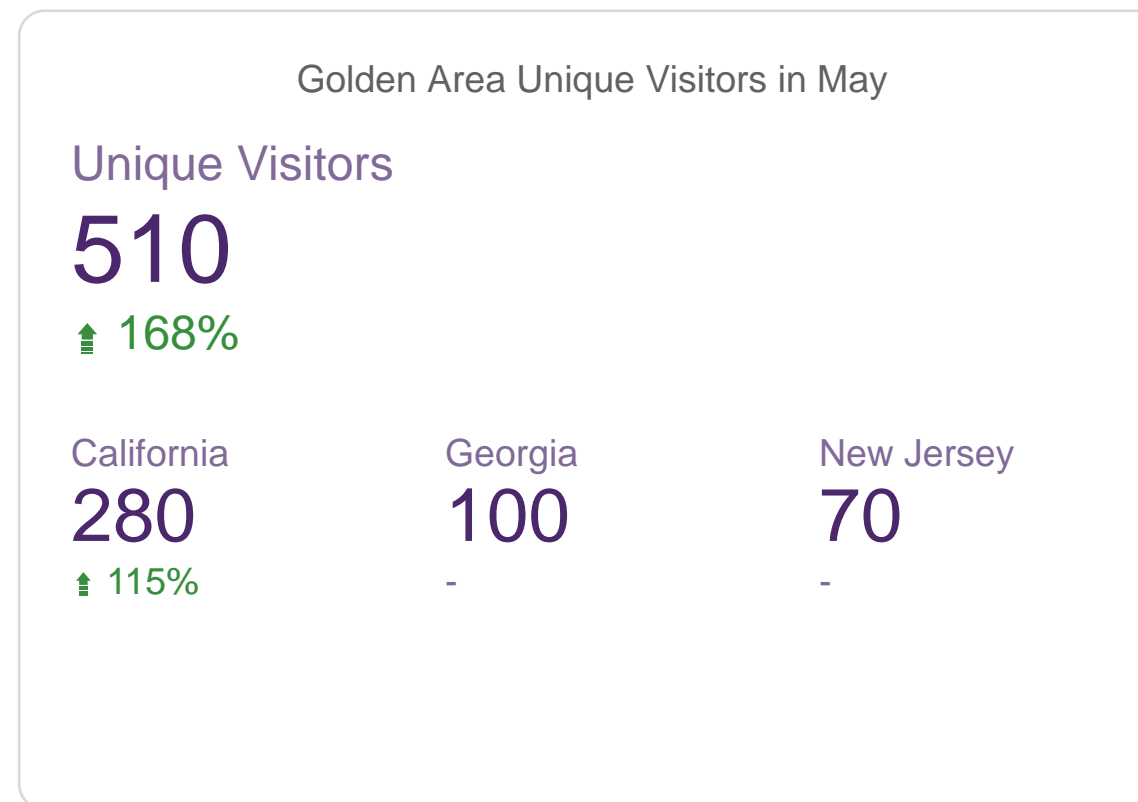
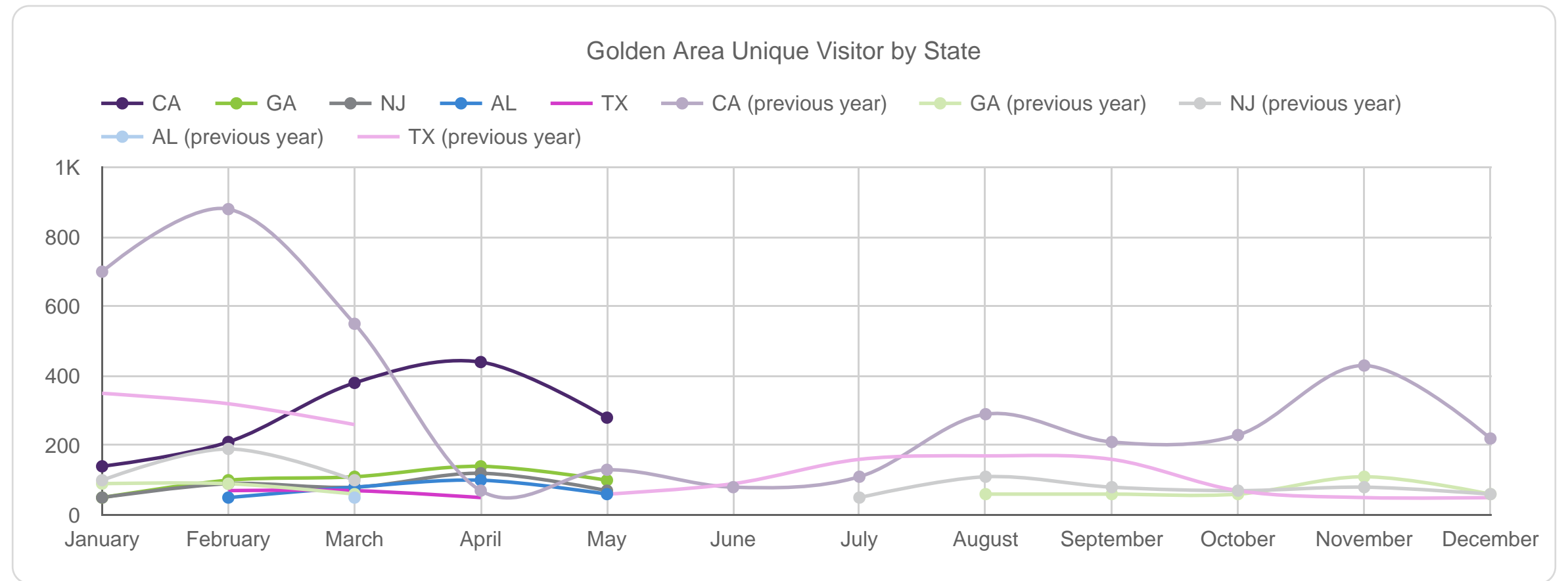


Monthly Unique Count

American Overnight Visitors
Broken down by state

May 2021

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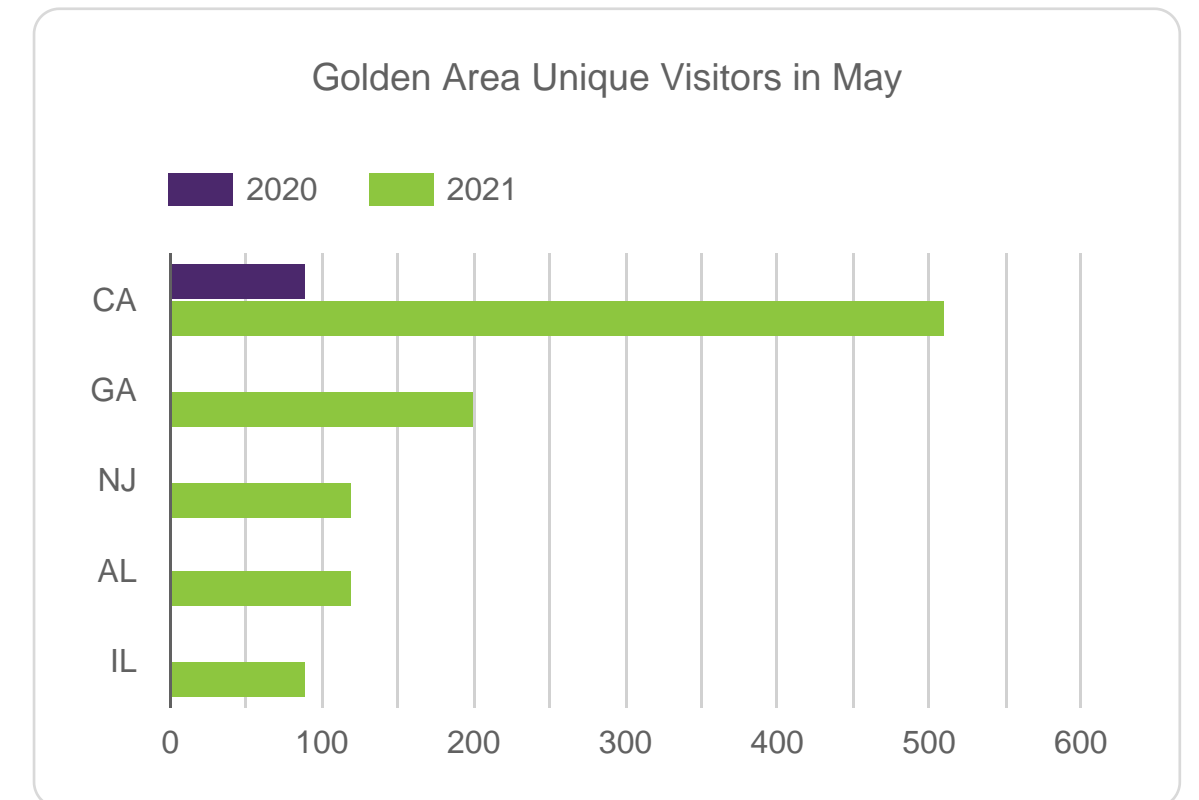
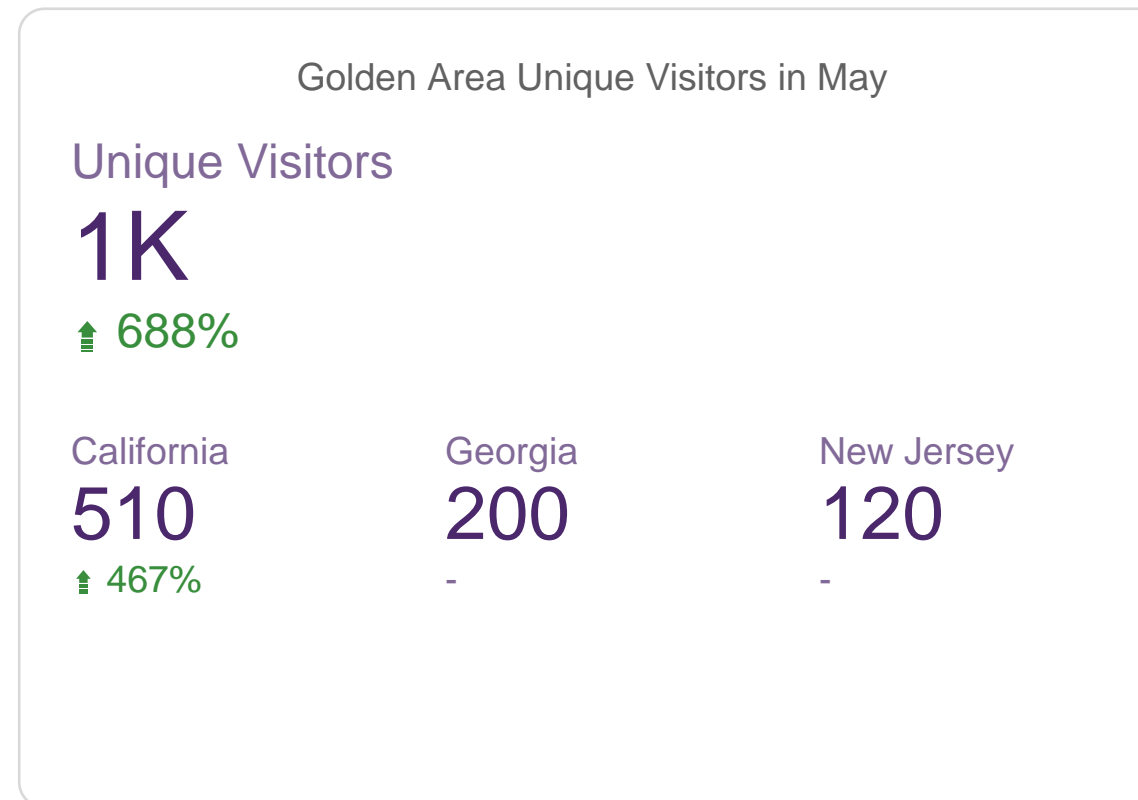
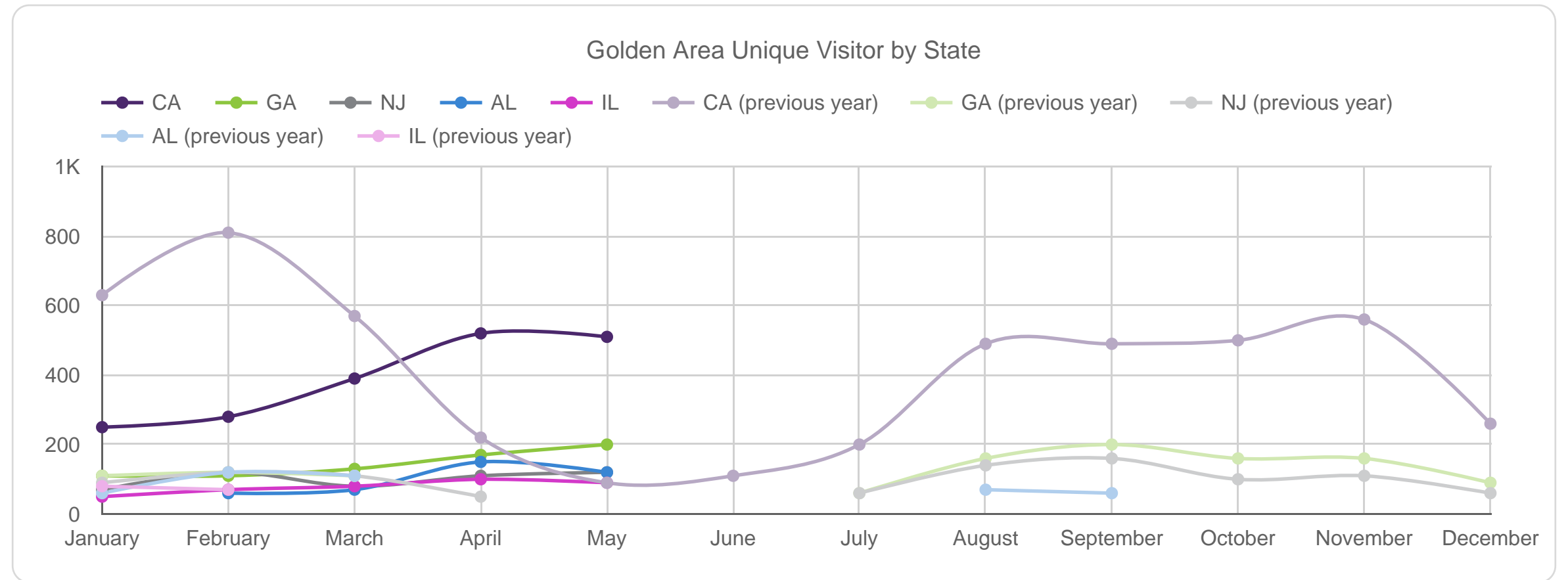


Monthly Unique Count

American Day-trip Visitors
Broken down by state

May 2021

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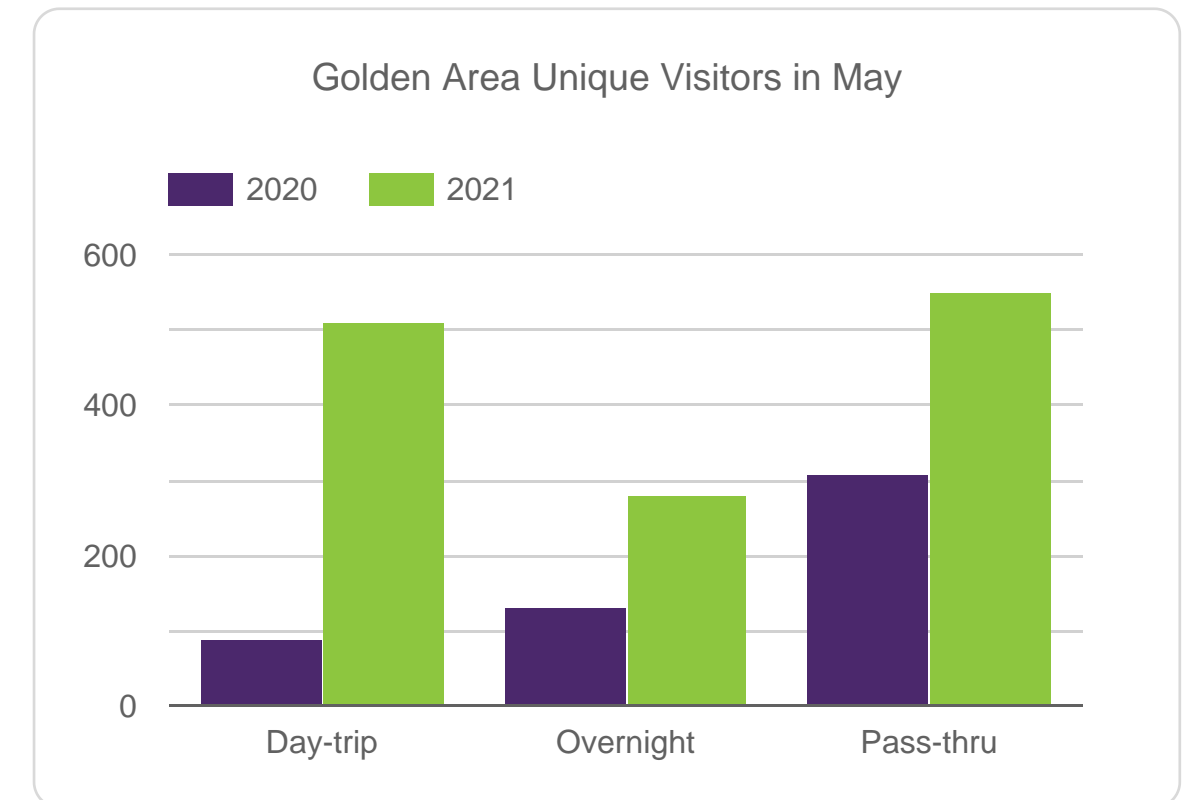
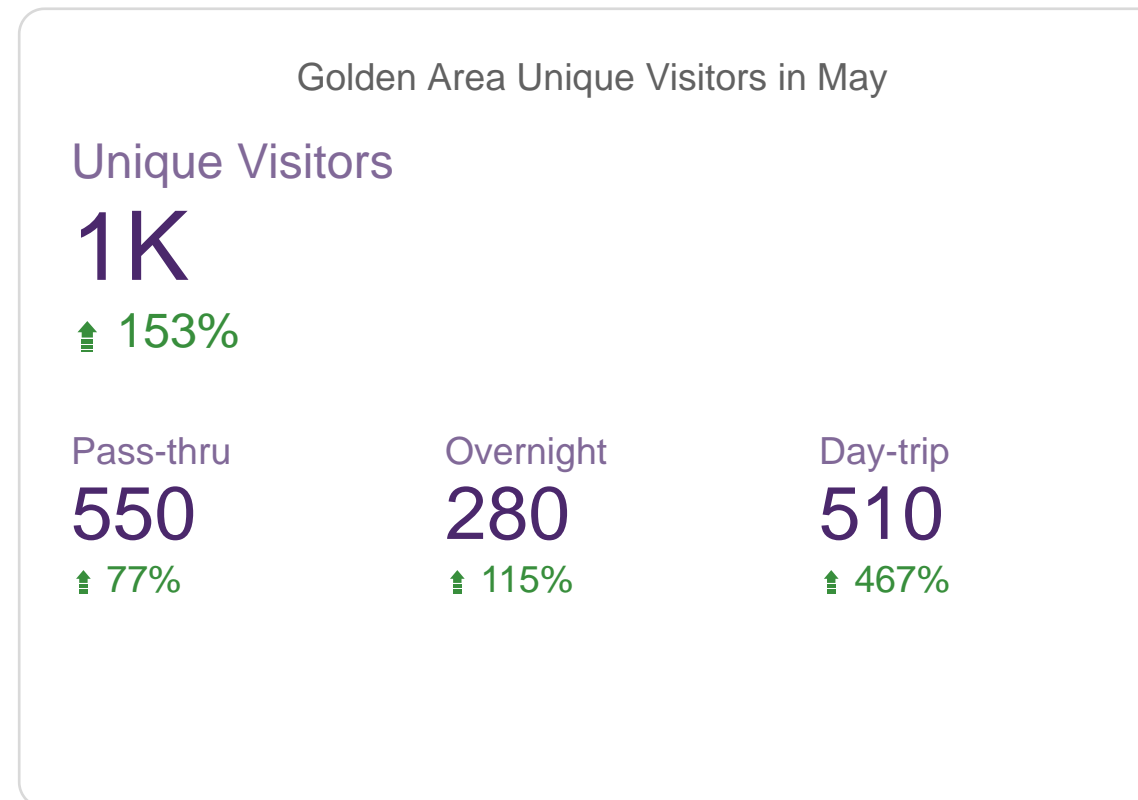
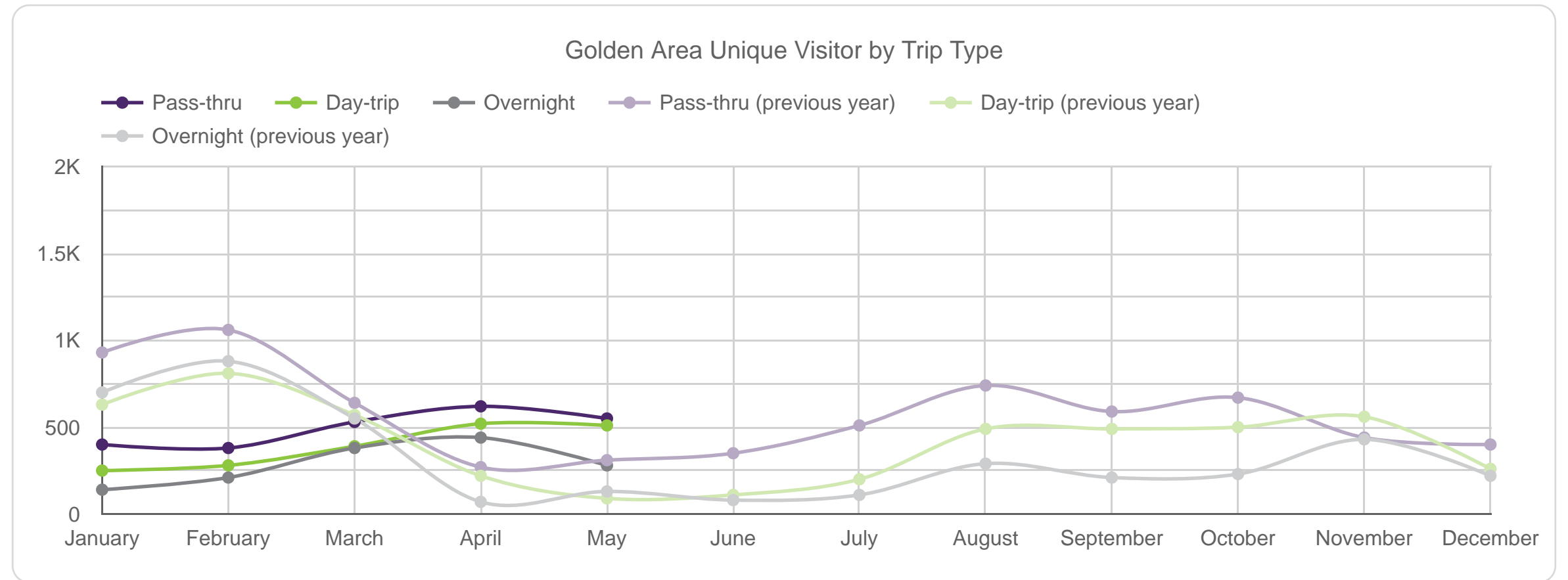


Monthly Unique Count

California Visitors
Broken down by trip type

May 2021

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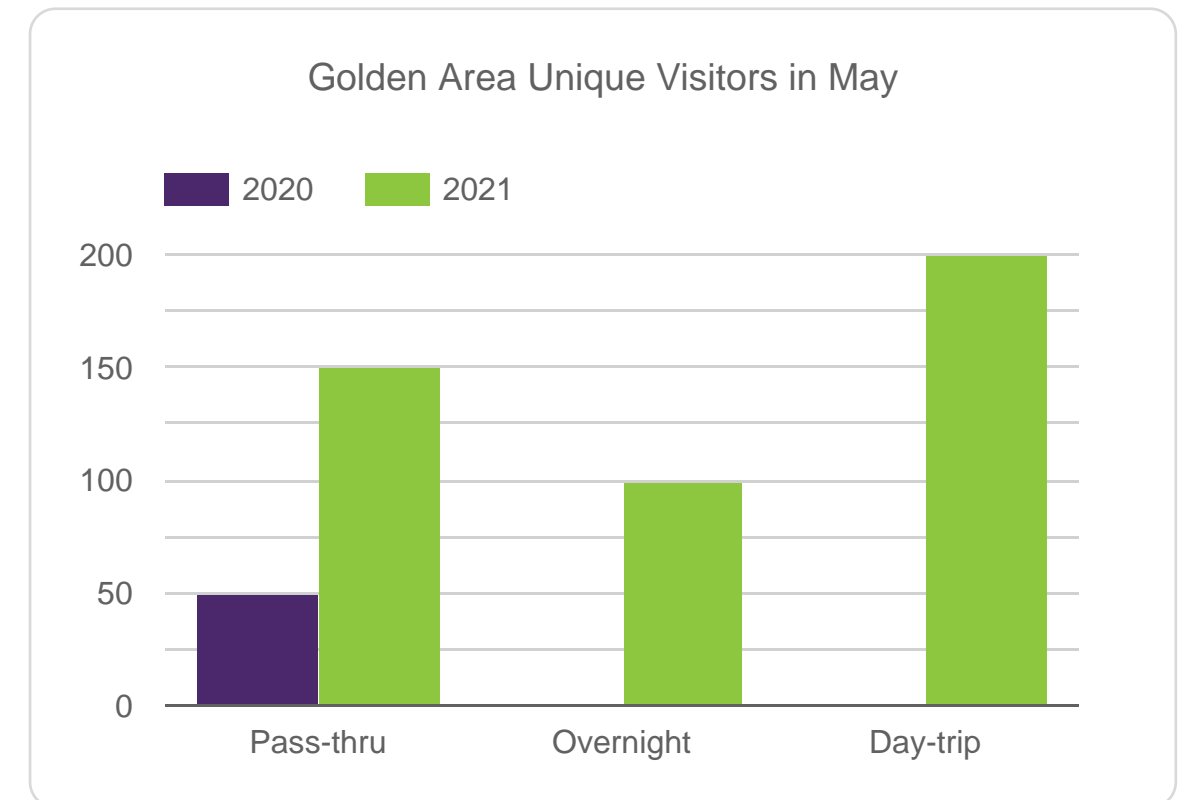
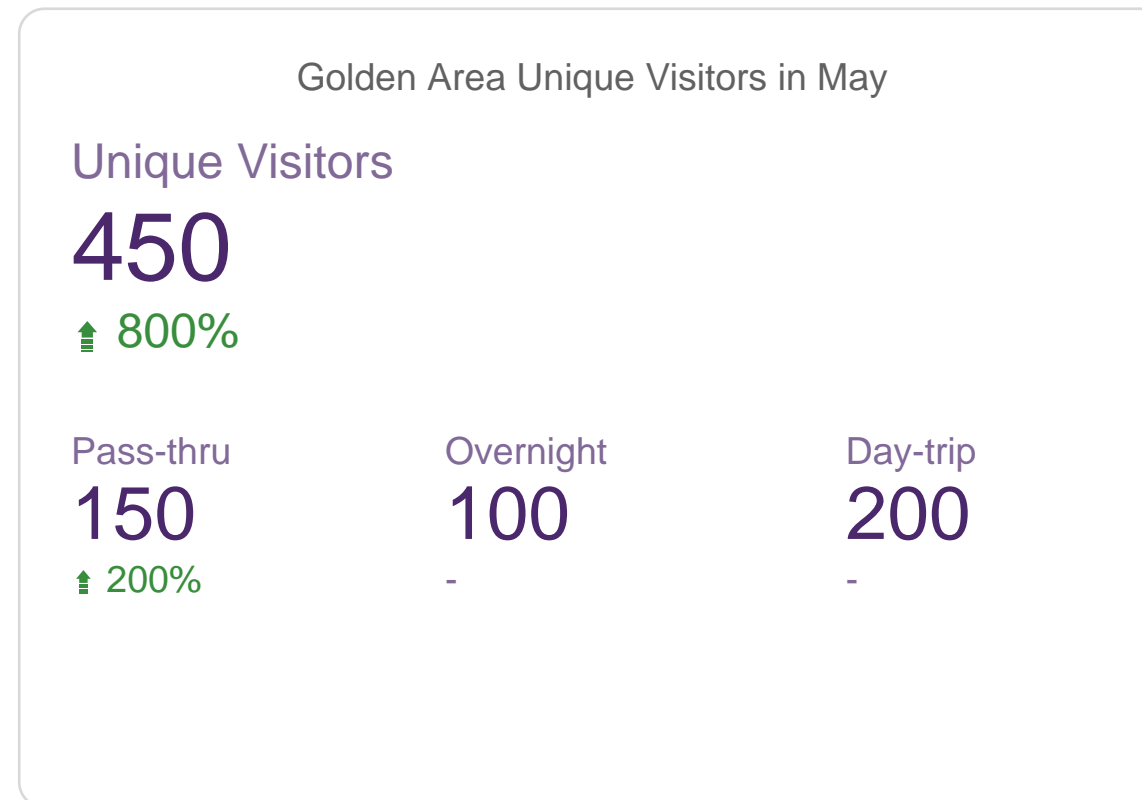
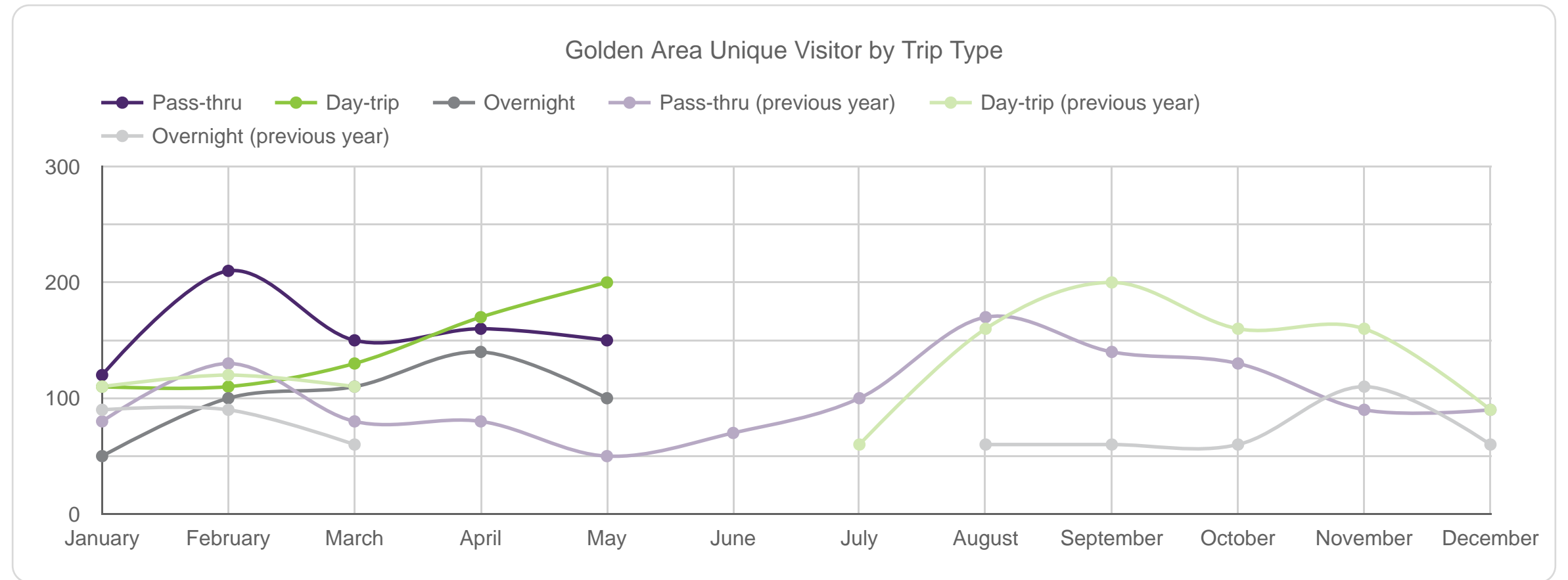


Monthly Unique Count

Georgian Visitors
Broken down by trip type

May 2021

The line chart on this page shows the counts of all Monthly Unique Georgian Visitors broken down by trip type.

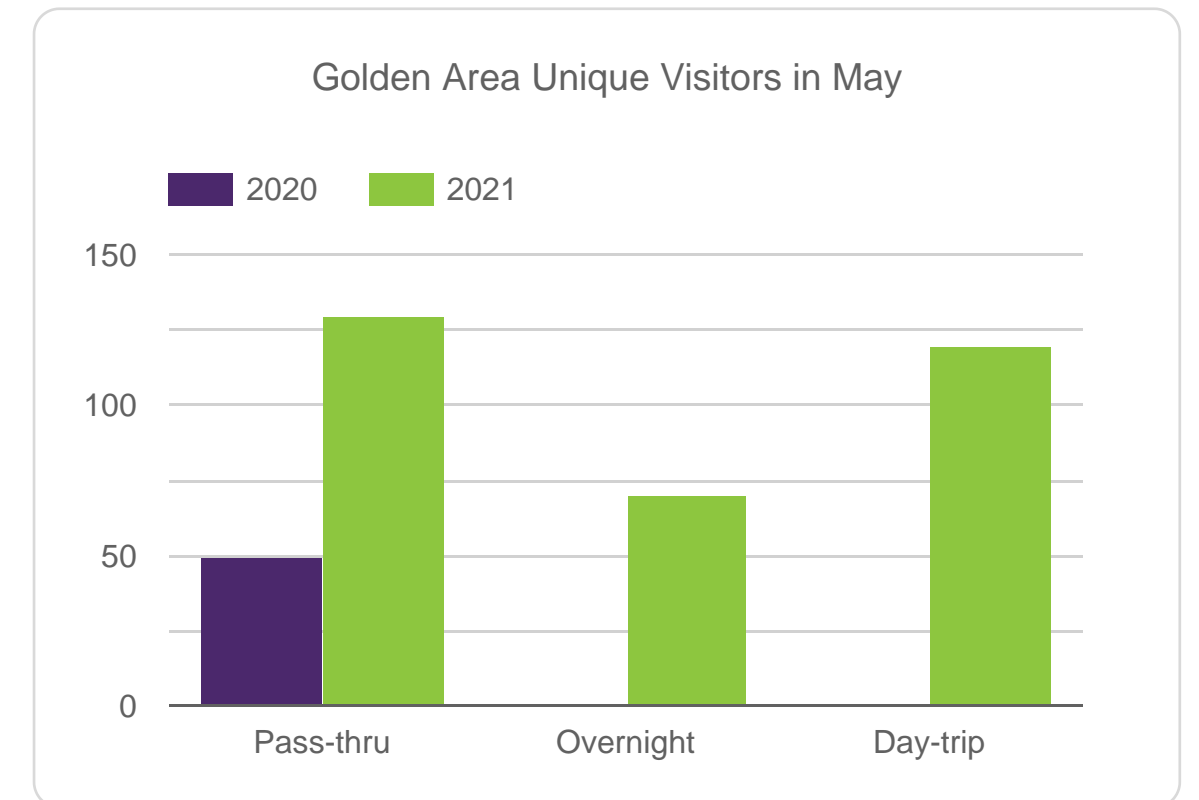
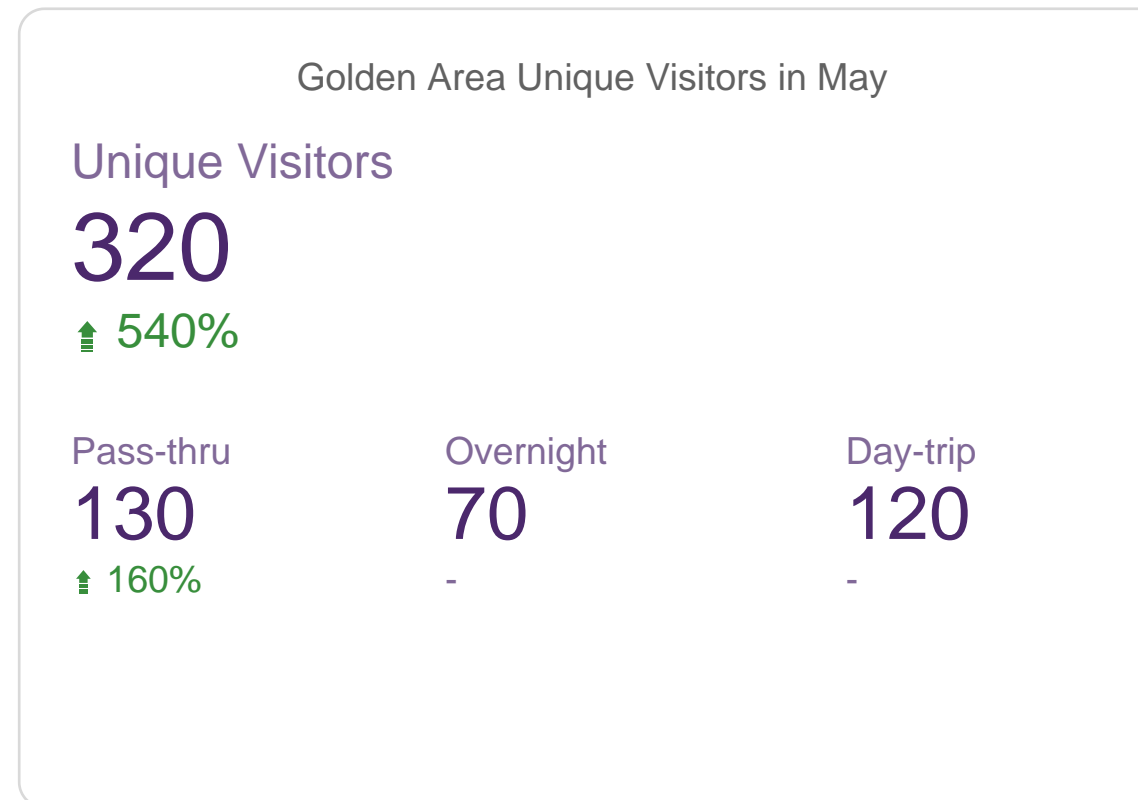
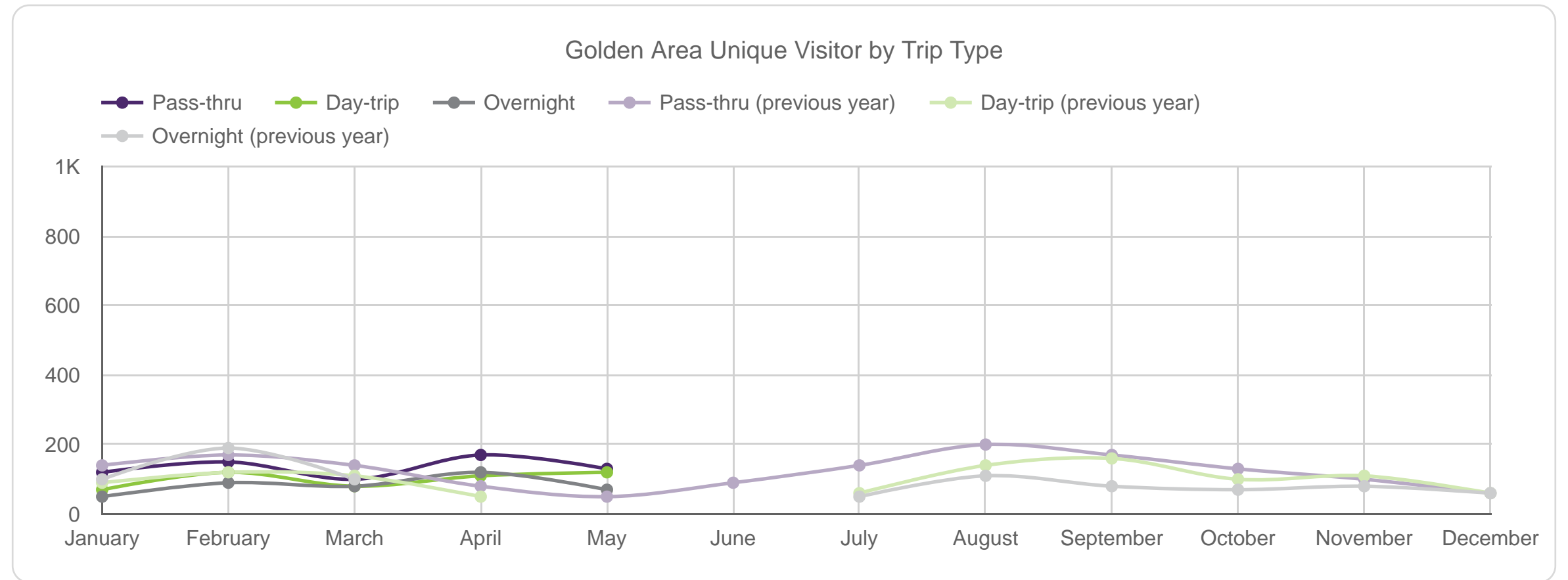


Monthly Unique Count

New Jersey Visitors
Broken down by trip type

May 2021

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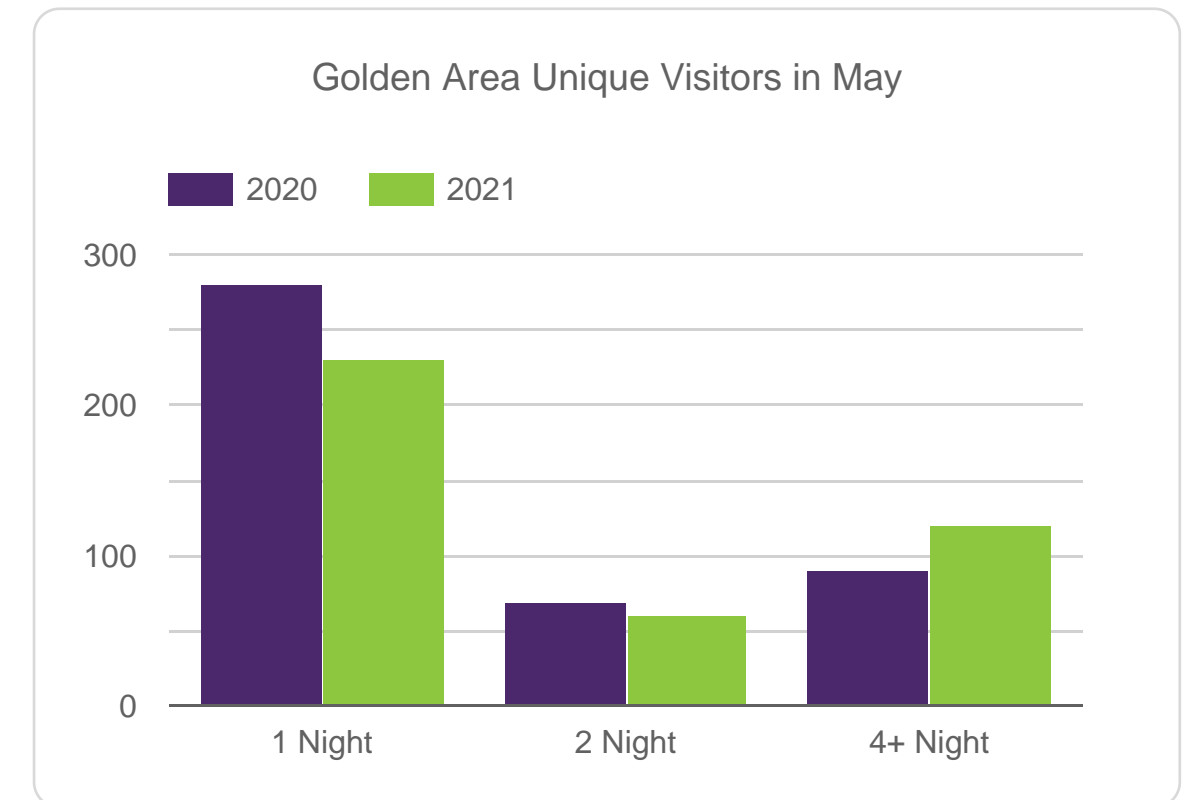
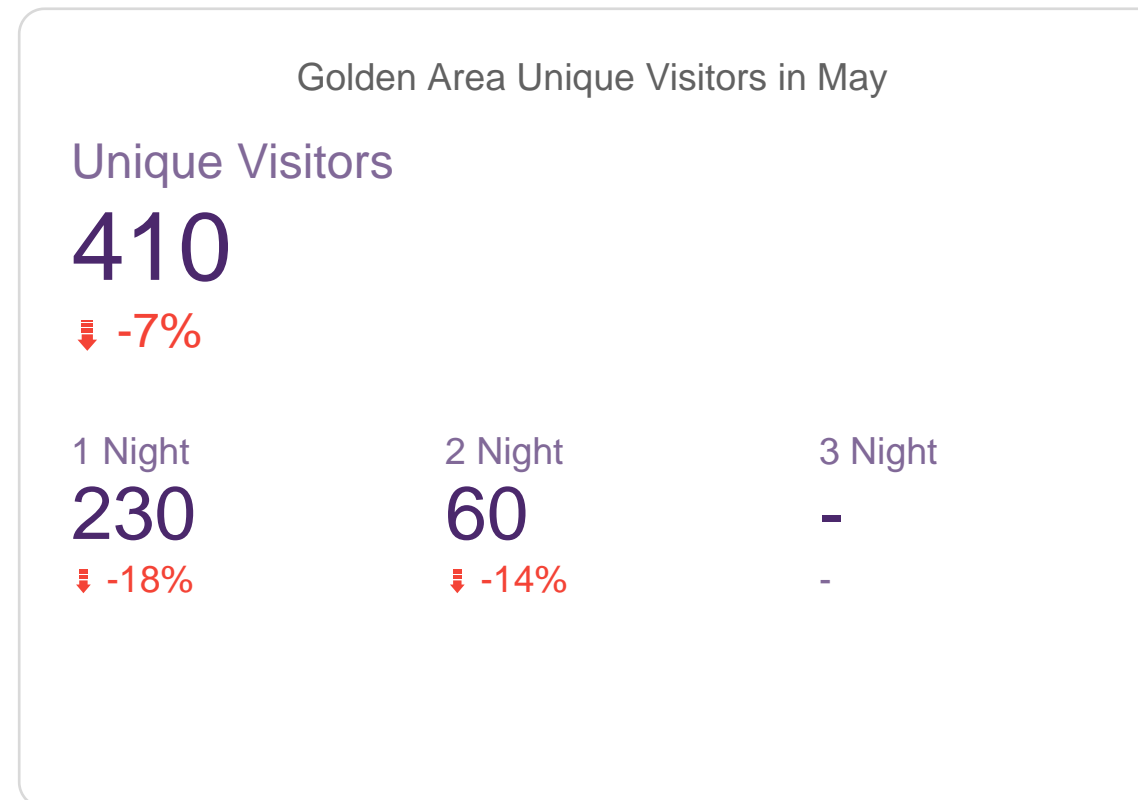
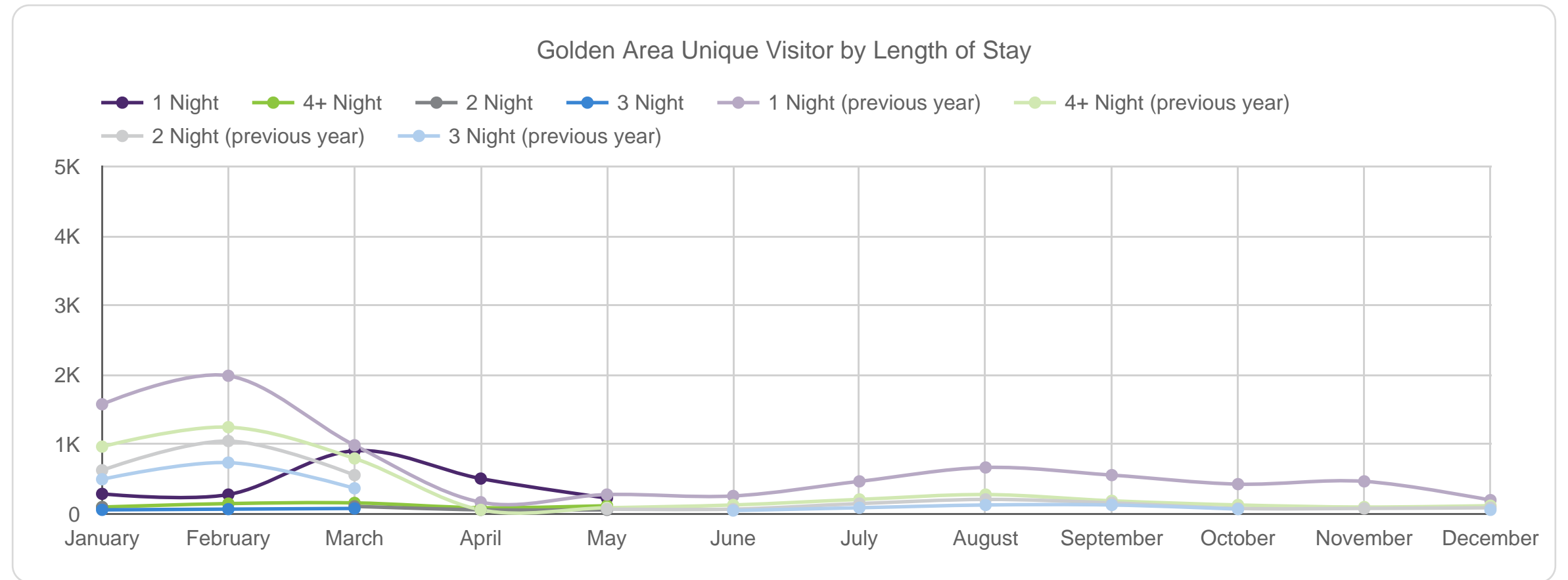


Monthly Unique Count

American Visitors
Broken down by length of stay

May 2021

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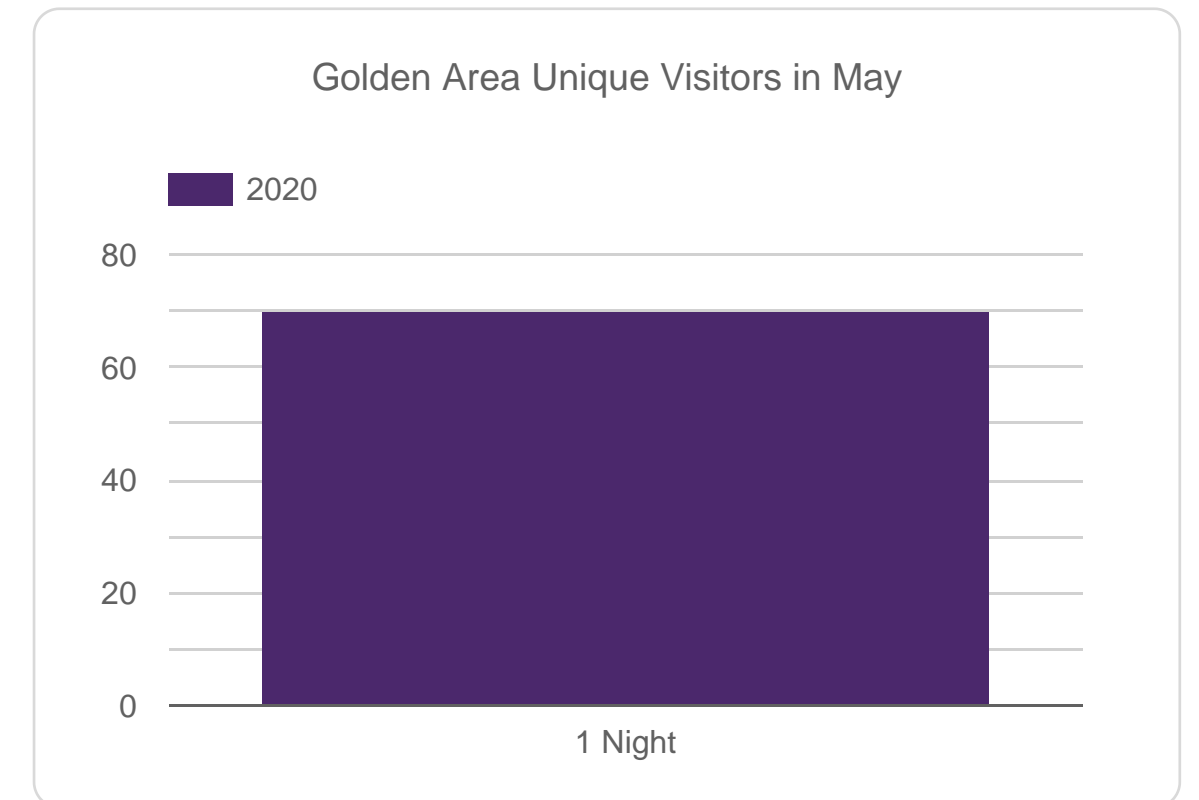
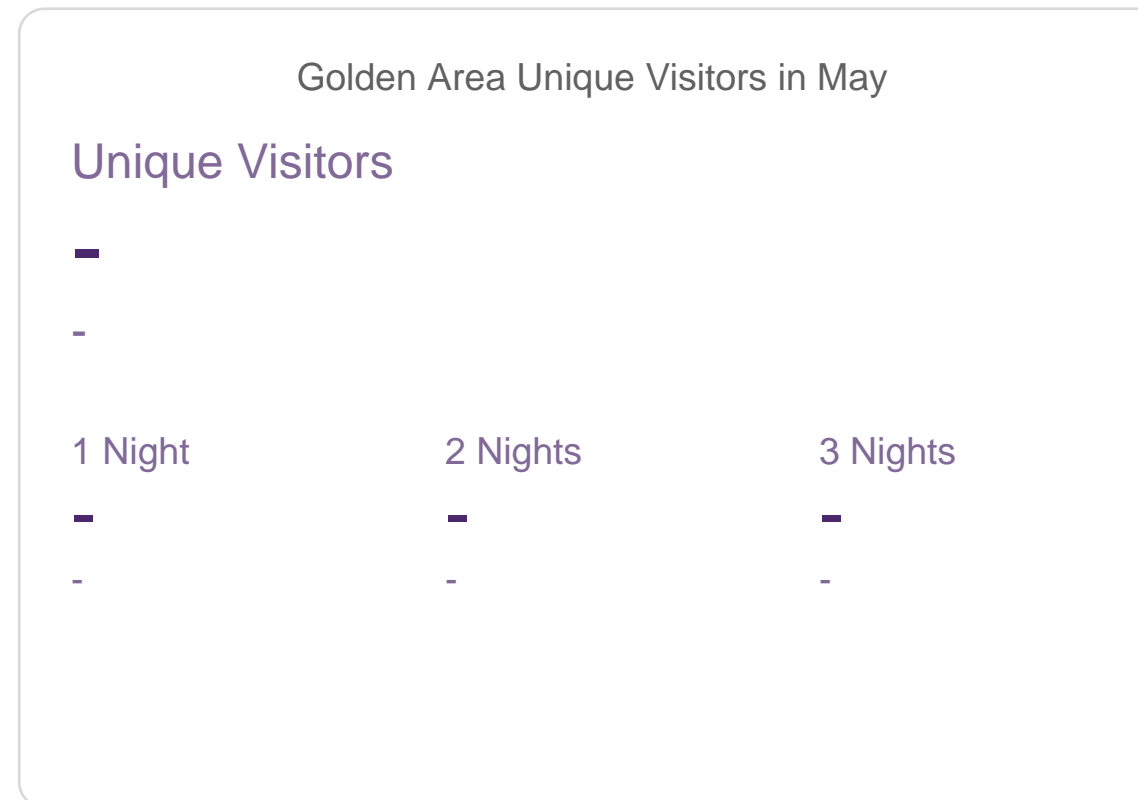
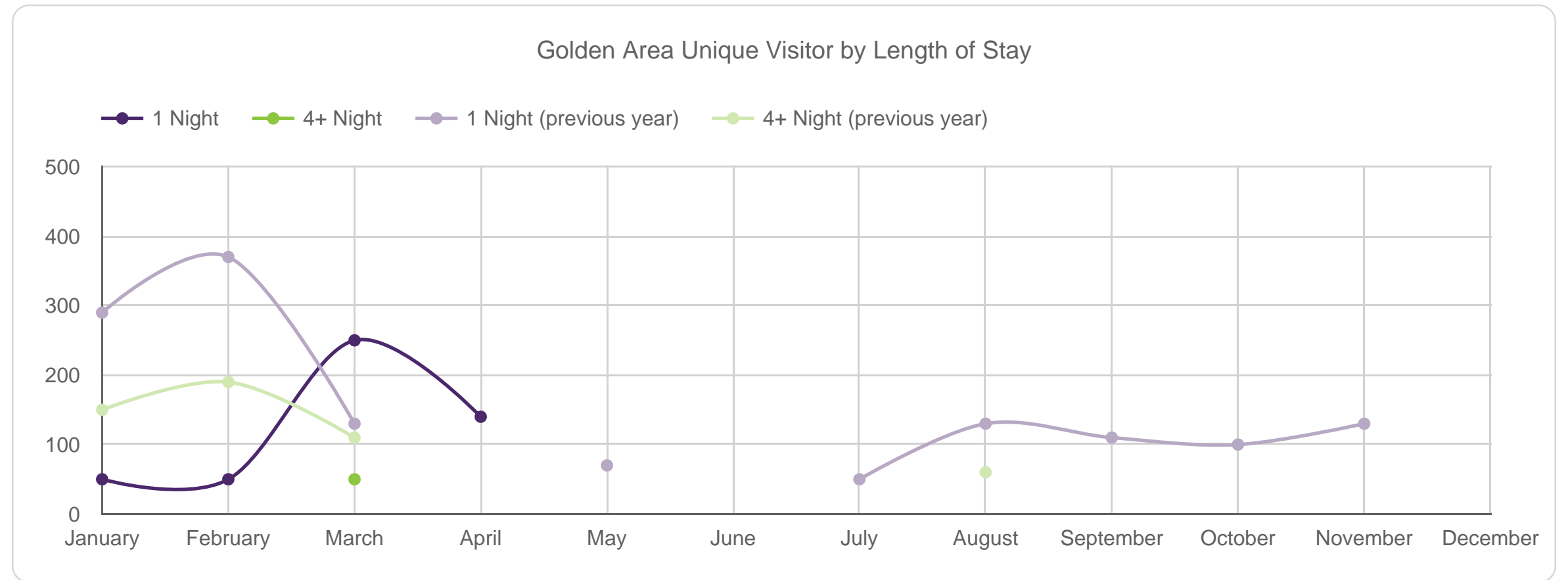


Monthly Unique Count

California Visitors
Broken down by length of stay

May 2021

The line chart on this page shows the counts of all Monthly Unique Californian Visitors broken down by length of stay.

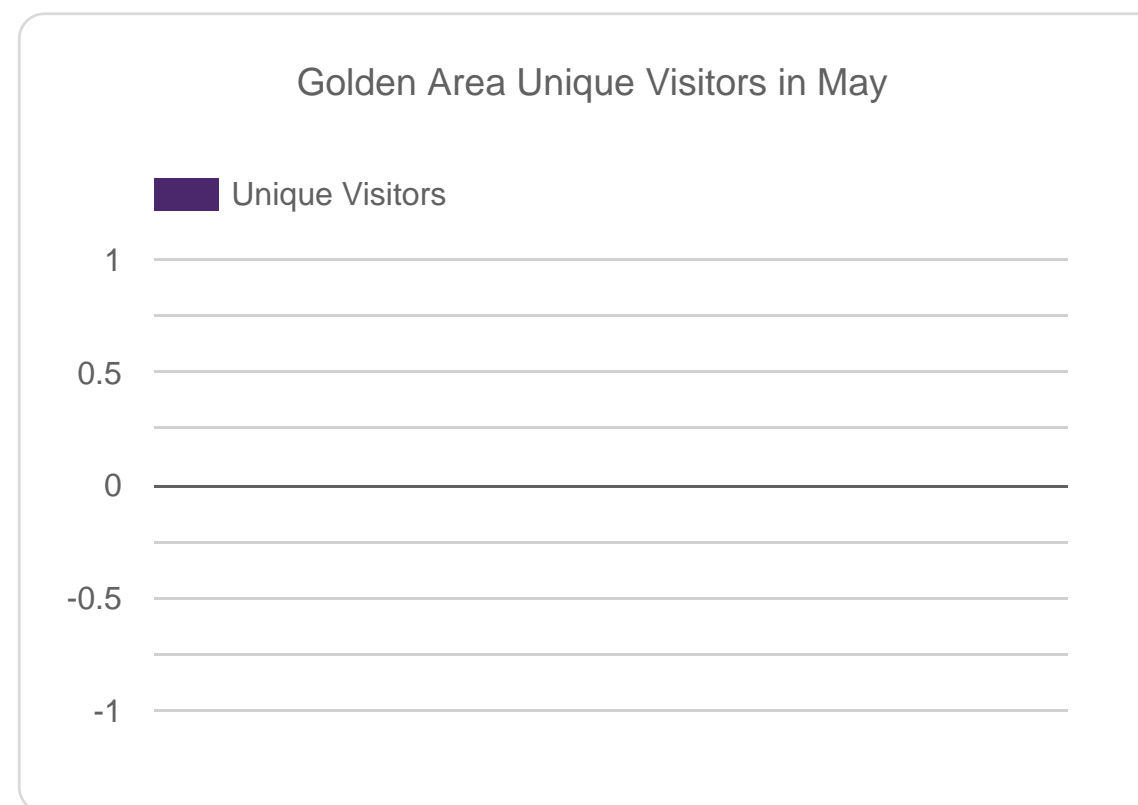
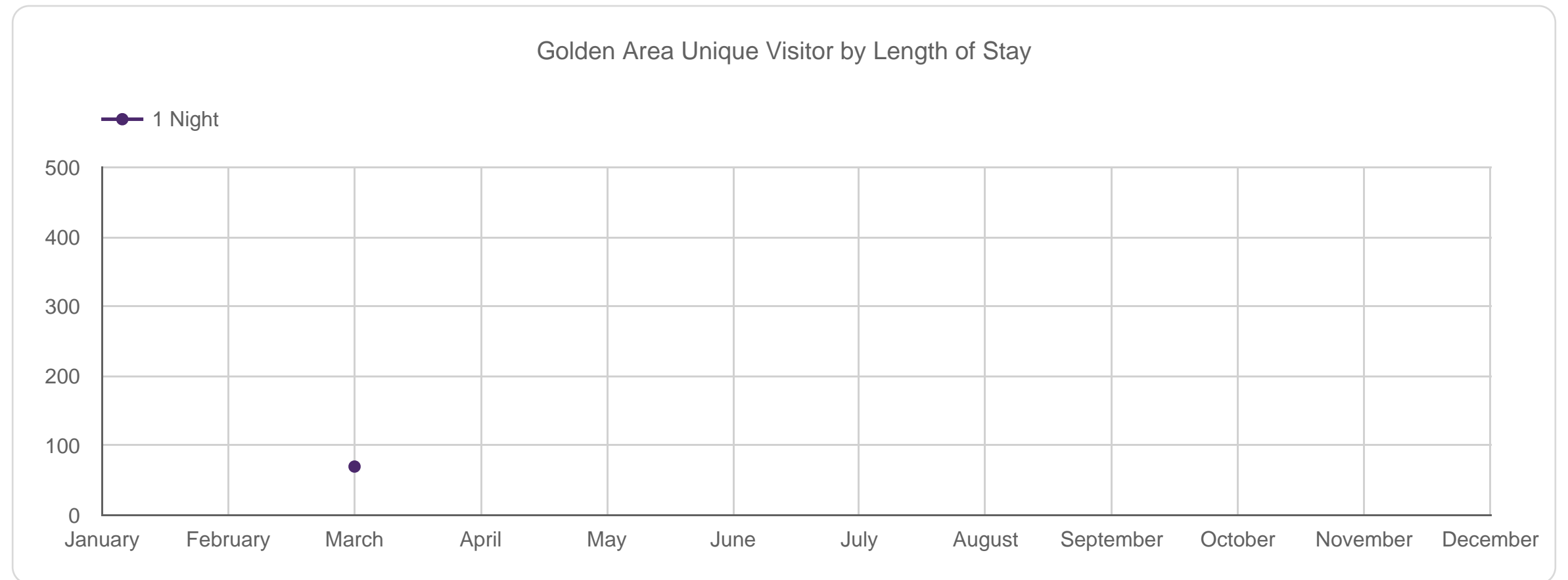


Monthly Unique Count

Georgian Visitors
Broken down by length of stay

May 2021

The line chart on this page shows the counts of all Monthly Unique Georgian Visitors broken down by length of stay.

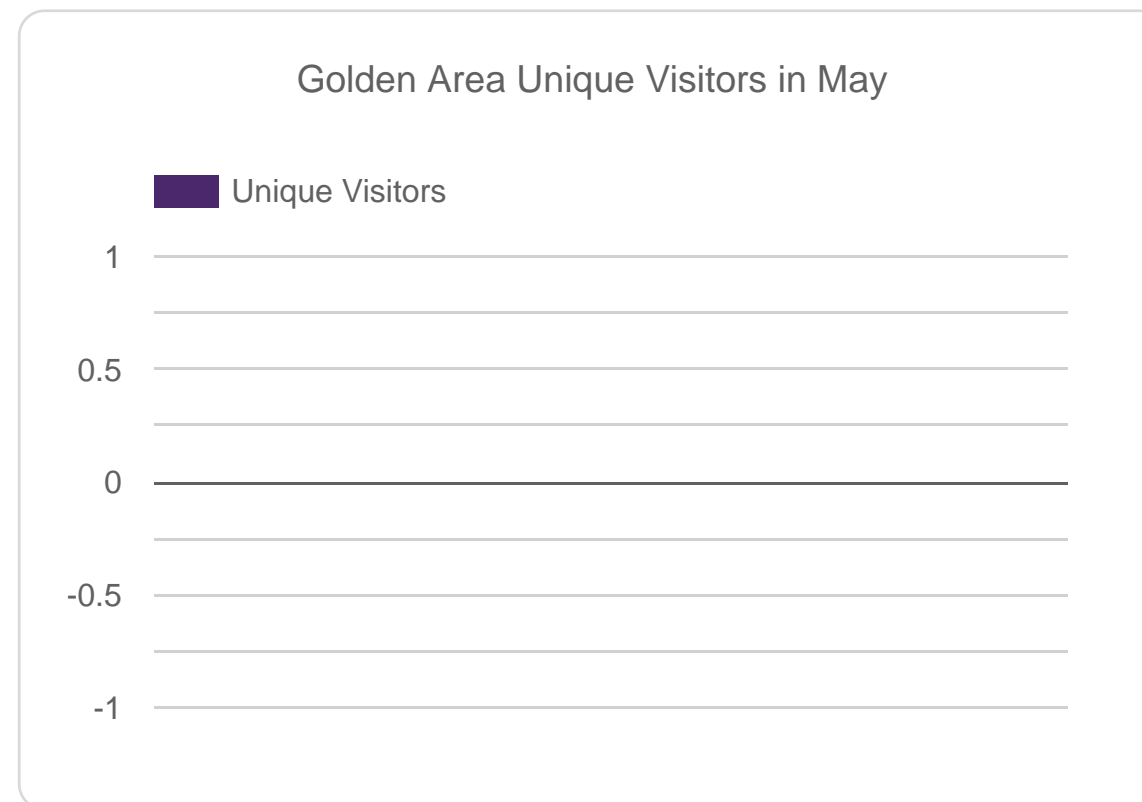
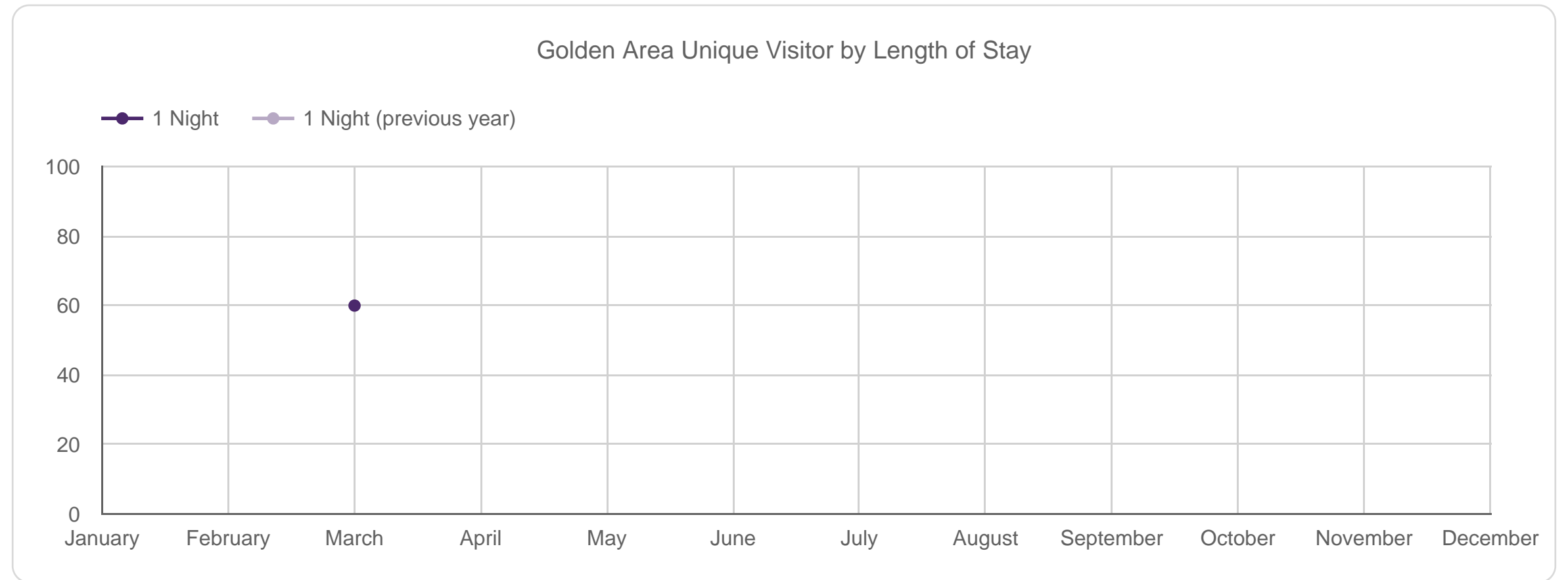


Monthly Unique Count

Alabamian Visitors
Broken down by length of stay

May 2021

The line chart on this page shows the counts of all Monthly Unique Alabamian Visitors broken down by length of stay.



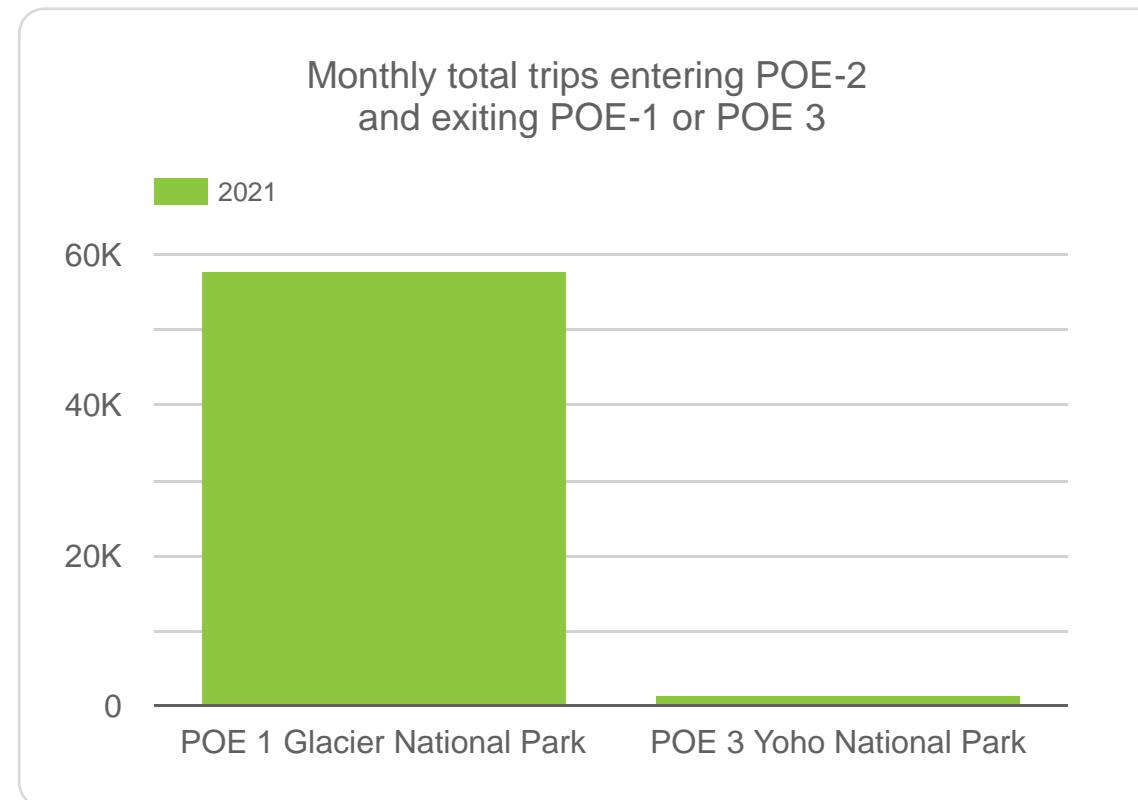
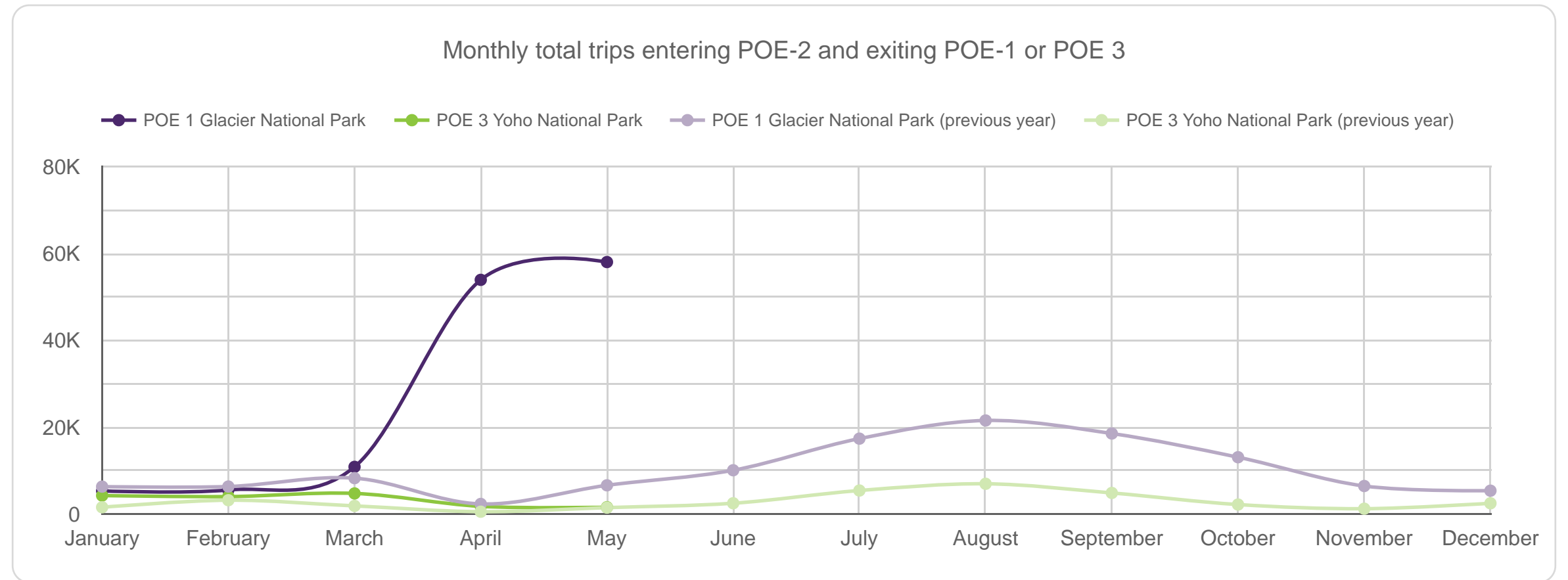
Monthly Total Trips

Total trips entering POE-2 and exiting POE-1 or POE-3

May 2021

The top line chart shows the monthly total trips entering POE-2, and exiting POE-1 or POE-3. The bar chart shows the total trips entering POE-2, and exiting POE-1 or POE-3 in May.

The Golden Area includes the City of Golden and three point-of-entry: POE-1 Glacier National Park, POE-2 Columbia Wetlands and POE-3 Yoho National Park. The orange line in the map below depicts the geo-fenced boundary of the Golden Area.





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