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Applicability and Effectiveness of the Park and Ride System in Kandy City.

* Required

1. **Your Current Residency ? ***
   Eg: Gampola,Matale,Kundasale

2. **You are Currently ***
   Mark only one oval.

   - ◯ Government Employed
   - ◯ Private Employed
   - ◯ Retired
   - ◯ Higher Studies
   - ◯ Schooling
   - ◯ Other: _____

3. **Your monthly Income** *

Mark only one oval.

- Less than Rs.50,000
- Rs.50,000 - Rs.75,000
- Rs.75,000 - Rs.100,000
- Rs.100,000 - Rs.150,000
- Above Rs.150,000

4. **Nearest City or Suburb (GN Division) to your destination ? ***

Mark only one oval.

- Kandy
- Buwelikada
- Thalwatte
- Lewella
- Aruppola West
- Aruppola East
- Niththawela
- Siyabalagasthenna
- Mawilmada
- Watapuluwa
- Watapuluwa West
- Watapuluwa south
- Mahaweli Uyana
- Dodanwela
- Aniwatte West
- Aniwatte East
- Asgiriya
- Bahirawakanda
- Mapanawathura
- Wattaranthenna
- Mahaiyawa
- Poornawatta West
- Poornawatta East
- Heerassagala
- Mulgampola
- Udabowala
- Bowala
- Ogastawatta
- Bowalawatta
- Palleperadeniya
- Udaperadeniya
- Pitakandagama
- Senkadagala
- Ampitiya North
- Ampitiya South
- Malwatta
- Katukelle

- ◯ Katukelle West
- ◯ Katukele Up
- ◯ Gatambe
- ◯ Welata
- ◯ Deiyannewela
- ◯ Nagastenna
- ◯ Hanthana
- ◯ Boganbara
- ◯ Suduhunpala East
- ◯ Suduhumpala West
- ◯ Hindagala
- ◯ Mahakanda
- ◯ Ampitiya Udagama North
- ◯ Ampitiya Udagama South
- ◯ Ampitiya Pallegama
- ◯ Meddegama
- ◯ Ulpathakumbura
- ◯ Wawethenna
- ◯ Thennekumbura
- ◯ Gurudeniya East
- ◯ Gurudeniya Dambawela
- ◯ Gurudeniya West
- ◯ Maligathenna
- ◯ Lewla
- ◯ Katawala
- ◯ Pahala Iriyagama
- ◯ Godagandeniya

5. **Purpose of entering Kandy city ?**
Mark only one oval.

- ◯ Work or Official purpose
- ◯ School or Higher Studies
- ◯ Business
- ◯ Shopping or Leisure
- ◯ Residence
- ◯ Other: _____

6. **Distance from your current resident to your destination (km) ?** *

_____

7. **Mode of major transport which you use to enter Kandy city ?** *
Mark only one oval.

- ◯ Private Vehicle (Car/Van/Jeep/Cab)
- ◯ Bus
- ◯ Train
- ◯ Bus + Train
- ◯ Staff Vehicle
- ◯ Bicycle
- ◯ Three Wheeler

8. **Average Travel time (min) ?** *

_____

9. **If you use a private vehicle,Frequency of traveling to Kandy ?** *
Mark only one oval.

- ◯ Daily
- ◯ Every week day
- ◯ 2 - 4 days per week
- ◯ 10 - 20 days per month
- ◯ I don't use private vehicle

10. **Your ability to use railway between Gatambe and Katugasthota** *
Mark only one oval.

- ◯ Can Use
- ◯ Can't Use
- ◯ Can use but I'm not preffered to use

Satisfaction level of your present transport mode

11. **Current Travel time of present journey** *
Mark only one oval.

	0	1	2	3	4	5	
Not Satisfied	◯	◯	◯	◯	◯	◯	Highly Satisfied

12. **Current level of Safety of your present journey** *
Mark only one oval.

	0	1	2	3	4	5	
Not Satisfied	◯	◯	◯	◯	◯	◯	Highly Satisfied

13. **Comfortability of your present transport mode** *
Mark only one oval.

	0	1	2	3	4	5	
Not Satisfied	◯	◯	◯	◯	◯	◯	Highly Satisfied

14. **Reliability of your present transport mode** *
Mark only one oval.

	0	1	2	3	4	5	
Not Satisfied	◯	◯	◯	◯	◯	◯	Highly Satisfied

15. **Economy of your present travel mode** *
Mark only one oval.

	1	2	3	4	5	
Not Satisfied	◯	◯	◯	◯	◯	Highly Satisfied

16. **Operational frequency of your present travel mode** *
Mark only one oval.

	0	1	2	3	4	5	
Not Satisfied	◯	◯	◯	◯	◯	◯	Highly Satisfied

17. **Satisfactory level of Pedestrian walkways** *
Mark only one oval.

	0	1	2	3	4	5	
Not Satisfied	◯	◯	◯	◯	◯	◯	Highly Satisfied

18. **Satisfactory level of Bus Stands,Bus Halts, Railway Stations and Halts/Stops** *
Mark only one oval.

	0	1	2	3	4	5	
Not Satisfied	◯	◯	◯	◯	◯	◯	Highly Satisfied

19. **Other ...(Please specify and mark it's level of satisfaction)**

20. *Mark only one oval.*

	0	1	2	3	4	5	
Not Satisfied	◯	◯	◯	◯	◯	◯	Highly Satisfied

How far the following improvements will help for better "Park and Ride" system ?

21. **Reliability of the proposed public transport system within the city** *
Mark only one oval.

	0	1	2	3	4	5	
Not Important	◯	◯	◯	◯	◯	◯	Very Important

22. **Availability of parking lots at the parking areas in the Terminals (Gatambe,Thennekumbura & Katugasthota)** *
Mark only one oval.

	0	1	2	3	4	5	
Not Important	◯	◯	◯	◯	◯	◯	Very Important

23. **Security of the parked vehicle** *
Mark only one oval.

	0	1	2	3	4	5	
Not Important	◯	◯	◯	◯	◯	◯	Very Important

24. **Comfortability of the proposed public transport system** *
Mark only one oval.

	0	1	2	3	4	5	
Not Important	◯	◯	◯	◯	◯	◯	Very Important

25. **Frequency of proposed public transport system within the city** *
Mark only one oval.

	0	1	2	3	4	5	
Not Important	◯	◯	◯	◯	◯	◯	Very Important

26. **Introduce lower parking charges and attractive parking charging system at the Terminals** *
Mark only one oval.

	0	1	2	3	4	5	
Not Important	◯	◯	◯	◯	◯	◯	Very Important

27. **Increase the parking charges within the City** *
Mark only one oval.

	0	1	2	3	4	5	
Not Important	◯	◯	◯	◯	◯	◯	Very Important

28. **Other... (Please specify and mark it's level of importance)**

29. *Mark only one oval.*

	0	1	2	3	4	5	
Not Important	◯	◯	◯	◯	◯	◯	Very Important

How far the following improvements will help for attractiveness of railway between Gatambe and Katugasthota

30. **Increase the number of frequency of travel between Gatambe and Katugasthota** *
Mark only one oval.

	0	1	2	3	4	5	
Not Important	◯	◯	◯	◯	◯	◯	Very Important

31. **Increase the number of halts/stops between Gatambe and Katugasthota** *
Mark only one oval.

	0	1	2	3	4	5	
Not Important	◯	◯	◯	◯	◯	◯	Very Important

32. **Increase the Comfortability of Trains** *
Mark only one oval.

	0	1	2	3	4	5	
Not Important	◯	◯	◯	◯	◯	◯	Very Important

33. **Develop the stations and halts/stops up to proper standards with new technology. (Wi-fi,Traveler information system,Advance bookings parking lots and tickets)** *
Mark only one oval.

	0	1	2	3	4	5	
Not Important	◯	◯	◯	◯	◯	◯	Very Important

34. **Other... (Please specify and mark it's level of importance)**

_____

35. *Mark only one oval.*

	0	1	2	3	4	5	
Not Important	◯	◯	◯	◯	◯	◯	Very Important

36. **If you are willing to use proposed public transport,Your expected waiting time on average journey (min)** *
Mark only one oval.

- ◯ 0-5
- ◯ 5-10
- ◯ 10-15
- ◯ 15-20

37. **Average walking distance from the point of egress from public transport mode to your destination** *

Mark only one oval.

- 0 - 100 m
- 100 m - 500 m
- 500 m - 1000 m
- above 1000 m

38. **Currently, If you are a private vehicle user, Your comfortable walking distance to change your traveling mode to public transport** *

Mark only one oval.

- 0 - 300 m
- 300 m - 500 m
- 500 m - 750 m
- above 750 m
- I use public vehicle

39. **After all developments made, Do you wish to use public transport ?** *

Mark only one oval.

- Yes
- No

40. **If No, Please specify the reasons ?**

ANNEXURE II: ANALYZED RESULTS OF PRESENT TRANSPORT AND ACCEPTABILITY OF PROPOSED P&R SYSTEM

```
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  /FORMAT=AVALUE TABLES
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  /COUNT ROUND CELL
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Crosstabs

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Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Travel Mode * Acceptability of P&R	152	100.0%	0	0.0%	152	100.0%

Travel Mode * Acceptability of P&R Crosstabulation

			Acceptability of P&R		Total
			Yes	No	
Travel Mode	Private vehicle (Car/Van/Cab/Jeep)	Count	60	43	103
		Expected Count	69.8	33.2	103.0
	Bus	Count	34	1	35
		Expected Count	23.7	11.3	35.0
	Train	Count	2	0	2
		Expected Count	1.4	.6	2.0
	Bus + Train	Count	1	0	1
		Expected Count	.7	.3	1.0
	Staff Vehicle	Count	2	3	5
		Expected Count	3.4	1.6	5.0
	Bicycle	Count	4	1	5
		Expected Count	3.4	1.6	5.0
	Three Wheeler	Count	0	1	1
		Expected Count	.7	.3	1.0
Total		Count	103	49	152
		Expected Count	103.0	49.0	152.0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	23.731[a]	6	.001	.000	
Likelihood Ratio	30.322	6	.000	.000	
Fisher's Exact Test	26.944			.000	
Linear-by-Linear Association	.689[b]	1	.407	.451	.230
N of Valid Cases	152				

Chi-Square Tests

	Point Probability
Pearson Chi-Square	
Likelihood Ratio	
Fisher's Exact Test	
Linear-by-Linear Association	.042[b]
N of Valid Cases	

a. 10 cells (71.4%) have expected count less than 5. The minimum expected count is .32.

b. The standardized statistic is -.830.

Test Hypothesis is;

Ho: Present mode of transport and Park and Ride acceptability are independent.

Ha: Present mode of transport and Park and Ride acceptability are not independent.

In this cases the assumption of Chi-square test is violated (expected count is less than 5 in more than 20% number of cells). Hence the hypothesis checked with the Fisher Exact test.

According to the outcome of SPSS, the P-value (0.000) is lesser than the significance level (0.05), hence null hypothesis cannot accept. Therefore, it is conclude that there is relationship between traveler's present mode of transport and acceptability of the proposed Park and Ride system.

ANNEXURE III: ANALYZED RESULTS OF MONTHLY INCOME LEVEL AND ACCEPTABILITY OF PROPOSED P&R SYSTEM

```
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  /FORMAT=AVALUE TABLES
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Crosstabs

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Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Income * Acceptability of P&R	152	100.0%	0	0.0%	152	100.0%

Income * Acceptability of P&R Crosstabulation

			Acceptability of P&R		Total
			Yes	No	
Income	Less than Rs 50,000	Count	23	3	26
		Expected Count	17.6	8.4	26.0
	Rs 50,000 - Rs 75,000	Count	12	2	14
		Expected Count	9.5	4.5	14.0
	Rs 75,000 - Rs 100,000	Count	39	5	44
		Expected Count	29.8	14.2	44.0
	Rs 100,000 - Rs 150,000	Count	20	19	39
		Expected Count	26.4	12.6	39.0
	Above Rs 150,000	Count	9	20	29
		Expected Count	19.7	9.3	29.0
Total		Count	103	49	152
		Expected Count	103.0	49.0	152.0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	38.698[a]	4	.000	.000	
Likelihood Ratio	39.907	4	.000	.000	
Fisher's Exact Test	38.112			.000	
Linear-by-Linear Association	28.675[b]	1	.000	.000	.000
N of Valid Cases	152				

Chi-Square Tests

	Point Probability
Pearson Chi-Square	
Likelihood Ratio	
Fisher's Exact Test	
Linear-by-Linear Association	.000[b]
N of Valid Cases	

a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 4.51.

b. The standardized statistic is 5.355.

Test Hypothesis is;

Ho: Monthly income level and Park and Ride acceptability are independent.

Ha: Monthly income level and Park and Ride acceptability are not independent.

In this cases the assumption of Chi-square test is satisfied (expected count is less than 5 in less than 20% number of cells). Therefore, the hypothesis checked with the Chi-squared test.

According to the outcome of SPSS, the P-value (0.000) is lesser than the significance level (0.05), hence null hypothesis cannot accept. Therefore, it is conclude that there is relationship between monthly income level and acceptability of the proposed Park and Ride system.

DATA

Monthly Income level	% Acceptance
Rs :25000	88
Rs :62500	86
Rs :87500	89
Rs :125000	51
Rs :150000	31

SUMMARY

Regression Statistics	
Multiple R	0.886662856
R Square	0.786171021
Adjusted R Square	0.714894694
Standard Error	14.17239175
Observations	5

ANOVA

	df	SS	MS	F	Significance F
Regression	1	2215.429936	2215.43	11.0299	0.045016091
Residual	3	602.5700637	200.8567		
Total	4	2818			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	111.7643312	14.35179625	7.78748	0.004406	66.09051024	157.43815	66.090510	157.438152
X Variable 1	-0.000475159	0.000143072	-3.32113	0.045016	-0.000930477	-1.984E-05	-0.0009304	-1.9842E-05

ANNEXURE IV: ANALYZED RESULTS OF AVERAGE TRAVEL DISTANCE AND ACCEPTABILITY OF PROPOSED P&R SYSTEM

```
CROSSTABS
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Crosstabs

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Case Processing Summary

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Travel Distance * P&R Accepatance	152	100.0%	0	0.0%	152	100.0%

Travel Distance * P&R Acceptance Cross tabulation

			P&R Acceptance		Total
			No	Yes	
Travel Distance	Distance ≤ 5	Count	8	10	18
		Expected Count	5.8	12.2	18.0
		% within Travel Distance	44.4%	55.6%	100.0%
	5< Distance ≤10	Count	19	26	45
		Expected Count	14.5	30.5	45.0
		% within Travel Distance	42.2%	57.8%	100.0%
	10< Distance ≤20	Count	13	36	49
		Expected Count	15.8	33.2	49.0
		% within Travel Distance	26.5%	73.5%	100.0%
	20< Distance ≤30	Count	4	15	19
		Expected Count	6.1	12.9	19.0
		% within Travel Distance	21.1%	78.9%	100.0%
	30< Distance ≤40	Count	1	7	8
		Expected Count	2.6	5.4	8.0
		% within Travel Distance	12.5%	87.5%	100.0%
	Distance > 40	Count	4	9	13
		Expected Count	4.2	8.8	13.0
		% within Travel Distance	30.8%	69.2%	100.0%
Total		Count	49	103	152
		Expected Count	49.0	103.0	152.0
		% within Travel Distance	32.2%	67.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	6.540[a]	5	.257	.260
Likelihood Ratio	6.757	5	.239	.271
Fisher's Exact Test	6.192			.284
N of Valid Cases	152			

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 2.58.

Test Hypothesis is;

Ho: average travel distance and Park and Ride acceptability are independent.

Ha: average travel distance and Park and Ride acceptability are not independent.

In this cases the assumption of Chi-square test is violated (expected count is less than 5 in more than 20% number of cells). Hence the hypothesis checked with the Fisher Exact test.

According to the outcome of SPSS, the P-value (0.260) is higher than the significance level (0.05), hence null hypothesis can accept. Therefore, it is conclude that average travel distance and Park and Ride acceptability are independent.

ANNEXURE V: ANALYZED RESULTS OF AVERAGE TRAVEL TIME AND ACCEPTABILITY OF PROPOSED P&R SYSTEM

```
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[DataSet1] J:\P&R\Report-2017\Analysis 3.sav

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Travel Time * P&R Accepatance	152	100.0%	0	0.0%	152	100.0%

Travel Time * P&R Acceptance Cross tabulation

			P&R Acceptance		Total
			No	Yes	
Travel Time	Travel Time ? 15	Count	9	6	15
		Expected Count	4.8	10.2	15.0
		% within Travel Time	60.0%	40.0%	100.0%
	15< Travel Time ? 30	Count	21	35	56
		Expected Count	18.1	37.9	56.0
		% within Travel Time	37.5%	62.5%	100.0%
	30< Travel Time ? 45	Count	14	26	40
		Expected Count	12.9	27.1	40.0
		% within Travel Time	35.0%	65.0%	100.0%
	45< Travel Time ? 60	Count	2	16	18
		Expected Count	5.8	12.2	18.0
		% within Travel Time	11.1%	88.9%	100.0%
	60< Travel Time ? 90	Count	2	12	14
		Expected Count	4.5	9.5	14.0
		% within Travel Time	14.3%	85.7%	100.0%
	Travel Time ? 90	Count	1	8	9
		Expected Count	2.9	6.1	9.0
		% within Travel Time	11.1%	88.9%	100.0%
Total		Count	49	103	152
		Expected Count	49.0	103.0	152.0
		% within Travel Time	32.2%	67.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	13.724[a]	5	.017	.016
Likelihood Ratio	14.706	5	.012	.017
Fisher's Exact Test	13.132			.019
N of Valid Cases	152			

a. 3 cells (25.0%) have expected count less than 5. The minimum expected count is 2.90.

Test Hypothesis is;

Ho: average travel time and Park and Ride acceptability are independent.

Ha: average travel time and Park and Ride acceptability are not independent.

In this cases the assumption of Chi-square test is violated (expected count is less than 5 in more than 20% number of cells). Hence the hypothesis checked with the Fisher's Exact test.

According to the outcome of SPSS, the P-value (0.019) is lesser than the significance level (0.05), hence null hypothesis cannot accept. Therefore, it is conclude that there is relationship between travel time and acceptability of the proposed Park and Ride system.

ANNEXURE VI: ANALYZED RESULTS OF AVERAGE WALKING DISTANCE FROM POINT OF EGRESS FROM PUBLIC TRANSPORT TO DESTINATION AND ACCEPTABILITY OF PROPOSED P&R SYSTEM

```
CROSSTABS
  /TABLES=walking_distance BY Acceptance
  /FORMAT=AVALUE TABLES
  /STATISTICS=CHISQ
  /CELLS=COUNT EXPECTED TOTAL
  /COUNT ROUND CELL
  /METHOD=EXACT TIMER(5).
```

Crosstabs

Notes

Output Created		26-MAR-2017 15:24:46
Comments		
Input	Data	J:\P&R\Report-2017\Analysis 2.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	114
	Definition of Missing	User-defined missing values are treated as missing.
Missing Value Handling	Cases Used	Statistics for each table are based on all the cases with valid data in the specified range(s) for all variables in each table.
Syntax		CROSSTABS /TABLES=walking_distance BY Acceptance /FORMAT=AVALUE TABLES /STATISTICS=CHISQ /CELLS=COUNT EXPECTED TOTAL /COUNT ROUND CELL /METHOD=EXACT TIMER(5).
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.02
	Dimensions Requested	2
	Cells Available	174762
	Time for Exact Statistics	0:00:00.02

[DataSet1] J:\P&R\Report-2017\Analysis 2.sav

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Avg. walking distance from point of egress public transport to destination * Acceptance	114	100.0%	0	0.0%	114	100.0%

Avg. walking distance from point of egress public transport to destination * Acceptance Crosstabulation

			Acceptance		Total
			yes	no	
Avg. walking distance from point of egress public transport to destination	0- 100 m	Count	17	11	28
		Expected Count	16.2	11.8	28.0
		% of Total	14.9%	9.6%	24.6%
	100 m-500 m	Count	41	24	65
		Expected Count	37.6	27.4	65.0
		% of Total	36.0%	21.1%	57.0%
	500 m-1000 m	Count	8	9	17
		Expected Count	9.8	7.2	17.0
		% of Total	7.0%	7.9%	14.9%
	Above 1000 m	Count	0	4	4
		Expected Count	2.3	1.7	4.0
		% of Total	0.0%	3.5%	3.5%
Total		Count	66	48	114
		Expected Count	66.0	48.0	114.0
		% of Total	57.9%	42.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7.126[a]	3	.068	.062	
Likelihood Ratio	8.544	3	.036	.049	
Fisher's Exact Test	6.738			.070	
Linear-by-Linear Association	3.521[b]	1	.061	.070	.040
N of Valid Cases	114				

Chi-Square Tests

	Point Probability
Pearson Chi-Square	
Likelihood Ratio	
Fisher's Exact Test	
Linear-by-Linear Association	.018[b]
N of Valid Cases	

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 1.68.

b. The standardized statistic is 1.876.

Test Hypothesis is;

Ho: average walking distance from point of egress public transport mode to destination and Park and Ride acceptability are independent.

Ha: average walking distance from point of egress public transport mode to destination and Park and Ride acceptability are not independent.

In this cases the assumption of Chi-square test is violated (expected count is less than 5 in more than 20% number of cells). Hence the hypothesis checked with the Fisher's Exact test.

According to the outcome of SPSS, the P-value (0.070) is higher than the significance level (0.05), hence null hypothesis can accept. Therefore, it is conclude that average walking distance from point of egress public transport mode to destination and Park and Ride acceptability are independent.

ANNEXURE VII: ANALYZED RESULTS OF EXPECTED WAITING TIME ON AVERAGE JOURNEY AND ACCEPTABILITY OF PROPOSED P&R SYSTEM

```
CROSSTABS
  /TABLES=waiting_time BY Acceptance
  /FORMAT=AVALUE TABLES
  /STATISTICS=CHISQ
  /CELLS=COUNT EXPECTED TOTAL
  /COUNT ROUND CELL
  /METHOD=EXACT TIMER(5).
```

Crosstabs

Notes

Output Created		26-MAR-2017 15:36:58
Comments		
Input	Data	J:\P&R\Report-2017\Analysis 2.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	114
	Definition of Missing	User-defined missing values are treated as missing.
Missing Value Handling	Cases Used	Statistics for each table are based on all the cases with valid data in the specified range(s) for all variables in each table.
Syntax		CROSSTABS /TABLES=waiting_time BY Acceptance /FORMAT=AVALUE TABLES /STATISTICS=CHISQ /CELLS=COUNT EXPECTED TOTAL /COUNT ROUND CELL /METHOD=EXACT TIMER(5).
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02
	Dimensions Requested	2
	Cells Available	174762
	Time for Exact Statistics	0:00:00.02

[DataSet1] J:\P&R\Report-2017\Analysis 2.sav

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
waiting_time * Acceptance	114	100.0%	0	0.0%	114	100.0%

waiting time * Acceptance Cross tabulation

			Acceptance		Total
			yes	no	
waiting time	0 - 5 min	Count	7	21	28
		Expected Count	16.2	11.8	28.0
		% of Total	6.1%	18.4%	24.6%
	5 – 10 min	Count	42	25	67
		Expected Count	38.8	28.2	67.0
		% of Total	36.8%	21.9%	58.8%
	10 – 15 min	Count	14	2	16
		Expected Count	9.3	6.7	16.0
		% of Total	12.3%	1.8%	14.0%
	15 – 20 min	Count	3	0	3
		Expected Count	1.7	1.3	3.0
		% of Total	2.6%	0.0%	2.6%
Total		Count	66	48	114
		Expected Count	66.0	48.0	114.0
		% of Total	57.9%	42.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	20.995[a]	3	.000	.000	
Likelihood Ratio	23.115	3	.000	.000	
Fisher's Exact Test	20.599			.000	
Linear-by-Linear Association	19.817[b]	1	.000	.000	.000
N of Valid Cases	114				

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 1.26.

b. The standardized statistic is -4.452.

Test Hypothesis is;

Ho: Expected waiting time on average journey and Park and Ride acceptability are independent.

Ha: Expected waiting time on average journey and Park and Ride acceptability are not independent.

In this cases the assumption of Chi-square test is violated (expected count is less than 5 in more than 20% number of cells). Hence the hypothesis checked with the Fisher's Exact test.

According to the outcome of SPSS, the P-value (0.000) is lesser than the significance level (0.05), hence null hypothesis cannot accept. Therefore, it is conclude that there is relationship between expected waiting time on average journey of private vehicle users and acceptability of the proposed Park and Ride system