

Dear reviewer, for your convenience, we translate the questionnaire into English version. The questionnaire is as follows. Thank you for your suggestions.

SP survey questionnaire for combined mode

1) personal information

- (1) your gender: A. male B. female
- (2) your age: A.10-20 B. 20-30 C. 30-40
D.40-50 E.>50
- (3) the household car ownership: A.0 B.1 C.2 D. ≥ 3
- (4) your occupation: A. Corporate staff B. service staff C. government servant D. officeholder E. Business personnel F. student G. retirees H. others

2) travel behavior survey

- (5) Recall your main daily trip, the travel process is:
Travel mode 1____, travel time____(min)
Travel mode 2____, travel time, other optional travel mode____:
A. metro
B. car
C. regular bus
D. bike
E. car to metro
F. others
- (6) choose 1-5 to evaluate your satisfaction on travel mode
1- very dissatisfied 2- dissatisfied 3- slightly satisfied 4- satisfied
5- very satisfied

	metro	car	Regular bus	bike
Crowded situation				
physical				
punctuality				
comfort				

3) travel preference

Please answer the questions according to your familiar situation:

scenario 1: travel distance 2-5km, choose travel mode from bike, bus, bike to bus

scenario 2: travel distance 5-15km, choose travel mode from bus, car, metro, bike to metro

scenario 3: travel distance >15km, choose travel mode from car, car to metro, bus to metro

If the situation setting does not match your actual situation, please assume that you are in the situation and give the result of the selection.

Scenario 1 (travel distance 2-5km): (8-1) assume that there are 3 routes to arrive destination, including: bike mode, bus mode, bike to bus, travel conditions change as follows, how would you choose, please choose the way

2



A. bike

1. Travel time:
20 min

2. Total cost:
0 yuan



B. bus

1. Travel time: 40 min

Including:
walking time 15min
tailing time: 15 min,
time in vehicle: 10 min

2. Fare: 2 yuan



C. car

1. Travel time:
15 min

2. Total cost:
8 yuan



D. bike to bus

1. Travel time: 35min

Including:
travel time of bike: 6 min

transfer walking time 15min
waiting time for bus: 15 min,
time in vehicle: 10 min

2. Fare: 2 yuan

3



A. bike

1. Travel time:
25 min

2. Total cost:
0 yuan



B. bus

1. Travel time: 29 min

Including:
walking time 12min
waiting time: 5 min,
time in vehicle: 12 min

2. Fare: 2 yuan



C. car

1. Travel time:
20min

2. Total cost:
10 yuan



D. bike to bus

1. Travel time: 28min

Including:
travel time of bike: 5 min

transfer walking time 6 min
waiting time for bus: 5 min,
time in vehicle: 12 min

2. Fare: 2 yuan

4	 A. bike 1. Travel time: 25 min 2. Total cost: 0 yuan	 B. bus 1. Travel time: 37 min Including: walking time 10min, waiting time: 12 min, time in vehicle: 15 min 2. Fare: 2 yuan	 C. car 1. Travel time: 20min 2. Total cost: 10 yuan
	 D. bike to bus	1. Travel time: 32min Including: travel time of bike: 4 min, transfer walking time 1 min, waiting time for bus: 12min, time in vehicle: 15 min 2. Fare: 2 yuan	

5	 A. bike 1. Travel time: 30 min 2. Total cost: 0 yuan	 B. bus 1. Travel time: 38 min Including: walking time 8 min, waiting time: 2 min, time in vehicle: 28 min 2. Fare: 2 yuan	 C. car 1. Travel time: 25 min 2. Total cost: 12 yuan
	 D. bike to bus	1. Travel time: 26 min Including: travel time of bike: 3 min, transfer walking time 3 min, waiting time for bus: 2min, time in vehicle: 18 min 2. Fare: 2 yuan	

6	 A. bike 1. Travel time: 30 min 2. Total cost: 0 yuan	 B. bus 1. Travel time: 35 min Including: walking time 5 min, waiting time: 10min, time in vehicle: 20min 2. Fare: 2 yuan	 C. car 1. Travel time: 25 min 2. Total cost: 12 yuan
	 D. bike to bus	1. Travel time: 37 min Including: travel time of bike: 2 min, transfer walking time 5 min, waiting time for bus: 10 min, time in vehicle: 20 min 2. Fare: 2 yuan	

(9-1) your monthly income: A ≤ 3000 B 3000~6000 C 6000~10000 D

10000~20000 E> 20000

Scenario 2 (travel distance 5-15km): (8-2) assume that there are 4 routes to arrive destination, including: bus, metro, car, bike and bike to metro, travel conditions change as follows, how would you choose, please choose the way

1	 A. bus 1.travel time: 55 min including: walking time: 3 min waiting time: 2 min time in vehicle: 50 min 2.fare: 2 yuan	 B. metro 1.travel time: 42 min including: walking time: 16 min waiting time: 1 min time in vehicle: 25 min 2.fare: 4 yuan	 C. car 1.travel time: 40 min 2.cost: 20 yuan
	 D. bike to metro 1.travel time: 37 min including: travel time of bike: 5 min transfer walking time: 6 min waiting time for metro: 1 min time in vehicle: 25 min 2.cost: 4 yuan		

2	 A. bus 1.travel time: 48 min including: walking time: 3 min waiting time: 5 min time in vehicle: 40 min 2.fare: 2 yuan	 B. metro 1.travel time: 37 min including: walking time: 14 min waiting time: 3 min time in vehicle: 20 min 2.fare: 3 yuan	 C. car 1.travel time: 35 min 2.cost: 15 yuan
	 D. bike to metro 1.travel time: 32 min including: travel time of bike: 5 min transfer walking time: 4 min waiting time for metro: 3 min time in vehicle: 20 min 2.cost: 3 yuan		

3

 1. travel time: 48 min including: walking time: 3 min waiting time: 5 min time in vehicle: 40 min 2. fare: 2 yuan	 B. metro 1. travel time: 37 min including: walking time: 14 min waiting time: 3 min time in vehicle: 20 min 2. fare: 3 yuan	 C. car 1. travel time: 35 min 2. cost: 15 yuan
 D. bike to metro 1. travel time: 32 min including: travel time of bike: 5 min transfer walking time: 4 min waiting time for metro: 3 min time in vehicle: 20 min 2. cost: 3 yuan		

4

 1. travel time: 56 min including: walking time: 6 min waiting time: 5 min time in vehicle: 45 min 2. fare: 2 yuan	 B. metro 1. travel time: 48 min including: walking time: 23 min waiting time: 5 min time in vehicle: 20 min 2. fare: 3 yuan	 C. car 1. travel time: 35 min 2. cost: 15 yuan
 D. bike to metro 1. travel time: 38 min including: travel time of bike: 10 min transfer walking time: 3 min waiting time for metro: 5 min time in vehicle: 20 min 2. cost: 3 yuan		

5

 1. travel time: 40 min including: walking time: 2 min waiting time: 8 min time in vehicle: 30 min 2. fare: 2 yuan	 B. metro 1. travel time: 27 min including: walking time: 11 min waiting time: 1 min time in vehicle: 15 min 2. fare: 2 yuan	 C. car 1. travel time: 25 min 2. cost: 13 yuan
 D. bike to metro 1. travel time: 25 min including: travel time of bike: 3 min transfer walking time: 6 min waiting time for metro: 1 min time in vehicle: 15 min 2. cost: 2 yuan		

6





B. metro



C. car

1. travel time: 48min
including:
walking time: 5 min
waiting time: 8 min
time in vehicle: 35 min

2. fare: 2 yuan

1. travel time: 37 min
including:
walking time: 20min
waiting time: 2min
time in vehicle: 15min

2. fare: 2 yuan

1. travel time: 25 min

2. cost: 13 yuan


➔


D. bike to metro

1. travel time: 30 min
including:
travel time of bike: 8 min
transfer walking time: 5 min
waiting time for metro: 2 min
time in vehicle: 15 min

2. cost: 2 yuan

7





B. metro



C. car

1. travel time: 32 min
including:
walking time: 2 min
waiting time: 10min
time in vehicle: 20 min

2. fare: 2 yuan

1. travel time: 22min
including:
walking time: 9min
waiting time: 3 min
time in vehicle: 10 min

2. fare: 2 yuan

1. travel time: 20 min

2. cost: 10 yuan


➔


D. bike to metro

1. travel time: 20 min
including:
travel time of bike: 3 min
transfer walking time: 4 min
waiting time for metro: 3 min
time in vehicle: 10 min

2. cost: 2 yuan

8





B. metro



C. car

1. travel time: 40 min
including:
walking time: 5 min
waiting time: 10 min
time in vehicle: 25 min

2. fare: 2 yuan

1. travel time: 35 min
including:
walking time: 18min
waiting time: 5 min
time in vehicle: 10 min

2. fare: 2yuan

1. travel time: 20 min

2. cost: 10 yuan


➔


D. bike to metro

1. travel time: 26 min
including:
travel time of bike: 8 min
transfer walking time: 3 min
waiting time for metro: 5 min
time in vehicle: 10 min

2. cost: 2 yuan

(9-2) your monthly income: A ≤ 3000 B 3000~6000 C 6000~10000 D 10000~20000 E >20000

Scenario 3 (travel distance >15 km): (8-2) assume that there are 3 routes to arrive

destination, including: car, car to metro, bus to metro, travel conditions change as follows, how would you choose, please choose the way

1

 A. car 1.travel time: 45min 2.cost: 25 yuan	 B. car to metro 1.travel time: 47 min, including: travel time of car: 10 min transfer walking time: 6 min waiting time for metro: 1 min travel time of metro: 30 min 2.cost: 12 yuan, including: cost of cat: 8 yuan metro fare: 4 yuan
	 C. bus to metro 1.travel time: 67 min, including: walking time: 8 min waiting time for bus: 10 min travel time of bus: 12min transfer walking time: 6min waiting time for metro: 1 min travel time of metro: 30 min 2.cost: 6 yuan, including: bus fare: 2 yuan Metro fare: 4 yuan

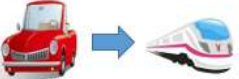
2

 A. car 1.travel time: 75min 2.cost: 35 yuan	 B. car to metro 1.travel time: 77 min, including: travel time of car: 20 min transfer walking time: 6 min waiting time for metro: 1 min travel time of metro: 50 min 2.cost: 16 yuan, including: cost of cat: 12 yuan metro fare: 4 yuan
	 C. bus to metro 1.travel time: 96 min, including: walking time: 6 min waiting time for bus: 8 min travel time of bus: 25 min transfer walking time: 6min waiting time for metro: 1 min travel time of metro: 50 min 2.cost: 6 yuan, including: bus fare: 2 yuan Metro fare: 4 yuan

3

 A. car 1.travel time: 60min 2.cost: 30 yuan	 B. car to metro 1.travel time: 67 min, including: travel time of car: 30 min transfer walking time: 5 min waiting time for metro: 2 min travel time of metro: 30 min 2.cost: 19 yuan, including: cost of cat: 15 yuan metro fare: 4 yuan
	 C. bus to metro 1.travel time: 81 min, including: walking time: 4 min waiting time for bus: 5 min travel time of bus: 35 min transfer walking time: 5 min waiting time for metro: 2 min travel time of metro: 30 min 2.cost: 6 yuan, including: bus fare: 2 yuan Metro fare: 4 yuan

4

 A. car	 B. car to metro 1. travel time: 97 min, including: travel time of car: 40 min transfer walking time: 5 min waiting time for metro: 2min travel time of metro: 50 min 2. cost: 6 yuan, including: cost of cat: 2 yuan metro fare: 4 yuan
1. traveltime: 90 min 2. cost: 45 yuan	 C. bus to metro 1. travel time: 106 min, including: walking time: 2 min waiting time for bus: 2min travel time of bus: 45min transfer walking time: 5min waiting time for metro: 2 min travel time of metro: 50 min 2. cost: 6 yuan, including: bus fare: 2 yuan Metro fare: 4 yuan

5

 A. car	 B. car to metro 1. travel time: 37 min, including: travel time of car: 10 min transfer walking time: 4 min waiting time for metro: 3 min travel time of metro: 20 min 2. cost: 11 yuan, including: cost of cat: 8 yuan metro fare: 3 yuan
1. travel time: 40min 2. cost: 20yuan	 C. bus to metro 1. travel time: 57 min, including: walking time: 8 min waiting time for bus: 10 min travel time of bus: 12min transfer walking time: 4min waiting time for metro: 3 min travel time of metro: 20 min 2. cost: 5yuan, including: bus fare: 2 yuan Metro fare: 3 yuan

6

 A. car	 B. car to metro 1. travel time: 67 min, including: travel time of car: 20 min transfer walking time: 4min waiting time for metro: 3 min travel time of metro: 40 min 2. cost: 16 yuan, including: cost of cat: 12 yuan metro fare: 4 yuan
1. travel time: 65min 2. cost: 30 yuan	 C. bus to metro 1. travel time: 86 min, including: walking time: 6 min waiting time for bus: 8 min travel time of bus: 25min transfer walking time: 4min waiting time for metro: 3 min travel time of metro: 40 min 2. cost: 6 yuan, including: bus fare: 2 yuan Metro fare: 4 yuan

7

 A. car 1.travel time: 45min 2.cost: 25 yuan	   B. car to metro 1.travel time: 58 min, including: travel time of car: 30 min transfer walking time: 3 min waiting time for metro: 5 min travel time of metro: 20 min 2.cost: 18 yuan, including: cost of cat: 15 yuan metro fare: 3 yuan
	   C. bus to metro 1.travel time: 72 min, including: walking time: 4 min waiting time for bus: 5min travel time of bus: 35min transfer walking time: 3min waiting time for metro: 5 min travel time of metro: 20 min 2.cost: 5 yuan, including: bus fare: 2 yuan Metro fare: 3 yuan

8

 A. car 1.travel time: 80min 2.cost: 40 yuan	   B. car to metro 1.travel time: 88 min, including: travel time of car: 40 min transfer walking time: 3 min waiting time for metro: 5 min travel time of metro: 40 min 2.cost: 22 yuan, including: cost of cat: 18 yuan metro fare: 4 yuan
	   C. bus to metro 1.travel time: 97 min, including: walking time: 2min waiting time for bus: 2 min travel time of bus: 45min transfer walking time: 3min waiting time for metro: 5min travel time of metro: 40min 2.cost: 6 yuan, including: bus fare: 2 yuan Metro fare: 4 yuan

(9-3) your monthly income: A $\leq$ 3000 B3000~6000 C6000~10000
D10000~20000 E>20000