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POLICY BRIEF

Traffic Congestion in Kabul City: How is the Traffic Flow Managed?

A Joint Work by 2019-2020 Participants of DROPS' 7-Month Policy Study Workshop

DROPS Afghanistan

July 2020



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POLICY BRIEF

**Enhancing Traffic Flow Management to Reduce Traffic Congestion
in Kabul City**

This policy brief is a publication produced by the Organization for Policy Research and Development Studies (DROPS). The policy brief is an initiative under DROPS' training and capacity-building pillar.

Since 2016, each year, DROPS conducts a seven-month policy study workshop that teaches what policy analysis is and what skills it entails and requires the participants to practically engage in developing a policy brief on a timely policy-relevant issue. The workshop adopts a two-pronged approach. First, it provides youth representing diverse sectors, including the civil service sector, Civil Society Organizations (CSO), academia, the private sector, and media outlets, with the necessary tools to understand, analyze, and critique policies. To complement that, it equips youth with the practical skills to formulate a policy brief/policy study. The policy study, or policy brief depending on which one the participants choose to conduct, is entirely researched and authored by the workshop participants, with guidance and help offered by DROPS if and when needed.

As part of this year's workshop, DROPS trainees have developed a joint policy brief on the increasingly important topic of traffic congestion in Kabul city, a problem that has only become more pressing in the past decade. This brief focuses on the management of traffic flow and what has been done thus far to tackle congestion in the city.

This policy brief was edited by Uzra Azizi and Bismillah Alizada, and authored by the trainees of DROPS 5th annual Seven-Month Policy Study Workshop: Ajmal Nabizada, Elham Kohistani, Faisal Imran, Ijaz Ur Rehman Nizam, Mansor Sayedi, Moheb Rahman Esar, Moqadas Yousufi, Najeeb Rahman Kakar, Nargis Tarawat, Sabawon Arghandiwal, Sabira Muradi, Saif Ali Attahi, Setara Hussaini, Zalanda Alizai, and Zubair Ahmad.

OBJECTIVES:

Exploring the critical causes of traffic congestion and its effects on the socio-economic life of Kabul residents.

Analyzing the current policies meant to address traffic congestion in Kabul and identifying the most practical and suitable alternatives to existing policies.

Identifying concrete and policy-oriented recommendations aimed at assisting policymakers in Kabul through the use of primary as well as secondary data collection tools.

POLICY ISSUE:

Traffic congestion is an increasingly pressing problem in Kabul city, Afghanistan's most bustling urban center that has seen unprecedented population growth since 2001.¹ The capital's population has grown from 1.5 million in 2001 to almost six million, 70% of whom live in informal settlements.² With this growth came an increase in the number of vehicles. In 2009, there were an estimated 400,000 cars on the streets of Kabul,³ in 2015, this number increased to 700,000 vehicles,⁴ and by 2019 to around one million.⁵

As an underdeveloped city with minimal transportation infrastructure, the increase in the number of vehicles has disrupted the normalcy of life for the residents in many ways such as long hours lost during commute or loss of life in cases when ambulances (or private cars taking patients to hospitals) are stuck in congestion. Kabul city has capacity for around 40,000 vehicles,⁶ meaning that the cosmopolis has 25 times more automobiles than its capacity allows. Multiple factors further compound this situation, including the lack of public transportation modes such as metro buses and trains that are currently nonexistent in the city. As a result, most of the one million vehicles are likely on the streets daily. The situation is further complicated when we also account for those vehicles that are registered in other provinces but commute in Kabul city, for which an exact statistic is not available.

Moreover, parking lots are also a rarity. As a result, according to some estimates, as many as 10,000 cars park on the sides of the roads every day.⁷ The problem is further aggravated by the ever-growing street vendors who also occupy parts of the streets and roads. According to a book published in 2020, as many as two million people engage in street trade on daily basis in Kabul city.⁸ The security walls that have blocked streets in various parts of the city is yet another layer added to this problem. The last challenge is lack of a proper traffic lights system in the city that can manage flow of traffic. Hence, the city's already narrow roads are made thinner for traffic, therefore the roads get clogged, creating traffic jams. If not remedied, congestion can negatively impact the city's growth to a significant degree.

¹ Rasmussen, Sune Engel. "Kabul – the fifth fastest growing city in the world – is bursting at the seams." *The Guardian*, December 11, 2014. <https://www.theguardian.com/cities/2014/dec/11/kabul-afghanistan-fifth-fastest-growing-city-world-rapid-urbanisation>

² Rasmussen, Ibid.

³ Shalizi, Hamid. "Unsafe, salvaged cars cause havoc in Kabul." *Reuters*, May 8, 2009. <https://www.reuters.com/article/us-afghanistan-cars/unsafe-salvaged-cars-cause-havoc-in-kabul-idUSTRE54700G20090508>

⁴ The World Bank. "Paving the Way for a Smooth Ride in Kabul." April 27, 2015.

<https://www.worldbank.org/en/news/feature/2015/04/22/paving-way-smooth-ride-kabul>

⁵ Sadaat, Sayed Abdul Rahman, and Nsenda Lukumwena. "Traffic Congestion Problem and Possible Solution in Kabul City." *International Journal of Transport and Vehicle Engineering* 12, no. 2 (2018): 132-137. p. 133.

⁶ Amiri, Sharif. "Management Of Kabul Traffic Dept Handed Over To Municipality." *Tolonews*, October 30, 2017. <https://tolonews.com/afghanistan/management-kabul-traffic-dept-handed-over-municipality>

⁷ Tolonews. "Kabul Faces Parking Problems." January 23, 2014. <https://tolonews.com/afghanistan/kabul-faces-parking-problems>

⁸ Grima, Simon. *Global Street Economy and Micro Entrepreneurship*. Emerald Group Publishing: 2020. P. 121.

POLICY RECOMMENDATIONS

1. Kabul Municipality and the Ministry of Transport should install traffic lights in all intersections in Kabul city to facilitate orderly flow of vehicles. The current manual regulation of traffic by traffic police at intersections is ineffective because blocking one route to allow flow of traffic from the other route at intersections contributes to traffic congestion when it is not synced with other adjacent intersections. A centrally managed traffic light system can resolve this inconsistency.
2. Kabul Municipality and the Ministry of Urban Development and Land (MUDL) should make construction of parking lots in residential areas, hotels, restaurants, and shopping malls mandatory. This is particularly important because the city's current structure of roads and streets lacks parking lots making it unfeasible for the two mentioned administrations to redesign current roads—at least in the short term.
3. The Ministry of Transport should revive the Millie Bus services, which is a feasible mode of public transport in Kabul city. With intended bus stops already constructed for metro bus system in the city, it appears that running this service is more practical now. This will help reduce private cars on Kabul streets.
4. Regulations to decrease VIP movements in Kabul city during rush-hours should be developed and implemented across the government. Currently, the VIP movements in the city disturb the normal traffic flow during peak hours, often taking hours to get back to normalcy.
5. Afghan Security Forces should modernize their vehicle checking tools for security purposes to avoid disturbing flow of traffic. Currently, too many checkpoints and human search of each vehicle engenders traffic congestion both during and off-peak hours.
6. Kabul Municipality should allot specific places for street vendors who currently occupy roadsides and pedestrian walks, further narrowing the already narrow roads and streets for traffic. Building public open-ceiling markets that can be leased at affordable prices to vendors and carters is one possible solution. This is particularly necessary for Khair Khana square, the center of Kabul city, Kota-e Sangi, and Dasht-e Barchi areas.

METHODOLOGY:

This policy brief is based on desk research. The authors of this study conducted a thorough review of relevant studies and news articles on the topic to lay out the problem of traffic congestion and its causes in Kabul city. Then, the authors conducted a review of relevant policies and plans that have been developed thus far to tackle the issue. In light of this review, the authors conducted further desk research to track down whether – or to what degree – implementation of these policies and plans has helped in reduction of traffic congestion in the city. Finally, the authors of this brief analyzed these policies to highlight their strengths and potential weaknesses, their likely inconsistencies, and their lack of feasibility. In light of the desk research, policy reviews, and policy analysis, the authors of this brief developed policy recommendations that can help the relevant administrations in tackling this pressing policy issue.

INTRODUCTION

Kabul is Afghanistan's capital city, with an estimated 6 million population as of 2019, 65.6% of whom live in urban areas.⁹ Over the course of four decades of violent conflict, the city has lost almost everything in terms of infrastructure. In other words, all infrastructures, including transportation systems, have been destroyed. The new Administration post-2001 began reconstruction and infrastructure building with the help of donor countries. To date, a total of four billion dollars have been invested in to improve transport infrastructure in the country.¹ However, the condition of transportation infrastructure and services in Kabul can in no way meet the demand of a consistently growing population of the city.

Kabul was the fifth fastest-growing city in the world in 2014,¹ and has seen a perplexing increase in the number of vehicles that now exceeds one million. Public transportation system is nearly nonexistent, leaving the residents of this megacity to rely on private modes of commute, mostly private cars. A combination of factors including occupation of streets by street vendors and carters, lack of a centrally-managed traffic lights system to manage traffic flow, arbitrary parking on streets, and poor transportation infrastructure has led to one of the worst traffic congestions in the country. Based on personal experience of the authors of this brief, at peak times, it takes hours for one to reach the other side of the city, a distance that should normally take around thirty minutes to travel.

How has traffic flow been managed so far, and what policies are in place to tackle the issue? This is the question that this brief is meant to answer, followed by policy recommendations.

Traffic Congestion and Public Transportation in Kabul City

Traffic congestion in Kabul city is caused by a host of factors. First, public modes of transportation remain extremely rare in the city. Kabul currently has only one mode of public transportation, which is the Millie Bus Service (National Bus Service). Established in 1975, the Millie Bus Company is part of the Ministry of Transportation and runs on subsidies from the government, but its buses are donated by donor countries.¹ As of 2018, it had a total of 100 buses in operation in 52 municipal lines, a surprisingly low number compared to 450 buses the authority had in 2007.¹

Another factor is infrastructure deficit in the city's transportation sector. Kabul's heavy transportation relies solely on roads, most of them narrow in width, lacking traffic lights, and largely occupied on their sides by street vendors and illegally parked cars. Other infrastructures

⁹ Cia.gov. (2020). The World Factbook—Central Intelligence Agency.

<https://www.cia.gov/library/publications/the-worldfactbook/fields/2028.html#af>

¹ Asian Development Bank. "Transport Sector Assessment." <https://www.adb.org/sites/default/files/linked-documents/44482-012-afg-ssa.pdf>

¹ Rasmussen, S. "Kabul – the fifth fastest growing city in the world– is bursting at the seams." The Guardian, December 14, 2014. <https://www.theguardian.com/cities/2014/dec/11/kabul-afghanistanfifth-fastest-growing-city-world-rapid-urbanisation>

¹ Sadaat, Sayed Abdul Rahman², and Nsenda Lukumwena. "Traffic Congestion Problem and Possible Solution in Kabul City." *International Journal of Transport and Vehicle Engineering* 12, no. 2 (2018): 132-137. p. 132.

¹ Sadaat, Sayed Abdul Rahman³, and Nsenda Lukumwena. Ibid.

such as railways, expressways, subways, parking lots, terminals, stations, and traffic monitoring devices are nonexistent. The infrastructure problem is further augmented by the rapid deterioration of road conditions and extremely poor maintenance. A 2015 report revealed that 20% of Afghanistan's roads were destroyed, and the remaining 80% continued to deteriorate.¹ A final culprit is VIP convoy movements and too many police checkpoints, both contributing to heavy congestions throughout the day, and particularly during peak hours.¹

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Attempts at Traffic Management System of Kabul City

A 2011 Master Plan for Kabul city outlines what the government needs to do to tackle traffic congestion. The plan includes building expressways,¹ standardizing cross-sections,¹ road network development,¹ building two ring roads,¹ expansion of bus services,² Light Rail Transit, and Bus Rapid Transit systems in terms of infrastructure development.² In terms of the traffic management system, the document outlines in detail such measures as improvement of intersection,² development of parking system,² and opening roads blocked for security reasons.² While these plans and projects look promising on paper, not much has changed on the ground to ease out the traffic jam for residents of Kabul. In 2019, Kabul Municipality started working on a project to change the geometrical shape of 33 intersections in Kabul city to help out traffic flow.² While several of these intersections were reshaped, it was received with criticism and efficiently questioned, both by drivers and by traffic police.²

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With regard to expansion of public bus services, Kabul Municipality has built a total of 264 public bus stations across the city. Meanwhile, it was announced in September 2019 that 1500 metro buses would soon start operating in the city to curb the heavy traffic,² but it has yet to be implemented. Although India pledged to donate 1000 buses to Afghanistan in 2015, the donation has not been made yet.² It is worth noting that of the 900 buses that were donated

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¹ Special Inspector General for Afghanistan Reconstruction. "Afghanistan's Road Infrastructure: Sustainment Challenges and Lack of Repairs Put U.S. Investment at Risk." SIGAR, October 2016. p. 14. <https://www.sigar.mil/pdf/audits/SIGAR-17-11-AR.pdf>

¹ Sadaat, Sayed Abdul Rahman⁵, and Nsenda Lukumwena. Ibid, p. 133.

¹ Draft Kabul City Master Plan.⁶2011. Pp. 5-48. Retrieved from USAID website: https://pdf.usaid.gov/pdf_docs/PA00JMMJ.pdf

¹ Draft Kabul City Master Plan.⁷2011. Pp. 45-50.

¹ Draft Kabul City Master Plan.⁸2011. Pp. 50-52.

¹ Draft Kabul City Master Plan.⁹2011. Pp. 52-56.

² Draft Kabul City Master Plan.¹⁰2011. Pp. 56-61.

² Draft Kabul City Master Plan.¹¹2011. Pp. 5-48.

² Draft Kabul City Master Plan.¹²2011. Pp. 68-80.

² Draft Kabul City Master Plan.¹³2011. Pp. 80-83.

² Draft Kabul City Master Plan.¹⁴2011. Pp. 83-89.

² Hashte Subh Daily. "Geometrical Shape of Kabul Intersections to Be Changed [shak-e handasi chahar rahi hayee kabul tagheer mikunad]." 22 Saur, 1398 hijri. <https://8am.af/the-geometric-shape-of-the-crossings-of-kabul-is-changing/>

² Daily Etilaatroz. "Increasing or Decreasing Congestion: What Does Kabul Municipality Want to Achieve? [kahish ya afzayesh-e rah bandan; shahrdari-e kabul dunbal-e chiest?]" 8 Saratan, 1398 hijri. <https://www.etalatroz.com/79569/reduce-increase-traffic-jams-what-municipality-kabul-follow/>

² Ariana News. "1,500 Buses to Start Operating in Kabul." September 23, 2019. <https://ariananews.af/1500-buses-to-start-operating-in-kabul/>

² Tolonews. "India to Donate 1,000 Buses as Kabul Public Transport Falts." July 27, 2015. <https://tolonews.com/business/india-donate-1000-buses-kabul-public-transport-falts>

to Afghanistan by foreign countries since 2001, currently only around 100 of them operate in Kabul.² As with the ring road in Kabul, it was officially announced in 2015 that its construction would start “soon.”³ However, the bid for contract of the project was only announced by the Afghan Ministry of Transport in December 2019, but there is no update about the project on the website of the Ministry.³

Moreover, the illegal parking issue has been approached unconventionally by Kabul Municipality – by deflating tires of the vehicles parked on street shoulders.³ This has been in practice for years now, but remains counterproductive as there are only two roads across Kabul city that have parking lots, and they stretch only for about 2.5 kilometers in total.³ Clearing roads from security T-walls was a more effective solution, but only weeks after it was initiated in June 2017, it was aborted without having completed the initial plan of removing such walls from the identified 173 sites.³

Policy Analysis and Alternative Policy Options

Although a thorough analysis of the proposed plans for resolution of traffic congestion in Kabul in the Master Plan would require expert knowledge, the plans appear to meet the demands on paper. In practice, however, it seems that there are shortcomings both in what the government has done thus far to improve the infrastructure as well as in the efforts for better management of traffic flow. Regarding changing the geometric shape of intersections, the experience in Kabul shows that while this practice worked for some intersections, it failed for others.³ Based on interviews with traffic police by the Daily Etilaat Roz, the reshaping of intersections was successful where three roads converge but has failed in areas where four roads intersect.³ The report states that “with the restructuring, cars should be stopped on three routes to open the way for vehicles of the fourth route to pass the intersection. This is particularly difficult given that there are no traffic lights and the whole management should be done manually by traffic police. Building a hanging bridge over intersections or constructing tunnels would help alleviate this issue because it would keep traffic flow going from all four routes without interrupting flow of any of them.”

The metro bus plans, however, seem to work and are effective. However, the experience of maintenance of public buses remains a dire concern. Moreover, it seems that without a

² Tolonews. “India to Donate 1,000 Buses as Kabul Public Transport Falters.”

³ Tolonews. “Officials Say Kabul Ring Road Construction to Start Soon.” January 26, 2015.

<https://tolonews.com/afghanistan/officials-say-kabul-ring-road-construction-start-soon>

³ Ministry of Transport. “Procurement of Works for, Construction of 20.7km Kabul City Ring Road.” December 9, 2019. <https://mot.gov.af/en/procurement-works-construction-207km-kabul-city-ring-road>

³ Tolonews. “Kabul Faces Parking Problems.” January 23, 2014. <https://tolonews.com/afghanistan/kabul-faces-parking-problems>

³ The World Bank. “Paving the Way for a Smooth Ride in Kabul.” April 27, 2015.

<https://www.worldbank.org/en/news/feature/2015/04/22/paving-way-smooth-ride-kabul>

³ Ariana News. “Kabul Municipality ‘Stops’ Removing T-Walls From The City.” July 12, 2017.

<https://ariananews.af/kabul-municipality-stops-removing-t-walls-from-the-city/>

³ Daily Etilaatroz. “Increasing or Decreasing Congestion: What Does Kabul Municipality Want to Achieve? [kahish ya afzayesh-e rah bandan; shahrdari-e kabul dunbal-e chiest?]” 8 Saratan, 1398 hijri. <https://www.etalatroz.com/79569/reduce-increase-traffic-jams-what-municipality-kabul-follow/>

³ Daily Etilaatroz. “Increasing or Decreasing Congestion: What Does Kabul Municipality Want to Achieve? [kahish ya afzayesh-e rah bandan; shahrdari-e kabul dunbal-e chiest?]”

complementary plan to regulate the existing one million cars in the city, metro bus plans would likely have no drastic effects on reducing congestion. For one, a plan to allow a car with odd plate numbers on odd days and those with even plate numbers on even days, based on the experience in other countries, can prove helpful. This is effective because it cuts the number of cars on streets in half, and with more reduction encouraged by metro buses, this will help ease traffic flow.

Thus far, the most ineffective approach of the municipality has been that of puncturing tire(s) of parked cars on streets. This is an attempt to stem the symptoms while leaving root causes of illegal parking unaddressed. So long as there are no parking lots across the city, those vehicles that need to park for various reasons will continue to park on street sides. Therefore, not only is this approach ineffective and counterproductive, but also unfair to drivers because they are not provided with any parking spaces while penalized for irregular parking. Opening blocked streets, on the other hand, has a bigger potential to help traffic flow as it distributes traffic. However, this initiative was nothing beyond some superficial and ephemeral campaign that lasted only a few weeks.

CONCLUSION

For years, Kabul city has been facing a dire traffic congestion. The number of vehicles in the city is 25 times more than the capacity of its transportation infrastructure. Kabul residents mainly rely on private cars for transportation due to lack of a public transportation system. The already narrow roads and streets across Kabul are occupied by illegally parked cars and street vendors for the large part. This situation is further deteriorated by poor management of traffic flow and absence of traffic lights. The Afghan government has not paid sufficient attention to the issue, and the few proposed plans largely remain on papers. Although these plans have been partially implemented, they have not yet been enough to resolve the problem; take for example changing intersections and managing illegal parking. Other possible complementary alternatives that demonstrate the potential to tackle the issue have not been considered, or tested. Some such alternatives are presented here in the form of policy recommendations.

POLICY RECOMMENDATIONS

1. Kabul Municipality and the Ministry of Transport should install traffic lights in all intersections in Kabul city to facilitate orderly flow of vehicles. The current manual regulation of traffic by traffic police at intersections is ineffective because blocking one route to allow flow of traffic from the other route at intersections contributes to traffic congestion when it is not synced with other adjacent intersections. A centrally managed traffic light system can resolve this inconsistency.
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bus system in the city, it appears that running this service is more practical now. This will help reduce private cars on Kabul streets.

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6. Kabul Municipality should allot specific places for street vendors who currently occupy roadsides and pedestrian walks, further narrowing the already narrow roads and streets for traffic. Building public open-ceiling markets that can be leased at affordable prices to vendors and carters is one possible solution. This is particularly necessary for Khair Khana square, the center of Kabul city, Kota-e Sangi, and Dasht-e Barchi areas.

About DROPS

Organization for policy research and development studies (DROPS) is a women-led, independent and multidisciplinary policy-oriented research organization based in Kabul Afghanistan. Established in 2012, DROPS is committed to strengthening democratic ideas and values by conducting research that provide policymakers with sound alternative solutions to national issues.

The existence of effective policy-oriented research institutes is vital for advancing and shaping the governance agenda in post-conflict countries. Therefore, to facilitate and encourage Afghanistan's transition to democratic governance we aim to (1) produce policy-relevant research that provides information and makes available resources to decision-makers and (2) increase women's involvement in policy dialogue and research on a diversity of issues that are at play in building democratic governance.

At DROPS, our core beliefs are: "what we find changes who we become; innovation through research; understanding today for a better tomorrow." in order to enable this mission, we produce public- driven research and policy briefs, we publish an annual women and public policy journal, we focus on building local capacities through our policy development and research methodology trainings and we advocate our research findings through our network of women thinkers and researchers.

We are committed to promoting democratic values in congruence with local cultural sensibilities so that we can build a road map for Afghanistan's young emerging democracy.