



The Regional Perspective: The Tourism of Tomorrow Lab

11th September - Vienna



NECSTouR

European Regions for
Competitive and Sustainable Tourism



www.tourmis.info

Andalucía





Introduction and background

NECSTouR 2030 Pathway

Regenerative, data-driven and resilient tourism across European Regions



VISION

Tourism has the power to make destinations and communities flourish.

Our commitment is to benefit:

Business

Communities

Visitors

Environment



MISSION

Lead and collaborate to strengthen the positive value of tourism in European Regions.



IMPACT

Better places to live, better places to visit.



Strategic Objectives 2030

- Strengthen regional capacity for regenerative destination management.
- Support regional tourism climate action: mitigation and adaptation.
- Empower destinations to measure tourism impacts for decision-making.
- Enable regions to implement the European Tourism Agenda and Strategy.
- Double NECSTouR's network impact through collaboration and innovation.



Strategic Hubs

Empowering destination leaders to deliver sustainability

GOVERNANCE HUB

CLIMATE HUB

TOURISM OF TOMORROW-DATA LAB



Projects



Knowledge



Networking



Tools



Pilots

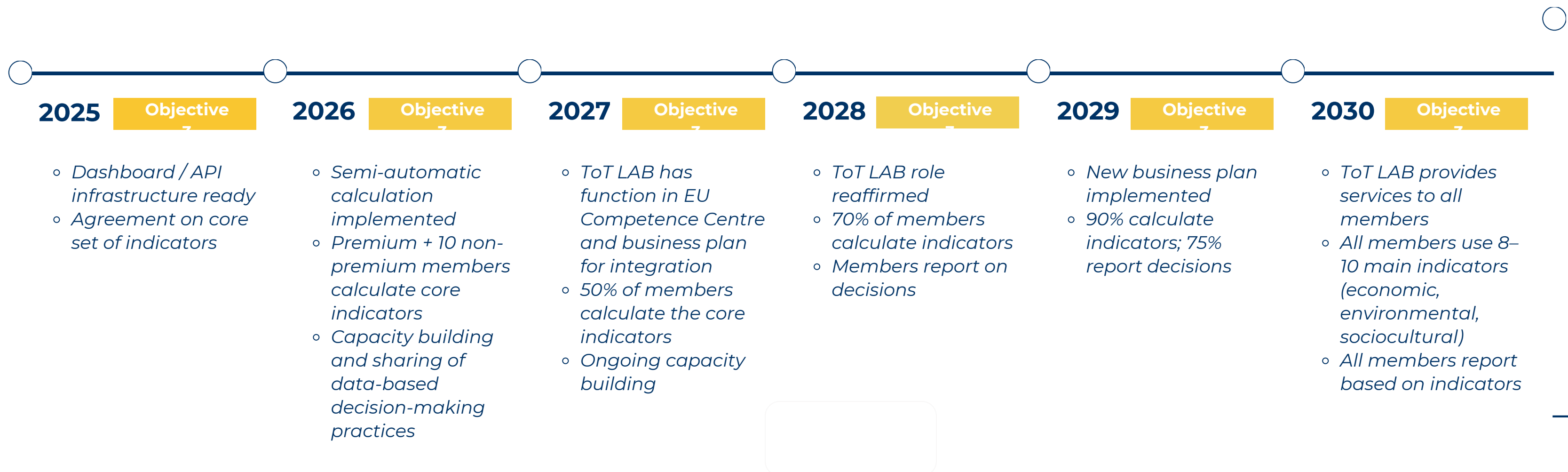
Empowering European destinations to flourish.

Background: ToT Lab contributing to NECSTouR 2030 Roadmap



NECSTouR 2030 Agenda | Objective 3

By 2030, NECSTouR's member destinations are systematically measuring tourism's impact on the economic, environmental and sociocultural level by using an agreed common set of indicators for decision-making.



Tourism of Tomorrow Lab



Who we are



We are NECSTouR's department coaching regional tourism authorities within the network in their data-driven journey committed to sustainability values.

We enable smart destination management and marketing through data analysis and generative AI to perform more sustainably, resiliently and competitively.



We promote collaborative knowledge and a European benchmarking approach, providing economies of scale to accelerate delivery.

Our specialised team provides tailor-made solutions to the DMOs requirements by working hand-in-hand and up-skilling their staff.



2025 in review



12 Premium Members

- Galicia
- Cataluña
- Madrid
- Andalucía
- Lanzarote
- Lapland
- Emilia-Romagna
- Visit Flanders
- Westtoer
- Consell d'Eivissa
- **Azores**
- **Visit Skåne**



3 Integrated projects

- Sustainable Indicators Platform
- Applied AI in Tourism
- ToT Lab Academy

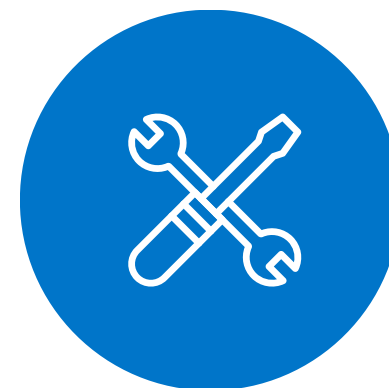


6 Webinars
3 Freemium events
2025 Data Summit



**Capacity building program
for tourism SMEs**

(Implemented in Lanzarote)



2 Ad-hoc projects

- Consell d'Eivissa
- Westtoer



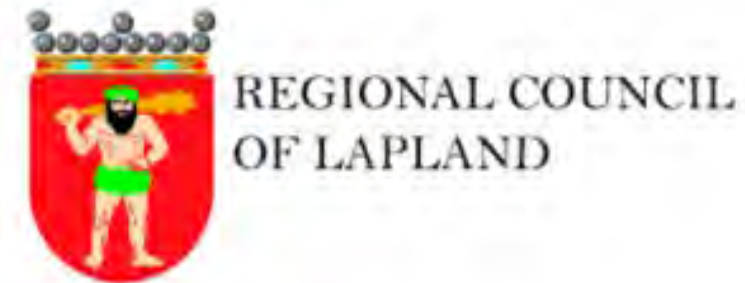
2 European projects

- D3HUB
- DEPLOYTOUR

01.



2026 ToTLab members



The background features a stylized map of Europe in a dark olive green color. Overlaid on the map are two network graphics consisting of interconnected dots and lines, one in the top right and one in the bottom left. A solid dark blue trapezoidal shape is located in the bottom right corner.

Challenges in Measuring Tourism's Impacts Across Regional Territories

Deciding what to measure



Multiple frameworks, no common ground

- Several sustainability frameworks exist (ETIS, TSI, SF-MST, etc.)



Alignment with regional strategy

- Difficult to select indicators that reflect the territory's specific goals, priorities, and vision.



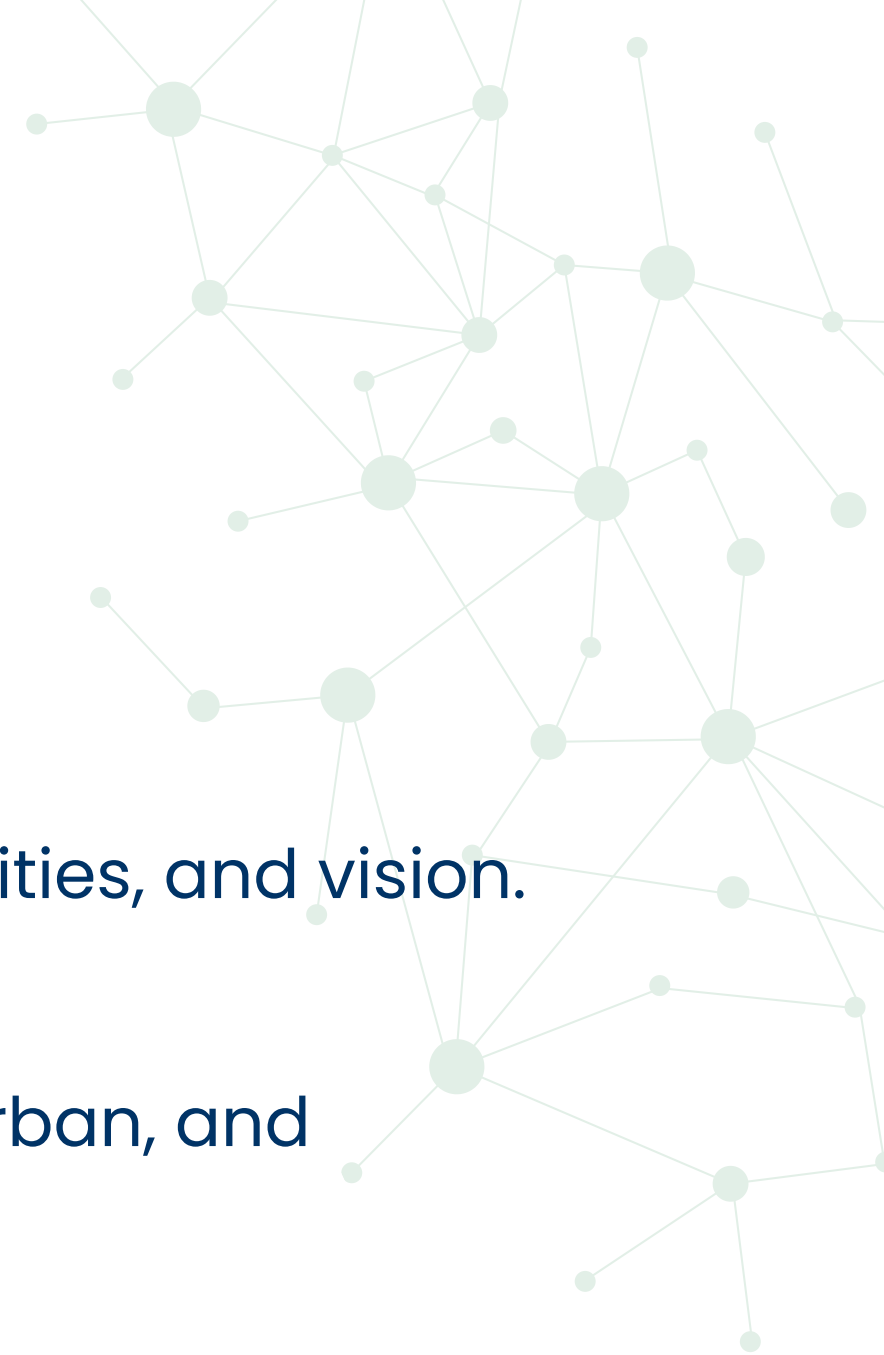
Diverse and fragmented territories

- Tourism regions encompass a range of areas, including coastal, rural, urban, and protected areas.



Many, many others:

- Too many indicators, not enough focus
- Limited data availability (geographic granularity and time resolution)
- Multidisciplinary nature of tourism
- Strategic (long-term) perspective vs operational (short-term)



Gathering and analysing the data



Fragmented data sources and inconsistent Formats

- Indicators often require data from multiple systems (APIs, websites, CSVs, databases).
- Data might come in Excel, JSON, XML, PDF, or proprietary formats.
- Structure may change frequently without notice.



Lack of APIs or poor API design

- Many institutions don't offer APIs
- If APIs exist, they may be unstable, undocumented, or require complex authentication.

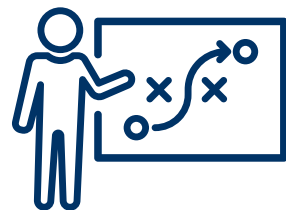


Manual data extraction and update workflows

- Downloading files, cleaning them, re-running calculations... over and over again.
- Lack of reproducibility
- High risk of introducing errors during manual manipulation.
- Error-prone and time-consuming

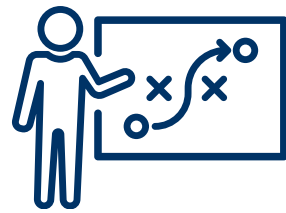


Turning data analysis into decisions



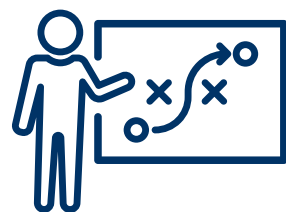
Interpreting indicators is an undervalued skill.

- Collecting data is only half the job. Knowing how to interpret it: understanding trends, trade-offs, and context, requires expertise that is often underfunded or ignored.



Indicators don't live in isolation.

- One indicator's trend can affect or distort another. Second-order effects are overlooked, leading to poor decisions.



Insights lost in translation

- There's a gap between those who analyze data and those who make decisions.
- Visualizations and reports are produced, but often fail to communicate urgency or relevance in a way that moves policy or action.

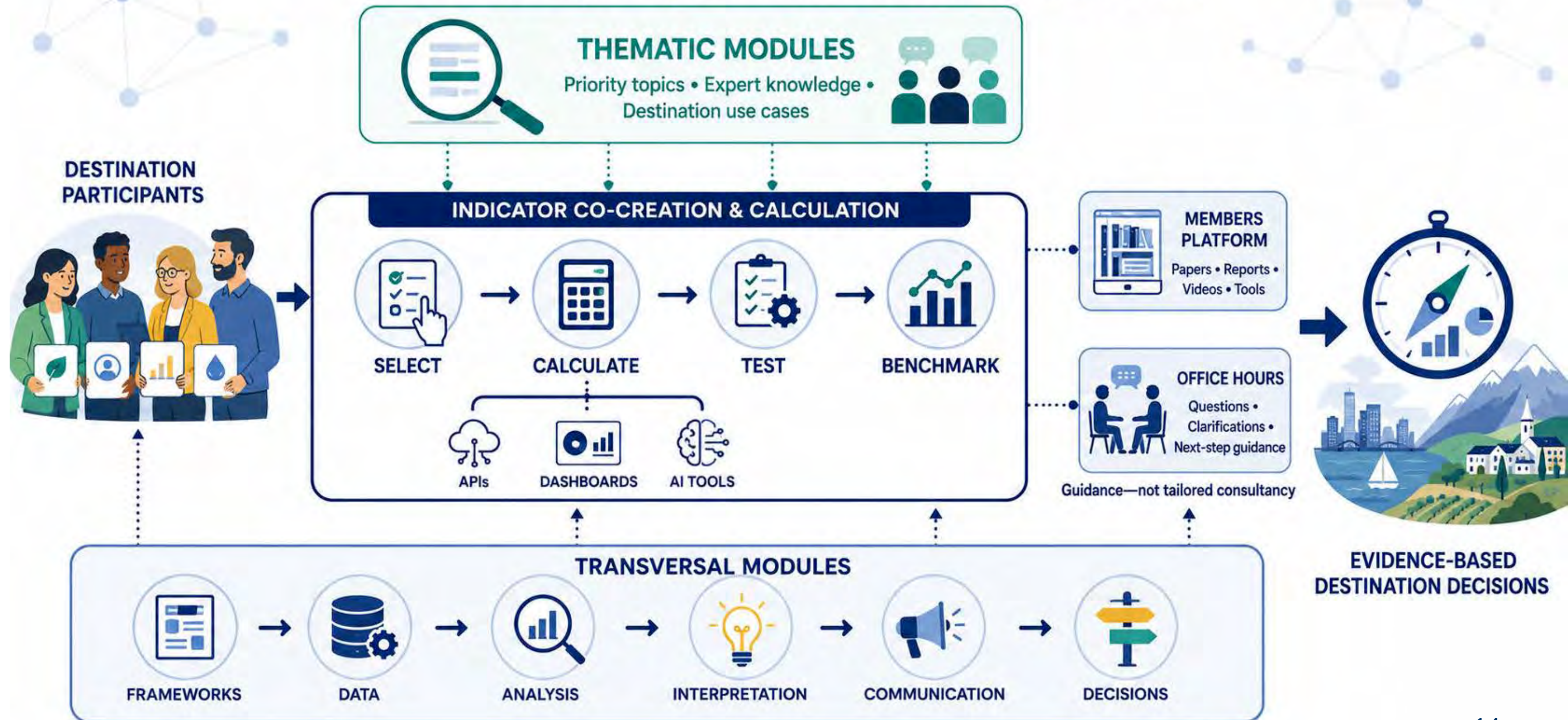


NECSTouR Data Pathway

The background of the slide is a solid red color. On the right side, there is a dark red silhouette map of Europe. In the top-left and bottom-left corners, there are network diagrams consisting of dark red dots (nodes) connected by thin dark red lines. A solid dark blue trapezoidal shape is located in the bottom-right corner.

How the NECSTouR Data Pathway Works

A connected journey from indicators to destination decisions



THEMATIC MODULE 1

Resident satisfaction measurement

Understanding community perspectives for better destination governance



The background of the slide is a solid blue color. Overlaid on this background is a faint, light blue map of Europe. In the top-left and bottom-left corners, there are network diagrams consisting of dark blue dots connected by thin lines, representing a global or interconnected network. A solid yellow trapezoidal shape is located in the bottom-right corner.

Measuring and managing impacts of tourism: examples from ToTLab members



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Optimisation of tourist flows in protected natural spaces: the use of data from Urederra

Gobierno
de Navarra  Nafarroako
Gobernua



Urederra case | Using destination-owned data to optimise visitor flows in a protected natural area

Description

The Urederra project demonstrates how data already generated through reservation systems and digital channels can support the management of visitor flows in a protected natural area. By transforming operational data into regularly updated intelligence, the project helps balance visitor access with the conservation of the natural resource.

Challenges

- Managing visitor pressure while protecting a sensitive natural environment.
- Assessing whether the fixed limit of 500 daily visitors reflects actual occupancy patterns.
- Making better use of underexploited reservation, visitor-origin, vehicle and web data.
- Providing regional and local managers with timely, actionable information requiring limited technical maintenance.

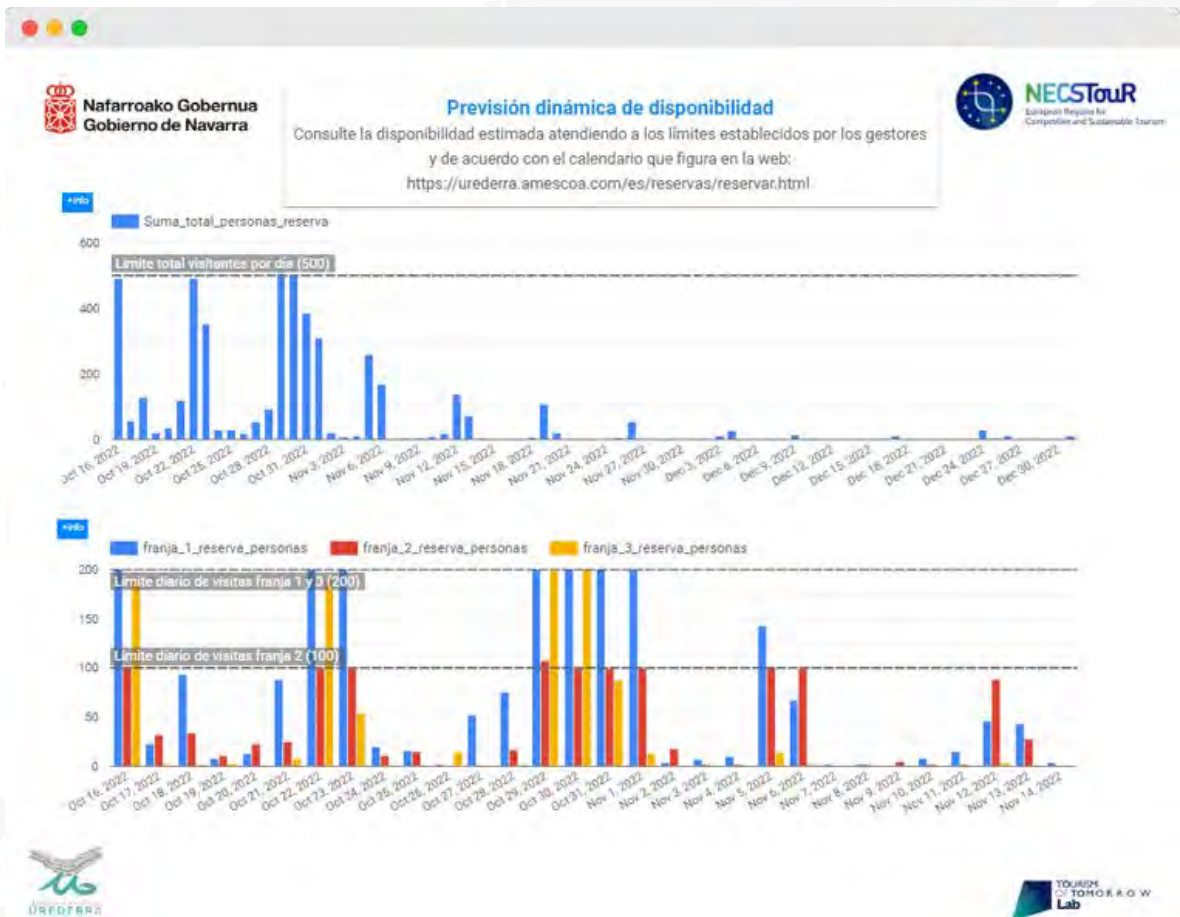
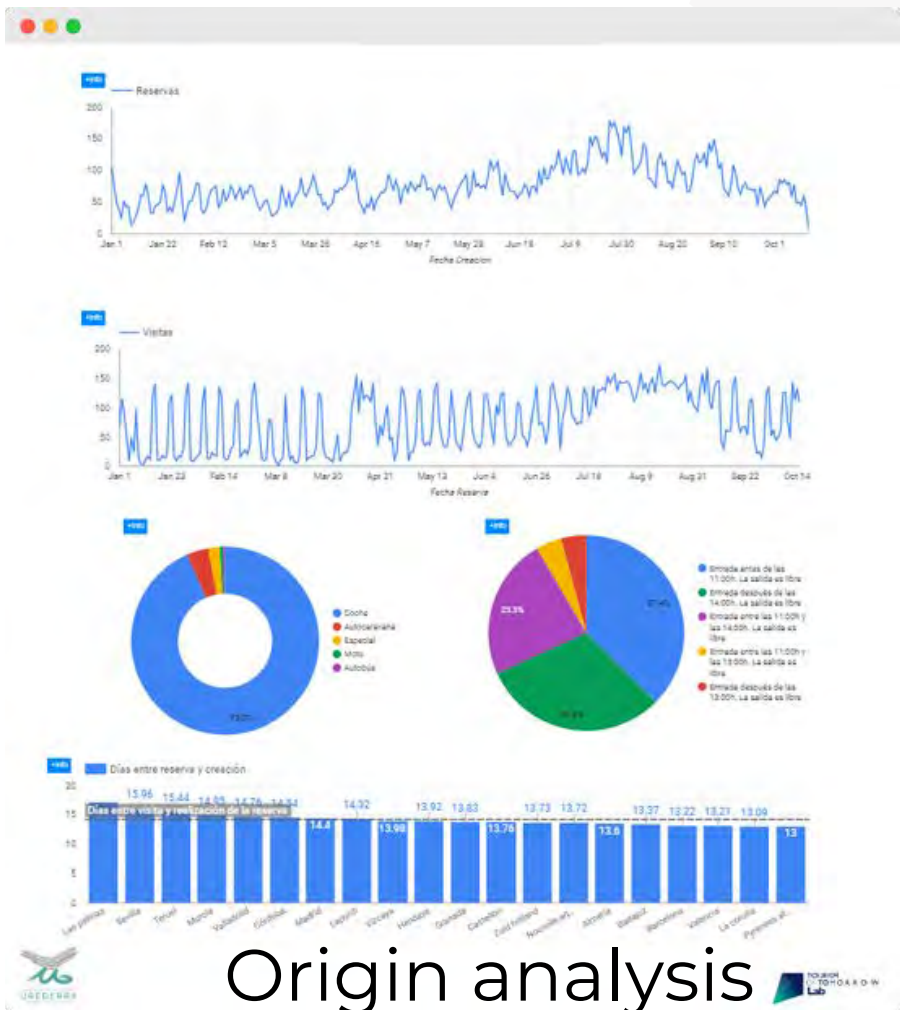
Solution

- Auditing and reusing destination-owned transactional and web-analytics data.
- Creating KPIs and interactive dashboards covering occupancy, demand, bookings, visitor origins, revenue and online behaviour.
- Providing evidence to assess visitor limits, redesign booking slots and manage demand more effectively.
- Preparing a scalable data model, APIs and tailored dashboards for application across additional points of interest.

Occupancy analysis

Booking analysis

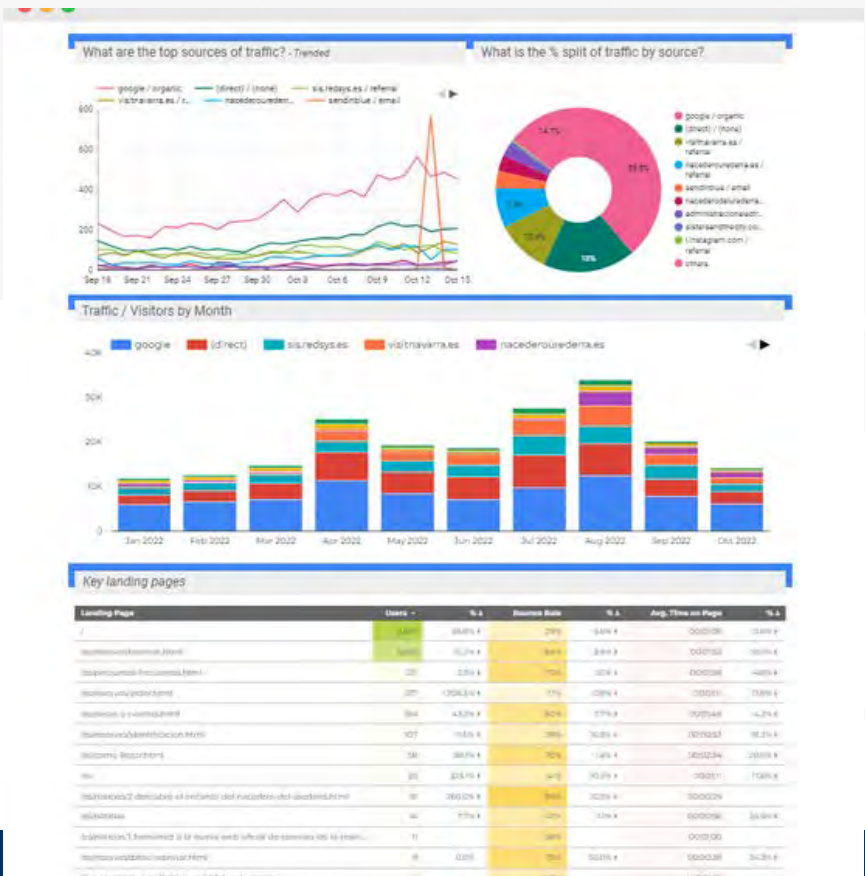
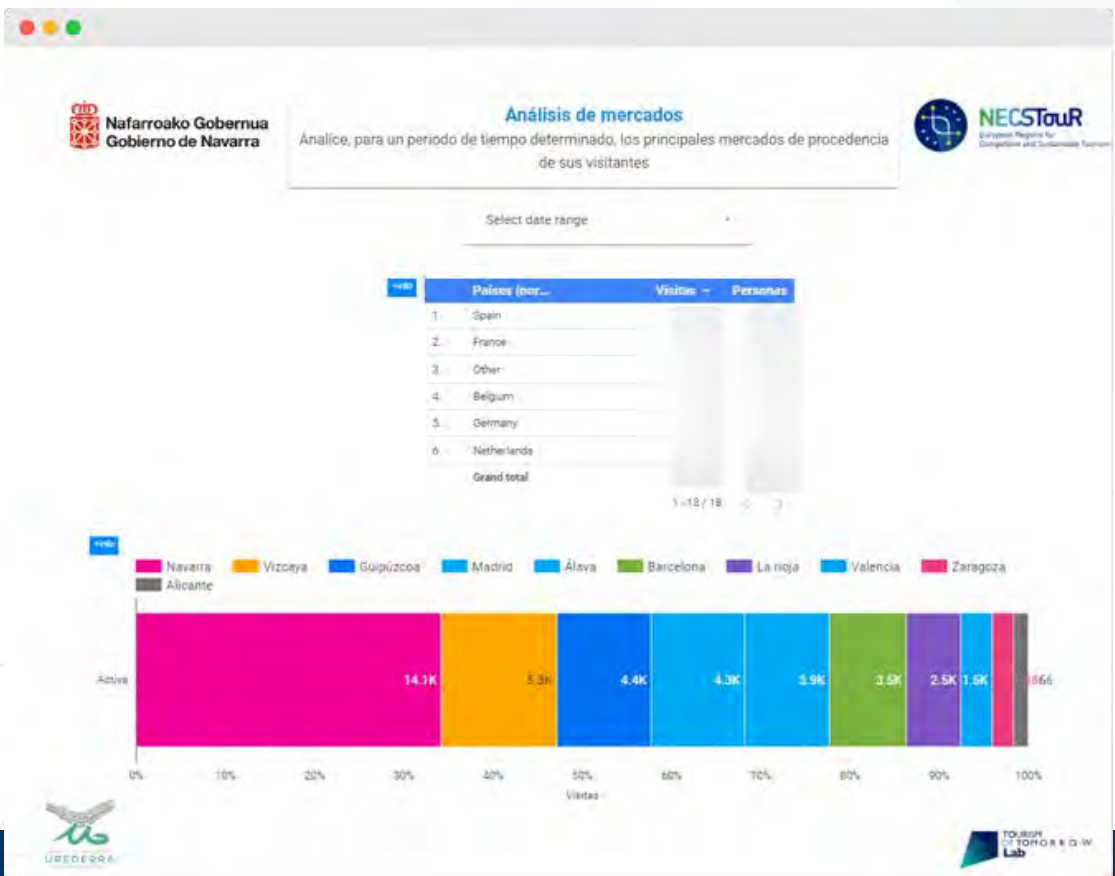
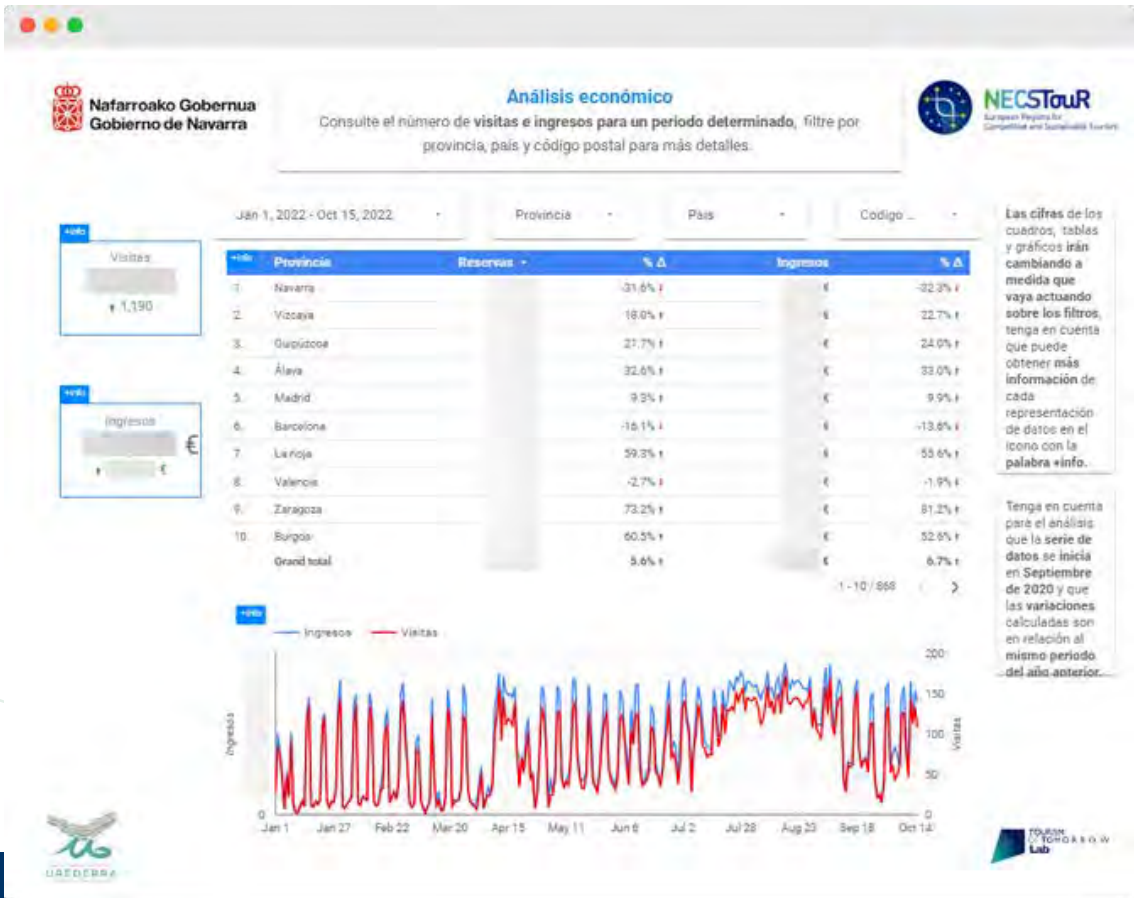
Demand analysis



Financial analysis

Origin analysis

Web analysis



Westtoer use case: building sustainable indicator frameworks and creating dashboards with open-source tools

westtoer 





Westtoer use case | Building sustainable indicator frameworks and creating dashboards with open-source tools



Description

Westtoer's "Kust in Balans" project presents a sustainability measurement framework for coastal municipalities, integrating economic, social, and environmental indicators. Participants learn how indicators are selected, data sources identified, and dashboards designed using open-source tools in collaboration with the Tourism of Tomorrow Lab.

Challenges

- Developing sustainability metrics that reflect local needs across multiple municipalities.
- Identifying reliable data sources for a comprehensive, multi-dimensional framework.
- Ensuring that dashboards communicate insights clearly to non-technical stakeholders.

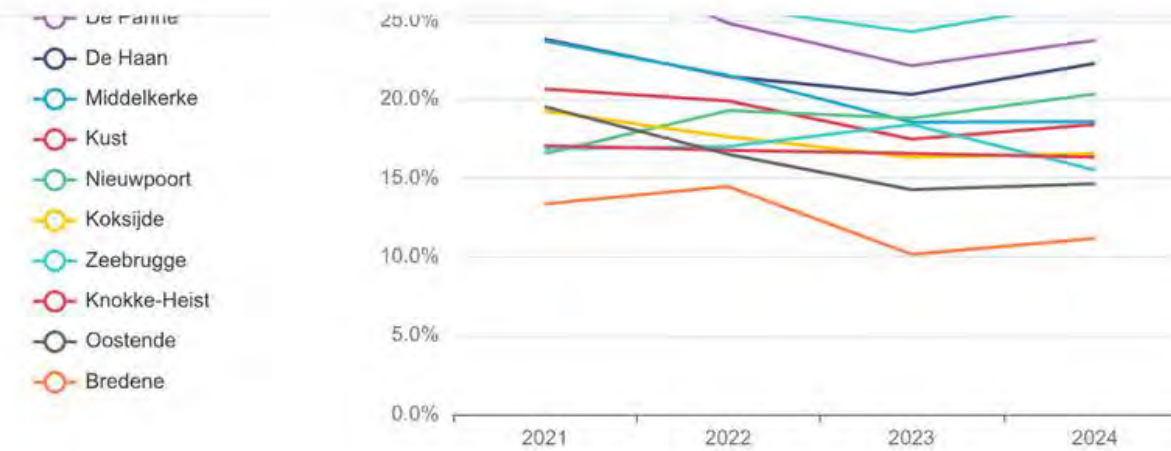
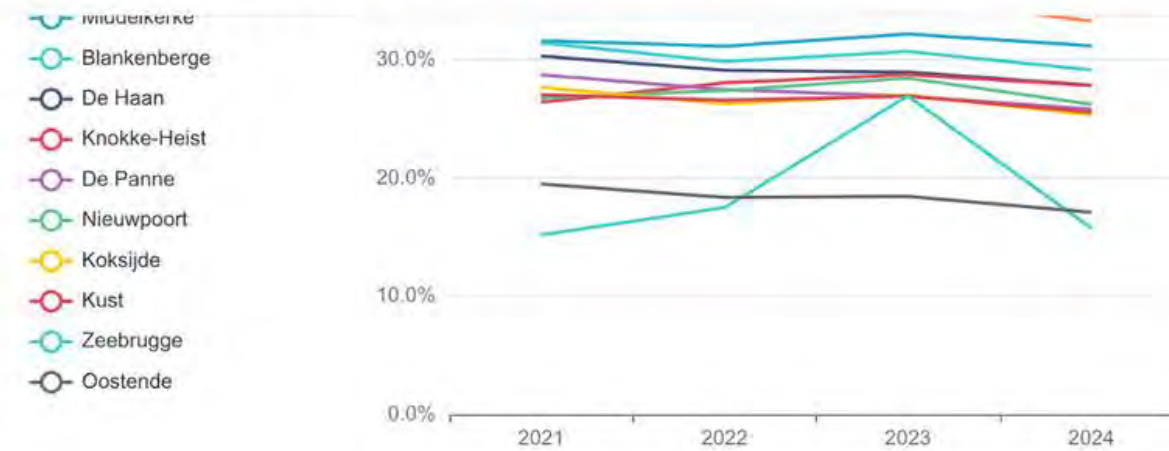
Solution

- Implementing a holistic sustainability framework customized for coastal regions.
- Co-developing dashboards using open-source tools that participants can build on their own laptops.
- Demonstrating a replicable methodology for gathering, analyzing, and communicating sustainability data.
- Empowering destinations to create low-cost, scalable tourism intelligence systems.

WESTTOER INDICATORS

Coastal Balance TOTLAB ☆ Draft 👤 Westtoer Westtoer ✎ 8 months ago

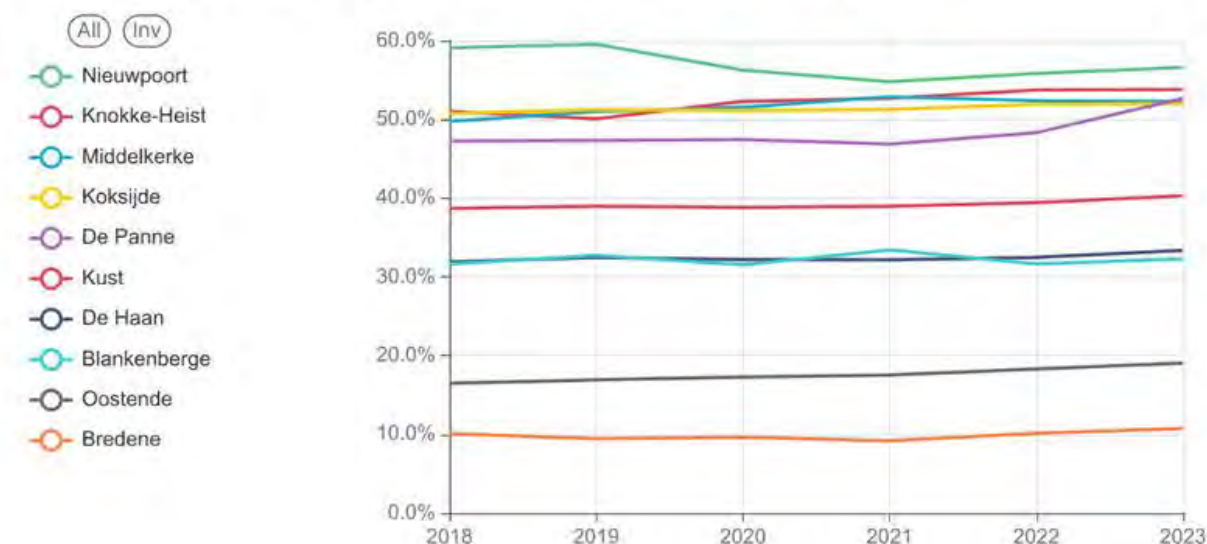
EDIT DASHBOARD



Bron:
Verblijfsbezoekers op basis van druktebarometer
Dagbezoekers op basis van druktebarometer

Impact op wonen en sociale cohesie

Ratio tweede verblijven ten opzichte van totale wooneenheden



Wachtlijst voor sociale woningen naar voorkeursgemeente (2024)

gemeente	AVG(value)
Oostende	6.3k
Bredene	3.06k
Middelkerke	2.21k
Blankenberge	1.96k
Nieuwpoort	1.65k
Koksijde	1.51k
De Haan	1.34k
Knokke-Heist	1.33k
De Panne	1.33k



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Eivissa's Project Prototype Traffic tracking to measure island mobility policies



Consell d'Eivissa



Ibiza case | Developing decision-support systems to measure the impact of road traffic restrictions



Description

Ibiza presents its decision-support system designed to measure and evaluate the impact of road traffic restriction policies. The session is framed within the island's broader sustainability strategy and its Action Plan to regulate tourism pressures, including tackling illegal tourist accommodation, demonstrating the destination's strong commitment to responsible, well-managed tourism development.

Challenges

- Managing and mitigating the impact of heavy tourism-related traffic.
- Assessing the real effectiveness of restriction policies under diverse conditions.
- Need for robust systems capable of integrating multiple traffic and mobility datasets.
- Balancing resident well-being, visitor access, and environmental impacts.

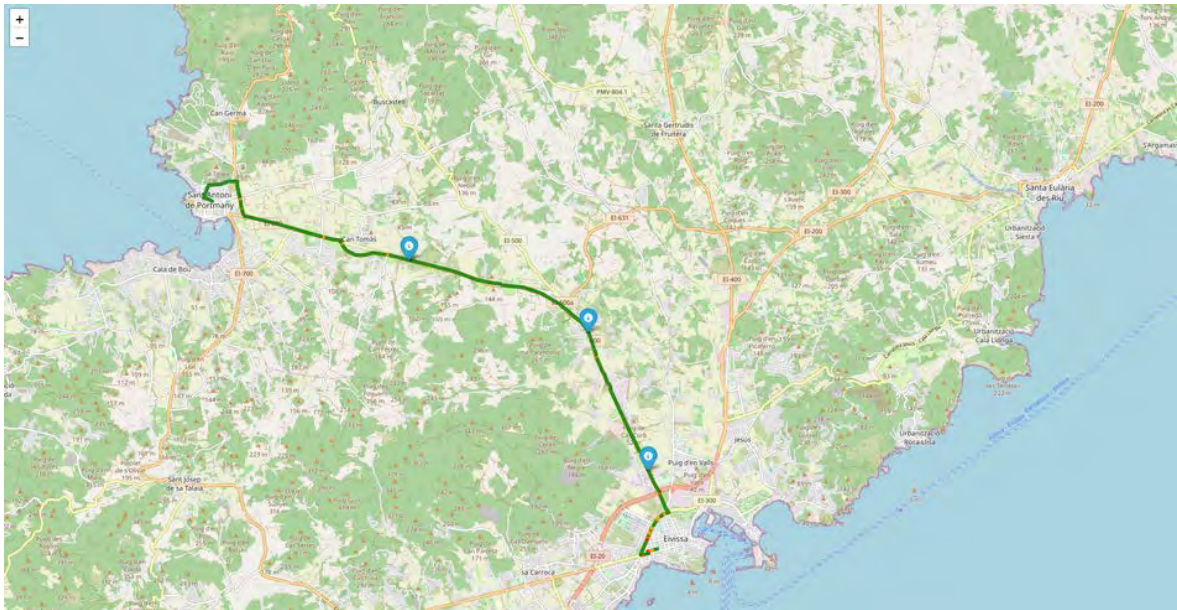
Solution

- Developing a Tourism of Tomorrow Lab-supported decision-support system to measure real-time traffic effects.
- Integrating datasets to analyze policy outcomes quantitatively.
- Providing an evidence-based framework for evaluating future mobility regulations.
- Equipping tourism managers with insights needed for sustainable mobility governance.

ROUTES

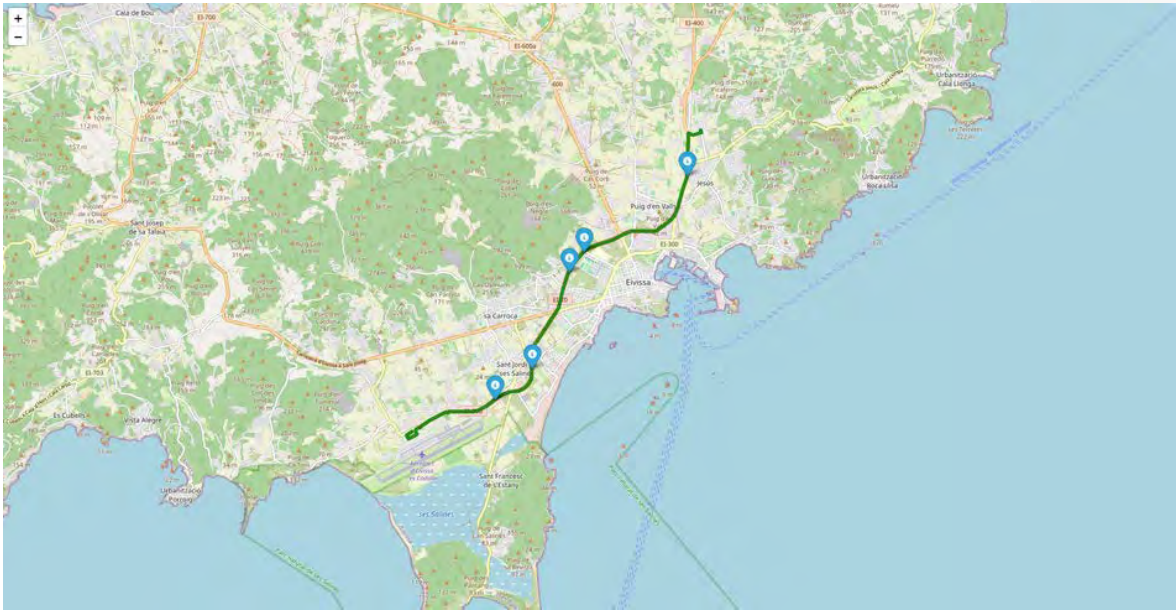
ROUTE 1
Ibiza City → Sant Antoni
(38.908,1.425) (38.965, 1.376)

Contains sensors
"E-11", "E-12", "E-13"



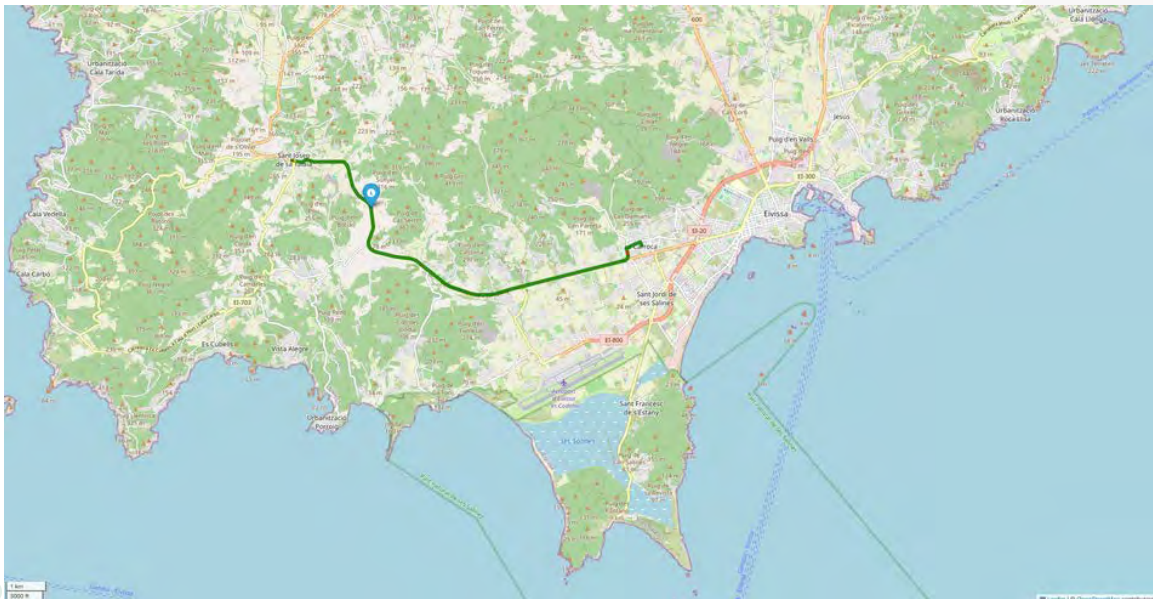
ROUTE 2
Ibiza Airport → Can Ramón
(38.878,1.368) (38.943, 1.448)

Contains sensors
"E-21", "E-20", "E-04", "E-05", "E-16"

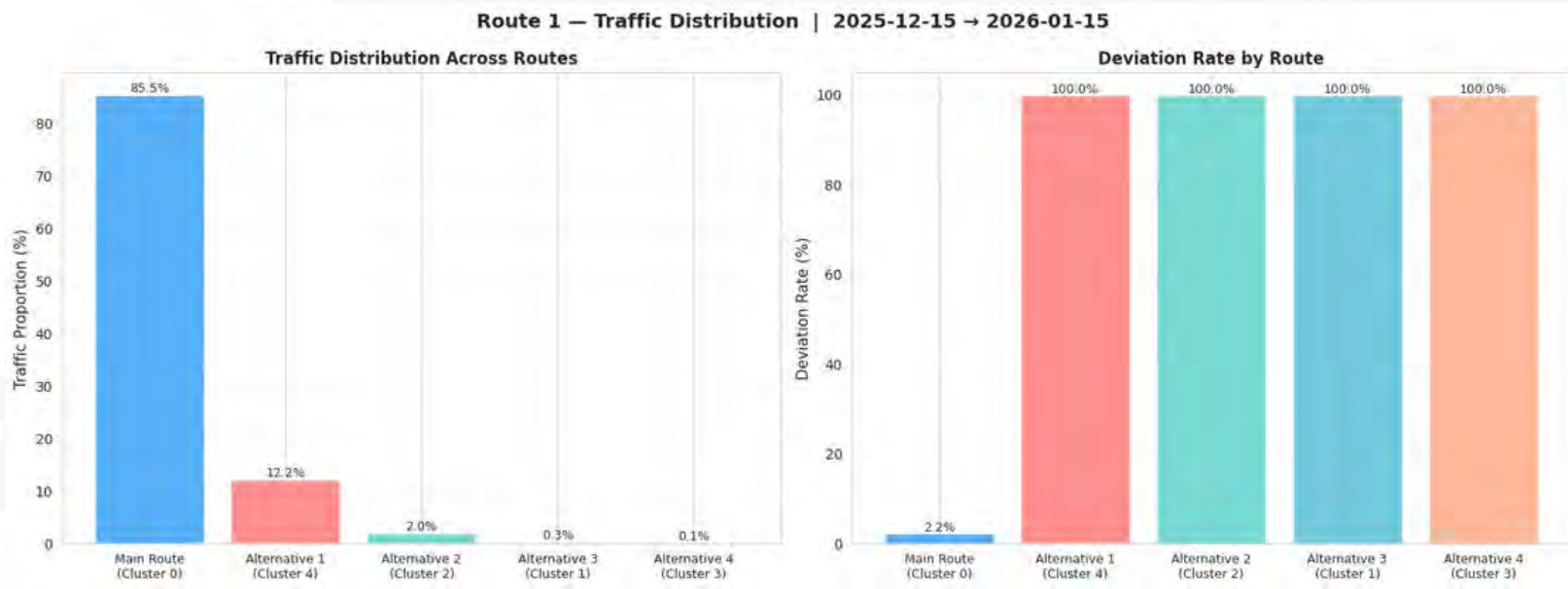
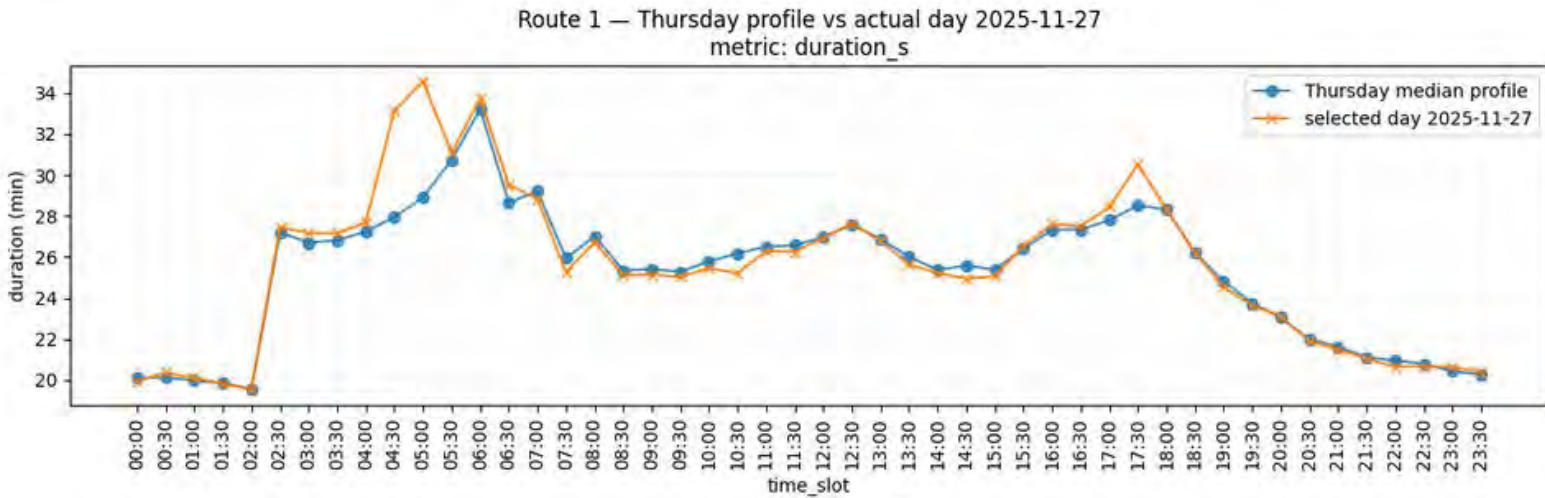
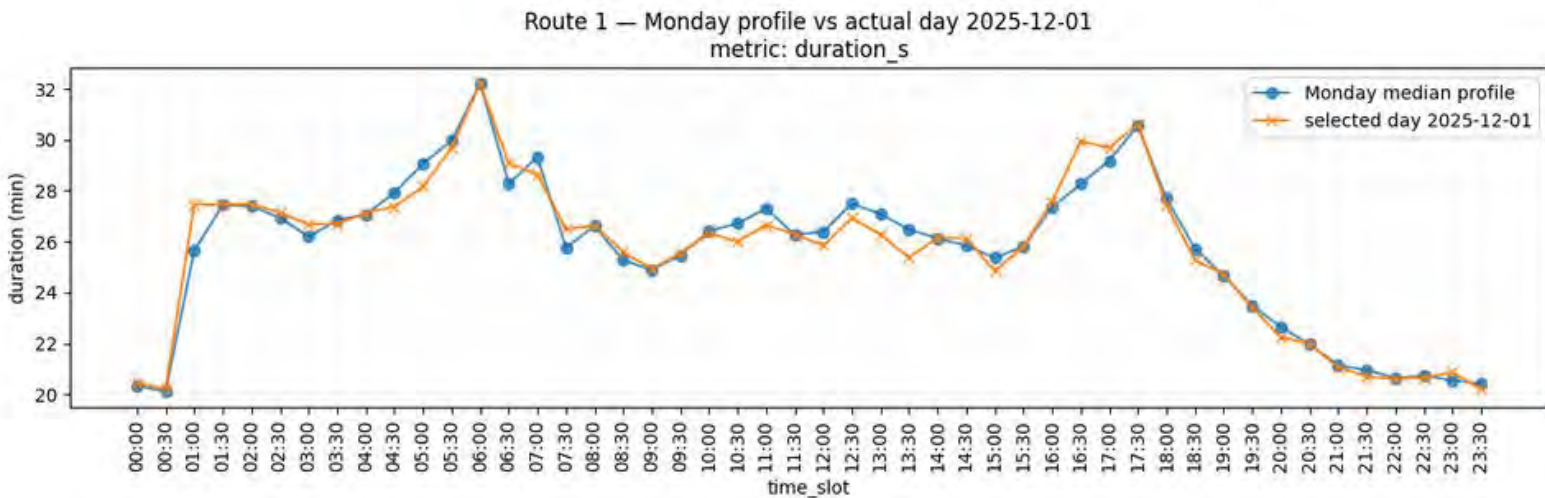


ROUTE 3
Sa Carroca Villa → Sant Jose de sa Talaia
(38.903,1.392) (38.921, 1.293)

Contains sensors
"E-26"



VEHICLE TRAFFIC ANALYSIS



Use case | Andalucía



Mr. Daniel Caro
Head of Andalucía Nexus



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NEXUS

The Andalusia
Tourism
Technology Hub