EXECUTIVE SUMMARY

The Economics of Living Destinations

Fiscal Carrying Capacity, Tourism and the Cost of Sustainable Island Life

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Naousa harbour · Photograph: Bill Marangozis

01 / THE QUESTION

Can tourism and dependable island services grow together?

An additional accommodation bed is a useful starting question. Depending on its use, it can create income, public revenue and service requirements. To understand the fiscal consequence, we must connect the change in activity to the institution providing the service, the cost it bears and the revenues available to it.

Fiscal Carrying Capacity / FCC

Fiscal Carrying Capacity (FCC) is a destination's ability to finance the services, infrastructure and public functions that residents and tourism need, without relying on continual growth in visitor volumes or degrading environmental and social capital.

Two questions belong together

Can today's services be sustained?

Assess recurring resources, current standards, maintenance and renewal.

What changes with additional demand?

Compare the extra service obligation with the additional resources available to the responsible institution.

The purpose: dependable life in a living destination

Decisions about tourism and infrastructure should make visible who receives benefits, who finances services, which obligations persist and which environmental or social conditions remain unresolved. Both development proposals and restrictions can be examined on that basis. The relevant outcome is dependable resident life and sustainable service provision, rather than an assumed preference for more or less activity.

02 / THE METHOD

Follow the service, then follow the money

01 · Activity

What changes in a particular place and period?

02 · Service

What extra water, infrastructure or staff is needed?

03 · Institution

Who must provide and pay for it?

04 · Resources

Which revenues fund operation, maintenance and renewal?

Visitor spending, business income, public revenue and money available to a local service provider are different quantities. The connections need evidence.

An affordable increment can coexist with an unresolved shortfall in existing services. A large budget alone does not establish room for the next increment.

Why use FCC?

A tourism-spending total does not tell us how much money a water utility or municipality receives. Capital funding does not show whether operation, maintenance and renewal are financed. FCC makes these relationships explicit. With adequate evidence, it provides a more precise basis for assessing whether additional activity can be served while maintaining resident services.

Carrying-capacity approaches consider physical, environmental, social and management limits. FCC complements them by tracing the public-finance relationships. Affordability alone does not establish that development is environmentally or socially acceptable.

What the Paros case establishes

The study brings together selected accommodation, airport and business observations, administrative financial records and water procurement documents. They describe different populations and stages. They cannot simply be added into a destination-wide total. Accounting gaps and source-access limitations remain explicit; they are not findings that the institutions themselves lack usable accounts.

03 / THE WATER EXAMPLE

When does a little more demand become a much bigger decision?

Imagine an island on a busy summer day. Residents, hotels and restaurants all need water at the same time. If the system has room to supply more, an extra request may mean mainly extra running costs. As that room disappears, the next request may require a more expensive source. Once the available sources reach their limits, paying their running costs cannot provide all the water requested.

HYPOTHETICAL EXAMPLE · NOT MEASURED PAROS RESULTS

A simple example: two sources, limited room

Suppose two sources each have room to produce another 100 cubic metres (m³) per day, after existing needs and a safety allowance. One cubic metre is 1,000 litres. Assume that 80 out of every 100 m³ produced reach users. Each source can therefore deliver only 80 extra m³ per day: 100 × 0.80 = 80.

Producing each extra m³ costs €1 at source A and €2 at source B. We assume A can be used first. These are assumed running-cost rates, not water bills charged to customers. The requests below are alternative scenarios, not amounts to add together or estimates of one bed's water use.

Extra water requested	How it is supplied and paid for
64 m³/day	A supplies everything. To deliver 64 m³, it produces 64 ÷ 0.80 = 80 m³. Daily running cost: 80 × €1 = €80. No unmet demand.
120 m³/day	A produces 100 m³, delivers 80 and costs €100. B must deliver the remaining 40: it produces 40 ÷ 0.80 = 50 m³, costing 50 × €2 = €100. Total: €100 + €100 = €200/day. No unmet demand.
200 m³/day	Both sources produce their full extra 100 m³. Together they deliver 80 + 80 = 160 m³ and cost €100 + €200 = €300/day. Still missing: 200 − 160 = 40 m³/day.

€300/day pays for the 160 m³ delivered. It does not tell us what it would cost to meet the whole 200 m³ request.

Illustration from Exhibit 5.3 and Appendix B. All quantities and rates are assumptions, not measurements of Paros. These running-cost figures are not a full budget for construction, maintenance, replacement or other service obligations. No additional revenue is assumed.

04 / THE TIPPING POINT

One extra bed at the busiest moment

The timing of demand matters. A system may have room for more use on a quiet day but very little at the summer peak. Spare capacity means the service that can actually be added at that time, after existing needs and safety allowances. An annual total cannot show whether that room exists on the busiest day.

The tipping point: when the existing system can no longer meet the next request

If a service is already close to its usable limit, even a modest increase may take demand beyond it. “One extra bed” makes that question concrete. Its use does not automatically require a new plant; it matters when, where and how much additional service is needed.

From 160 to 161 m³/day: just one more

In our example, the two sources can deliver at most 160 extra m³/day. A request for 161 leaves only 1 m³/day unmet. The same sources cannot supply it under these assumptions. Whether meeting that small gap needs a modest adjustment or a larger investment remains to be established. This is not an estimate of one bed’s water use.

Buying capacity is only the beginning

A new unit, tank or network extension has an upfront cost. It may also bring extra energy bills, inspections, servicing, repairs and eventual replacement. A grant can help pay for construction without covering those later bills. These obligations may continue through quieter months, when visitor-related receipts are lower.

Before choosing expansion, compare feasible repairs, efficiency improvements, storage, alternative supply and ways to reduce or shift peak demand. Each option has costs, limits and environmental or social consequences. This example does not choose an option for Paros.

Costs may rise in steps: a small extra requirement can sometimes bring forward a larger commitment. The last extra bed is not solely responsible for the cost of shared infrastructure: existing demand, past investment and the chosen service standard also matter. Similar thresholds may arise in other public services, but each needs its own evidence.

FCC asks two connected questions: can we keep today’s services dependable, and can we fund the response to tomorrow’s demand, including its continuing costs?

This edition does not calculate a measured cost per additional bed, a tourism fiscal surplus or deficit, a maximum visitor number, or current water adequacy. It does not rank Paros infrastructure investments. Those answers need compatible evidence that is not yet established in this study.

05 / THE NEXT STEP

Better local evidence can make the next question answerable.

The study offers a practical way to examine proposals now. Developing and comparing specific policy options requires more complete, compatible local data, together with technical assessment and public judgement. Accommodation businesses, utilities and public authorities can help by contributing clearly defined records under agreed handling arrangements. Better evidence can help businesses assess service risks, investment choices and operating plans, and help authorities compare options for sustaining public services. Participation supports more informed choices; it does not guarantee a particular policy or commercial outcome.

01 · Accommodation businesses

Person-nights and public-network water for the same period, with meter coverage and other water sources clearly described.

02 · Utilities and service providers

Aligned production, service demand, operating inputs, source availability and applicable revenue information.

03 · Public authorities and local stakeholders

Clarification of accounting fields, service responsibilities, project stages and relevant local service conditions.

Start with a conversation

Expressions of interest: bmarangozis@gmail.com. Please describe possible contributions first; definitions, permission and handling should be agreed before sharing records.

The first edition keeps a fixed evidence cutoff of 16 October 2026. Later evidence can support dated supplements; material errors will require transparent correction. An ongoing research programme does not mean silently changing a published edition.

The author is the sole researcher, without funding or institutional support, and declares no relevant financial or non-financial interests. AI tools assisted with drafting, revision, literature discovery, citation organisation, calculation checks and proof production. No external expert review or independent engineering certification is claimed.

Source: The Economics of Living Destinations (English), first edition; especially Chapters 2, 4–6 and 8, Exhibit 5.3 and Appendices A–C. This summary is not a separate empirical study.

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