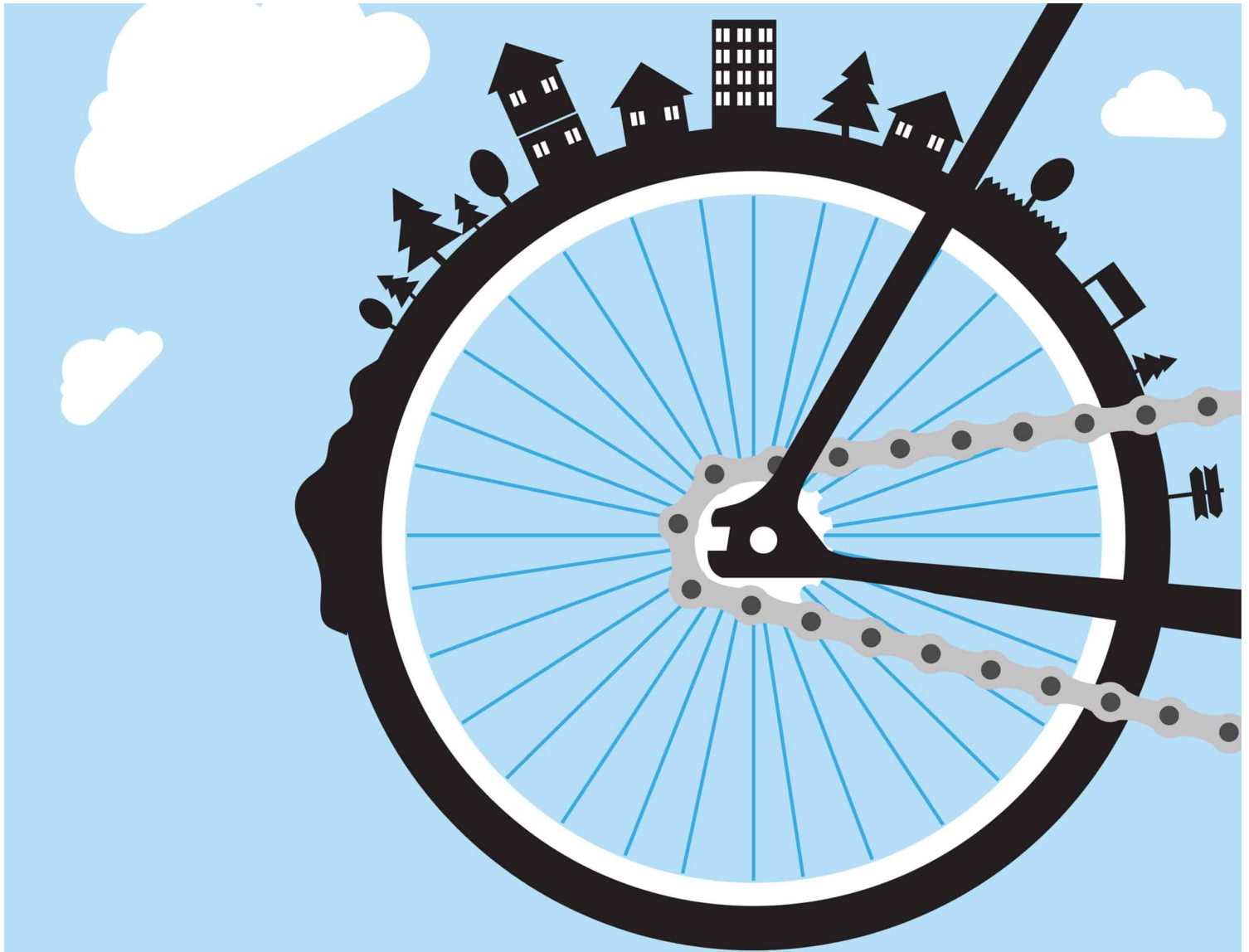




Benefits of Cycling [Draft Version]

This guide will give you information about the benefits of cycling and introduce the actions you can take to increase cycling in your city.

Explore the Collection

This resource is part of a suite of learning products linked with the following publication.

SAFE CYCLING DESIGN MANUAL FOR ISTANBUL

Executive Summary

April 2015



www.embarqturkiye.org



PUBLICATION

[Safe Cycling Design Manual for Istanbul](#)

This manual examines three main topics: (1) the benefits of urban cycling; (2) governance of cycling infrastructure and user preferences; and (3) solutions for implementing safe, sustainable cycling infrastructure. The manual draws from field research and a survey of over 3,000 stakeholders in Istanbul.

Course Content

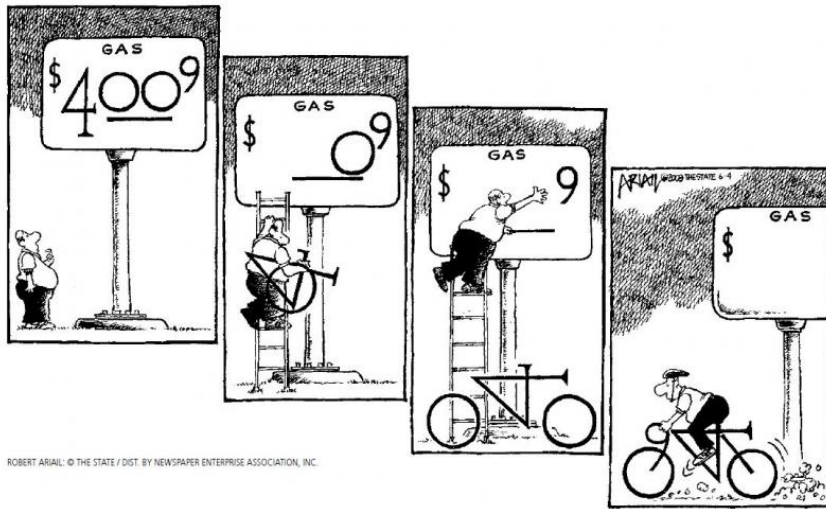
How can cycling bring economic benefits to our city?

Greater use of cycling in urban areas:

- reduces energy costs
- decreases the cost of transport infrastructure for municipalities
- reduces the consumption of natural resources
- creates economic dynamism in urban centers by encouraging flexible mobility

Affordable

While only 10% of the world's population can afford a car, an estimated 80% of people can afford a bike.

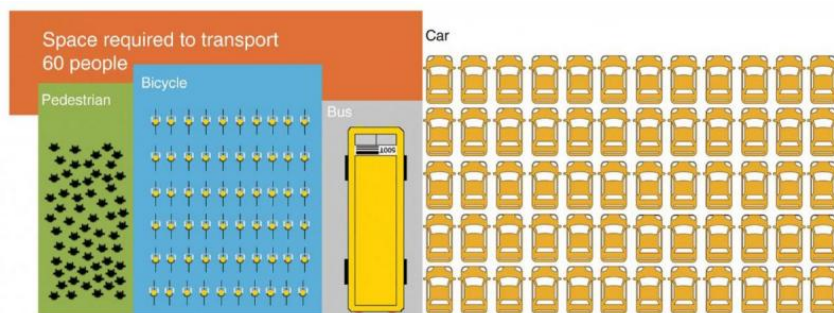


Economic Dynamism

Cycling encourages flexible mobility and shorter trips. It also encourages people to do more activities at city center. It offers an economically realistic form of transportation and recreation.

Cost Effective

Bicycle infrastructure is cost-effective for local governments. A roadway can carry seven to twelve times as many people per meter of lane per hour by bicycle as compared to by automobile in urban areas.



References

[Queensland Government Department of Transport and Main Roads](#)

[Safe Cycling Design Manual for Istanbul](#)

BCRPA, 2011, Bicycle Facilities Design Course Manual

Image 1 sourced from Active Transportation for America

How does cycling improve our environment?

Cities where cycling is popular and integrated with transport network offer:

- **A cleaner, more livable environment**

It is possible to achieve significant savings in transportation systems, depending on the design of the urban centres, where bicycle-focused transportation is common. **In the same space used by 7 cars, a bike rack can comfortably hold 80 bicycles with space for future expansion.**

- **Better air quality**

Cycling does not consume fossil fuels and therefore contributes neither to air pollution nor climate change. Use of bicycles rather than private cars on short-distance urban trips also reduces emissions.

References

[Safe Cycling Design Manual for Istanbul](#)

[Projects and Programs Manual to Encourage Cycling in Communities](#)

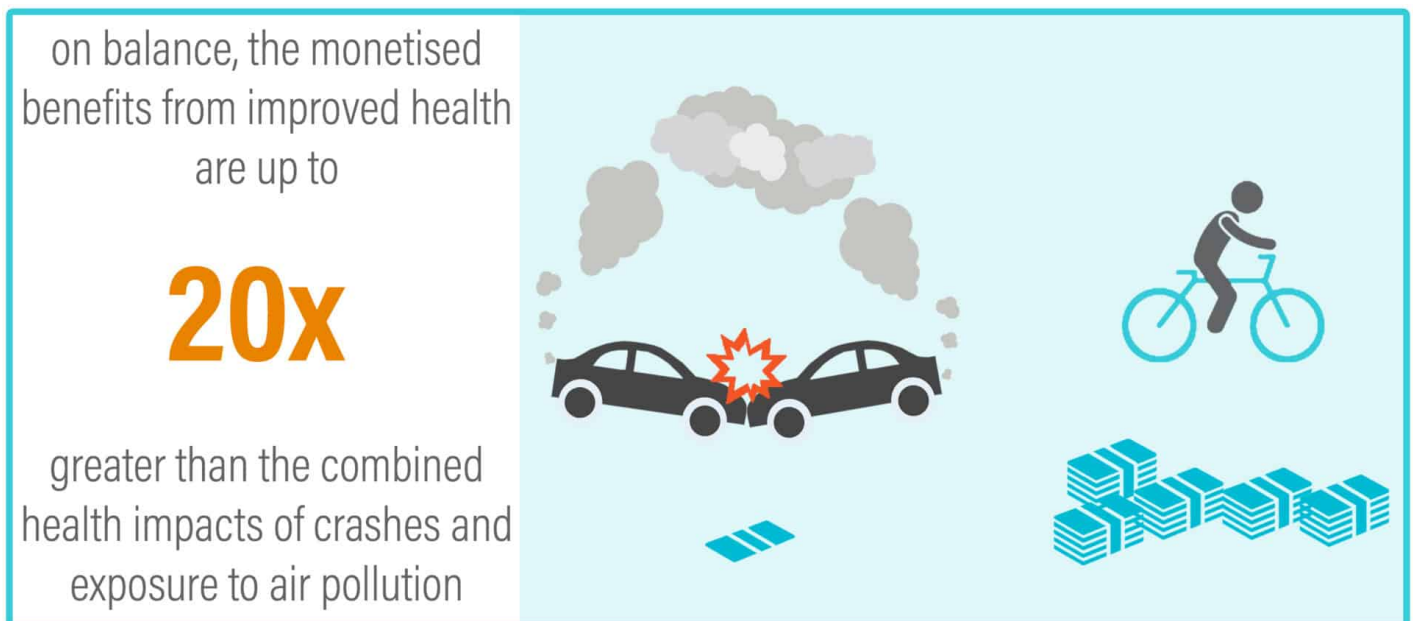
How do the health benefits of cycling help our city?

Globally, around 23% of adults aged 18 and over were not active enough in 2010 (men 20% and women 27%). In high-income countries, 26% of men and 35% of women were insufficiently physically active, as compared to 12% of men and 24% of women in low-income countries. The drop in physical activity is partly due to inaction during leisure time and sedentary behaviour during the job and at home. Likewise, an increase in the use of “passive” modes of transportation also contributes to insufficient physical activity.

Cycling increases physical exercise and therefore reduces the risk of cardiac diseases, cancer, and other health problems that lead to premature death. For this reason, several institutions and organizations have developed strategies to promote physical activity and proposed policies to encourage cycling.

In Turkey, three people out of four have inadequate levels of physical activity.

In Mexico City, the reported prevalence of Type 2 diabetes is 13.9% for adults, and 74% are overweight or obese.



Text from Philippe Crist's presentation OECD: Cycling Economy and Impact. Graphic prepared by Merve Akı & Hande Donmez.



- Risk of cardiac diseases
- Cancer
- Other health problems leading premature death

- Physical exercise



Source: Safe Cycling Design Manual. Graphic prepared by Merve Akı & Hande Donmez.



28%

Fewer commuter cyclist deaths
compared to population aged
26-60 years

Source: Cities Safer by Design



Cyclists take **50%** fewer sick
days a year compared to non-cyclists

Source: Cities Safer by Design

References

[WHO](#)

[Safe Cycling Design Manual](#)

[C40 Cities, Benefits of Climate Action: Piloting a Global Approach to Measurement](#)

[Philippe Crist, "OECD: Cycling Economy and Impact"](#)

How can cycling improve quality of life for our citizens?

In social terms, walking and cycling:

- Increase transport options and flexibility
- Encourage people to move around and explore new places
- Improve the perceptions of urban spaces

The bicycle can be a symbol of freedom and economic opportunity for community residents. There are many ways to improve social equality by integrating the bicycle into a sustainable mobility system.



Photo by Benoit Colin

References

[Safe Cycling Design Manual](#)

An example from Brazil: REBICYCLE

Rebicycle is a program set up by the Rio de Janeiro state government that recycles used bicycles and discarded bike parts. The goal of the program is to promote cycling and, consequently, social inclusion, focusing on improving quality of life. The initiative stimulates cycling as a mode of transportation, in particular among children and teenagers from low-income communities. It promotes awareness on the importance of sustainability and the value of cycling and the environment.

The Recycle program also works in prison education classes, offering inmates informal training in bicycle mechanics. The inmates learn and teach repair techniques using discarded parts. The new bicycles are donated to the communities. An added benefit of this program is that it gives inmates the opportunity to return to society with an employment option for social reintegration.



Bicycle workshop in the Complexo do Alemão favela. Photo by Silvia Ballan.



Bicycle workshop in the Complexo do Alemão favela. Photo by Silvia Ballan.

References

[Projects and Programs Manual to Encourage Cycling in Communities](#)

An example from Turkey: YELLOW BICYCLE

Yellow Bicycle Project aims to create awareness on the need to lead an active and healthy life, and to encourage cycling, one of the most entertaining ways of physical activity. This project -realized by ETI and Active Living Association in Turkey- is a good case for a private and NGO collaboration on promoting cycling.

Yellow Bicycle Project began in the city of Eskisehir in 2014 and continued in Istanbul in 2015. Aiming to spread the “Activity” concept within the society through bicycle, the project focused on “Women” in Istanbul in 2015 and encouraged bicycling with the leadership of women. Project cooperates with “Bicycling Woman Initiative” created by bicycling women in Istanbul and underlines the “possibility” of bicycling in all fields of life.



References

[ETI, Yellow Bicycle Project](#)

An example from India: STREETS FOR ALL

Streets for All Program & Raahgiri Day

The Streets for All initiative is a sustained community movement towards the provision of better and safer

walking and cycling infrastructure in our city. It provides a platform for engagement between government, media, NGOs, technocrats and the community, in order to jointly develop workable solutions to improve the safety and mobility conditions on our streets. Streets for All could be a weekly, bi-weekly, or monthly open streets event when select streets are opened up for the exclusive use of pedestrians, cyclists, and other users of non-motorised transport (NMT).

Following the success of Colombia's Ciclovía, which began in Bogotá in 1976, similar open streets initiatives have spread to at least 110 cities worldwide. The initiative started as Raahgiri Day in Gurgaon in 2013, one of the first successful open streets events in India. It has been replicated and adopted under different names in several cities across India with new events taking place weekly.

Such initiatives have been successful in helping cities understand the importance of cycling, thus implement safe cycling infrastructure and projects like public bicycle sharing.



Raahgiri Day



Cycle track & PBS in Bhopal, India

References

[Streets For All Toolkit](#)

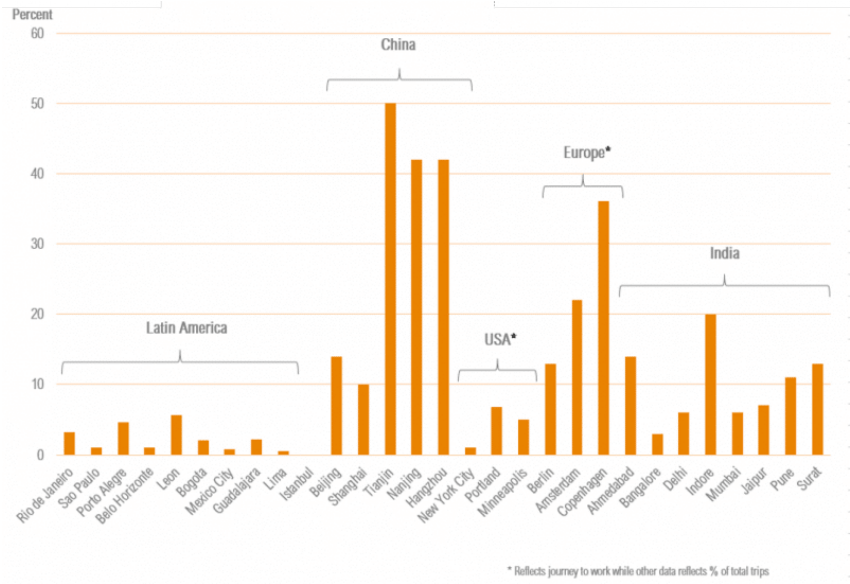
How have cycling rates changed around the world?

Bicycling in many cities is a main form of transport.

In most countries, a high proportion of people own a bicycle.

Asian cities once had a great legacy of bicycling, but this is on the decline in China and increasing in the United States and other developed European countries.

Research has shown that U.S and European cities with higher rates of bicycling have fewer overall traffic crashes, and these cities are also home to connected streets and advanced networks of bicycle lanes, off-street paths, ample bike parking, and bicycle sharing systems.



Graph compiled based on most available data: Latin America, the Urban Mobility Observatory, CAF; China, Pucher et. Al 2007; India, EMBARQ India, Europe: EC Urban Audit, LTA Academy

References

[European Commission, Walking and Cycling as Transport Modes](#)

[Cities Safer by Design](#)

How can we increase the rate of cycling in our city?



DEVELOP POLICIES

- Implement cycling policies and programs
- Consider cycling as a transportation mode and include in mobility plans/city plans
- Encourage cycling with grant programs
- Support local agencies during the implementation phase
- Build capacity for decision makers and implementers in local agencies
- Find out what the population wants and needs in order to guide actions

DESIGN AND IMPLEMENT

- Design a continuous cycling network
- Promote safe cycling infrastructure
- Consider the integrations between cycling and public transport
- Provide maintenance of cycling infrastructure periodically
- Implement bike-sharing system to promote cycling

Learn more: [Design Principles of Cycling](#)

Bike use will rise as investments are made in bike lanes and parking, safety features, and supportive policies, as has happened in various cities and as projected by other modeling.

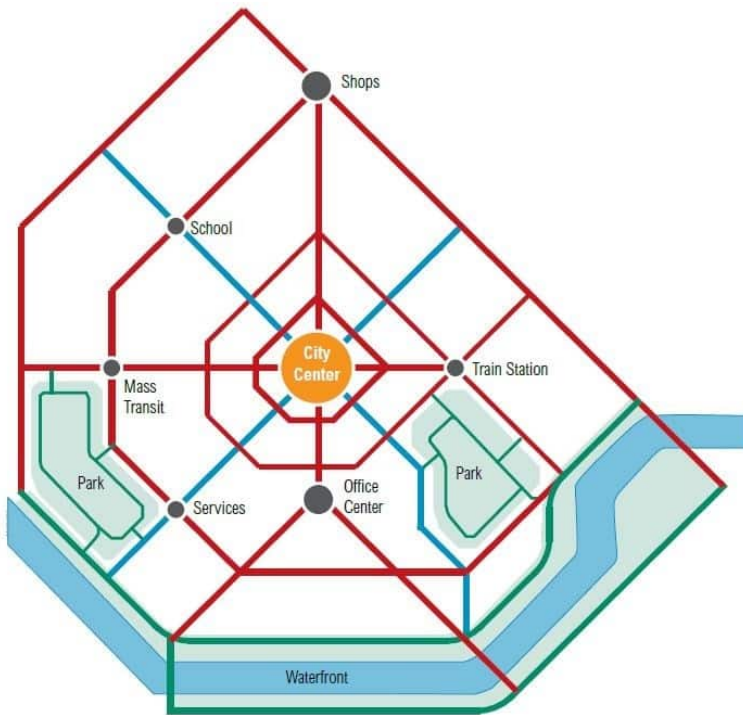


Diagram of a bike network that connects important destinations. Source: Cities Safer By Design

RAISE AWARENESS

- Raise public awareness and promote cycling within communities
- Implement cycling projects with the participation of local communities, NGOs, and other stakeholders working on bicycle transportation
- Organize promotion campaigns by using media resources, public service advertising, seminars
- Organize events like Raahgiri Day, World Carfree Day, and Open Roads, which link safety and cycling.

More: [A case from Mexico](#)

References

[Safe Cycling Design Manual For Istanbul](#)

[ITDP \(2014\) A Global High Shift Scenario: Impacts And Potential For More Public Transport, Walking, And Cycling With Lower Car Use](#)

[Cities Safer by Design](#)

An example from Mexico: “Muévete en bici”

On regular Sundays for the past ten years (since 2007), part of the Paseo de la Reforma, the biggest city centre street, is closed to cars to provide space for pedestrians and cyclists as part of the “Muévete en bici” (*Move by Bike*) program. This event has grown to become the fifth largest car-free day in Latin America, with 48 km of streets closed to motorized traffic.

In 2008 the Ministry of Environment opened a Non-Motorized Mobility Strategy Office to coordinate the building of better bike infrastructure, integrating cycling into the wider transport system, creating a cycling culture, and increasing access for all the city's residents to cycling. Pedestrianization of the city's historical centres and neighbourhoods began in 2010. Cycling-infrastructure was introduced as part of the "Programa de Corredores de Movilidad No Motorizada" (*Non-Motorized Lanes Programme*), adding 31 km of bicycle lanes.



Photo by karmacamilleon via Flickr.

References

[UN Environment \(2016\) Global Outlook on Walking and Cycling Policies & realities from around the world](#)

[Fernando Paez & Gisela Mendez, TheCityFix, "Mexico City's new mobility law shifts focus towards people, not cars."](#)

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<https://thecityfixlearn.org/courses/benefits-of-cycling-draft-version>