

Appendix 6

Scenario Narratives

1# Scenario: Ageing and shrinking population

(moderator: *Claudia de Luca*, notes: *Katriona McGlade*)

- Barcelona 2025; outmigration of young population and ageing of resident population emerged as main issues.
- The pressures on health, mobility, housing, job availability, and social services have substantially increased.
- Elders suffer high levels of depression and loneliness, lacking opportunities to engage (socially or economically), and in public health and wellbeing.
- City is lacking accessible open green spaces, as these have capacity to provide manifold social and environmental benefits.

Barcelona 2025; As a consequence of the climate and economic crisis in the last 15 years, the city lost around 200.000 inhabitants, mostly young educated people, resulting in a resident population of around 1.4 million¹. Also, birth rate has decreased substantially over the period, as young people continue facing serious barriers in access to secure jobs and affordable housing, with direct consequences on household formation and natality levels.

As a matter of fact, elderly people account now for over 27% of the resident population (compared to 21% in 2016) generating an increased pressure on urban systems, such as health, mobility and social services among others. In terms of household composition, this is resulting in an increasing number of elderly people living alone, as well as in new and crowded retirement homes managed by the City Council, private entities and third sector organisations. The Agència de Salut Pública de Barcelona (ASPB) reports that depression rates especially among the elderly population are becoming alarming, calling for concrete actions to address the challenges of ageing population in an integrated way.

Within this context, scientific evidences on the positive links between health, social interaction, and green public spaces, are becoming increasingly acknowledged by policy-makers with competencies over public health, seeking to foster the use of green and public spaces by local population, especially elderly people. However, in a high-density urban area, with limited space for urban regeneration and rapidly changing demographic patterns, these efforts require integrated and creative solutions across several policy areas.

2# Scenario: Enhanced tourism

(moderator: *Maria Gómez*, notes: *Luis Campos*)

- Barcelona 2025; mass tourism is a source of wealth but also of complex challenges.
- The pressures on housing, services, and urban space availability as well as on urban environment have substantially increased.
- This has resulted in rising prices, increase in illegal activities, overcrowded and degraded open spaces, and in changing attitudes of residents living in affected central neighbourhoods.
- Affected residents are deprived of available green spaces and beaches for recreation. Several local movements have emerged and started to act.
- Policy interventions are needed in order to re-establish the availability open spaces and related benefits, fostering the wellbeing of residents.

Barcelona in 2025; tourism further increased. The city now received more than 30million annual visits, in average more than 160,000 per day². Hospitality business and related tourism offers have grown substantially. Tourism belongs to the most important economic activities in Barcelona, providing income to a large share of the residents. Nevertheless, the negative impacts of tourism are being progressively questioned.

¹ <http://www.bcn.cat/estadistica/angles/dades/tpob/projeccions/pob/prpob/base2013/bcn/t111.htm>

² This means a yearly increase by about 1% since 2017.
http://ajuntament.barcelona.cat/economiatreball/sites/default/files/documents/mesura_de_govern_mobilitat_0.pdf

From an environmental point of view³ – carbon footprint, water usage, waste disposal – mass tourism is hardly sustainable in a very compact and dense city as Barcelona. From a social point of view, attitude of some resident groups has drastically changed in the last 15 years.

As from 2015, the city council has started developing measures to regulate mass tourism (e.g. diversifying offers, licence limitation, tourism taxation, etc.). Nevertheless, it did not prove to be effective on some of the main issues: housing prices (20% rise in central neighbourhoods), public transport, and especially access to open spaces and cultural sites – Barceloneta beach, Ciutadella, Parc Guell, Mont Juic, public squares and ramblas. Also, a trend of ‘urban nature tourism’ emerges, flooding parks in Barcelona with birdwatchers, picknickers, beerdrinkers.

The wellbeing of residents has suffered, as they are deprived of the beneficiary effects coming from the nature experience. Also, affected green spaces are now subjects of degradation. Residents started to avoid using these green spaces and beaches, as they are overcrowded and noisy.

An integrated policy action is needed in order to foster the social life, to enable access to recreation in the city, and to improve health and wellbeing of its citizens.

3# Scenario: Gender inequality

(moderator: Johannes Langemeyer, notes: Filka Sekulova)

- Barcelona 2025; Public spaces are dominantly used by male population due to certain changes in perceptions and behaviours. Equal access to green and open public spaces is questioned and gender issues are increasingly raising.
- An increasing number of women is reporting negative experiences from their visits of open spaces, also due to misperception and disinformation. The “stories” are spreading fast.
- The access to green spaces by women became limited, as they perceive them as unsafe.
- In result, the female population is deprived of benefits related with urban nature.
- Policy interventions are needed to re-establish the accessibility to open spaces and related benefits.

Barcelona in 2025. the number of visits to green spaces by female population has declined in the last years, resulting in more “homogenized” male-oriented user groups. This trend emerged as a product of changing behaviours and perceptions of public spaces in Barcelona, especially among women. Some serious questions related to gender equity have been put forth.

Negative experiences, including ambushes, thievery, sexual harassment, and other dangerous encounters have been reported, whereas the victims are being predominantly women. Even though these encounters are rather rare, the stories continue to spread. The public community, and specifically women, widely perceive the open spaces as unsafe. Especially larger green spaces that are difficult to control, such as Collserola, Montjuic, Park Güell, or Tres Turons, are evoking negative thoughts and anxiety. Besides female population, families and elderly have started to avoid these areas too.

The accessibility to nature experience in the city has become limited as the feeling of safeness has dropped extremely. Changing perceptions further affect behaviours; concerned user groups (mostly women and elderly) are feeling threatened, what induces their suspicious behaviour and tendency to avoid social encounters in the public spaces. Social interactions and gender equity are disrupted. In fact, green spaces are considered by women to be the most unsafe urban areas⁴, due to crime and violence that they are exposed to.

Female users are deprived of the benefits linked to the green space use as result of realities narrated above. To re-establish social equity in terms of the opportunities to experience urban nature for all, policy interventions will be necessary.

4# Scenario: Global warming

(moderator: Francesc Barò, notes: Andoni Gonzales)

- Barcelona 2025; climate change has intensified and is affecting the city and its residents.
- Increase in the number of torrid days, droughts, fires, rain-shortages, and water scarcity represent and immense challenge for the future life in the city.

³ Rico A. et al., 2019. Carbon footprint of tourism in Barcelona, Tourism management, 70 (2019), 491-504

⁴ https://ajuntament.barcelona.cat/dones/sites/default/files/documentacio/17_661_web_bcn_v2_0.pdf

- Some residents are affected more than others; especially vulnerable groups are elderly, children, and pregnant women. Similarly, heavily built-up areas are affected the most.
- An increased importance of friendly and climate-resilient open spaces is highlighted.
- Policy interventions are needed in order to preserve and foster the capacity of provisions originating from open spaces, as these are becoming critically scarce

Barcelona 2025; Global feedback processes have accelerated the global warming trend to an extent unpredicted by most climate scientists. Barcelona became a critically endangered region, exposing its population to risk and uncertainty. Rapidly changing climate manifests its power through a high variability and frequent occurrence of extreme events.

A number of torrid days (reaching over 33°C) and the duration of droughts increased eight-fold. Intensive urbanization amplifies the urban heat island effect, making the built-up area hotter by 20°C comparing to the surrounding green areas⁵. The number of deaths counts for 2000 human lives per year due to the heat in Barcelona only⁶. Districts with the lowest coverage of green spaces are hit most heavily, as they become unbearably hot. These areas correspond with the poorer population, whereas elderly, children and pregnant women are the most vulnerable groups. Tropical nights exhaust people as they are not able to have a needed rest after a torrid day. Heat waves cause premature births, physical and mental diseases, but also financial shortages of poorer residents due to intense use of cooling technologies; also, resulting in higher energy use and thus intensifying the climate change.

At the same time, the city experiences severe rainfall shortages and thus water scarcity. Furthermore, fire hazards concern not only the Collserola, but appears in the neighbourhoods of Vallvidrera, Tibidabo i les Planes, Horta, Canyelles, or Torre Baró, where thousands of people reside.

By contrast, rainfall gains on intensity in form of a storm events which frequently flood the city; floods and landslides are threatening residents and causing ample economic damages. A 72% of impermeable surfaces⁷ and lack of climate-resilient green spaces in Barcelona are boosting impacts to maximum. Another critical water-related issue will soon emerge on the coastline, where the sea level may rise by additional 1m and start to flood the recreational areas.

Citizens' health and wellbeing started to decrease. A discomfort from heat, droughts, fires, or storm events, has led to a higher demand for friendly and resilient open green spaces. Integrated policy action is required to preserve ecosystem provisions that are necessary for security and wellbeing of citizens.

^{5,8} <http://lameva.barcelona.cat/barcelona-pel-clima/en>

⁷ <https://ajuntament.barcelona.cat/ecologiaurbana/en/what-we-do-and-why/energy-and-climate-change/climate-plan>