GUIDELINES ON SUSTAINABLE MOBILITY

SHARED TRANSPORT

ResidentFirst

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This publication is dated September 2023 and is one of 24 documents being produced as part of the Local Councils' Association's ResidentFirst vision 2024, under the pillar of Sustainable Mobility.

This is the fourth published guideline document, in a series of documents which are being published under the Resident First project headed by the Local Councils' Association (LCA) and endorsed by all Local Councils in Malta and Gozo. The document's objectives are to facilitate the discussion and implementation of shared transport within our localities, as another possible piece of the sustainable mobility puzzle. It explains different aspects to shared transport, highlights important case studies and identifies the critical steps needed to ensure that this may be a relevant part of the various mobility options on our islands and enable its successful delivery. As always, the wider aim of this and other documents shall be that of delivering better urban environmental quality. The guide acknowledges that shared transport, albeit important, is not a stand-alone solution but forms part of broader accessibility and connectivity strategies. There are continuous references to other documents within the Sustainable Mobility pillar that have been, or shall be, published by the LCA.

As with the other documents, this publication is intended as a guide for Local Councils in planning, designing and promoting shared transportation. It does not aim to be prescriptive and seeks to have the right degree of technicality to be able to provide a full picture of the benefits of shared transport in a clear and objective manner. In this manner it is hoped that Local Councils and authorities alike may embrace the concept of shared transport as yet another important component within the strategic sustainable mobility approach that needs to be adopted so as to improve the liveability of our towns and villages.

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1. Increasing Liveability Via the Use of Shared Transport

1.1 Introduction

When shared transport flourishes, it has a vital role in increasing liveability within cities. Together with other qualities, such as walkability and cycleability, it may contribute to the achievement of sustainable mobility, with its countless benefits such as improved public health. It furthermore implies equal access to transport, while increasing access to urban centres.

New transportation options, accompanied by changes in travel behaviour, are changing today's mobility dynamics in some localities. More people are adopting the mentality of sharing different modes of transport so as to reduce the negative impacts on the environment (most notably due to traffic congestion), while simultaneously reducing personal costs associated with private mobility. If provided with proper alternatives, more people would be encouraged to leave their cars at home, generating less traffic on the roads that may give back valuable urban space to pedestrians and cyclists.

Sustainable and inclusive localities depend on transport that facilitates safe, efficient, and pollution-free flow of people and goods, while also providing affordable and accessible mobility for all. New mobility services should complement, not replace, high-quality, frequent public transport and safe, walkable streets.

We need to ensure beneficial conditions for the shared transport system in Malta to reach its full potential. To date, there are a number of available shared transport options for residents and tourists alike. We have also seen some local initiatives to improve shared transport options, some of which are addressed later on in this document.

There is significant potential for developing this field of transport further and, for this to happen, Local Councils have a central role to play in enhancing their respective localities.

1.2 Shared Transport and its Advantages

In terms of transport, 'sharing' could mean:

- the same asset being used by multiple users simultaneously along a route; or
- the independent use of shared assets, wherein users obtain temporary personal access.

Simply stated, shared transport is the shared use of vehicles or other travel modes among multiple individuals, allowing users short-term access to transport according to personal demand. The main objective (and outcome) of shared transport is the reduction in private car ownership and usage. Shared transport offers:

- more mobile choices (flexibility);
- last and first mile solutions;
- reduction in traffic;
- reduction in transport costs;
- improved efficiency;
- access to underserved areas;
- reduction in carbon emissions through shared use and increased efficiency;
- provision of mobility during off-peak hours; and
- accessible mobility options for those with limited physical ability and limited income.

Cars are significant space-consumers in relation to how many people are transported per amount of physical street space. When shared transport replaces usage of private cars, it has the ability of freeing up valuable space in our streets.

The same argument applies for walking and cycling, which is addressed in the LCA's previously published document on Walkability and Accessibility. The following diagram illustrates the spatial capacity of different modes of travel.

Image by Cycling Promotion Fund

In turn, in the image on the previous page also shows the degree of freed-up space among the space occupied by 50 people on a typical road when walking, cycling, using public transport and using private vehicles.

A key advantage of shared mobility (other than public transport), when public transport is unavailable, is its ability to ensure that people have other, more efficient and sustainable options before they resort to their private vehicle. Different modes of sharing transport (refer to illustration on the right) may be arranged, notably:

- Informal: sharing takes place casually without a formal arrangement, at a household or at a community level.

- Organisational: sharing is typically arranged for a specific group of people by an organisation. An example is the workplace or institution ride-sharing scheme, for instance at the University of Malta.

- Non-organisational, formalised: does not necessarily take place within a defined group, but is organised through a formal scheme (via an application, online platform, etc.).

Illustration by Studjurban

1.3 Types of Shared Transport

Shared mobility includes numerous forms of transport, some of which are discussed in this section.

Mass Transit

Mass transit includes buses, metros, ferries and trains that are operated by public agencies or the private sector for the public agencies. These modes efficiently and affordably move people along fixed route lines and timetables.

New modes of shared mobility could both complement and substitute public transport. They may serve as a substitute when public transport is inefficient or unavailable. Wherever shared mobility complements an existing service, it may be an effective tool to bridge the last and the first mile in a travel journey (the LCA's upcoming publication entitled Last Mile Transportation provides further insights in this regard).

Bike and Scooter Sharing

Bike sharing is a low-cost option for mobility, especially for first and last mile connectivity, possibly to get to and from public transit and other modes that are used beyond 'the mile'. Users may rent bikes, scooters, or e-kick scooters from fleets operated by private companies. Bike sharing comes in a variety of forms:

- dock-based systems, where users can pay to obtain and return bikes at docking stations throughout the service area;
- dockless or GPS-based systems, where users simply leave the bikes at the terminal point of their trip, and the bike locks with its own system; and
- peer-to-peer bike sharing, where users rent, or borrow, bikes from owners.

E-kick scooter sharing is a newer alternative mode of transport within the shared mobility market. It is considered to be flexible transport since the vehicles can be picked up and left anywhere within a specified area, and technology-wise they are user friendly for people who have a smartphone. Even though scooter riding or e-kick scooter riding might not have the same immediate health benefits as cycling, it is nonetheless a sustainable and popular transport option. These new services are referred to as 'microtransit', as they provide transit on a smaller, more flexible scale. Examples of such established microtransit services include Whizascoot or Bolt (scooters).

Given the lack of scooter-parking infrastructure, users of this specific mode of transportation must always ensure that these vehicles are parked in a location which does not obstruct pavements or other forms of traffic within the specified area. Alternatively, Local Councils, in discussions with Transport Malta, should strive to provide organised designated spots wherein these scooters may be placed.

Car Sharing

There are different types of car sharing, each with their own unique features.

It is not only possible to use a car from a car sharing provider, but also to share privately owned cars via online platforms or decentralised community groups.

Car sharing is a type of short-term car hire and refers to a cost-per-minute rental service for transport. Once the user has registered, that user may utilise a number of vehicles which are publicly available. The same user may also park in designated parking spots which are reserved for shared vehicles only. Once the user has arrived and parked the shared vehicle, another person can make use of the same vehicle. This means that fewer vehicles are left parked and unused during the day and therefore less parking space is required to accommodate the same number of commuters.

Car sharing allows users the choice of pick-up and drop-off locations:

- Station based or round-trip car sharing requires customers to pick up and return vehicles at the same location or from dedicated spaces.
- One-way or point-to-point car sharing allows customers to pick up a vehicle at one location and drop it off at another, with no dedicated parking lots.
- Decentralised peer-to-peer car sharing allows existing car owners to make their vehicles available for others to rent for short periods of time.

Car-Pooling

Carpooling occurs when car owners share their vehicles with other people to travel to and from the same, or a similar, destination. The idea behind carpooling is to stop multiple commuters from having to make the same trip in their own separate, private cars, thus reducing the number of vehicles on the road. Online Applications are available to facilitate communication between interested carpoolers and to help organise their trips (applications such as Lyft and Uber pool). One does not need to own the vehicle in question to carpool – it may be possible to share rented, pay-per-use vehicles or even taxis (which may be pre-booked via a phone call or app).

Photo by Tom Morbey on Unsplash

1.4 Shared Transport for Delivery

Shared-use mobility also has significant potential for the commercial delivery sector. Shared trucks, electric vehicles and light electric-assist cargo bikes may deliver goods at a lower cost than trucks in many situations (this is further discussed in the LCA's upcoming document entitled Last Mile Transportation). Sustainable strategies in freight include:

- collaborative warehouses in which multiple manufacturers store their products;
- shared transport which could deliver to locality hubs and regional consolidation centres; and
- final distribution to stores, pick-up points and homes that could make use of consolidated deliveries.

Such strategies could naturally be included in a Sustainable Urban Logistic Plan (SULP) that is currently being prepared by Transport Malta on a national scale for each of the different SUMP (Sustainable Urban Mobility Plan) regions throughout Malta and Gozo.

Photo by Ivan Bandura on Unsplash

1.5 Shared Transport in Malta

Transport Alternatives	Description
Tallinja Public Transport	Public transport in Malta comprises a system of route buses. Generally, the bus routes operate in Malta and Gozo between 5:30 am and 11:00 pm. A night service runs on Friday and Saturday nights and on public holidays, but does not service all areas and does not run as frequently as the day service.
Tallinja Bikes	Malta Public Transport has installed bicycle stations in Valletta and the University of Malta, making it easier for people to commute between the Capital and University. The easy-to-use Tallinja Bikes offer a convenient and affordable solution for students and visitors alike. Other Tallinja Bike stations may be found in St.Elmo, near the Barrakka Lift, Valletta Waterfront, Marsamxett, Pembroke P&R, Bombi bus interchange station, St. Julian's, and Mgarr, Victoria and Marsalforn in Gozo. Users set up a one-time registration at the station itself and may then unlock a bike and dock it back when they reach their destination. The introduction of Tallinja Bikes is a practical measure to ease traffic congestion. Stations are located at the University of Malta, the Valletta Bus Terminus, the Barrakka Lift, Valletta Waterfront, Fort St Elmo, Marsamxett Ferry Terminal and the Floriana Park and Ride.
Ferry Service	Valletta Ferry Services operates regular ferries between Valletta's Marsamxett Harbour and Sliema, as well as from near Valletta Waterfront to the Three Cities. Another option to get from Valletta to the Three Cities is on a traditional wooden boat, operated by private companies. There are also regular boat services between each island, notably the Gozo ferry provided through the Gozo Channel, Gozo Highspeed, and the fast ferry services and Comino.
Hop on Hop off Tourist Bus	The private company offers set touristic routes where passengers may embark or disembark to visit certain touristic landmarks and destinations. It is more expensive than public transport due to additional commentary and information offered for the passengers. Such routes may be preferred by tourists and the service alleviates pressure on public transport lines which become extremely busy in summer.

Source: Studjurban

Transport Alternatives	Description
E-powered Taxis	There is limited public transport in Valletta due to the steep and narrow roads and general issues of accessibility. However there are eco-friendly electric-powered taxis, providing a well-priced service that runs from 07:00 am to 8:00 pm, seven days a week.

Photo by Viktor Keri on Unsplash

1.6 Local Shared Transport Initiatives

Initiatives to improve sustainable transport should always be encouraged. In this section, some existing local initiatives are introduced.

Shared car rides for the University of Malta

The University of Malta and the Vodafone Malta Foundation have collaborated on an application for shared transport aimed for students. The Vodafone Malta Foundation part-funded the project, coordinated by the Institute for Climate Change and Sustainable Development. The aim of this project wasis to provide multiple travel options, thereby reducing the dependence on private car use.

Promotion Campaign by Transport Malta

Transport Malta has embarked on an information and awareness-raising campaign to promote transport sharing services as well as cycling safety, so as to encourage their use and make their added value known with the overall aim of encouraging a modal shift towards sustainable transport practices. The campaign targets both tourists and residents. Tourists are presented with sustainable alternatives to rented vehicles while residents are presented with viable, less costly transport options than the private car.

STEP 8 of this document addresses the need for such awareness and education campaigns further.

Controlled Vehicular Access in Valletta

The Controlled Vehicular Access (CVA) in Valletta was introduced to try and restrict the entry of vehicles into the capital city and improve walkability therein by introducing a system of automated paid parking. The CVA uses cameras for vehicle registration plate recognition in order to assess whether the vehicles entering and leaving the city belong to licensed Valletta residents or otherwise, and in this manner monitor time spent within a set area bound by the city walls. Predetermined fees, set by Transport Malta, are automatically issued according to the time period vehicles spend inside this CVA boundary. At the same time, designated street parking distinguishes between general (white bays), resident-only (green bays) and reserved parking for residents within certain hours (blue bays).

This system is a key part of enhancing accessibility and improving both pedestrian and driver experiences in Valletta and has proved successful, supplemented by the neighbouring Park and Ride facility provided in Floriana.

Photo by beatsnoops

Photo by Tadas Petrokas on Unsplash

2. Steps Towards Improved Shared Transport

As previously discussed, there are several existing efforts of shared transport in Malta. Local Councils may be directly involved in several areas of mobility management, including, among others:

- suggesting improvements in bus routes, schedules/timetables and type of public transport fleet to be deployed, based on resident feedback and travel patterns;
- liaising with offices and schools present within their localities to adopt transport plans;
- creating online information services wherein different modes of mobility may be highlighted;
- launching of awareness-raising campaigns;
- organising training workshops for local residents;
- developing urban mobility plans in consultation with TM and other local stakeholders;
- securing access to locality centres, favouring more sustainable means of mobility; and
- promoting the creation of walking buses and cycling train schemes.

It is crucial for any Local Council to first ask some important questions, and collect relevant data, namely:

How many people in my locality use public transport?

What other methods of transportation do my residents prefer, other than the private vehicle?

Which public transport routes are running efficiently and which are inefficient? If the latter, why?
Are existing shared transport options well advertised and easily accessible to all residents?

How may the Local Council further market new mobility initiatives to reach the target users?

An eight STEP action plan follows, suggesting tools for developing a sustainable and effective shared transport system.

Step 1

Collect and Share Information

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Photo by Firmbee on Unsplash

Local stakeholders need information to be able to plan for future conditions so that urban settlements may grow in desirable and sustainable ways. Therefore, the current lack of data needs to be addressed.

Information obtained from transport research or from private or public data systems should be published and shared so that multiple stakeholders may utilise them to further improve the existing transportation system. As new transportation technologies emerge, they create data streams with vital information for management, proactive planning and policymaking.

Collecting data is an essential basis for any individuals actioning towards sustainable mobility, including improvement of shared transport. For example, when private companies invest in shared transport, it is necessary to have available data that states the amount and accessibility of parking spaces within the specific area. That information is required to make informed decisions regarding how many parking spaces can be taken up for the shared vehicles provided, and consequently for the public-private partnership to have a successful outcome.

Information should also be collected on how the private suppliers of shared transport maintain their vehicles, to avoid having broken down or unsafe vehicles taking up valuable space on local streets. This information needs to be kept up to date and assembled by the authorities for them to ensure the availability of useful and sustainable mobility options.

Furthermore, Local Councils should actively take note of successful shared transport initiatives that have been implemented around the world. These examples could help guide the Local Councils and provide them with ideas when developing context-based solutions for each locality. Although it is imperative that solutions are context-based, there is no need to reinvent the wheel – good practice may be modified and updated according to specific circumstances. There are numerous examples to learn from by studying them closer. Some case studies are also included within this document and could be used as important references. Similar to collecting data, analysing case studies is also a very good basis for taking informed future decisions.

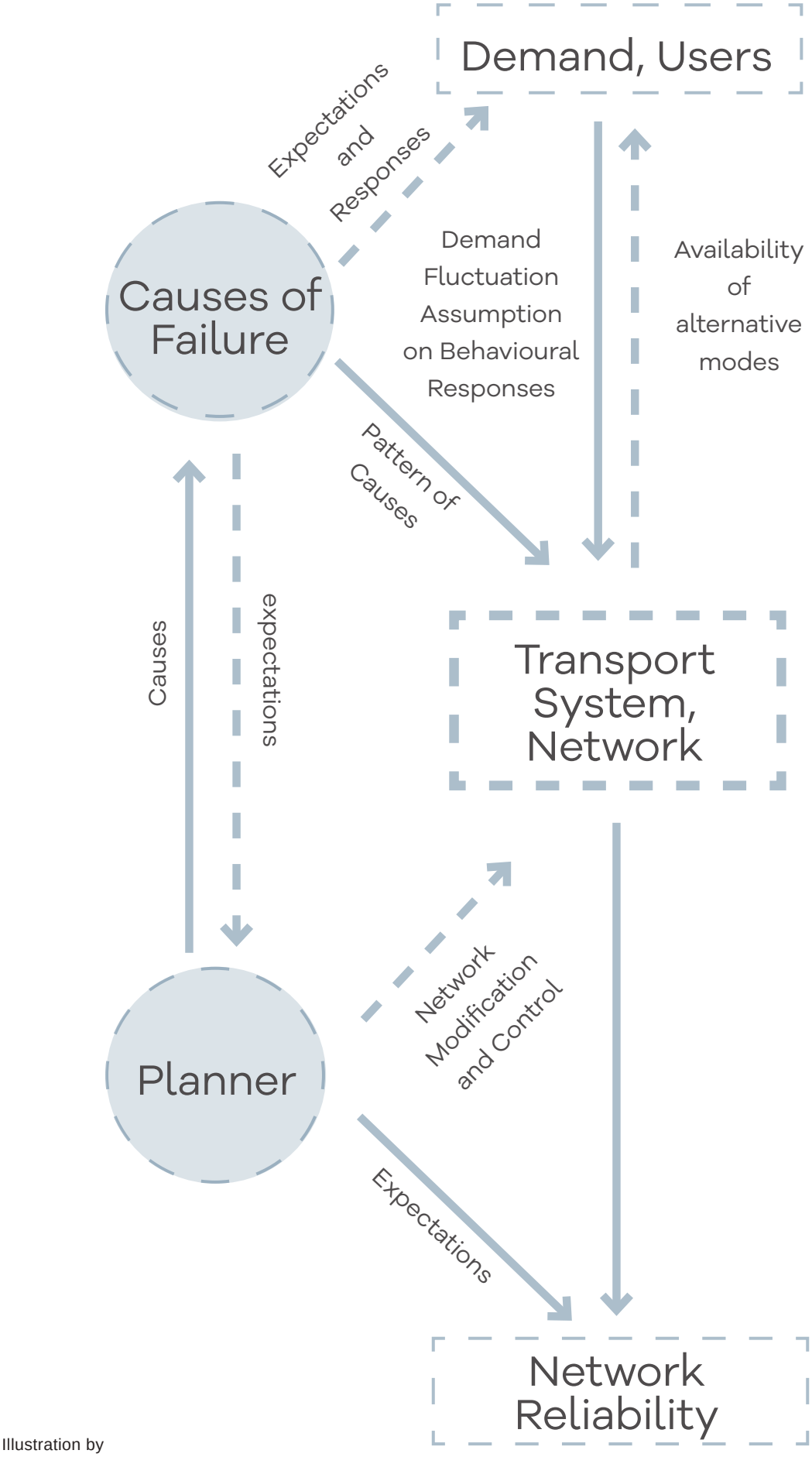

Illustration by Studjurban

Photo by freepik on Freepik

Step 2

Improve Public Transit

Photo by Benjamin Nijs on Unsplash

People will use public transport provided that it is a good alternative to the convenience of utilising their private cars.

After carrying out observations on the ground and consulting their residents, Local Councils should assess the efficiency of the public transport route in their respective locality and propose recommendations for its improvement. Current public transportation routes must be assessed in terms of:

- minimising overlap and ensuring as comprehensive coverage across the locality as possible, in line with demand;
- looking into the possibility of dedicated bus corridors/lanes when possible;
- having well positioned and well designed bus stops within an acceptable walking distance and facilitate access to and from such stops;
- ensuring access for all;
- ensuring real-time information through the use of up-to-date technology;
- designing easy-to-read bus maps;
- in seaside localities, exploring and adding new routes for ferries to further alleviate traffic from local roads; and
- providing frequent, reliable services – in this respect, bus routes on main locality arteries and roads used for longer distance travel will require a high frequency service. On local routes, a less frequent service may be sufficient, depending on demand and punctuality. Alternatively, a rethought public transportation fleet using smaller vehicles at a higher frequency might provide a better solution for some localities, particularly towns and villages characterised by narrower streets and that might be currently under-served in terms of public transportation due to accessibility issues.

Some of the above aspects were already introduced in the LCA's publication Walkability and Accessibility as ways to improve public transport in Malta. Mobility decisions should be planned with input from all affected stakeholder groups and the public at large, to ensure inclusive problem-solving.

Additionally, public transport, along with other shared transportation systems, should prioritise the achievement of environmental targets, with the possibility to shift to EVs. The gradual elimination of conventional (fuel-based) vehicles from urban areas will contribute significantly to the reduction of oil dependence, greenhouse gas emissions, local air pollution and noise pollution. The benefits of electric vehicles are explored in more detail in a previously published LCA document entitled EV Infrastructure and shared transportation systems could help accelerate the transition to electric vehicles.

Step 3

Promote and Incentivise Car Sharing

Photo by Aimo on meisterproject.eu

Car sharing should be subsidised to offer low tariffs that would appeal to people more than using their personal vehicles, and potentially given priority within our street design.

In order to achieve a broad social transition towards shared mobility, it is important to embed sustainable solutions for private car ownership in policy papers, at different governance levels. An action plan for car sharing, containing ambitious and achievable goals in the short and medium term, could be a first important step, especially if it is part of a broader Sustainable Urban Mobility Plan (SUMP, further discussed within the LCA's forthcoming publication entitled Last Mile Transportation) rather than being a self-standing initiative outside of ordinary transport planning activities.

An action plan for car sharing would contain, among other measures, the integration of car sharing in new, redeveloped or renovated projects and the establishment of mobility hubs, within which car sharing options could constitute an important component, together with the monitoring of the use of space by such shared vehicles. In this way the inclusion of car sharing could maximise social, environmental and economic benefits.

As stated in the previous chapter, shared transport should prioritise being electric which would of course increase the environmental benefits from car sharing even more. See more on electric vehicles in the forthcoming LCA document entitled EV Infrastructure.

Furthermore, car sharing should be subsidised or in other ways directly beneficial. To encourage the use of shared transport, prices should be low enough to attract people from using their personal vehicles. Parking for shared cars should be free or offer lower tariffs so that it may appeal to commuters. Dedicating parking bays for shared transport would also incentivise commuters, instead of having to search for private parking spaces. Beneficially, this is already a reality in many cases. Providing high-occupancy vehicle lanes (see STEP 6) would as well make car sharing even more beneficial in comparison to riding private cars.

Step 4

Oblige Shared Transport Providers to Take Responsibility for Their Vehicles

Photo by NYC Dot on Brooklyn Eagle

To ensure shared transport that is beneficial to all, the providers of such vehicles should be obliged to take responsibility for their vehicles and any negative impacts associated with their use. Shared transport providers should:

- Assume responsibility to collect relevant data, and ensure that it is shared with the authorities for them to have the possibility of managing shared transport;
- Ensure that their vehicles are useful, maintained, and upgraded with time;
- Upgrade their technology continuously, in accordance with new inventions and standards, in order to ensure maximum efficiency and sustainability;
- Ensure that there is available infrastructure to support the implementation and use of the provided transport; and
- Be obliged to ensure the availability of vehicles in all localities, and not only in the denser or more touristic areas (view the discussion on regulations on micro-mobility in Last Mile Transportation).

These responsibilities and obligations should all be agreed upon in the initial stages of agreement between the shared transport provider and the local council. In regard to infrastructure, the provider of the shared transport in question could, for example, collaborate with local retailers to find the space for dedicated parking spaces and, if needed, charging stations for their vehicles. This has the potential of being beneficial for the shared transport provider, the retailer in question, as well as the users and even the non-users of the specific transport.

Step 5

Consider Hubs for Intermodality

Photo by Illiya Vestica on Unsplash

Changing between different transportation modes during a given journey should be efficient and easy, since many journeys consist of more than one such mode.

Often, travellers use more than one transport mode during a single journey, which may be described as intermodal transport. Thus, designing hubs for intermodality means gathering numerous transport options together, at or close to a transit stop and with potential dedicated parking spaces in close proximity. Intermodality and its advantages will be discussed further in LCA's forthcoming document Last Mile Transportation.

Promoting an intermodal approach to transit planning, fares and operations, encourages the use of public transportation and other shared modes. Easily changing between travel modes can be done by studying travel patterns and strategically locating stops and stations, providing clear signage and information, and consistently improving the public transit experience.

Multiple cities abroad have experienced positive outcomes from designing mobility hubs to support intermodality and the use of alternative transport modes. In Bremen, for instance, the intermodality approach has decreased the dependance on cars and is an international case study that is discussed at a later stage in this document. In Malta, a number of discussions with TM in relation to the SUMP have centred on the potential to develop regional and district hubs, in tandem with a rethought public transport network that could allow both the creation of dedicated public transport routes and the inclusion of other shared transportation modes. Allowing vehicles to terminate within mobility hubs, early on during the journey, could liberate them from the local roads, instead permitting this road space to be used by dedicated modes of transport that would, in turn, prioritise them.

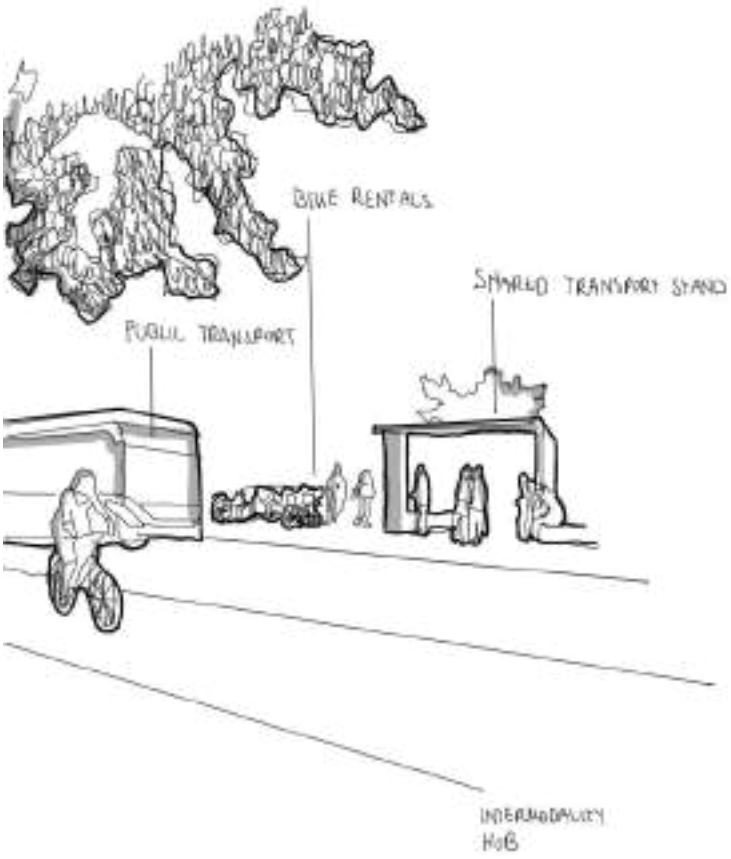

Illustration by Studjurban

Step 6

Redistribute the Space on the Street

Efficient use of space on our streets must be re-evaluated to be used by shared transport, such as the introduction of bus lanes, and dedicated parking bays for shared transport.

Shared transportation options can only be used safely and efficiently if proper space is dedicated to them on the streets. The potential liberation of road space has been discussed earlier in this document, and several Slow Street proposals that have been proposed for different localities around Malta and Gozo look into the possibility of rethought street sections. Lessening vehicles from the roads may permit such spatial rethinking to occur, allowing space to be occupied by, and dedicated to, other modes of transport. Spatial redistribution could, for example, take into account dedicated lanes for both public transit and car sharing so as to incentivise their use further, which would naturally support previous steps discussed within this document. Street widths, street use and redistribution of space is also discussed in the LCA's document entitled Walkability and Accessibility. In this document, it is further discussed to continue emphasising the need to allocate and encourage the efficient use of space.

It is of utmost importance that new mobility services do not take the place of high-quality, frequent public transportation, or safe, walkable streets. Decision makers should embrace the potential for new options to enhance public transportation, but it should never be a substitute for the essential basics of good community design and access to transit. In all decisions, user safety should always be prioritised.

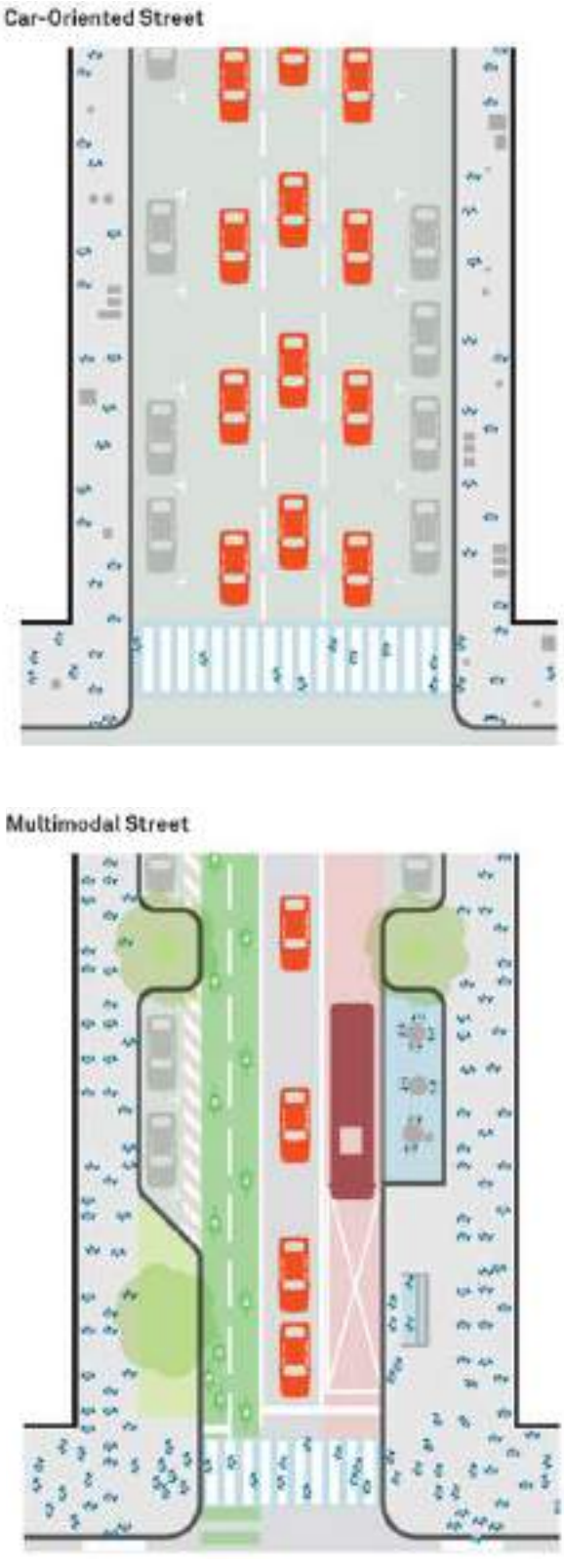

Image by Global Designing Cities Initiative

Space Allocation for Shared Transport

Street users and vehicles occupy different amounts of space depending on their size and speed. Lane design should accommodate transit vehicles at a speed that is safe within the overall street context, supporting consistent and reliable operations. Dedicated bus lanes are typically 3m – 3.3m wide, and 3.3m – 3.6m when adjacent to an opposing lane of bus traffic.

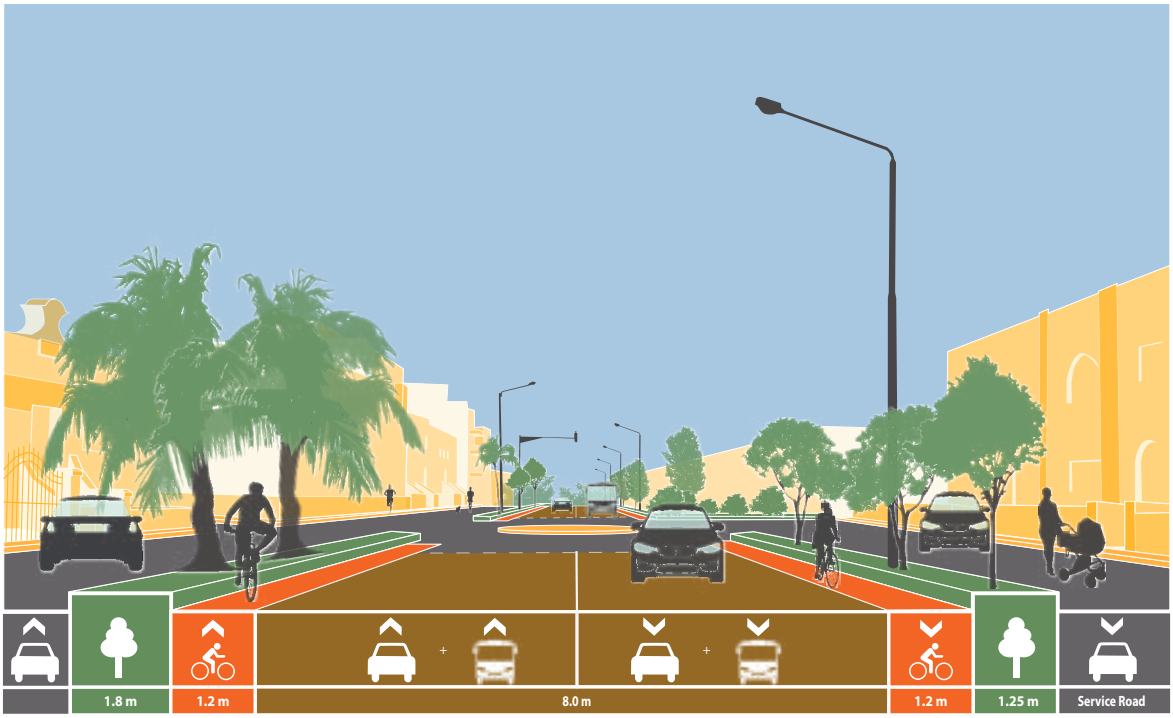

Illustration by Studjurban - Slowstreets Proposal in Qrendi

A bus lane may potentially act as a buffer zone between cyclists and car traffic. Buses drive at a lower speed and run less frequently than cars. However, a cycle lane should never be between a bus lane and traffic but immediately adjacent to the footpath/pavement. In this respect, a 3m-wide bus lane may protect a 1.5m – 1.8m cycle lane.

The ideal scenario is demonstrated in the figure found on the next page:

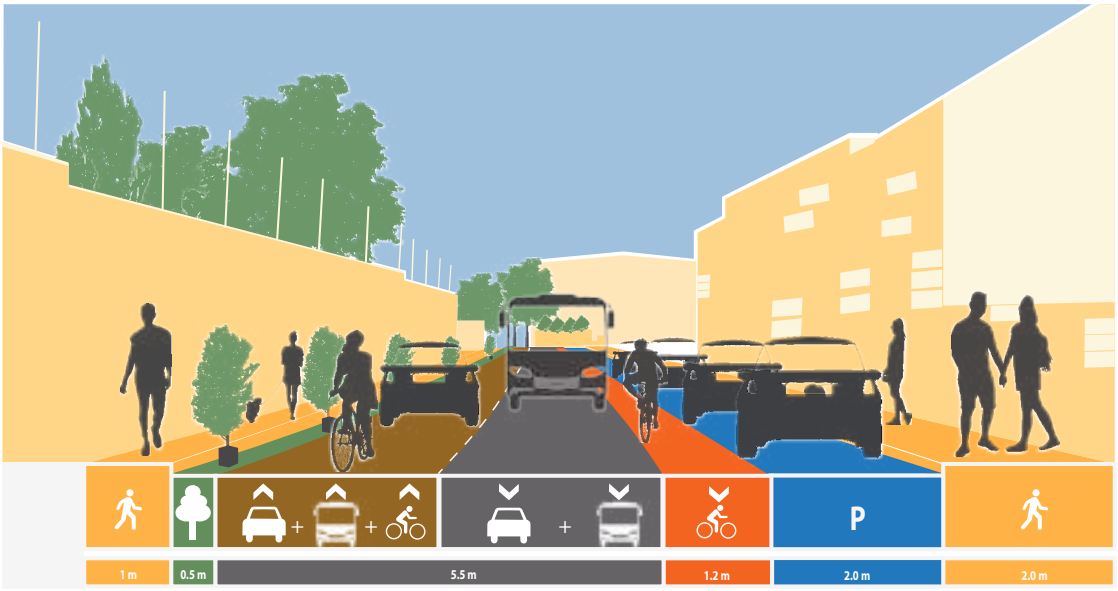

Illustration by Studjurban - Slowstreets Proposal in Birgu

Shared Bus Lane

A shared bus lane can be described as a bus lane that also allows cyclists to use the same lane. Many urban settlements with narrow streets and dense bus networks increasingly use bus/bicycle lanes as a compromise to accommodate both modes of transport. Research carried out by the Transport Research Laboratory describes shared bus cycle lanes as being popular with cyclists. They may provide several advantages, namely:

- Bus/bicycle lanes may provide continuity to a cycle network when space is restricted.
- Links along public transport routes often in turn create strong links to urban destinations.
- Bus/bicycle lanes are easy and inexpensive to implement.

Shared lanes should not be used to avoid allocating specific space for bicycles. The ideal scenario would be one that creates a separate bike track – which is always safer, more comfortable, and will attract more cyclists (this is further discussed in the LCA's forthcoming document Last Mile Transportation). Another disadvantage of shared lanes is the proximity of cyclists to bus exhaust, which would naturally be solved if such buses were to be replaced with electric ones (discussed further in the LCA's document Electric Vehicles Changeover). It is important to note some further recommendations to ensure cyclist safety:

- Use bus/bicycle lanes on short stretches (less than 200 m) to ensure that buses' speed remains low.
- Avoid overly wide lanes (the recommended width is usually around 3.3m; widths of around 4m or higher are normally not recommended) as buses may try to overtake cyclists, creating an unsafe scenario.
- Use appropriate markings and signage, such as cycle symbols and arrows at entry and exit points and at regular intervals throughout the extent of the lane.
- Train public transport drivers to be aware of, and respect the presence of, cyclists, and follow a code of conduct for any potentially conflicting situations.

Image by Denver Public Works

High-Occupancy Vehicle Lane

A high-occupancy vehicle lane (also known as a HOV lane, carpool lane, and transit lane) is a traffic lane reserved for the exclusive use of vehicles with a driver and one or more passengers, including carpools and buses. These restrictions may be imposed during peak hours or at all times. These lanes are designed to discourage single or low occupancy car use, and encourage shared transport by allowing users to reduce their journey times. An HOV lane may be generated from an existing road lane, for the entire day or part of it, or by adding an extra lane inside or outside of an existing road, if the space allows for it.

Step 7

Consider Access-for-All

Photo by Campaign Creators on Unsplash
Photo by charlesdeluvio on Unsplash

There needs to be equal and inclusive access for all residents, including the elderly and the disabled.

Local Councils should work with their residents to alleviate discriminatory circumstances related to transportation and land use. Everyone should have equal access to all modes of shared transport. A core aim will be to improve outcomes so as to promote equality for people of all socio-economic backgrounds and people with disabilities.

There are several solutions that should be studied and implemented to realise the goal of guaranteed access-for-all. The solutions could include:

- ensuring that people with disabilities can access the bus easily from all bus stations; and
- regulating the spread of shared mobility so that people living in rural areas can have equal access to sustainable mobility.

More solutions should be considered based on the specific context and residents' needs.

Photo by Marco Testi on Unsplash

Step 8

Create Awareness and Educate

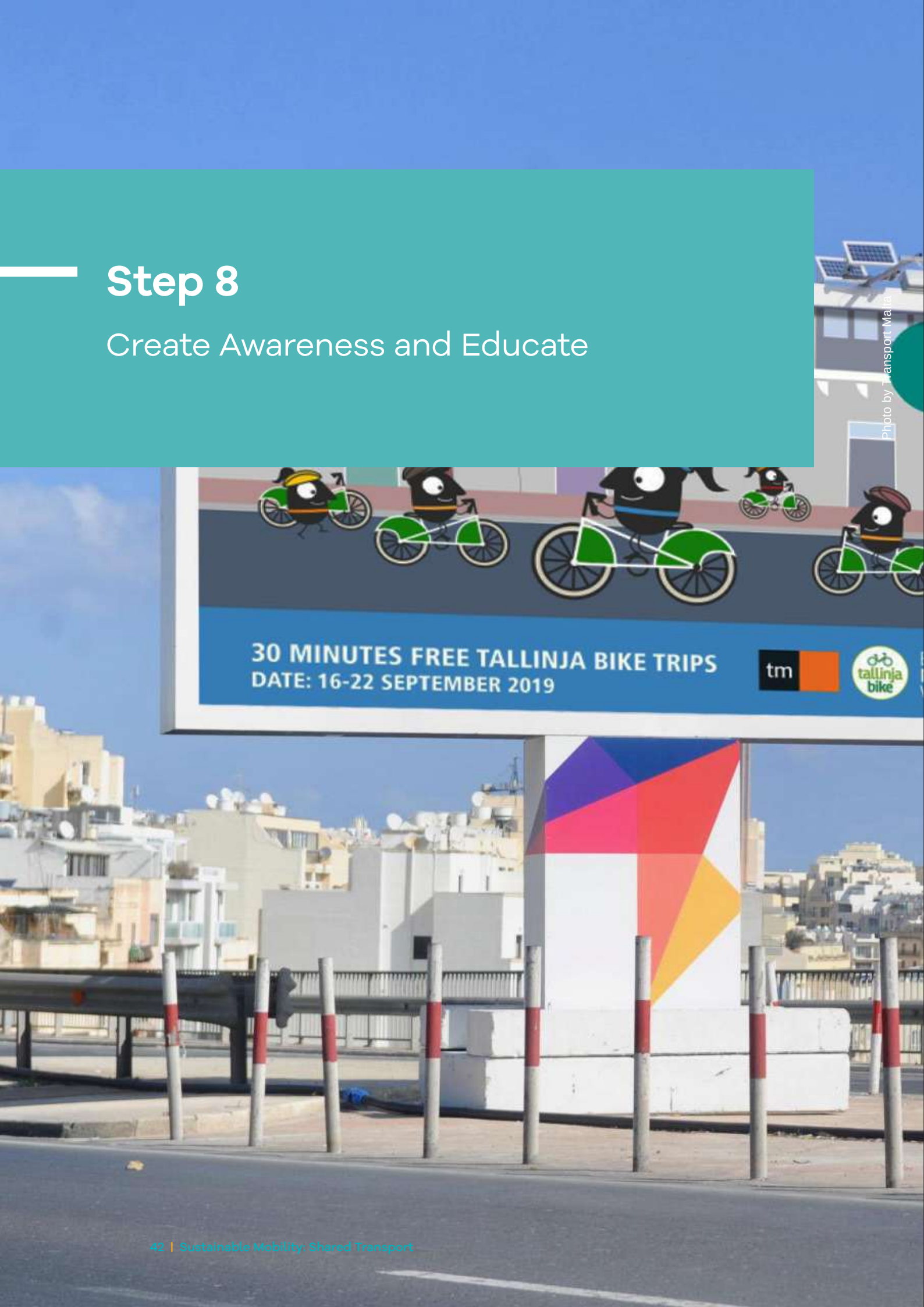

Photo by Transport Malta

Residents need to know more about shared transport and the benefits it presents to the future of the community.

Residents need to know more about shared transport and the benefits it presents to the future of the community.

There are several initiatives that could contribute to increased awareness on available modes of shared transport, as well as knowledge about its advantages. Such initiatives could include:

- arranging workshops;
- creating incentives for people to travel by shared transport;
- rewarding people who travel sustainably;
- advertising available modes of sustainable transport; and
- launching awareness and education campaigns on sustainable mobility.

While it is of importance that residents are well educated, it is a necessity that the previously mentioned actions take place simultaneously for sustainable transport to be an attractive and competitive option.

Local Examples

The following are examples of local initiatives to educate and create awareness on sustainable transportation as well as to reward those who travel sustainably. Local Councils should support and encourage similar initiatives.

Through the collaboration of Project Aegle Foundation (PAF) and Greenroads Limited, commuters are able to learn about sustainable mobility and be rewarded for using the bus, walking, cycling or getting the ferry, on the platform www.Greentrips.eu. The platform also rewards individuals who may not own a bicycle but rent it out from different potential sources and for those carpooling.

The University of Malta is also developing a mobile application with the aim of promoting sustainable mobility among tourists by providing useful information related to public transport and tourist attractions. Currently, only the Tallinja application provides travellers with information about the bus services, routes and schedules. However, no App exists which integrates different intermodal transport opportunities, including information on scheduled bus services and the ferry network. The application would be useful in promoting new tourism mobility patterns, as well as gathering data on how tourists move around in order to plan long term tourist-specific transport infrastructure.

3. Case Studies

As the first STEP of this document suggests, case studies are important sources of information and should be analysed in depth. Some pertinent case studies are described below.

Local case study: Valletta

Several traffic control regulations have been applied to enhance pedestrian accessibility, discourage increasing congestion, and protect the heritage of the Capital. From May 2007 vehicles have been paying to enter the locality, with strict parking regulations. Valletta remains well connected through a main bus terminal and a bike sharing station at its entrance, ferry services that connect the two harbours on either side, and private operators that offer small vehicles to access its narrow streets.

Valletta provides a good case study for the potential implementation of similar policies that may be adapted to other localities. Conducting regular surveys among the general public, may help to improve policies and implement better strategies catered for local residents.

London Transport System

London's transport system is known to be well-connected and frequently used, especially compared to other areas in the UK. This is due to an integrated transport system in which a single transport card may be used on all transport services in the locality. This system further allows the collection of commuting data, such as commuting patterns, and may better inform investment decisions. The Transport for London (TfL) model is characterised by five main qualities:

1. Sole control over bus services and prices.
2. The availability of long-term funding due to the presence of integrated, strategic plans.
3. The ability to raise local funds to reinvest in transport, such as through Congestion Charging. In the first year of congestion charging, London saw a 30% reduction in traffic congestion and raised approximately £150 million in revenue for transport investment.
4. Single management of most public transport modes.
5. Integrated transport strategy in other policy areas.

For example, TfL produced a transport action plan for health which sets out plans to promote walking and cycling, improve health and reduce costs for the National Health Service in London.

Fellow Traveller program, Debrecen (Hungary)

The City of Debrecen in Hungary launched a low cost pilot project called "Fellow traveller program", where they introduced the concept of sharing private cars to a limited target group of students who leave the city frequently on weekends. To ensure that the system matched the needs and wishes of the target group, the student organisation at the University of Debrecen was also involved in the development of the system. The success of this project has been due to, namely:

- the involvement of students in the development of the system;
- the support of the University, allowing access through its private network; and
- proper promotion among students.

Mobility hub, Bremen (Germany)

The reduction of vehicle numbers on the streets of Bremen has allowed more space to be reclaimed for other uses. The creation of integrated mobility hubs combines multiple modes of transportation in one physical location, thus making it easy to access a wide range of transport options for different trip types. This includes carshare stations, bike parking and scooters, with payment occurring via a smartcard or mobile app. Mobility hubs are located at high-frequency public transit stops. The convenient connection therefore helps reduce the reliance on private vehicles and support multimodal lifestyles.

Free public transportation, Luxembourg city

Luxembourg is a small country, which may be crossed in only two hours. However, traffic congestion around Luxembourg city has become a major issue due to the high number of private vehicles. In efforts to encourage residents to favour shared public transport, authorities announced that all public transport inside the country would be free as from March 2020, including trains, trams and buses. It was the first country to have free public transportation for all age groups, residents and non-residents.

Last year, Malta introduced free public transportation for the holders of a personalised Tallinja Card, who may travel for free on Day Routes, Night Routes and Special Services.

Flugs e-carsharing, Lienz (Austria)

The lack of a modern flexible public transportation fleet spurred the initiative of the Flugs e-carsharing system in the city of Lienz. Flugs is an electric car sharing system that offers sharing mobility so as to reduce the number of cars in households and, subsequently, within public spaces. It has high accessibility with easy online reservations done via a webpage or mobile phone app. The service ensures a high standard of flexible mobility with a relatively low workforce, as staff are trained to undertake multiple functions. The current tariff system is made up of a membership fee, kilometre-costs and hourly costs. The carsharing system is regularly used by locals, private companies and the public service sector, and was supported by state funding.

Photo by Hem Poudyal on Unsplash

4. Concluding Thoughts

This document has discussed the concept of shared transport in depth, presented locally available shared transport options and introduced some local shared transport initiatives. The principles, and pertinent examples, illustrate that we have slowly commenced a process of developing our shared mobility system. However, there are many possibilities to improve shared mobility in order for mobility in Malta to be increasingly sustainable.

The actions for development are presented in this publication as 8 steps contributing towards improved shared transport. None of those steps will solve the mobility issue alone, but solutions are often integrated with, and sometimes dependent on, each other. This implies that the steps should be considered together with the steps present within other documents on Sustainable Mobility that have been published by the Local Councils' Association.

There are several examples of shared transport initiatives from around the world that could be referenced. These examples illustrate the potential of shared mobility and the implications on improved mobility patterns and, ultimately, broader quality of life objectives. Together with their residents and the relevant authorities, Local Councils should prioritise the most efficient and suitable actions in the local urban context.

European Actions

There are a number of European actions in support of sustainable urban mobility:

- The Urban Mobility Package
- Urban Vehicle Access Regulations (UVAR) (see Portal of all Urban Access Regulations in Europe)
- Urban public transport and shared mobility

Publications, Projects & Tools

Publications

- 'The Future of Cities' report (European Commission)
- Shared mobility models (European Commission)
- The role of car sharing in low carbon mobility (European Commission)
- The role of 'willingness' in car sharing (European Commission)
- What users think about mobility as a service (European Commission)
- STRIA Roadmap on Smart Mobility and Services (European Commission)
- Guidelines on reversing car dependency (The International Transport Forum)
- Bike sharing and car sharing schemes (CIVITAS)
- Develop a smart choice of mobility services Factsheet (CIVITAS)
- Planning for a more Resilient and Robust Urban Mobility (European Platform on Sustainable Urban Mobility Plans)

Projects

- New EU Urban Mobility Framework Roadmap (European Commission)
- New European Coalition to promote micromobility
- Citizen and stakeholder involvement in mobility planning and new mobility services (CIVITAS)
- Shared Elba Mobility Agency, dedicated to planning, managing and coordinating the different ride-sharing services, mobility information services for users, and other types of mobility planning support available on the island.

Tools

Public transport innovation and management centre Madrid (CITRAM)

Funding Opportunities

EIT Urban Mobility KIC

EIT Urban Mobility is an initiative of the European Institute of Innovation and Technology (EIT), aimed at encouraging positive changes in the way people move around cities in order to make them more liveable places, co-funding up to €400 million (2020-2026).

Horizon Europe

Horizon Europe is the new EU Research and Innovation programme which succeeds the previous programme, Horizon2020. Horizon Europe has been allocated a budget of approximately €95.5 billion of funding to be made available over 7 years (2021 to 2027) in areas including energy and transport.

Horizon Europe incorporates different research and innovation missions. The most pertinent mission area which is relevant for urban mobility is Cluster 5: Climate, Energy and Mobility, including specific opportunities in relation to Transport research and innovation.

Events

ConnectingEurope Days

2-5 April 2024

Connecting Europe Days will bring together politicians, financial institutions, industry representatives, transport stakeholders and the European Commission to discuss concrete measures and exchange good practices on creating a fully decarbonised, resilient, seamless and digital transport and mobility network in Europe.

General References

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https://civitas.eu/sites/default/files/civitas_insight_car_sharing-new_forms_of_vehicle_use_and_ownership.pdf

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Transport Malta
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BUS 154

ResidentFirst

Assoċjazzjoni
Kunsilli Lokali

Local Councils' Association Malta