

Insights shaping the future of travel

---

# Tackling seasonality to create a more sustainable tourism model



# Foreword

---

Sustainability in tourism isn't a one-size-fits-all concept. For some destinations, it's about mitigating the pressures of unbalanced tourism by smoothing out peak demand. For some, it's about extending the economic benefits of the high season. And for others, it's about reshaping the visitor experience, encouraging exploration beyond well-trodden paths, or keeping CO<sub>2</sub> emissions in check.

Despite these diverse objectives, one common thread unites them all — a need for strong data. Successfully navigating the complexities of sustainable tourism development requires a deep understanding of visitor flows and emerging trends. It also requires anticipation and scenario planning, coupled with a systematic evaluation of the impact of the decisions made. Only then can travel businesses and destinations measure their progress and address public opinion which is increasingly critical of the travel and tourism sector.

At ForwardKeys, we're convinced that travel and tourism is a force for good — when properly managed. That's why our teams keep developing new solutions and sharing insights to help travel professionals make better decisions based on accurate data.

This report is indicative of the type of support we provide. We examine the practical steps destinations can take to mitigate the negative effects of seasonality, reduce unbalanced tourism and build a more sustainable model for future growth. I trust you'll find it both informative and inspiring.



Olivier Ponti,  
Intelligence & Marketing Director, ForwardKeys



The data included in this document is accurate according to ForwardKeys' market research database as of October 2024.

© ForwardKeys, 2024. All Rights Reserved.

# About this report

---

## Table of contents

How can destinations capitalise on the macro trends shaping seasonality?	4
Where can destinations find the most profitable opportunities for sustainable growth?	6
How can a collaborative approach to route development support off-season growth?	8
How does trip length impact sustainability?	9
What can destinations do to manage existing tourism peaks?	10
How can destinations access the insights they need to balance tourist flows?	12

## About ForwardKeys

ForwardKeys is trusted by organisations worldwide to deliver actionable insights through superior travel data and product innovation. As a global leader in travel intelligence, we deliver real-time and predictive analysis of 4,750 airports, 900 airlines and 4.5 billion annual passengers, helping destinations and businesses better understand and anticipate traveller behaviour.

Our proprietary algorithms, powered by advanced AI and machine learning, process millions of data points daily, offering unmatched granularity to inform strategic decisions in marketing, operations, and growth. Destinations and businesses can gain hyper-targeted information about geographic areas, enabling more effective marketing, store placements, and strategic planning.


By leveraging detailed travel behaviour data across nationalities, routes, regions, and seasonality, ForwardKeys helps businesses focus their strategies, giving them a competitive edge and maximising growth opportunities.

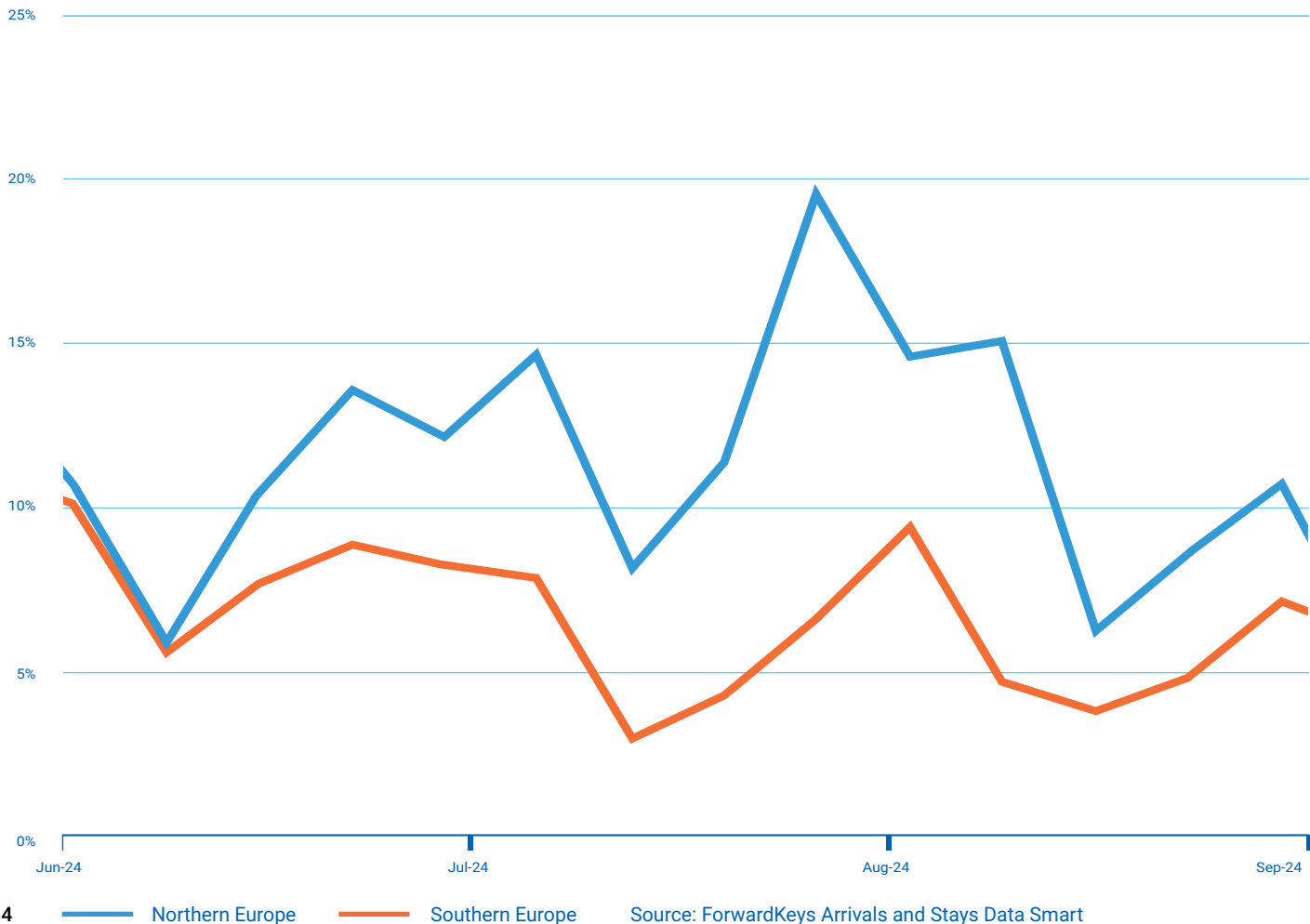
# How can destinations capitalise on the macro trends shaping seasonality?

Climate change is starting to influence booking behaviour

In 2024, Northern European destinations experienced higher year-on-year growth during the peak summer months than their southern counterparts. One explanation is the increasing awareness of climate change amongst travellers and how it influences their destination choices. Growth during the peak summer months has been strongest for Northern European destinations. Conversely, Southern European destinations have experienced a boost during the shoulder season—spring and autumn.

## Travellers to Europe are choosing destinations with milder climates during the hottest months

 International arrivals between Jun and Sep 2024; var vs 2023





↑ **+12%**  
Northern Europe  
Jun-Aug vs 2023

↑ **+7%**  
Southern Europe  
Jun-Aug vs 2023

**“ForwardKeys’ data offers us a fact-based view of the near future: based on flight booking data, we can fairly accurately predict the demand for the upcoming season from different markets.”**

Susanne Heikkinen, Analyst at Visit Finland



This shift is a win-win for both regions. Northern European destinations are attracting more visitors during traditionally less busy summer months, smoothing out the seasonal spikes and reducing reliance on winter travel. Similarly, Southern European destinations are extending their tourism seasons beyond the peak months, maintaining visitor numbers year-round.

As consumers are moving away from traditional booking behaviour, relying on historical data alone to predict future travel patterns is no longer sufficient. Destinations need accurate forward-looking data to identify and act upon macro trends in advance.

# Where can destinations find the most profitable opportunities for sustainable growth?

Leveraging data-driven insights can reveal hidden opportunities and enable the development of targeted marketing strategies that maximise return on investment. This approach is particularly valuable in achieving sustainable growth, as it allows destinations to attract more visitors during low seasons, supporting local economies year-round.

“For destinations looking to boost tourism during traditionally off-peak seasons, understanding the dynamics of potential source markets is key.”

Nancy Dai, Market Intelligence Consultant, ForwardKeys

In the Philippines, source market analysis reveals untapped potential in neighbouring countries.

Analysing competing destinations with similar tourism offerings, such as Indonesia, Vietnam, and Thailand, reveals the source markets most likely to consider the Philippines as a viable alternative during the off-peak season — South Korea, Hong Kong, and Chinese Taipei among others. Armed with this knowledge, destinations can craft more targeted marketing and promotional campaigns, focusing their resources on the most promising audiences and realising greater value for their marketing spend.

By spreading visitor arrivals more evenly throughout the year, destinations like the Philippines can better utilise infrastructure and resources year-round while driving economic growth.



Potential Growth Opportunities for Philippines from North East Asia  
Considering stays of 4-14 nights between 19 Feb to 7 Jul

Origin markets	Overnights to competitors	Overnights to Philippines	Optimal to Philippines	Growth Target
South Korea	5,520,667	1,305,622	1,416,232	+110,610
Hong Kong	1,427,256	236,672	295,452	+58,780
China	5,390,399	156,241	198,340	+42,099
Chinese Taipei	2,740,232	349,720	383,911	+34,191
Japan	1,973,180	465,053	465,871	+26,818
Macao	83,195	13,691	23,046	+9,355

Source: ForwardKeys Arrivals and Stays Data Smart

# Understanding seasonality can help destinations to identify the most effective strategies to boost off-season travel

ForwardKeys’ Seasonality Index tracks how unbalanced tourism is over a year – the higher the value, the less balanced, i.e. more seasonal, tourist flows are. In 2024, Baku has a seasonality index of 137, whilst destinations with similar tourist offers, such as Tbilisi (99) and Almaty (64), demonstrate a smoother visitor flow. The low season for Baku typically spans from the middle of February to early April, presenting a key opportunity for growth by targeting the right travellers. By observing the best practices of similar regional destinations, Baku can implement strategies to reduce its reliance on peak-season tourism and smooth out visitor flow year-round.

With the right insights, Baku can attract a larger share of travellers already visiting similar destinations.

Potential Growth Opportunities for Baku  
Based on Overnight stays of between 4-14 nights between 12 Feb - 7 Apr 2024



Origin Markets	Overnights to Competitors (Almaty & Tbilisi)	Overnights to Baku	Optimal to Baku	Growth Target (p.p.)
United Arab Emirates	66.7%	33.3%	53.1%	+19.8 p.p.
Romania	78.6%	21.4%	59.8%	+38.4 p.p.
Kuwait	67.4%	32.6%	46.6%	+13.9 p.p.
India	65.8%	34.2%	45.1%	+11 p.p.
Turkiye	32.9%	67.1%	72.2%	+5.1 p.p.

Source: ForwardKeys Arrivals and Stays Data Smart

The growth potential refers to the untapped opportunity for a destination to capture a higher proportion of travellers from specific origin markets. This potential is calculated by assessing how many visitors a competitor is currently attracting from a particular market compared to Baku. Markets such as UAE, Romania and Kuwait present significant growth opportunities – and are already demonstrating a strong interest in similar destinations.

“Targeted marketing campaigns aimed at travellers who already frequent similar destinations during the low season can focus on promoting Baku’s diverse offerings and positioning it as a prime destination for year-round travel.”

Antoine Vialle, Market Intelligence Consultant, ForwardKeys

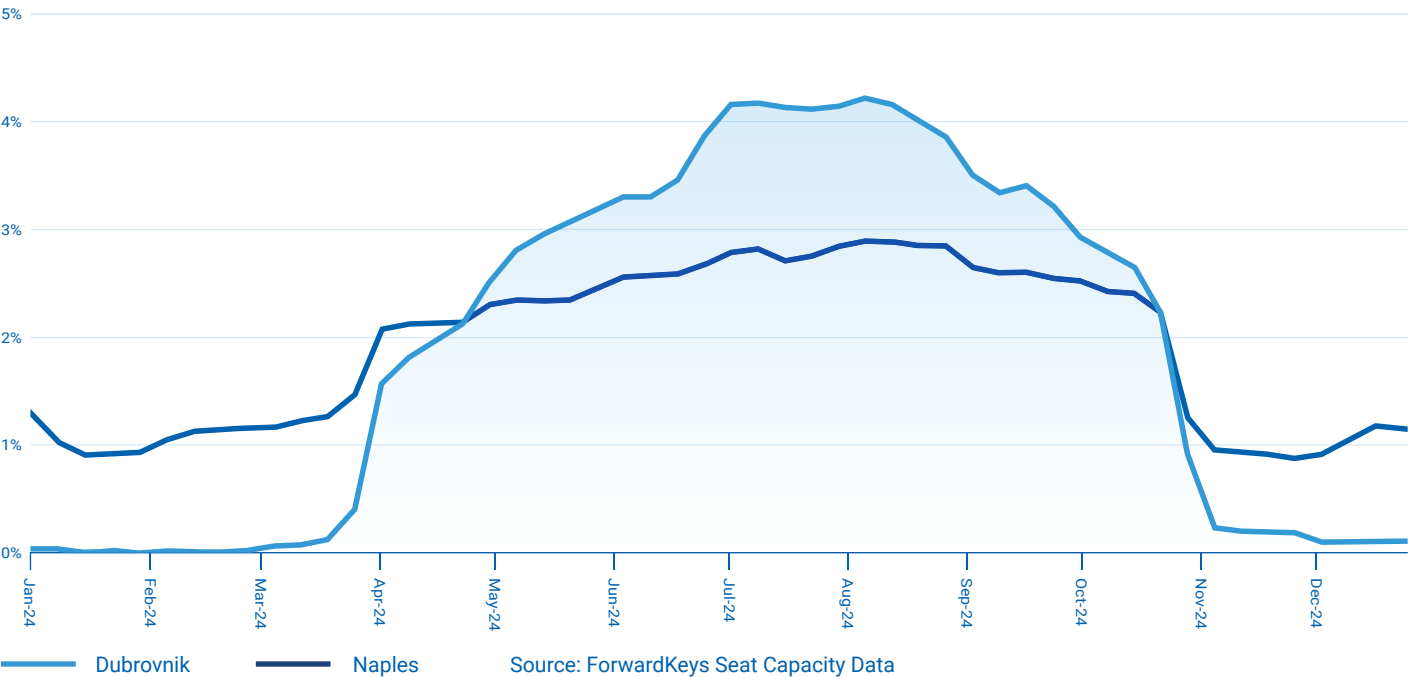
# How can a collaborative approach to route development support off-season growth?

Flattening the seasonality curve relies on the right connections being available at the right times of the year. In order to ensure this, destinations need to identify unserved routes with high potential during the low-season and prove to airlines that these routes are worth flying.

## In Dubrovnik, available seat capacity currently limits off-season growth



Seat Capacity for international flights arriving in 2024, with schedules as of 21 Oct; % share of seats.



**“By synchronising seat availability with promotional efforts and ensuring appealing year-round offerings, destinations like Dubrovnik can better distribute tourism throughout the year, reducing their heavy reliance on peak-season traffic and mitigating seasonal spikes in visitor numbers.”**

Parisa Bakhtiari, Market Intelligence Consultant, ForwardKeys

In destinations like Dubrovnik, the Seasonality Index for 2024 remains extremely high at 965, an increase of +99 points compared to 2019. This stark contrast with other southern European destinations, such as Naples, which saw a significant reduction of -110 points to 200, or Tirana, which reduced by 74 points to 222, underlines the challenges Dubrovnik faces in balancing its visitor flow.

Compared to a destination such as Naples, flights into Dubrovnik drop off much more sharply in the off-season. To achieve more sustainable tourism growth, a coordinated effort between local tourism boards, airlines, and tourism providers is essential. Targeted marketing campaigns during the off-season will be ineffective unless destinations work closely with airlines to ensure more flights are available during those periods – and local businesses such as hospitality and retailers are ready to service demand.



# How does trip length impact sustainability?

Data on visitor length of stay provides valuable insights for strategically targeting potential source markets and maximizing economic impact. By encouraging longer stays, destinations can incentivise visitors to explore multiple locations, distributing tourism revenue to a wider range of regions, including those traditionally experiencing lower demand.

**“Increasing the proportion of long-stay visits can make a big difference to sustainability – increasing total spending and promoting a more sustainable balance between carbon emissions and travel days”**

Andy French, Market Analyst, ForwardKeys

The St. Patrick’s Day holiday presents an opportunity for Ireland to attract a greater share of long-stay visitors interested in Northern European destinations.

Potential Growth Opportunities for Ireland from Southern Europe  
Based on Overnight stays of between 2-4 weeks between 5 Feb – 12 May 2024



Origin Market (In Southern Europe)	Overnights to Competitors (Scotland, Wales, Norway)	Overnights to Ireland	Optimal to Ireland	Growth Target
Spain	1,406,894	223,539	327,466	+103,927
Turkiye	152,338	25,684	50,824	+25,140
Italy	310,251	253,140	267,683	+14,543
Portugal	209,425	35,254	42,489	+7,235
Malta	12,711	31,162	38,118	+6,956

Source: ForwardKeys Arrivals and Stays Data Smart

Analysing the length of stay patterns of tourists visiting similar destinations, such as Scotland, Wales, and Norway, gives destinations in Ireland a strategic advantage. Origin markets such as Spain, Turkiye and Italy offer clear potential growth opportunities. These markets already demonstrate a propensity for longer trips, making them ideal candidates for targeted campaigns promoting extended stays in Ireland around the St. Patrick’s Day holiday. Targeted marketing in the relevant languages can be used to promote the diverse range of experiences available throughout the country, enticing these visitors to explore beyond the typical holiday hubs and discover under-visited regions of Ireland and contributing to a more sustainable tourism model.

# What can destinations do to manage existing tourism peaks?

---

Geo-localised data enables destinations not only to identify pain points – where and when high concentrations of visitors occur – but also identify the specific visitor segments involved.

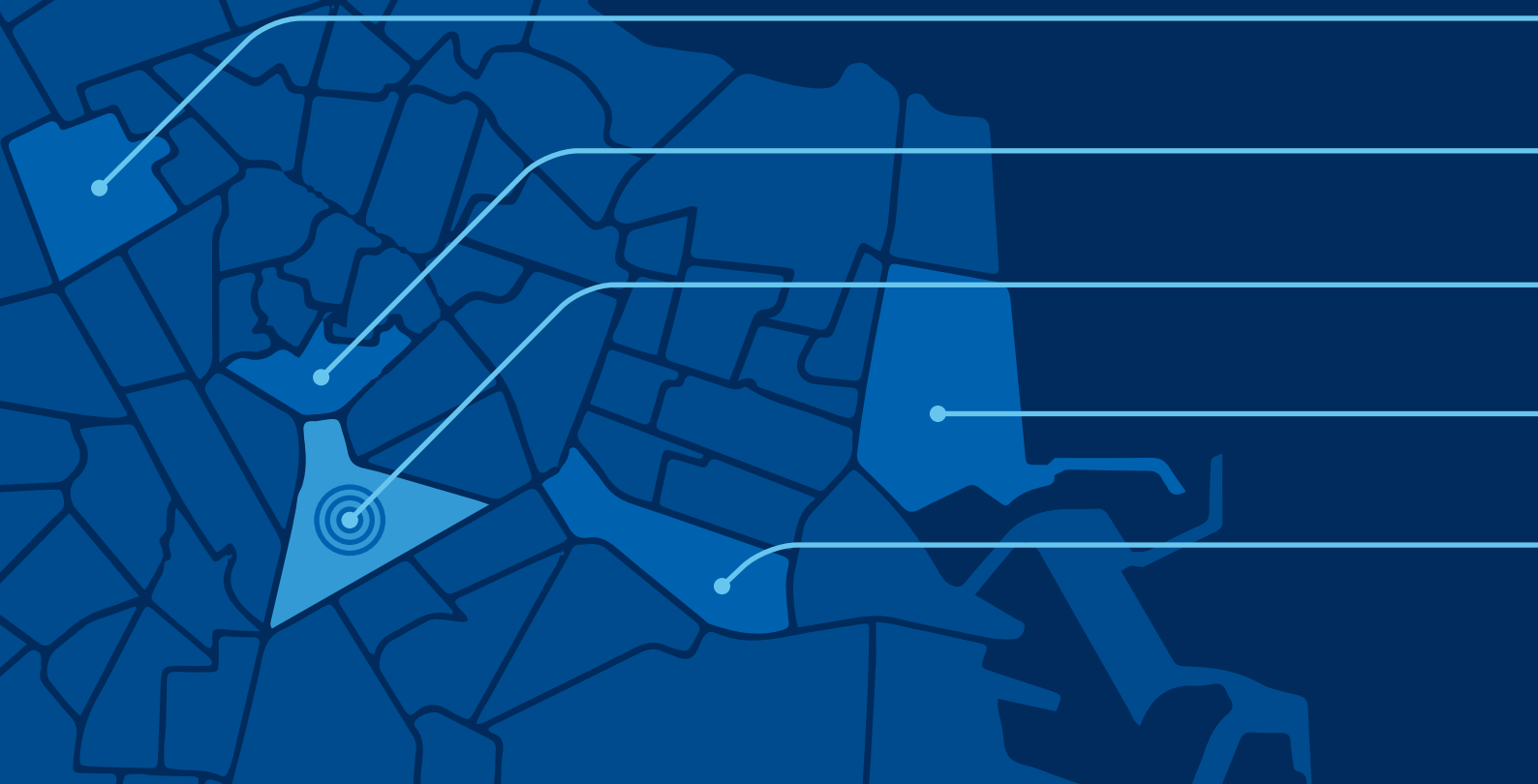
Having clear sight of the origin of tourists visiting different locations empowers destinations to target their outbound communications by source market and language to prompt changes in traveller behaviour and mitigate the negative effects of unbalanced tourism. The same tools enable destinations to identify opportunities for distributing visitor flows in space by enabling them to identify which profiles are more likely to go “off the beaten track”.

An example of the power of this type of granular data's utility can be seen in contrasting the distinct districts of Russafa, close to Valencia's bustling centre, and Albufera, a natural park to the south.

Russafa's popularity as a nightlife destination, particularly amongst British visitors, contributes to late-night activity that can sometimes create friction with local residents. While the volume of British tourists makes them a clear presence, the data reveals a nuanced picture. Italians and Dutch visitors are disproportionately represented in Russafa compared to their overall presence in the region. This insight allows for more targeted communication strategies, such as multilingual outreach to these key visitor groups promoting responsible enjoyment of the area, or alternative evening activities in other districts.

**“Understanding visitor movements within the city in granular detail – including nationality and time of day – is critical to major tourist hubs like Valencia.”**

**Luis Millan**, Head of Market Intelligence & Consulting,  
ForwardKeys



The Albufera and its surroundings, the “Food & Nature” area is popular with the French, Dutch & Belgian tourists during lunchtime.



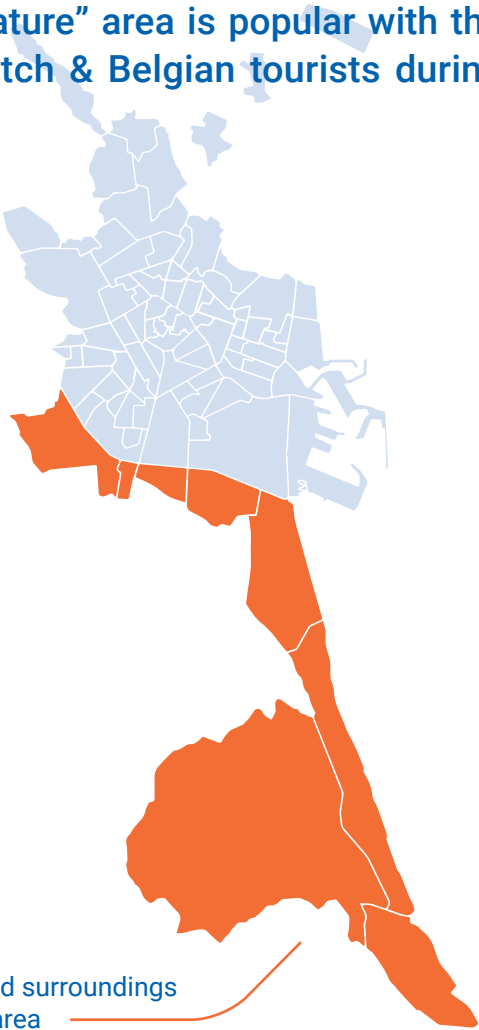
French



Dutch



Belgian



The Albufera presents a valuable opportunity for visitor dispersion, drawing tourists away from the city centre and offering a contrasting experience. French, Dutch, and Belgian tourists are overrepresented in the “Food & Nature” region of the Albufera — but their presence is concentrated during lunchtime. This highlights a strategic opportunity to promote evening activities in the area, capitalising on the area’s existing appeal to these nationalities.

By understanding these temporal visitor patterns, destinations can develop targeted marketing campaigns and initiatives to attract already motivated visitors from these nationalities to visit the Albufera in the evenings. This could include promoting evening dining experiences, sunset tours, or other activities that capitalise on the area’s natural beauty and culinary offerings.

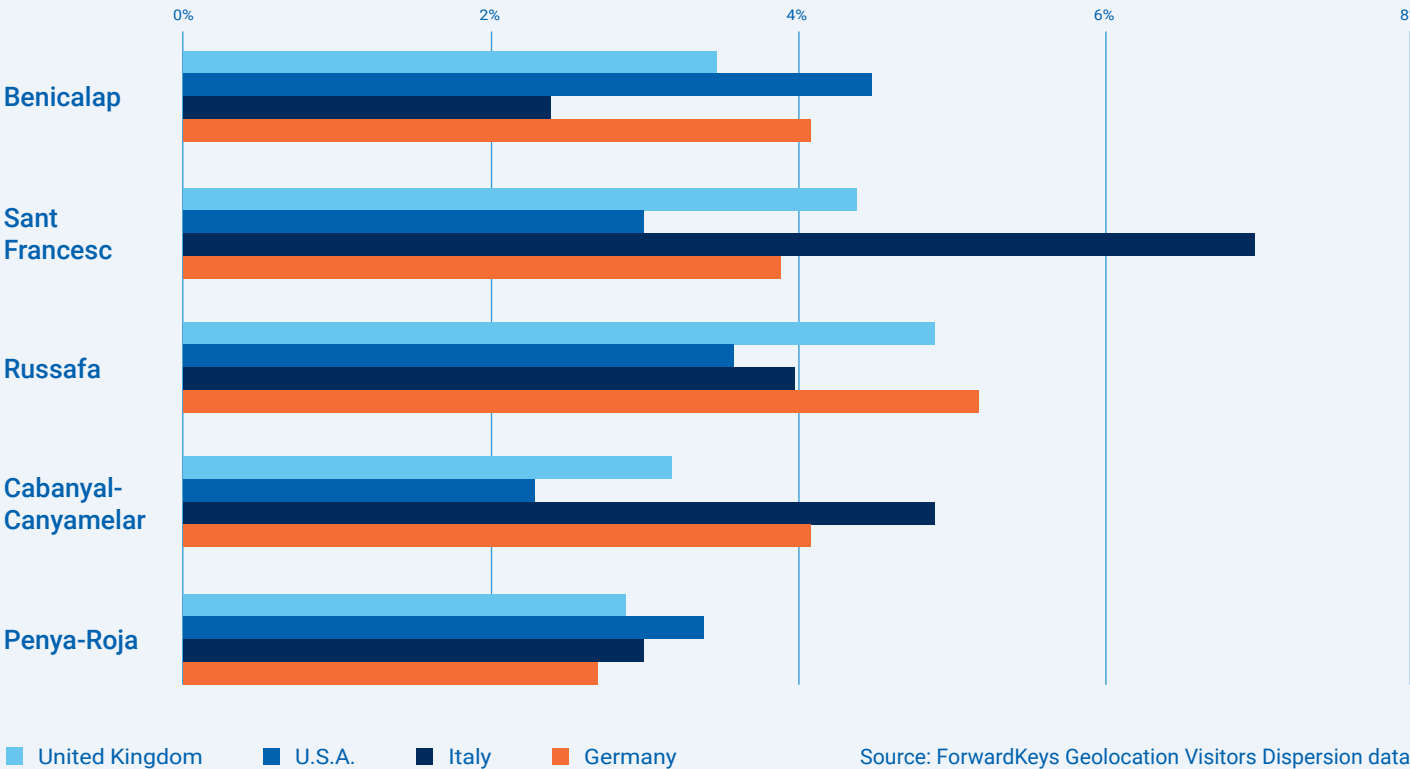
Geolocation data empowers destinations to address tourism management challenges proactively. By pinpointing areas experiencing high visitor concentration — and revealing the specific visitor profiles contributing to this concentration — it enables highly targeted interventions. Then, by highlighting opportunities for visitor dispersion and identifying the nationalities most likely to be receptive to these offerings, it informs more effective promotional strategies.



Visitor concentration  
during lunch time



Visitor Dispersion of key nationalities in Valencia’s neighbourhoods between Jul and Aug 2024; % share



Source: ForwardKeys Geolocation Visitors Dispersion data

# How can destinations access the insights they need to balance tourist flows?

---

Balancing the needs of a thriving tourism sector with the preservation of a destination's unique character requires careful planning and insightful data.

ForwardKeys Destination Gateway provides destinations with the tools to understand visitor flows and travel trends, enabling informed decision-making for sustainable growth. The platform offers data-driven insights, predictive forecasting and proactive suggestions to help destinations understand visitor flows and travel trends, enabling informed decision-making.

By understanding where visitors are coming from, when they are visiting, and how they engage with the destination, stakeholders can develop targeted strategies to promote sustainable tourism practices, manage overcrowding, and develop a well-balanced tourism model.

**“Exploring new markets can only be done with the data received from ForwardKeys. We can see and analyse potential opportunities from areas in the world that previously we never evaluated.”**

Patrick Bontinck, CEO - Visit Brussels



**“By fostering collaboration, developing creative tourism products, and ensuring strategic airline partnerships, destinations can succeed in promoting year-round tourism.”**

Ged Brown, Founder and Chairman of Low Season Traveller





**Destination  
Gateway**

# What's new in Destination Gateway?



## Assess the environmental impact with CO<sub>2</sub> emissions

Gain an understanding of your carbon footprint by analysing CO<sub>2</sub> emissions per route and per passenger for your inbound flights — allowing you to make informed decisions regarding your sustainability objectives.



## Understand visitor behaviour in your destination

View heatmaps showing where visitors are most concentrated and identify potential hotspots that may require attention. Reveal how and where visitors spend time in your destination and what kind of activities they value, from sightseeing to nightlife.



## Manage growth proactively and sustainably

Receive recommendations about growth opportunities per market during your low and shoulder seasons. Access a detailed overview of overnight stays, indicating seasonality trends for your destination and competing or similar locations. Discover opportunities to attract visitors from closer markets, reducing the environmental impact of travel.



# Trusted to deliver actionable insights via superior travel data and product innovation



## Methodology

### Data used in this report

The insights regarding Tourist Arrivals, Seasonality and Growth Potential in this report were compiled from **ForwardKeys Arrivals and Stays Smart**, which provides segmented and directional global air traffic monitoring, including both full-service and low-cost carriers, for historical tourist arrivals in 2024.

Information on air connectivity is compiled from **ForwardKeys Seat Capacity Data**, which includes information on scheduled direct commercial flights and their seat capacity, with schedules as of 21 Oct 2024.

Information on visitor impact and behavior is compiled from **ForwardKeys Geolocation Visitors Dispersion Data**, which includes information on historical international visitors in July and August 2024.

### Definitions

**Seasonality Index:** Quantifies the degree of seasonality of overnight stays in a destination, providing a comparison of the variance (spread or variability) versus other destinations. A lower index indicates more consistent overnight stays year-round, while a higher index reflects greater variability in weekly overnight stays. An index of zero means zero seasonality, i.e. overnight stays do not vary throughout the year.

**Optimal share:** Proportion of overnight stays a POI could reasonably expect from a source market through the year. It is calculated by comparing the number of overnight stays at the destination to the total overnight stays from that origin market across the destination and its competitors. This proportion is calculated for each week of the previous year.

**Growth target:** The difference between the optimal and current proportion a destination receives from a source market for a given period.







## PREDICTING TRAVELLERS' IMPACT



DOWNLOAD THE REPORT

Let's drive sustainable growth together.

Get in touch:

Contact us at  
[info@forwardkeys.com](mailto:info@forwardkeys.com)

Check out the latest analysis at  
[www.forwardkeys.com](http://www.forwardkeys.com)

Follow us on [LinkedIn](#)