

Transport Systems that Protect Health and Climate

How are health, climate and transport connected?

In far too many instances, existing transport systems contribute to air pollution, road traffic injuries and deaths, physical inactivity, and socioeconomic exclusion. Reshaping mobility with a focus on health and equity will help to increase access to convenient, affordable transport and help to protect the climate.

Transport impacts affecting health and climate



Road crashes

Pedestrians accounted for more than **one-third of fatalities** from road crashes in low income countries in 2016.



Carbon emissions

Road vehicles account for nearly **three-quarters of transport CO₂ emissions**, as aviation and shipping emissions continue to rise.



Air pollution

Transport produces about **20% of small particulate emissions**, increasing risk of cardiovascular and respiratory diseases.



Insufficient activity

An estimated **25% of adults and 81% of adolescents** are not sufficiently active, due in part to transport designed for vehicles and not people.



Equitable access

The world's poorest make most journeys by foot, and in many cities, **half of residents** have insufficient access to jobs within 60 minutes.

Transport trends improving public health



Increasing walking and cycling investments

In response to the COVID-19 pandemic, **nearly 200 cities globally** have created pedestrian-only spaces and/or protected bike lanes.



Phasing out internal combustion engines

19 countries, at least 11 cities and regions, and a number of automobile manufacturers have announced phase-out commitments.



Phasing in electric bicycles and buses

Electric bicycles have surged in Europe, North America and East Asia, and **electric bus fleets** have surged in China, Chile and Colombia.



Increasing fuel economy standards

30 countries have improved fuel economy policies since 2018, which cover nearly 80% of all light-duty vehicles sold as of 2017.



Reducing second-hand vehicle imports

18 countries in Africa, Asia and Latin America have recently committed to limiting imports of polluting used vehicles.

Post-pandemic uncertainties with health implications

Sustainable urban mobility

Will **public transport** suffer from underinvestment and remote workspaces, or will it regain trust and ridership?

Will **walking and cycling streets** become permanent and widespread, or will car traffic resurge?

Will **ride-hailing services** continue to increase congestion, or will they become more efficient shared mobility services?

Inter-urban and global transport

Will **road freight** shift to rail and waterways, or will carbon-intensive long-haul trucking remain dominant?

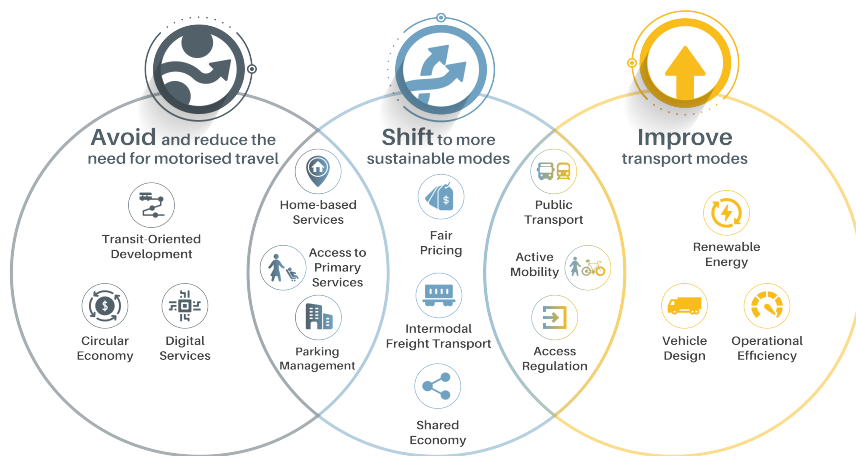
Will **global supply chains** remain disrupted, or will they innovate to meet emerging challenges?

Will **air travel** demand be permanently reduced, or will it adopt new patterns and protocols?

Recovery responses

Will **recovery packages** be deployed with accountability, or will they yield unintended consequences?

Will **positive transformations** be accelerated by government spending, or will they be stifled by debt?



*The A-S-I diagramme presents a non-exhaustive list of measures for illustrative purposes only.

Actions for delivering transport systems that protect health and climate

Applying Avoid-Shift-Improve measures through integrated, inter-modal and balanced approaches is critical to maximise the health benefits of sustainable, low carbon transport.

Read more:

[SLOCAT Avoid-Shift-Improve Refocusing Strategy](#)

Prioritise active transport and public transit in planning and infrastructure decisions



Reroute investment in roads towards **public and active transport infrastructure**.

Kisumu Kenya's mobility plan targets 55% walking/cycling trips (for men and women) and 80% public transport for motorised trips by 2030.



Remove subsidies for **high-carbon fuels, vehicles, highways, and airports**.

India reduced oil and gas subsidies 75% from 2014 to 2017, while increasing funding for renewable energy sixfold.



Implement fair pricing to reflect health/climate impacts, and raise revenues.

Road pricing in **Bogotá, Mexico City** and **Santiago**, could reduce vehicle travel 29% and generate daily revenues up to USD 600,000.



Invest in data collection to ensure public transport is locally relevant and reduces inequities.

Paratransit (or 'informal transport') routes have been mapped in cities including **Accra, Addis Ababa, Cairo, Dar es Salaam, Kampala, Kisumu, Lusaka** and **Mombasa**.

Regulate for and invest in efficient zero-carbon technologies and systems



Focus planning/infrastructure decisions on the **Avoid-Shift-Improve framework**.

In **Accra**, Avoid-Shift-Improve measures could avert nearly 40,000 deaths and reduce CO₂ emissions of nearly 160 million tonnes by 2050.



Increase investment in developing **low-carbon public, shared and freight transport**.

A study in **Rwanda** has shown how investment in low-carbon transport can reduce emissions in its capital Kigali and pay for itself within a decade.

Ensure that mobility solutions reduce inequities and benefit everyone



Ensure that everyone has access to **affordable and safe** zero-carbon transport.

Bogotá, Glasgow, and Milan are envisioning a "15-minute city," to allow residents to meet essential needs with a short walk/bicycle ride.



Adopt an **equitable, rights-based approach** to mobility decisions.

Burkina Faso will regulate paratransit taxis by 2025 by renewing fleets, increasing driver health insurance and adding fare collection systems.



Embed health and equity in transport policies through integrated social policies.

Increasing safe walking, cycling and public transport options in cities like **Delhi** and **São Paulo** can reduce pollution and increase physical activity.



Fund low-carbon transport in LMICs via high-income governments/ institutions

The **European Bank for Reconstruction and Development's** Transport Strategy links green economy, climate resilience, private sector action.