



#MobilityIndicators

Average trip length

What is it?

Average distance covered per trip. One of the most direct indicators of how a city's spatial structure shapes daily life.

What does it measure)

The physical separation between where people start and end each trip: home, work, school, shopping, care, leisure.

Units: km one-way per person, per trip

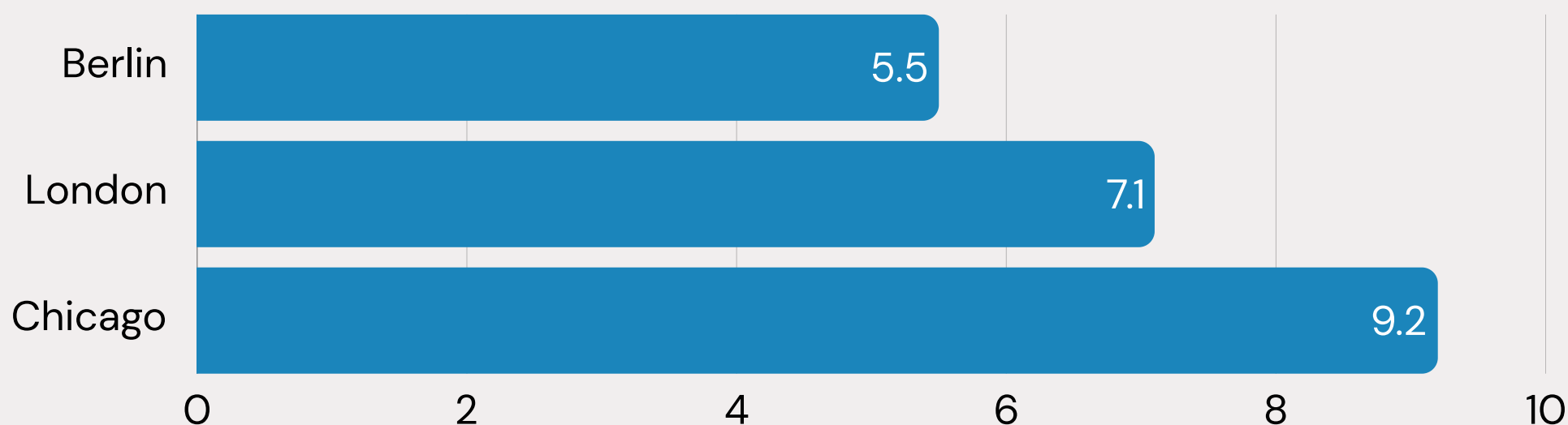
What does it shape?

Land use density and mix (e.g. how distant people's jobs are from where they can afford to live), income levels, car access, and other factors



Average trip length

City Comparison – Average Trip Length, All Modes
(km one-way by person)



What average trip length reflects



Urban form:

Density and land-use mix determine how far apart activities are in the first place



Mode

availability:

Car access enables and encourages longer trips; PT and cycling constrain distances naturally



Housing cost:

Displacement to affordable periphery may force longer trips for those with least resources



Trip length by mode



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Main mode of transport	Travel time (min/trip)	Distance (km/trip)
Walk	17.3	1.1
Bicycle	19.6	3.7
Car	25.2	12.3
Public transport	37.3	9.3
Total	23.8	6.0

Example Munich: All Routes, All Days of the Week: Average Travel Time, Distance, and by Major Mode of Transport

Housing displacement adds trip length

Low-income workers who cannot afford to live near their jobs often face the longest commutes, often by the slowest PT. Average trip length can be highest among those with fewest choices. Always ask: who is making the long trips, and why?





Trip length by mode and purpose



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Trip length by purpose — illustrative ranges

Purpose	Typical range	Notes
Commute (work)	8-15 km	Longest single purpose; drives city average upward
Education	3-8 km	Shorter where school catchments are local
Shopping	1-5 km	Sensitive to local retail availability
Care / escort	1-3 km	Short but frequent; disproportionately women
Leisure / social	5-12 km	Highly variable; flexible timing enables PT use

Gender and trip purpose

Men's trip length averages are pulled up by longer work commutes and leisure trips. Women's averages are pulled down by short, frequent care and escort trips. When datasets report a single average without purpose disaggregation, they make women's travel patterns invisible and their infrastructure needs go unbudgeted.



Better together — Pair with these indicators



Pair with:

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Mode share:

Is that 10 km average being covered by PT or car? Completely changes the emissions and equity reading.

Trip purpose:

Commute distance vs. care trip distance tell fundamentally different stories about urban form and gender.

Travel time:

Distance alone ignores congestion and PT speed. A 10 km car trip in traffic may take longer than 10 km by rapid transit.

Income quartile:

Who is making the long trips? Displacement to the periphery hits lowest-income residents hardest.

The distribution gap by gender

Men's trip lengths can be spread across a wide range, with many medium-distance trips and a smaller share of very long commutes. Women's trips can be more concentrated at shorter distances, while a distinct group of longer public transport-based work trips creates a second peak. As a result, a single mean trip length masks these different mobility patterns and is not representative of either distribution.





Limitations – the mean can mislead

Two cities can share the same average trip length for entirely different reasons. Always look at the distribution, the mode mix, and who is making which trips.

Three limitations to always flag



Sensitive to mode and purpose mix

A city with many short walking trips and a few long car trips can show the same mean as one with uniformly medium-length PT trips. The policy implications are different.



Skewed by infrequent long-distance trips

One overnight trip to another city, if recorded as a trip, can significantly inflate an individual's average. Some surveys exclude trips over a threshold; check the methodology.



Shorter isn't always better

A low average in a deprived area can reflect suppressed mobility – people not travelling to jobs or services they need because of cost or access barriers. Never read short as sustainable without checking why.





Reducing trip length: levers and targets



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Average trip length is one of the few mobility indicators that is directly linked to and shaped by land-use policy, not just transport investment.

Policy levers and their impact on trip length

Lever	Mechanism	Speed of impact
Mixed-use zoning	Jobs, retail, and services near homes reduce the distance between origins and destinations structurally	Slow; decades
Local service provision	Schools, clinics, and shops within neighbourhoods reduce care-trip distances	Faster; years
Affordable housing near employment	Prevents displacement-driven commute lengthening for low-income workers	Medium; 5–10 yrs
Remote work policy	Reduces peak commute distances; but risks suburban sprawl if housing policy doesn't keep pace	Immediate
PT network densification	Reduces car-trip distances by making PT viable for medium-length trips	Medium; 3–7 yrs



What a good target looks like



Trip length target examples

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Too vague

"Reduce average trip length by 10% by 2030."



Specific and auditable

"Reduce average car commute distance from 18 km to 14 km by 2030 through mixed-use rezoning of three employment corridors, measured using annual household travel survey data disaggregated by income and gender."

Distance is destiny in transport. **The further apart a city puts its activities, the longer, more expensive, and more carbon-intensive travel becomes,** and the harder it falls on those with the least time, money, and access. Trip length is where urban planning and transport policy either collaborate or cancel each other out.

Gender-responsive spatial planning

A gender-responsive trip-length target would explicitly aim to reduce the distance women travel for care purposes, e.g. by bringing schools, clinics, and care facilities closer to residential areas. It would also track whether housing displacement is lengthening commutes disproportionately for women in low-income households. Spatial equity and gender equity are the same problem viewed from different angles.



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Sources:

- Transport for London (2025): Travel in London 2025: <https://content.tfl.gov.uk/travel-in-london-2025-the-travel-behaviour-of-london-residents-based-on-the-ltds-acc.pdf>
- TU Dresden (2024): Mobilitätssteckbrief für Berlin: <https://tu-dresden.de/srv>
- CMAP (2019): A pre-pandemic snapshot of travel in northeastern Illinois. Available: <https://cmap.illinois.gov/wp-content/uploads/My-Daily-Travel-pre-pandemic-travel-1.pdf>
- Risi München (2025): Mobilität in Städten – SrV 2023 Ergebnisse der Haushaltsbefragung zum Mobilitätsverhalten der Münchner Bevölkerung. Available here: <https://risi.muenchen.de/risi/dokument/v/9307363>

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Transformative Urban Mobility Initiative (TUMI): <https://transformative-mobility.org/>

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