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Why green and healthy transport modes deliver vast rewards for cities

[Climate Action Planning](#)[Transport](#)

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Prioritising the movement of people using sustainable transport modes rather than private cars delivers vast benefits for the health of citizens and the prosperity of cities, as well as for the climate. This is why.

Transport emissions are a major source of greenhouse gas emissions and air pollution in cities

Emissions sources vary from city to city, but transport – and particularly on-road vehicle transport – accounts for a large portion of greenhouse gas emissions in the vast majority of cases. In New York City, 28% of emissions are from transport;¹ in Mexico City, the figure is 53%;² and across C40 cities, transport accounts for an average of 30% of cities' emissions.³

Traffic is also the biggest source of urban air pollution, driving up the risk from serious health conditions such as premature birth, asthma, cancer, and lung and heart conditions. Globally, it is responsible for around a quarter of particulate matter in cities' air.⁴

Increasing sustainable transport mode share delivers big rewards for city economies, health and communities

Private cars are the least efficient way to move people around cities, whether fossil-fuel based or electric. They take up too much space to accommodate all the trips taken, especially when transporting only one or

two people. Peak capacity on a single lane for different modes looks something like this



English



NACTO Street capacity comparison

00:05

Cities designed for walking, cycling and public transport, and with fewer and cleaner cars on the road, can reap vast rewards:

Higher-density, mixed-use development financially outperforms car-dependent sprawl and improves cities' financial solvency. Car-centric development and urban sprawl is typically a net-drain on city finances because of the high cost of providing and maintaining the infrastructure and services these areas need, relative to the tax revenue they contribute. In contrast, denser mixed-use development is productive for city purses. Cities with too much low-density development risk long-term financial difficulty or even bankruptcy. As sprawl neighbourhoods tend to be wealthier, this also means that poorer neighbourhoods within a city are usually subsidising wealthier ones. [This short video](#) looks at the case of Lafayette, Louisiana.

Reduced congestion boosts city productivity. Traffic congestion holds back our economies through lost time and productivity. For example, before [London's Congestion Charge](#) zone was introduced in 2002, time lost to congestion cost the city's economy up to £4 million a week.⁶ In Lagos, traffic congestion is severely impacting businesses, with an estimated annual economic cost to the city of more than \$9 billion.⁷

People-friendly streets that promote walking and cycling have a clear economic case. They can boost



local employment, footfall, retail sales and rents. In Lancaster, California, a drastic reduction in space for vehicles on a downtown boulevard, coupled with simple changes in street design to prioritise walking and cycling, has been a catalyst for economic and social activity, attracting \$130 million in private investment and generating \$273 million in economic output over four years. The initial investment from the city was \$11.5 million.⁸ Research for London found a £724 million economic benefit for an £80 million active travel spend.⁹ After Oslo reduced car-parking, supported cycling and public transport, and pedestrianised streets in the city centre, footfall in the centre increased by 10% and there is greater demand for retail premises on the car-free streets.¹⁰ Vancouver's Downtown Business Association have become a vocal supporter of bike lanes, after initially opposing them, because they have proven to be better for business than the street parking they replaced.¹¹

Active travel reduces depression, anxiety, stress, obesity and chronic disease.¹² Lack of physical activity results in physical and mental health problems, lost productivity, higher rates of absenteeism and higher healthcare costs. It kills more people today than smoking.¹³ Supporting people out of cars and into active travel – particularly walking and cycling but also public transport, which typically leads to more activity – significantly lowers these risks. A cost-benefit study in New Zealand found the benefit from investments in walking and cycling outweigh the costs of building them by 10 to 1, with health gains from active transport delivering the most significant economic benefit.¹⁴ Oklahoma City's former mayor (2004–18), Mick Cornett, credits investment in people-centred streets with helping to turn around the city's economic fortunes as well as tackling its obesity problem, yielding results in just five years.

Cutting traffic means cleaner air and less noise. People breath unsafe air in over 90% of cities globally, causing a major threat to public health.¹⁵ Noise pollution, meanwhile, can cause sleep disturbance, cognitive impairment in children and cardiovascular disease – in Europe, it is the second biggest environmental problem affecting health after air pollution.^{16, 17} The overwhelming majority of noise in cities is caused by motor vehicles.

Car parking is a profoundly inefficient – and damaging – use of valuable space in cities. On average, private cars are parked for over 95% of the time.¹⁸ Cities including New York, London, Paris, Vienna, Boston and Hong Kong have parking coverage of between 15% and 30%.¹⁹ Parking spaces push buildings further apart, making it harder to walk and encouraging more driving. It also limits the vibrancy and sense of community in local areas, while vast expanses of asphalt increase the urban heat island effect and risk of flooding. Cities have a huge opportunity to turn parking into housing, productive uses like shops and office buildings, and for walking, cycling and public transport stations.

Fewer cars could lead to safer streets. In Kansas City, the police reported in 2008 that crime decreased by 74% in the city's Kessler Park when a 2.6-mile byway was turned car-free on weekends.²⁰ More recently, the introduction of low-traffic neighbourhoods in London's Waltham Forest, from 2015, was associated with an 18% reduction in crime in three years, with an even larger reduction for violent and

sexual offences.²¹ Less traffic also means fewer deaths on city roads – for example, Oslo recorded zero pedestrian and cyclist deaths for the first time in 2019 after implementing measures to minimise cars (by comparison, in the same year London and New York City recorded 79 and 149 pedestrian and cyclist deaths respectively).²²

Cities can take action today

Transport decisions are within the powers of most cities, and city leaders now have an unprecedented range of mobility options. A future where the majority of citizens travel on foot, by bike or by shared transport is within cities' grasp. Cities can benefit from the lessons and experience from leading cities around the world.

Priority actions for cities include:

- **Implement transit-oriented development.** These are people-friendly urban planning policies that encourage dense, mixed-use development around transit stations to encourage public transport use, walking and cycling. Cities can also implement '15-minute city' urban planning policies to help residents access everything they need within a short walk or bike ride from home, while creating more vibrant neighbourhoods.
- Build infrastructure and implement schemes to increase the rates of walking, cycling, and public and shared transport use for all citizens. In the wake of the COVID-19 pandemic, investment in public transport is critical for delivering a healthy, sustainable and equitable recovery.
- **Enact low- or zero-emission areas** to target vehicle emissions.
- Build electric vehicle charging infrastructure and incentivize the uptake of electric vehicles to transition the vehicles left on the roads away from fossil fuels.
- Collaborate with suppliers, fleet operators and businesses to accelerate the shift to zero emissions vehicles and reduce fleet vehicle miles. Lead by example by procuring zero emission buses and vehicles for city fleets as quickly as possible.

Read [here](#) about these and more impactful actions that cities can take to reduce transport emissions.

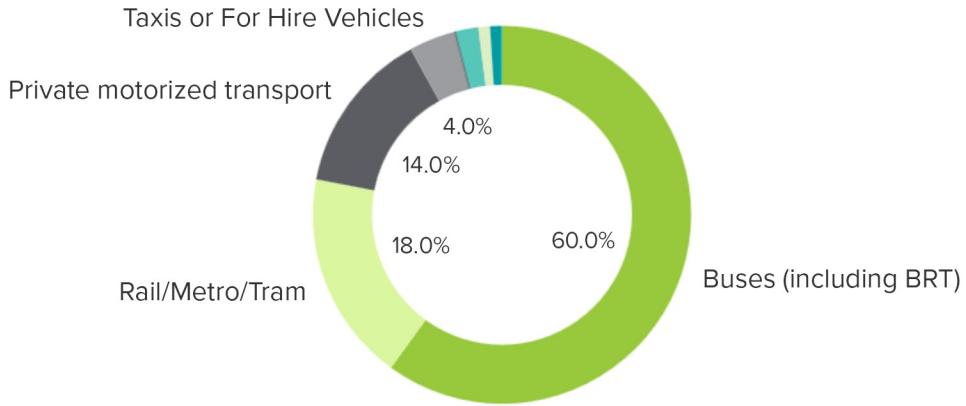
Select your city in the graphic below to find out the current transport mode shares and how the city compares to some of those with the highest travel by sustainable modes.



Select a City

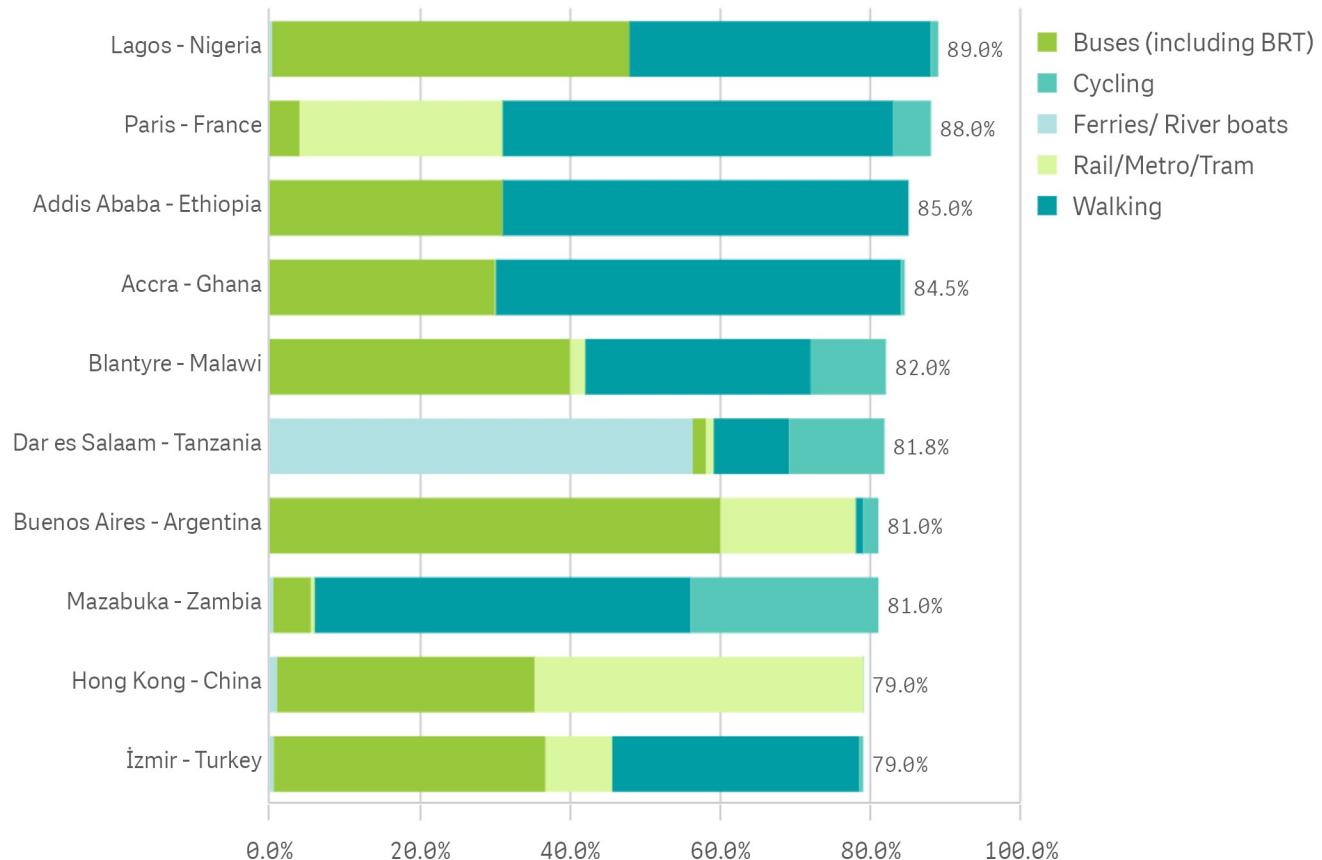
BUENOS AIRES - ARGENTINA

Transport mode share



Data source: CDP 2019

Sustainable transport mode share in some leading cities



View more transport data for your city in our [Transport Data Explorer](#).



The C40 Green and Healthy Streets Declaration

Signatory cities to the C40 Green and Healthy Streets declaration have committed, as priority actions, to:

- Procuring, with our partners, *only* zero-emission buses by 2025 at the latest.
- Ensuring that a major area of our city is zero emission by 2030.

These priority actions can also be adopted by non-signatory cities around the world as impactful, ambitious steps toward streets free of transport emissions. Several cities have already achieved one or more of these goals – Shenzhen, for example, already has a fully electric bus fleet.

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