

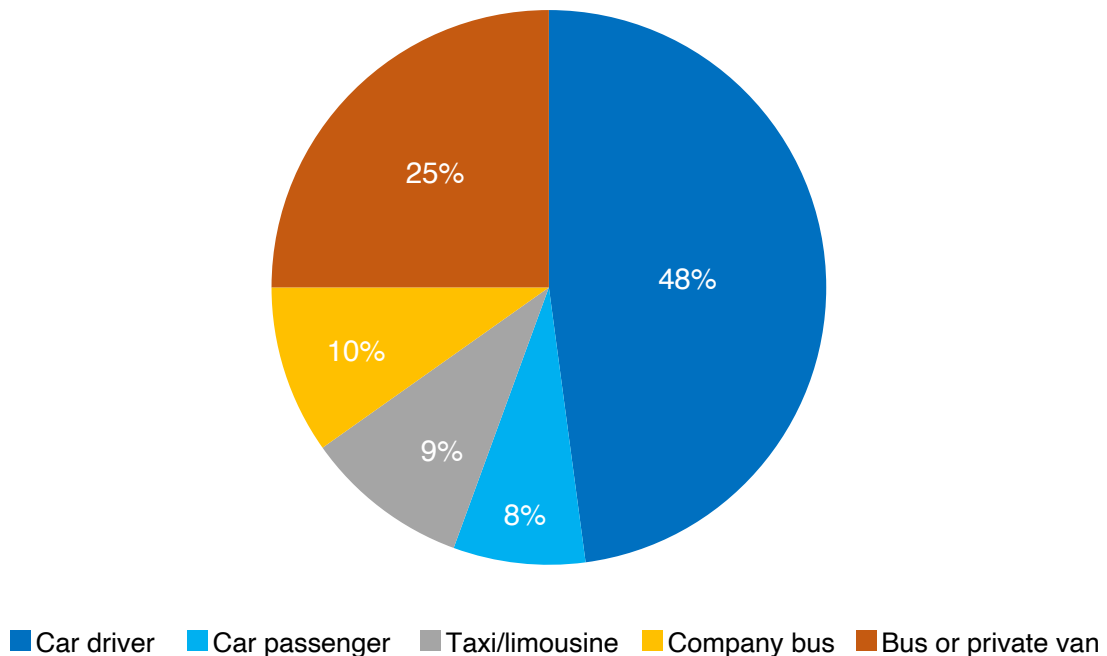
# Data Insight

06/01/2021

## Stated preferences of metro use by current mode choices in Riyadh

- The Royal Commission of Riyadh City (RCRC) performed a state preference (SP) survey in 2013 to understand the preference for metro use in Riyadh.
- In the SP survey, respondents stated whether they were willing to shift from their current mode to using the metro, based on 45 hypothetical scenarios.<sup>i</sup>
- According to the survey sample, there are five different mode users in Riyadh (Figure 1).

**Figure 1:** Current modal split in Riyadh (SP survey).

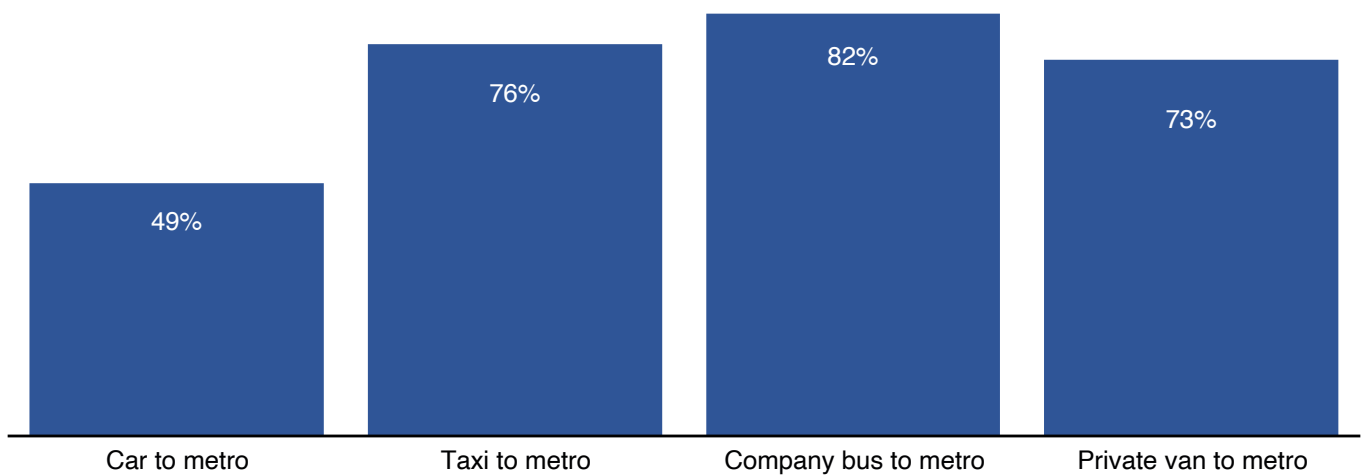


Source: Stated Preference Survey, 2013.

<sup>i</sup> 45 hypothetical scenarios (six types of card with nine situations per card, where colored situations are the best scenarios).

- Car users (drivers and passengers) were less (49%) likely to shift to using the metro (Figure 2).<sup>1</sup>
- Company bus users were the most (82%) likely to shift to using the metro (Figure 2).<sup>1</sup>
- The survey shows that the primary mode shift to the metro is expected from mass transit and shared/intermediate modes of transport.
- To encourage a higher percentage of car users to shift to metro use, the city may need to add fiscal and infrastructural regulations that discourage the use of cars and make metro usage more convenient and efficient by comparison.

**Figure 2:** Percentage of modal shift from current mode to metro.



Source: Stated Preference Survey, 2013.

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<sup>1</sup> Percentages represent the best scenario among all hypothetical scenarios; 'car' includes both driver and passenger.

**Card type D1 who are car users (car to metro without transfer consideration)**

	S1		S2		S3		S4		S5	
Attributes	Metro	Car	Metro	Car	Metro	Car	Metro	Car	Metro	Car
Fare / parking fee	3 SAR	Free	5 SAR	10 SAR	3 SAR	Free	7 SAR	Free	7 SAR	Free
Wait time	7 mins	None	7 mins	None	4 mins	None	2 mins	None	7 mins	None
Travel time	Last trip - 15 mins	Same as last	Last trip - 8 mins	Same as last	Last trip - 8 mins	Same as last	Last trip - 8 mins	Same as last	Last trip - 5 mins	Same as last
Walk time	Same as last	Same as last	Last trip + 5 mins	Same as last	Last trip + 3 mins	Same as last	Same as last	Same as last	Last trip + 3 mins	Same as last
	S6		S7		S8		S9			
Attributes	Metro	Car	Metro	Car	Metro	Car	Metro	Car		
Fare / parking fee	7 SAR	Free	5 SAR	10 SAR	3 SAR	Free	5 SAR	10 SAR		
Wait time	4 mins	None	2 mins	None	2 mins	None	4 mins	None		
Travel time	Last trip - 15 mins	Same as last	Last trip - 15 mins	Same as last	Last trip - 5 mins	Same as last	Last trip - 5 mins	Same as last		
Walk time	Last trip + 5 mins	Same as last	Last trip + 3 mins	Same as last	Last trip + 5 mins	Same as last	Same as last	Same as last		

**Card type D2 who are car users (car to metro with transfer consideration)  
(no colored situation, because the best scenario for car users is found in card type D1)**

	S1		S2		S3		S4		S5	
Attributes	Metro	Car	Metro	Car	Metro	Car	Metro	Car	Metro	Car
Fare / parking fee	5 SAR	Free	7 SAR	10 SAR	3 SAR	Free	3 SAR	Free	7 SAR	10 SAR
Wait time	7 mins	None	7 mins	None	7 mins	None	2 mins	None	2 mins	None
Travel time	Last trip - 12 mins	Same as last	Last trip - 5 mins	Same as last	Last trip - 12 mins	Same as last	Last trip - 5 mins	Same as last	Last trip - 12 mins	Same as last
Walk time	Same as last	Same as last	Same as last	Same as last	Last trip + 5 mins	Same as last	Same as last	Same as last	Last trip + 5 mins	Same as last
Transfer required	No	None	Yes	None	Yes	None	No	None	No	None
	S6		S7		S8		S9			
Attributes	Metro	Car	Metro	Car	Metro	Car	Metro	Car		
Fare / parking fee	5 SAR	Free	5 SAR	Free	4 SAR	Free	5 SAR	Free		
Wait time	2 mins	None	7 mins	None	5 mins	None	2 mins	None		
Travel time	Last trip - 12 mins	Same as last	Last trip - 5 mins	Same as last	Last trip - 8 mins	Same as last	Last trip - 5 mins	Same as last		
Walk time	Same as last	Same as last	Last trip + 5 mins	Same as last	Last trip - 2 mins	Same as last	Last trip + 5 mins	Same as last		
Transfer required	Yes	None	No	None	No	None	Yes	None		

**Card type D3 is not related to metro (car to public bus)**

**Card type D4 who are taxi/limousine users (taxi/limousine to metro)**

	S1		S2		S3		S4		S5	
Attributes	Metro	Taxi	Metro	Taxi	Metro	Taxi	Metro	Taxi	Metro	Taxi
Fare	3 SAR	Same as last	5 SAR	Same as last	3 SAR	Same as last	7 SAR	Same as last	7 SAR	Same as last
Wait time	7 mins	Same as last	7 mins	Same as last	4 mins	Same as last	2 mins	Same as last	7 mins	Same as last
Travel time	Last trip - 13 mins	Same as last	Last trip - 7 mins	Same as last	Last trip - 7 mins	Same as last	Last trip - 7 mins	Same as last	Last trip - 4 mins	Same as last
Walk time	5 mins	Same as last	8 mins	Same as last	12 mins	Same as last	5 mins	Same as last	12 mins	Same as last
	S6		S7		S8		S9			
Attributes	Metro	Taxi	Metro	Taxi	Metro	Taxi	Metro	Taxi		
Fare	7 SAR	Same as last	5 SAR	Same as last	3 SAR	Same as last	5 SAR		Same as last	
Wait time	4 mins	Same as last	2 mins	Same as last	2 mins	Same as last	4 mins		Same as last	
Travel time	Last trip - 13 mins	Same as last	Last trip - 13 mins	Same as last	Last trip - 4 mins	Same as last	Last trip - 4 mins		Same as last	
Walk time	8 mins	Same as last	12 mins	Same as last	8 mins	Same as last	5 mins		Same as last	

**Card type D5 who are company bus users (SP: company bus to metro)**

	S1		S2		S3		S4		S5	
Attributes	Metro	Company bus	Metro	Company bus	Metro	Company bus	Metro	Company bus	Metro	Company bus
Fare	3 SAR	None	5 SAR	None	3 SAR	None	7 SAR	None	7 SAR	None
Wait time	7 mins	Same as last	7 mins	Same as last	4 mins	Same as last	2 mins	Same as last	7 mins	Same as last
Travel time	Last trip - 10 mins	Same as last	Last trip - 5 mins	Same as last	Last trip - 5 mins	Same as last	Last trip - 5 mins	Same as last	Same as last	Same as last
Walk time	Last trip - 12 mins	Same as last	Last trip - 5 mins	Same as last	Same as last	Same as last	Last trip - 12 mins	Same as last	Same as last	Same as last
	S6		S7		S8		S9			
Attributes	Metro	Company bus	Metro	Company bus	Metro	Company bus	Metro	Company bus		
Fare	7 SAR	None	5 SAR	None	3 SAR	None	5 SAR		None	
Wait time	4 mins	Same as last	2 mins	Same as last	2 mins	Same as last	4 mins		Same as last	
Travel time	Last trip - 12 mins	Same as last	Last trip - 10 mins	Same as last	Same as last	Same as last	Same as last		Same as last	
Walk time	Last trip - 5 mins	Same as last	Same as last	Same as last	Last trip - 5 mins	Same as last	Last trip - 12 mins		Same as last	

**Card type D6 who are bus/private van users (SP: bus/private van to metro)**

	S1		S2		S3		S4		S5	
Attributes	Metro	Bus/private van	Metro	Bus/private van	Metro	Bus/private van	Metro	Bus/private van	Metro	Bus/private van
Fare	3 SAR	Same as last	5 SAR	Same as last	3 SAR	Same as last	7 SAR	Same as last	7 SAR	Same as last
Wait time	7 mins	Same as last	7 mins	Same as last	4 mins	Same as last	2 mins	Same as last	7 mins	Same as last
Travel time	Last trip - 10 mins	Same as last	Last trip - 5 mins	Same as last	Last trip - 5 mins	Same as last	Last trip - 5 mins	Same as last	Same as last	Same as last
Walk time	Last trip - 12 mins	Same as last	Last trip - 5 mins	Same as last	Same as last	Same as last	Last trip - 12 mins	Same as last	Same as last	Same as last

	S6		S7		S8		S9	
Attributes	Metro	Bus/private van	Metro	Bus/private van	Metro	Bus/private van	Metro	Bus/private van
Fare	7 SAR	Same as last	5 SAR	Same as last	3 SAR	Same as last	5 SAR	Same as last
Wait time	4 mins	Same as last	2 mins	Same as last	2 mins	Same as last	4 mins	Same as last
Travel time	Last trip - 10 mins	Same as last	Last trip - 10 mins	Same as last	Same as last trip	Same as last	Same as last	Same as last
Walk time	Last trip - 5 mins	Same as last	Same as last	Same as last	Last trip - 5 mins	Same as last	Last trip - 12 mins	Same as last

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