



# POLICY BRIEF

## ENSURING OPTIMUM ACCESSIBILITY OF PEDESTRIAN ZONES

### INTRODUCTION

*Street life is the motor of society, where humans come together. In order to regain urban space for citizens, a rising number of cities around the world have banned private cars in parts of the city. To benefit the economy, social cohesion and sustainability, there is a need to align traffic and transport policies to accommodate pedestrian zones in the city.*

*The role of public transport is essential in bringing the balance that is needed to ensure accessibility to these pedestrian zones. The scope of this UITP Policy Brief is about the creation of large pedestrian zones including whole streets and public squares and ensuring their accessibility by involving all concerned stakeholders and especially public transport. This paper aims at demonstrating the critical role public transport and combined mobility play to ensure optimum accessibility of pedestrian zones and hence the need to involve these actors from the very beginning of the project.*

### PEDESTRIAN ZONES

#### A STRATEGIC PLACE IN THE CITY

An important part of city life happens on the streets. Street life is the motor of society, where humans come together.

As cities grow and vehicle traffic becomes increasingly important, a rising number of cities have banned or have made plans to ban private cars in parts of the city. These cities are part of a movement to regain urban space for citizens and wish to create places where people can meet and interact. Pedestrian areas are usually introduced for reasons including better quality of life, safety, air quality and lower noise levels and they have social and economic goals. These goals could be either the revitalisation of central business districts, restoring the concept of cohesiveness among communities, or the development of new opportunities<sup>1</sup>.



▶ Rio de Janeiro, Brazil

<sup>1</sup> Project for Public Spaces, Transit Cooperative Research Program, & National Research Council (U.S.) (Eds.). (1998). Transit-friendly streets: design and traffic management strategies to support livable communities. Washington, D.C.: Transportation Research Board, National Research Council ; National Academy Press.

## THE DIFFERENT TYPES OF PEDESTRIAN ZONES

Pedestrian zones (car- or auto-free zones, pedestrian precincts) are areas of a city or town reserved for pedestrian-only use and in which most or all motorised traffic is prohibited. Some are closed to motorised traffic on a permanent basis, some only during certain times of the day. Pedestrian zones can be individual pedestrian streets with or without intersections or large self-contained areas including whole streets and public squares<sup>2</sup>.

### GAINING BACK URBAN SPACE FOR PEOPLE

In Seoul (South Korea), the Metropolitan Government has been operating four pedestrian zones and providing an extensive range of events so that citizens could enjoy walking in car-free zones. These zones are operated during limited times such as the Deoksugung Stone Wall Path that opens from 11:00-14:00 on weekdays and 10:00-17:00 on weekends. The Seoul Metropolitan Government plans to hold more varied and specialised events and extend the scope and hours of pedestrian zones so that more citizens can enjoy walking in these regained urban areas.



► Seoul, South Korea

## REAL BENEFITS FOR CITIES, PEOPLE AND BUSINESSES

Strategic locations such as city-centres are mainly used for shopping, housing, working and for leisure activities. To make these areas more lucrative and to improve free circulation, pedestrian zones are often proposed in such locations.

### • economic impact of pedestrian zones

Although shop owners are often initially sceptical, the footfall - the number of people entering a shop or shopping mall - clearly increases following the pedestrianisation of shopping areas. According to a study<sup>3</sup> in New York, the expansion of pedestrian facilities in Manhattan reduced commercial vacancies by 49% in Union Square North, and retail sales volumes increased by 172% when an underused parking was converted into a public park on Pearl Street (Brooklyn). In France, city-centre and convenience stores represent up to 50% of the shops and the large majority of clients reach them by walking, cycling or public transport<sup>4</sup>.

### • improvement of the urban realm

The improvement of the urban realm through pedestrianisation enhances the attractiveness for citizens and businesses. When Copenhagen's main shopping street, Stroget, was pedestrianised in the 1960s, footfall increased. But the real achievement lies in allowing people access to the public realm. The number of people using the streets doubled and cafe culture boomed. In the following decades, tourism and migration increased considerably.

### • a chance for safer, healthier and more sustainable cities

The benefits of walking and cycling are widely recognised by health experts. Pedestrian zones create an environment that reduces land reserved for roads and parking and preserves open spaces which leads to a reduction in the air and noise pollution levels. Pedestrian zones are key to enable healthier lifestyles and also contribute to reducing road traffic accidents as well as the heat island<sup>5</sup> effect.

2 Walter Grabe and Joachim Utech (1980). "The serving by public transport of pedestrian precincts in urban centres". International Association of Public Transport (UITP).

3 Litman, T. (2017). Economic value of walkability. World Transport Policy & Practice, 10(1), 5-14

4 ADEME.Commerces de centre-ville et de proximité et modes non motorisés, Rapport final Publication n°4841,

5 An urban heat island is an urban area or metropolitan area that is significantly warmer than its surrounding rural areas due to human activities (Wikipedia, 13/11/2017)

## BETTER AIR QUALITY WITH THE PEDESTRIAN PRIORITY PROGRAMME

Buenos Aires (Argentina), a city with 2.8m inhabitants and with 3m commuters, had its urban transport and public space completely saturated. In parallel, in the last 10 years the motorised traffic had increased rapidly, exacerbating the quality of life through high levels of noise, traffic accidents, and health and emissions issues.

To address these, the city implemented their Pedestrian Priority Programme which aims to put pedestrians first, focusing heavily on generating bold changes to public spaces to strengthen the diversity of activities, and promote social and functional recovery. In this way pedestrian improvements are a priority for the urban planning area of Buenos Aires. By doing so, there was an increase of 13% of pedestrians, along with a reduction of 97% of emissions (including CO<sup>2</sup>).



► Buenos Aires, Argentina

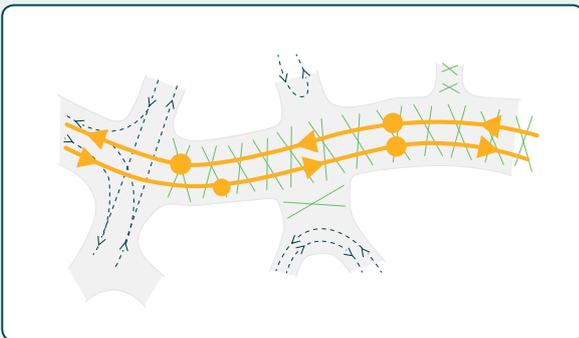
## MOBILITY SOLUTIONS TO ENSURE THE ACCESSIBILITY OF PEDESTRIAN ZONES

There is a great variety of approaches to human-powered personal vehicles such as bicycles, inline skates, skateboards and kick scooters. In some pedestrian zones anything with wheels is prohibited; others ban only certain categories; others segregate the human-powered wheels from pedestrian traffic; and others have no rules at all.

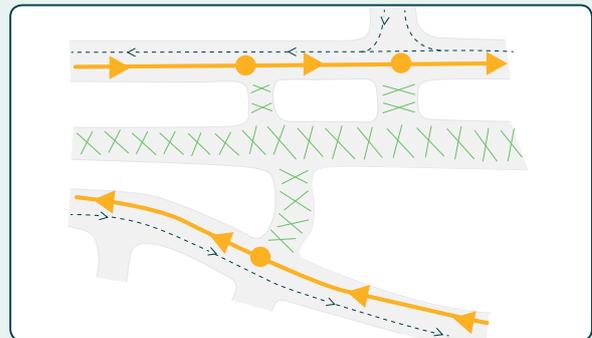
On top of these private solutions, different public mobility solutions should be aligned to ensure a maximum accessibility of the pedestrian zone. The public transport offer in this regard should be adapted to the needs and numbers of visitors to the area. There are different modes and mobility services that could serve a pedestrian zone:

- **Inner public transport and mobility services (available in or crossing the area):**  
Tramway, underground/metro, autonomous vehicle shuttles, electric shuttles, bike-sharing
- **Outer public transport and mobility services (available at the outskirts of the area):**  
All public transport services, car-sharing, parking solutions, bike-sharing, taxi stations, ride-sourcing

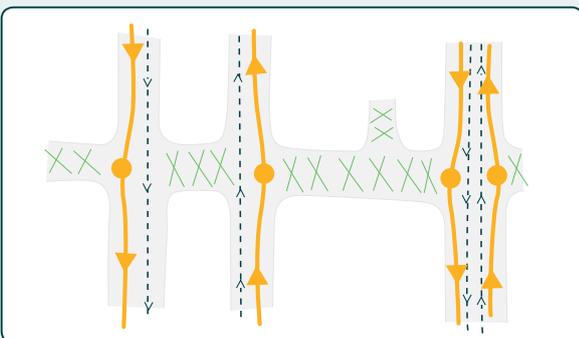
### PUBLIC TRANSPORT SOLUTIONS TO SERVE PEDESTRIAN ZONES



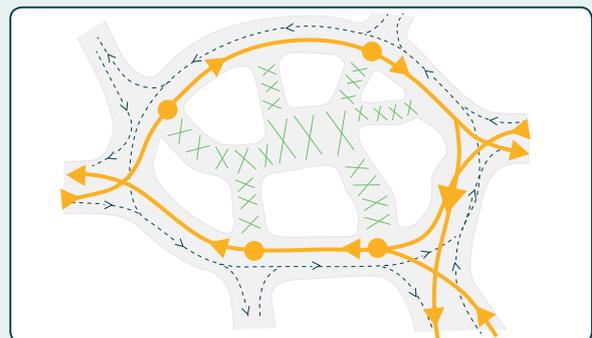
► Public transport running in the centre of pedestrian precincts



► Public transport running parallel (left-hand traffic system)



► Public transport crosses pedestrian precinct



► Tangential solution: public transport in left-hand traffic system (doors on pedestrian precinct side)



## MOBILITY REORGANISATION

### INVOLVEMENT OF PUBLIC TRANSPORT AND COMBINED MOBILITY ACTORS

By involving public transport companies from the very beginning of the project in order to identify how to best serve the pedestrian zone, cities will ensure excellent accessibility of this zone. Public transport services are indeed built as networks where connections between different modes are essential for an optimum service

quality and coverage. Typically, metro stations and bus or tramway lines are connected in order to ensure seamless travel for travellers and the public transport service quality and ridership can be affected negatively if these connections are broken. Preliminary studies should estimate the demand for efficient feeder services to the pedestrian zone and public transport services should be organised and reinforced accordingly. Car-sharing, bike-sharing and taxi operators also need to be consulted to ensure demand will be met and that space for station relocation, if necessary, is secured and clients can be informed well in advance.

### INVOLVING MOBILITY ACTORS FROM THE START

In Vienna (Austria) “Bognergasse-Tuchlauben” is the pedestrian zone located in the city centre and was introduced to improve the urban realm. It is fully accessible by inner public transport and mobility services with public transport, bike-sharing and rickshaw services as well as outer services such as taxi, car-sharing, private car, public transport, bicycle, bike-sharing, rickshaw and horse carriage. Bus routes had to be reorganised such as City Buses 1A, 2A and 3A that got new and better routes. Taxi points were reorganised, car parking was removed and bicycle parking was retrofitted to deal with parking issues. Public transport passenger numbers have increased considerably and the city considers the pedestrian zone a success as it has achieved its objective of creating a better urban realm. This success stems from the excellent cooperation with public transport and mobility service providers, who were intensively consulted before the implementation process.

### DO NOT SKIP THE CONSULTATION

In Brussels (Belgium) the “Boulevards du Centre”, also known as ‘le piétonnier de Bruxelles’, is the extended pedestrian area around the famous Grand Place. It was created in 2015 and is one of the largest pedestrian zones in Europe (50 hectares). Unfortunately it is not a good example in terms of implementation as public transport and combined mobility service providers were informed at a late stage of the process. A number of bus routes had to be adapted in a short time, leading to a loss of the intermodality connections between buses and underground tram/metro lines and a loss of passengers. The bus terminal that was removed is still a source of conflict between the city and the public transport operator. Car-sharing stations had to be moved outside the pedestrian zone at a very short notice. The ambition of the authority was to give the city centre a new attractive atmosphere, but this objective was only partially achieved as the implementation was done in a rush with little prior consultation of mobility stakeholders and a large part of the zone still needs road works to transform the public space into a real pedestrian zone.



▶ Vienna, Austria



▶ Brussels, Belgium

## IMPLEMENTATION IN ACCORD WITH ALL CONCERNED STAKEHOLDERS

The implementation of the steps taken for reorganising the mobility options inside and outside of the pedestrian zones needs to be carefully managed. Studies to measure the possible effects of such reorganisations should be anticipated with the help of urban realm modelling. Simulation studies about the traffic and transport modelling could be helpful, as this will calculate the trip generations and attractions to these zones. These effects should be discussed with all concerned stakeholders, ranging from shopkeepers, citizen initiatives, local businesses, real estate actors or the tourism industry to mobility stakeholders. Different reservations of different groups of people need to be addressed. An effective communication campaign should be carried out to ensure buy-in of citizens and businesses. Associating public transport and combined mobility actors in these communication campaigns will help convince partners and reassure them of the accessibility of the newly implemented pedestrian zone.

## EFFECT ON THE SURROUNDING OF THE PEDESTRIAN ZONE

If the surrounding of the new pedestrian zone is not properly managed through mobility reorganisation techniques, it could lead to disruptive traffic situations. The implementation of car-free areas is indeed an important decision that has a large impact on the reorganisation of passenger and goods movements. Sometimes, public transport as well as car-sharing, bike-sharing and taxi stations need to be relocated on the outskirts of the zones to act as feeders meaning urban space needs to be freed accordingly. More parking spaces both for bicycles and cars are usually built in the surroundings, which are also expected to absorb the effects on outer traffic.

### ANTICIPATING THE EFFECTS ON THE SURROUNDINGS

“Grafton Street” in Dublin (Ireland) is the pedestrian zone located in the shopping area of the city. This pedestrian zone was introduced to improve the urban realm. The city believes that it has removed traffic from this area successfully, and has made this street a very vibrant shopping and leisure location. Mobility services were reorganised around the area and the pedestrian area is now going to be expanded further to several other streets and the creation of two plaza areas is underway. There are multistory car parks for off street parking and two floors of one car park are now dedicated to cycle parking to deal with parking issues. Public transport and mobility service providers were consulted before the implementation process as a formal consultation and approval mechanism.

### CONCLUSION

*Pedestrian zones provide a great opportunity to regain urban space for citizens and create places where people can meet and interact in a healthier way. They contribute to better quality of life, health, safety, air quality and lower noise levels and have beneficial social and economic impacts.*

*The implementation of car-free zones is an important decision that has a large impact on passenger and goods movement. Therefore, the reorganisation of public transport and combined mobility options should be planned carefully and in agreement with all relevant stakeholders to ensure optimum accessibility of the pedestrian zone - in other words to guarantee its success.*



Dublin, Ireland



Amsterdam, the Netherlands

## RECOMMENDATIONS FOR THE SMOOTH INTRODUCTION OF PEDESTRIAN ZONE

In order to ensure the successful pedestrianisation of certain areas and regain urban space for citizens it is important to observe the following recommendations:

- > Involvement of all stakeholders from the very beginning of the pedestrianisation project
- > Early consultation with public transport and combined mobility providers to ensure optimum accessibility of the pedestrian zone
- > Consideration of all mobility options, including the provision of inner public transport services such as trams or buses
- > Simulation studies with traffic and transport modelling to anticipate the effects of creating a pedestrian zone
- > Ensure buy-in of citizens and businesses
- > Organise a clear communication campaign
- > Adaptation and/or improvement of urban realm with good accessibility to public transport
- > Improving infrastructural facilities to improve pedestrianisation with street furniture and sidewalks and ease accessibility for persons with reduced mobility
- > Careful planning of the location and design of surface public transport stations to ensure connectivity to underground public transport
- > Creation of priority lanes for public transport services acting as feeders to the pedestrian zone
- > Density of land-uses in the surroundings of the pedestrian zone should be intensified
- > Ensuring pedestrian safety by examining pedestrian movements



▶ Montpellier, France

This is an official **Policy Brief** of UITP, the International Association of Public Transport. UITP has over 1,500 members in 96 countries throughout the world and represents the interests of key players in this sector. Its membership includes transport authorities, operators, both private and public, in all modes of collective passenger transport, and the industry. UITP addresses the economic, technical, organisation and management aspects of passenger transport, as well as the development of policy for mobility and public transport world-wide.

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