The Human Dimension: Public Realm Management and Accessibility

Equitable Reallocation of Public Space and the Development of a Walkability Index

Penelope Vasquez Hadjilyra | Paulina Smykouskaya

THE WAY SPACE BEGINS



Built to walk.

**For thousands of years,
we have drawn ourselves on foot,
chasing animals across open land.**

Cova dels Cavalls, Valltorta (Castellón, Spain). Levantine rock art, UNESCO World Heritage.
Photo: https://www.spain.info



The street, seen from the pavement.

To a pedestrian,
the road is a chasm and the pavement a ledge.
The problem isn't our bodies. It's our streets.

Illustration: Karl Jilg for Trafikverket, the Swedish Transport Administration

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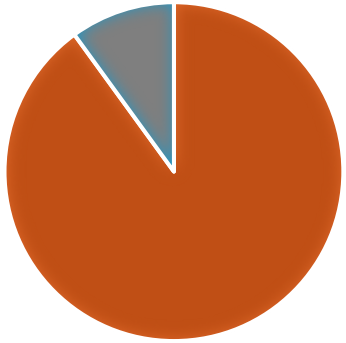
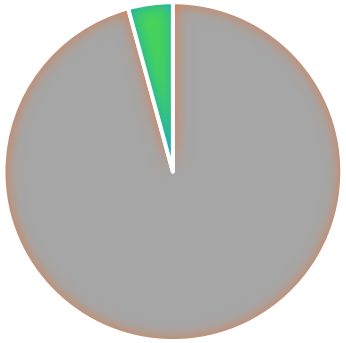
Cyprus in four numbers

Nicosia

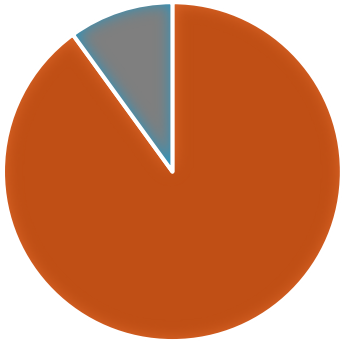


90%+
daily trips by private car

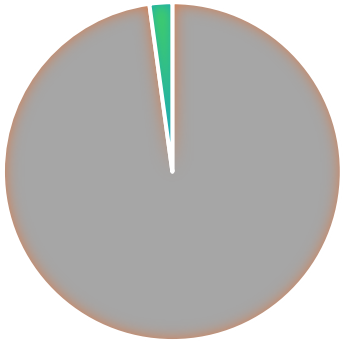


4% tree cover
the lowest of any
European capital

Limassol



90%+
journeys made by car



<2% urban land
that is green space

No metro, no tram, limited buses.
Walking is the first and last part of every car or bus trip,
and **that walk is what we can fix first**.

Mouzas et al. (2022) · Mayor Y. Armeftis, NetZeroCities (2026) · European Environment Agency (2023)

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How fair is the street today?

3.5×

more street space for people in **cars** than for **everyone else**.

18 streets measured in Berlin

Three ways to judge a fair street:
moving people · a healthier city · a place to live
All three agree: less parking, more pavement.

Creutzig, Soomauroo et al. (2020), *Fair street space allocation*, Transport Reviews 40(6)

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The problem in Limassol

What is not measured is invisible in planning.

87% of Limassol lives within a 5-minute walk of a bus stop.

But nobody measures whether that walk is safe, shaded or even possible.

Decisions about streets are made on traffic data alone.
Blocked pavements, missing shade and hostile crossings go undocumented.

Walkably study, via Cyprus Mail, 28 Oct 2026

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Nicosia 2022:	Limassol next step:
An intermodal walkability index for a car-oriented city	From the desk to the pavement
The walk starts where the car is parked	Field audits with evidence photos
GIS model (QGIS) using satellite imagery and open data	Comfort and interest are scored, not only distance and shade
Simple plus/minus scores: shade, vegetation, within a 5-minute walk, obstacles	A report card for each street that the public can read
Shade scores positive and full sun negative, because it was built for a hot climate	Versioned re-scoring to monitor change over time

Mouzas, Ioannou & Fokaides (2022), *Front. Environ. Sci.* 10:934236

The Limassol Walkability Index.

An independent, non-commercial civic data project that will score streets on walkability, with evidence for every score.

0-100	A-F	16	Open
score for every street	grade anyone can read	indicators with written rules	method published and versioned

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The Limassol Walkability Index.

Four questions about every walk

Weight	Question	What it measures
30%	Is it safe?	Traffic speed, crossings, whether there's a sidewalk and its clear width
30%	Is it comfortable?	Midday shade, enclosure, noise, places to pause
20%	Is it useful?	Everyday destinations within a 5-minute walk, transit access
20%	Is it interesting?	Active ground-floor frontage, façade variety, signs of life

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How streets will be audited.

Collect	Process	Judge
• field audits (photo and video) • open data (OpenStreetMap, satellite imagery)	• AI as the efficiency layer, for image analysis and data processing. • Faces and licence plates are blurred first.	Human auditors score every indicator against written criteria, never the machine.

Comparative, not absolute.
The same method for every street.

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From indicators to a grade

Pillar score (0–100): points earned ÷ pillar maximum × 100
Walkability score: 0.30 × Safe + 0.30 × Comfortable + 0.20 × Useful + 0.20 × Interesting

Score	Grade	Label
80–100	A	Genuinely walkable
65–79	B	Walkable with flaws
50–64	C	Walkable by necessity only
35–49	D	Hostile to pedestrians
below 35	F	Effectively unwalkable



Can a child walk there safely?

Pilot: the streets around six schools in Limassol.

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Equitable reallocation.
Measure, reallocate, measure again.

Before.

D

A baseline grade shows where the street fails pedestrians, and which pillar is to blame

Reallocate.

Parking to pavement, shade and trees, safer crossings, together with Park & Ride and better buses

After.

B

The same method tests whether the change worked for people on foot.

What the index can measure in Limassol:
Planned, so before and after: Neapolis one-way plan · green corridors · 25 neighbourhood parks
Completed, so the result: Heroes Square · 81 km of new pavements
Temporary, so with and without cars: LAOU LAOU Open Street

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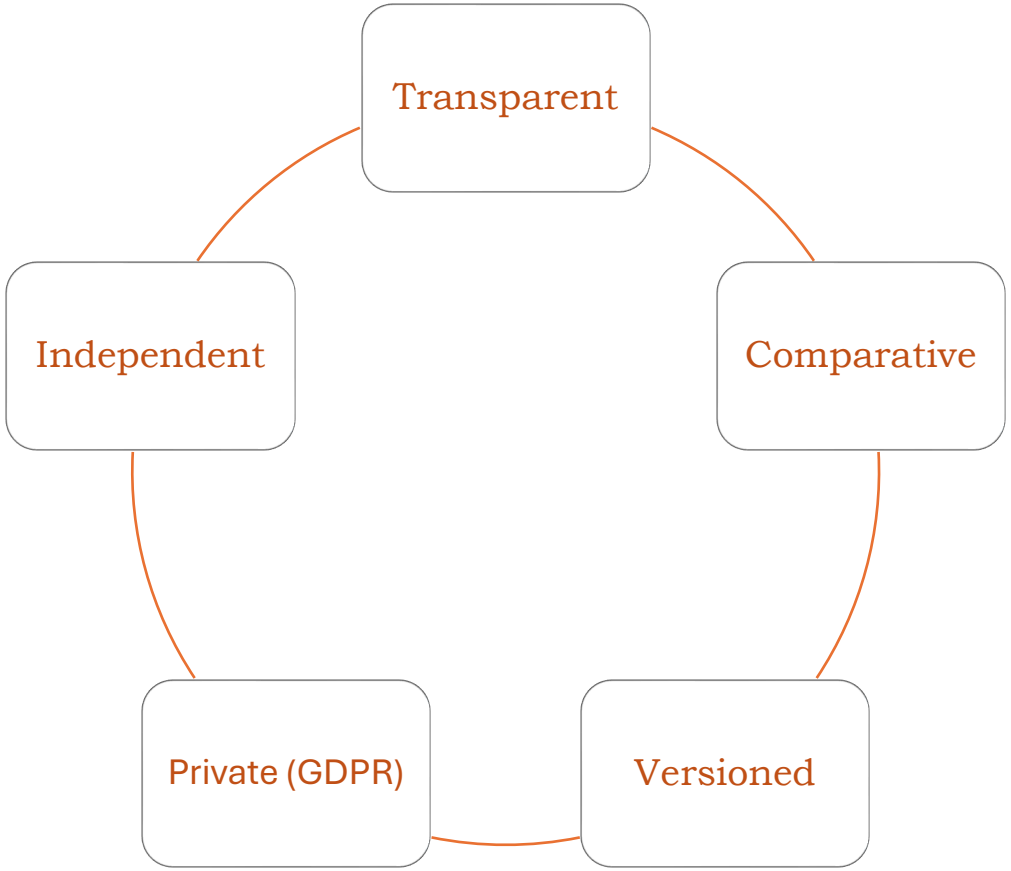
What each partner gets.

Partner	What the index will offer
Municipality of Limassol	A free diagnostic and monitoring layer: before/after evidence for street works and mobility-plan commitments
Ministry of Transport / Public Works	Street-level pedestrian evidence for arterials and crossings, alongside traffic and accident data
Developers	A recognised walkability measure: a value signal, not just a constraint
Residents, schools, civic groups	A shared vocabulary and published evidence, replacing anecdote with data

Built to walk. Let’s build streets that let us.

The method is ready, the pilot is about to begin and the partners are joining.



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Thank you.

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