

Annex 4: Treatment and Analysis of Flagged Cases

As pointed out in Chapter 2, Section 2.4.5, PPRI was alerted that to the fact that batches of completed self returned questionnaires with very similar responses were received. A total of 629 of such completed self-returned questionnaires were sent to the WKCD in seven batches¹³ via mail between 15 November 2010 and 23 November 2010, constituting 13.1% of all self-returned questionnaires. All of these questionnaires were completed using photocopies of the official questionnaire. Most of them did not provide demographic information or signature. All except 25 did not provide any written comments. Their answers to the questions were very similar.

Treatment and Analysis of Flagged Cases

PPRI set up a special Committee to look into these cases. The Committee is of the view that there is insufficient evidence to invalidate these cases, even though statistical tests show that the responses from these batches are significantly different from the rest of the responses for all of the questions in the questionnaire. The Committee decided that these cases need to be flagged, and that the results should be presented with and without the flagged cases. The following analyses were performed.

t-test¹⁴

Statistical tests were performed to determine if significant differences exist between the responses of the flagged cases vs the non-flagged cases. The results show that significant differences exist for all of the responses between the two sets as shown in **Table 4.1**.

13. The concerned 629 questionnaires were received in seven batches in November 2010: 212 were received on 15 November, 1 on 16 November, 191 on 17 November, 10 on 18 November, 129 on 19 November, 85 on 22 November, and 1 on 23 November.

14. T-test is a commonly used statistical tool to determine whether the average scores from two data sets are from the same population.

Table 4.1**Results of T-Tests for Question 1****“City Park”:**

	<i>p-value</i> ¹⁵	<i>Significant Difference between the Two Data Sets</i>
Q1(a) Exhibiting a Green Setting	0.00	Yes
Q1(b) Environmental Friendliness	0.00	Yes
Q1(c) Showcasing Hong Kong’s Unique Local and Traditional Characteristics	0.00	Yes
Q1(d) Experience a Relaxing Atmosphere	0.02	Yes
Q1(e) Providing Public Open Space	0.01	Yes
Q1(f) Connectivity with the Neighbouring Districts ¹⁶	0.00	Yes
Q1(g) Catering the Needs of Different Users (e.g. for different purposes of visit)	0.00	Yes

“Cultural Connect: Key to Sustained Vitality”:

	<i>p-value</i>	<i>Significant Difference between the Two Data Sets</i>
Q1(a) Exhibiting a Green Setting	0.03	Yes
Q1(b) Environmental Friendliness	0.00	Yes
Q1(c) Showcasing Hong Kong’s Unique Local and Traditional Characteristics	0.00	Yes
Q1(d) Experience a Relaxing Atmosphere	0.00	Yes
Q1(e) Providing Public Open Space	0.00	Yes
Q1(f) Connectivity with the Neighbouring Districts	0.00	Yes
Q1(g) Catering the Needs of Different Users (e.g. for different purposes of visit)	0.00	Yes

“Project for a New Dimension”:

	<i>p-value</i>	<i>Significant Difference between the Two Data Sets</i>
Q1(a) Exhibiting a Green Setting	0.00	Yes
Q1(b) Environmental Friendliness	0.00	Yes
Q1(c) Showcasing Hong Kong’s Unique Local and Traditional Characteristics	0.00	Yes
Q1(d) Experience a Relaxing Atmosphere	0.00	Yes
Q1(e) Providing Public Open Space	0.00	Yes
Q1(f) Connectivity with the Neighbouring Districts	0.00	Yes
Q1(g) Catering the Needs of Different Users (e.g. for different purposes of visit)	0.00	Yes

Results of T-Tests for Question 2**“City Park”:**

	<i>p-value</i>	<i>Significant Difference between the Two Data Sets</i>
Q2(Ai) Open Space	0.00	Yes
Q2(Aii) Core Arts and Cultural Facilities	0.00	Yes
Q2(Aiii) Retail-dining-and-entertainment Facilities	0.00	Yes
Q2(Aiv) Hotel, Office and Residential Facilities	0.00	Yes
Q2(B) Connectivity	0.00	Yes
Q2(C) Accessibility	0.00	Yes

“Cultural Connect: Key to Sustained Vitality”:

15. If $P < 0.05$, there is significant difference between the two concerned data sets; If $P \geq 0.05$, there is no significant difference between the two concerned data sets.

16. Question item Q1(f) “Connectivity with the Neighbouring Districts” of the questionnaire asks the respondents to indicate whether the concerned Conceptual Plan Option has addressed the connectivity issue raised on the planning of WKCD received in Stage 1 PE exercise. Question item Q2(B) “Connectivity” asks the respondents to indicate their degree of liking of the concerned Conceptual Plan Option on integration with neighbouring areas and relationship with Victoria Harbour.

	<i>p-value</i>	<i>Significant Difference between the Two Data Sets</i>
Q2(Ai) Open Space	0.00	Yes
Q2(Aii) Core Arts and Cultural Facilities	0.00	Yes
Q2(Aiii) Retail-dining-and-entertainment Facilities	0.00	Yes
Q2(Aiv) Hotel, Office and Residential Facilities	0.00	Yes
Q2(B) Connectivity	0.00	Yes
Q2(C) Accessibility	0.00	Yes

“Project for a New Dimension”:

	<i>p-value</i>	<i>Significant Difference between the Two Data Sets</i>
Q2(Ai) Open Space	0.00	Yes
Q2(Aii) Core Arts and Cultural Facilities	0.00	Yes
Q2(Aiii) Retail-dining-and-entertainment Facilities	0.00	Yes
Q2(Aiv) Hotel, Office and Residential Facilities	0.00	Yes
Q2(B) Connectivity	0.00	Yes
Q2(C) Accessibility	0.00	Yes

Average Score

The Committee also compared and contrasted the average score and standard deviation of the responses for each question for the full data set vs the data set with the flagged cases excluded. The results show that for the data set with the flagged cases, the average score for “City Park” is higher for all of the questions than the set without the flagged cases. The results are shown below in **Table 4.2**.

Table 4.2: Mean and Standard Deviation for Q1 and Q2 for the Self-returned Questionnaires Including Flagged Cases and the Self-returned Questionnaires Excluding Flagged Cases

Q1 Extent of Mainstream Comments from PE1 being Addressed

(a) Exhibiting a Green Setting

	Including Flagged Cases		Excluding Flagged Cases	
	Average Score	Standard Deviation	Average Score	Standard Deviation
“City Park”	4.30	0.92	4.28	0.95
“Cultural Connect: Key to Sustained Vitality”	3.48	0.98	3.49	1.02
“Project for a New Dimension”	3.27	1.07	3.33	1.08

(b) Environmental Friendliness

	Including Flagged Cases		Excluding Flagged Cases	
	Average Score	Standard Deviation	Average Score	Standard Deviation
“City Park”	4.01	0.95	3.98	0.98
“Cultural Connect: Key to Sustained Vitality”	3.45	0.98	3.50	1.01
“Project for a New Dimension”	3.20	1.03	3.28	1.04

(c) Showcasing Hong Kong’s Unique Local and Traditional Characteristics

	Including Flagged Cases		Excluding Flagged Cases	
	Average Score	Standard Deviation	Average Score	Standard Deviation
“City Park”	3.14	1.08	3.01	1.06
“Cultural Connect: Key to Sustained Vitality”	3.40	1.05	3.47	1.08
“Project for a New Dimension”	3.62	1.15	3.76	1.13

(d) Experience a Relaxing Atmosphere

	Including Flagged Cases		Excluding Flagged Cases	
	Average Score	Standard Deviation	Average Score	Standard Deviation
“City Park”	4.04	1.00	4.02	1.04
“Cultural Connect: Key to Sustained Vitality”	3.47	1.07	3.56	1.08
“Project for a New Dimension”	3.37	1.12	3.48	1.10

(e) Providing Public Open Space

	Including Flagged Cases		Excluding Flagged Cases	
	Average Score	Standard Deviation	Average Score	Standard Deviation
“City Park”	4.03	0.97	4.01	1.01
“Cultural Connect: Key to Sustained Vitality”	3.57	1.06	3.71	1.04
“Project for a New Dimension”	3.55	1.11	3.68	1.06

(f) Connectivity with the Neighbouring Districts

	Including Flagged Cases		Excluding Flagged Cases	
	Average Score	Standard Deviation	Average Score	Standard Deviation
“City Park”	3.64	1.01	3.58	1.04
“Cultural Connect: Key to Sustained Vitality”	3.54	1.05	3.66	1.04
“Project for a New Dimension”	3.60	1.12	3.73	1.07

(g) Catering the Needs of Different Users (e.g. for different purposes of visit)

	Including Flagged Cases		Excluding Flagged Cases	
	Average Score	Standard Deviation	Average Score	Standard Deviation
“City Park”	3.61	1.02	3.57	1.08
“Cultural Connect: Key to Sustained Vitality”	3.47	1.06	3.60	1.04
“Project for a New Dimension”	3.51	1.12	3.67	1.11

Q2 (A) Essential Features

(i) Open Space

	Including Flagged Cases		Excluding Flagged Cases	
	Average Score	Standard Deviation	Average Score	Standard Deviation
“City Park”	3.88	1.08	3.84	1.12
“Cultural Connect: Key to Sustained Vitality”	3.49	1.09	3.57	1.12
“Project for a New Dimension”	3.44	1.16	3.54	1.17

(ii) Core Arts and Cultural Facilities

	Including Flagged Cases		Excluding Flagged Cases	
	Average Score	Standard Deviation	Average Score	Standard Deviation
“City Park”	3.70	1.02	3.63	1.04
“Cultural Connect: Key to Sustained Vitality”	3.53	1.03	3.62	1.04
“Project for a New Dimension”	3.60	1.14	3.72	1.13

(iii) Retail-dining-and-entertainment Facilities

	Including Flagged Cases		Excluding Flagged Cases	
	Average Score	Standard Deviation	Average Score	Standard Deviation
“City Park”	3.74	1.05	3.69	1.08
“Cultural Connect: Key to Sustained Vitality”	3.42	1.04	3.52	1.05
“Project for a New Dimension”	3.49	1.13	3.62	1.11

(iv) Hotel, Office and Residential Facilities

	Including Flagged Cases		Excluding Flagged Cases	
	Average Score	Standard Deviation	Average Score	Standard Deviation
“City Park”	3.71	1.07	3.66	1.10
“Cultural Connect: Key to Sustained Vitality”	3.55	1.10	3.45	1.11
“Project for a New Dimension”	3.37	1.12	3.48	1.11

Q2(B) Connectivity

	Including Flagged Cases		Excluding Flagged Cases	
	Average Score	Standard Deviation	Average Score	Standard Deviation
“City Park”	3.77	1.07	3.72	1.10
“Cultural Connect: Key to Sustained Vitality”	3.51	1.06	3.61	1.07
“Project for a New Dimension”	3.53	1.13	3.65	1.12

Q2(C) Accessibility

	Including Flagged Cases		Excluding Flagged Cases	
	Average Score	Standard Deviation	Average Score	Standard Deviation
“City Park”	3.93	1.04	3.90	1.07
“Cultural Connect: Key to Sustained Vitality”	3.55	1.04	3.64	1.05
“Project for a New Dimension”	3.60	1.13	3.72	1.12

Q3B Other Arts and Cultural Facilities and Education- Related Facilities

	Including Flagged Cases		Excluding Flagged Cases	
	Average Score	Standard Deviation	Average Score	Standard Deviation
“City Park”				
Black Boxes	3.95	0.95	3.89	0.99
White Cubes	3.89	0.94	3.87	0.98
Centre for the Arts and Creative Industries	3.87	0.99	3.84	1.02
Knowledge Centre	3.93	1.00	3.91	1.02
Dance & Drama School	3.86	0.99	3.84	1.03
Children’s Theatre	3.81	1.04	3.77	1.07
Music School	3.91	1.00	3.89	1.04
Art Academy	3.94	0.98	3.93	1.01
Dance & Performing Arts Studios	3.91	0.98	3.89	1.01
Arts & Crafts Studio	3.89	1.02	3.87	1.06
Recording, Post-production & Broadcasting Studios	3.75	1.06	3.74	1.08

	Including Flagged Cases		Excluding Flagged Cases	
	Average Score	Standard Deviation	Average Score	Standard Deviation
Cultural Connect Key to Sustained Vitality				
Community Art College	3.75	1.01	3.82	1.03
Children’s Museum	3.53	1.12	3.63	1.13
Film Centre	3.77	1.10	3.89	1.09
Humanities Centre	3.62	1.11	3.76	1.08
Art Organisation Workshop/ International Cultural Establishment	3.63	1.09	3.77	1.04

	Including Flagged Cases		Excluding Flagged Cases	
	Average Score	Standard Deviation	Average Score	Standard Deviation
“Project for a New Dimension”				
Cultural Library and Archive	3.81	1.07	3.92	1.05
School for Arts and Creative Industries	3.80	1.08	3.95	1.03
Visual Arts Factory	3.74	1.08	3.90	1.01
Performing Arts factory	3.74	1.08	3.90	1.00
School for Chinese Opera and Cantonese Opera	3.58	1.20	3.75	1.14

Rank Order

In terms of the rank order of the Options for the 13 questions, 9 out of them are the same for both data sets, as shown in **Table 4.3**.

Table 4.3: Rank Order of the Options for Q1 and Q2 for the Self-returned Questionnaires Including Flagged Cases and the Self-returned Questionnaires Excluding Flagged Cases

Questions	Self-Returned (Including Flagged Cases)	Self-Returned (Excluding Flagged Cases)	Remarks
Q.1			
(a) Green Setting	CP, CC, PND	CP, CC, PND	same
(b) Environ Friendliness	CP, CC, PND	CP, CC, PND	same
(c) HK's Uniqueness	PND, CC, CP	PND, CC, CP	same
(d) Relax Atmosphere	CP, CC, PND	CP, CC, PND	same
(e) Public Open Space	CP, CC, PND	CP, CC, PND	same
(f) Connectivity	CP, PND, CC	PND, CC, CP	different
(g) Needs of Different Users	CP, PND, CC	PND, CC, CP	different

Q.2a			
(i) Open Space	CP, CC, PND	CP, CC, PND	same
(ii) CACF	CP, PND, CC	PND, CP, CC	different
(iii) RDE	CP, PND, CC	CP, PND, CC	same
(iv) Hotel, Office Residential Facilities	CP, CC, PND	CP, PND, CC	different, but CP is top ranking for both

CACF = Core Arts and Cultural Facilities, RDE = Retail-dining-and-entertainment Facilities

Q.2b			
Connectivity	CP, PND, CC	CP, PND, CC	same

Q.2c			
Accessibility	CP, PND, CC	CP, PND, CC	same

CP- "City Park"; CC- "Cultural Connect: Key to Sustained Vitality"; PND- "Project for a New Dimension"

Comparing with Exit Poll

When the results in terms of rank order of the 2 Self-returned data sets (the set with flagged cases and the set excluding flagged cases) are compared with the results of the Exit Poll, 7 of the 13 questions are found to be the same for all three data sets. The remaining 6 questions in which the results are not the same, the Committee suggests that the results from the Exit Poll be given higher weighting. These questions are marked with * in **Table 4.4**.

Table 4.4: Rank Order from the 3 Data Sets: Self-returned Questionnaires Including Flagged Cases, Self-returned Questionnaires Excluding Flagged Cases, and Exit Poll

Questions	Self-Returned (Including Flagged Cases)	Self-Returned (Excluding Flagged Cases)	Exit Poll
Q.1			
(a)Green Setting	CP, CC, PND	CP, CC, PND	CP, CC, PND
(b)Environ Friendliness	CP, CC, PND	CP, CC, PND	CP, CC, PND
(c)HK’s Uniqueness	PND, CC, CP	PND, CC, CP	PND, CC, CP
(d)Relax Atmosphere	CP, CC, PND	CP, CC, PND	CP, CC, PND
(e)Public Open Space	CP, CC, PND	CP, CC, PND	CP, CC, PND
(f)Connectivity with the Neighbouring Districts*	CP, PND, CC	PND, CC, CP	PND, CC, CP
(g) Needs of Different Users*	CP, PND, CC	PND, CC, CP	CC, PND, CP
Q.2(A)			
(i) Open Space	CP, CC, PND	CP, CC, PND	CP, CC, PND
(ii) CACF*	CP, PND, CC	PND, CP, CC	CC, PND, CP
(iii) RDE*	CP, PND, CC	CP, PND, CC	CC, PND, CP
(iv) Hotel, Office and Residential Facilities*	CP, CC, PND	CP, PND, CC	CP, CC, PND

CACF = Core Arts and Cultural Facilities, RDE = Retail-dining-and-entertainment Facilities

Q.2(B)			
Connectivity*	CP, PND, CC	CP, PND, CC	CC, CP, PND

Q.2(C)			
Accessibility	CP, PND, CC	CP, PND, CC	CP, PND, CC

CP- “City Park”; CC- “Cultural Connect: Key to Sustained Vitality”; PND- “Project for a New Dimension”

* rank order not the same for the 3 data sets

Written Comments from the Flagged Cases

Written comments from these flagged cases were separately content analysed. A total of 187 text units which constitutes 0.7% of the total number of text units were coded. The views expressed in the flagged cases have been covered by the salient points presented under the 9 themes in **Chapter 3**. Distribution of the concerned text units were tabulated below in **Table 4.5**.

Table 4.5 Distribution of Text Units of Flagged Cases

Category	Sub-category	Sub-item	Original Number of Text Units	Number of Text Units from Flagged Cases	Final Number of Text Units
1.1 Exhibiting a Green Setting	1.1.1 City Park	1.1.1.1 Positive Views	100	3	103
	1.1.2 Cultural Connect: Key to Sustained Vitality	1.1.2.1 Positive Views	30	2	32
1.2 Environmental Friendliness	1.2.1 City park	1.2.1.1 Positive Views	55	1	56
1.3 Showcasing Hong Kong’s Unique Local and Traditional Characteristics	1.3.1 City park	1.3.1.2 Negative Views	22	1	23
		1.3.1.3 Other Views	11	1	12
	1.3.2 Cultural Connect: Key to Sustained Vitality	1.3.2.3 Other Views	7	1	8
	1.3.3 Project for a New Dimension	1.3.3.3 Other Views	11	2	13
1.8 Other Views on Addressing Issues Raised in Stage 1 PE			7	1	8

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2.1 City Park	2.1.1 Positive Views		816	6	822
	2.1.3 Other Views		495	2	497
2.2 Cultural Connect: Key to Sustained Vitality	2.2.1 Positive Views		722	2	724
	2.2.2 Negative Views		544	5	549
	2.2.3 Other Views		390	3	393
2.3 Project for a New Dimension	2.3.2 Negative Views		746	8	754
	2.3.3 Other Views		457	1	458
2.4 Other views on Overall Design and Other Aspects of Conceptual Plan Options	2.4.2 Any Other views on Overall Design and Other Aspects of Conceptual Plan Options		1,208	3	1,211
3.1 Open Space	3.1.1 City Park	3.1.1.1 Positive Views	118	4	122
		3.1.1.3 Other Views	90	2	92
	3.1.2 Cultural Connect: Key to Sustained Vitality	3.1.2.1 Positive Views	124	2	126
		3.1.2.3 Other Views	54	1	55
3.1.4 Other Views on Open Space		376	4	380	
3.2 Core Arts and Cultural Facilities	3.2.1 City Park	3.2.1.1 Positive Views	70	6	76
	3.2.3 Project for a New Dimension	3.2.3.3 Other Views	105	1	106
	3.2.4 Other Views on Core Arts and Cultural Facilities		313	5	318
3.3 Retail-dining-and-entertainment Facilities	3.3.1 City Park	3.3.1.1 Positive Views	49	2	51
		3.3.1.3 Other Views	33	1	34
	3.3.3 Project for a New Dimension	3.3.3.2 Negative Views	61	2	63
	3.3.4 Other Views on Retail-dining-and-entertainment Facilities		558	9	567
3.4 Hotel, Office and Residential Facilities	3.4.1 City Park	3.4.1.1 Positive Views	102	5	107
		3.4.1.3 Other Views	57	1	58
	3.4.2 Cultural Connect: Key to Sustained Vitality	3.4.2.1 Positive Views	68	1	69
		3.4.2.2 Negative Views	97	3	100
3.4.4 Other Views on Hotel, Office and Residential Facilities		626	8	634	
4.1 City Park	4.1.1 Positive Views		56	2	58
4.4 Other Views on Connectivity			238	3	241
5.1 City Park	5.1.1 Positive Views		205	4	209
5.2 Cultural Connect: Key to Sustained Vitality	5.2.2 Negative Views		53	1	54
5.4 Other Views on Accessibility			673	7	680
6.1 City Park			2,160	17	2,177
6.2 Cultural Connect: Key to Sustained Vitality			2,049	10	2,059
6.3 Project for a New Dimension			2,011	10	2,021
6.4 Other Views on Most Preferred Particular Feature(s) of the Conceptual Plan Options			531	3	534
7.1 City Park	7.1.12 Other Views on Other Arts and Cultural Facilities and Education-related Facilities		55	1	56
7.3 Project for a New Dimension	7.3.5 School for Chinese Opera and Cantonese Opera		12	1	13
7.4 Other Views on Other Arts and Cultural Facilities and Education-related Facilities	7.4.3 Any Other Views on Other Arts and Cultural Facilities and Education-related Facilities		402	7	409
8.1 Phase 1 (2015 – 2020)	8.1.1 Overall Views on Phase 1 (2015 – 2020)	8.1.1.1 Positive Views	185	3	188
		8.1.1.3 Other Overall Views on Phase 1 (2015 – 2020)	187	1	188
	8.1.8 Mega Performance Venue (Phase 1)	8.1.8.1 Positive Views	3	1	4
8.3 Other Views on Phasing Arrangement for Core Arts and Cultural Facilities			777	5	782
9.1 Overall Design Principles	9.1.3 Other Views on Overall Design Principles		229	1	230
9.2 Facilities and Activities	9.2.4 Other Views on Facilities and Activities		187	8	195
9.3 WKCDA's Management Issues	9.3.2 Management and Operation		265	1	266
	9.3.5 Other Views on WKCDA's Management Issues		17	1	18
9.6 Any Other Opinions			205	1	206
Total:			19,022	187	19,209

The above table shows that the inclusion or exclusion of the comments from these flagged cases does not affect the distribution of qualitative data in any substantive manner.

Conclusions

For the quantitative data, the inclusion of the flagged cases does not alter the rank order of the Options for 9 out of the 13 items. For the 4 items – 1(f) Connectivity, 1(g) Needs of Different Users, 2A(i) Core Arts and Cultural Facilities, and 2A(iv) Hotel, Office and Residential Facilities – in which the rank order is different, the Committee recommends that the rank order from the Exit Poll be given greater weighting.

The inclusion of flagged cases does not change the results in any significant manner for the distribution of the qualitative data.