

When Does Infrastructure Become Culture?

What 150 years of cycling history
can tell Norway about what comes next

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Cycling Cities: The Global Experience

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Norway has moved cycling forward

A strong platform for the next transition

9%

Oslo: share of all trips by cycling, 2025

+39%

Growth in Oslo's cycling share over past decade

155 km

Oslo's Cycling infra
built or upgraded since 2015

Norway shows:
policy choices, sustained investment, and institutional
commitment can change everyday mobility.

Historical question:
how do these gains become durable, inclusive, and self-reproducing?

Cycling Cities: The Global Experience

Comparison is our method



100+ researchers

100+ years

50 cities

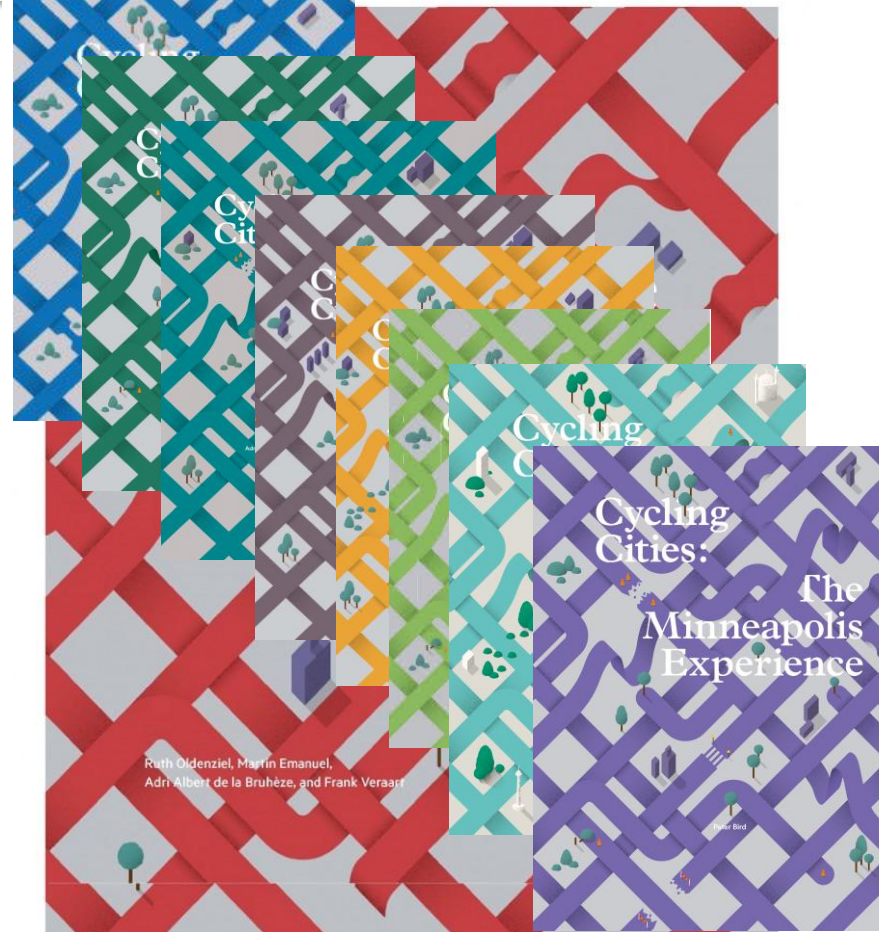
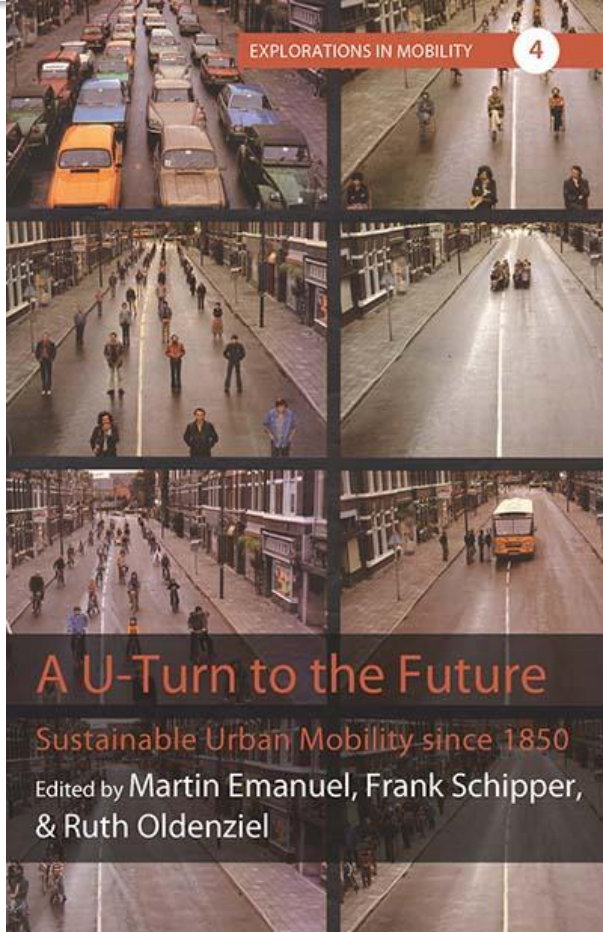
25 countries

...and growing

Why does cycling become ordinary in some places, decline in others, and return in still others?

Our research behind the framework

Long-term comparison, city histories, and usable pasts



100+ researchers • 50 cities • 25 countries — and counting

Five factors—one system

All five need to support cycling; no single lever is enough

1

Urban form

distance • density • destinations

2

Traffic models & governance

street design • standards • implementation

3

Mobility alternatives

walking • public transit • cars • micromobility

4

Social movements

advocacy • coalitions • contested priorities

5

Cultural status

ordinary practice • identity • legitimacy

Infrastructure without culture

can remain a corridor used mainly by confident existing cyclists

Campaign without conditions

can raise enthusiasm without changing what trips are practical

Five factors in relation

is the historical pattern behind durable cycling cultures

Mobility systems are made by people

History is not a sequence of technologies; it is a history of choices and actors

Ordinary cyclists

adopt • adapt • demand • abandon

Traffic engineers

allocate street space • define safety • set standards

Policymakers

fund • regulate • prioritize • coordinate

Car boosters

promote automobility • parking • road capacity

Activists & associations

contest priorities • organize • reframe cycling

**Mass motorization was not inevitable:
roads, parking, investment, regulation, and cultural status were politically negotiated.**

Motorization Did Not Simply Happen: It was Built

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Cycling was once ordinary urban mobility

Oslo, 1941: everyday practice under extraordinary conditions



Ordinary cyclists

used cycling for work, errands, food, social life, and independent mobility

Institutions & authorities

shaped what was possible through access, controls, roads, and competing transport priorities

Historical lesson

what becomes “normal” mobility is produced—and can be produced differently

Five Factors, Different Clocks

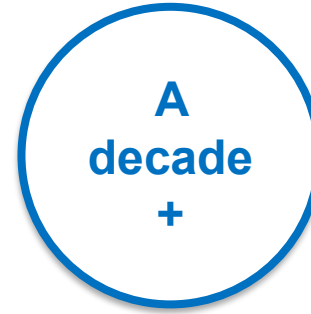
Policymakers need to manage interaction—and lead time



campaigns • pilots



rules • budgets • street
projects



connected networks
• institutional routines



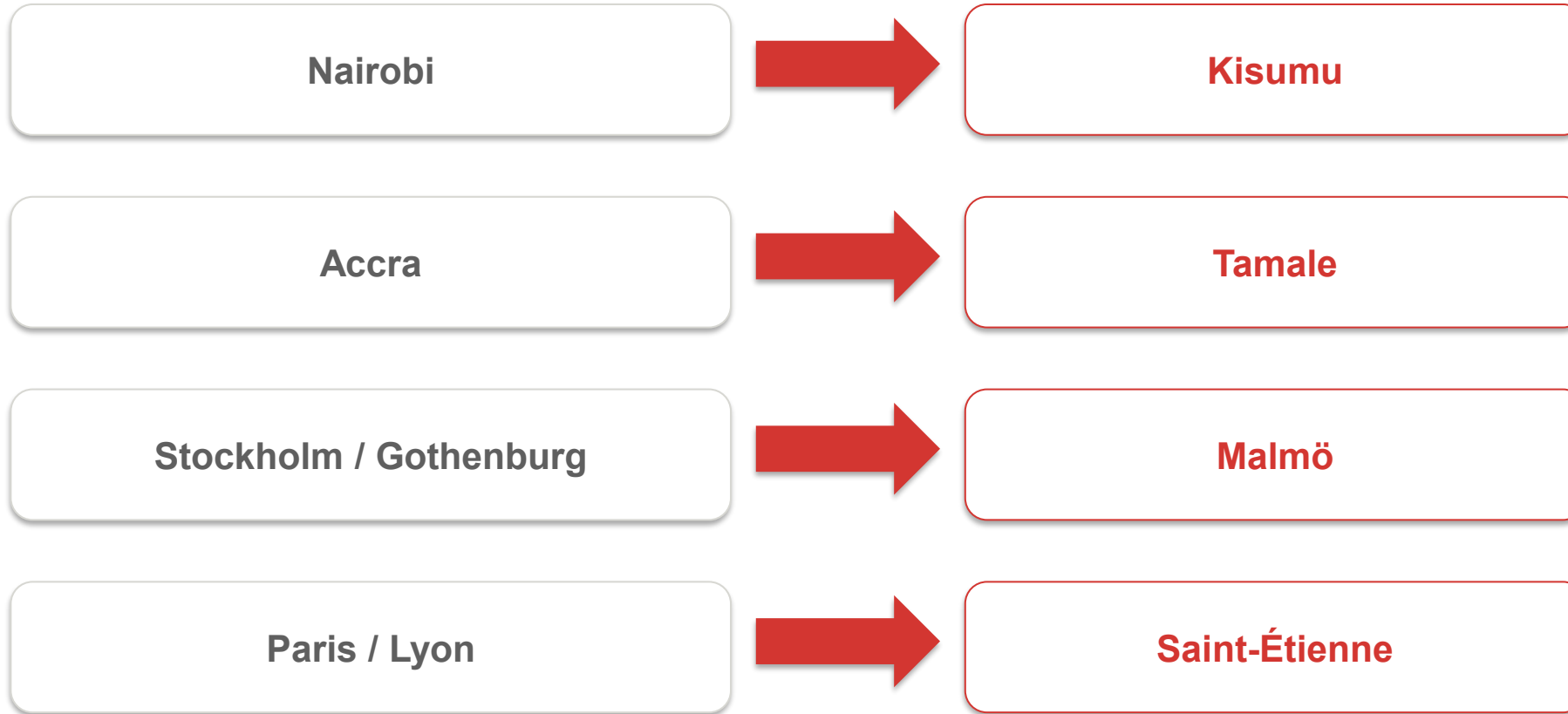
urban form • cultural expectations •
life-course habits

A three-year policy cycle can easily misread a twenty-year cultural transition.

Ask both: What can change now? What must today's decisions make possible later?

Small-city Paradox

“Benign neglect” can preserve bottom-up cycling—and create room to move up



Why an opportunity?

less extensive
public transit
historically

greater reliance on
individual mobility

sometimes less
intensive car-
oriented redesign

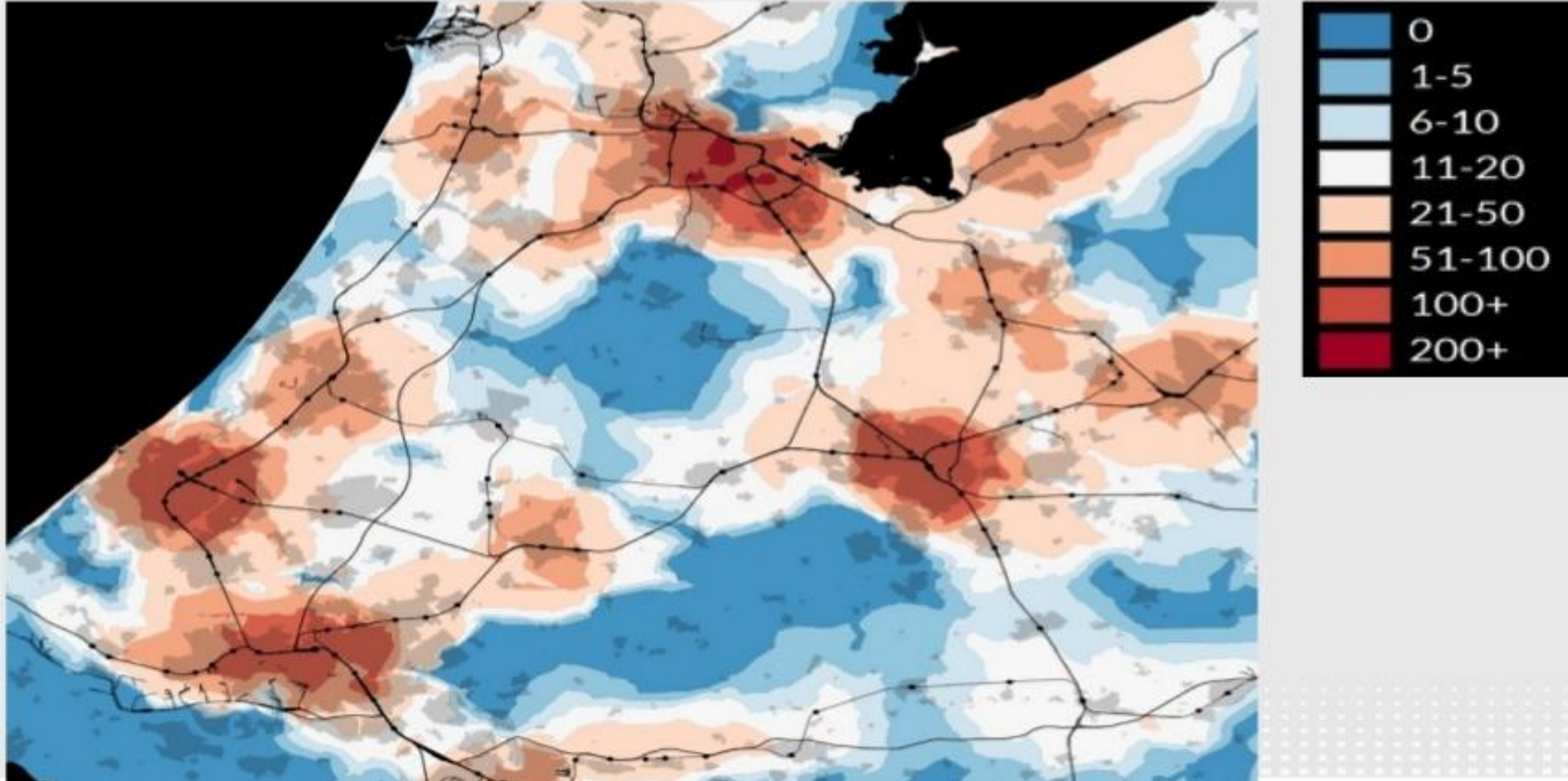
bottom-up cycling
can persist

Inter-urban
connections

For smaller cities, think beyond the center

The strategic network may be regional rather than metropolitan

Number of departing trains per hour within 20 minutes of cycling



How do we know the system works?

Look at those who expose its weak points: women • children • older adults

Women

Comfort and safety gaps reveal whether a network works beyond the confident commuter.



Children

Independent school and neighborhood cycling shows whether a culture is reproducing itself.



Older adults

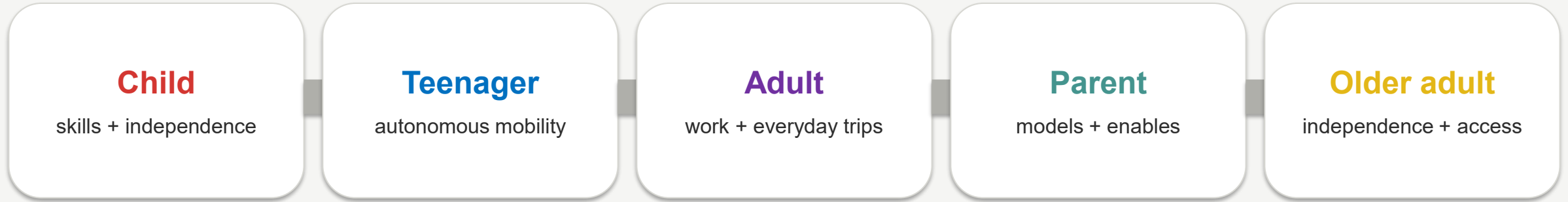
Local access and e-cycling show whether cycling remains viable across the life course.



**Norway's recent decline in youth cycling is therefore not a side issue—
it is a warning about cultural reproduction.**

The life cycle of cycling

A culture reproduces itself when cycling remains ordinary through changing stages of life

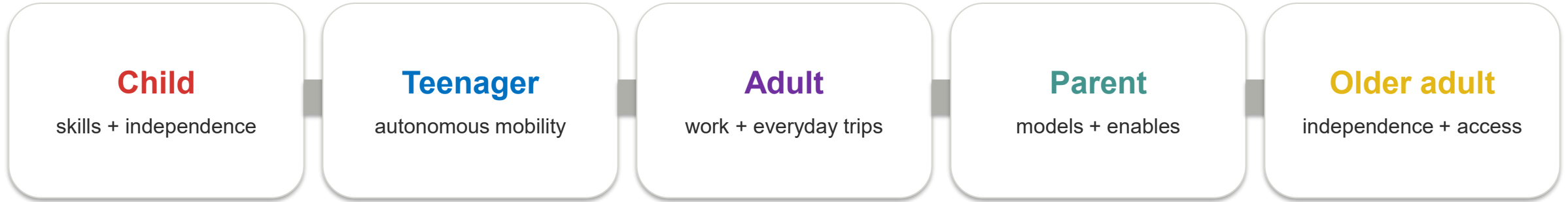


Break the cycle for one generation—and the consequences can last for decades.

The policy question is not only: How many adults cycle today? It is also: Are we producing tomorrow's adult cyclists?

Are We Producing Tomorrow's Adult Cyclists?

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Questions history leaves for Norway

- 1** Are all five conditions moving in the same direction?
- 2** Are policy timelines matched to the different lead times of change?
- 3** Are children, women, and older adults experiencing the transition too?
- 4** Can smaller cities develop cycling models suited to their own geography?
- 5** Are we connecting cycling to schools, shops, train hubs, and neighboring towns?

The 50-year Durability Test

Can an 8-year-old and an 80-year-old use the same cycling network comfortably and independently?

And will today's 8-year-old still be cycling at 58?

That is when infrastructure, governance, mobility alternatives, social movements, and culture have begun to reinforce one another.

