



# A Presentation on “**Highway Condition Scenario During Festival**”

**Course No.- PLAN-446**

**Course Title: Transportation Planning Studio**

*Submitted by-*

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**Level-4/Term-1**

*Submitted to*

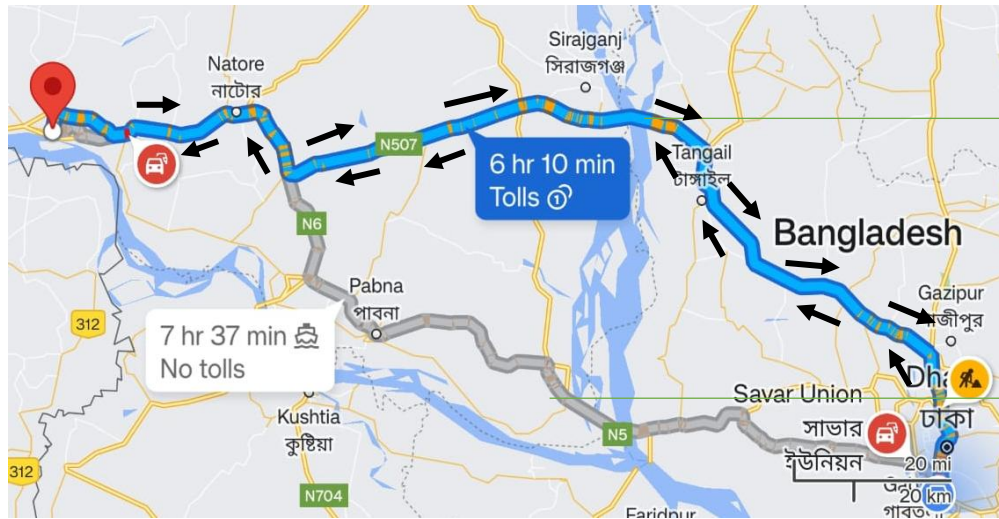
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**Farzana Faiza Farha, Lecturer**

Date of Submission: 08/07/2023

# Regular Route from Dhaka to Rajshahi / Rajshahi to Dhaka



Regular  
Route

Alternative  
Route

**Route:** GPO, Dhaka-Tongi-Gazipur-Tangail-Sirajganj-Natore-Rajshahi

**Alternative Rote:** Manikganj-Faludalia-Pabna-Ishwardi-Bonpara-Natore-Rajshahi

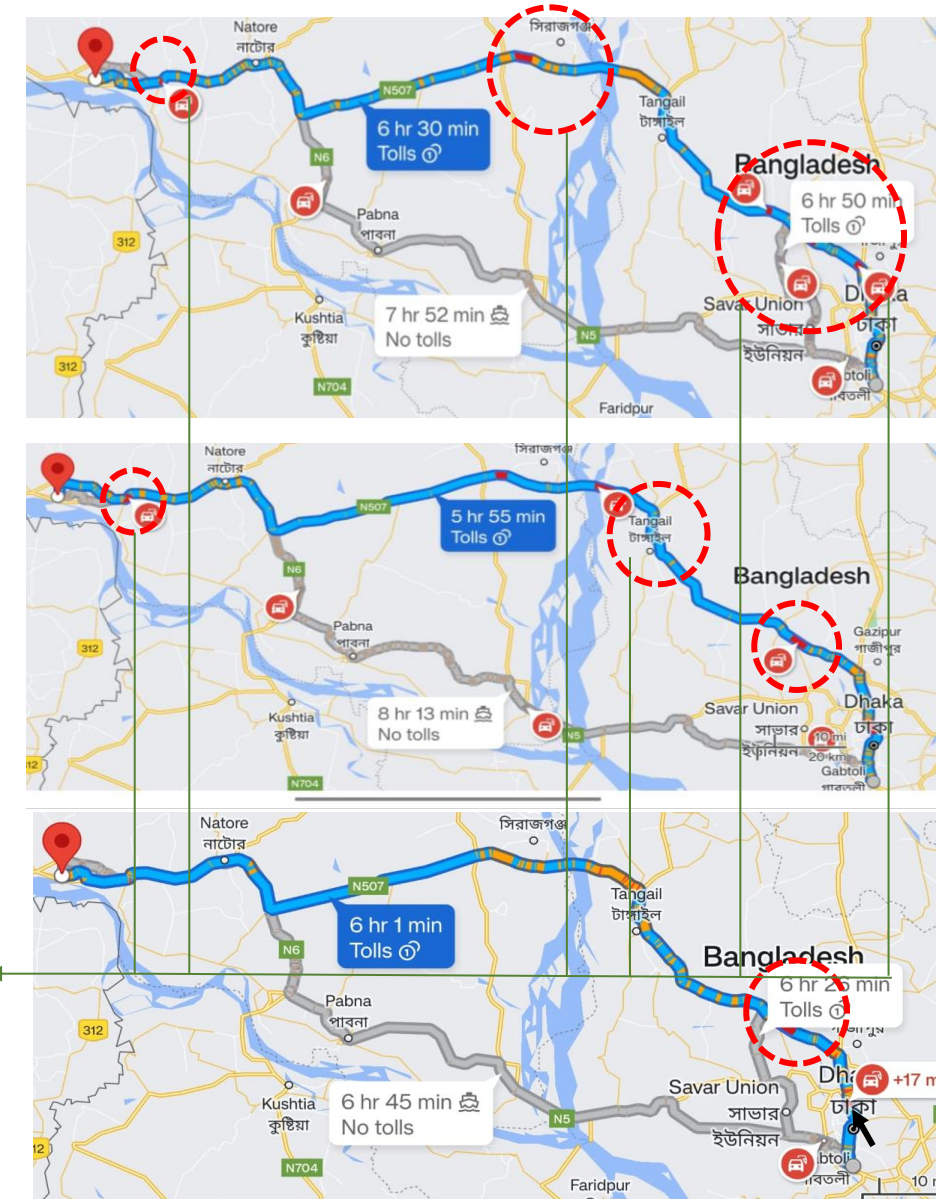
**Average Distance:**256km

**Reason for Variation of Different Distance:** measurement depends on road networks, speed limits, turn restrictions, these data constantly being updated.



Gazipur, Tangail, Baneswar, Baipayl

## Reason Behind Creating Congestion Points:

- Some vehicles without fitness broke down (News Deck, June 27,2023)
- A long traffic congestion has been created in Dhaka Tangail Highway due to road accidents (News Deck, June 27,2023)
- Vehicles' pressure increased on Gazipur Highways.(The Financial Express, June28,2023)

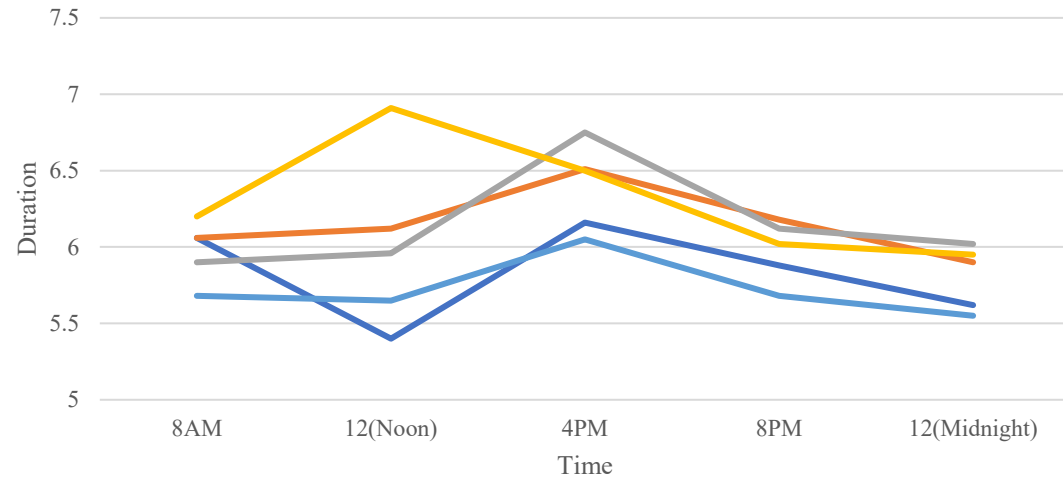


Common Congestion Points of 27 June

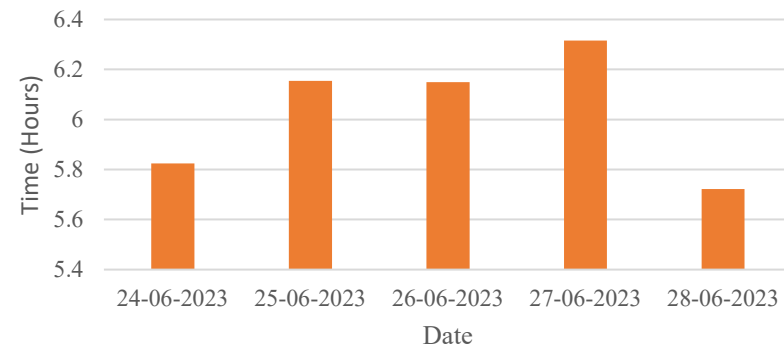
 <b>Origin: Dhaka &amp; Destination: Rajshahi</b>		<b>Highway Condition before Festival</b>					
<div>Time</div> <div>Date</div>	8am	12(Noon)	4pm	8pm	12(Midnight)	Average Time	
24-06-2023	6hrs 4min <div>7, 0</div>	5hrs 24min <div>8, 0</div>	6hrs 10min <div>2, 2</div>	5hrs 53min <div>6, 2</div>	5hr 37min <div>4, 3</div>	5hrs 49min	
25-06-2023	6hrs 4min <div>2, 2</div>	6hrs 7min <div>5, 2</div>	6hrs 31min <div>0, 1</div>	6hrs 11min <div>3, 1</div>	5hrs 54min <div>3, 2</div>	6hrs 9min	
26-06-2023	5hrs 54min <div>2, 1</div>	5hrs 58min <div>2, 3</div>	6hrs 45min <div>1, 4</div>	6hrs 7min <div>2, 3</div>	6hrs 1min <div>1, 2</div>	6hrs 9min	
27-06-2023	6hrs 10min <div>0, 3</div>	5hrs 55min <div>0, 5</div>	6hrs 30min <div>1, 4</div>	6hrs 1min <div>0, 4</div>	5hrs 57min <div>0, 4</div>	6hrs 31min	
28-06-2023	5hrs 41min <div>0, 4</div>	5hrs 39min <div>0, 3</div>	6hrs 3min <div>0, 3</div>	5hrs 41min <div>0, 0</div>	5hrs 33min <div>0, 0</div>	5hrs 43min	
Average Time	5hrs 58min	6hrs 5min	6hrs 23min	5hrs 58min	5hrs 48min	-	
 <b>Origin: Rajshahi &amp; Destination: Dhaka</b>		<b>Highway Condition after Festival</b>					
<div>Time</div> <div>Date</div>	8am	12 (Noon)	4pm	8pm	12(Midnight)	Average Time	
30-06-2023	5hrs 39min <div>0, 0</div>	5hrs 41min <div>0, 0</div>	6hrs 17min <div>4, 0</div>	5hrs 24min <div>2, 0</div>	5hrs 56min <div>8, 0</div>	6hrs 11min	
01-07-2023	5hrs 56min <div>6, 0</div>	6hrs 7min <div>7, 0</div>	6hrs 18min <div>3, 0</div>	5hrs 35min <div>3, 0</div>	5hrs 51min <div>6, 0</div>	6hrs 21min	
02-07-2023	-	6hrs 2min <div>0, 0</div>	-	6hrs 6min <div>0, 0</div>	5hrs 28min <div>0, 0</div>	6hrs 11min	
03-07-2023	6hrs 6min <div>0, 1</div>	-	6hrs 10min <div>0, 1</div>	5hrs 50min <div>0, 2</div>	5hrs 33min <div>0, 0</div>	6hrs 1min	
04-07-2023	6hrs 7min <div>0, 1</div>	6hrs 53min <div>0, 0</div>	6hrs 16min <div>0, 2</div>	5hrs 55min <div>0, 1</div>	5hrs 11min <div>0, 1</div>	6hrs 28min	
Average Time	5hrs 57min	6hrs 10min	6hrs 14min	6hrs 34min	6hrs 35min	-	
Hrs=Hours, min= Minutes, Red & Dark Red= Number of congestion points in the entire route						Source: Google Map, 2023	

# Before after Scenario of Highway Condition During Festival

## Shortest Journey Time (Dhaka to Rajshahi)

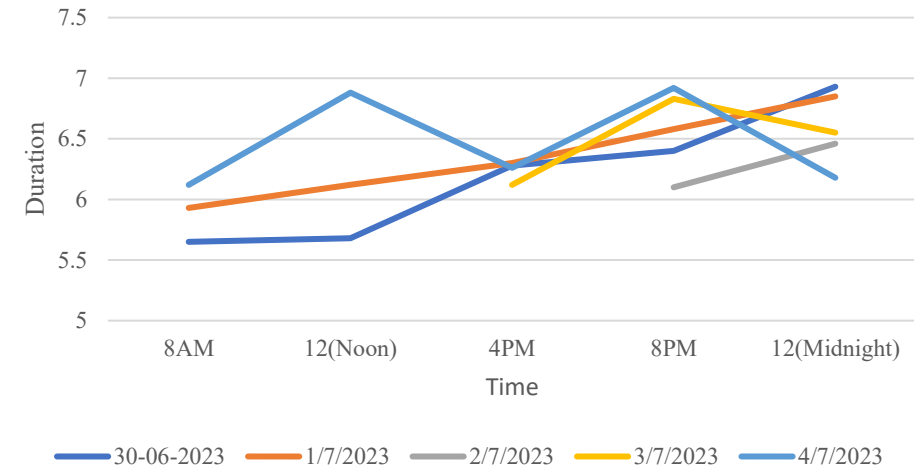


## Average Journey Time (Dhaka to Rajshahi)

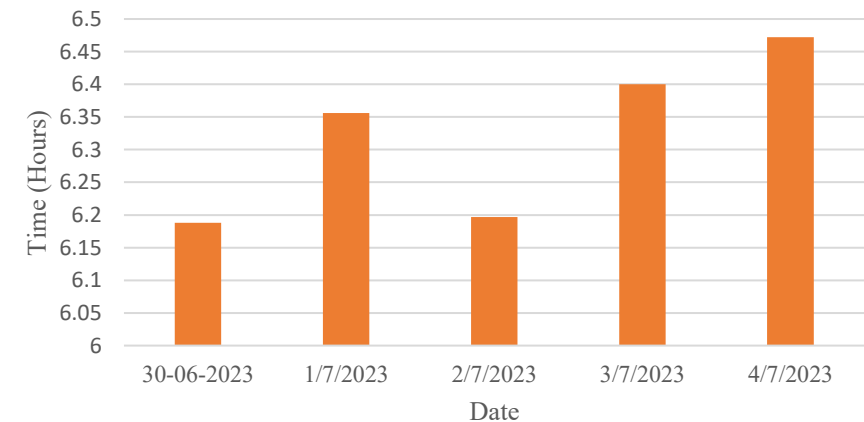


- Average Journey Time was higher in 27<sup>th</sup> June.
- In 4pm, the journey time was higher and in 12(Midnight) the journey time was lower before festival.

## Shortest Journey Time (Rajshahi to Dhaka)



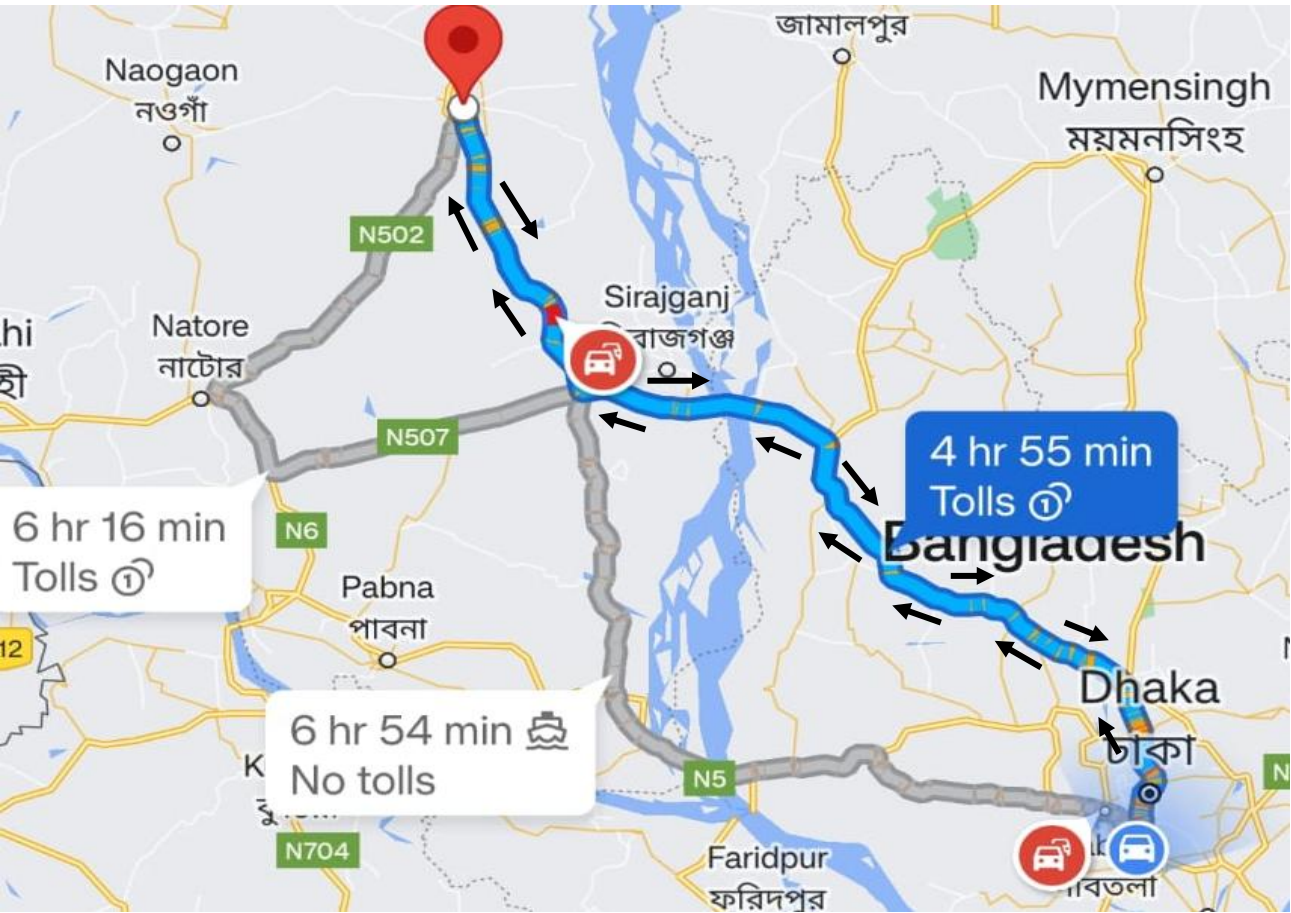
## Average Journey Time (Rajshahi to Dhaka)



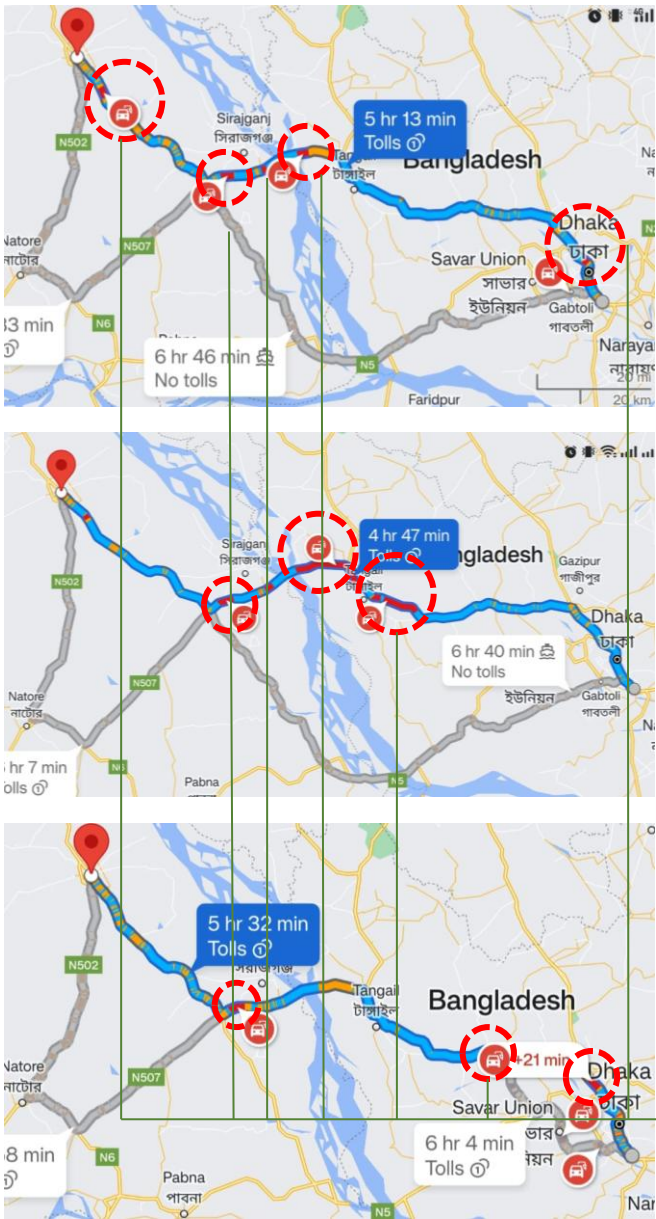
- Average Journey Time was higher in 4<sup>th</sup> July.
- No particular trend exists.



# Regular Route from Dhaka to Bogura / Bogura to Dhaka



**Route:** Dhaka-Gazipur-Tangail-Sirajganj-Hatikimtul-Sherpur-Majhira-Bogura  
**Alternative Rote:** Dhaka-Manikganj-Talpatte-Hatikumrul-Sherpur-Majhira-Bogura  
**Average Distance:**198km




Common Congestion Points of 28 June

## Reason Behind Creating Congestion Points:

- Renovation work for Hatikumrul- Rangpur Highway. Dhaka Tribune, June 26,2023)

Sherpur, Tangail, Tongi, Hatikimrul

Origin: Dhaka & Destination: Bogura				Highway Condition before Festival			
	8am	12(Noon)	4pm	8pm	12(Midnight)	Average Time	
24-06-2023	5hrs 9min 5,2	4hrs 55min 5,0	5hrs 29min 4,2	5hrs 9min 7,1	4hrs 50min 4,3	5hrs 6min	
25-06-2023	5hrs 15min 1,2	5hrs 13min 10,1	5hrs 38min 2,1	5hrs 18min 9,0	4hrs 56min 3,1	5hrs 17min	
26-06-2023	4hrs 58min 1,2	5hrs 5min 1,2	5hrs 47min 1,4	5hrs 17min 3,4	5hrs 12min 0,2	5hrs 15min	
27-06-2023	5hrs 11min 1,3	5hrs 1min 0,3	5hrs 32min 1,4	5hrs14min 0,6	5hrs 7min 0,4	5hrs 13min	
28-06-2023	4hrs 47min 0,2	4hrs 49min 0,3	5hrs 13min 0,3	5hrs 2min 0,1	4hrs 52min 0,0	4hrs 56min	
Average Time	5hrs 3min	5hrs 12min	5hrs 31min	5hrs 12min	4hrs 59min	-	

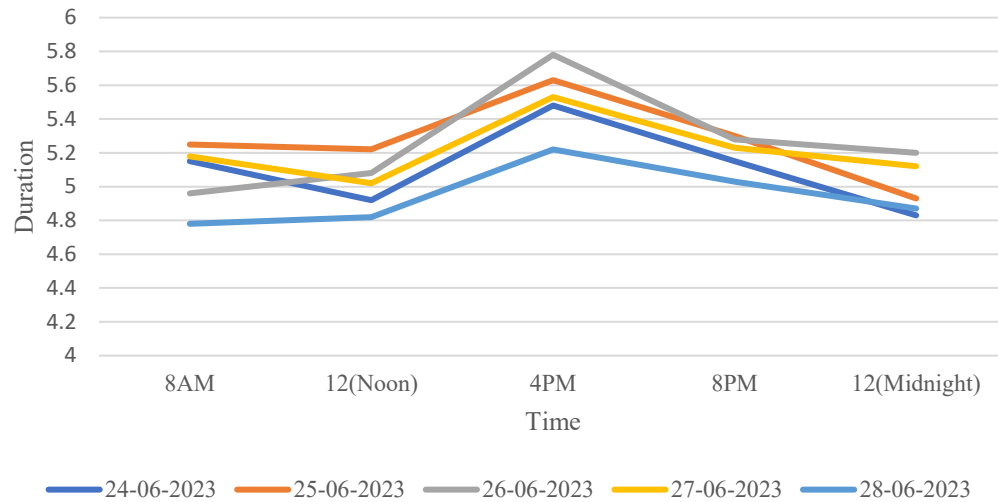
 Origin: Bogura & Destination: Dhaka	Highway Condition after Festival						
	8am	12 (Noon)	4pm	8pm	12 (Midnight)	Average Time	
30-06-2023	4hrs 33min 0,0	4hrs 39min 0,0	5hrs 13min 6,0	4hrs 35min 2,0	4hrs 57min 9,0	4hrs 47min	
01-07-2023	4hrs 56min 7,0	5hrs 10min 5,0	5hrs 20min 4,0	4hrs 37min 4,0	4hrs 39min 5,0	4hrs 55min	
02-07-2023	-	5hrs 4min 0,0	-	5hrs 8min 0,0	4hrs 47min 0,0	5hrs	
03-07-2023	5hrs 5min	-	5hrs 16min 0,1	5hrs 11min 0,0	4hrs 47min 0,0	5hrs 4min	
04-07-2023	5hrs 12min 0,1	5hrs 19min 0,1	5hrs 8min 0,1	5hrs10min 0,1	4hrs 45min 0,0	5hrs 18min	
Average Time	4hrs	5hrs 17min	5hrs 13min	4hrs 55min	4hrs 47min	-	

Hrs=Hours, min= Minutes, Red & Dark Red= Number of congestion points in the entire route

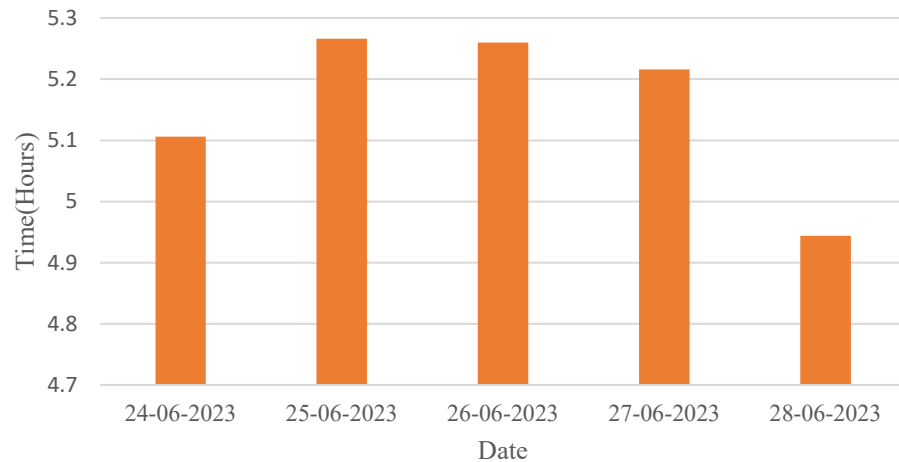
Source: Google Map, 2023

# Before after Scenario of Highway Condition During Festival

## Shortest Journey Time (Dhaka to Bogura)

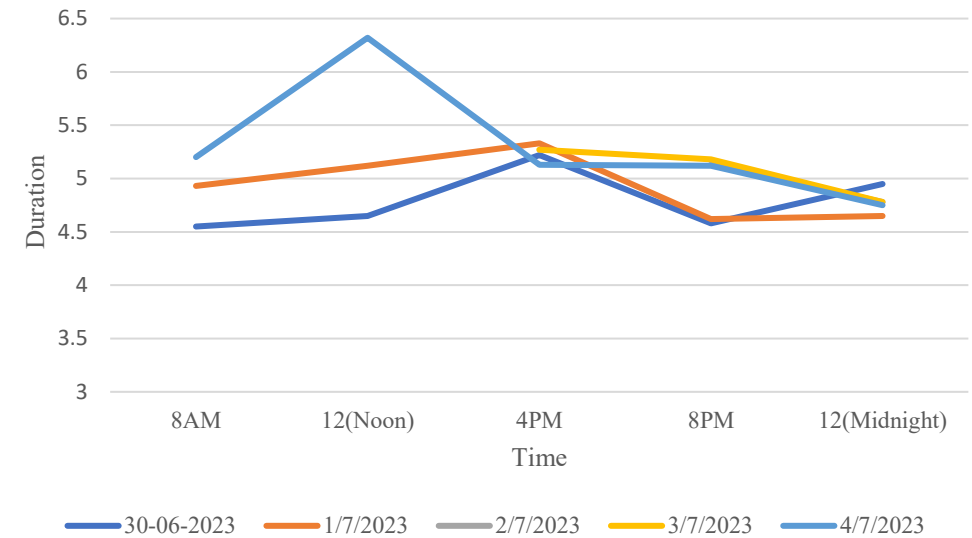


## Average Journey Time (Dhaka to Bogura)

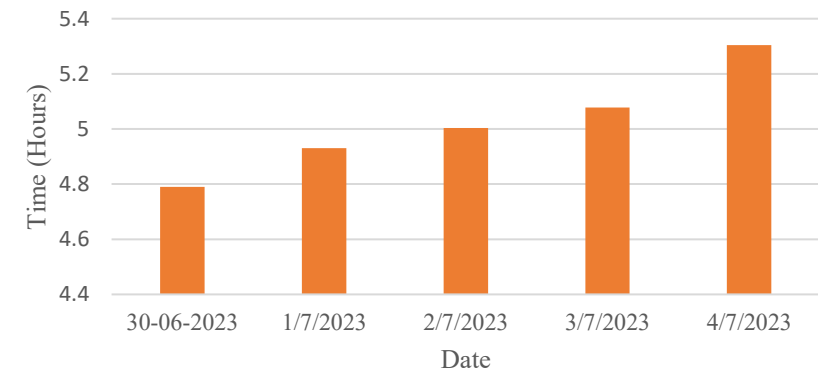


- Average Journey Time was gradually decreasing.
- In 4pm, the journey time was higher and in 12(Midnight) the journey time was lower before festival.

## Shortest Journey Time (Bogura to Dhaka)



## Average Journey Time (Bogura to Dhaka)



- Average Journey Time was gradually increasing
- No particular trend exists.

## Major Findings

- From “Dhaka to Rajshahi” or “Rajshahi to Dhaka”- Alternative route was Hemayetpur- Manikganj-Arichaghat-Kazirhat Launch Terminal-Pabna-Ishwardi-Rajshahi. Alternative route was chosen by Google map just once because people need to change their travel modes in this route at Arichaghat.
- In both cases “Dhaka to Rajshahi” & “Rajshahi to Dhaka” off peak hour was 12pm (midnight) because of less traffic congestion point in that particular point.
- Travel time variation with congestion point exists.
- Congestion points before “Eid” day were increased gradually.

## Recommendations

- Renovation work for highways should be completed in a fixed time period.
- In “Eid ul Azha”, the “Kurbani Hats” were temporarily placed adjacent to roads and it should be facilitated properly
- To address the sudden accidents, a team with proper machineries could be formulated at different point of the roads to mitigate the consequences of accident as soon as possible.
- The vacation period ( starting and ending) could be adjusted by private company owners, government and other stakeholders.
- offer incentives like toll discounts or free parking for vehicles traveling during off-peak hours.
- Promote the concept of carpooling among friends and family members traveling to the same destinations.