Ayuntamiento
de Málaga

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Preliminary Study
The Sustainable Tourism Observatory of Málaga (STO Málaga)

For the application of the STO Málaga to become member of
the UNWTO INSTO Network

January 2022

Application submitted by: Málaga City Council; Tourism, City Promotion & Investment department.

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1. Introduction

With a population of 578,460 inhabitants in 2020 and an area of 395 square kilometres, Málaga is the second most populous city in Andalusia and the sixth most populous in Spain. The City of Málaga, which the Málaga province is also named, underwent rapid economic growth in the second half of the 20th century thanks to the tourism industry, which constitutes one of the most important pillars of its economy today. In 2019, which was the strongest tourism year in history, the City welcomed a total of 1.4 million overnight visitors[1] (of which 62% were foreigners), making Málaga the fourth most visited destination in Spain with a total economic impact of 3 billion euros supporting around 34.500 jobs. The City's top five foreign tourist markets include the UK, Germany, France, Italy and the USA.

With rapidly growing tourism numbers during the past 10 years as well as increasing challenges from universal issues such as climate change, many years ago the City recognized the need for better, more timely and more reliable insights about the quickly changing tourism dynamics. By placing a strong focus on its digital transformation, Málaga has evolved from a traditional sun-and-sea tourism hotspot into a modern and innovative tourism destination. Major recent milestones on this journey included the City's membership in the Smart Tourism Destination Network (DTi) as promoted by the Spanish Ministry of Tourism in 2020, as well as its recognition as European Capital of Smart Tourism from 2020 until September 2021.

At the same time, the City has a long-standing commitment to the environment. In 1995, Málaga adopted the first local Agenda 21 and was the third Spanish city to adhere to the European Digital Green Charter in 2010. Later, in 2015, the City approved its new Urban Agenda 2050 which presents the current strategic sustainability framework for the City and was the starting point for increased activities in the areas of waste and water reduction, environmental education, nature protection, renewable energies, sustainable mobility and green entrepreneurship, among others.

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[1] Visitors in hotels and similar establishments. There were an additional 232,190 visitors counted in tourist apartments in 2019.

In addition, the City adopted a clear climate roadmap in 2019, defining the goal of reducing its carbon emissions by 55% before 2030 and achieving carbon neutrality by 2050.

In order to direct the tourism sector into a more sustainable future that is aligned with the vision of the City, the new tourism strategy for 2021-2024 includes many related activities including the creation of a Sustainable Tourism Observatory that will strengthen Málaga's tourism data capacities beyond the already available economic insights and will help to monitor the achievement of the thirteen overarching goals set in the strategy.

Because this observatory seeks to follow international standards and shares the vision for better evidence-based decision making in the tourism sector, strengthening the resilience and sustainability of the sector, the STO Málaga aspires to join the UNWTO International Network of Sustainable Tourism Observatories (INSTO). The preliminary study has therefore been prepared as part of the city's application to become an INSTO member. The following pages present an overview of the initiative and give insights into the envisioned structure, steps for development and timelines that are required to establish and run the Sustainable Tourism Observatory of Málaga (STO Málaga).

PURPOSE: Málaga aims to establish the observatory and join the INSTO network in order to

- Improve and extent monitoring activities to ensure a more holistic understanding of tourism development and its impacts and help prioritize planning activities.

- Support the monitoring of the successful implementation and impacts created through the new tourism strategy and other initiatives and commitments of the City.

- Strengthen evidence-based decision making and competitiveness of the destination through easily accessible information that is available to all stakeholders.

- Foster a participatory development approach and serve as anchor for regular exchanges, closer coordination and increased collaboration on specific topics between all tourism stakeholders in the destination.

- Ensure a strategic, long-term approach to generating insights and facilitating its access and offer a place for continuous learning about tourism data to ensure evidence-based decision making.

- Strengthen and ensure more sustainable and resilient development of tourism in the city in the future with satisfied guests and hosts.

- Connect the City with like-minded destinations around the world to learn together and accelerate the shift towards more sustainable development in the destination.

2. Data Landscape in Málaga

2.1. Background: Smart Tourism in Málaga

Being the urban destination with one of the highest tourism growth rates in the country, it is especially important for Málaga to better monitor and manage tourism flows and to offer the most innovative products and services for its visitors. Because of that, the City has focused on becoming a smart city and intelligent tourist destination for many years.

The first evidence of this desire to transform the City was when the City Council created a new department specifically dedicated to "Innovation and New Technologies" in 2006. It was the first department of its kind in Spain and this pioneering initiative is considered to have laid the groundwork for Málaga's digital transformation overall, and thus for the transformation into a Smart Destination.

Since then, numerous actions were implemented and tools were developed, from applications for museums and monuments, to the Málaga Tourism website, which offers all the content related to the tourist resources of the City, including an audio guide and related App. Additionally, Social Networks play a fundamental role by a) providing reference for tourists during their stay; b) providing personalized support services, and c) helping to collect data on visitors' profiles and experiences in order to improve the tourist experience. Other digital elements available today include QR codes and Bluetooth low energy beacons, which are installed throughout the City in places of interest.

Furthermore, Málaga has developed a variety of different Apps of different aimed at managing and improving the experience of both tourists and residents. Examples include the transportation App developed by the Málaga Transport Company (EMT), which is as national benchmark, facilitating trip planning throughout the City. The App "Alertcops" allows any tourist to contact the Police directly in case of emergency. Furthermore, the App "Málaga Cruise Shop" lists shops with hours adapted to cruise ship passengers; and the App "Playas de Málaga" offers schedules, weather information and other types of information on beach activities such as the typical local beach parties called "Moragas", where sardines are grilled right by the sea.

A final example is the "Málaga Pass" App, which allows its users to benefit from admission to the main tourist and leisure attractions with preferential access and significant discounts.

Besides the strong emphasis on digital applications, one of the key elements of Málaga´s transformation to a smart destination is the City's strong focus on leveraging information and communications technology (ICT) to develop intelligent transport systems to ensure smart and efficient mobility solutions. As part of these efforts, Málaga has also worked on smarter traffic management, with technological innovation systems that facilitate the observation, analysis and monitoring of parameters, such as: traffic intensities, travel times, impacts due to works or events in public space. For example, through the Automatic Incident Detection System (DAI), an AI-driven intelligent mobility management system, the City has strengthened its capacity to identify and respond to traffic incidents.

With regard to car parks, two systems have also been implemented: the Intelligent Regulation System and the Parking Guidance. Through the installation of state-of-the-art parking meters and the sensitization of the parking lots, available spaces are easier detectable through the free SMASSA application.

Also noteworthy is the "Gecor" App, a platform for citizen collaboration to report incidents on public streets; or "CitySense", another collaborative participation project that allows the user to actively intervene in the generation of OpenData about Málaga and its main points of interest, interacting with sensors installed by the City.

Finally, Málaga has put enormous efforts into positioning itself as entrepreneurial smart city by strengthening its innovation business ecosystem and attracting technology companies and start-ups from all over the world. The Málaga Innov@ strategic project has created "a city for knowledge and innovation" where there is a high density of professionals linked to research, knowledge and ICT. The most notable aspects of the City's innovative ecosystem are the Málaga TechPark (PTA), the University of Málaga (UMA), several Smart City pilot projects, the investment in high-speed rail research, the Málaga Valley initiative and a support structure for SMEs and entrepreneurs. The Digital Content Hub, which was the first of its kind supported by the Spanish government, has further driven the technological evolution to such an extent that it has become a fundamental factor of change in the City, including the tourism industry.

Thanks to this entrepreneurial ecosystem and its now more than 200 technology events per year, Málaga has become one of the top destinations in Europe for technology events and conferences. This year, the city will co/organize its first Mobile Week Málaga[2] in collaboration with Mobile World Capital Barcelona. One recent hackathon that specifically focused on developing solutions for tourism based on remote sensing data was the Copernicus Hackathon[3] Málaga held in 2020, which was organized jointly by the Universidad de Málaga, the Málaga City Council and Randbee Consultants.

2.2. Currently Available Insights

[2] https://fycma.com/evento/mobile-week-malaga/?lang=en
[3] http://copernicus.adabyron.uma.es/wp-content/uploads/InfoPack.pdf

Because of this strong focus on digitalization and innovation, it is no surprise that there are many data sources available throughout the City of Málaga which are also important for tourism. For example, with regard to the availability of data by any citizen, including tourists, Málaga has various tools, among them: "Smart Tourist Data". This is a technological tool at the regional level with the active participation of the University of Málaga, which allows destinations and companies to improve the customer experience.

Through the Open Data Portal[4] of the City Council, Málaga is also committed to make all kinds of data freely available for anyone, with more than 700 datasets currently available. The data is accessible in different formats in order to ensure transparent information flow and the development of useful applications based on these data points.

In terms of tourism data, Málaga has been monitoring key economic indicators on a regular basis for many years, which is why the City has a variety of different insights with historical data going back to 2008 and older. While most information was primarily used for marketing and political planning purposes in the past, there has been a shift towards extending information and making it more publicly available through different initiatives. The following table is an overview of data points that are published by the City Council on a regular basis.

AVAILABLE INSIGHTS	INDICATORS
Economic Impact	- Direct economic impact - Indirect economic impact - Total economic impact
Cultural Offer & Businesses	- Number of museums - Nr. of gastronomic zones - Nr. of galleries - Nr. of monuments and points of interest
Pedestrian Areas	- Total hectares (by year – since 1994)
Tourism Offer	- Nr. of hotel establishments - Nr. of hotel bed-places - Nr. of travellers (in hotels; foreign/national) - Nr. of travellers (in tourism apartments) - Nr. of foreign origin markets - Nr. of overnights (foreign/national) - Nr. of visitors - Overnights of at least one night - Nr. of tourists - Nr. of tourist apartments - Nr. of tourist apartment bed-places - Nr. of housing with tourist purpose (e.g., Airbnb) - Nr. of bed-places in housing with tourist purpose
Mobility Information	- Nr. of cruise passengers - Nr. of cruise ships - Nr. of air passengers (foreign/national) - Nr. of air connections (foreign/national) - Nr. of train passengers
Hotel Details	- Average night spent - ADR - RevPar - Occupation
Evaluation of the destination by Visitors	- % that recommend the destination - % that would repeat visitation - % level of satisfaction (positive & very positive) - Average grade given to the destination - Average grade for museums, events and beaches

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[4] https://datosabiertos.malaga.eu/

Additional provincial information	- Nr. of tourists - Nr. of tourism establishments - Nr. of bed-places in tourism establishments - Hotel visitors - Hotel overnights - Employment - Total economic impact - Spanish schools (& nr. of students) - Nr. of businesses established - Register Tourism Andalusia: inscribed businesses

The above information is also made available for all stakeholders through the Málaga Tourism Website in different formats [5]. Besides infographics, the information is presented in more extensive format and with a different focus, from more in-depth presentations about the market characteristics to seasonal focus insights, such as specific data presentations for the Christmas season.

In addition to the tourism data gathered by the City itself, there is additional information available through other sources, such as the "Smart Costa del Sol[6]" project, which is led by the Málaga Province and brings together fifteen municipalities throughout the province. The objective is to create a multi-city platform (Big Data and Open Data) with all the information and services of interest to both tourists and residents. Information currently available through the Costa del Sol Platform include:

AVAILABLE INSIGHTS	INDICATORS
Supply Side Offer - Accommodations	*Data series since: 2017* - Nr. of establishments - Nr. of bed-places - Evolution of establishments - Evolution of bed-places - Bed-places per category (stars) - Bed-places per typology (hotel; tourist apartments etc.)
Demand characteristics	*Data series since: 2011; for all region* - Nr. of tourists (& evolution) - Average travel budget (& evolution) - Average length of stay (& evolution) - Average age - Evolution of tourist volumes by nationality - Employment generated - Total production factor (EUR)
Tourist concentration in the territory	*Data series available: last 4 months* - Concentration tourists (national vs. International) - Ranking of origin countries - Ranking of origin provinces - Hourly & daily concentration
Time of hotel search	*By origin; dates of reservation; data of trip & hotel category* - Total searches (nationals vs. internationals) - Countries of origin - Hotel categories searched - Searches per day
Direct hotel reservations	*By origin; dates of reservation; data of trip & hotel category* - Total reservations (national/international) - Cancellations

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[5] http://www.malagaturismo.com/es/paginas/informes/362

[6] https://www.costadelsolmalaga.org/bigdata/

	- Countries of origin - Type of booking (complete; without breakfast etc.) - Average price per category (stars)
Hotel rate of return	*Data series since: 2016* - RevPar Spain / Andalusia / Málaga / Costa del Sol - ADR Spain / Andalusia / Málaga / Costa del Sol - RevPar/ADR per category (stars) - RevPar/ADR annual & monthly evolution - RevPar/ADR annual variation - RevPar/ADR provincial averages
Travellers & overnights	*Data series since: 2016* - Total overnights/travellers (national/international) - Overnights/travellers evolution - Overnights/travellers by type of accommodation - Overnights/travellers annual variation
Commercialization of tourist apartments	*Data series since: 2018* - Nr. of establishments - Bed-places - Average prices (total and by capacity/rooms) - Occupation - Establishments by capacity / rooms - Revenues
Employment	*Data series since: 2010* - Total employment generated - Employment in accommodation & restaurants - Employment in travel agencies - Employment in other tourist services - Employment by sub-sector - Annual variation by subsector - Evolution of employment - Self-employed by subsector
Arrivals at airport	*Data series since: 2004* - Total arrivals (international/domestic) - Nr. of countries connected - Nr. of cities connected - Ranking of origin country - Ranking of origin cities - Evolution of arrivals
Flight searches for Málaga	*From last month or week; for next three months; by origin country* - Total searches (nationals/internationals) - Searches by origin country & origin city - Evolution of searches & comparison with previous year - Nr. of searches per days of week
Forecast of airline seats	*For 1 and up to 6 months ahead* - Total offered seats (nationals/internationals) - Nr. of cities connected - Ranking of origin markets & cities - Seats by airline & annual variation - Evolution of seat offer

Furthermore, there are additional sources with useful data points which resulted from various initiatives of organizations and research projects. For example, a recent study prepared by the Urban Environment Observatory (OMAU) of the City of Málaga and the Universidad de Málaga (UMA), together with other partners, was published in 2020, giving an overview of the tourism development within the City for both supply and demand side.

The study was developed in the framework of the EU-funded Alter Eco Sustainable Tourism project (2016-2019) and included estimates on intensities in different neighbourhoods and an analysis of the related opportunities and challenges regarding the presented trends and dynamics in the City.[7]

Also, the CIEDES Foundation[8] (Center for Strategic Research and Economic and Social Development) and Promálaga[9] (a municipal company that promotes economic development) gather business related indicators each year. This information includes data in the areas of economy, industry & commerce, research and innovation, education, transport and infrastructure, tourism attractions and cultural infrastructure, and health.

2.3. Smart Destination Málaga

Since 2020, Málaga is a member of the Smart Destination Network (DTi) as promoted by the Spanish Ministry of Tourism. To join the network, the City had to undergo a thorough review of its activities in 2019, with a focus on the five main pillars of a smart destination as initially defined in the Spanish National Tourism Plan for 2012-2015: Governance, Innovation, Technology, Sustainability and Accessibility.

Results of the diagnostic study showed that Málaga complied with more than 80% of requirements, which allowed the City to become an official member of the Smart Destination Network. In the area of governance, sustainability, and accessibility, which are especially important to the work of the INSTO network, the following recommendations for improvements were made in the study:

Governance:

- Improve and extend the monitoring of indicators to improve understanding of all impacts of tourism in the destination
- Improve the coordination between departments and organizations
- Increase training efforts to ensure all personnel is prepared for the new needs and services arising from the smart destination
- Increase transparency and citizen participation in tourism planning

Sustainability:

- Start monitoring resident satisfaction
- Find measures to avoid over-tourism
- Increase evidence about environmental impact of tourism
- Include tourists in activities to strengthen sustainability
- Increase actions to strengthen sustainable consumption and production
- Develop tourism crisis management plans

Accessibility:

- Update the municipal accessibility norms
- Develop an accessibility strategy for the destination
- Develop tools to monitor implementation of accessibility norms
- Implement training for employees and tourism stakeholders

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[7] http://static.omau-malaga.com/omau/subidas/archivos/1/2/8421/aproximacion-al-turismo-en-malaga-%28alter-eco%29_v5.pdf
[8] https://ciedes.es/
[9] https://www.promalaga.es/

- Revise the tourism value chain for the level of accessibility
- Improve access in public spaces and events as well as digital spaces
- Increase promotion and information to tourists

Based on these recommendations, the review process resulted in a total of 70 proposed actions to improve the status quo in all of the five pillars of a smart destination, setting even higher ambitions for the destination in the future. This included the establishment of a central data platform to facilitate data analytics and the related establishment of the observatory.

Note: Because of Málaga's efforts in the areas of sustainability, accessibility, digitalization and cultural heritage, the City has also become a role model for other tourism destinations. In 2020, the City won the title of European Capital of Smart Tourism along with Gothenburg, Sweden.[10]

2.4. Málaga Tourism Data System (SID)

As a result of seeking to become an officially recognized Smart Destination, the City is currently building its own digital data portal (SID), where many of the previously mentioned insights, plus new data points, are made available to all stakeholders of the tourism supply side. This offers an enormous opportunity for the observatory as information is already digitally available and additional information gathered by the observatory can be easily integrated into the existing data infrastructure. The data platform is planned to be open to all tourism stakeholders (with login) of the tourism supply side.

So far, the following information has been integrated into the data portal:

AVAILABLE INSIGHTS	INDICATORS
Accommodation Supply Information	Time series available since: 2016 (yearly info) - Nr. of establishments (by types and categories) - Nr. of bed-places (by types) - Evolution of supply side
Hotel Overnights Information	Time series available since: 2005 (monthly info) - Nr. of travellers (national/international) - Nr. of overnights - Average length of stay
Airport Statistics	Time series available since: 2010 (monthly info) - Nr. of passengers - Nr. of flights - Nr. of international flights - Nr. of connected countries - Passengers and flights by origin country - Passenger and flights info for major national airports - Top 20 airports with major number of flights
Cruise Information	Time series available since: 2005 - yearly info; 2019 – monthly info - Nr. of cruises - Nr. of passengers - Nr. of cruises in the main ports in Spain
Bus Information	Time series available since: TBC (monthly info) - Nr. of passengers (national/ international)
Health-related information (COVID-19)	Insights deriving from an already existing, external dashboard developed. Available on GitHub.

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[10] https://smart-tourism-capital.ec.europa.eu/cities/competition-winners-2020/malaga-winner-2020-european-capitals-smart-tourism_en

The development of SID is currently under way. Besides the information shown in the table above, more information will be integrated over the next few months, including:

- Extension of the supply-side information integrating information on occupancy of accommodation establishments and revenues
- Extension of cruise ship information to include previsions of arrivals
- Real-time information on data related to the beaches
- App data for real-time tracking
- Inclusion of flight search options
- Real-time information on flight, bus, train and cruise arrivals and departures

Further sources are currently under revision to identify their feasibility to generate insights related to the capacities and occupancies of the museums in the City; the usage of parking slots and information on capacities and visitor volumes in different areas of interest within the City. In addition, the data available through the Costa del Sol platform that is relevant to Málaga is planned to be incorporated into SID.

Note: Data gathered by the new observatory is planned to be integrated into SID in the future (more information in the following chapters).

3. Sustainable Development in Málaga

3.1. Background: Sustainability Efforts in Málaga

Economic development and the unstoppable demographic growth and increase in tourism arrivals in Málaga over the years have led to increasing impacts in the destination, with visible challenges to provide a healthy environment for both host and guests.

Because of this, the City has been actively focusing on sustainable development for years. In fact, in 1995, Málaga became a national benchmark by adopting the first *Local Agenda 21* for the municipality, which kick-started a series of environmental efforts with important results. One of these efforts was the City's Urban Environment Observatory (OMAU[11]), which was established in the framework of the URB-AL program between 2000-2006. Since then, the OMAU has been responsible for monitoring environmental indicators for Málaga; sharing experiences with other cities; providing annual training courses and reporting on emerging issues in the City related to the urban environment.

Later, in 2009, Málaga adhered to the European initiative of the Covenant of Mayors setting its first emission reduction goals. One year later, the City was the third Spanish city to adhere to the European Digital Green Charter, committing to increasingly apply information and communications technology (ICT) with the goal to improve energy efficiency and resource management. As a result, the City renewed its *Local Agenda 21* in 2015 as part of its *Sustainability Strategy 2020-2050*[12]. The main objective of the strategy was to ensure a sustainable development of the City that achieves the well-being of the community and the improvement of the experience of the citizen and the tourists.

The Málaga Municipal Energy Agency was created in 2006 within the framework of the City's Strategic Plan and the European Commission's "Intelligent Energy-Europe" Program.

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[11] https://www.omau-malaga.com/
[12] https://www.omau-malaga.com/45/com1_pb-0/com1_md2_cd-16/agenda-urbana

This agency initiated the *Action Plan for Sustainable Energy*[13] in 2011, to create a more favourable economic scenario in the City through a more sustainable and competitive model, thus positioning Málaga as one of the benchmark cities in sustainable urban development and in new technologies advancements.

Among the main sustainability efforts that stand out are the City's efforts to change the public lighting to LED technology; the implementation of energy management systems (EMS) in different locations; the automation of the electrical grid control systems and the development of a lighting map, which allows to know the current state of public lighting and the lightning needs in each area of the City. In addition, the City established smart meters; electrical storage in surplus batteries and has placed focus on energy efficient and sustainable construction of municipal buildings.

Currently, self-generation of electricity greatly exceeds the electricity consumption of municipal buildings with almost 46% of the total electricity consumed by the Málaga City Council, its agencies, and companies coming from renewable sources. The results are a 25% global energy saving and a 20% reduction in CO_2 emissions. In this way, the City complies with the European guidelines on energy efficiency and use of renewable energies.

In terms of energy efficiency and sustainable mobility, Málaga has participated for four years in the ZEM2All Project, an electric mobility plan that has meant a reduction of 330 tons of CO_2; the Victoria Project, which has put Málaga at the forefront of Spain with the first dynamic induction electric charging bus lane (charging system for electric buses in motion and without cables); and the Special Plan for Sustainable Urban Mobility of Málaga. In addition, strong efforts to extend bike lanes throughout the City have been ongoing, with 43 kilometres and 900 bike parking spaces, including the introduction of the public bicycle rental system with more than 26,000 users and 23 stations to date.

In relation to the improved use of water and wastewater treatment, measures such as the separation of rainwater and the sanitation system have been implemented in the City to facilitate the evacuation of water deriving from heavy rainfall. This included 44 improvement activities; a new treatment system for the control and treatment of odours; an intelligent irrigation system for parks and gardens which allows saving water, energy and maintenance costs; and a desalination plant, which is one of the most modern and largest of such infrastructures in the world.

Furthermore, Málaga also has a Sectorial Air Quality Plan, which aims to reduce atmospheric pollution (especially that produced by traffic); monitor pollen levels in the air; and outlines different plans and actions against noise to improve the acoustic quality in the City. Málaga monitors in real-time air quality and environmental data through a sensor system installed in postal delivery carts from the City's mail services as well as on volunteer basis through public bicycles. Finally, the City invested in improved street cleaning equipment and has worked on better waste separation in the city center.

Besides these implemented technical measures, the natural resources in the City of Málaga also help with air quality, with 48.6 km^2 of protected natural space; 60 hectares of botanical gardens; 439 hectares of municipal green areas and 5 beaches.

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[13] https://www.omau-malaga.com/agendaurbana/subidas/archivos/arc_155.pdf

The City has revitalized many of their natural spaces, such as its wetlands, creating ideal spots for bird watching and nature walks which offer unique experiences for both visitors and citizens.

To raise citizens' environmental awareness and knowledge about responsible consumption, Málaga has additionally created several engagement programs and activities which include the established group of Local Environmental Agents providing guidelines for responsible consumption and information on sustainable products in shops and hotel establishments that can be found through a specific app (CAA Málaga).

Finally, the annual GreenCities Forum[14] has been held in Málaga since 2010, which has become one of the most important events for smart city developers and stakeholders. During the two-day event, institutions, municipalities, companies, and professionals present and discuss the latest developments around urban intelligence and sustainability with a strong focus on innovation and technology.

3.2. Málaga's Urban Agenda

The City's renewed Local Agenda 21, which was approved in March 2015, is an integrated part of the City's current Urban Agenda [15] and the City's *Sustainable Development Strategy 2020-2050*.

Guided by the objectives of the Sustainable Development Goals (SDGs), the Agenda looks at important thematic areas for the City such as the territory and city configuration; the management of natural resources; social cohesion and economic development, as well as governance. Within these areas, several sub-themes are included that have equal relevance for tourism development in the City. These include the process of urbanization (densification); diversity of activities in public spaces; green zones; urban zoning; urban biodiversity; social cohesion; characteristics of population; poverty trends; knowledge creation and access to education; housing issues; local participation and cooperation and local financing, among others. For each of these areas, the Agenda defined a list of specific indicators that give insights into the development of these aspects over time. It is important to highlight that as part of the 2-year development of the Agenda, neighbourhood meetings were held in the districts, informing, discussing and collecting ideas from citizens, which led to defining different objectives per district.

As one of the main drivers of economic development in Málaga, it is no surprise that tourism was mentioned various times in these stakeholder talks and has been integrated in various parts of the Urban Agenda either directly and indirectly. Within the objectives per district (found in the Annex) many relevant tourism action items linked to defined indicators can be found. For example, balancing the proportion of activities to avoid existing predominant uses (hospitality and franchises); limiting the use of hotels, apartments, hostels, and maximizing the use of bed & breakfasts; improving the quality of public spaces; promoting more sustainable mobility models; minimizing acoustic impacts caused by the proximity of the airport.

As 2020 was the first temporal milestone for the indicators (data was presented for each indicator until 2013 in the plan), it is expected that an updated version with newer insights will be available in the near future, which will be highly relevant for the work of the STO.

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[14] https://greencities.fycma.com/?lang=en

[15] https://www.omau-malaga.com/agendaurbana/pagina.asp?cod=6

3.3. Málaga's Climate Action Plan

As further step in its sustainable development, Málaga approved its Climate Plan called *Alicia*[16] in the summer of 2020, which is strategically linked to the Urban Agenda and which is also aligned with the United Nations 2030 Agenda and the 17 SDGs, mainly with goals 7 (affordable and clean energy), 11 (sustainable cities and communities), 13 (climate action), 14 (underwater life) and 15 (life of terrestrial ecosystems) as well as with the contents of the 2019 Spanish Urban Agenda.

Prepared by the OMAU and in alignment with the vision of the European Commission emission reduction goals, the plan presents a status quo analysis outlining the biggest vulnerabilities and needs, as well as a proposed roadmap towards the City's carbon neutrality by 2050, including an interim target of 55% reduction of emissions by 2030.

Similar to the strong integration of tourism in the Urban Agenda, the plan Alicia also refers to tourism in various sections of the report either directly and indirectly. Here again, different stakeholder groups were included in the development of the plan to ensure the representation of all stakeholders needs and challenges, including the tourism sector.

In alignment with Spain's National Plan for Adaptation to Climate Change (PNACC), the main themes and sectors defined in the Andalusian Plan for Adaptation to Climate Change as well as other relevant strategic documents that highlight tourism's important role in the fight against climate change (including the national tourism strategy), tourism was one of the main sectors analysed for Málaga's climate plan and included multi-stakeholder workshops with relevant tourism actors in the destination.

As a result, one of the strategic areas of the plan focuses directly on tourism (chapter 22):

22.1. Projections of water demand and promote through ordinances the installation of water saving and accumulation systems in tourist facilities

22.2. Conservation and protection of tourism infrastructures due to floods and rainfall

22.3. Development of relevant climate-related indicators for the tourism sector

For each of these three identified areas of intervention, the report proposes detailed actions, indicators for success, required investments, timelines, and highlights which stakeholders are most responsible for these areas. In addition to these direct references to tourism in the Plan Alicia, the sector is also referred to indirectly in various other chapters of the document.

Regarding point 22.3., two main actions are proposed in the document: a) an initial detailed vulnerability assessment, i.e., tourism's exposure to climate-related threats such as heat waves, rising sea levels, river floods etc., and b) the development of climate-related indicators. As shown in the proposed timeline below, these indicators will be developed throughout the next two years, which presents an enormous opportunity for the STO in terms of involvement and cooperation regarding the indicator development, data gathering and analysis. Because of this, OMAU has been identified as one of the most important research partners for the observatory and conversations have started about the potential future collaboration.

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[16] https://www.omau-malaga.com/agendaurbana/pagina.asp?cod=65

CRONOGRAMA DE IMPLANTACIÓN: 1ª FASE (2020-2030)

INICIO	HITO 1	HITO 2	SEGUIMIENTO
Fecha de aprobación	Valoración riesgo turístico	Identificación indicadores	Seguimiento
2020	2023	2024	2030

IMPLEMENTACIÓN PREVISTA	✓	✓	
INVERSIÓN ACUMULADA (k€)	15	15	30

3.4. Málaga's Tourism Development Plan 2021-2024

In the beginning of 2021, Málaga published its new tourism strategy[17], which serves as roadmap for the next four years with the goal to strengthen the City's image as "*Place to visit, live and invest*". The plan includes thirteen action areas to consolidate the City as a sustainable, inclusive and intelligent destination. Similar to the approach for the Plan Alicia, various tourism stakeholder roundtables were held – including with citizens – for the development of the strategy. These included roundtables about the following topics: MICE; Cruises; Education & Languages; Food & Wine; Cultural & City Break; Nature, golf, Sun and Beach; Audiovisual & Cinematography; Luxury and Shopping; Health & Wellbeing.

Resulting elements for the new vision of Málaga were defined through the conversations with stakeholders: (1) Málaga will be diverse - it will be promoted throughout the year and will show its wide offer for each segment and each market. (2) Málaga will have a strong online presence, will make its products accessible to all audiences and will position itself as one of the first destinations in internet searches. (3) Málaga will have a sustainable tourism management model. (4) Málaga will generate experiences for both tourists and residents

While also considering the results and recommendations from the process of becoming a smart destination, the City defined a total of thirteen action areas ("retos estratégicos") through the conversations with the stakeholders and the research undertaken for the development of the new tourism plan. These experiences also formed the foundation for this preliminary report.

The thirteen strategic action areas for the destination that are outlined in the strategy, and on which all proposed activities are based on, include:

1. Implement a new governance model
2. Advance the digitalization and knowledge-building
3. Facilitate coexistence of different stakeholder groups
4. Optimize and consolidate mature tourism segments
5. Develop more high-value segments
6. Create new attractions for new markets

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[17] http://s3.malagaturismo.com/files/933/933/plan-estrategico-turismo-2021-2024-def.pdf

7. Create a more secure environment
8. Strengthen brand and online-sales
9. Strengthen innovation within and among entities
10. Create memorable experiences along entire value chain
11. Improve accessibility within destination
12. Optimize air connectivity
13. Develop new spaces and resources for tourism

When looking into the strategy, the following proposed activities are of specific relevance for the STO as the observatory will be able to support generating relevant needed data and support monitoring the implementation of the defined action points:

- Define governance structure and increase collaboration (1.1.)
- Identify new information sources (2.1.)
- Strengthen public participation in tourism planning processes in a continuous manner (3.2.)
- Improve the perception of citizens regarding tourism/evaluate satisfaction (3.3.)
- Evaluate and improve satisfaction of sector agents (3.4.)
- Implement more strategic plan to develop cruise ship tourism (4.2.)
- Consolidate health security of tourism actors (certifications, stamps etc.) (7.1.)
- Develop and implement an accessibility plan for tourism (11.1.)

Overview of the new tourism development vision defined for the destination:

Málaga strives to be destination appreciated by its visitors, citizens, and agents of the sector, for its ability to generate memorable memories, citizen coexistence and sustainable development.

The values of the City that will guide its tourism development in the future are:

INNOVATION; INTELLIGENCE; SUSTAINABILITY; DIVERSITY; INCLUSIVENESS; ACCESSIBILITY AND SECURITY

The below tables are an extract from the new strategic plan and offer an overview of the thirteen action areas, including the proposed strategic projects to be implemented in each of these areas. The ones marked in yellow are those projects of strong links / high relevance for the work of the new observatory. For a link of the projects to the sustainable development goals (SDGs), please see the official document.

Reto Estratégico	Proyecto Clave	2021				2022				2023				2024			
		T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4
1. Desplegar un Modelo de Gestión en la Entidad Gestora	1.1. Definir y desplegar un Modelo de Gobernanza	●	●														
	1.2. Facilitar la colaboración interdepartamental		●														
	1.3. Actualizar los instrumentos normativos y ordenanzas		●	●	●												
	1.4. Mejorar la coordinación de Eventos del Ayuntamiento	●	●			●	●			●	●			●	●		
2. Avanzar en la digitalización y el conocimiento	2.1. Elaborar un mapa con nuevas fuentes y necesidades de información en turismo		●														
	2.2. Desplegar un CRM					●	●	●									
	2.3. Mejorar la información aportada por el Observatorio de Turismo			●													
	2.4. Establecer un mecanismo Vigilancia Tecnológica	●	●				●				●				●		
	2.5. Crear el INSTO de Málaga					●	●								●		
	2.6. Implantantar un sistema de big data turístico					●	●										
	2.7. Mejorar la información aportada por el SID	●															
3. Facilitar la permeabilidad y convivencia del destino	3.1. Definir y desplegar un plan de comunicación interna y externa	●	●			●				●				●			
	3.2. Impulsar la participación ciudadana en estrategia turística		●				●				●				●		
	3.3. Mejorar la percepción de al ciudadanía sobre el turismo					●	●										
	3.4. Evaluar y mejorar la satisfacción de los agentes del sector		●				●				●				●		
	3.5. Progresar los estudios de percepción de los visitantes		●				●				●				●		

Reto Estratégico	Proyecto Clave	2021				2022				2023				2024			
		T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4
4. Perfeccionar y consolidar los segmentos maduros	4.1. Desplegar un plan de perfeccionamiento de Cultural y City Break	●	●			●		●		●		●		●		●	
	4.2. Desplegar un plan de perfeccionamiento de Cruceros	●	●			●		●		●		●		●		●	
	4.3. Desplegar un plan de perfeccionamiento de Educativo-Idiomático	●	●			●		●		●		●		●		●	
	4.4. Desplegar un plan de perfeccionamiento de MICE	●	●			●		●		●		●		●		●	
5. Desarrollar segmentos asociados a los Visitante de alto valor añadido	5.1. Desplegar un plan de desarrollo del segmento Enogastronomía	●	●			●		●		●		●		●		●	
	5.2. Desplegar un plan de desarrollo del segmento Naturaleza, golf y playa	●	●			●		●		●		●		●		●	
	Desplegar un plan de desarrollo del segmento Premium, Golf y Shopping	●	●			●		●		●		●		●		●	
	5.4. Desplegar un plan de desarrollo del segmento salud y bienestar	●	●			●		●		●		●		●		●	
	5.5. Desplegar un plan de desarrollo del segmento Audiovisual y Cinematográfico	●	●			●		●		●		●		●		●	
6. Crear nuevos atractivos para nuevos mercados	6.1. Desplegar un plan de atracción para residentes	●	●														
	6.2. Desplegar un plan de atracción para visitantes y residentes de Costa del Sol	●	●														
	6.3. Desplegar un plan de atracción para visitantes de orígenes nacionales de valor	●	●														
	6.4. Posicionar a Málaga en las acciones de promoción internacional del turismo español	●				●				●				●			
	6.5. Desplegar un plan de atracción para visitantes internacionales	●	●														

Reto Estratégico	Proyecto Clave	2021				2022				2023				2024			
		T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4
7 . Crear un entorno aún más seguro	7.1. Consolidar las medidas de seguridad sanitaria	●															
	7.2. Desplegar un plan de medidas de seguridad del visitante									●	●						
8. Progresar la notoriedad de la marca y la venta on line	8.1. Desarrollar un Plan de Marketing digital y off line			●	●				●				●				●
	8.2. Mejorar el Portal de Turismo			●													
	8.3. Desplegar la venta on line del destino		●	●													
9. Desarrollar la Innovación en el destino y entre sus agentes	9.1. Impulsar la innovación dentro de los agentes del sector turístico	●	●	●		●				●				●			
10. Generar experiencias memorables del visitante en toda la cadena de valor	10.1. Desarrollar áreas de mejora y actualizaciones de contenidos en apps, dispositivos y microsites		●	●													
	10.2. Sensorizar la experiencia del visitante					●	●	●									
	10.3. Impulsar la experiencia de clientes dentro de la gestión de los agentes del sector turístico	●	●	●		●				●				●			
	10.5. Mejorar la red de oficinas de información turística					●	●	●									
11. Aumentar la accesibilidad del destino	11.1. Desplegar un Plan de Turismo Accesible					●	●	●		●	●			●			
	11.2. Desplegar acciones de información y formación sobre accesibilidad					●	●	●	●								
	11.3. Mejorar la accesibilidad de los canales digitales					●	●										
12. Potenciar la conectividad aérea	12.1. Reforzar alianzas para la promoción del aeropuerto	●	●	●	●				●				●				●
	12.2. Poner en valor el aeropuerto		●	●	●				●				●				●
13. Desarrollar nuevos espacios y recursos para la actividad turística	13.1. Desarrollar un plan de acción para el aprovechamiento de recursos turísticos	●	●			●	●			●	●			●	●		

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4. Main Sustainability Issues & Data Needs

Based on the previously mentioned trends and developments, the recent development of the new strategy and ongoing sustainability efforts in the City, the following tourism-related issues have been identified as high-priority areas where more evidence is needed. They are relevant to the work of the STO and will be linked to the required issue areas of the INSTO:

- **Accessibility**

Regarding the efforts to improve accessibility within the City, Málaga has already implemented several local initiatives that were initiated in the previous Accessibility Plan of the Municipality of 2010. To date, nearly all public buses in Málaga have a dual-ramp for better access and each one has voice and double-screen systems; visitors with visual impairments can download the EMT App where they can get tickets, travel information and special needs assistance, and can request a stop by saying their destination out loud; beaches are fully accessible, offering reserved parking, access ramps, concrete walkways, amphibious chairs, accessible changing rooms, seating areas and support assistants on hand to provide help with swimming in the sea.

Following the launch of the Strategic Plan for Accessible Tourism of Tourism Costa del Sol[18] in May 2021, as well as the specifically defined goal in the City's new tourism strategy to establish an accessible tourism plan for the City, Málaga has recently appointed the consulting company Ilunion to prepare a detailed proposal. The tourism department is part of the team that collaborates in the initiative and has held numerous meetings with the City Council's accessibility department and Ilunion throughout the past months. Required information for this project is being gathered through surveys and interviews for the development of relevant action points. These insights will be a valuable baseline for the STO. Depending upon the implementation of activities and the continuation of efforts over the mid-, and long-term, there is an opportunity for the STO to support and contribute to this initiative through the gathering and/or dissemination of relevant data around accessibility and monitoring its implementation.

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[18] https://www.costadelsolmalaga.org/base/descargas/363652/plan-estrategico-turismo-accesible-costa-del-sol-occidental

- **Governance**

Another main conclusion of the new tourism strategy of Málaga is the importance to advance in the area of destination governance, especially in the field of monitoring objectives and indicators. The STO will play an important part in governance, which is why the establishment of the observatory is specifically mentioned in the list of action points in the strategy. Although there is already much information available in the City, the STO presents the opportunity to bring together and extend information to all areas relevant for sustainable tourism (economic, social and environmental). This includes insights that are highly relevant for the City such as the continuous monitoring of the development of tourism apartments within the City, as well as areas and moments of overcrowding in specific locations of interest. Being able to generate this information on a regular basis and make it easily accessible for all stakeholders will allow the City to support both public and private sector in their decision-making processes.

- **Local Participation & Satisfaction**

Closely linked to the area of governance is the goal of Málaga to continue and extend collaborative processes within the destination and increase the participation of the local community and businesses in the strategic planning of tourism. For the writing of the new tourism strategy, as well as the Plan Alicia, participatory approaches have been followed, implementing various stakeholder workshops and feedback mechanisms throughout the entire development process. In the spirit of collective responsibility, this approach is also foreseen for the establishment and maintenance of the STO. As one of the main objectives, which is also a specific action point within the tourism strategy, a survey is planned to identify the satisfaction of residents regarding tourism in their City. This planning phase for this effort is currently under development. The STO will play a key role in the definition of questions, the approach, the continuity and resulting indicators. It is expected that a tangible action plan for the implementation of this research will be ready in 2022.

- **Tourist Flows & Densities**

Compared to other important tourism destinations in Spain, Málaga is having one of the highest tourist saturation indexes in the last years. In addition, the number of tourist apartments in the City has grown exponentially in the City over the last years, which has resulted not only in more and more residents feeling dissatisfied with tourism and incidents of visible tourism-phobia, but also to a decline in residents living in the city Center as well as increasing housing prices. This phenomenon, which can also be seen in many other destinations around the world, is something that will be of high importance for the STO to monitor on a regular manner and inform tourism stakeholders about the latest developments and expected future trends. Important baseline work has already been carried out since 2016 through the Interreg project 'Alter-Eco[19]', where a variety of data points have been collected over the years, including the density of visitors in different neighbourhoods and the existing capacities, the growth and distribution of tourist apartments per neighbourhood and the evolution of habitants in different areas in the City, among others. The STO will be able to build on this important work.

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[19] https://www.omau-malaga.com/2/com1_md3_cd-1627/alter-sostenibilidad-turistica

- **Climate Action**

With about 195 days of sunshine per year, Málaga is a destination with a very favourable climate for tourism all year round. While days of good air quality increased between 2015 to 2019 from 90% to 97%, changing temperatures have been recorded as well: the average annual temperature increased from around 17,7 ºC in 2013 to 18,1 ºC in 2018, with average temperatures in the summertime changing from 24,8 ºC to 25,2 ºC, respectively. In addition, average annual precipitation increased from 303 mm in 2013 to 338,3mm in 2018[20]. Finally, due to increased heat waves and the worsening of drought that have equally increased over the years and resulted in more vulnerable, degraded forest masses, the risk for wildfires have also increased around the destination, presenting one of the biggest challenges for tourism. The impactful wildfire of 2021 in the Sierra Bermeja in the province of Málaga was a reminder of this changing reality, which is why monitoring climate-related impacts will be key for the STO. Hence, as the City now has a climate action plan with specific emission reduction targets and where tourism is integrated, there is an enormous opportunity to strengthen collaboration in this area within the different City Council departments and public entities responsible for its implementation. The STO will be able to support these efforts by engaging in the process of developing the vulnerability analysis which is planned for 2022 and coordinating closely with the OMAU in regards to the development of climate-risk related indicators. This process is also expected to kick-off in 2022 and a first meeting is planned for the end of 2021. While roles and responsibilities still need to be defined and baseline information collected, the basis for this collaborative process has been formed, which presents a highly favourable momentum for the work of the STO.

- **Impacts of cruise ships**

Although slightly irregular, the arrival of passengers through the Málaga Port has increased significantly during the last ten years. Before 2000, this activity was very limited as docks 1 and 2 were not yet remodelled and the main source of income for the port authority was the transport of oil which has since been diverted to Cartagena. Between 2008 and 2012 there was an 84.6% growth in the number of cruise ship passengers, increasing from 352,993 in the year 2008 to 651,517 in 2012. While this growth decreased significantly as a result of the economic recession, numbers once again reached more than half a million passengers in 2017 and 2018. Before the COVID-19 pandemic, in 2019, a total of 288 cruise ships arrived in the City, bringing around 476,085 passengers to Málaga. Due to this development, the Málaga Port has become the fifth cruise ship port in Spain and the second in the Iberian Peninsula. In order to further strengthen the sector, the current tourism strategy outlines the need for a cruise ship improvement plan that will attract the premium cruise ship segment, which is expected to be developed as a result of this new strategy. Data was identified as a crucial element during the roundtables held with the cruise ship sector while developing the strategy. This presents another important opportunity as the STO will be able to support these efforts through regular monitoring of key information related to cruise ship tourism in the City. This is especially important as the strategy also highlights the goal of positioning Málaga as a "green port", which is not overcrowded and in perfect harmony with the destination.

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[20] Information provided by Promálaga/CIEDES

Besides the above-mentioned key monitoring areas for Málaga, other topics for monitoring that derived from the current tourism strategy and will be integrated over time in the work of the STO.

These topics include sustainability, education and training in tourism; responsible production; sustainable events and health-related information, among others. For some, this will require thorough review and a completely new research plan while for others, such as the health-related information, already available information can be integrated into the insights generated by the STO.

5. Objectives of the Sustainable Tourism Observatory (STO) Málaga

5.1. Vision of the STO Málaga

The observatory will serve all tourism stakeholders responsible for the creation of tourism experiences in Málaga and empowers them to tackle the collective challenges of today and tomorrow in the most well-informed and responsible manner.

5.2. Mission of the STO Málaga

Through multisector and destination-wide cooperation, regular and holistic monitoring, evaluation and reporting of tourism impacts, the observatory's mission is to unlock the potential of tourism as catalyst for positive change by bringing all data insights together that are relevant for sustainable and resilient destinations and provide all stakeholders the opportunity to co-create a tourism model that can balance the needs of people, planet, and prosperity.

The Observatory will monitor, evaluate, and communicate on Málaga's developments and the impacts they have on the destination, its natural environment, and its inhabitants. It will strive to ensure reliable, holistic information for well informed decision making, point out risks and opportunities, develop ideas, as well as provide recommendations and best practices towards continuous improvement of sustainable tourism and smart destination management. The enabling of awareness, learning and evidence-based decision making for different target groups of Málaga's society will be its very core.

5.3. Objectives of the STO Málaga

The establishment of the observatory presents the next logical step in Málaga's efforts to create and maintain a sustainable destination that safeguards a healthy environment for host and guests.

This will be achieved by increasing and improving data availability through regular and more holistic data collection that goes beyond the traditionally primarily economic and market-related information. In addition, by making the data accessible for all tourism stakeholders in the destination and engage them in the strategic planning of the monitoring area, an inclusive monitoring approach will be ensured that fosters collaboration, trust and a general awareness and sense of collective responsibility in the destination. In addition, by generating insights, the observatory will be able to identify risks and opportunities, help develop ideas, showcase best practices and provide recommendations that strengthen sustainable and smart destination management.

In summary, the main objective of the observatory is to turn Málaga into a Center for knowledge and information transfer in the tourism and sustainable field. Detailed objectives which are necessary to achieve this vision are:

- Improve the quality of existing and potential data
- Create continuous and reliable insights about tourism trends and dynamics
- Improve the accessibility of the available data for all stakeholders
- Increase knowledge and understanding about tourism development
- Provide tangible evidence about the value of tourism and its impacts
- Strengthen data-driven decision-making
- Facilitate the prioritization of development decisions and actions
- Decrease information gaps and foster data standards
- Facilitate benchmarking of own progress and with other destinations
- Decrease silos and increase cooperation within and across organizations
- Increase productivity and competitiveness of organizations
- Increase commitments of all tourism stakeholders to data sharing
- Involve all stakeholders in strategic planning through details on indicators and priorities
- Promote collective responsibility in the destination

By improving the data landscape for tourism stakeholders in Málaga and fostering more well-informed decision making, the initiative seeks to support the regions in moving from a primarily marketing-driven development approach towards a more management-oriented development approach that follows future-proof measures of success where the net benefit for the local community plays a key role, creating thus a cultural change related to the management of tourism within the destination.

5.4. Beneficiaries of the STO Málaga:

The Sustainable Tourism Observatory of Málaga will serve a variety of different stakeholders. By generating more holistic insights beyond the traditional economic data and bringing them together onto one data platform (hence facilitating access to it), the STO seeks to support tourism stakeholders in the destination with their operations and management, enabling them to make more responsible and well-informed decisions.

These stakeholders include:

- Tourism businesses & industry operators (supply side)

- Educational institutions
- Local, regional and provincial tourism organizations
- Ministries, other government departments & associations
- Transport, infrastructure & utilities operators
- Communities & community associations
- Investors & developers
- Industry associations
- Other tourism-related organizations

6. Governance of the Observatory

6.1. Proposed Structure of the Observatory

The observatory will be lead and hosted by the Tourism, City Promotion and Investments department of the Málaga City Council. The unit will be supported by other departments within the City Council that have valuable information for the Observatory. In addition, the Observatory will be able to count on a small group of selected individuals that have been invited to form the expert committee, which will be available to provide guidance and support for the Observatory in case specific issues arise that require expert knowledge.

Important to note is the fact that the Tourism Department of the Málaga City Council already established the so-called Tourist Observatory[21] of the City of Malaga in March 2008. However, to this point, this has simply been a website where all research outcomes of the department have been published, without having a specific structure like the one envisaged for the STO behind it. At this moment, the City is working on redesigning the entire web portal of the City, including the observatory page, which will allow to utilize the new page as official page of the new STO, hence integrating the already existing information into the new website for the STO.

Besides the existing information structures within the tourism department of the City, additional data will be gathered through partnership with important research institutions such as the Urban Environment Observatory of the City (OMAU), the University of Málaga (UMA) and the Center for Strategic Research and Economic and Social
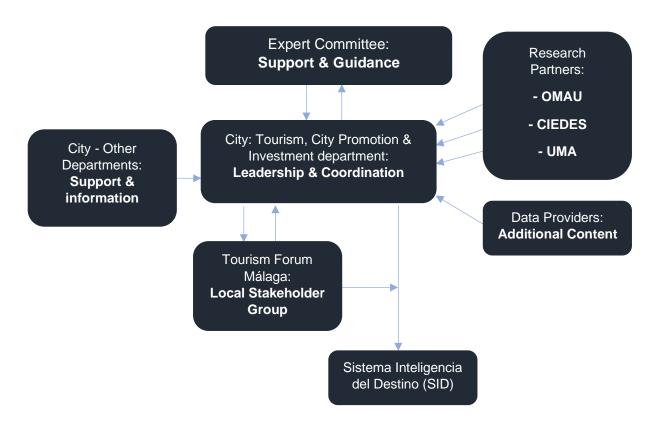
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[21] http://www.malagaturismo.com/es/paginas/observatorio-turistico/410

Development of Málaga (CIEDES). With time, it is planned to extend research partners if necessary and integrate more and more information from third party data providers.

Finally, all information and planned activities will be revised and discussed jointly together with members of the local working group. This group is an already existing entity called Tourism Forum Málaga, which includes more than 20 local organizations and associations and meets every two months to discuss latest tourism developments in the City. To avoid duplication and increased workloads for group members, all relevant information related to the Observatory will be discussed with them on a regular basis in their already planned meetings. Depending on the topics, additional organizations can be invited to these meetings, which make them a perfect forum for the Observatory.

Once the activities have been reviewed and discussed with the local working group, all data is planned to be imported onto the existing Tourism Intelligence System of Málaga (SID) and shared with all relevant tourism stakeholders in the destination.

The proposed governance structure of the Sustainable Tourism Observatory (STO):

6.2. Relevant Stakeholders for the Observatory

1) Observatory Host/Lead:

>The City: Tourism, City Promotion & Investment department

2) Expert Committee (The City):

- Representative: Mayor's office
- Head of department: Innovation and urban digitalization
- Head of department: Environmental sustainability

- Head of department: Territory management, mobility and security

3) Other supporting departments within the City:

- Department: Communication
- Department: Social rights, equality, accessibility, inclusive policies and housing
- Department: Operational services, interior regime, beaches, and events
- And others

4) Research Partners:

- Urban Environment Observatory of the City (OMAU)
- University of Málaga (UMA)
- Centre for Strategic Research and Economic and Social Development of Málaga (CIEDES).

5) Local Stakeholder Working Group (Tourism Forum Málaga):

- Delegate Councillor for Tourism, City Promotion & Investment of Málaga
- Director General of Tourism, City Promotion & Investment of Málaga
- Technical Director Málaga Convention Bureau
- Director of Fairs and Congresses (FYCMA)
- Director General of the Department of Sports of Málaga
- Director General of Culture and Sports of Málaga
- Executive Vice President / Secretary General of the Málaga Business Confederation (CEM)
- Vice President of the Hotel Association of Costa del Sol (AEHCOS) - Málaga y Torremolinos
- President of the Málaga Chamber of Commerce
- Representative of the Tourism Commission of the Málaga Chamber of Commerce
- President of the Andalusian Rental Vehicles Entrepreneurs Association (AESVA)
- President of the Málaga Hoteliers Association (MAHOS)
- President of the Association of Spanish Schools for Foreigners of Málaga (NACEM)
- Representative of the Málaga Port
- President of the Association of Official Tour Guides of Málaga (APIT)
- President & Vice President of the Business Association of Travel Agencies of Andalusia a (AEDAV)
- Director of the Málaga Airport
- Dean of the Faculty of Tourism University of Málaga (UMA)
- Director of the Tourism and Planning Division, Costa del Sol
- President of the Historic Center of Málaga/ Neighbour Association (ACHMA)

Regarding the stakeholders that are relevant for the STO, the recent development of the new Tourism Strategy 2021-24 has provided a platform to discuss and inform stakeholders of the vision to create a more structured approach to data monitoring in the destination, with the result that the need for better monitoring; the plan to establish a Big Data platform, and the plan to establish an STO for the City have been included as some of the main priority activities in the strategy. Although not specifically organized to discuss the establishment of an Observatory, the participatory approach that was taken for the development of the strategy was therefore also a first engagement process for the STO.

In all stakeholder consultants, the need for better, more frequent, and more reliable and holistic information was coming out clearly. Although sometimes still heavily linked to marketing efforts and goals, it was observed that most stakeholders understood and favoured the establishment of a more structured monitoring system in the destination and a more transparent information exchange. From those conversations, the additional issue areas to monitor were identified. In addition, during the preparation process of the preliminary study in the second half of 2021, an update was given to relevant tourism stakeholders by the tourism department, indicating the upcoming joining of the INSTO network and the plan to present and discuss the content of the preliminary study in more detail at the first meeting of the Tourism Forum Málaga in 2022. Conversations have also been held with the envisaged partners about roles and responsibilities.

6.3. Funding and Operations of the Observatory

As the Observatory will be an integral part of the Tourism, City Promotion and Investments department of the Málaga City Council, the initial funding to establish the entity and to guarantee the longevity of the structure and basic monitoring activities of the Observatory will also be provided by the same department (hence already existing, internal funds). Additional funding to extend monitoring activities beyond the basic, mandatory insights in the future, including ad-hoc research projects and potential data exploratory activities, are planned to be financed through additional, external streams deriving from public calls, as well as collaborations with other organizations (e.g. universities; research centres etc.). To be able to attract more funds for the project both internally and externally, it will be key to show its membership in the INSTO network as well as its value to the different stakeholders in the destination and beyond, which will facilitate to ensure long-term support and funding.

In terms of the day-to-day operations, initial activities of the Observatory will predominantly be realized through three already existing staff members within the Tourism, City Promotion and Investments department of the Málaga City Council: one that will be in charge of the external communication and promotion (incl. political level); one for the administration, and one for the operations and the technical side of the Observatory. In addition, the already existing partnerships will play a key role in supporting the efforts of the Observatory in the beginning. As the efforts in the initial year will focus especially on establishing the most effective structures; bringing order into the existing data insights; the integration into SID and starting the regular stakeholder engagement processes, it is essential that these activities are led by already existing, knowledgeable, and well-connected staff members. With further extensions of monitoring activities over time and additional research activities, further collaboration with external partners (e.g. consultants, other City departments; the universities etc.) will be considered.

7. Roadmap: Planned Development Phases

7.1. Short Term Activities (2022)

Based on the before-mentioned objectives of the STO, the following activities of the observatory have been defined and are planned in the short, medium, and long-term:

1 **January**	• Finalizing the identification & review of existing data and information sources relevant for the STO. • Identification of data gaps and thus data needs. • Submission of the application to become member of the UNWTO International Network of Sustainable Tourism Observatories (INSTO).
2 **February - April**	• Official joining of the INSTO network. • First meeting of the local working group to introduce the initiative; give an overview of the identified issue areas and related indicators and share the timeline & activities planned. • Initial conversations with data sources/data providers and exploration of potential workflows and information exchange (focus first on internal, already available information). • Initial conversations with potential research partners and agreement on collaboration. • Initial presentation & information sharing about the initiative with relevant departments within the City.

3 **May - July**	- Review and structuring of first priority information, including the definition of formats, visuals and preparation and analysis processes. - Decision on additional thematic monitoring areas, including planned indicators over time. - Linking of STO activities with the current tourism strategy and objectives of other relevant city development plans.
4 **August - October**	- Development of detailed data gathering strategy and work plan including relevant phases such as data gathering, review, cleaning, preparation etc. - Integration of priority indicators into SID that are relevant for STO but not yet included in the system - Mid-year stakeholder working group meeting to discuss progress - Special focus on developing research plans and gathering first information in the areas: accessibility & residents' satisfaction
5 **November / December**	- Collecting, reviewing & visualizing all available data to date & share with stakeholders for their review - Preparation first annual progress report for the INSTO network - Reviewing & finetuning research activities for the following year - End-of-year stakeholder working group meeting to present the annual report

7.2. Mid-Term Activities (2023/2024)

2. Mid-term objectives (2023/2024)			
Revision and fine tuning of initial structure, indicators, activities and work plan of the STO		X	
Evaluation and optimization of initial data gathering processes and cleaning and preparation efforts		X	
Detailed discussions with research partners about joint data projects – kick-off of specific actions		X	
First extension of existing indicators of the STO and their integration into SID		X	
Review and adding of other, external data sources to the mix of already existing indicators		X	

Review of SID platform & start of feedback loops of usability		**X**	
Review of focus areas and a potential extension of such (and/or deepening of insights in these areas)		**X**	
Continuous regular meetings with the Local Stakeholder Working Group		**X**	
Identification and communication of best practice examples, potentials and opportunities in the destination		**X**	
General awareness raising activities in the destination around sustainability & resilience of the destination		**X**	
Preparation of the second annual report for INSTO		**X**	
Networking and exchanging knowledge and experiences with other tourism destinations worldwide, compare practices, discuss problems and learn from each other		**X**	

7.3. Long-Term Activities (4 years and beyond)

2. Long-term objectives (Year 4 and beyond)			
Continuous review and fine tuning and improving of data insights from both internal and external sources			**X**
Continuous extension of indicators per issue area as well as extension of themes to be monitored:			**X**
Continuous translation of the evidence generated for different stakeholders in the destination			**X**
Continuous improvement of SID in terms of content and usability			**X**
Continuous strengthening and extension of partnerships for data research and analysis			**X**
Continuous communication and exchange with relevant stakeholders in the destination to foster trust, understanding, engagement, collaboration and support for the initiative			**X**
Regular exchange of experiences with other destinations worldwide			**X**
Preparation and provision of the annual reports to the INSTO network and active participation in the network's meetings			**X**

8. Themes and main indicators of the STO Málaga

8.1. Overview of mandatory and voluntary issue areas

This preliminary study report is the first step in the development of the STO of Málaga as a member of the global UNWTO INSTO Network. As a commitment to the network and to drive evidence-based decision making in the main issue areas for the City, the observatory will continue the City's efforts to improve and maintain its extensive inventory of its supply side[22]. In addition to this, the STO plans to monitor information in the following mandatory and voluntary issue areas:

Mandatory issue areas:

1. Tourism Seasonality
2. Employment
3. Economic benefits at destination level
4. Governance
5. Local Satisfaction
6. Energy Management
7. Water Management
8. Waste Water Management
9. Solid Waste Management
10. Accessibility
11. Climate Action

Additional issue areas important for Málaga:

12. Tourism Supply (integrated into the seasonality issue area)
13. Mobility (incl. cruise ships)
14. Sustainable Production
15. Sustainable Events
16. Health-Related Information
17. Sustainability Education and Training

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[22] http://www.malagaturismo.com/mapa-turistico/mapa.html

8.2. Detailed Indicators by Issue Area

The following table gives an overview of the identified indicators that are envisioned to be measured from year one of the establishment of the STO, as well as those indicators, that are already defined but will require review to generate the desired insights. Besides these indicators, more indicators will be added over time through a regular review of available and potential data and the prioritization of such. At this moment, there is already data available for all mandatory issue areas, as well as information on the tourism supply side and mobility. These two areas are already added to the mandatory issue areas. The regular update and collection of information regarding the existing tourism supply is seen as important foundation for the monitoring of all other issue areas as it gives an overview of the tourism inventory in Málaga and its development over time. It is expected that further important thematic areas such as sustainable production, sustainable events and health-related information will be added over time, but they will require a thorough review and planning to generate relevant information in the future. Once the first indicators as outlines below are being collected, focus will be put on their optimization and extension as well as the adding of new themes.

Indicators	Year 1*	Year 2 onward**	Sources / Partner Organizations
Tourism Supply & Seasonality			
Total visitors (overnights / excursionists and by origin: domestic vs. international)	X		INE (Spanish Statistical Office)
Total visitors and overnight stays by type of accommodation (& annual variation)	X		INE, RTA (Andalusian Tourism Registry/ Junta de Andalusia)
Average length of stay in hotels and by origin	X		INE
Hotel Occupancy (& annual variation)	X		INE, RTA
Total number of accommodations by type and category of establishment (& annual variation)	X		RTA, AEHCOS
Total nr. of tourism businesses (& nr. of new businesses per year)	X		RTA, Promálaga
Longevity of tourism establishments (by sub-sector)	X		RTA, Promálaga
Businesses open all year (by sub-sector)		X	RTA, City of Málaga, Promálaga
Special events held during different seasons (nr. of events & participants)		X	Más Málaga

Indicators that are already available and/or can be collected and reported on from Year 1 (2022).

** Already defined indicators where the aim is to include them from year 2/year3 but that require more in-depth research.

Indicators	Year 1*	Year 2 onward**	Sources / Partner Organizations
Employment & Economic Benefits			
Total employment	X		City of Málaga
Total tourism employment (by sub-sector & annual variation)	X		INE, City of Málaga
Ratio of tourism employment to total employment	X		INE, City of Málaga
Total unemployment	X		INE, City of Málaga
Ratio of part time/full time employment in tourism	X		City of Málaga/Tourism Dept.
Ratio men to women employed in tourism	X		City of Málaga/Tourism Dept.
Average tourism wages (by subsector)	X		City of Málaga/Tourism Dept.
Value of tourism (multiplier effect)	X		SAETA (Andalusian Tourism Analysis and Statistics System); City of Málaga
Average daily spend (EUR)	X		City of Málaga/Tourism Dept.
Average travel budget of visitors	X		City of Málaga/Tourism Dept.
Total economic impact (& direct and indirect)	X		City of Málaga/Tourism Dept.
Hotel Profitability – RevPar & ADR (& annual variation)	X		INE
Total tourism receipts / revenues generated by tourism	X		City of Málaga/Tourism Dept.
Contribution of tourism to local GDP (%)	X		City of Málaga/Tourism Dept.
Revenue from business permits, licenses or concessions	X		CIEDES
Revenue from tourism taxes	X		City of Málaga/Tourism Dept.
Total annual expenditures on tourism	X		City of Málaga/Tourism Dept.
Annual expenditures on tourism as % of total tourism revenue	X		City of Málaga/Tourism Dept.

*Indicators that are already available and/or can be collected and reported on from Year 1 (2022).

** Already defined indicators where the aim is to include them from year 2/year3 but that require more in-depth research.

The above-listed indicators for the areas of tourism supply & seasonality, as well as employment and economic benefits present some of the most basic key indicators that have been gathered for the City, helping to understand key economic dynamics in the destination. As these are well-established reference points for all stakeholders in the destination, they will continue to function as the foundation for the analysis of tourism trends – together with market-related insights that is also available but not as relevant for the work of the Observatory. For all issue areas, and as stated in Málaga's current tourism plan, other potential information sources will be considered and examined if available, to improve the overall quality of the insights gathered.

Indicators	Year 1*	Year 2 onward**	Sources / Partner Organizations
Governance			
Does the organization have employees responsible for sustainability (e.g., sustainability officer, sustainability manager)?	X		City of Málaga/Tourism Dept.
Nr. and percentage of tourism businesses with sustainability certification (by subsector)		X	City of Málaga/Tourism Dept.
Communication of sustainability issues to tourism-related businesses (Media, meetings, direct contact etc.).	X		City of Málaga/Tourism Dept.
Link of local tourism development plan with provincial plan	X		City of Málaga/Tourism Dept.
Nr. of funds available per year for tourism development	X		City of Málaga/Tourism Dept.
Tourism data platform available for stakeholders in the destination	X		City of Málaga/Tourism Dept.
Measurement of identified indicators, with results recorded and publicized at least annually	X		City of Málaga/Tourism Dept.
Existence of a risk reduction, crisis management and emergency response plan for tourism		X	City of Málaga/Tourism Dept.
Overview of existing regulations on property rental and operation for tourism, with evidence of their application and enforcement	X		City of Málaga/Tourism Dept., RTA
% of area subject to control (density, design, etc.).		X	City of Málaga/Urban Dev. Dept.
% of area designated for tourism purposes, for buildings		X	City of Málaga/ Urban Dev. Dept.
Existence of specific criteria for tourism development control in plans, such as maximum numbers of hotels/beds, density standards, design controls, environmental and social, etc.		X	City of Málaga/ Tourism Dept./ Urban Dev. Dept.
Existence of local stakeholder working group for tourism development and monitoring	X		City of Málaga/Tourism Dept., Foro Málaga

Indicators that are already available and/or can be collected and reported on from Year 1 (2022).
*** Already defined indicators where the aim is to include them from year 2/year3 but that require more in-depth research.*

Governance plays an enormously important part in the work of the Observatory as this issue area has been one of the key aspects highlighted in the new tourism strategy for the City. With the goal to adapt and improve the City's tourism management and governance structures, Málaga has committed to follow a more holistic vision for its tourism model with clear organizational structures and processes where responsibilities and actions are defined with stakeholders together, and where action plans and the evaluation of objectives are clearly defined (Project 1.1. of the new tourism strategy).

As previously mentioned, in this context, the City especially highlights the importance of a continuous monitoring of development objectives and indicators; the elaboration of new data sources; the implementation of a Big Data system for tourism; the active engagement and participation of the citizens in decision-making processes; increased collaboration among stakeholders, as well as the establishment of the Observatory, among others. With the above-listed indicators, the Observatory will contribute to the defined ambitions by the City by creating an accountability mechanism to monitor the implementation of the defined goals and activities.

Indicators	Year 1*	Year 2 onward**	Sources / Partner Organizations
Local Satisfaction			
Total population (by neighbourhood; demographics and evolution over time)	X		City of Málaga/ Tourism Dept.
Land and housing prices (and evolution over time)		X	City of Málaga/ Tourism Dept.
Information about the regular monitoring of local satisfaction	X		City of Málaga/ Tourism Dept.
Local satisfaction with tourism, based on resident questionnaire and/or tourism perception report		X	City of Málaga/ Tourism Dept.
Existence of regional/local tourism plan as endorsed by stakeholders	X		City of Málaga/ Tourism Dept.
Comprehensive engagement with local residences throughout the development of the regional strategy	X		City of Málaga/ Tourism Dept.
Programme of information, education and training on tourism provided for residents		X	City of Málaga/ Tourism Dept.
Recorded signs of dissatisfaction with tourism by residents	X		City of Málaga/ Tourism Dept.
Level of residents' understanding of tourism and its impacts		X	City of Málaga/ Tourism Dept.

Indicators that are already available and/or can be collected and reported on from Year 1 (2022).
*** Already defined indicators where the aim is to include them from year 2/year3 but that require more in-depth research.*

The above-listed indicators will furthermore offer insights into an issue area that is important to strengthen in the next few years in the City, as outlined in the new tourism strategy. Goal 3.3. and 3.4. of the strategy clearly state the goals to better understand and improve the perceptions of the citizens regarding tourism, including those of the local sector stakeholders. Other goals of the strategy, such as the implementation of an accessibility plan and increased health security for all stakeholders will indirectly play an additional role in achieving this goal of improving local satisfaction as these actions will contribute to improve the quality of life for all citizens. As previously mentioned, the City is currently starting to develop ideas for the regular monitoring of local satisfaction – a process to which the Observatory will be able to contribute not only to this initial conceptual phase but most importantly later, in the implementation of the regular monitoring and the analysis of the outcomes.

Indicators	Year 1*	Year 2 onward**	Sources / Partner Organizations
Energy & Water Management			
Energy consumption targets (defined & published)	X		Municipal Energy Agency
List of existing programmes to increase energy efficiency	X		Municipal Energy Agency
Investment in renewable energy and percent of total provision/consumption		X	Municipal Energy Agency
Support and incentives for energy monitoring and reduction by enterprises		X	Municipal Energy Agency
Per capita consumption of energy from all sources (overall, and by tourist sector - per person day)		X	Municipal Energy Agency
% of energy consumption from renewable resources (at destinations, establishments)		X	Municipal Energy Agency
Number of tourism establishments (e.g. hotels) using renewable sources, generating own energy		X	City of Málaga/ Tourism Dept., Municipal Energy Agency
Volume of total water consumption (and domestic, public bodies and industrial use)	X		EMASA (municipal company responsible for water management)
Water citizens savings – annual consumption in the city (% reduced, recovered or recycled)	X		EMASA
Price of water per litre or cubic meter (domestic vs industrial)	X		EMASA
Is there a water quality monitoring program?	X		EMASA
Monitoring of bathing water, with certification and identification of sites that meet the established standards	X		City of Málaga/ Tourism Dept., EMASA
Nr. of drinking water fountains in the city	X		EMASA

Indicators that are already available and/or can be collected and reported on from Year 1 (2022).

** Already defined indicators where the aim is to include them from year 2/year3 but that require more in-depth research.

Indicators	Year 1*	Year 2 onward**	Sources / Partner Organizations
Waste Water & Solid Waste Management			
Percentage of destination / site wastewater receiving treatment	X		LIMASA (municipal company responsible for waste management)
Percentage of tourist establishments (or accommodation) with (adequate) treatment systems		X	City of Málaga/ Tourism Dept., LIMASA

Indicators	Year 1*	Year 2 onward**	Sources / Partner Organizations
Percentage of destination served by storm water systems (separating wastewater from runoff and surface drainage)	X		LIMASA, EMASA
Total amount of waste collected		X	LIMASA
Waste volume produced by the destination (tonnes) / Person years		X	LIMASA
Waste attributable (by month or season) to tourism		X	City of Málaga/ Tourism Dept., LIMASA
Volume of waste recycled (m3)		X	LIMASA
Number of tourism establishments recycling their own waste (e.g. composting)		X	City of Málaga/ Tourism Dept., LIMASA
% of destination area (especially in urban sites) covered by solid waste collection services		X	City of Málaga/ Tourism Dept., LIMASA

*Indicators that are already available and/or can be collected and reported on from Year 1 (2022).

** Already defined indicators where the aim is to include them from year 2/year3 but that require more in-depth research.

The above-listed indicators, as well as the indicators related to the issue area of climate change, are insights that the City's tourism department has not collected specifically for tourism purposes in the past. Nevertheless, many insights are available thanks to the data collection efforts of organizations within the destination, such as, for example, the Observatory of Urban Environment (OMAU) of the City Council. As mentioned before, in the case of the OMAU and in the context of the Plan Alicia, there are currently ongoing efforts to define new climate-related indicators also for tourism, which presents an enormous opportunity to strengthen partnerships and link the tourism sector closer to these ongoing efforts. This also includes the opportunity of the Observatory to contribute to the City's plan to become carbon neutral by 2050, with an interim target of 55% reduction of emissions by 2030, contributing with more tourism-specific information to these goals. For achieve this active support and contribution, the first year of the Observatory will be important to not only define and finetune desired insights but also to establish regular inter-organizational communication structures between relevant entities to ensure long-lasting and continuous information exchanges and support for these efforts.

Indicators	Year 1*	Year 2 onward**	Sources / Partner Organizations
Accessibility			
Existence of any regulations and standards regarding the accessibility of visitor sites, facilities, and services	X		City of Málaga/Tourism Dept., Ilunion
Existence of an Accessible Tourism Plan / Program / Activities	X		City of Málaga/Tourism Dept.
Information on the extent/proportion of visitor sites and facilities that are accessible	X		City of Málaga/Tourism Dept., Ilunion
Information on accessibility included in communications about the destination as a whole	X		City of Málaga/Tourism Dept., Ilunion
Nr. of tourism businesses with accessibility certification (by		X	City of Málaga/Tourism Dept., Ilunion

Indicators			Sources / Partner Organizations
subsector)			
Nr. of accommodations with some level of accessibility		X	City of Málaga/Tourism Dept., Ilunion
Nr. of public buildings with some level of accessibility		X	City of Málaga/Tourism Dept., Ilunion
Nr. of purchasable accessible products and itineraries (& over time change)		X	City of Málaga/Tourism Dept., Ilunion
# of companies offering specific experiences with trained guides for people with different ranges of access needs		X	City of Málaga/Tourism Dept., Ilunion

Indicators that are already available and/or can be collected and reported on from Year 1 (2022).
** Already defined indicators where the aim is to include them from year 2/year3 but that require more in-depth research.

Accessibility is another key area for the City that has been highlighted in the tourism strategy. Following the efforts of the recently launched Strategic Plan Accessible Tourism for Costa del Sol, Málaga is currently ongoing processes to establish an accessibility plan for tourism in the destination. As mentioned before, the plan is currently being developed in partnership with a selected external entity and the Observatory will be a key component in supporting the implementation of the planned activities, as well as the monitoring and analysis of the future outcomes. For the first year of establishment of the Observatory, more planning and basic inventory activities are expected (e.g. creating an overview of accessible establishments with their specific characteristics) in order to have a strong foundation for future monitoring activities.

Indicators	Year 1*	Year 2 onward**	Sources / Partner Organizations
Climate Action			
The destination emission footprint	X		City of Málaga, OMAU
Climate target(s) of the city	X		City of Málaga, OMAU
Does the city and municipality currently have a climate action plan/strategy/road map?	X		City of Málaga, OMAU
City committed to a certain formal climate action framework?	X		City of Málaga, OMAU
Is your organization disclosing the information about emissions from your tourism operations?	X		City of Málaga, OMAU
Engagement of DMO/local authorities with tourism businesses about climate change and decarbonisation efforts?	X		City of Málaga/Tourism Dept.
Nr. of partner organizations that the tourism authority collectively addresses climate change with		X	City of Málaga/Tourism Dept.
Existing guidance and training to tourism businesses on climate change & potential actions		X	City of Málaga/Tourism Dept.
Nr. of extreme climatic events: floods; fires, droughts and landslides etc.		X	City of Málaga / Urban Planning Dept., OMAU
Degree to which key tourist		X	City of Málaga / Urban Planning

			Dept. & Tourism Dept.
zones are covered by contingency or emergency planning (existence of plan, % area included)			
A climate risk assessment, covering current and future risks – undertaken and made publicly available	X		City of Málaga / Urban Planning Dept., OMAU
Is there support and guidance for accommodations and restaurants in reducing single-used plastic products (SUPPS)?	X		City of Málaga/Tourism Dept.

*Indicators that are already available and/or can be collected and reported on from Year 1 (2022).

** Already defined indicators where the aim is to include them from year 2/year3 but that require more in-depth research.

Indicators	Year 1*	Year 2 onward**	Sources / Partner Organizations
Mobility			
Nr. of arriving passengers at airport (international / domestic)	X		AENA
Total nr. of airport connections (int. / domestic)	X		AENA
Total revenue generated by airport		X	AENA; Málaga Airport (AGP)
Total nr. of airport employees (full time/ part time; and gender)		X	Málaga Airport (AGP)
Total number of arriving cruise ships	X		Port Authority Málaga
Total cruise passengers per month/year (int. / domestic)	X		Port Authority Málaga
Average spending of cruise passengers	X		City of Málaga/Tourism Dept.
Total nr. of train passengers (by top 3 origin)	X		Renfe

*Indicators that are already available and/or can be collected and reported on from Year 1 (2022).

** Already defined indicators where the aim is to include them from year 2/year3 but that require more in-depth research.

In terms of the insights related to mobility, there is already a solid basis of data available indicating the volumes of arriving travellers to the City through different modes of transports. Nevertheless, given that there are efforts to further strengthen the connectivity of the destination through its access points (especially the airport and the port) in the next years, adding additional flight routes to more destinations and welcoming more cruise ships, the Observatory will play a key role in monitoring these developments over time. The focus on the cruise sector has especially been highlighted in the new strategy, with a specific stakeholder consultation being implemented just for this sector alone. In the future, the Observatory will be able to contribute to a responsible management of these developments by helping to extend the currently available data on volumes to more detailed insights, potentially including socio-economic aspects such as employment created through these entry points, gender and wage distributions of employees, as well as potential environmental impacts.

ANNEX

A. MÁLAGA: CONTEXT & BACKGROUND

The city of Málaga is the capital of the Andalusian province that bears his name. Located on the shores of the Mediterranean between the Guadalhorce and Guadalmedina rivers and the Montes de Málaga. Its municipal term has an area of 398.25 km² and a population of 578,460 inhabitants in 2020. It's the second-most populous city in Andalusia and the sixth most populous in Spain.
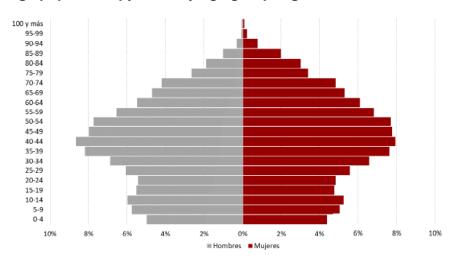

Evolution of the population and comparison of the Autonomous Community with the province and the city. Years 2020, 2018, 2013, 2008, 2003 and 1998

	Andalusia		Málaga Province		Málaga City	
Year	Total	Growth	Total	Growth	Total	
1998	7.326.459		1.240.580		528.079	
2003	7.606.848	3,8%	1.374.890	10,8%	547.105	3,6%
2008	8.202.220	7,8%	1.563.261	13,7%	566.477	3,5%
2013	8.440.300	2,9%	1.652.999	5,7%	568.479	0,4%
2018	8.384.408	-0,7%	1.641.121	-0,7%	571.026	0,4%
2020	8.464.411	0,9%	1.695.920	3,3%	578.460	1,3%

Source: own elaboration based on "Continuous Register Statistics", National Institute of Statistics (INE)
Note: In 2020, Málaga was the city with the highest population growth in Spain in comparison to 2019, with 8.169 new inhabitants. This was especially due to the active promotion as place to live for remote workers since the beginning of the COVID-19 crisis. For details, see: https://elpais.com/sociedad/2021-04-21/Málaga-se-convierte-en-la-provincia-que-mas-poblacion-gano-en-2020-gracias-al-teletrabajo.html
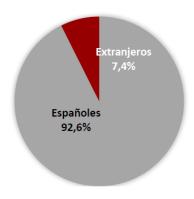
In 2018, Málaga's population pyramid showed characteristics of an ageing population (17.4% of the population is over 65 years old, the national average being 19%), with a higher concentration of the population between 36 and 64 years old (this age group brings together 44.2% of the population of Málaga) and with an equal distribution between men and women. From the total population, about 93% were of spanisch nationality and 7% had a foreign nationality.

Málaga population pyramid by age group & gender, 2018

Source: INE, 2019

Málaga population distribution (foreign/national), 2018

Source: INE, 2019

Although there is no relevant population loss in the municipality in general, recent studies have shown that there is a loss of population in the historic Center of the city, caused by gentrification and tourism, which has been a major challenge for the city. The before-mentioned study developed in the framework of the EU-funded Alter Eco project, which was published in 2020, showed these developments:

Evolution of the resident population in the Center of Málaga (by neighbourhood)

	Años Arrabales	Ciudad antigua	Ensanche Heredia	Total Centro Histórico
1981	-	8.968	-	25.681
1986	-	8.548	-	24.076
1991	-	6.868	-	22.47
1995	-	6.028	-	21.186
1999	-	5.213	-	20.102
2005	-	5.51	-	21.603
2006	-	5.591	-	22.785
2007	15.593	5.456	2.687	23.736
2008	15.958	5.209	2.59	23.757
2009	16.119	5.196	2.566	23.881
2010	16.177	5.157	2.563	23.897
2011	16.35	5.046	2.592	23.988
2012	16.274	5.057	2.591	23.922
2013	15.982	4.944	2.545	23.471
2014	17.05	4.862	2.506	24.427
2015	16.956	4.72	2.456	24.132
2016	16.34	4.634	2.411	23.385
2017	15.724	4.615	2.489	22.828
2018	15.528	4.393	2.505	22.426

Source: Alter-Eco Project; Observatorio de Medio Ambiente Urbano (OMAU) Ayuntamiento de Málaga.

In terms of tourism arrivals, Málaga has experienced a rapid growth of visitor numbers over the past decade. As previously mentioned, 2019 represented the strongest year in terms of arrival numbers for the city, with a total of 2.561.839 overnight visitors (hotels and other types of accommodation establishments), as well as 2.158.704 excursionists. From the visitors staying in hotels, which were in total 1.410.036 visitors, about 62% were international visitors. Between 2018 and 2019, the number of visitors staying in hotels increase 3% and the overnights in hotels increased 5,7%, with overnights from international visitors increasing more than those of domestic visitors (7,3% vs. 2.7%).
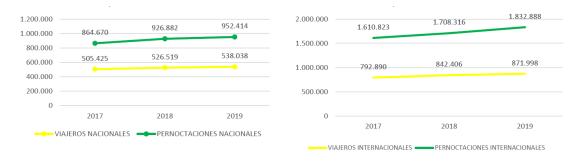
Visitors in different types of accommodations in Málaga, 2019

TIPO DE ALOJAMIENTO	Viajeros
VIAJEROS HOTELEROS	
Hotel 5*	31.755
Hotel 4*	516.279
Hotel 3*	555.973
Hotel 2*	107.302
Hotel 1*	4.097
Hostal/pensión 3*	27.914
Hostal/pensión 2*	71.449
Hostal/pensión 1*	95.266
TOTAL	1.410.036

TIPO DE ALOJAMIENTO	Viajeros
VIAJEROS NO HOTELEROS	
2. AT 2 Llaves	123.224
3. Vivienda con fines turísticos (*)	595.884
4. Vivienda en propiedad	31.767
5. Vivienda de familiares y amigos	301.785
6. Albergue	19.982
7. Residencia	31.767
8. Campamento Turístico	4.099
9. Otros. (Especificar)	43.295
TOTAL	1.151.803

Source: INE, 2019

Evolution of national (left) and international (right) visitors and overnights, 2019

Hotel-based statistics showed that the average length of stay were 1.98 nights in 2019 for visitors in the city and the average hotel occupancy reached 78,6% the same year. The average revenue per available room in hotels (RevPar) was 77,80 EUR and the average daily hotel rate was around 98,10 EUR in 2019. (INE 2019)

In terms of source markets, the City's top five foreign tourist markets include the UK, Germany, France, Italy and the USA. Nevertheless, Spain remains the top source market overall. From this domestic market, it were especially visitors from the same province (Andalusia), followed by visitors from Madrid, Catalonia, Valencia and Castilla de la Mancha that visited the city most. The below is an overview of the domestic and international source markets:

Origin of domestic visitors and overnights, 2019

Viajeros y pernoctaciones según Com. Autónoma		
Com. Autónoma	**Viajeros**	**Pernoctaciones**
Andalucía	249.792	394.631
Madrid. Comunidad de	108.174	205.521
Cataluña	39.748	69.799
Comunitat Valenciana	22.584	40.814
Castilla – La Mancha	14.135	27.913
Canarias	12.154	26.381
Castilla y León	11.134	25.289
País Vasco	10.240	23.757
Región de Murcia	9.701	17.352
Baleares	9.601	19.875
Galicia	8.389	17.873
Melilla	7.933	12.728
Extremadura	7.657	14.282
Aragón	6.655	15.699
Ceuta	6.039	9.418
Asturias	5.278	11.526
Cantabria	3.962	8.534
Navarra	2.961	6.928
La Rioja	1.899	4.095
Total	538.036	952.415

Origin of international visitors and overnights, 2019

Viajeros hoteleros		
País	Viajeros	Porcentaje
España	538.038	38,16%
Reino Unido	133.646	9,48%
Alemania	69.915	4,96%
Francia	69.664	4,94%
Italia	69.441	4,92%
Estados Unidos	54.822	3,89%
Países Bajos	51.137	3,63%
Suecia	35.700	2,53%
Bélgica	31.342	2,22%
Noruega	25.736	1,83%
Dinamarca	24.674	1,75%
Irlanda	22.853	1,62%
Suiza	22.381	1,59%
Polonia	16.601	1,18%
Finlandia	15.583	1,11%
República China	14.855	1,05%
Canadá	14.299	1,01%
Rusia	12.971	0,92%
Portugal	10.442	0,74%
Argentina	9.856	0,70%
Austria	9.186	0,65%
Japón	8.489	0,60%
Brasil	6.968	0,49%
República Checa	5.564	0,39%
R. De Corea Del Sur	5.541	0,39%
México	5.301	0,38%
Turquía	3.358	0,24%
Hungría	3.158	0,22%
Grecia	2.826	0,20%
Ucrania	2.560	0,18%
Lituania	1.768	0,13%
Luxemburgo	937	0,07%
Resto De Ue	20.909	1,48%
Resto De Europa	9.195	0,65%
Resto De América	23.197	1,65%
Países Africanos	22.361	1,59%
Resto Del Mundo	34.763	2,47%
TOTAL	1.410.037	100,00%

Pernoctaciones		
País	Pernoctaciones	Porcentaje
España	952.415	34,19%
Reino Unido	295.831	10,62%
Alemania	148.610	5,34%
Italia	139.172	5,00%
Francia	133.695	4,80%
Países Bajos	122.518	4,40%
Estados Unidos	104.698	3,76%
Suecia	74.495	2,67%
Bélgica	72.668	2,61%
Noruega	65.268	2,34%
Dinamarca	58.316	2,09%
Irlanda	54.928	1,97%
Suiza	52.345	1,88%
Finlandia	35.828	1,29%
Polonia	31.416	1,13%
Canadá	28.421	1,02%
Rusia	25.471	0,91%
Argentina	23.775	0,85%
Portugal	21.109	0,76%
Austria	20.570	0,74%
República China	18.643	0,67%
Japón	14.303	0,51%
Brasil	13.864	0,50%
República Checa	12.510	0,45%
México	10.158	0,36%
R. De Corea Del Sur	7.890	0,28%
Hungría	7.063	0,25%
Turquía	6.556	0,24%
Grecia	5.995	0,22%
Ucrania	5.585	0,20%
Lituania	3.671	0,13%
Luxemburgo	2.365	0,08%
Resto De Ue	46.830	1,68%
Resto De Europa	18.497	0,66%
Resto De América	45.227	1,62%
Países Africanos	38.395	1,38%
Resto Del Mundo	66.212	2,38%
TOTAL	2.785.313	100,00%

Source: INE, 2019

When looking at the different modes of transport, Málaga is a city that has important communications infrastructures with the rest of Spain. To access the city, it has a regular and high-speed train line and a bus service that connects it with the main Spanish cities and municipalities, in addition to road, sea and air access.

The Málaga -Costa del Sol Airport is one of the most important ones in Spain, located eight km from the city Center. During the year 2019, the airport had 108 connections, of which 19 were to other Spanish airports and 89 to international ones. In terms of passenger numbers, it reached 19.9 million arrival / departure travellers and has experienced a growth in the number of arrivals of 4.4% compared to the previous year. Overall 85% of airport arrivals traffic originated from international markets.
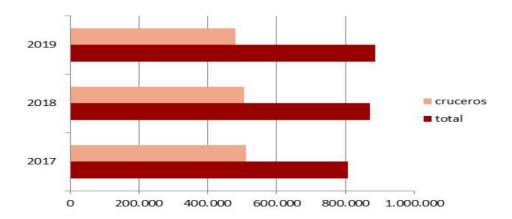
Evolution of air passengers to the airport Málaga -Costa del Sol, 2014-2019

In terms of water access, the port of Málaga has become the fifth largest cruise port in Spain and the second in the Peninsula and is usually visited by the most important shipping companies in the world. The Port Authority opted for cruise ship traffic and the Expansion Plan executed at the beginning of this century led to the construction of new facilities for ships, such as the Levante dock, the new Paseo de Levante, the cruise terminals and its attached berths. Currently (pre-pandemic), the port of Málaga has a number of passengers around 800.000, with more than 50% of them coming from cruise ships (in total 476.085 cruise passengers in 2019 and a total of 288 ships). Of these, 28% are base passengers, who begin or end their itinerary in Málaga.

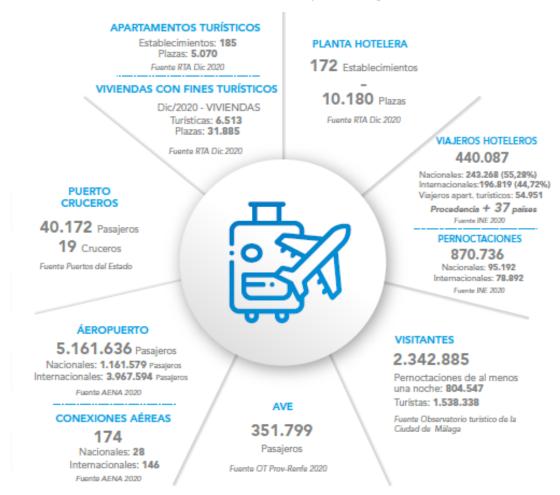**Evolution of cruise passengers to the port of Málaga, 2017-2019**

Málaga also has a Renve High Speed Train and Cercanías station called María Zambrano. It is one of the most important railway communication nodes in the South of Spain and is centrally located next to the bus station and communication with other means of transport within the city and with the airport through the commuter service. In 2019, there were 2.5 million train passengers arriving from Madrid to Málaga; 581.200 coming with the high speed train from Barcelona and 98.000 visitors arriving from Valencia. (Renfe, 2019)

Finally, in terms of economic impacts, the city estimated that in 2019, the average available pocket spending of the excursionists amounted to 74.25 EUR and the average budget per tourist trip to 711.5 EUR. These figures suppose a direct economic impact on the analyzed year of 1.983 million Euros and an indirect economic impact of 971.685 million Euros, the total economic impact of tourism in the city of Málaga being 2.955 million Euros. In the hotel sector, the increased demand created around 1.570 more jobs in 2019 compared to the previous year, reaching a total of 34.500 total tourism employment that year. (Málaga City Hall, 2020)
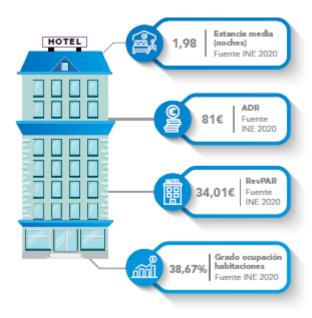
Of course, and similar to all other tourism destinations worldwide and in Spain, the COVID-19 health crisis had tremendous negative impacts on the development of tourism in the city of Málaga. The below infographic shows an overview of the main data points for 2020:

Overview main tourism indicators of the city of Málaga, 2020

APARTAMENTOS TURÍSTICOS
Establecimientos: **185**
Plazas: **5.070**
Fuente RTA Dic 2020

VIVIENDAS CON FINES TURÍSTICOS
Dic/2020 - VIVIENDAS
Turísticas: **6.513**
Plazas: **31.885**
Fuente RTA Dic 2020

PLANTA HOTELERA
172 Establecimientos
–
10.180 Plazas
Fuente RTA Dic 2020

VIAJEROS HOTELEROS
440.087
Nacionales: 243.268 (55,28%)
Internacionales:196.819 (44,72%)
Viajeros apart. turísticos: 54.951
Procedencia + 37 países
Fuente INE 2020

PERNOCTACIONES
870.736
Nacionales: 95.192
Internacionales: 78.892
Fuente INE 2020

PUERTO CRUCEROS
40.172 Pasajeros
19 Cruceros
Fuente Puertos del Estado

ÁEROPUERTO
5.161.636 Pasajeros
Nacionales: **1.161.579** Pasajeros
Internacionales: **3.967.594** Pasajeros
Fuente AENA 2020

CONEXIONES AÉREAS
174
Nacionales: **28**
Internacionales: **146**
Fuente AENA 2020

AVE
351.799
Pasajeros
Fuente OT Prov-Renfe 2020

VISITANTES
2.342.885
Pernoctaciones de al menos una noche: **804.547**
Turístas: **1.538.338**
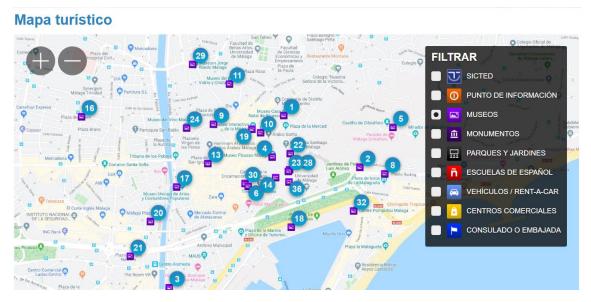*Fuente Observatorio turístico de la Ciudad de Málaga*

Fuente Estudio de perfil visitante de la Ciudad de Málaga Enero-Diciembre 2020
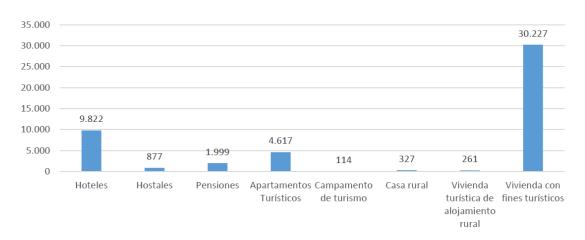

B. MÁLAGA: OVERVIEW SUPPLY SIDE

Looking at the tourism supply side, Málaga has a variety of different attractions that have allowed the city to strengthen its position as cultural hub, with additional important events and conferences throughout the year. In 2019, there were in total 40 museums, 14 galleries, 7 gastronomy zones and 53 monuments and points/areas of interest within the city. Thanks to this varied product offering, the city has achieved to develop and position itself around four fundamental axes: culture; congresses; languages and cruises. In addition, the competitive advantages have been strengthened over the past years in the following areas: health, shopping, gastronomy, industry & technology. Most recently and as visible in the new tourism development plan, the city is further focussing to strengthen its image in the areas of accessibility, nature, cinematography, family leisure and other topics as outlined in the strategy.

Mapa turístico

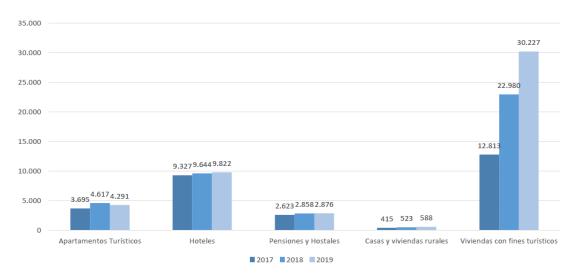Link to the interactive map: http://www.Málagaturismo.com/mapa-turistico/mapa.html

In terms of accommodation supply, there were around 410 accommodations in the city in 2019 with a total of 18.017 bed-places. Peer-to-peer home-sharing offers presented the largest share of accommodation properties in 2019, with a total of 5.910 properties including 30.227 bed-places which were available through different booking platforms, i.e. private homes booked through sharing economy platforms (VFTs). From the hotels, it was the 4-star hotels that had most capacities in 2019 with 5.095 bed-places, followed by the 3-star hotels that had 2.489 bed-places.

Total available bed-places in Málaga by type of accommodation, 2019

Source: RTA, 2019

49

Evolution of bed-places in Málaga by type of accommodation, 2017-2019

Source: RTA, 2019

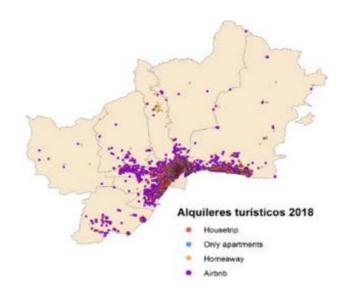**Summary of accommodations & bed-places in Málaga by type, 2019**

	Número Establecimientos	Plazas	
		Número Plazas	Cuota
Establecimiento Hotelero	77	9.822	20,36%
1 estrella	7	170	0,35%
2 estrellas	18	1.351	2,80%
3 estrellas	24	2.489	5,16%
4 estrellas	26	5.095	10,56%
5 estrellas	2	717	1,49%
Alojamiento Hotelero-Pensión	89	2.876	5,96%
Hostal 1 estrella	11	458	0,95%
Hostal 2 estrellas	10	419	0,87%
Pensión	68	1.999	4,14%
Apartamento turístico	171	4.617	9,57%
Primera (3 y 4 llaves)	11	424	0,88%
Segunda (2 llaves)	98	2.570	5,33%
Tercera (1 llave)	62	1.623	3,36%
Casa rural	37	327	0,68%
Casa rural básica	28	231	0,48%
Casa rural superior	9	96	0,20%
Vivienda turística de alojamiento rural	35	261	0,54%
Vivienda con fines turísticos	5.910	30.227	62,65%
Campamento de turismo	1	114	0,24%
TOTAL	6.320	48.244	

Source: RTA, 2019

The above statistics show that over the years, it was especially the private homes being rented out to tourists that increased in numbers in the city, being one of the reasons for the before-mentioned decline in inhabitants in the city center and presenting a growing challenge for the city (similar to many other destinations worldwide). Between 2016 and 2019, the Alter-Eco project analysed this developing

situation and identified that around 70% of these available (and registered) VFTs are concentrated in the central area in the city, followed by Málaga's East district with 11,23%. The evolution over time in terms of properties that offer the entire home, just the beds or rooms is shown below.

Spatial distribution of VFTs in Málaga, 2018

Source: Datahippo 2019, visualized for the Alter-Eco project

Typology of VFT properties offered in Málaga, 2016-2019

Source: AirDna, 2019, visualized for the Alter-Eco project

The research in the framework of the Alter-Eco project nevertheless showed that the available offers identified on the most common booking platforms exceeded the officially registered offer in Málaga by around 22%, indicating that there are even more offers available to tourists throughout the city than can be seen in official statistics. In terms of occupancy and economic impacts, the investigation highlighted that these

types of establishments tend to have a lower occupation as other official establishments such as hotels. However, the intermediary platforms indicate that occupancy tend to be around 60% also for the VFTs, which is yet to be confirmed. The average daily rates as found through the research reached between 69 Euro in February and 111 Euros in August 2019. However, depending on the platforms these figured varied. More details can be found in the study[23].

C. PROJECT ALTER-ECO: (PRE-COVID) SWOT ANALYSIS OF THE DESTINATION

In the framework of the Alter-Eco project, a detailed SWOT analysis of the situation in Málaga regarding its tourism development was conducted. Although this was done in 2017 and implemented by an external team of researchers (thus pre-pandemic and not picturing the most recent status-quo in terms of strengths, weaknesses, challenges, opportunities for the city), it allows nevertheless for some interesting background information regarding the past years that can help to better understand the current and future situation. Because of that, a summary is included in the below section.

STRENGTHS

- An emerging city with strong positioning in the urban tourism segment 2000-2018.
- Consolidation of the comprehensive revitalization, mobility and accessibility strategy of the Historic Center 1994-2018: recovery of degraded spaces, expansion of pedestrian public spaces, economic activity and the promotion of social cohesion.
- Important attraction capacity of the infrastructure of tourist offer, hotels, apartments, hospitality, leisure, museums, historical heritage, natural spaces and beach.
- Increasing supply of hotel rooms and tourist apartments, and the ability to customize demand through ICTs.
- Museum network promoted in the last ten years: Picasso, Birthplace, Pompidou, Thyssen, Russian State, Center for Contemporary Art (CAC), etc.
- Pedestrian friendly Historic Center that encourages a high number of trips to be made by foot.
- Boosting economic activity, employment and the consolidation / creation of companies.
- Excellent air connections, by AVE or by sea that offer a feeling of proximity.
- Ability to promote, organize and manage large events that project the image of the city
- Provision of tourism management structures, Municipal Tourism Area, Málaga Convention Bureau, Trade Fair and Exhibition Center, SICTED, Tourism Observatory.
- Pleasant climate throughout the year.
- Urban Agenda updated in 2015 that raises the sustainability of urban tourism.

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[23] http://static.omau-malaga.com/omau/subidas/archivos/1/2/8421/aproximacion-al-turismo-en-malaga-%28alter-eco%29_v5.pdf

- Existence of a working table with interlocutors from the different economic sectors, municipal areas, Ahecos hotel association, AVVA tourist housing association, Mahos hospitality association, Neighborhood Association, University, and Fundación Ciedes.

WEAKNESSES

- Confusion in the legal situation of houses for tourist use and room for improvement in the coordination between the Junta de Andalucía and the City Council.
- The concentration in the central area of the city accounts for more than 70% of the total tourist dwellings.
- Excessive concentration of economic and commercial activities (mainly restaurants, bars and franchises) in some areas of the Historic Center.
- Abusive occupation of public spaces by terraces and commercial facilities.
- High levels of noise pollution in certain streets and squares.
- Little compliance with municipal regulations for residential uses on upper floors.
- Slowness in the implementation of acoustically saturated areas, as well as in the establishment of new regulations for the preservation of the environment and the carrying capacity of the old city.
- Room for improvement in the decoration of the furniture that occupies the public space, and the design of some commercial ground floors, incompatible with the heritage and architectural image of the old city.
- Need for improved coordination between municipal areas on the levels of occupation of public space (Urbanism, Trade, Environment).
- Need to expand and permeate tourist areas to other areas of the Historic Center and the city to disperse pressure and tourist burden.
- Loss of the resident population as a consequence of the increase in housing prices and the inconvenience derived from the tourist overcrowding.
- The use of housing in the Historic Center (even more so in the Old City) supports high price increases, and the usual residential use is replaced by the offer of tourist rentals.
- Progressive disappearance of traditional commerce: the success of the use value of the recovered old city, entails an increase in the exchange value, so that rental income rises.
- Insufficient commercial and service offer during holidays with coincidence of cruise passengers.
- Little professional training in the service and quality of the restaurant, whose fast-food outlets increase more than double that of specialty restaurants.
- Need to establish guidelines for regulated behaviour with online tourism companies.
- Abandonment of the image of symbolic reference of the city for the benefit of the simulated theme park.
- Excessive dependence on the tourism macro-sector, weakly offset by the industrial sector.
- Insufficient participation of the private sector in the structures for promoting urban and cultural tourism.

THREATS

- Overcrowding and pressure that causes discomfort in the tourist image of the city and reduces the quality of life.
- Increase in neighbourhood complaints basically due to noise and annoyances generated by tourist homes (different hours of activity) and the creation of movements of social rejection.
- Significant levels of illegal and illegal tourist offer that harm the regulated offer.
- Massive and uncontrolled growth in the supply of tourist homes, 1,200% between 2014 and 2017.
- Aging of the population, and lack of renewal of the young population due to the problems derived from the increase in housing prices, and the discomfort of living in a crowded area. Expulsion of residents.
- Significant increase in speculation in the sale and rental of homes.
- Important shortage of supply of long-term rental housing.
- Tourist saturation of the Old City: alteration of the environment and the balance of urban tourism.
- Possible decrease in tourists and visitors due to degradation caused by excessive overcrowding, and the lack of quality of services.
- Questioning the tourist model of "fast food", low cost and overcrowded.
- Growing competition between emerging cities for urban tourism.
- Structural weakness in the face of economic crises and recessions that affect tourism and its spending capacity.
- Need to coordinate the organization of resources between administrations and private organizations that miss out on synergies and efforts.
- To face in an imaginative way the new forms of direct marketing between the client and the tourist offer and that thanks to the ICTs avoids the classic intermediary.

OPPORTUNITIES

- Axis of the tourist conurbation of the Costa del Sol, which combines sun and beach tourism with urban, cultural, historical-heritage, gastronomic and leisure tourism.
- Value and integrate the urban landscape as a resource, taking care not only of its fragility and diversity, but also its vitality, paying special attention to the traditional productive forms that have historically shaped it.
- Improve the tourist and cultural attraction of the city.
- Really promote original "collaborative" tourism
- Emergence of the illegal and alleged offer that will contribute to pay taxes for their economic activity.
- Facilitate new forms of vacation subdivision, young, family or adult tourism with high spending capacity.
- Establishment of tourist taxes that compensate the tourist "expense" and are destined to compensate the improvement of the quality of life of the residents (equipment's, improvement of public spaces…).
- Adequate relationship of services and prices in relation to international competition.
- Wide range of tourist connections and combinations.
- Tourism strategy defined at the regional and metropolitan level.

D. USEFUL RESOURCES

Links in the document:

https://fycma.com/evento/mobile-week-malaga/?lang=en

http://copernicus.adabyron.uma.es/wp-content/uploads/InfoPack.pdf

https://datosabiertos.malaga.eu/

http://www.malagaturismo.com/es/paginas/informes/362

https://www.costadelsolmalaga.org/bigdata/

https://www.omau-malaga.com/2/com1_md3_cd-1627/alter-sostenibilidad-turistica

https://ciedes.es/

https://www.promalaga.es/

https://smart-tourism-capital.ec.europa.eu/cities/competition-winners-2020/malaga-winner-2020-european-capitals-smart-tourism_en

https://www.omau-malaga.com/

https://www.omau-malaga.com/45/com1_pb-0/com1_md2_cd-16/agenda-urbana

https://www.omau-malaga.com/agendaurbana/subidas/archivos/arc_155.pdf

https://greencities.fycma.com/?lang=en

https://www.omau-malaga.com/agendaurbana/pagina.asp?cod=6

https://www.omau-malaga.com/agendaurbana/pagina.asp?cod=65

http://s3.malagaturismo.com/files/933/933/plan-estrategico-turismo-2021-2024-def.pdf

https://static.costadelsolmalaga.org/omau/subidas/archivos/1/2/arc_8421_v5.pdf

https://www.costadelsolmalaga.org/base/descargas/363652/plan-estrategico-turismo-accesible-costa-del-sol-occidental

http://www.malagaturismo.com/mapa-turistico/mapa.html

http://www.malagaturismo.com/es/paginas/observatorio-turistico/410

Other relevant links:

http://www.malagaturismo.com/es/paginas/observatorio-turistico/410

https://www.malaga.eu/la-ciudad/instalaciones-y-espacios/

https://ciedes.es/el-plan/agenda-ods-2030.html

http://medioambiente.malaga.eu/es/huella-de-carbono/index.html

https://cemi.malaga.eu/es/apps-moviles/yo-gestiono-mi-agua/#.YZz9GdDMKUk

http://controlderuido.malaga.eu/

http://medioambiente.malaga.eu/opencms/export/sites/sostenibilidad/.content/galerias/legislacion/ord.aire.pdf

http://laconcepcion.malaga.eu/es/cambio-climatico/#.XkpttmhKjcs

http://www.malagaturismo.com/es/site/smarttourism/paginas/medio-ambiente/574

https://www.ine.es/

https://www.juntadeandalucia.es/institutodeestadisticaycartografia/

https://www.andalucia.org/es/datos

https://www.juntadeandalucia.es/servicios/procedimientos/detalle/6631.html

https://www.juntadeandalucia.es/servicios/procedimientos/detalle/6631.html

https://www.andalucia.org/es/datos

https://smartcitycluster.org/

https://planmeta2027.turismoandaluz.com/

www.OpenForBusiness.Malaga.eu

https://cemi.malaga.eu/es/apps-moviles/parques-empresariales/#.YZz9VdDMKUk

https://www.bic.es/

http://edusi.malaga.eu/es/programacion/marco-estrategico/agenda-urbana/#.Xkp1F2hKjcs

http://urbanismo.malaga.eu/es/plan-general-de-ordenacion/plan-general-vigente-2011/#.Xkp2rmhKjct

http://movilidad.malaga.eu/es/lineas-de-trabajo/plan-especial-de-movilidad-urbana-sostenible-pemus/

https://smart-lighting.es/greencities-malaga-autodrive/

http://novadays.eu/proyecto-automost-hacia-transporte-publico-autonomo/

https://www.endesa.com/en/press/press-room/news/energy-sector/endesa-leads-the-european-coordinet-project-to-create-a-european-energy-platform-and-open-the-market-to-consumers

https://www.urbener.com/zem2all/

https://www.malagaldia.es/2019/07/04/el-ayuntamiento-participa-en-el-proyecto-europeo-meister-destinado-a-potenciar-movilidad-electrica-en-ciudades/

www.aforocostadelsol.es

https://www.polodigital.eu/

http://bioeduca.malaga.eu/es/el-eco-mercado/