EXPLORING
CARFREE
PROJECTS AND
DESIGN
ESSENTIALS FROM
ACROSS THE
GLOBE

CCA

CARFREE CITIES ALLIANCE www.carfreealliance.org





CARFREE CONVERSION

- a. Carfree Streets
- b. Public Spaces All Shapes & Sizes
- c. Neighborhood Community Spaces
- d. Carfree City Centers



CAR CONTROL

- a. Traffic Calming
- b. Reduce City Center Access
- c. Pricing Policies to Discourage Driving
- d. Stop Unnecessary Road Building



SUSTAINABLE TRANSPORT

- a. Pedestrian Amenities
- b. Cycling Infrastructure
- c. Public Transport Improvements



URBAN STRATEGIES

- a. Urban Mobility Strategies
- b. Participatory Budgeting
- c. Transition Plans



POP-UP TO PARTY TIME

- a. Ciclovia / Carfree Sundays
- b. Pop-up Bike Lanes
- c. Pop-up Everything
- d. Festivities

PROJECTS CATALOGUE

Going carfree is a bold initiative, as it amounts to a major shift in planning after decades of havoc wrought by the age of the automobile. The aim is to reclaim space for people, creating a more dignified urban living. This can be achieved through numerous approaches. Some are simple to organize while others require more dedicated effort.

To throw light on the many ways that carfree goals can be achieved, CCA has developed a catalogue of projects, with examples from around the globe, reflecting **key features**, **impacts**, **and important conditions** (**enablers**) that need to be in place to achieve such transformations. Enablers can vary according to place, context and cultural significance; so, keep a look out for conditions unique to your location.

Cover photo by Tamás Nagy, valyo.hu

Roads suitable for bicycle and other non motorised travel

Well-developed and monitored system of fee collection

Active community engagement

Bold vision and public support

Historical and cultural architecture - conservation

Strategic crosssectoral alliances: better projects

Strong political and institutional support

Easy access to train station and bus interchange

Planning strategies to reduce + optimise the need to travel

FEATURES AND ENABLERS

Throughout this Projects Catalogue, you will to come across numerous examples from around the world. How did these places become what they became? They all have unique qualities and are based on their own culture, yet at the same time connect to universal features.

In some cases the baseline conditions were ripe for what came to follow; thus the importance of key enablers (examples of these can be seen on the left) while many times, positive actions have led to high value impacts, which means that results have benefited numerous people and can be listed as shining examples.

Enjoy the rich diversity of projects, programs, activities, themes and a treasure chest of creative ideas!



SECTION A - CARFREE CONVERSION

Carfree conversion explores the holistic transformation of cities into lively, pedestrian safe spaces. A carfree city is characterized by strong public transport systems, sufficient and well-maintained pedestrian infrastructure, multiple types of environmentally friendly mobility modes, and a strong digital information portal that is continuously updated and accessible to all residents of the city.

In essence, carfree conversion involves reclaiming physical space and land use that was formerly devoted to automobiles, whether parked or driving. Every street that is pedestrianized, bike lane added, new park or parklet unveiled, through traffic prohibited, or parking removed from public squares - all this brings your city one step closer to liberation.

While small but vital steps are needed just as much as a systemic transformation approach, it is imperative to foster a culture and spirit of active movement - which goes hand in hand with physical and mental health.

A city will thrive when it creates beautiful and culturally attuned spaces that invite all city dwellers to participate.





CARFREE STREETS

A carfree street, as the name suggests, is a street (or sections of the street) where motorized vehicles, especially private vehicles such as cars and scooters, are restricted from driving and parking. This simple act of restricting (cars) actually opens the streets for people - creating a unique space for pedestrian movement and many other non-motorized activities, such as cycling, skateboarding, rollerblading.

From the perspective of achieving carfree cities, this measure is essential, as it allows citizens to experience firsthand a life with less vehicular traffic. Its simplicity also inspires diversity, seen in the way that one street at a time can be converted into a unique and contextual space.



CARFREE STREETS - GREAT PROJECTS

- ★ Carfree streets are places of thriving economic and social activity. The slow pace of life on such streets allows for easy transition between different activities: shopping, dining, work and leisure, or combining transport modes like cycling to the train station.
- Carfree streets are spaces that can be accessed and enjoyed by visitors, transit users and residents living in the neighborhood. Such streets are an essential tool to decongest cities, especially where destinations intersect, for instance, transport hubs.
- ★ Mapping carfree streets and pedestrian friendly streets could be a practical tool for residents, helping to start further interesting projects.

Our Favorite Variants

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Downtown Pedestrian Street

A place of commerce with high on-street activity. Boasting large protected walkways that are well connected to public transportation and alternate modes of mobility. These are usually large social gathering places and have cultural relevance.



Connecting Street

Connectors between different city spaces – such as between a transport hub and central square, or a street linking two parks. Proper signage guides newcomers to their destination.

Residential Pedestrian Street

Every neighborhood deserves its own pedestrian area, including those in non-central districts. This may function as a place for local retail or just for recreation and an occasional café.



CARFREE STREETS - GREAT PROJECTS

Contiguous Pedestrian Streets

A network of pedestrian streets that can be used for transit or leisure, such as walking, jogging, cycling, or rollerblading. The larger the network, the more fun and useful for everyone.

A Very Long Street

A very long pedestrian street, connecting multiple neighborhoods, will encourage walking, be fun for the city, and create a new iconic feature. Consider the history of the flâneur and the art of strolling.

Safe Streets For Young And Old

Some of the best arguments for carfree streets can be seen in the safety they provide to the elderly and children. There is nothing better for the cognitive development of a child than safe streets to play in.

- ★ Carfree streets can provide a much needed facelift for a neighborhood, whether it be highly commercialized, industrial, or residential. Their introduction can provide a different form of land use without the complexity of restructuring planning norms.
- ★ Carfree streets are more essential now than ever, as cities all over the world struggle to address Covid-19. The need to physically distance and maintain hygienic environments calls for spaces within cities that are not bounded by four walls and that are safe. Carfree streets make an ideal stage to enable outdoor activity with sufficient ventilation, benefiting not just the health of the city's residents but also providing economic opportunities.







PUBLIC SPACES

Unlike street transformation, public spaces come in all shapes and sizes, and can be retrofitted into many geographical and contextual settings.

Some of the most popular kinds of public spaces are squares, waterfronts pedestrian plazas, small courts and just about any place that greatly encourages the gathering of people. This can include areas near transit hubs, shopping areas, monumental or government/civic buildings, and more.

From the perspective of achieving carfree cities, this measure is dynamic, because of its ease and informal techniques of implementation.

This measure can also be the first step in setting up carfree streets.



PUBLIC SPACES - GREAT PROJECTS

- ➤ Public spaces can be developed as temporary or permanent spaces, dependent on acceptance by locals and authorities.
- ➤ Public spaces have the potential for diverse functions during the day as a transit space or spot to catch your breath; and by night a lively plaza for social gathering.
- ★This measure allows for a dramatic increase in access to destinations and places of interest, for instance by removing chaotic traffic and poor street functionality, and by providing more convenient access to public buildings, monuments, train or bus stations, parks and other destinations.
- ★ New public spaces can greatly revitalize and breathe fresh life into an area.

Our Favorite Variants



Greenways

A paradise for cyclists, pedestrians, joggers. May run along a train track, river bank, natural landscape or be designed as an aerial park

Parks And Their Environment

Parks provide an immediate escape into an oasis of peace. Parks and adjacent areas will revitalize all who pass by.



Train and Bus Station Areas

Public transport nodes should welcome users with attractive, accessible and quality public spaces.

Waterfront Esplanade

The waterfront is the new place to be. Prime location for leisure, cafés, social life

Markets

The lifeblood of daily needs and errands.







NEIGHBORHOOD COMMUNITY SPACE

When zooming in from the scale of the city to a neighborhood, one may perceive repetitions in spatial design. This may seem natural at first, but one slowly begins to realize that at the neighborhood scale, the requirements are different. The needs of people change, the number of people using spaces vary, and the way space is utilized is different.

Neighborhood resilience is especially dependent on community engagement; thus it is vital that sufficient space be created within each neighborhood to enable social engagement.



COMMUNITY SPACE - GREAT PROJECTS

- ★ Community spaces are essential for enabling interaction and community ownership. This leads to better maintenance of the neighborhood and greater social interaction.
- ★ Community spaces create ways to reach out to people in need.
- **★** Community spaces enable more eyes on the street and help reduce incidents of violence, theft, and vandalism, building safer and more secure environments.
- *The design and number of community spaces can be decided entirely by the local population, thus building on the trust and resilience of the community.
- * This works well with festivities and events as listed in Section E.

Our Favorite Variants

Woonerf

Paint it!

a Dutch system of reclaiming streets for people, by limiting speed of motorized traffic. Protected spaces exist directly at the building entrances, allowing children to play and neighbors to meet.

From colorful murals to

painting, turn your

colorful place!

intersection repair and street

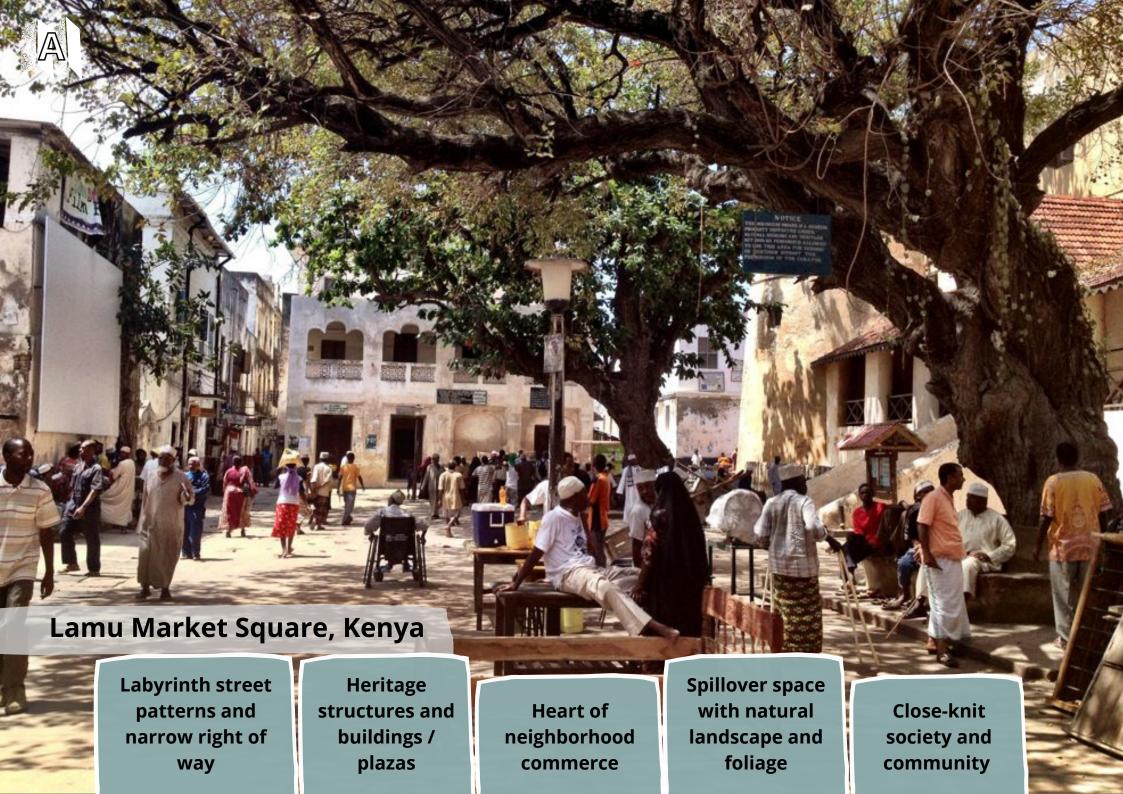
neighborhood into a vibrant,

Green Neighborhood

Revitalizing a neighborhood by introducing nature, trees, plants, flowers, meadows, ponds, and even small forests.

Make sure that there are plenty of events to bring people together. What about a "swap party", where people exchange no longer needed belongings? Put out street furniture, like tables and benches, these will be appreciated anytime!









CARFREE - CITY CENTERS

Characterized by high levels of social and economic activity within a small area, the city center is the heart of it all.

Bustling life is accompanied by high footfall, movement of people and goods, with countless daily exchanges and transactions.

City centers should be well connected by public transport and para transit modes. Managing and limiting vehicular traffic movement through the city center will bring radical improvements that benefit everyone, including local business.

By eliminating parking and disruptive motorized traffic, this transformation will result in a better utilization of urban space: better air quality, a revitalized downtown, and happier citizens.



CARFREE CITY CENTERS - GREAT PROJECTS

- ★ Carfree city centers encourage better utilization of space, thereby improving overall economic potential of the area.
- ★ Once waiting spaces like parking lots and docking lots are eliminated and replaced by organized tram lines or electric lines, spillover spaces become available for use.
- ★ Carfree city centers are the key to improving overall air quality.
- ★ More open space becomes available for use, which increases the frequency of creative interactions and leisure functions
- ★ Cities starting on this journey will want to increase public transport service or paratransit options, such as shuttle services, to smoothen the transition. Bicycle services and hire should be added.

Our Favorite Variants

A Greener City

Redesign a neighborhood with the focus of introducing nature. Trees, plants, flowers, meadows, ponds, and even small forests can revitalize the surrounding area. Urban gardens are the way to go.

Shared Space

This concept puts all traffic participants in the same zone, without traffic signals. Tests have been promising, crashes eliminated.

Culture Magnet

This is the chance to develop the cultural identify of the city and highlight its iconic style

Local Traffic

An alternative (or stepping stone) to a completely carfree center would be to restrict all but local traffic. The success of such an initiative is dependent on stringent policies such as right of way to pedestrians and cyclists, setting low speed limits, enforcing vehicle and parking regulations



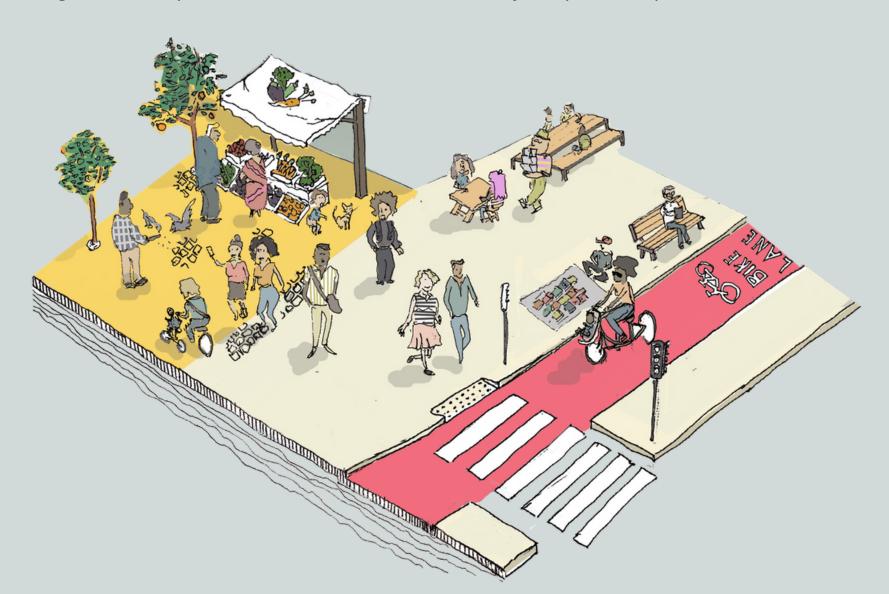






SECTION B - CAR CONTROL

To take steps towards carfree cities involves carrying out a culture shift in how we travel. These changes should be grounded in policies and measures that are easily adaptable, replicable, and scalable.



A community **Dining and Retail Options** During the current public health emergency, Summer Streets supports expanded outdoor dining and retail options while at a safe social distance from others. · Enjoy outdoor dining Shop outside Wear face coverings Stay a safe distance with your family

TRAFFIC CALMING

To explore the advantages of a carfree lifestyle, it is important to have the opportunity to try it out: maybe for a short period of time or during regular, repeating events. You'll notice that the carfree experience becomes a cherished experience. Why not have that always?

Traffic calming, such as by means of closing a thoroughfare or intersection to motorized vehicles, creates impact: something special happens.

To achieve carfree cities requires the onset of a culture shift: changes in policy with new measures that lead to fewer vehicles in circulation, with gradually more and more carfree space.



TRAFFIC CALMING - GREAT PROJECTS

- ★ Traffic calming usually involves physical barriers to driving, either by reducing speed or available road allocation, or by completely removing cars from specific areas. It may also involve reducing overall traffic volumes.
- ➤ This measure connects with the traffic evaporation concept, which clearly demonstrates (with numerous case studies) that closing access points has the effect of an overall, area-wide reduction in driving.
- ★ There are many wonderful cases of traffic calming, where initially critics opposed it, but then noted its success, with local shops experiencing greater footfall and the prediction of traffic chaos turning out to be false.

Our Favorite Variants

Reduce Incoming Traffic

Limiting road capacity for cars entering the center is crucial. Various ways exist to limit inbound traffic. Traffic lanes or parking lanes can be removed. No city center should be plagued with multi-lane roads designed for heavy traffic.

Pedestrian Bridge

Historic towns with natural water bodies have been built with bridges, yet these have become overburdened with city growth. With an overall traffic-calming effect, bridges can be fully returned to pedestrian use, resulting in unique social and cultural meeting space - on a bridge.

Notable Examples

- Millenium Bridge, London
- Charles Bridge, Prague
- Freedom Bridge, Budapest (temporary)
- Ghent Circulation Plan



TRAFFIC CALMING - GREAT PROJECTS

- ★ There are many good measures to deploy when a larger scale restriction of cars is not yet feasible but targeted access restriction for motorists would provide an immediate relief from congestion, pollution and noise.
- ★ Traffic-calmed, open streets provide an essential tool to map the full potential that spaces have, allowing planners, decision makers and citizens to reflect on how these spaces can be designed and utilized better. Meanwhile, spaces that are off limits to cars prove safer and inviting.
- ★ Temporary closures may happen when a given stretch is being renovated. This is a golden opportunity to try out the ideas in this section.

Our Favorite Variants

Modify Traffic Flow

Traffic flows can be modified and reduced by such actions as flipping the directional flow mid-corridor, thus removing its through traffic character. Other options are to limit detours, remove lanes of traffic, or restrict heavy vehicles. There are even further variations to this theme.

Traffic Calming With Physical Barriers

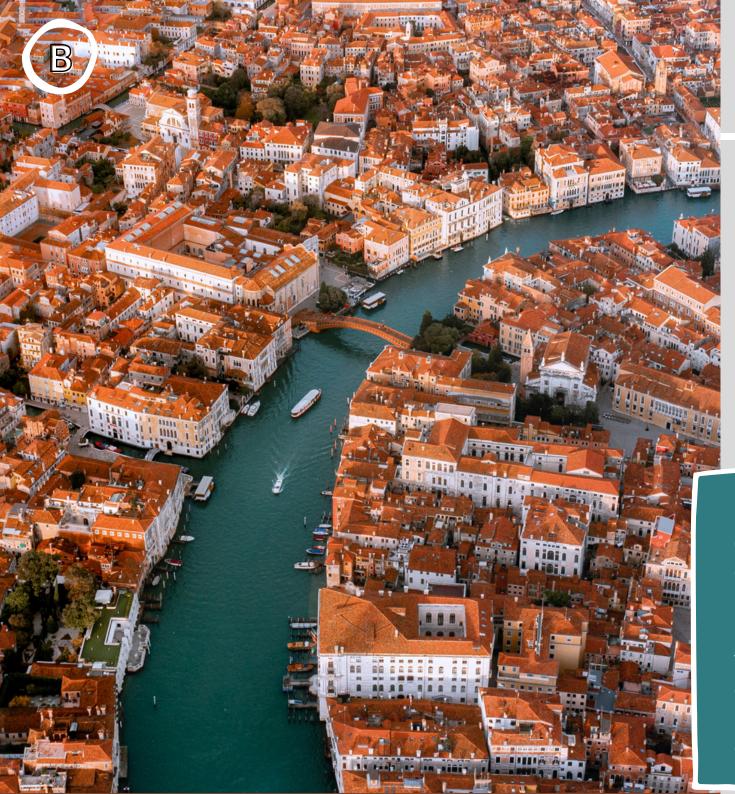
There are many ways to effectively and cheaply limit the speed or flow of traffic. They may be speed impediments, such as potted flowers, kerb extensions, pedestrian refuges, bicycle parking, and many other ways to slow vehicles.

Parking Policy

A parking policy should come into effect that discourages or completely removes parking on street and downtown. A number of cities are progressively removing parking places and converting them to public space.







REDUCE CITY CENTER ACCESS

As the heart of many cities evolved before the automobile, streets were narrow as they were primarily built for walking. These streets were not designed for, nor are they in any way compatible with, fast traffic.

Yet today these streets are choked by the congestion of vehicular traffic. These spaces have become a lose-lose scenario.

By reducing car access, a center can experience full revival of its original pedestrian nature.
Limiting access can be achieved by: restrictions on type of vehicle that may enter, the number of available access routes, or utilization of clever street design and transport policy tools.



REDUCE CITY CENTER ACCESS - GREAT PROJECTS

- ★ Decongestion of the city center can greatly improve economic activity by freeing extra space for exchange while encouraging new forms of cultural and social activities.
- ★ Time loss due to traffic congestion is a huge problem in many cities. Decongestion directly addresses this.
- ★ If the center is well connected via public transport, then reduced vehicular access can boost PT use. It may also push the PT system to take on additional routes and improve overall service delivery.
- Reduced vehicular access can encourage nearby residents to opt for active travel, especially all travels within the neighborhood.

Our Favorite Variants

Limit Highway Offloading

Reduce the number of highway entry points deep into the city center, while increasing transit access. This will relieve downtown traffic while encouraging train trips and other inter-city modes of travel.

Circulation Plans

This measure works
wonderfully in Groningen,
Netherlands and Ghent,
Belgium. Pedestrians and
cyclists may move freely
between the established
downtown quadrants, but car
traffic must take a longer route
- therefore incentivizing other
modes of travel.

Street Layout

A re-engineering of street layout and traffic flows can do much to ensure that only local traffic is permitted. A narrow one way street that winds its way and has multiple turns is much less inviting for a driver than a wide, straight boulevard

The Mews of London: narrow passageways that are fun to walk in







PRICING POLICIES

In urban areas, people usually have several options to choose from when they travel from A to B. They can walk, cycle, drive, take transit or use a combination of these modes.

Most choices depend on how long each option will take, their relative comfort, convenience, safety, or per-trip cost.

When each car trip becomes noticeably expensive, there is an incentive to choose a different mode of travel.

An inconvenient truth is that there are enormous subsidies for road use and fuel consumption. If the real costs of driving were better known (or handed down to the user) there would be less driving. Extra charges simply ask drivers to pay more of a fair share of the costs involved.



PRICING POLICIES - GREAT PROJECTS

- ★ Often the most effective way to change people's behavior is when you ask them to pay up. When confronted with extra costs, people will reconsider if that line of action is worth it.
- ★ People who protest at higher prices for road use or parking are usually not aware of the large subsidies provided. And they are also the first ones to complain if taxpayer money goes to public transport.
- ➤ Pricing policies that involve users paying directly at the applicable time/location are more effective in causing a reconsideration of modal use than a monthly bank charge that is hardly registered.

Our Favorite Variants



Congestion Charge

This is a fee that must be paid when entering the central area by automobile. It has been successfully implemented in Singapore, Stockholm and London, among other places.

Parking Prices

Increasing prices for parking discourages driving. Free parking invites car traffic whereas high charges discourage it. Raising parking prices works well together with incrementally removing on-street parking.

Pollution Charges

These are levied on vehicles with higher tailpipe emissions. May require adding filters.

VMT (Vehicle Miles Traveled)

This is a fee directly linked to distance traveled.

Add-on fees to Uber and Lyft rides





Decreased vehicle entrances by setting up 43 monitored gates

Multiple alternate access way routes Strong political and institutional support Various modes of connected public transportation Strong digital +
non digital
information portal
on transport
systems in the city

Welldeveloped and
monitored
system of fees
collection



street parking and waiting

portal on transport systems in the city

system of fees collection

transportation

support



STOP UNNECESSARY ROAD BUILDING

The belief that road building is the preferred way to develop transport networks has caused enormous damage since the Twentieth century. Many cities built before the automobile era, such as Rome, Venice, and Prague, demonstrate the superiority of human scale design - by providing steps, narrow winding walkways, tree-lined boulevards, avenues, and bridges, with further connections to trains and ferries.

It is time to make it clear to policy-makers and the wider population that we need to put the age of road building and road expansion behind us. Urban blight, pollution, ecological destruction, climate change, dangerous roads with high mortality rates, and inefficient transport - these are a few of the tragic effects of our road building addiction.



STOP ROAD BUILDING - GREAT PROJECTS

- Road building costs taxpayers and governments lots of money, with massive subsidies and never-ending investments in damaging and inefficient transport networks.
- ➤ Roads have a massive carbon impact, making the transport sector the only one with continuously rising emissions.
- ★ This fact should be better understood: new roads lead to new satellite settlements, with greater distances involved. This increases avoidable trips while destroying the environment.
- ★ The use of public funds for infrastructure needs to be better scrutinized. Making better choices will serve people directly, such as encouraging healthy lifestyles via pedestrian and cycling facilities.

Our Favorite Variants

The Ring Road Problem

Ring roads usually add more cars to the streets rather than provide any relief. If the city insists on building a ring road to alleviate traffic, hold them accountable and make sure that they guarantee real relief in the central areas, which means a radical reduction of traffic volumes along all central corridors and lower level street networks.

Endangered Ecosystems

When a planned new road crosses a vulnerable natural area or an existing town or community, protests will communicate resistance.
With the help of local leaders and nature/community protectors, the larger population can be rallied for their support.

Awareness-raising Campaigns

Make a big splash on media, billboards, newspaper, radio shows, social media and everywhere you can get the message across: No to highway expansions! No new highways! No subsidies for pollution! Invest in railways and sustainable transport!



STOP ROAD BUILDING - GREAT PROJECTS

- ★ There needs to be a greater focus on the protection and benefits of ecosystems surrounding the city. Restorative projects and a greater connection to nature will be of great value to urban communities.
- ★ There are inherently strong arguments for pedestrian, cycling and mass transit infrastructure, as these will boost health, safety, and economic activity.
- ★ The development of unsustainable infrastructures should be met with opposition and protest. This should include public discourse in schools and universities.
- ★ Narrative-influencing activities: protest, community dialogue, media discussions, social media call-outs, awareness raising campaigns.

Our Favorite Variants

Highway Removal

Highways have no place in cities. If there is a highway running through the center, campaign for its removal or demotion to a normal capacity road. There are good examples of highway removal or conversion of busy roads into calmer ones.

Tunnels?

In some cases, planners put the traffic problem underground, yet this does not fundamentally solve the problem and is very costly.

Infrastructure budget should be spent more wisely on sustainable projects.

Flyovers?

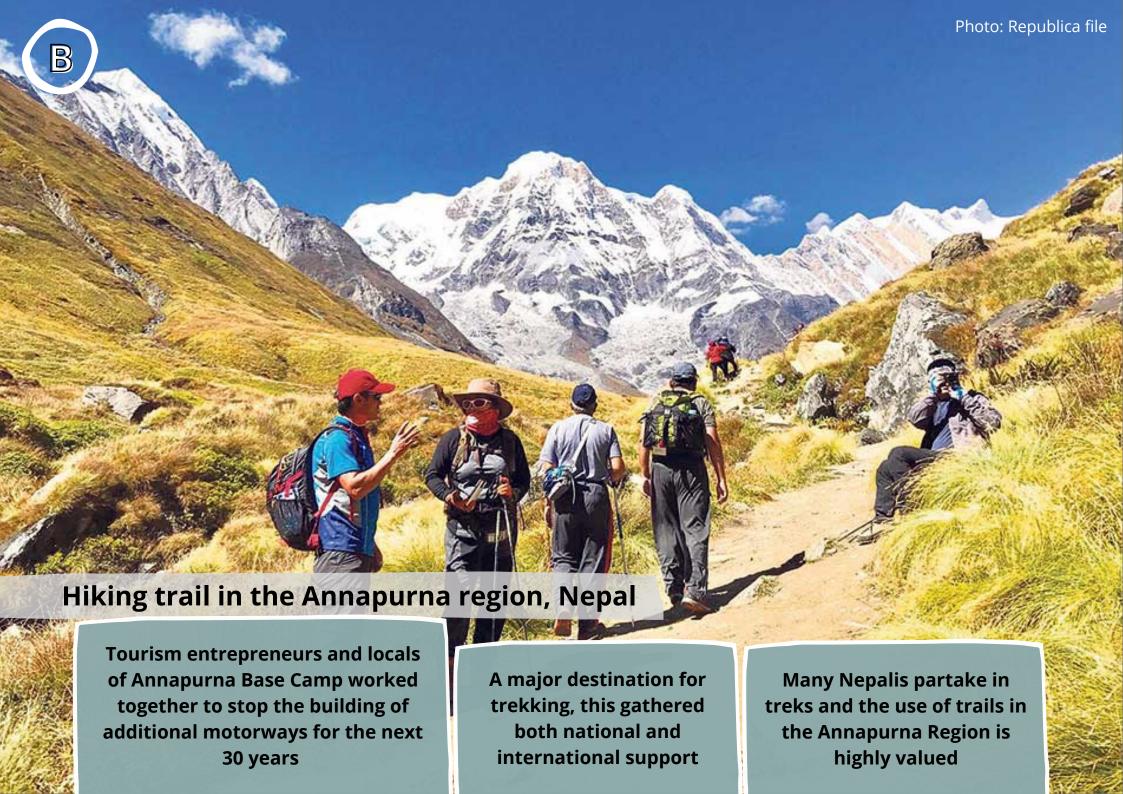
Bogotá said no thanks to a Japanese investment proposal of elevated expressways and flyovers. Instead, they invested in cycle lanes and BRT. This shows that any city can say no to unnecessary road infrastructure.



cover of the city and encourage use of more private cars

mobility plan focussing on public transportation

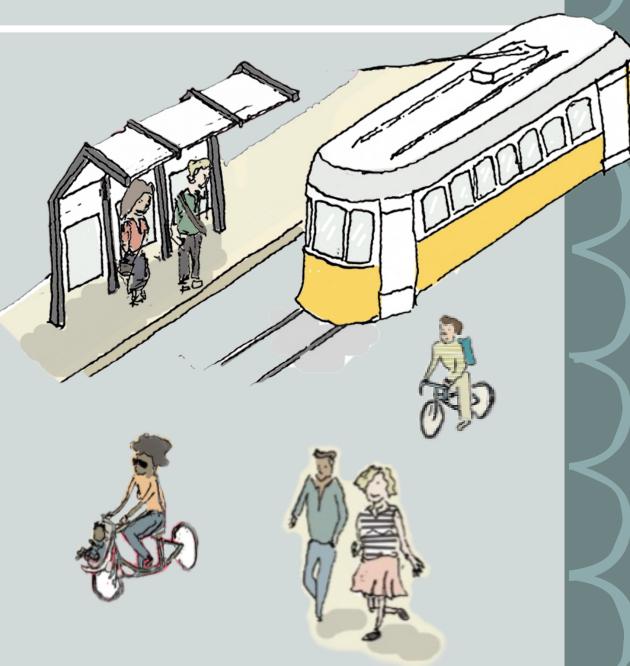
individuals and Namma **Bangalore Foundation**





SECTION C - SUSTAINABLE TRANSPORT

"You don't meet other people while driving in a private car, nor often in a bus or trolley. It's on foot that you see people's faces and statures and that you meet and experience them. That is how public socializing and community enjoyment in daily life can most easily occur. And it's on foot that one can be most intimately involved with the urban environment; with stores, houses, the natural environment, and with people" Allan B. Jacobs, "Great Streets"





PEDESTRIAN AMENITIES

The most memorable public places in our cities are the places where people congregate on foot - the streets, parks, and squares. These are democratic places that make our towns and cities livable. Everyone is a pedestrian at some moment in the day, irrespective of culture, age, gender, and societal status.

If one cycles to work, takes a bus to school, skates to the local market, or strolls downtown with friends, walking is the common denominator, even for car trips. Pedestrian transportation should rightfully be the starting point in planning and the designing of mobility systems and policy.



PEDESTRIAN AMENITIES - GREAT PROJECTS

- ★ Walking is a social as well as recreational activity. Walking involves short distances and more time to soak in your surroundings and enjoy the company of other people.
- ★ A city will get a high score for walkability when there are accessible places for walking throughout the city that are safe and continuous, that connect important destinations, and that provide a pleasant environment.
- ➤ Ways to provide ample space to pedestrians include widening sidewalks and eliminating curb cuts for cars; creating traffic islands; increasing the duration of crossing lights; providing respite from motorized vehicles; ensuring shade, and adding drinking fountains and toilets.

Our Favorite Variants

Special Needs

It is essential to guarantee pedestrian rights for all users. All pedestrian spaces needs to be accessible by wheelchair users and people with other disabilities such as reduced vision. This includes clear signage and signals.

Right To The City - For All

In many cases, minorities experience additional barriers. This may be due to other languages used or not feeling comfortable in certain areas. Everyone should be made to feel welcome and included in daily life. Existing barriers should be removed.

Child and Elderly Friendly City

Children need to have protected places just as senior citizens do. Street design and urban policy should be carefully attuned to the needs of these groups.

Surfacing Material

The choice of surfacing is important when seeking to promote walking. Stone or decorative tiles are friendlier and more inviting surfaces, as opposed to black top surface, which is geared to automobiles.





- unfixed, changeable, recyclable

weeks to a few months.

and retail centers

on air quality and health

Future Streets incubator fund



CYCLING INFRASTRUCTURE

Cycling infrastructure is an essential part of engineering a mobility culture shift. Whether the city is as densely populated as Shanghai or a small town along the French coast, safe and dedicated routes for cycling are essential to bolster the spirit of progress - to a more sustainable future.

There are international standards that provide guidelines for cycling infrastructure, such as NACTO in North America or CROW in the Netherlands.

The choice to make a trip by bicycle can be influenced by many variables. Convenience, safety, affordability and trip length are at the top of the list.



CYCLING INFRASTRUCTURE - GREAT PROJECTS

- ★ People frequently cite the lack of safety and high car traffic as reasons not to cycle. If these issues are properly addressed, many more will get on their cycles.
- ★ To address safety and comfort concerns, dedicated and protected cycle paths or low traffic routes are the way to go.
- ➤ Network density is also a boost: when more places can be reached easily by bike, people will happily ride.
- ★ Quality of surfaces and removal of curbs or obstacles is important. Cycling infrastructure should never be lower quality than conditions for driving.

Our Favorite Variants

Bicycle Friendly City

The overall goal of improvements for cycling should be to achieve a truly bicycle friendly city.

Inter-modality

Combining cycling with other forms of transport, such as train and bus travel: this involves integrating ample bicycle parking at stations and transport hubs, or allowing bicycles to be carried by trains or put on bike racks on the front of the bus.

Low-traffic Areas

Where little motorized traffic is in circulation, streets don't need extra cycle paths, as shared road space is just fine.

Bicycle Parking

Bicycle parking should be universally available, and connect directly to housing and all destinations. When it is easy to safely park their cycles, people will use them. The choice of quality bike parking structures should not be left to chance.



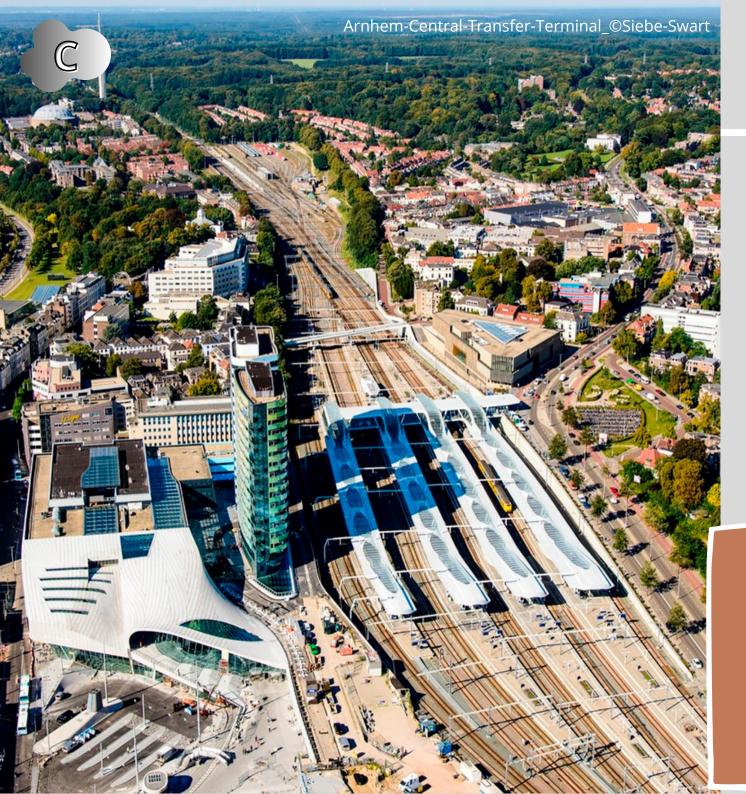
Consistent design and orange color improve safety at all intersections

Organising traffic flows at intersections without stopping

Creating buffer space between lanes improves awareness, as line of sight becomes longer, giving more time to react

Prioritizing space for cyclists and enabling easy navigation





PUBLIC TRANSPORT IMPROVEMENTS

Public transport (PT) should be easy to use, inexpensive and have the widest possible coverage in a city, reaching the peri-urban and neighboring rural areas.

Any significant improvement to public transport quality, reliability, affordability, safety, and connectivity will increase the ridership and provide equitable alternatives to automobile infrastructure.

When public transport is given its proper place as the backbone of a city's transport network and local economy, car use is no longer a requirement for navigating daily life.



PUBLIC TRANSPORT - GREAT PROJECTS

- ★ Providing high quality public transport is an equity issue. PT is the basis for the local economy. Thus this essential urban service should not be forced to "sink or swim" in the market economy. It is wrong to call PT a cost [or loss] and roads an investment.
- ➤ Network density and coverage is key for good transport systems. There should be plenty of routes in service, as well as transfer options, and ease of integration with other modes.
- ➤ Even in complex systems, every effort should be made to provide clear signage and be user friendly. Plan and design for intuitive use.

Our Favorite Variants

Reduce Transfers

Often a disincentive for using PT occurs when many transfers are required (with long wait times). Well designed routes can cover a lot of ground, reducing unnecessary transfers.

Metro, Tram or BRT?

While a mega city will need a robust metro system in addition to everything else, smaller cities should choose wisely. Trams and BRT can be more cost effective and provide excellent service, and are visually inviting.

Wayfinding

Wayfinding is the art of deploying signs, visual aids and informational boards for both passengers and pedestrians.

Wayfinding design should based on providing clear guidance, directions and also point out local culture and areas of interest.

Free vs. Affordable PT

There is a lot of debate on whether PT should be free for its users. Whichever position one holds, PT should not be expensive and should be free of charge for low income users. PT should never cost more than petrol prices.





13 well connected and integrated corrdiors

Less expensive infrastructure investment than underground highways / motorways/ flyovers and expressways

+ energy
upgradation electric mobility

Strong digital + non digital information portal on transport systems in the city

Well-developed and monitored system of fee collection





Higher carriage capacity per trip, with potential to increase

Slower and controlled speeds allow for easy halting and greater number of stops

Slower speeds and controlled movement allows them to be implemented on shared public space

+ energy
upgradation electric mobility

Ease of access for all people, irrespective of age and ability

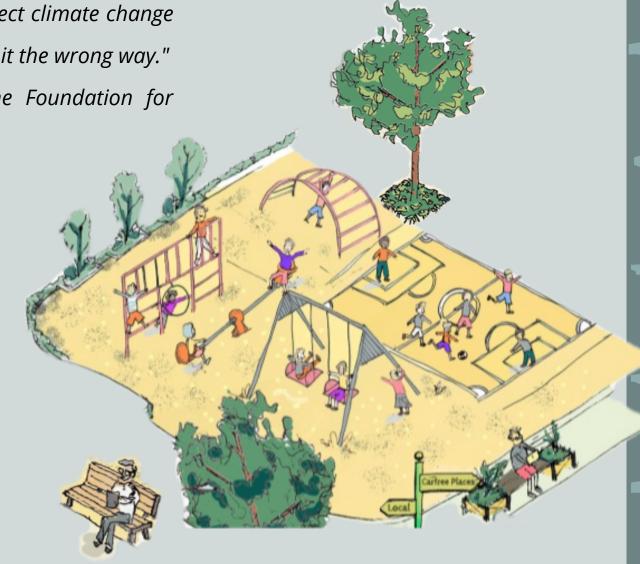


SECTION D - URBAN STRATEGIES

"We are not short of money to correct climate change and transport policy. We just spend it the wrong way." Professor John Whitelegg from the Foundation for Integrated Transport









GLOBAL ROADMAP OF ACTION

Toward Sustainable Mobility





URBAN MOBILITY STRATEGIES

Creating a comprehensive mobility strategy for a city involves taking full stock of all current issues and givens, and developing a plan for future development, with an eye to incremental improvements in line with the overall vision. Key factors include predicting future scenarios and keeping policy priorities and targets in mind.

The modal shift away from driving and to sustainable transport modes should be integrated in a city's mobility strategy and vision. This in turn should form the basis of a robust action plan.



URBAN MOBILITY STRATEGIES - GREAT PROJECTS

- ★ Urban mobility strategies should be integrated with other strategic planning areas. Thus land use, energy provision, water, social programs, economy and environment initiatives all need to work in tandem.
- ★ When the overall well-being of residents is the primary goal of planning, this will translate into a stronger economy in the long-term. Thus, short-term commercial gain should never lead as a priority.
- ★ Environmentally sound investment: all infrastructure projects need to be rooted in strong environmental anchoring, including everything from ecological diversity, green energy, pedestrian-oriented space, quality materials, harmonious design, and carbon neutral construction process.

Our Favorite Variants



SUMP vs Niche Strategies

A Sustainable Urban Mobility Plan (SUMP) should be the bedrock of transport policy, with specialized strategy tools used for specific areas, such as cycling, public transport, childfriendly strategies.

Transport Demand Management

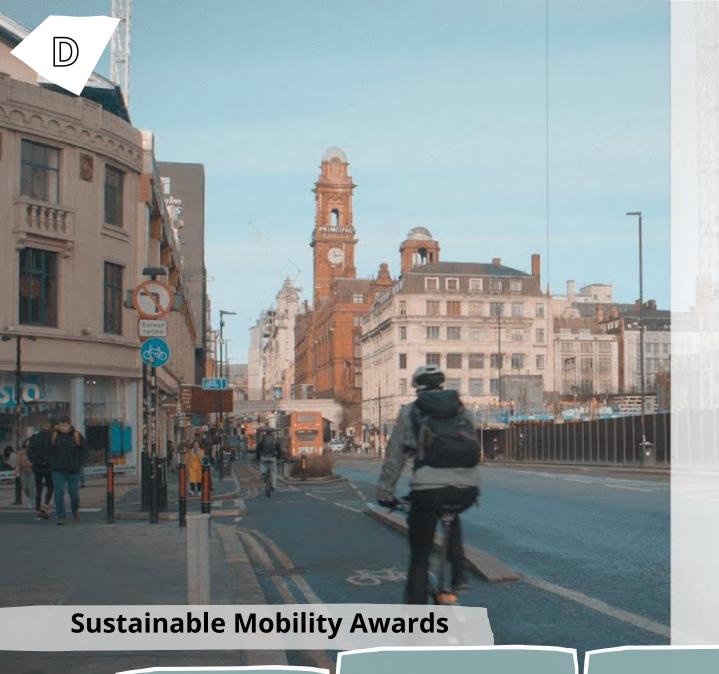
TDM is an approach to planning where the focus is not on ever-increasing supply but rather on where demand can be influenced through key levers and policy considerations. See VTPI's TDM Encyclopedia.

Urban-Rural Integration

Planning should integrate the wider territory, including satellite towns. Sprawl should be discouraged, while emphasizing compact planning. Natural and recreation areas should be accessible to all. Forests, parks, rivers and meadows should be protected and expanded.

Transit Oriented Development (TOD)

TOD relates to a priority in planning that integrates transport nodes with nearby destinations, amenities, and housing. Transit users will reap many benefits and save time and money.



7thSUMP Award on multimodality



Greater Manchester

Highlights different aspects of city and mobility planning

Encourages open dialogue and discussion with multiple stakeholders

Creative engagement and assessment of long term planning

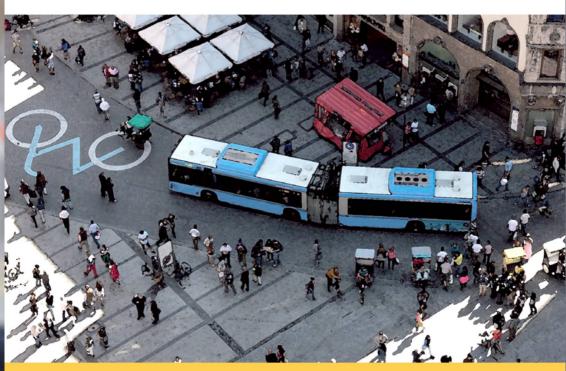
Encourages and shares best practices

Urban Mobility Strategy









Guidelines

Developing and Implementing a Sustainable Urban Mobility Plan

SUMP Guidelines by the EU

Guiding policies for large and small decisions pertaining to city roads and street planning

Prioritising more efficient, safe, attractive, environmentally friendly and healthy vision for the city plan

Planning strategies to reduce + optimise the need to travel Focus on the goals and prioritise for different city departments/ administrations



PARTICIPATORY BUDGETING

The Participatory Budget asks people to come up with solutions to problems in their community, in areas where they are the experts and in which they are highly invested. The nature of the process gives ample opportunity for a plurality of voices to be heard while also encouraging collaboration and consensus-building among participants with similar agendas, and finally giving everyone the opportunity to vote for those ideas which matter most to them.

This measure is a very important step towards a more collaborative city. Allowing urban dwellers to influence where money gets spent enables ownership and also provides the opportunity to create things that people care about.



PARTICIPATORY BUDGETING - GREAT PROJECTS

- ➤ While the proportion of the Participatory budget (PB) in the overall city budget might not be that large, it is important that the available scope for projects go beyond symbolic and allow for meaningful projects to be financed.
- The PB process creates the opportunity for citizen participation and puts democracy to work. This is a great way to get residents active and enable them to take ownership of important issues in their town.
- ★ The process should be fun, with stimulating discussions, fresh ideas, unexpected twists and turns. The best of human ingenuity may surface here.
- ★ Even in areas without a strong democratic base, smart leaders can realize the benefits (and non-threatening nature) of this process.

Our Favorite Variants



Local Story

The PB process can help to make the local culture shine - as it connects to what people care about - allowing the local history to be told. This gives people reason to be proud of where they live.

Tactical Urbanism

This is a form of citizen participation directly in public spaces, designing and implementing many types of local projects, using tools and equipment, and usually guided by an expert.

Tactical Urbanism Ideas

New plants and flowerbeds in the street or square. Bicycle parking. Colorful street painting by children. Murals. Community gardens. Patches of wild flowers or thick grass (not manicured). Playgrounds. Depaving and greening. Cultural events and street parties. Parades. Sports events. Trips into nature for children and underprivileged.

Co-creation

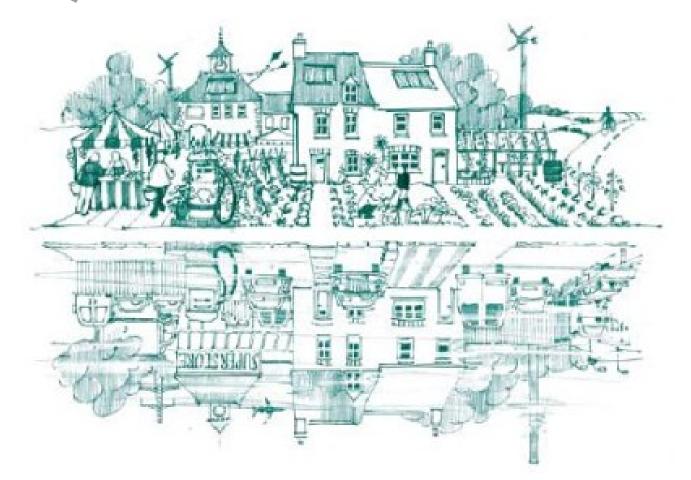
Apart from coming up with suggestions and voting on projects within the PB process, it will be especially valuable when citizens are able to take part in the implementation as well in a hands-on co-creation process.











IN TRANSITION

From oil dependence to local resilience

The Transition Handbook, by Rob Hopkins

TRANSITION PLANS

At a time when the climate crisis has become a burning issue for all but the most dogged skeptics; at a time when the destructive nature of burning carbon and other fossil fuels is being witnessed by all; and as the world experiences ever more chaotic weather, with fragile ecosystems under threat, a diversity of voices have been earnestly calling for a transition to carbon neutrality and likewise sustainable cities. Meet the Transition Towns movement, which started in the UK.

A transition plan is a specific planning instrument that delivers a roadmap for the transition to a sustainable, resilient, low carbon society, ideally also a carfree city



TRANSITION PLANS - GREAT PROJECTS

- *All cities should have the goal of becoming equitable, with zero traffic deaths and zero emissions. These and other aspects feature in the transition to becoming truly sustainable places.
- ★ A transition plan thus connects sustainability goals to the policy and planning process
- *While in general an urban development strategy should be guided by sustainability principles, a transition plan is wholly focused on strategies, indicators and a timeline for meeting the targets
- ★ In order to carry out a truly ambitious transition program, institutions and relevant stakeholders need to be aligned and committed. This involves training and capacity building (see bubble).

Our Favorite Variants

Context Definition

Transition plans can be grounded in a number of areas, connecting to economic, political, social, or cultural perspectives.

Vision Zero

The focus is on zero transport deaths. It can play an integral part of any sustainability paradigm

Carfree Transition

While new cities can be built from scratch without cars, existing cities should embark on a transition plan to gradually reduce automobile infrastructure and driving.

Only if a firm plan is in place can such a goal be achieved.

Transformative Capacity

This sub-genre focuses on the necessary structural and organizational arrangements of participating institutions and of the structure of governance in order to achieve the desired outcomes.





constRuctive mEtabolic processes For material flOWs in urban and peri-urban environments across Europe

Deliverable 1.2

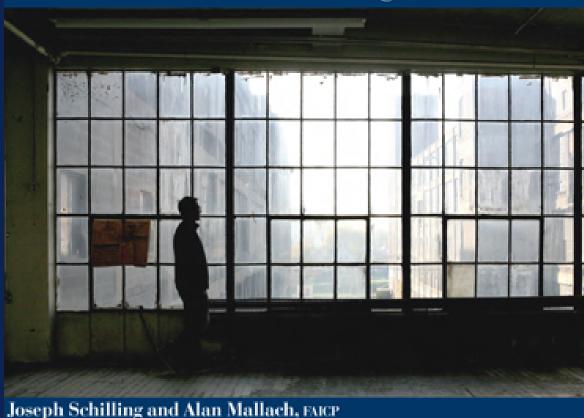
CITIES' CIRCULAR ACTION **PLANS**

Due date of deliverable: 31/05/2020 Actual submission date: 31/05/2020

Start date of project: 01/06/2019 Duration (36 Months)

Dissemination Level: Public 🗸

Cities in Transition: A Guide for Practicing Planners



The Cities' Circular Action Plans (CCAP)

Guide for Cities in Transition



Roadmaps for the transition toward circular and regenerative cities

Action plans for project level and pilot level

Guidelines on management and implementation of local activities

Transition plan is wholly focused on strategies, indicators and a timeline for meeting the targets

E

SECTION E - POP-UP TO PARTY TIME

There is no better way to turn around a city than to be a part of the transformation process yourself. You can join the "pedal powered revolution" or cocreate parklets and join with others in community gatherings. Catch the spirit of street parties and festivals.











CICLOVIA / CARFREE SUNDAYS

A brilliant idea from Bogotá, Colombia, involving the temporary conversion and enjoyment of otherwise busy city streets for the sole use by citizens: runners, gymnasts, cyclists, pedestrians, joggers, and skaters. Cars are nowhere to be seen.

In Bogotá this event is celebrated every Sunday of the year, with over 120 km of the city's road network used for this purpose.

Bogotá's weekly ciclovía attracts approximately two million people, 30% of the city's population, on vast stretches of carfree streets. This city bans cars every Sunday and people love it!



CARFREE SUNDAYS - GREAT PROJECTS

- * Streets closed to cars but now open to people provide a wonderful space for celebration of food, music and local culture.
- ★ The brilliance of events like Ciclovía is that they allow people to experience first hand what carfree streets look and feel like. Such experiences can be more powerful than any rational arguments.
- ★ It can be smart to gradually increase the network of participating streets and operating hours. When people can step outside their homes and join right in, no more convincing is needed.
- ★ A key to the success of ciclovía is to mobilize a sizable number of volunteers for the day. Each participating city needs to find the right incentives to get standby event helpers.

Our Favorite Variants

Carfree Day

Carfree Day is celebrated every year on September 22. This can be a special event anywhere. Some bold cities (including Bogotá) have instituted a city wide carfree day experience.

Ecomobility World Festival

A wonderful experiment described as: one month, one neighborhood, zero cars. This has been carried out in South Korea, Taiwan and South Africa, and can be replicated anywhere.

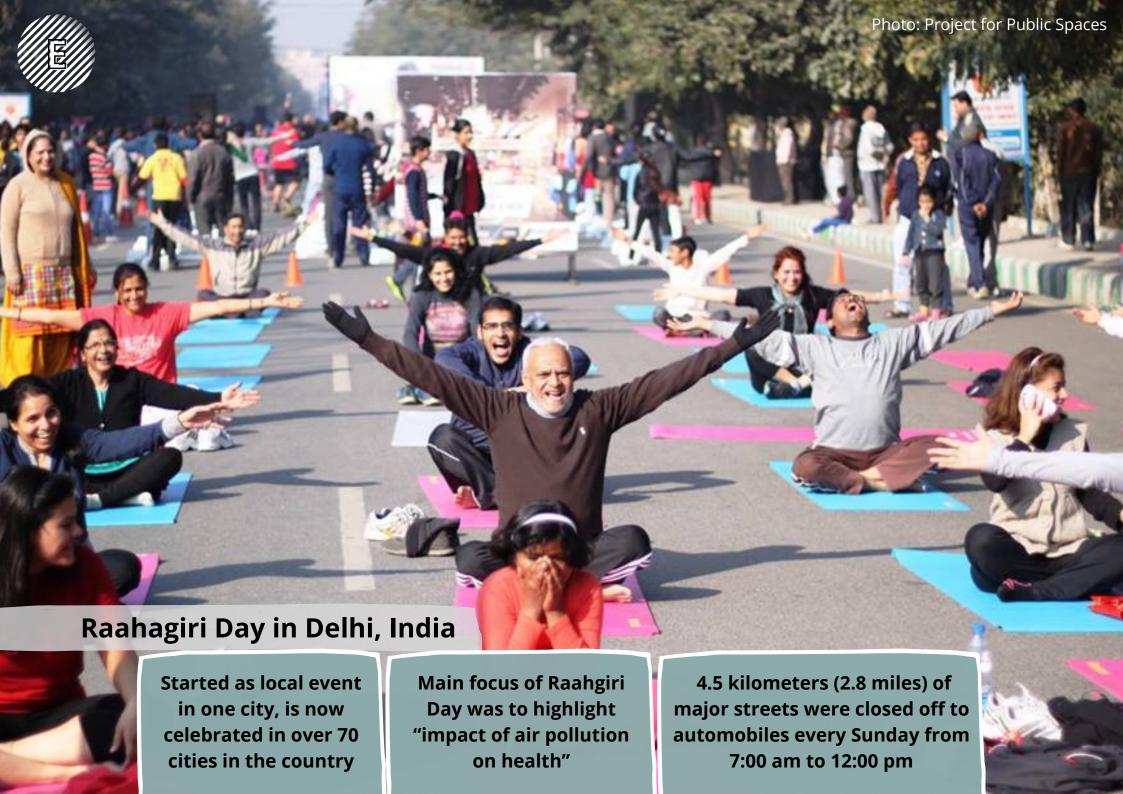
Urban Beaches

Some cities have turned road space on the river embankment into sandy beaches during the summer months. This includes the famous Paris plage and was also done in Budapest.

Summer Events

Not every city chooses to hold a ciclovía every weekend. Some cities hold these events on summer weekends. For several years, Budapest's Széczenyi bridge (chain bridge) held carfree celebrations on summer Sundays.







POP-UP BIKE LANES

Placing new bike lanes on city streets has been a popular and quick win for many cities during the COVID-19 pandemic, but it is also something that works in normal times. This provides ideal testing ground for permanent adoption, and also provides much needed extra space to regular and new cyclists.

Pop-up bike lanes are among the most iconic responses to have come out of progressive cities during the pandemic. They are easy to do and send a signal: We will rise to the challenge and we will use this crisis as a starting point to improve our city.



POP-UP BIKE LANES - GREAT PROJECTS

- ➤ Pop-up bike lanes are something a city can do fast, within a few days for a given road, using simple and cheap materials, mainly paint and dividers.
- A chief advantage of pop-up bike lanes during an epidemic where physical distancing is required is that it provides just that a safe way to have independent mobility on two wheels.
- ★ Temporary bike lanes like this come with the hope that they will stay for longer. There are good reasons to be optimistic as well, as cycling has been growing around the world and people are using the new lanes.
- *This approach follows the motto: You have to try it yourself to learn how great it is.

Our Favorite Variants

Network Effect

It is not too early to think of the future cycling network. You can already map out an extensive network that covers the whole city, and build a skeletal route that you can continuously add to.

Bold Move

Pop-up bike lanes provide the opportunity for forward-thinking designs, replacing whole stretches of parking places or driving lanes. Since one can always promise to remove the new cycle lanes if they don't work, that amounts to fire insurance against fierce opposition.

Paint It!

Colorful paint along the bike path makes it fun for everyone, cyclists and anyone else on the street.

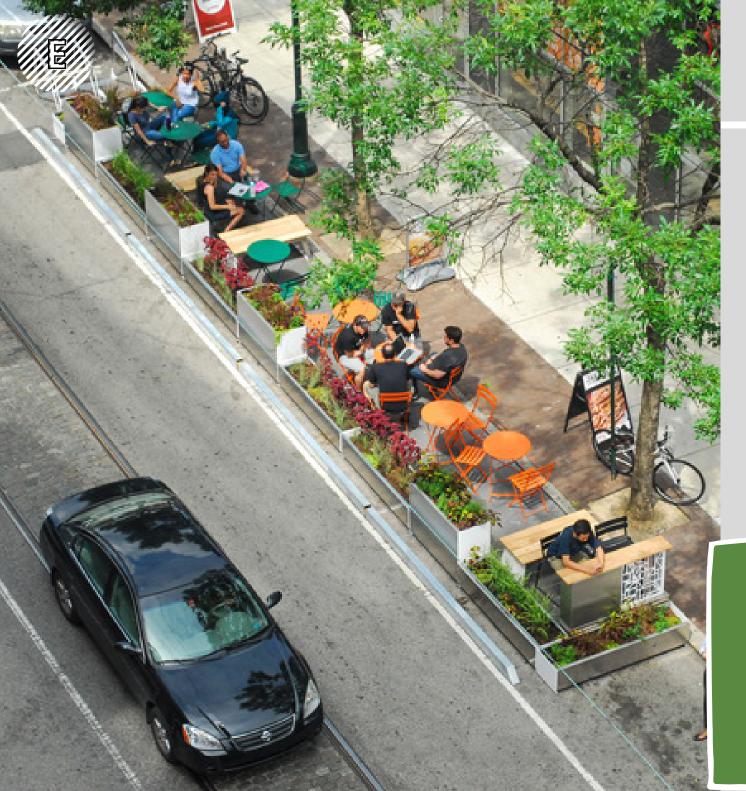


Mid-density residential neighborhoods

with mixed-use buildings, stores & cafes

lanes allowed for quick transformation

were held prior to implementation. These platforms continue to be used to educate public about benefits of cycling



POP-UP EVERYTHING

Apart from bike lanes, many great initiatives can be conceived and rolled out very quickly, often with the cooperation and co-design of locals – that is, tactical urbanism. This can take many forms, see the variants.

Reclaiming space for people and doing it in ways that include local participation and allow for creativity and beautiful designs - is there any better way to spruce up a city than that? It is fun, creative, participatory and inexpensive.

Pop-up measures of all varieties and sizes are a great way to experiment and test what has enduring value. Besides they are fun and provide boundless opportunities for creativity.



POP-UP EVERYTHING - GREAT PROJECTS

- ➤ Tactical urbanism allows for citizen projects to get off the ground, quickly and inexpensively. They are fun for the creators and provide an enjoyable experience for any urban dwellers who come across them.
- ★ These kinds of projects are also a great way to foster local democracy via civic participation and help residents to reclaim their city, akin to the Right to the City movement.

Our Favorite Variants

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Parklet

This is a mini park that usually takes the place of a parking space, and can be designed in many different ways, often with plants, flowers and seating.

Community Spaces

One may establish temporary or permanent community centers and meeting areas, which may contain cultural activities, workshops, soup kitchen, bike repair, concerts and much more. Utilize unused places or empty shops, buildings.

Open Streets

DIY ways to give pedestrians more space. This is a thematic that is rapidly gaining traction.

Pedestrian Area Extensions

There are also many ways to do this, such as widening the sidewalk or creating new pedestrian-only areas, often with creative street art or pavement art. Parking spaces can also be replaced with picnic tables. The opportunities are endless.



Superblock of Sant Antoni, Barcelona

400 meters

Local network: 10 km/h





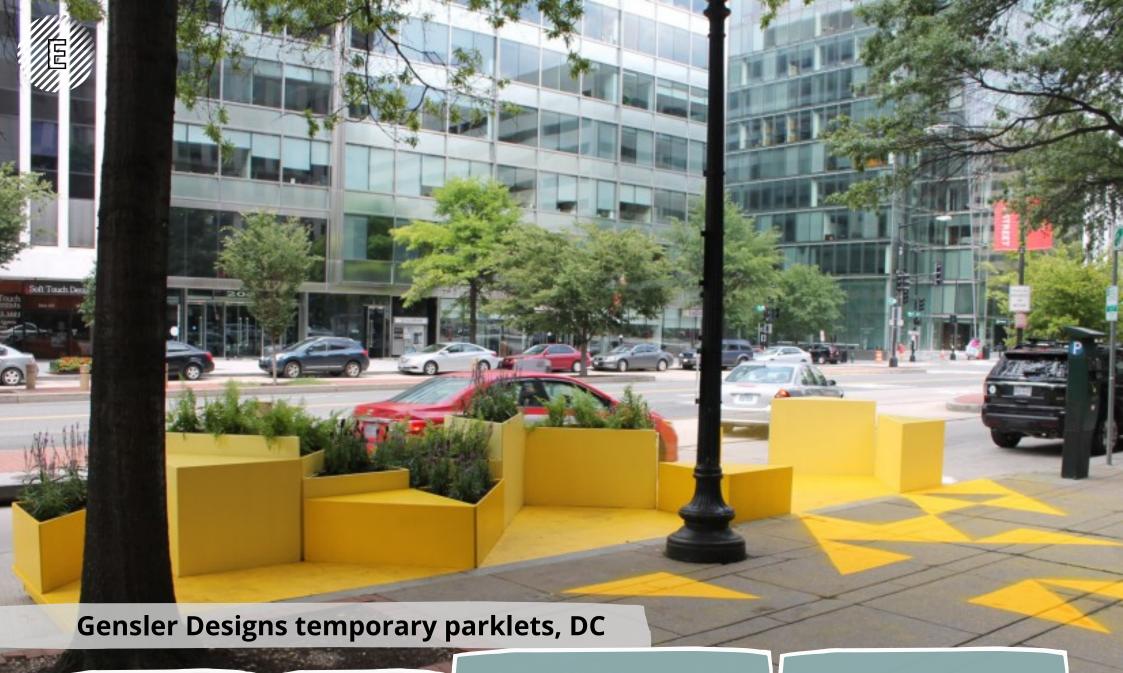
PASSING VEHICLES DO NOT GO **THROUGH**

EXERCISE OF ALL THE RIGHTS THAT THE CITY OFFERS. HIGHEST AIM: CITIZEN.

City blocks in the characteristic orthogonal urban grid pattern segregates traffic movement at the periphery, allowing inner streets to become carfree and pedestrian only spaces

The urban grid, along with super block model, creates shorter travel distances, making walking and cycling easier and more attractive

A soundbite of the **Superblocks** program: Filling streets with life



Seasonal parklet open for a period of 2 -3 months

Joint initiative between public and private Adds playful and vibrant color to the site, catching eyes of passersby, inviting them to pause

New meaning for sidealks as not just places to move but as places to rest and interact



A safe and easy way to park bicycles is an important part of encouraging cycling.

Unlike cars and other motor vehicles, bicycle parking occupies less space and can be innovative and fun

Ease of access parking bays are at
ground level - same as
the footpath

Mix up uses - bicycle parking bays along with greenery and waiting areas may be accepted more easily and used frequently







STREET FESTIVITIES

Celebration and festivity provide a fundamental medium for humans to connect, and a place where community and civic spirit can be created. Events offer a perfect way to get your messages out and do awareness-raising. There are countless fun ways to bring people together. The sky is the limit.

Festivities are where celebration meets civic spirit and where socializing and good neighborliness meets political and local awareness.



STREET FESTIVITIES - GREAT PROJECTS

- ★ Street events are opportunities for people to come together. They can create opportunities both for friends to gather and for strangers to meet.
- ★ A street party is the complete opposite to a typical suburban neighborhood in North America, where cars can be seen everywhere, but not a single person in sight no big surprise, as there are often no sidewalks available.
- ★ Events may be one-off or recurring, they may inhabit a particular space (such as a public square) or they may include a procession across town. They can be simple or complex. There might be a stage with a band or pingpong tables.

Our Favorite Variants



Public Gathering

This can be a fun parade or it can be a demonstration with public statement made in front of town hall. The point is to offer a clear message to the public and/or to the decision makers.

Street Festival

Close the street to traffic and create a fun atmosphere for a day or an evening. During the day let a creative theme and games dominate, the evening might have a convivial atmosphere, with food and drink, music and dancing.

Outdoor Games

There are many group activities and games that can be played right in the city.

Outdoor Event Ideas

Stone-skipping on the river bank.

Communal breakfast or lunch. "Cyclists' breakfast on the go" with coffee and croissant for cyclists to grab. Silly group activities like pillow fights or capture the flag. Yoga in the park or street. Sports competitions. Children and youth gatherings. Chess tournaments. Food festivals. Theater performance or poetry recital. Song and dance.



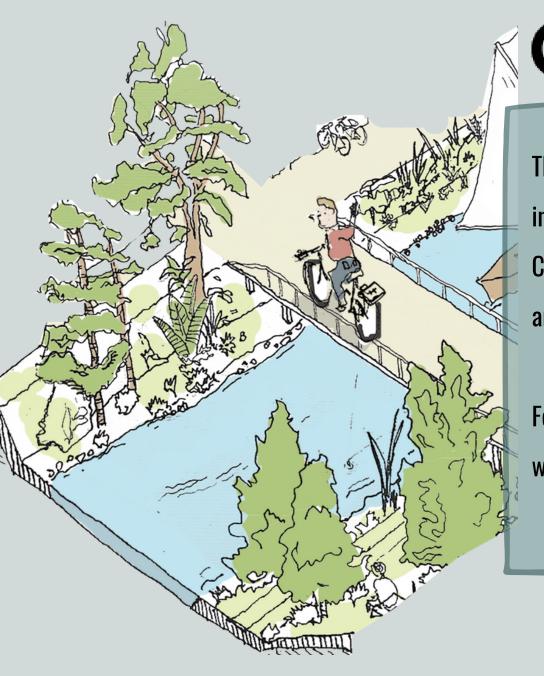
Anstey Village is the creative heart of the city

the vibrant neighbourhood + artistic culture Part of Neighbour Day 2015 an annual celebration of community by Relationships Australia. Open platform to discuss community-related issues and concerns

Streets are closed off to cars and motor vehicles







SCA

The Carfree Cities Alliance is the premier international organization promoting the Carfree Model as the way forward for current and future cities.

For more information on CCA, visit: www.carfreealliance.org