

# Should we Build Mega Transport Project in Cities? The Case of TransPeshawar Pakistan

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## Abstract

*The research indicates that TransPeshawar Project faces a huge gap for its successful completion and implementation due to many reasons which approve the recommendations of BRT studies conducted worldwide. Its aim is to find out the present status and challenges of mega transport projects carried out in four cities of Pakistan. Total budget, numbers of riders and operating cost were analyzed for each project. It is interesting that all of the three completed projects are not earning enough money to support their own operations. They are still getting a huge amount from the government in order to operate smoothly. In a country like Pakistan, neither had they obtained their objectives nor support the government financially but benefit a specific sect one way or the other way. The situation will be even worse for BRT Peshawar. Therefore it is recommended that the government should prefer roads, highways or motorways instead of such mega projects in cities. The research is focused on a single case study of BRT projects of Pakistan, its findings may apply to such projects in other cities in similar economic and political contexts.*

**Keywords:** *Rapid Transit System (RTS), Bus Rapid Transit (BRT), Mega Transport Projects*

**JEL Classification:** *A10, D10*

## INTRODUCTION

Mega Projects are the projects that cost an enormous volume of money and draw remarkable public attention. They have extensive impacts on society, environment, and economy (Altshuler, Alan; Luberoff, David, 2003). They are characterized by the magnitude of investment and level of complexity (Brookes, Naomi J, 2015). Megaprojects necessitate tremendous care during the project planning process in order to diminish future hurdles. There are many areas, where countries do such projects but this study will emphasis on transport projects (Bus Rapid Transit Systems) completed or near to be completed in 2018 in Pakistan (Pakistan Bureau of Statistics, 2017).

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Pakistan is the fifth most populous country with a population of 212,742,631 in the world out of which 39.7% live in cities (Pakistan Bureau of Statistics, 2017). Its transport system accounts for 10.5 % of its total GDP (The World Bank, 2011) and is better than other countries of the region like India, Bangladesh, and Indonesia (Pravakar Sahoo, 2011). Highways form the central part of the country's transport system with supplementary roads of about 263,942 km which is used by 92 % of travelers and by 96 % of freight traffic (Pakistan Economic Survey, 2014–15). Interestingly, motorways and highways networks account for 4.6% (Pakistan Economic Survey 2014–15), yet it is used by 85% of the traffic (Ahmed Jamal Pirzada, 2011).

Lahore is the first city where the government of Punjab constructed modern transport system (Lahore Metro) to facilitate a massive volume of passengers inside the city (Metro Bus Lahore Pakistan -Rapid Bus Transport". 2018). After the completion of this project, the same type of projects were initiated in other cities of the country as well. Among them Multan Metro and Rawalpindi-Islamabad Metro are completed and operational. The government of Sind and Khyber Pakhtunkhwa copied the ideas and decided to start such projects in Karachi and Peshawar, despite the evidence that the same projects cost a huge amount of money and still operational in a loss. In addition, there is also shreds of evidence or inquiries under consideration in the National Accountability Bureau regarding corruption in these projects.

This study is focused on the Bus Rapid Transit (BRT) system which is under construction in Peshawar. This study aims to find out answers for the following questions:

- 1 Was it a good choice for the government to start BRT facilities in Pakistan?
- 2 What were not learned from the BRT projects carried out in Pakistan?
- 3 What are the challenges of BRT transport project?

## **RAPID TRANSIT SYSTEM**

Rapid Transit or metro is a high capacity and comfortable public transport systems. Generally, the system uses electric railways but in many countries, it also uses buses (Wright and Hook, 2007). Its main purpose is to provide fast transportation to a large population over a short distance. The first Rapid Transit System (RTS) was made in 1863 at London (Transport for London, 2013). There are more than 40 BRT systems around the globe in different countries (Poiani 2014; Global BRT Data 2016).

It is used in large and populated cities in order to facilitate passengers in large numbers at high frequency through short distances. Each RTS consists of single or multiple lines which are used as a specific route with multiple line's stations and stopping. While some systems operate more than one routes. Design of routes are linked with the overall engineering structure of the system and the arrangements vary from city to city according to the need (Mark Ovenden, 2007).

RTS operators provide timely and quickly information about the destination to the users along with speed, quality, and safety. Usually, the operators use its own logo. A map of the route also known as transit map is displayed inside the bus/train and at each station to assist the passengers in recognition of destinations (Mark Ovenden, 2007). Many operators use google map and provide very accurate information about its location on the route.

**Multan Metro bus**

Multan Metro bus is a BRT system, in operation since January 24, 2017, in Multan (Multan Metrobus, 2017), having the population 1,871,843 (Provisional Summary-Punjab, 2017). It is 18.5 km long project consists of 21 bus stations (14 elevated and 7 ground level). The official documents indicate total cost Rs. 29 billion for the whole project. Its operator claims daily 96000 riders (<http://dunyaews.tv>).

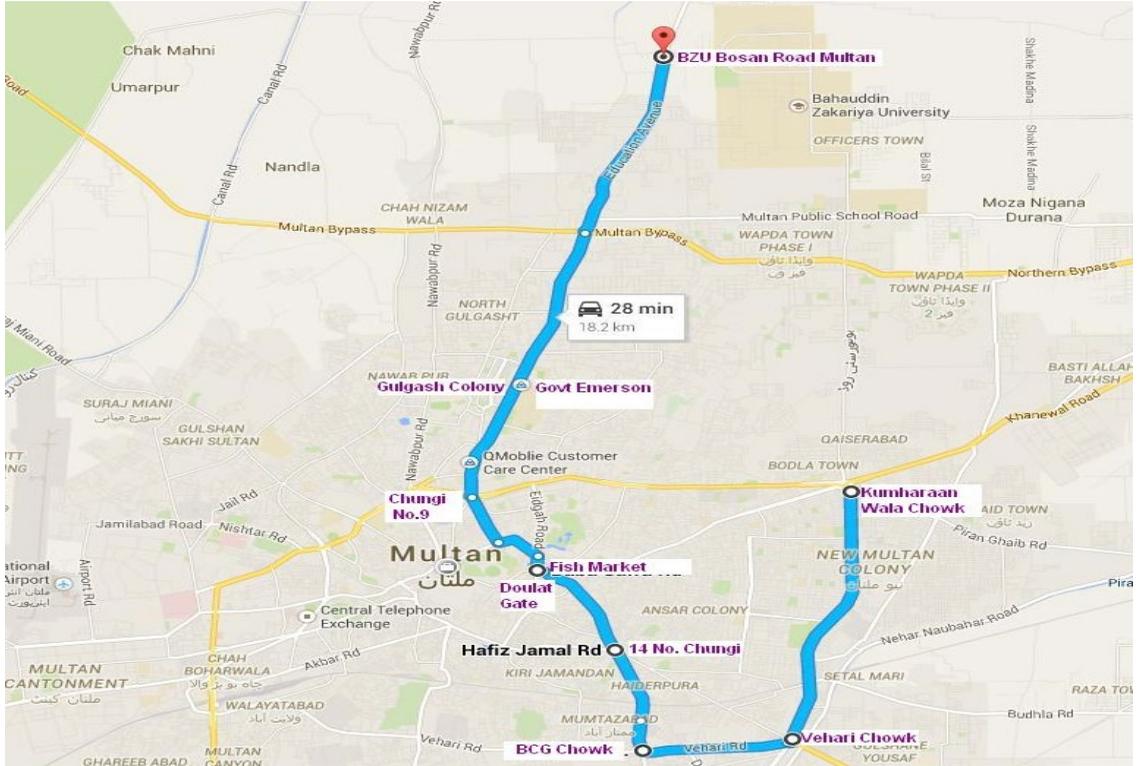


Fig.1 Metro Bus Multan. (<http://www.pakimag.com>).

Initially it was started with 47 buses but later on, the number was reduced to 37 due to losses (Abtak April, 2017). But it did not work and the management further reduced buses to 18 (Lahore News HD, 2017). It was further decided to include 100 feeder buses to the system to bring passengers from remote areas to use the metro (Shahram Haq, 2017). In the second phase, 100 more buses were added to cover all possible routes in the city. But after some time, Speedo buses were also reduced to 115 from 200 due to the lack of people’s interest (Lahore News HD, 2017). In short, the project faced immense losses due to lack of public interest and although consuming subsidized fare. Major reasons for the failure are Inappropriate Design, Poor Route Planning, and Difficult Ticketing Systems (News TV, 2018).

Table 1: Metro Bus Multan

Name	Status	Year	Distance	No. of Buses	Cost	No. of Passengers/day
Multan Metro bus	Operational	Jan, 2017	18.5 km	200	Rs: 29 Billion	90,000

### Lahore Metro bus

It is a BRT service functioning in the capital of Punjab, Lahore (Metro Bus Lahore Pakistan, 2018) having the population of 11,126,285 persons. The service is integrated with local bus service (Lahore Transport Company) providing services to neighboring communities throughout Lahore district. Its total length is 28.7 km which will be expanded to 43 km further.

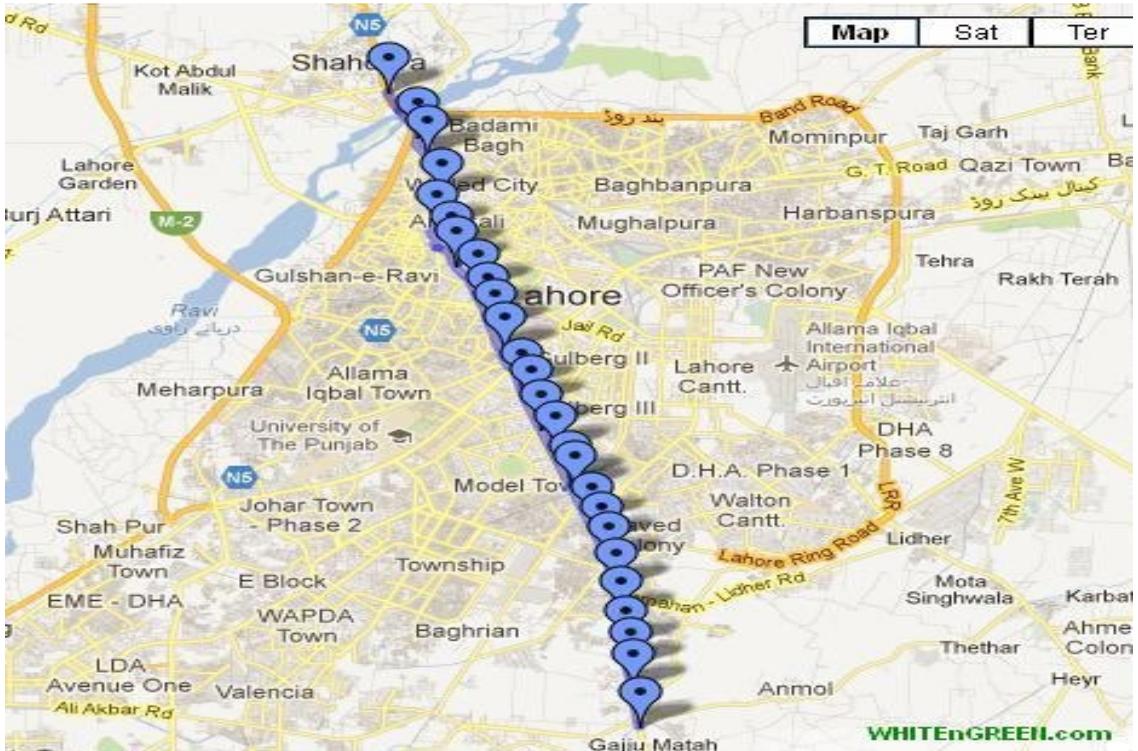


Fig. 2: Lahore BRT. (<https://thinktransportation.net/project>)

According to official documents the project was completed at a cost 59.65 billion Rs. It has 86 buses run over the corridor with an average speed of 26 km/h. Lahore Transport Company claims that the system ridership is more than 180,000 a day (Lahore BRT System Study, 2016). Research studies also claim that the figure will rise by 222 % in 2021. Punjab government pays Rs. 40 on each ticket in order to make the service affordable to the public (The express tribune, 2014).

Table 2: Lahore Metro Bus

Name	Status	Year	Distance	No. of Buses	Cost	No. of Passengers/day
Lahore Metro bus	Operational	2013	27.7 km	86	Rs: 59.65 Billion	200,000

### Rawalpindi-Islamabad Metro bus

It is a 22.5 km long BRT service operating in Rawalpindi and Islamabad having a population of 2,098,231 and 1,014,825 (urban) respectively since 2015 (Provisional Summary

Results, 2017). The total cost of the project which was Rs. 44.31 billion, was financed 50% by the federal government and 50% by the government of Punjab. The systems include 68 buses out of which 35 buses serving 80,000 passengers on a daily basis although 150,000 passengers were expected initially. Due to huge expenditures of fuel, the remaining buses were not utilized (Aamir Yasin, 2016).

Table 3: Lahore Metro Bus

Name	Status	Year	Distance	No. of Buses	Cost	No. of Passengers/day
Rawalpindi - Islamabad Metro bus	Operational	June, 2015	22.5 km	68	Rs: 44.31 Billion	100,558

Many of the short distance travelers do not prefer using metro due to its long station entrance and waiting time at terminals. And long route travelers use the facility during office time i.e. morning and evening. The system also does not connect major parts of the city which is also one of the strong reason for not attracting the desired numbers of passengers. As a result, the service is unable to earn enough money to support its operations. Currently, the government is paying Rs 2 billion subsidy to maintain its operations. Rising the fare will further decrease the number of riders (Heavy loans of subsidies, 2016). Its losses are raising questions on the long-term utilization of the systems (Islamabad Metro...billions, 2017).

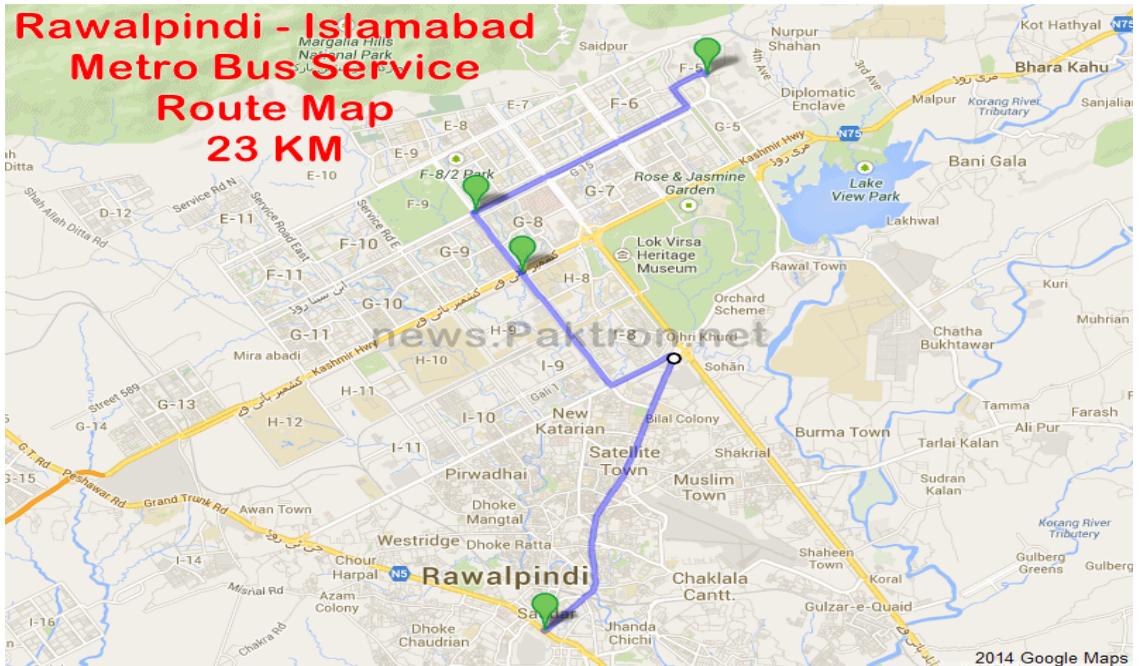


Fig. 3 Rawalpindi-Islamabad Metro Bus. (<http://news.paktron.net>)

**Trans Peshawar Project Background**

Presently under construction but may be completed in 2018, it is a BRT System in the capital city of Khyber Pakhtunkhwa, Peshawar. The total population of the city is 160, 0000

and it is estimated by the authorities that up to 450,000 riders will use the system on daily basis (Asian Development Bank). The system under work comprises of 31 stations over 26 km long route. Initially, the system will serve the people with 383 buses and 100 more small buses will be added later (Tender-2017, Addendum, 2017). The main BRT corridor will be connected with seven feeder routes in order to cover a large geographic area and to collect passengers from a remote area for the BRT system.

Table 4: Bus Rapid Transit

Name	Status	Year	Distance	No. of Buses	Cost	No. of Passengers/day
Bus Rapid Transit	Under Construction	2018 Expected	26 km	383	Rs. 69.9 Billion	500,000 Est

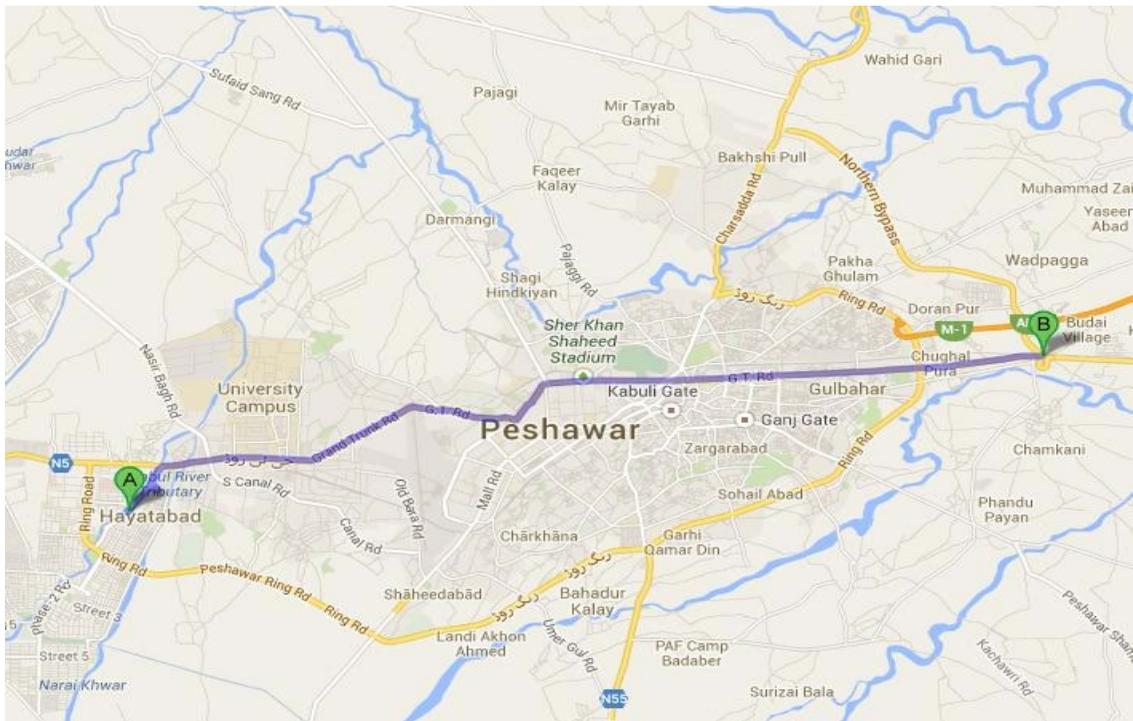


Fig. 4: (Peshawar BRT Bus Rapid Transit) (<https://www.politicpk.com/brt-peshawar-metrobus-route-map-bus-stations>)

The total cost of the project was initially estimated Rs: 41 billion but now according to some reports, it touches the figure of Rs 68 billion. The system will also use automatic ticketing machines (Expression of Interest, 2016-2017).

The idea or basis for BRT system originated from Urban Transport Pre-feasibility Study carried out in May 2014 under City Development Initiative for Asia (CDIA). The study proposed six corridors in its designed 20-year public transport roadmap which will be developed phase wise. The government of Khyber Pakhtunkhwa considered it an extraordinary project as advised by CDIA in May 2014 and PPTA/ preliminary engineering design study in December 2016 which were conducted with the financial assistance of Asian Development

Bank (ADB). The government of Khyber Pakhtunkhwa and ADB are its main sponsors, and Peshawar Development Authority (under Khyber Pakhtunkhwa Urban Mobility Authority) and TransPeshawar are executing the project and will also look after the maintenance and operations of the system.

***The main objectives of the projects are:***

- To provide reliable, affordable and convenient service to the people
- To reduce travel and waiting time by providing service at high frequency and speed on the dedicated route.
- To provide high accessibility i.e. to cover a large geographic area/ a large number of passengers.

## **ANALYSIS**

### ***Engineering Design:***

One of the main issue with BRT Peshawar project is its poor design and implementation. It was planned without proper work and climate of Peshawar which has challenged its timely completion and budget. Many times its design was changed and in some cases, it was changed after the completion of a specific activity. For the new design, many completed tasks were demolished and reworked.

### ***Expected Daily Riders***

The project claims that it will serve 450,000 riders on daily basis, which seems to be very unrealistic and unattainable. If we compare this project with that of Multan, we will definitely realize its possible future. Daily riders of Multan Metro, Lahore Metro and Rawalpindi Islamabad Metro are 96,000 and 180,000, 80,000 respectively then how it was estimated for Peshawar which has far less population than Lahore and Rawalpindi-Islamabad that the daily users will be 450,000.

### ***Project Budget***

Initially, the project was started with an estimated budget of Rs. 41 Billion but with the passage of time it reached to Rs. 68 Billion (Sohail Khattak, 2018) and some claim it Rs. 72 Billion. Although people have criticized Lahore Metro, Multan Metro, and Rawalpindi-Islamabad Metro for their huge budget of Rs. 29.6 Billion, Rs. 29 billion and Rs. 44.31 billion respectively. The final budget is not yet finalized due to work in process and may be more than the current estimated value which is Rs. 70 Billion. It is clear that it's more costly than Lahore Metro etc. (Report, Bureau, 2017).

### ***Cost of Service***

Unlike other similar projects in Pakistan, this cost of using this project services is very high. For example, anyone can ride for Rs. 20 either from one station to another or through the whole route in other such systems in Pakistan. But in Peshawar Metro, it is planned that minimum fare for one station will be Rs. 15 and Rs. 55 for the whole route ride. This will definitely negatively impact riders to use this service because fare for the same destination is Rs.30 and

people will prefer the old service due to low fare. It is well-intentioned to be mentioned here that riches have their own private transport and poor mostly use public transport due to its low cost. Therefore its high fare will be one of the challenges it will face in future.

### *Project Coverage/ Route*

Although the project road covers a demanding route yet it is not the justification that all of the people near the route will use it and it will attract people from far and wide to avail its service. Because most of the population living in Peshawar has no need to avail the service regularly and many will prefer private or rental transport to get into a proper destination. It will attract those only living near the route and need to reach places near the stations. Otherwise, Taxi and Rikshaw will be preferred as in other cities of Pakistan.

### *Environmental Impact*

One of the objectives of the project is to minimize environmental pollution in the city in the shape of CO<sub>2</sub> generated by old vehicles and transport system. But initially, it has minimized the plantation and green belts to a large extent in the city. And if someone believes that greenery is beauty, then this project has reduced the beauty of Peshawar. This project like others, does not intends to eliminate the local transport then how it is claimed that it will reduce environmental pollution? The fact is that it has reduced the very beautiful green belt to a greater extent and will not decrease the numbers of vehicles to the planned value.

### *Corruption Allegations*

Many of the project officials have resigned as they claim that there is huge corruption in the project. Top management decisions, design, implementation, cement ratio, steel ratio etc. every activity is subjected to corruption charges as claimed by officials. Like in other similar projects many believe that there was huge corruption as National Accountability Bureau has already initiated inquiries against corruption. Then such a high increase in the budget and poor planning may be subjected to the same allegation soon.

### *Project Financing*

The main portion of the project is financed by ADB which will be returned by the government of Khyber Pakhtunkhwa in coming years. It will cost a huge amount from the Provincial Budget for a longer period of time.

### *Lesson Learned and Conclusion:*

It is clear from the above details about mega transport projects in various cities of Pakistan, that no system is capable to cover its own operating expenses. Provincial governments are paying a huge amount to support them annually. Governments are also reimbursing a terrific amount from public treasure to return the loan, obtained from various organizations for assisting the projects. It means that the public treasure is paying loan and subsidy to support the normal operations. The same will be the future of BRT Peshawar.

*The following lessons are learned from mega transport projects in Pakistan.*

1 An indecorous theory for announcing the systems in Peshawar.

- 2 Inadequate Planning before starting the project
- 3 Inadequate population to avail the service
- 4 A specific route which does not covers enough area to attract sufficient riders
- 5 Huge expenditures on projects for small geographic area
- 6 Huge monetary cost for public treasure in the shape of loans and subsidies.
- 7 Corruption

It is concluded that countries like Pakistan needs to develop a transport system between different cities through Motorways and highways which covers large geographic area and benefits adequate population and transport. Mega Transport Projects which cover a large area not only facilitate transport but also provide many commercial and other development opportunities to a remarkable population. For a country like Pakistan which is already bordered by foreign loans, it is not suitable to start such projects which further increase this burden. Authorities must think thrice before initiating, planning and executing such projects.

TransPeshawar or BRT Peshawar, a project of Khyber Pakhtunkhwa in Peshawar. The project was supposed to be completed in April 2018 but due to poor planning and executing, work is still in progress. Due to its specific route and a small population of the city, this future of this project will be worse than the similar project of Multan. And like other similar projects, this project will affect the provincial treasury for a long period of time.

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