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MOBILITY, CARS, AND CITIES

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Pakistani cities need a car policy!

“Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody.”

— Jane Jacobs

Introduction

The cities are the people, their activities, and the mobility people exercise. These cities, in themselves, provide the engines of growth for the countries. The cities need to allow freedom and facilitate mobility, and not restrict. Equitable service delivery and access to the city services ensure a robust economic activity and city growth; and, contrary, clique access to these facilities hinders the growth. Mobility in Pakistan is one such exercise that has been usurped by the car-owners in the garb of gentrification, road infrastructure development, and converting public spaces into parking spaces.

In past decades, the rate of car ownership in Pakistan has been on the rise. To facilitate the car owners, cities often try to provide a robust infrastructure of roads so that the smooth flow of traffic can be ensured, disregarding the non-motorized or public transport mobility. The road infrastructure, therefore, makes the largest part of the development budget in Pakistan (ADP, 2019-20). The problem in doing this is the aggravation of demand for new cars. When new roads are built, they seamlessly facilitate cars and travelers find it easy to own a car for mobility to homes, schools, offices, and city centers.

This paper looks at the rising car ownership in Pakistan, and how the need for road infrastructure for cars is facilitated by city authorities. We maintain that a large portion of a city or provincial finance is routed to road infrastructure. The next step will be to look at how other cities of the world have created a balance between car ownership, road infrastructure, parking provision, parking charges, and public transport; and are increasingly making walkable streets. Then the study will provide a prescription towards how Islamabad - Rawalpindi - Lahore - Karachi and other cities can employ parking charges, amongst other measures, as a tool for revenue generation and move old fleets of cars out of the cities—increase the use of public transport¹

The world cities are fast realizing their ‘planning mistakes’ of expanding the spaces for cars while shrinking public spaces; and are now on reversing the phenomenon by realizing streets and roads as public spaces (Toderian, 2020).

¹ For Pakistan see Haque and Nayab (2019), Haque (2017) and Haque (2020)

URBAN MOBILITY AND CAR OWNERSHIP

People move to urban areas in pursuit of employability, better lifestyle choices, health facilities, improved service delivery, proximity to amenities, and much more. Urban spaces are built on the single principle of keeping many aspects of life in a finite amount of space—agglomeration. When a small piece of land is used for multiple types of land utility, it results in people living and working together. In an agglomerated city, if the city is unable to manage and exercise the planning then it results in congestion—that chokes the service delivery mechanism—and interest groups benefiting from skewed and stunted policymaking.

The secret for any city to thrive is to maintain the balance between vital functions of its economy by providing maximum utilization of space by fine service delivery of every function of a city from transportation, sewerage, cleaning services, utilities, etc. The battle to create a balance keeps the city authorities on their toes because of high rural to urban migration.



Pakistan has now one of the fastest rural to urban migration and, resultantly, Pakistan now has some of the largest cities in the world. While the world is adjusting to high-rise buildings and constructing residential towers, Pakistan has done the opposite and chose to horizontally expand the cities resulting in huge urban sprawl. As these cities have become populated, the usual urban problems—traffic congestion, poor city livability, and health issues—have arisen. City authorities of Pakistan have limited capacity to cope up with the growing metropolises and their urban issues (Haque et al., 2020).

Resorting to Car Ownership

1. Walking?

The Urban Population wants to exercise mobility, but the greener option of walking is harmful, unavailable and dangerous.

2. Cycling?

The Bicycling can lead to a greater health, less combustion, and fewer cars on road. But there are no cycle lanes on roads in Pakistan.

3. Public Transport

The people can use public transport, rails as cheaper and shared modes of transport. But these are unavailable, inaccessible and limited to fewer routes.

4. Cars?

First three options force people to own cars and facilitate the sprawl leading to GHG emissions, health hazards, higher costs and no public spaces.



Figure 1: How Do People Resort to Cars?

People need mobility and cities must facilitate it with infrastructure that is inclusive and accessible for its residents. However, cities in Pakistan have chosen to make mobility a seamless experience for car-owners and a daunting task for those who do not own cars.

Haque (2015, 2019 and 2020) has raised the important issue of car ownership, blatant increase in poorly planned road-infrastructure as part of urban mobility. Sadly, the lack of forum of discussion for such topics has led to invading view that 'cities are brick and mortar.' City authorities develop more roads to facilitate the smooth flow of traffic but it creates induced demand which results in more cars on roads. then city authorities build more road and then more cars and this circle continues (Haque et al., 2020)

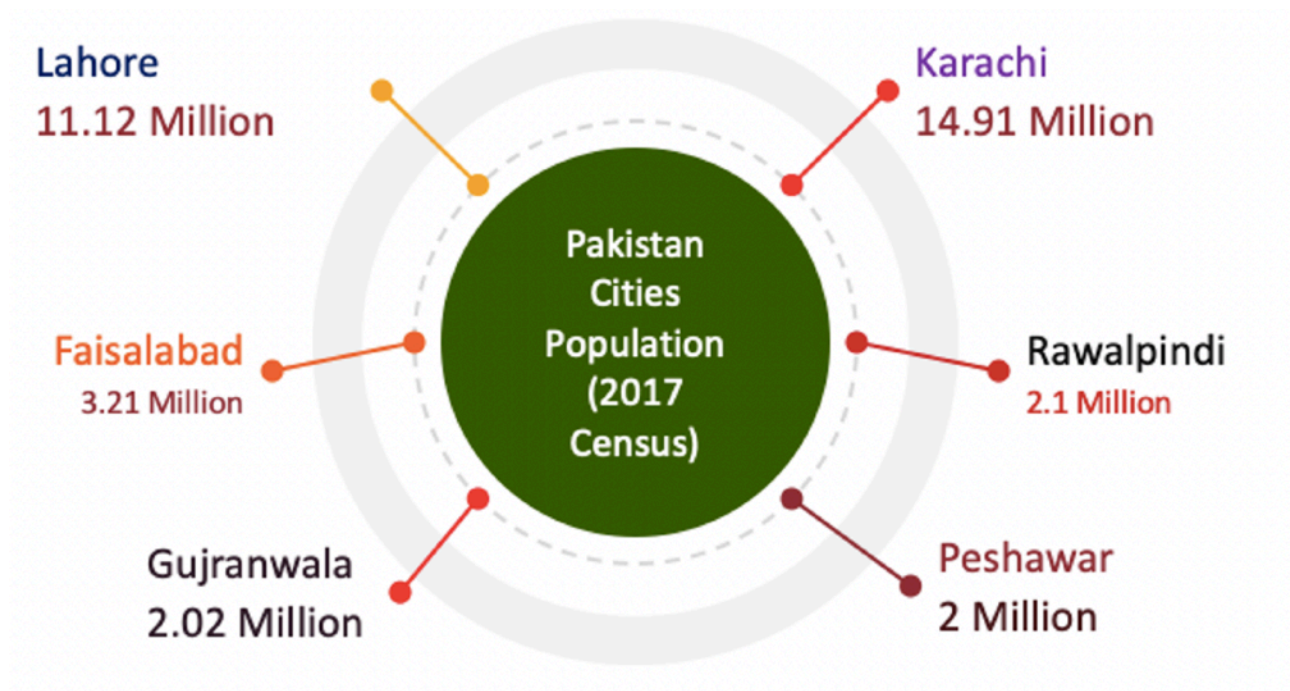


Figure 2: Pakistani Cities Population

1. HIGH COSTS OF MOBILITY

As cities grow, the cost of moving around the city increases with distance. People need transportation modes to be accessible. As the cities in Pakistan lack public transportation, the facilitation to pedestrians and bicycle riders is not only poor but dangerous, people resort to cars. Historically, this lack became a stimulus of owning a car that leads to more cars on the road that in return facilitates the housing in sprawl.

So, in this paper, we will review the possibilities of developing a comprehensive car policy in the cities of Pakistan to rationalize: urban mobility with equal opportunity, and lower environmental and human stress. The rising number of car-ownership, its contribution to traffic and pollution calls for a policy that outlines the effective usage of cars. A forward-looking car policy must be devised to address the issues of urban planning and cities' governance. In this regard, the Pakistan Institute of Development Economics is proposing the car policy to make ailing cities livable.

Since ride-hailing services are fast becoming the default mode of transportation from the middle-class jobholders, there is a rising portion of income that is spent on mobility within the city. The average monthly cost of a job holder in Pakistan using the ride-hailing services reaches 12,000 to 15,000 without any freedom since these are demand-based rides and do not offer stops in-between.

2. CARS AND CITIES

People agglomerate in cities to find jobs and seek economic and social mobility, similarly, firms tend to be officed in the city centers to be close to the market or amenities. As cities grow, the cost of moving around increases with distance. People need transportation modes, accessible; and lack of public transportation, poor facilitation to pedestrians, and bicycle riders, they resort to cars. The increased car ownership excused with urban spread-out has discouraged the development of public transport systems, fewer bicycle, and car lanes.

While the developing countries are facing an exponential increase in car ownership in face of bad public transport, the developed countries are programming to make the cars 'things-of-past' by providing better alternatives—public transportation with better connectivity, bicycle lanes, and street space for pedestrians. In the face of congestion adversity and high environmental costs; cities are rethinking the usage of streets, cars, and cities themselves.

The cities in Pakistan are facilitating the car owners, and that makes the cities exclusive. These cars occupy public spaces, and all development is engendered and shaped by car affording owners, and impede city experience through congestion. Unsurprisingly, the diluting clique of car.

3. CONGESTION COSTS VS. AGGLOMERATION BENEFITS

In urban literature, there's abundant evidence that agglomeration benefits outdo the congestion costs. The evidence exceedingly suggests that countries with poor urban governance have far more congestion costs than the cities with better urban governance. Cities have developed mechanisms that not only avert the congestion in cities through speed-lanes, higher parking fees, congestion taxes, restricted cars in city centers; but also, have made them long-term sources of their revenues, as discussed later part. The cities of London, Stockholm, Singapore among others generate positive cash-flows through their car policies within the city.

These congestion costs can further be minimized by exercising due pricing. Baert and Raynaert (2018) estimated that for a 1% increase in the agglomeration benefits, the positive effect is 0.073% in productivity—and varying increase in economic activity, while in a 1% increase in congestion the losses incurred are 0.01% suggesting the huge comparable advantage of agglomeration.

Congestion Costs Vs. Agglomeration Benefits**

		Congestion	Agglomeration
1	Pricing	Reduced by Congestion Pricing	Low Transportation Costs
2	Environment	High Costs: but Can be reduced by redesigning Public Spaces and Roads	Net Low Emissions Overall Low Environment Degradation
3	City Life	The vibrancy. City Experience	Confined to City Centres
4	Cars	Caused by Cars. Cars can be reduced by 80% with alternative available	Public Transportation with Low Costs
5	Transportation	Low Walkability and Cycling. Poor Public Transport	Closely Knitted-low-cost infrastructure
6	Opportunity Cost	2/10 of the Agglomeration Benefits	5 Times higher Benefits and Can be improved
7	Crowdedness	Efficient Use of Transportation	Evenly Crowded-High Density
8	Streets	Covered with Cars and Parking Spaces Need to discourage car ownership for Low Traffic. More Space	High Economic Activity. Innovation. Entrepreneurship. High Social Mobility
9	Parking	Due Pricing as per Driving Costs -same revenue with lesser cars	Cars only for luxury-comes with a price
10	Examples	Beijing is increasing Car Ownership and often chokes with Traffic. Countries with poor public transport are paying high congestion costs.	London. Stockholm. Oslo. Copenhagen

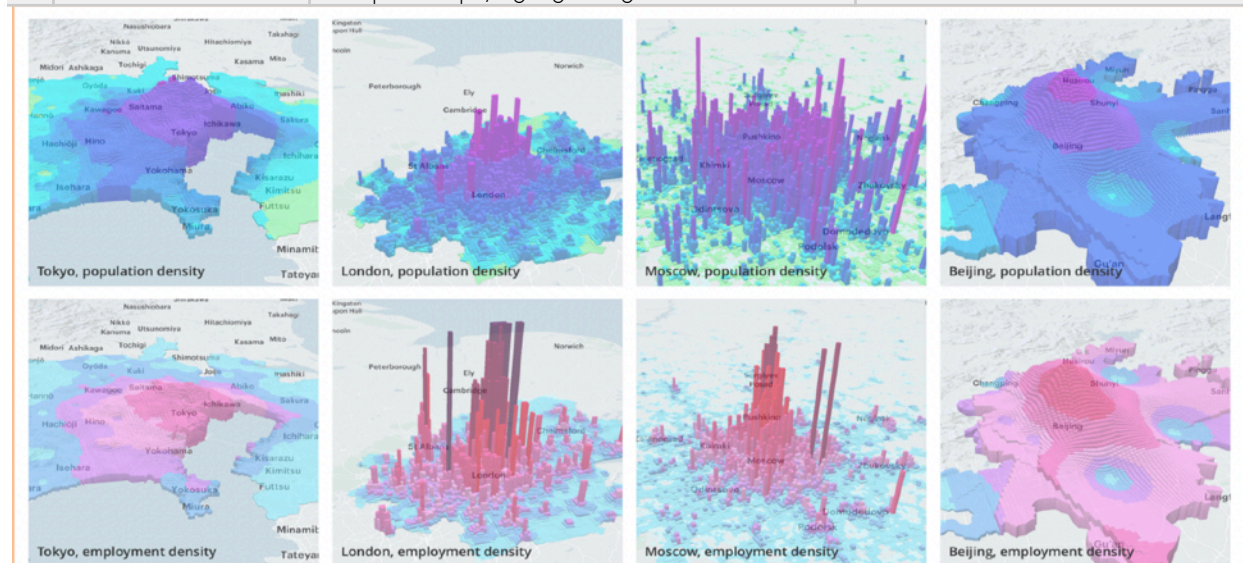


Figure 3: Agglomeration Benefits Vs. Congestion Costs

4. STREETS ARE SHARED PUBLIC SPACES

The street experience is fast becoming the focus of urban governance; from city centers to off-street parking requirements, the cities are realizing the foregone value of land utilized by the cars. Urban governance practitioners and academics (Ben Toderian, Donald Shoup, Nadeem Ul Haque) have been asserting for decades that streets must be at the center of city experience. Streets are

** From the works of Don. Shoup (2018), Janette Sadik Khan (2016), Brent Toderian (2017 & 2020), Baert & Raynaert (2018)

shared public spaces and part of city land that must be priced commercially and indiscriminate. Therefore, streets must be used to generate social and economic activity rather than succumbing to parking and car-traffic.

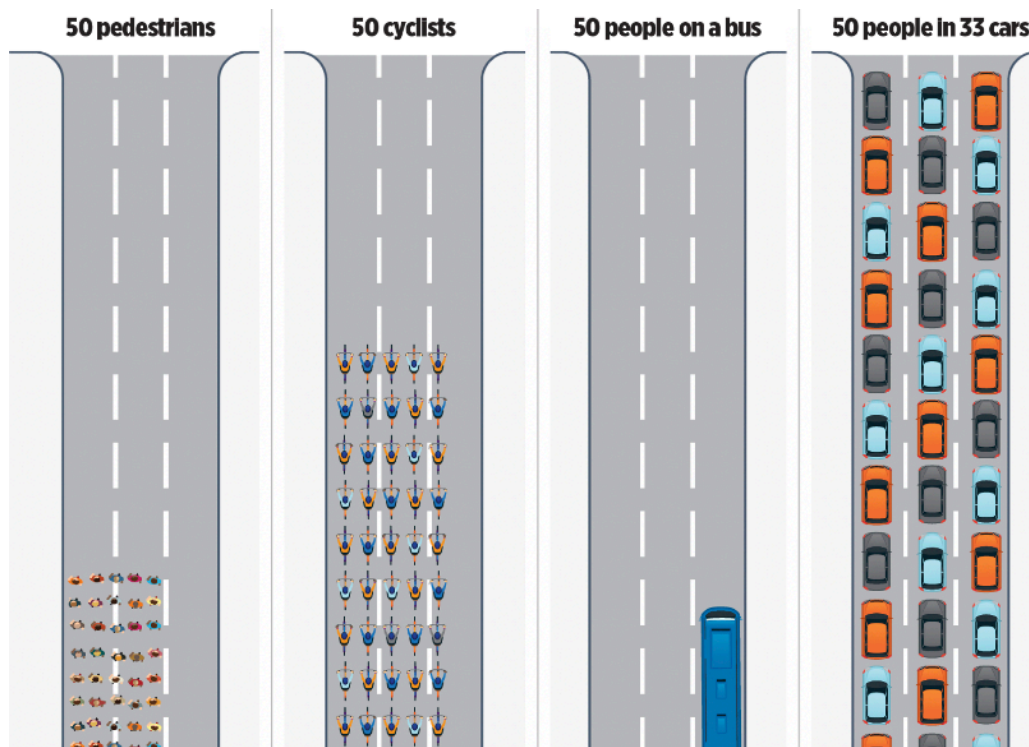


Figure 4: Comparative Space Occupation by Modes of Transportation

Ben Toderian (2020) and Janette Sadik Khan (2016) have extensively worked on designing streets for the public. They argued that streets in cities are public spaces, thus must be accessed by everyone, unlike the skewed availability for car-owners. These car-free areas generate more

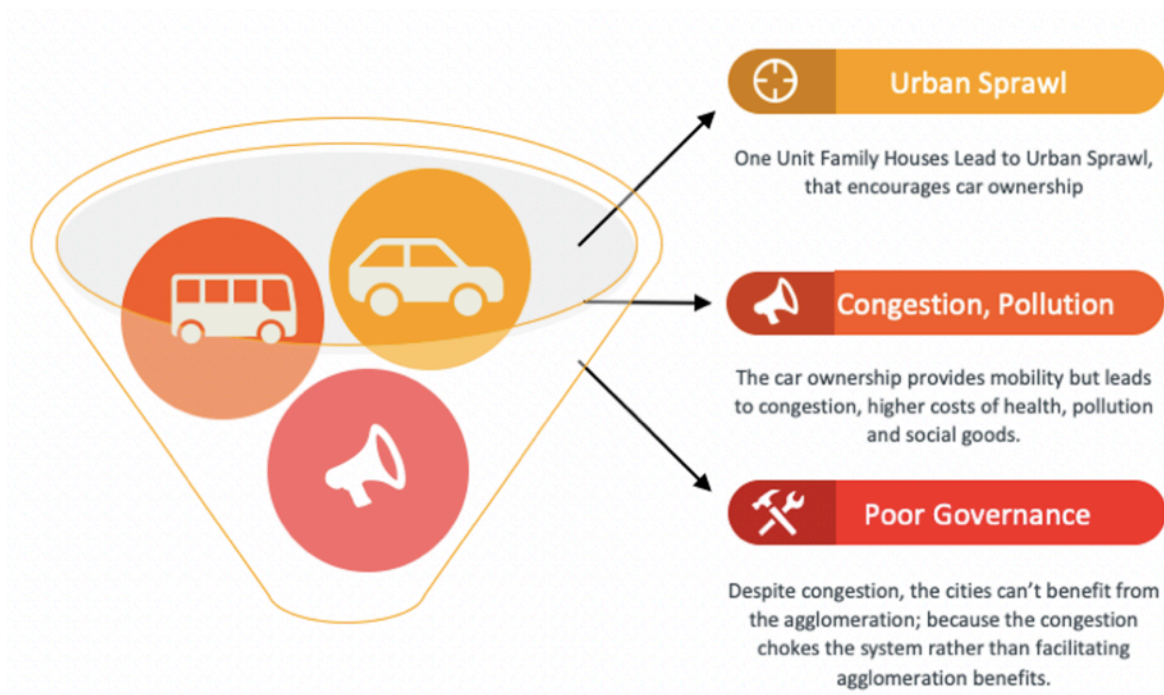


Figure 5: The recipe to City Choking

Therefore, the literature on car ownership has started posing an essential question in the urban planning of a tradeoff between individual prosperity collective betterment.

economic activity. A recent study in Barcelona (2020) suggested that there is 9.7% more retail activity in streets with public spaces and walkability rather than car-owning roads.

In terms of space, 10% of car owners occupy more than 80 % of streets and roads. Therefore, the urban governors need to reassess their priorities particularly in developing countries with less city experience and higher car-ownership. It is established that social activity by redesigning streets for public use increases the vibrance. As New Urbanisms suggests, the streets are the essential elements in devising environment-friendly cities with considerably fewer emissions.

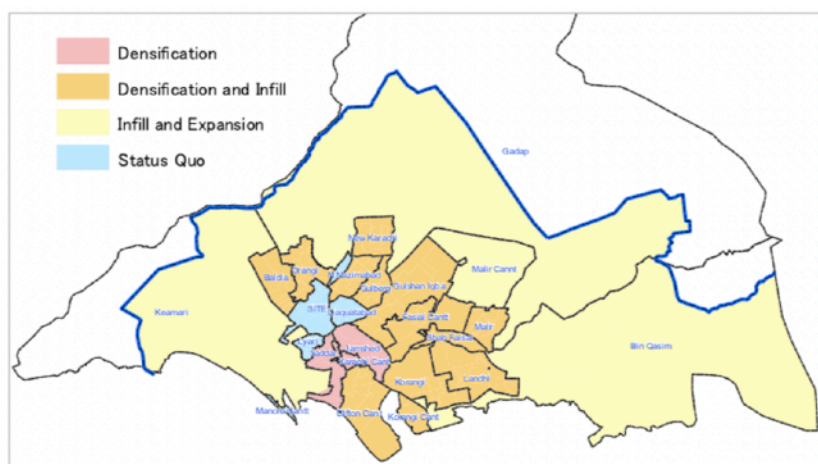


Figure 6: Spatial Growth Strategies for Karachi 2010-2030. The Pale Yellow is the Expansion Plan (Source: Proposed in KITP)

What are cars for?

Since the cars are so central to our urban planning, therefore one may ask the basic underlying question: What are cars for? The cars provide freedom of movement, and beyond necessity; car ownership is a luxury that car-owners experience as opposed to those using the public or other shared modes of transportation.

Cars are luxuries and desired worldwide, but good cities reduce their demands.
—Brent Toderian, PIDE Webinar

This leads to the following question: *Does paying to own the car provides the owner with exclusive rights of freedom and luxury?* Cities must realize the real costs of luxury and freedom must not be the price of the car but the owners must pay for road depreciation, pollution the cars use, usage of space for parking and opportunity cost of that land usage, etc. If a person's luxury is costing the society a bad environment, impedes mobility, and lessens the city experience then that owner must be charged for this opportunity cost that he is causing to collective betterment for individual prosperity.

1. THE ASSOCIATED PROBLEMS

The car ownership in Pakistan has several associated issues and challenges including traffic congestion, high pollution costs, health deterioration, and higher costs of mobility. It is counter-intuitive to the idea that urban sprawl should decrease traffic congestion because of the spread of urban communities and societies. However, since this urban sprawl simultaneously encourages the car-ownership; this leads to higher congestion costs without agglomeration benefits.

• TRAFFIC CONGESTION IN CITIES—EXAMPLE OF LAHORE

In Lahore, the largest city in Punjab of Pakistan, the car ownership in some sectors of DHA, Askari, Bahria Town exceeds 2.1 cars per household³. This high number of solo-driver cars in the city and country at large are a source of congestion in city spaces. The traffic in peak hours is so congested that on Noor Jahan Road—Liberty Roundabout to Hussain Chowk—a car can take up to half an hour for what is an average 1-minute drive on the empty road.

This congestion further leads to more accidents and health injuries, not disregarding the fact that noise pollution and excessive fuel costs are other externalities. During the daytime, the Zahoor Elahi Road and many other roads with schools are choked with traffic because there is no transportation system by the schools or government to pick-and-drop the students from their homes. Lack of such facilities should lie at the core of the city's mission to facilitate students, but is rather absent in the case of Lahore and other cities. The lack of school buses in cities has made the morning and noon times a choke-period for cities. The kids must be the last recipient of the pollution, yet they suffer in the congestion equally.

The cities in the world are getting rid of cars.

- Some societies in Lahore has car density of as much as 2.1 per household.
- Madrid's city plan has levied aggressive taxes on car ownership and usage in city spaces.
- Oslo has converted 35 kilometers car lanes into bicycle lanes.

• HIGH CONTRIBUTION TO POLLUTION

According to Dawar Hameed Butt, an environmentalist, the AQI index, before the COVID-19 hit the city, had reached the dangerous levels of 500 points. During the COVID-19 lockdown, the lack of traffic had brought the AQI to 70 points. This staggering difference shows that the high contribution of cars in air pollution and smog that is fast becoming the routine problem in the city.

2. MULTIPLE CARS OWNERSHIP

The cars in Pakistan are expensive, however, owning and maintaining the ownership is fairly cheap and evasive. The process of registration in Pakistan is highly rigged therefore even in larger cities there are higher numbers of non-Customs registered cars. Unlike many developed countries, there is no compulsion of having insurance or maintenance standards, therefore, the households keep on owning multiple cars.

³ Author's calculations based on 130 households in Bahria Town, Askari X, Valencia Town, DHA Phase VI and GOR VI.

Lahores OmniBus

Lahore has not always been unfamiliar with public transport. Around the 1940s, the Lahore and Karachi saw a surplus making 'Lahore Omnibus Service' (LOS) which was packed after a decade of its successful operations and was one of the largest taxpayers. These double-decker buses assembled at Ferozepur Depot with engines from the Bedford Chassis had made moving around the city very convenient and had covered cities by breadth and width. The attempts by the government to seek loans from financially-too-good LOS had left the business model of LOS failed. Since then, Pakistan has seen uneven attempts at public-transport with loss-making efforts and deficit financing. OMNI Bus Service



3. THE CAR REGISTRATION PROCESS

The car registration process in Pakistan is highly rigged. The vehicles can undergo overhaul changes to get registered under different chassis numbers. The car owners can delay paying the tokens of cars for decades without the fine. At times of sales, car ownership is often not transferred, hence giving people a chance to not show the cars as assets. The ease of ownership has decreased the dependence on public transport within cities and trains, rail, buses for inter-city transport. This independence has assisted the city-elites to evade the responsibility of demanding inclusive public transport.

4. HHI INDEX FOR COMPETITION IN CAR INDUSTRY OF PAKISTAN

Herfindahl-Hirschman Index or HHI is an index that measures the concentration of market players in any industry. With the high competition and number of market players, it tends to reach 0; while in the case of hegemonization it approaches its highest 10,000. The industries with HHI above 2000 are considered highly concentrated. The author calculated the HHI in the Car Industry of Pakistan with data of market share from Pak Wheels and PAMA.

HHI in Car Industry in Pakistan

- 1300cc above category: Toyota 4500 HHI
- 1000 cc Category: Suzuki 8500 HHI
- 880 cc Category: 6500 HHI

5. THE COST OF DRIVING

The true price of car driving is not what the driver pays while purchasing a car or paying for the gas he uses (Khan, 2016; Toderian, 2020). It goes beyond in terms of roadwork, emergency services, damage to the environment, and the use of land in terms of parking and otherwise used by car (Shoup, 2005). The associated costs can be categorized in Foregone Revenue by using land for parking rather than economic activity, pollution costs—inadvertently borne by society. According to Shoup (2005), it takes 1-2 % of maintaining roads for pedestrians and bicycle lanes than building roads and parking for cars. Similarly, the incremented economic activity revenue generated from the increased economic activity exceeds the parking costs in cities with streets as public spaces more walkability.

Similarly, the researchers associate Higher risks of a medical emergency; deaths, and costs attached to these emergencies with the indirect costs of car ownership in cities. The policies are needed to distinguish the use of a modern car from need to luxury, and charge a price on that luxury like other commodities. The lack of walkable spaces in cities supports car ownership. Several studies suggest that the provision of good public transport and walkable spaces deter car ownership. In a city in the United States, if due to installed public transportation, the city gives up 15,000 cars, the city has \$127,275,000 saved in terms of purchases, gas uses, parking, etc.

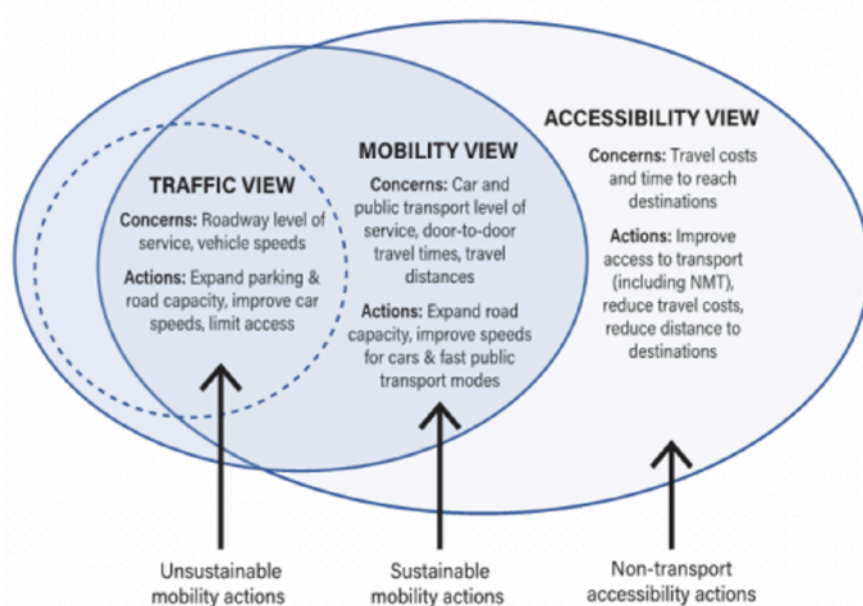


Figure 8: The Mobility View of City Planners--Venter. 2017

How does the World view cars?

The cities worldwide have emphasized working on shared modes of transportation that are inclusive, cater to the agglomerated urban experience, and with the least congestion can mobilize millions of passengers daily. The transportation structure of London, Seoul, Beijing, Tokyo, New York are testaments to these priorities. Rather than owning the car, the residents of developed cities are relying more on public and shared modes of transportation.

Walk & Cycle, Public Transport, Private Transport and Taxi & Others

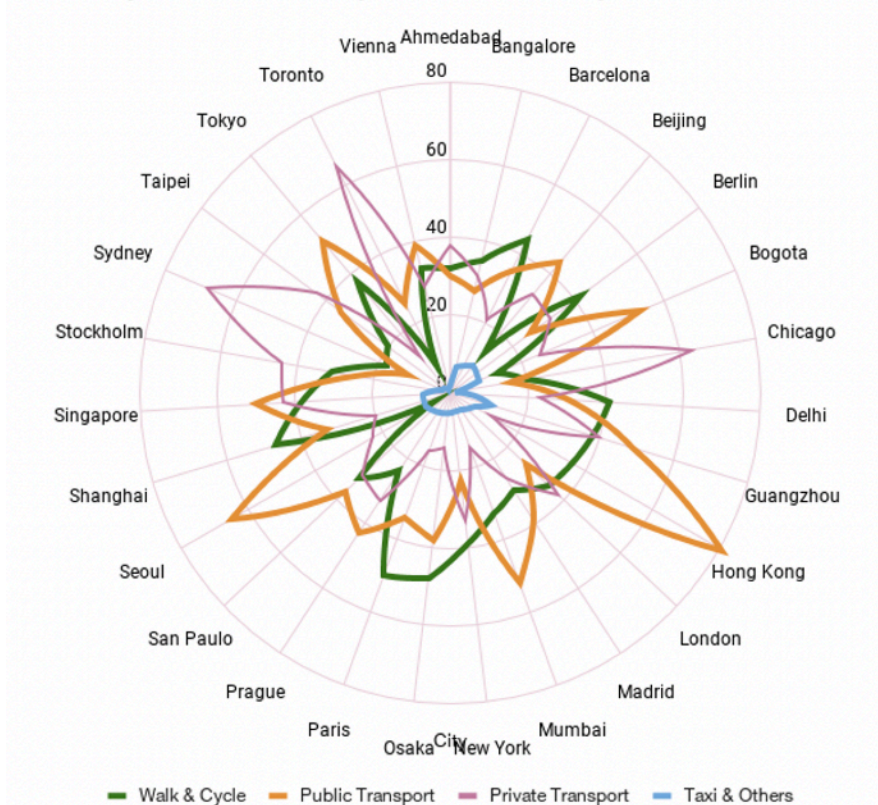


Figure 9: World Cities Portioning Public, Private, Taxi Transport and Walking

The Car-Free Areas

The City of London has started exercising the car-free areas in the restricted zones of London on several days in a week to reduce GHG emissions, increase walkability, and making cities conducive for the public. Global cities are practicing car-free areas for certain days of the week. These car-free days and areas are seeing considerable improvement in the environment, city experience, and encourage the use of public transportation. The revenues are collected by the city governments and can be allocated to the areas it was generated from, thus contributing to the local welfare.

1. PARKING RULES

Donald Shoup highlighted The High Cost of Free Parking and suggested that the city government must remove the off-street parking with high on-street parking. The associated costs with on-street parking shall deter the drivers to be part of congestion, and the fee shall discourage car-ownership. Many of the cities worldwide have taken his advice and are working on charging parking costs and eliminating off-street parking. The staggering facts of high costs of land dedicated to parking and the maintenance costs outnumber the rationality of efficient usage of land or resources.

2. THE FREE LUNCH

In developing countries, ownership of a car is a luxury, but it also evades the associated costs. The road services, land that cars use, and pollution are paid by the general public. A car normally occupies a space of 330 square feet, which is attributed freely for a car although land otherwise has a price value. This forgone cost is paid by society. In Islamabad every day around 280,000 cars enter through the vast road infrastructure present, if even half of the traffic is charged for parking of paltry Rs. 10 then the city government can daily generate a revenue of Rs. 2.8 million.

3. REPURPOSING ROADS—CONGESTION PRICING

The cities are using their roads to streamline the traffic. In the United States, many highways have congestion pricing strategies to make people avoid traffic. If a driver wants to take the express lane he could be priced for using the lane. This pricing of car-ownership and using the express lane assists in maintaining the services of highways.

4. STREETS AND PUBLIC SPACES

The cities are realizing the importance of public spaces, and therefore the outdoor public spaces are being created. The cars in certain streets are banned or charged highly to provide city-experience to visitors. In the attempt to choose between the Individual prosperity vs Collective betterment, cities are tagging a high price on individual prosperity.

Car Policies in Global Cities

Cities worldwide are fast becoming cognizant of the costs attached to increased car-owning and therefore are planning to reduce the car presence in cities. Oslo, Copenhagen, Stockholm, New York, and London are few of many cities levying price over cars in city centers and are using various ways to discourage cars. We took the 15 cities and studied their recent actions to contain car presence, and here are a few reasons why the cities are reducing the car numbers. Pollution is the single most significant concern of these cities to cut down the number of cars within cities.

These cities are validating the concerns of new urbanisms as the need for accessible, environment friendly, and center of maximum social interaction indiscriminately. Therefore, they are making the city-experience as the center of planning for the urban areas.

By reducing the number of cars, the cities are expected to use 30-75% of roads into public spaces within 25 years to enhance physical and social mobility within the city. Cities provide Right to Mobility.

Public Transport is the most rewarding incentive to reduce the number of car owners. Cities like Seoul, London, New York, Copenhagen are heavily investing in their public transport infrastructures to complement their goals. The citizens in these cities are increasingly opting for Bicycle and walking as healthy measures and the burden on health services delivery has decreased.

As per WHO estimates, around 40,000 people die in crashes on US roads, and out of which the owners of vehicles make the largest proportion. The responsible public transportation and less traffic make the cities less vulnerable to such high losses. Therefore, the cities are using alternative measures to reduce the risk of deaths because of traffic and road accidents.

Traffic policies are central to regulate car ownership. City governments can coordinate with provincial and federal governments to come up with comprehensive plans that ensure the autonomy for cities to implement the car policies along with the coherent national policy suitable for the cities.

Revenue Speed Lanes

In the wake of congestion, the cities worldwide are using the speed lanes as a source of revenue and facilitation to the car owners at a cost. Speed lanes facilitate those city inhabitants who want to reach their destination in less time. revenue collected through speed lanes then is routed to road maintenance or other city functions. These measures can be taken in Pakistan as well to reduce congestion, increase revenue, and smooth traffic.

The Mobility in Pakistan

The transportation planners in Pakistan have long seen mobility and urban development as a means to facilitate car mobility—Traffic View of Urban Planning (Venter, 2017). Their planning has barred the accessibility and mobility view for urban citizens. The construction of no-signal corridors, brick-and-mortared bus stations, overhead bridges with intervals of kilometers to cross a road, lack of zebra crossings, no provision of cycling lanes or walking paths have led to the inaccessibility of amenities for citizens.

In Pakistan, transportation planning has been dominated by the 'Traffic-View', and that too has resulted in the chaotic traffic jams and poor access to urban amenities. The cities worldwide are opting for multiple mobility options at once to facilitate the agile movement to-and-from city centers, throughout cities and inter-city.



Figure 10: Inaccessibility through Public Transport Infrastructure

According to the Transport Manager at Faizabad Bus Station in Islamabad, Shahid, the government has 'strangled' the independent transport-owners by not allowing the private transport in Islamabad and very restricted the movement of wagons. This is aggravated by non-issuance of route-permits, safety licenses to public transport vehicles, and frequent ticketing of wagons as fines. Despite the interest of transport owners to run operations in Islamabad, the city administration has orchestrated ways to reduce public transport within the city. Therefore, the average time for a citizen to access public transport has increased from 8 minutes to 31 minutes in Islamabad City.

The developing cities, like in Pakistan have a double-edged sword of planning on its citizens: The city planners are very fond of planning and regulating hence the regulations are excessively passed; and then there is a poor implementation of those laws. This leads to the stunted growth of cities and mafias benefit.

Pakistani Cities and Funding

The world Cities are using the service delivery and provision of accommodating citizens as a source of generating revenues. The collection of council taxes, utility charges, parking fees, and other sources of revenue put the cities in a position to be self-sufficient in terms of planning urban mobility options among other things. However, in Pakistan, the lack of experts in district administrations has resulted in poor management of cities, non-existent sources of revenue, free parking spaces and sub-optimal utilization of land, and facilitation to the vehicle owners (Yusuf, 2017).

Cars or Substandard Transportation: The Transport Extremes

Since the cities in Pakistan are unable to provide safe, sustainable transport options, the ownership of cars is considered a necessity beyond luxury. However, the citizens unable to afford the car-ownership resort to services provided privately—in case of mobility, sub-standard wagons, rickshaws, Qing Qi, Bike without proper safety guards.

In such instances, any incidence of public transport provision becomes a source of political propagation rather than the provision of 'public good'. The BRTs system developed in Pakistan has become such a nuanced idea where large infrastructures are developed to manifest the tangible notions of 'development' with approximate costs of as large as 10times than the provision of public transport through alternative options of wagons, buses, and railways (Shahid, 2020). Due to the lack of Public Transport, female citizens feel apprehensive of using any public transport limiting female mobility within the city without private vehicles nearly impossible.

The cities in Pakistan need to better respond to the accessibility concerns of the citizens. Meanwhile, the cities need to do it through developing ways to finance its projects rather than entirely depending upon the federal and provincial spilled budgets; since that shall define the accessibility for its citizens.

The Case of Faisalabad

The City Government of Faisalabad, formerly Lyallpur, has recently planned to restrict the movement of cars and vehicles in its City Centre (Clock Tower and 8 Bazaars). Although the policy seems to have accorded accessibility, walkability, and mobility to people without cars, the Traders Union have readily started violating the plan.

A traffic police officer, Adnan, suggested that cars have taken over the historic bazaars around clock-tower. This has not only restricted the mobility of customers and tourists but also provide a greater problem in managing transport in the city. As per plans, if the traffic police officers challenge the parking and movement of cars on streets of bazaars, the trader's union asserts

pressure to corner the traffic police officers. A City-Centre where the mobility should be at its highest, traffic-jams, extra deployment of traffic personnel makes it the least desirable spots for the traffic officers.

The Options—Pakistan’s Way Forward

Pakistan’s government has divested from its responsibilities and city government have long been managed by the generalists rather than the urban planners. This has led to a narrower view of urban planning and not governance. The plethora of legislation, regulation, and laws have halted the natural growth of cities. This, consequently, led to urban sprawl and increased car-ownership among other problems. PIDE has argued that the country needs the framework for growth that transcends the brick-and-mortar model and integrates the nuances of the locality.

1. SHARED MODES OF TRANSPORTATION

The cities eventually run out of car spaces, the available options include the cities to grow—increasing the cost of travel, increasing the value of land, and de-cultivating the city lands. This results in widening roads—the less space for the open space cafes and public entertainment and walking, or lessen the use of cars. To avert such losses and poor urban catastrophe, the citizens need to move towards walking, cycling, and more shared mode of transportation that includes public transport, ride-hailing services, rails, and buses. The ride-hailing and ride-sharing services—can increase per car use from 9% to 55% of the time.

In the last decade, the ride-hailing services Uber, Careem, Bykea, etc. have captured a large market but remain an elite solution. In shared modes of transportation, public transportation remains a failure, while in the last one year, ride-sharing Airlift and Swvl have stirred the transportation sector and must be encouraged.

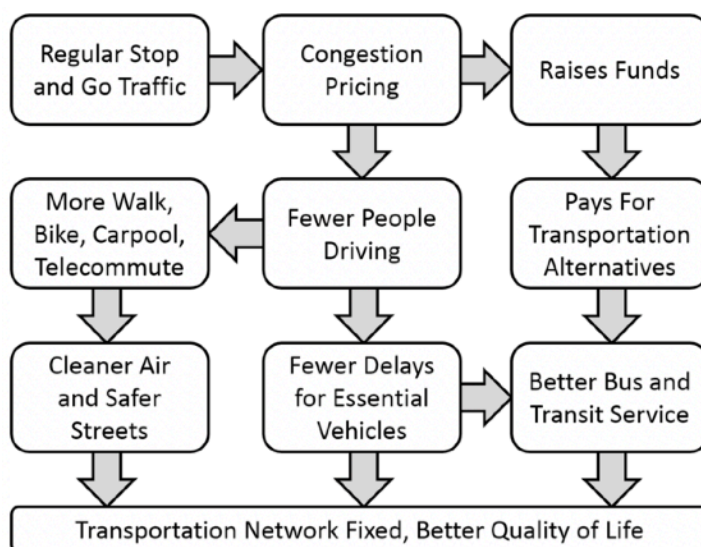


Figure 11: Accessible Transport: Better Life

2. PARKING BYE-LAWS

Local Governments Act 2013 of Punjab suggests that the local government has the provision to develop their parking bye-laws. However, there are no comprehensive parking laws followed by any local government throughout Punjab as per 2020.

The local governments must develop parking and traffic by-laws. These parking prices can be a regular source of local

Lahore Parking Company (LePark) is a subsidiary of Lahore Metropolitan corporation. and despite generating revenue doesn't contain any parking rules. rather focuses on developing the parking spaces for its revenue generation purposes.

governments and can assist in a) documenting the cars, b) data generation of cars' transport, c) revenue generation for localities that could be spent on local welfare and service delivery.

3. PARKING RULES

The cities provide services to its residents and visitors and in return collect revenues for its services. There are no standing rules for parking in Pakistan.

1. The parking rules must be based on discouraging car ownership and encouraging public welfare, and not the other way around. Therefore, the regressive parking charges can be used based on car usage of amenities, roads, and parking spaces.
2. The cars must be insured at the registration process.
3. A comprehensive parking cost must be evaluated by cities, and levied upon the car parkers.
4. Encouraging and normalizing ride-hailing services can discourage car ownership.
5. The local governments need to heavily invest in walking, bicycle lanes, and public transport.
6. The provision of the pedestrian-only zone, public transport, and bicycle lanes shall greatly discourage car ownership and traffic congestion.
7. The government must ensure the fair play in the car market and competitive prices must be insured comparable to international prices with proper health-related amenities like air-bags.
8. Enabling the tariff structure of 'Rationalising Automobile Import Policy'.
9. Solo Driver cars must be taxed in cities.
10. Consolidate EV Policy with the upcoming Auto vehicle Policy.
11. The schools can be encouraged to run the school buses to discourage traffic congestions on roads.

Donald Shoup Points on Parking

1. Parking comes at a high cost and must not be free.
2. Set on-street parking rates so that about 15% of the spaces are always empty.
3. Return the money collected on-street to the neighborhoods from whence they came.
4. Do away with minimum parking requirements.

4. TRAFFIC RULES

Within cities, the traffic rules can greatly change the proportion of the car-ownership. The introduction of car-free days, car-free areas, parking charges, congestion pricing, and introducing speed lanes can lessen the traffic while also encouraging social activity in these public spaces. Pakistan must revise its Provincial Motor Vehicle Ordinances dated back to 1965 to regulate with the modern-day needs and regulations of safety and health.

5. PUBLIC TRANSPORT—NAY TO BRT AND BRICK AND MORTAR

The development model in Pakistan is based on the project approach where the implementors are supposed to construct, built brick and mortar to project the efficiency. This has also been translated into the transportation sector where large public funds were invested in the construction of infrastructure for the Bus Rapid Transits (BRT) in Lahore, Multan, Islamabad, and

Peshawar. The discouragement in owning cars shall lead to pressing demand of having public transport thus having more refined experiments in introducing modes of public transportation, but simultaneously the government must provide more accessible public transport rather than constructing high-cost bus-transit stations.

6. STREETS

Streets are engines of public activity, and the streets in city centers are critical in estimating the capital of cities. Cities worldwide are using streets as a critical starting point to regenerate themselves. Pakistan can use the city streets as public spaces by doing away with free parking at roads and charging the parking fee minimum to the marginal social cost of having cars on these streets.

Lahore Parking Company (LePark) is a subsidiary of Lahore Metropolitan corporation. and despite generating revenue doesn't contain any parking rules. rather focuses on developing the parking spaces for its revenue generation purposes.

These streets can be furthered for public use through open space cafes, restaurants, and organizing social activities. Making these streets car-free shall make cycling and walkability easier and the public can reclaim streets as accessible city points developed for themselves.

Environmental degradation yields health problems, and by managing the transport this degradation can be greatly controlled. Within cities, not largely industrial, pollution can be reduced by 40% just by regulating the emissions coming from the transportation sector.

If you can change the street, you can change the world.
Janette Sadik Khan

Policy Implications

Roads infrastructure is very costly to maintain and cities are made for economic activity not providing luxuries to the rich stratum of the population. To create a balance, cities need to start charging the car owners the due price (see Haque 2020).

1. We need to alter our city development policies which facilitate urban lifestyle in a distant rural setting and necessitates the use of cars for mobility.
2. Enrique Penelosa, Mayor of Bogota, suggested that cities cannot thrive without mobility and public transport is an integral part of that mobility. Cities around the world have learned that walking and bicycling are less costly for the government, environment friendly, and provide more chance of social cohesion.
3. Subsidizing cars resulted in having little space for bicycling and walking. Roads are widened to facilitate more and more cars. it has to be discontinued if Pakistani cities want to evolve as a self-sustaining center of growth.
4. Designated spaces for parking have to be announced with parking charges, as discussed in the writeup about Islamabad can generate a sum of around Rs. 2.8 million per day if it only charges Rs. 10 per car as parking.

5. Congestion charges need to be allocated in busy hours to demotivate the movement of cars which will free up the road space for most important things.

6. Projects like Metrobuses and Orange lanes are very costly for the cities as well for the provinces. Public transport can run well on the same report. All across the world public transport is given a priority lane. It can be done in Pakistan as well. these two benefits can be achieved one being minimizing the bifurcation of the city into two sides of the metro lanes and second more accessibility to public transport.

If our city governments become successful in rethinking how they develop a city, our most important city problems would vanish automatically. As discussed widely in earlier publications of PIDE the city-center needs to be established which needs mixed-use high-rise development. high rise development fulfills the residential's needs of the inhabitants. being in the city center lessens the distance traveled from home to office-school etc. and free up road space for public transport.

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