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URBAN
PLATFORM



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Foreword

Pakistan's rapidly urbanizing economy has been a central topic in policy circles for the last few years. Traffic and transport related issues faced by city dwellers are a regular feature in the news however, seldom do we see actionable policy recommendations being implemented. The popular approach to urban problem solving has been to allocate government expenditure for mega infrastructure projects that ultimately cater to long distance motorized transport. Pakistani cities are socially and spatially growing through unsustainable urban sprawl and misallocation of vital resources. The consequent damage of this unsustainable growth on air pollution and overall quality of life needs to be addressed with innovative approaches.

This document has been prepared by a multidisciplinary team of citizens and urban professionals with the aim of influencing sustainable change in Pakistan's urban mindset. The Islamabad Cycling Strategy intends to highlight and illustrate the possibility of non-motorized short distance inner city transport. Although the promotion of cycling and biking infrastructure may be met with skepticism in Islamabad, the proposed strategy merits consideration. Cities around the world are implementing similar strategies and benefiting greatly from the socio-economic returns thereof.

The city of Islamabad is fortunate to have able and open-minded leadership with the willingness to implement sustainable solutions for its citizens. The Islamabad Capital Territory Administration (ICTA) has collaborated with Urban Innovation, Islamabad Cycling Association, Urban Platform, Municipal Corporation Islamabad, Traffic Police Islamabad and Graana.com to organize 'Cycling Sundays' in Islamabad every month. The partners are committed to advance cycling as a safe and affordable option for mobility in Islamabad.

Together, the authors of this document would like to thank the citizens of Islamabad who have participated in the ongoing awareness initiatives and demonstrated the increasing demand for healthy, safe and sustainable urban mobility solutions for their city. We hope you will continue to lend us your support and help achieve this vital change for Islamabad.

Sarah N. Ahmad
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Executive Summary

Around the globe, capital cities are leading the way in implementing innovative solutions to the rising challenges of urbanization.

Islamabad is the capital of a rapidly urbanizing nation of over 220 million people. Therefore, Pakistani cities naturally look towards Islamabad to lead the way in policy and sustainable change. Bolstered by the current political and social will, the city has recently displayed an appetite and demand for healthy solutions to ongoing mobility challenges. Moreover, the unique changes to urban life brought about by COVID-19 have highlighted the need for alternative and safe modes of personal transport around the city.

This cycling strategy outlines the importance of behavioural change initiatives and awareness campaigns encouraging and mainstreaming non-motorized short distance travel within the city. The awareness campaigns will specifically focus on the challenges faced by women and children. The frequency of short distance travel by cars can be mitigated by promoting and facilitating alternative modes of travel such as walking and cycling. Islamabad can prevent traffic congestion by improving upon its existing network of sidewalks and by developing more lanes for cycling. The city can improve its urban landscape, mobility and environment by making much needed improvements to its public spaces.

This document outlines a four pronged approach: Behavioral change, infrastructure measures, policy and legislative measures, and the creation of sectoral level jobs and opportunities. This cycling strategy document also presents necessary diagrams, maps, a detailed action plan and timeline thereby simplifying the implementation process for the city administration. The subsequent strategy paper will be based on reviving the cycle manufacturing industry in Pakistan.

Intrinsic to the success of the Islamabad Cycling Strategy is multi-stakeholder collaboration and coordination. Without the willingness of both the public and private sector to work together to enact positive change in Islamabad, this strategy and similar efforts will be in vain.

BACKGROUND

Imagine this: On a typical working day in Islamabad, an office worker comfortably drives their cars on the wide expressway. He frowns at pedestrians trying to cross the road and at non-motorized vehicles who are slowing his car. He sees them as obstacles in his path. On the other hand, non-motorized vehicle owners and pedestrians fear for their lives amid the velocity and ferocity with which motorized vehicles cross their path and overtake them. This is just one instant of the non-inclusive urban mobility development model the city of Islamabad follows. Therefore, there is a need to improve accessibility to the urban commons for all by creating affordable and equitable transportation options and infrastructure amidst rapid urbanization.

Urbanization in Pakistan is primarily fueled by high population growth rate and an increase in rural to urban migration. According to estimates, the annual growth of urbanization is about 2.52% to 3%, which is one of the highest in South Asia (UNDP, 2018). This rapid urbanization presents its own set of challenges and opportunities. Even though cities are hubs of economic growth, productivity, innovation and culture, if urban service delivery remains poor, the benefits of agglomeration are significantly diminished (UNDP, 2018).

The preference of policymakers for automobile-dependent master plans which lead to urban sprawl and restrict high-density and mixed land-use development has trapped cities in an unsustainable and vicious cycle as indicated in Figure 1. The situation is aggravating in the absence of an approved non-motorized Transport policy in Pakistan.

Development of singular land-use regimes and low-density housing at the periphery of cities increases dependence on vehicle usage, which promotes motorization. Motorization further increases the traffic congestions and leads to an uptick in parking demand. Consequently, government officials invest in road infrastructure, underpasses, signal-free corridors and increase the road capacity to alleviate traffic congestion (Haque & Rizwan 2020; Iftikhar et al., 2020). However, this leads to a phenomena known as “induced demand”, which indicates that increasing road capacity leads to a greater increase in traffic volume (Goodwin, 1996). Hence, it is a safe assumption that the government officials cannot simply build their way out of traffic congestion. There is a need to diversify modes of urban mobility by discouraging the use of private vehicles, increasing the number of trips made by public transport and promoting non-motorized modes of travelling, i.e. walking and cycling (Cervero, 2002; Ahmed, 2020).



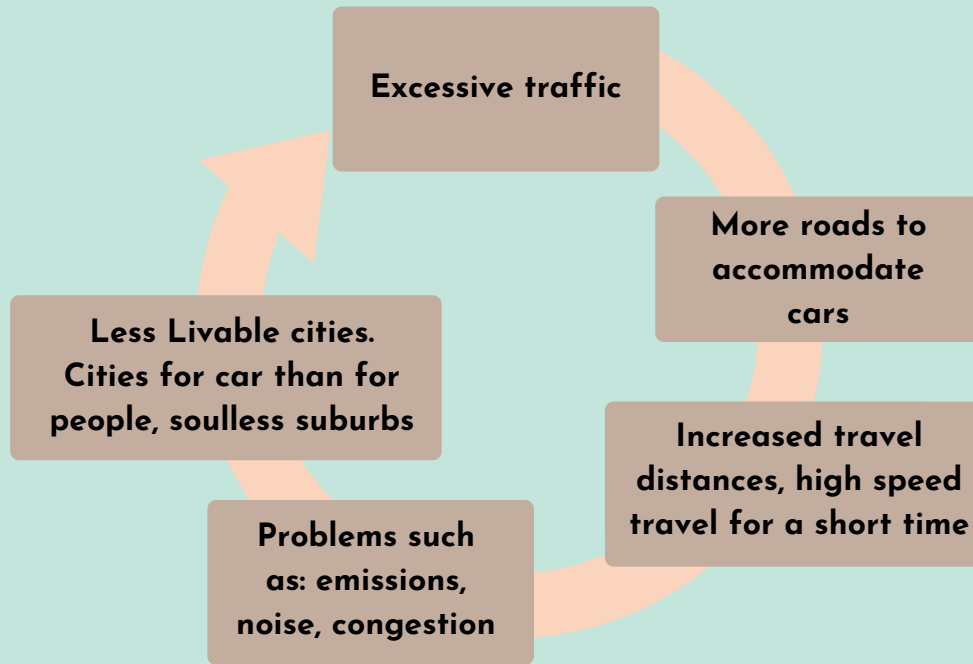


Figure 1. Vicious cycle of Excess Traffic (Kodukula, 2011)

Infrastructure projects in Islamabad have seen a similar pattern resulting in resource exhaustive and unsustainable projects. This document provides an action plan to the policy makers for increasing the uptake of cycling to curb the mobility challenges of Islamabad.

Cycling is a beneficial activity for the individuals and the community as a whole. It is a clean, low-cost and healthy mode of transport. Moreover, in dense urban areas, cycling can be utilized as a much faster mode of transport compared to cars.

In the Netherlands 36% of the population's most frequent mode of transport is a bicycle, regardless of the rainy weather.

Dubai has a 100 Km urban cycling track, while its master plan proposes an 850 Km stretch to be completed in few years.



PROBLEM IDENTIFICATION AND CHALLENGES

Pakistan's transport budget is primarily spent on improving road infrastructure, which includes authorizing signal free corridors, flyovers and underpasses that essentially facilitate cars and motorbikes. There is no focus on other modes of transport such as walking, cycling, para-transit, buses and urban railways. The result is skewed investments towards unaffordable transport options against the widely acknowledged priority transport modes as explained in Figure 2 (Haque & Rizwan, 2020).

Despite the growing trend of discouraging the use of cars in cities and encouraging pedestrianization, urban planners in Pakistan are doing everything possible to make the cities more car-friendly (Haque, 2015).

The result is heat-island effect in Karachi with a mammoth of concrete and alarming levels of air quality index in Lahore. Within no time, the issue of smog will blowout to more cities. Globally, greenhouse gas emissions from the transport sector will rise by a whopping 128% between 2012 and 2030, in which passenger vehicles' contribution is the maximum as shown in Figure 3. Hence, the environmental impact of the transport industry is significant and consumes a major chunk of non-renewable energy resources.

Lack of dedicated cycling infrastructure, cultural setbacks, gender impediments and increased private vehicle ownership have sidelined cycling. Women and children feel unsafe while walking or cycling on the roads due to excess motorized vehicles. Moreover, lack of policy formulation for non-motorized transport and the absence of traffic rules for cyclists has exacerbated the issue. In the last couple of years, numerous cycling groups have mushroomed across Islamabad to promote cycling in the capital. Critical mass Islamabad was one of the pioneers of such efforts. However, the sphere of such groups is essentially limited to leisure and sports.





Figure 2. Transport Modes: Hierarchy Vs. Cost (ITDP, 2018; Haque & Rizwan, 2020)

Major Emission Source Category	2012	2015	2020	2025	2030
Road Passenger Vehicles	21.1	23.5	29.1	36.1	45.2
Road Freight Vehicles	12.6	14.5	18.9	24.2	30.6
Aviation	1.5	1.7	2.4	3.2	4.3
Rail	0.2	0.3	0.4	0.5	0.7

Figure 3. Projected Greenhouse Gas Emissions of Transport Sector (International Institute for Sustainable Development, n.d.)

There is a stigma attached with the utilitarian role of cycling; it is regarded as the poor man’s transport. Motor cars have infiltrated the lives of the upper and middle class groups due to easy availability of auto-finance options and lack of decent public transport options. This has increased the number of private vehicles on the roads (Ahmed, 2020). Expensive BRTs in big cities of Pakistan are only catering to the lower and lower middle-income group without any long-term vision of multi-modality in transport planning.

CYCLING STRATEGY IN ISLAMABAD

Bicycles are a cheap, pollution-free and non-motorized mode of transport for short and medium-range trips (Ahmed, 2019). Hence, the cycling strategy proposes interventions to encourage cycling as a mode of transport for short distance travel within the city.

In the immediate short term, cycling can be promoted as a reliable mode of transport for short trips, instead of private motorized modes due to absence of safe and cheap transportation alternatives. Simultaneously, private vehicle use should be discouraged by introducing parking fee in designated parking areas.

In the medium to long term, cycling can become one of the primary modes of transportation for the residents of Islamabad with appropriate infrastructure development across suitable destinations. Islamabad’s sectors are already designed at an exceptional bike-able scale with straight and wide roads. However, inter-sectoral connections need to be substantially improved to facilitate commuters to travel across sectors. This will also help to reduce traffic congestion since a cycle lane is 6 times more efficient than a car lane in terms of the number of people it can carry (National Association of City Transportation Officials, n.d.).

There is widespread agreement in the mobility literature that the most effective mechanism to boost cycling is to incorporate both behavioural change interventions and providing enabling infrastructure (Department of Transport, 2016). The details of promoting cycling via infrastructure improvements, behavior change interventions and policy level changes is provided in Figure 4.



Figure 4. Outline of Cycling Strategy

INFRASTRUCTURE IMPROVEMENTS

The infrastructure improvements can be divided into three different sections:

JUNCTIONS AND CROSSINGS

All of the junctions/intersections should be cycle friendly, which means avoiding the left hook problem through state of the art management techniques including advanced stop lines, cycle specific signal phases and cycle friendly roundabouts (Transport for London, 2014).

Currently, in Islamabad some signals on the access road are not operational, which promotes motorized vehicles to cross an intersection at high speeds thereby creating an unsafe environment for bicycles and pedestrians. Cycling is sidelined as a possible mode of transportation by underpasses, overpasses and grade separated interchanges.

Poorly designed intersections pose the biggest safety risk to cyclists. Adequate design alterations to protect cyclists will be key to promote this mode of transportation, while preventing fatalities due to vehicular-cycle collisions.

CYCLE TRACKS

All cycle lanes and tracks should be suitable for cycling. In road segments, where vehicles are flowing at a high speed, there should be dedicated protection or segregation of cyclists from motorized vehicles. For access or collector roads, the speed of motorized traffic should be less than 30 mph/50 kph (Transport for London, 2019). Speed Limit modification will allow cyclists to access the main cycling network. Moreover, there should be cycle paths in parks and zone 4 of Islamabad, but these paths must be well connected to the rest of the cycling network at frequent intervals.

However, the growing trend of increasing the number of lanes for motorized vehicles and creating signal-free corridors continues to dominate Islamabad's landscape. In turn, this deteriorates mobility due to induced demand for cars, which traps cities in a vicious-cycle of excess traffic.

OTHER ASPECTS

There are supplementary facilities that are required to promote cycling, which includes integration of metrobus stations with cycling tracks. Similarly, all key points of interests, including workplace areas, commercial areas, recreation areas such as parks and trails should have proper cycle parking and storage facilities. Similarly, the signage and path finding should also be improved for cyclists.

Table 1 below provides a documentation of the infrastructure and cycling activity in Pakistan compared to the international best practices.

Table 1. Comparative Infrastructure documentation

Current Practices in Pakistan

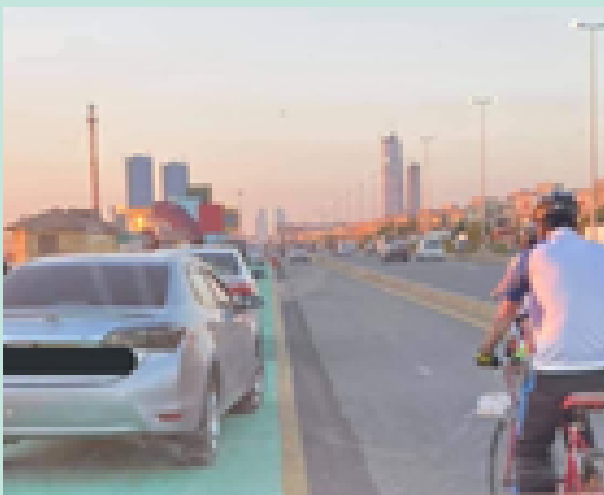


Exhibit 1: Car parked on dedicated bicycle lane in Karachi (twitter@theLahorewala)



Exhibit 3: No consideration of cyclists at traffic signals, Islamabad (twitter@navift)

Best Practices to promote cycling



Exhibit 2: A well integrated street with walking path, step-separated bicycle lane, and parking



Exhibit 4: Advanced stop lines for cyclists

Current Practices in Pakistan



Exhibit 5: Grade separated interchange in Islamabad which is a major obstacle for pedestrians and cyclists



Exhibit 7: Inconsistent traffic signs in Pakistan

Best Practices to promote cycling



Exhibit 6: A Cycle Optimised Protected Signals (CYCLOPS) junction in Hulme, Manchester, maximizes opportunities for safer cycling and walking



Exhibit 8: Proper sign and way-finding system for pedestrian and cyclists in London

BEHAVIOURAL CHANGE INTERVENTIONS

Research denotes substantial evidence that the promotion and widespread uptake of cycling as a leisure activity can increase the propensity of leisure cyclers to commute via cycles. This is essential for children as it will help them in adopting a healthy lifestyle, while engaging in a recreational activity. Hence, events like Cycling Sunday should be promoted. Cycling Sundays is a new initiative by “Urban Innovation” consultancy firm in collaboration with the Islamabad Capital Territory Administration (ICTA). The aim of the initiative is to promote walkability and cycling as eco-friendly modes of transport, while encouraging a healthier lifestyle among the residents of the city. The model should be replicated in multiple locations of Islamabad. Service lanes of sectors can be closed off during dedicated timings to promote pedestrianization through festivals and community gatherings.

Existing cycling clubs and associations like the Islamabad Cycling Association should be taken on board, while promoting new community clubs, especially women-led cycling clubs. The marketing strategies listed below can make a significant impact to raise awareness and induce a behavior change:

- Promotional messages through social, electronic and print media
- Awareness-raising campaigns
- Targeted training in community groups
- Cycling educational programs in schools
- Maps with cycling routes will be circulated
- Cycling education programs and races in schools
- Bicycle guides for buying, renting and repair

POLICY LEVEL CHANGES

To bring changes at the policy level, the foremost requirement is strong elected leadership at the city level committed to improve mobility. The government should employ multidisciplinary teams from urban studies, engineering and social sciences to work closely with citizens and advocacy groups on urban management and mobility.

Pakistan does not have an approved non-motorized transport policy. Although, the discussion has already started on ground, endorsement and facilitation from governmental authorities is needed to validate the proposed solutions. Islamabad needs to set up a city vision or sustainable urban mobility plan that lays out the city's future goals through appropriate policy making. A city goal sets a benchmark, such as 'increase the cycle network from 0 to 1000 km in X years'. The policy framework should also safeguard action plans needed to achieve the goal.

ACTION PLAN

For building dedicated cycling infrastructure, formulation of non-motorized transport policy is essential. Non-motorized transport policy offers basic mobility, affordable transport and access to public transport. Improving convenience, comfort and safety of walking and cycling will reduce the demand for travelling through personal motor vehicles for short trips. Hence, it would alleviate the city from critical traffic challenges (Ahmed, 2019). Simultaneously, synergies need to be generated through a holistic transport policy which discourages private car usage, introduces a parking fee and de-incentivizes purchasing of excess individual vehicles through tax increments (Haque & Rizwan 2020).

The non-motorized transport strategy helps to define a common vision for improving the walking and cycling environment. The strategy serves as an umbrella document that helps with coordination among the multiple agencies. Moreover, it facilitates a conducive design and management of the non-motorized transport environment. It should lay out the vision for an enhanced walking and cycling environment, which complements the mobility plans providing detailed guidance on specific mobility initiatives (UNEP).

Non-motorized Transport policy will be impractical unless a vision of urban mobility is ingrained in the urban development and land use policy. Seemingly, Pakistani cities have no downtown or city centre, perhaps areas that are dense, walkable and mixed use. If urban sprawl is not curbed, walkability and cycling will remain a dream. Long distances between residential areas and offices along with lack of transportation options significantly reduce productivity of the workforce (Iftikhar et al., 2020). Therefore, Islamabad should push for an integrated approach of transport with urban planning for long-term economic, social and environmental solutions.

The cycling strategy is developed, along the outline of discussion presented in the preceding section; behavioural change interventions, infrastructure improvements and policy changes. The strategy is segmented into a timeline. Immediate actions are mentioned in the three month mark to kick-start the network. Further infrastructure changes will require data collection and transport planning. Hence, they will continue in the next stages of 6-12 months, while achieving a full cycling network in Islamabad by the end of a two-year period.

Potential target cycling groups are considered in developing the actions plans.

- Potential cyclist: Those who have not cycled but if the conditions are right, they might start cycling
- Competitive cyclists: Cycling for athletic fitness, usually a small group of professional cyclists
- Utility cyclists: Already cycling for commuting purposes, majority of this group consists of men doing blue collar jobs such as security guards, house servants, street hawkers. They should be the most important stakeholder.
- Recreational cyclists: Those who cycle as a hobby i.e., cycling in dedicated parks

Special consideration will be given to women and children in the awareness campaigns for cycling. It will be promoted not only as a safe mobility option for men but for women and children too. Moreover, dedicated tracks, closure of roads at set timings will promote cycling as a recreational activity among women and children.

Table 2. Action Plan Matrix with Timeline

	3 month	6 month	1 year	2 years
Behavior change intervention through Awareness and marketing	Awareness campaign through schools and offices as well as public events such as Cycling Sundays and events	Create maps of identified cycling routes and disseminate in the city	Pilot non-motorized weekend in selected location	Maximum usage of cycles and walking in short trips
	Electronic, Print and social media marketing through exiting cycling groups and multiple sources. Circulars of cycle routes to be distributes	Expansion of cycling Sundays in more locations	Continuation of events	
	Guidance notes for traffic police	Capacity building of Traffic Police	Collaboration with schools for cycle training	

	3 month	6 month	1 year	2 years
Infrastructure measures	Dedicated off-road cycle track with safe crossings at all junctions of Jinnah Avenue and Margalla road (figure 4) Signage and traffic lights	Cycles tracks from Margalla road to marakaz to Jinnah avenue Cycle track to connect with metro stops and linked sectors Cycle crossings with each track as per transport plan.	Cycle tracks around the perimeter of sectors. Cycles lane/ tracks extended into the four division of sectors, connecting markaz. (figure 3)	Cycle streets; shared use of internal streets.
	Cycle Parking in keys areas; Markaz, recreational zones such as parks and hiking trails	Addition of cycle parking with metro stops	Bicycle racks within office and educational buildings	
	Streetlights for safety	Addition of Signage, traffic lights, streetlights	Addition of Signage, streetlights	Maintenance review

Table 2. Action Plan Matrix with Timeline

	3 month	6 month	1 year	2 years
Policy/ Legislative measures	City vision for transport planning with an outline of non-motorized transport policy	Non-motorized Transport policy in coordination with transport plans	Restrictions on car use with designated Parking areas and paid fee	Inter-modality in Transport Policy to be achieved
	Parking fee in Markaz of each sector and Jinnah avenue	Restrictions on car use through; >Dedicated parking area >Strict implementation of fine for wrong parking >Paid parking in all marakaz and blue area	Implementation of cycling network master plan and Policy	Performance evaluation measures
	All internal streets of sectors to be declared shared use, hence develop guidelines for safety of cyclist	Pilot of non-motorized weekend in an identified Markaz	Dialogue with land-use policy	Integration with land-use policy

	3 month	6 month	1 year	2 years
Cycle Manufacturing /Trade and Job Creation	Identification of bicycle repair stations.	Bicycle schemes	Road maintenance where shared use	Incentivizing manufacturing and supply of cycles as well
	Place making and programming to create cycling related events and economic activity.	Sharing, rentals, selling/buying Promoting e-bike start-ups Availability of cheap and functional cycles by promoting manufacturers		

CYCLE MANUFACTURING /TRADE AND JOB CREATION

Cycling can be a great economic activity booster. The country had a huge manufacturing capacity of cycles which atrophied over the years due the declining trend of utilizing cycling as a mode of transport. This can be rejuvenated to increase job creation in the twin cities through appropriate incentives. The cycle manufacturing industry might become a big contributor to the local economy. Moreover, it will give the twin cities a first mover advantage putting both cities at the forefront of cycle manufacturing in the country. Cycling will activate the informal economy in public spaces, which will benefit the food vendors and small businesses.

In Bogota, monthly 'Cyclovias' also became economic boosters for small businesses and the informal sector since they encouraged a culture of coming out and spending money on street vendor items and created public spaces which could support large volume of temporary or permanent street activity.



CHALLENGES AND PRIOR STUDIES

Policy and infrastructure changes need to establish cycling networks can only be accomplished through collective action and decision-making. Some of the stakeholders are as follows:

- National, regional and local authorities, city governments, municipalities, and road administrations
- Public transport operators
- Environmental organizations
- Bicycle user groups
- Health authorities, hospital, and health insurance companies
- Employers
- Education institutes (universities and schools)
- Local newspapers
- Police
- Tourist offices
- Bicycle dealers and manufacturers

Moreover, data collection can be done through detailed surveys, gathering existing reports in various departments, and using Strava and multiple applications required to identify and assess the key routes. Demographic data will also determine how many able-bodied cyclists of different age groups live in each sector. The data collected should be analyzed to undertake a detailed transport planning exercise. The starting point of planning the cycling network requires identification of potential points of origin and destination, as listed in Table 3.

Table 3. Origin and Destination Indicators

Common potential NMT Points of Origin and Destination can be defined as follows:

Public Facilities	Educational Facilities	Mobility Facilities	Sport Facilities	Leisure Destinations	Cultural Facilities	Workday Key Centres
<ol style="list-style-type: none"> 1. Ministries 2. Hospitals, Med Facilities, Churches 3. Public Facilities (Sector, Markaz, etc.) 	<ol style="list-style-type: none"> 1. Universities 2. Schools 3. Kindergartens 4. Public Educational Facilities 	<ol style="list-style-type: none"> 1. Taxi Ranks 2. Bus Stops 3. Train Stations 4. Bus Terminal 	<ol style="list-style-type: none"> 1. Stadiums 2. Sports Clubs 3. Sports Hall 	<ol style="list-style-type: none"> 1. Parks 2. Lakes 3. Recreational Facilities 4. Night Life 	<ol style="list-style-type: none"> 1. Historical Buildings 2. Museum 3. Cultural Centres 	<ol style="list-style-type: none"> 1. Major Workplaces 2. Malls and Shopping Centres 3. Pedestrian Zones

Before the start of this process, it is important to appraise the current situation of traffic and road safety. Such as:

- Accidents and black spots
- Traffic volumes
- Travel patterns
- Satisfaction
- Traffic structure
- Analysis of cycling friendly local companies

PLANNING

Transport planning considers full Right of way (ROW) and allocates space to each mode of transportation as per the transport master plan. A good design earmarks vehicular space, pedestrian or cycling space, transit space, and parking space, if any, without ambiguity. A bad design does not demarcate space for each function clearly, causing confusion and overlap of usage (Haque & Rizwan, 2020). Thus, detailed transport drawings should be developed in collaboration with experts. This section introduces the draft layout and lane hierarchies.

Figure 5 will require signal crossings, parking places and connection to bus stops in detail design. Figure 6 highlights the lane hierarchies as a starting point. Furthermore, Figure 7 gives a typical avenue section clearly explaining the ROW. Such interventions need to be introduced across all the avenues in Islamabad.

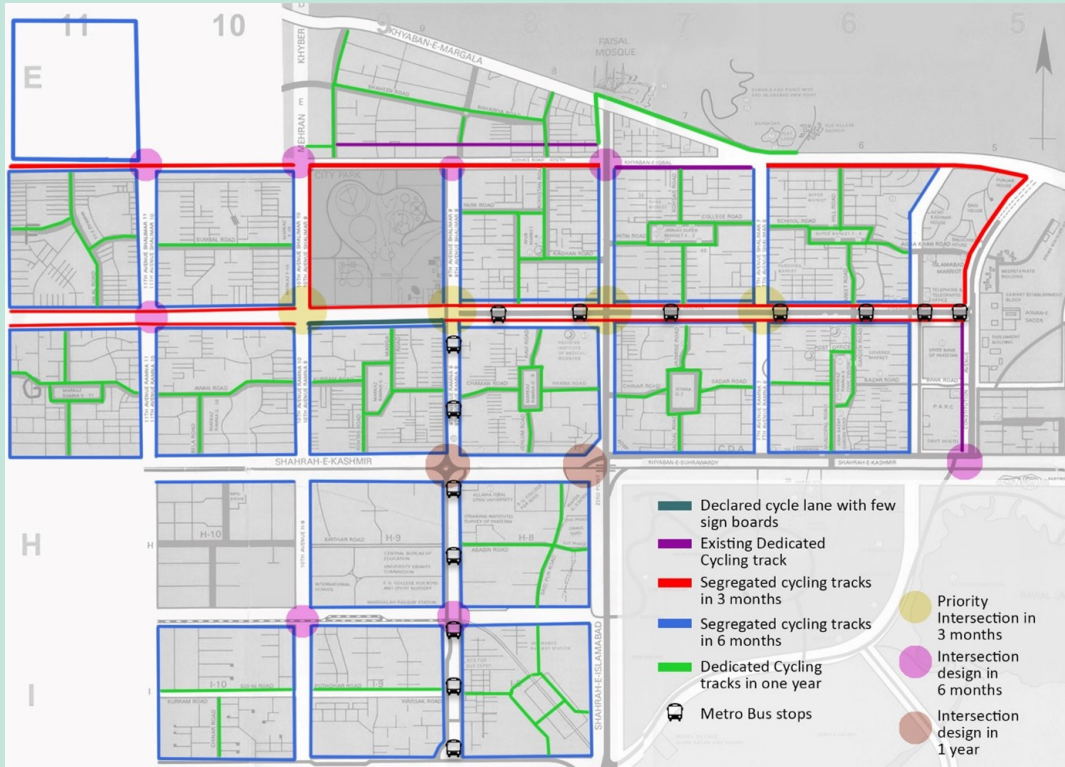


Figure 5. Cycling Network in Islamabad

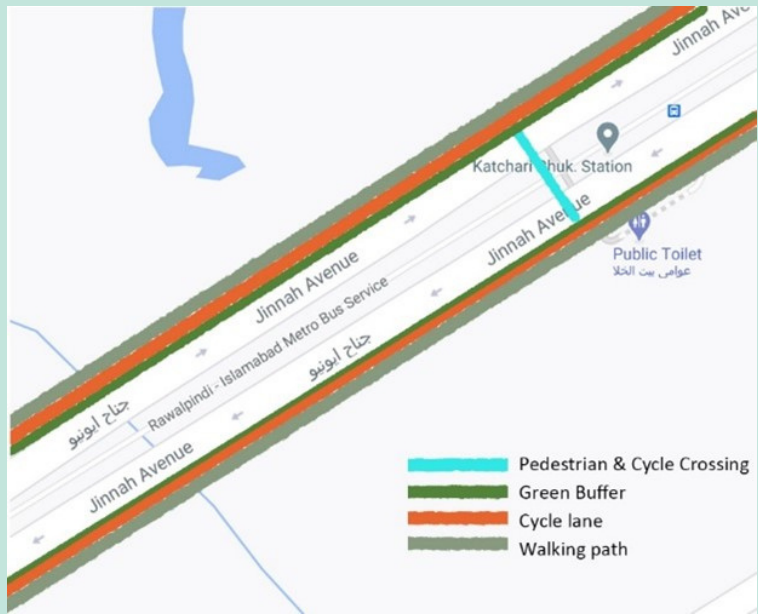


Figure 6. Close-up view of lane hierarchy

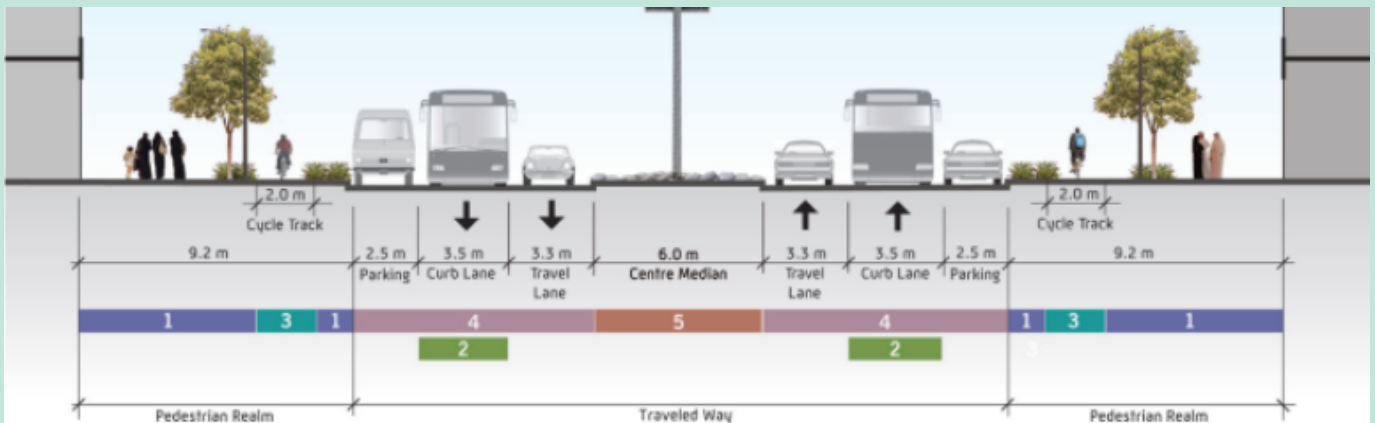


Figure 7. Typical Urban Avenue Section (Haque & Rizwan, 2020)

Policy Action

The discussion in this policy note and action plan matrix has identified three areas of actions namely awareness and behavioural change, infrastructure upgradation and policy changes. While Awareness and behavior changes have kick-started already, there is a need to show groundbreaking actions to garner public trust and support towards policy. The following policy action outlines the main steps required to initiate and build the cycling network.

1. Segregated cycling tracks on the Jinnah Avenue and Margalla road should be demarcated within one month to mobilize the project with the existing tracks
2. Addition of cycling infrastructure, safe crossing with traffic signals, functioning streetlights and cycle parking stalls across Jinnah avenue
3. Connecting the cycling lanes between Jinnah Avenue, Margalla road and Marakaz.
4. Cycling Sundays in more locations
5. Pilot cycling lane from Margalla road to F-7 markaz
6. Parking fee for cars in marakaz of all sectors on weekends
7. Pilot connection of cycling lane from Jinnah avenue and blue area to metro stops
8. Cycle Parking at metro stops (Chaman, Ibn-e-sina, Ketchehri chowk, PIMS etc. based on usage frequency)
9. Safe crossing for cyclists at all intersections of avenues to be introduced by traffic signals as per priority marked in figure 5.
10. Addition and maintenance of traffic lights along cycling lanes for security
11. Cycling lanes around the perimeters of all sectors and designing intersections to enable travel across sectors
12. Survey of footpaths and maintenance along with the construction of cycling tracks
13. Benches along cycling lane for stopping and promoting public space
14. Design of avenues as boulevards with walking paths and kiosks
15. Promotion of E-bikes for medium and long commutes

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Cycling Strategy - Islamabad

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#CyclingSunday

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