



Buffalo City Municipality

Report on the 2005 Customer Satisfaction Survey

29 July 2005

Prepared by Organisation Development Africa (Pty) Ltd



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Full report length: 160 pages in hard copy, 1 Word file (this file), 2 Excel files, 1 Powerpoint file

To print the full report:

	<i>Length</i>
<i>Main BCM Customer Satisfaction Survey Report.doc</i>	<i>42</i>
<i>1 BCM Customer Satisfaction Survey.ppt</i>	<i>43 (landscape)</i>
<i>5a BCM QUESTIONNAIRE Results 2.xls Sheet1</i>	<i>34 (landscape)</i>
<i>5b BCM QUESTIONNAIRE Results 2.xls Sheet7</i>	<i>19 (landscape)</i>
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1. Introduction

Buffalo City Municipality appointed ODA in April 2005 to assist with the development of a Service Delivery Charter and a Customer Care Strategy for the City.

The project entailed three elements:

- Output 1: Conduct a customer care survey
- Output 2: Develop a Customer Care Strategy
- Output 3: Develop Service Charters

This report deals exclusively with the customer care survey and its results.

2. Methodology

2000 residences and businesses were visited in an intensive survey. This comprised about 2% of users randomly selected from the municipal billing list of 257,850 records which related to some 106,888 properties in the Municipal Valuation Roll. (Some properties receive a number of bills for different municipal services). The following steps were completed:

- a) Scoping and preparation of a questionnaire;
- b) Testing the questionnaire in focus groups;
- c) Finalising data collection survey forms (See Appendix 1);
- d) Placing an add in the local press to make the community aware of the survey process;
- e) Advertising, appointing and training data collectors to complete field forms from within the community;
- f) Sample selection from municipal billing address list and valuation roll data (See Appendix 3);
- g) Collection of field data from sample through visits of data collectors
- h) Data capturing of data collection survey forms;
- i) Quality control;
- j) Analysis (See Appendix 4); and
- k) Reporting.

The selection of data collectors, their training and the management of the field work, data capturing and quality control was conducted under the leadership of Mr Anthony Maclons, Managing Director, The Data Collection Company (Pty) Ltd.

3. Structure of the Questionnaire

Buffalo City Municipality currently provides services three broad types of services to the community; namely, Trading, Community and Development services.

Questions were first framed within these three divisions to reflect the clustering approach adopted for the proposed customer care strategy and services charter responses.

- A Trading Services**
 - 1 Water
 - 2 Sanitation
 - 3 Electricity Supply
 - 4 Refuse Removal
 - 5 Complaints Regarding Trading Services
- B. Community Services**
 - 1 Primary Health Care
 - 2 Municipal Parks and Playgrounds
 - 3 Community Halls
 - 4 Libraries
 - 5 Municipal Sports Fields, Swimming Pools & Stadiums
 - 6 Complaints Regarding Community Services
- C. Development Services**
 - 1 Residential Streets, Roads, Sidewalks and Pavements
 - 2 Stormwater
 - 3 Housing
 - 4 Fire Department
 - 5 Traffic Services
 - 6 Civic Protection
 - 7 Building Plans and Land Use Applications
 - 8 Environmental Protection
 - 9 Protection of Historical Heritage
 - 10 Economic Development
- D Overall Rating of Buffalo City Municipality**
- E. Personal Details**
- F. Communication**

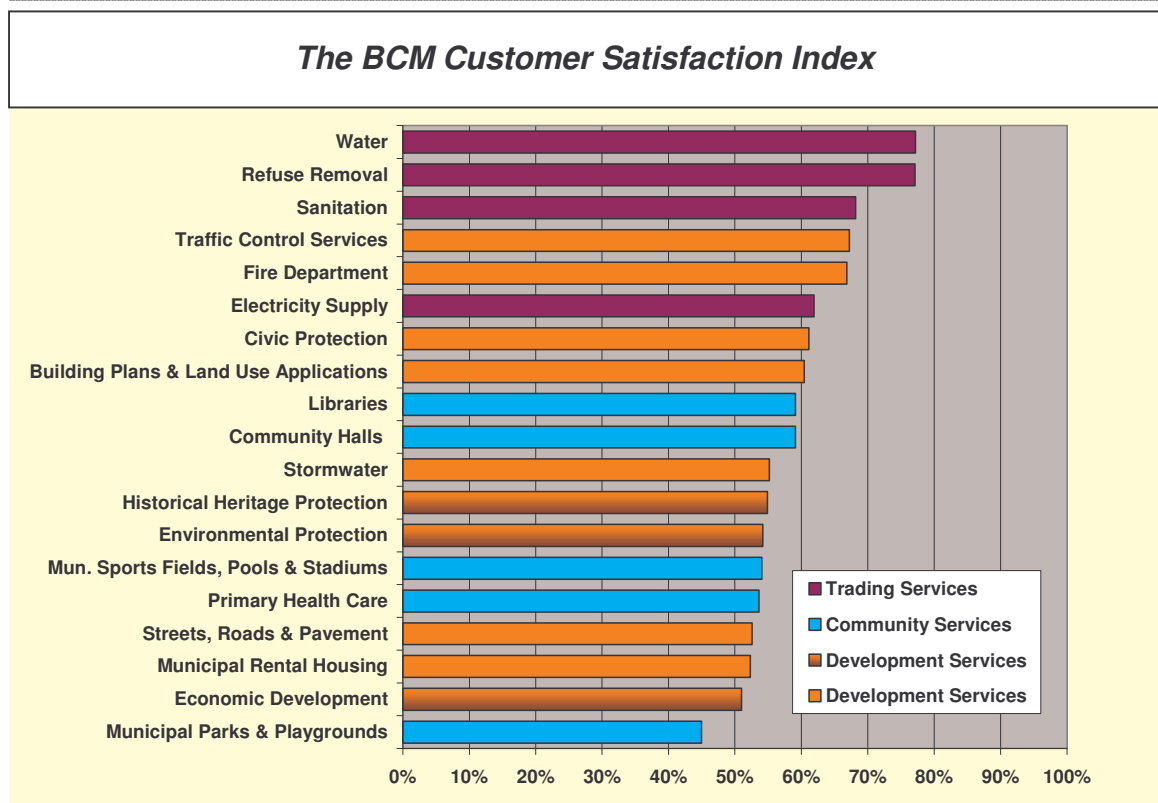
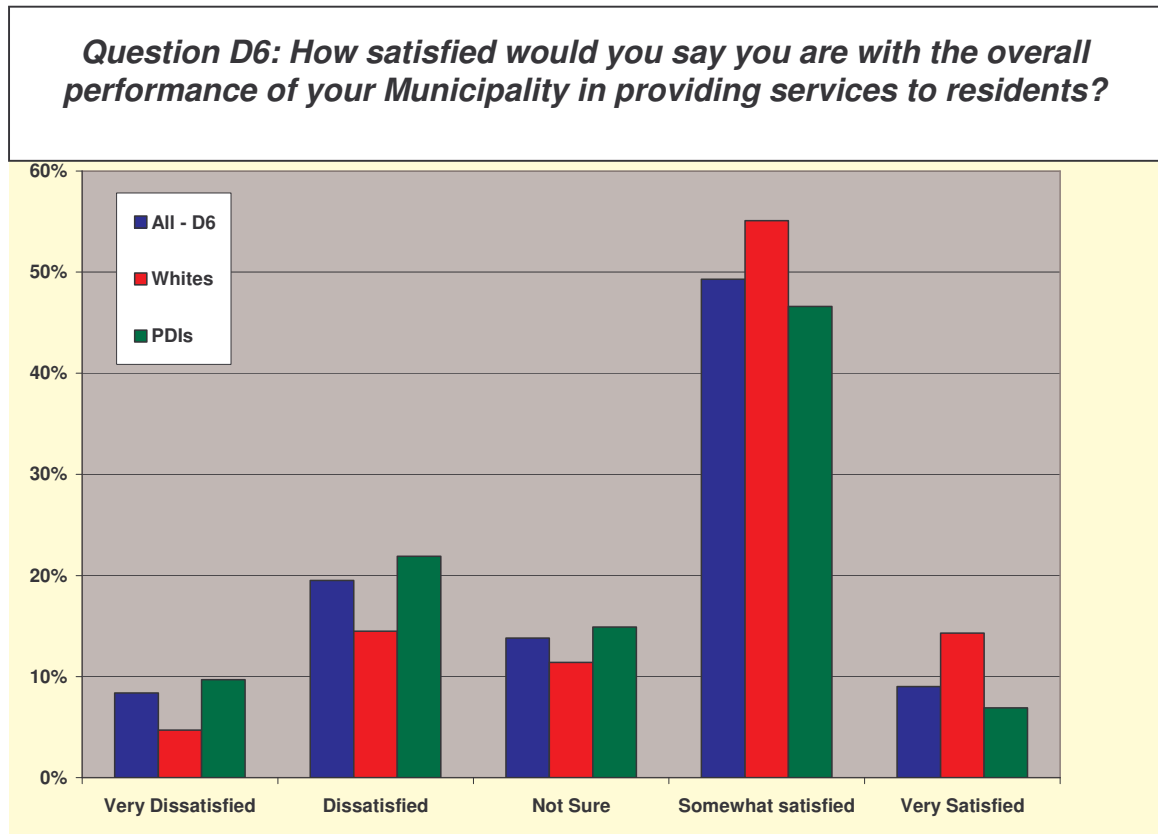
The fourth section of the questionnaire sought a detailed rating of the BCM, its staff and services, to determine the overall level of satisfaction with services provided by the City

The final questions collected information on the age, population group and gender of respondents and surveyed media and meeting habits to determine the best strategies for the City to communicate with customers.

4. Key results

The main results of the survey are set out in the Powerpoint presentation below (Appendix 1)

The key quantitative results may be summarised in two graphs:



The survey report finds the following overall satisfaction ratings for the BCM:

Satisfaction Index: Overall	
All groups	59%
Whites	67%
PDIs	56%

The BCM Satisfaction Index is a useful initial tool that allows a comparison between different services and different groups of customers. It allows one to approach an answer to questions such as:

- Where are customers least satisfied between the services?
- Which of the trading services is doing best?

Over time, the index allows the BCM to measure improvement, or less favourable changes, in customer perceptions of its service quality.

The BCM Satisfaction Index calculation is applied in a predictable and consistent manner, but the results depend upon the weighting attached to different features.

It is easy to calibrate the index for Yes and No answers, or for extreme cases where the satisfied and the dissatisfied fall into only two camps. The index would yield a value of 100% when everyone is extremely satisfied or 0% when everyone is extremely dissatisfied. But a 50% index rating may mean that all respondents are neutral - or that half of customers are extremely satisfied and half extremely dissatisfied! The index does not stand alone – it must be interpreted in the context of the results.

The BCM can decide to calibrate the index to highlight particular features. For example, negative views of the fire department may be more heavily weighted than positive views, to bias the index measure for a service where poor performance is life threatening. At this stage, **equal weightings** between negative and positive features have been calculated. A 'neutral' response has attracted a zero weighting, but a response of 'adequate' has been weighted as 1. The extremes of satisfaction and dissatisfaction have been weighted equally – as +10 or -10, for example.

The BCM Satisfaction index has the advantage of being simple. It attaches a single percentage figure to each service or group of customers.

But it can be misleading if interpreted without looking at the pattern of responses. The way you weight the responses dictates the result. This should be done in a transparent manner – and consistently in all cases, and between surveys, once the weighting has been agreed upon.

A final key result from the survey is that a majority of BCM customers some 57% (and in this rare case, represented by more blacks than whites!) say the Municipality has improved in the last 2 to 3 years. The survey suggests detailed areas where this trend of continuous improvement can be consolidated and taken forward.

The survey provides useful and detailed information to inform the customer care strategy. It will repay careful study. The results can be publicised as a context for the Service Charter. The data can be made available for further study (once the address information has been taken out to preserve confidentiality).

Buffalo City Municipality: Appendices to the Customer Care Survey Report

Appendix 1: Customer Satisfaction Survey Report Overview

<43 pages landscape>

d:\Documents2005\BCM Customer Satisfaction Survey.ppt

The overview concentrates on customer satisfaction with the services of the BCM. It covers only 30 answers from over 120 questions, and does not include details of over 1200 written comments. It does not deal here with perceptions of the competence and efficiency of BCM staff, an issue that was canvassed thoroughly throughout the questions in each section, and which are contained in detail in Appendix 5, below.

A TRADING SERVICES

1. WATER

1(a) Do you have clean piped municipal water in your house?

Yes	No
1	2

1(b) In your opinion, how satisfied are you with the water service provided by the municipality?

Extremely Dissatisfied	Poor service with much room for improvement	Neutral – No Opinion	Satisfied, but room for improvement	Extremely satisfied – no problems
1	2	3	4	5

1(c) Do you have a water meter that is read regularly?

Yes	No
1	2

1(d) Do you trust the cleanliness of the water for human consumption?

Yes	No
1	2

1(e) Is the water supply to your home regular, or does it get interrupted on a regular basis?

Regular	Interrupted
1	2

1(f) In your opinion, is your water consumption accurately measured and is the account correct?

Yes	No
1	2

1(g) Have you had recent water breakages or major leakages?

Yes	No
1	2

1(h) Have you had a complaint in the last 3 months regarding your water supply?

Yes	No
1	2

If yes, do you have any suggestions on how to improve water provision to your home?

.....

.....

2. SANITATION

2(a) What kind of toilet (sanitation) service does your household have access to:

Flush toilet / chemical	Pit (VIP)	Bucket latrine	No sanitation – Self provided
1	2	3	4

2(b). In your opinion, how satisfied are you with the sanitation service provided by the municipality?

Extremely Dissatisfied	Receiving a poor service with much room for improvement	Neutral – No Opinion	Satisfied, but would like to see room for improvement	Extremely satisfied – no problems
1	2	3	4	5

2(c). Have you had recent blockages or overflow of sewerage outside your property/in your street?

Yes	No
1	2

2(d). Have you had a complaint in the last 3 months regarding sanitation provision or your sewerage system?

Yes	No
1	2

If yes, do you have any suggestions on how to improve sanitation services to your home?

.....

.....

3. ELECTRICITY SUPPLY

3(a) Do you have electricity supplied to your house and are the electricity supplied by Buffalo City Municipality or Eskom? (If Eskom, ignore the following questions)

Yes, Buffalo City Municipality	No, Eskom
1	2

3(b) In your opinion, how satisfied are you with the electricity service provided by the municipality?

Extremely Dissatisfied	Receiving a poor service with much room for improvement	Neutral – No Opinion	Satisfied, but would like to see room for improvement	Extremely satisfied – no problems
1	2	3	4	5

3(c) Do you have a electricity meter that is read regularly

Yes	No
1	2

3(d) Is the electricity supply to your home regular, or does it get interrupted often?

Regular	Interrupted
1	2

3(e) In your opinion, is your electricity regularly and accurately measured and is the account correct?

Yes	No
1	2

3(f) Have you had electricity supply interruptions within the last 3 months?

Yes	No
1	2

3(g) Have you had a complaint in the last 3 months regarding your electricity supply?

Yes	No
1	2

If yes, do you have any suggestions on how to improve electricity provision to your home?

.....

4. REFUSE REMOVAL

4(a) Does the municipality conduct refuse collection/rubbish removal at your home at least once a week?

Yes	No
1	2

4(b) In your opinion, how satisfied are you with the refuse removal service provided by the municipality?

Extremely Dissatisfied	Receiving a poor service with much room for improvement	Neutral – No Opinion	Satisfied, but would like to see room for improvement	Extremely satisfied – no problems
1	2	3	4	5

4(c) Have you had incidences where refuse was not collected in the last 3 months?

Yes	No
1	2

4(d) Have you had a complaint in the last 3 months regarding your refuse collection?

Yes	No
1	2

If yes, do you have any suggestions on how to improve refuse removal provision to your home?

.....

5. COMPLAINTS REGARDING TRADING SERVICES

5(a) Have you had any complaints regarding water, sanitation, electricity or removal?

Yes	No
1	2

If yes, how did you go about resolving your complaint? (Describe the steps/process followed)

.....

5(b) What was the response from the municipality? For example was the complaint satisfactorily addressed and were you called with follow up to let you know the problem has been addressed?

Incapable: They were very unprofessional and did not seem to know what they were doing	Adequately capable: They were reasonably professional and were able to help you but you would like to see the service improved.	Highly/ very capable: They were professional and helped you immediately.
1	2	3

5(c) Should you have any complaints, how would you rate the capability of the staff to deal with your problem?

Incapable: They are very unprofessional and do not seem to know what they are doing	Adequately capable: They are reasonably professional and would be able to help you but you would like to see the service improved.	Highly/ very capable: They are professional and will help you immediately
1	2	3

B. COMMUNITY SERVICES

1. PRIMARY HEALTH CARE

1(a) How regularly did a member of your household go to the municipal clinic in the last two months?

Never	Once	At least 3 times	More than 5 times
1	2	3	4

1(b) Which clinic do you usually use?

Alphendale	1
Aspiranza	2
ATIC	3
Beacon Bay	4
Beaconsfield	5
Braelyn	6
Braelyn Ext. 10	7
Cambridge	8
Central	9
Chris Hani	10
Cottondale	11
Drake Road	12
Fort Grey	13
Gompo A	14
Gompo B	15
Gompo C	16
Gonubie	17
Greenfields	18
John Dube	19
Moore Street	20
Pefferville	21
Petros Jonabe	22
West Bank	23
X Ray	24
Zanempilo	25
Mobile Health	26
Central Clinic	27
Breidbach	28
Ginsberg Clinic	29
Schornville	30
Sweetwaters	31

1(c) In your opinion, are there sufficient clinics in your area?

Yes	No
1	2

1(d) In your opinion, are the clinics well situated/located and are they accessible to the majority of the community?

Yes	No
1	2

1(e) In your experience are the clinics well staffed?

Yes	No
1	2

1(f) How would you rate the health services provided to you and your family at the clinics?

Totally inadequate	Inadequate/ could be improved	Adequate	Good	Excellent
1	2	3	4	5

1(g) Have you had a complaint in the last 3 months regarding the treatment or service you received at the clinic?

Yes	No
1	2

If yes, do you have any suggestions on how to improve the provision of health services in your area?

.....

2. MUNICIPAL PARKS AND PLAYGROUNDS

2(a) How often did a member of your household make use of parks and playgrounds in the last two months?

Never	Once	At least 3 times	More than 5 times
1	2	3	4

2(b) In your opinion, are there sufficient parks and playgrounds in your area?

Sufficient	Insufficient
1	2

2(c) In your opinion; are the parks/playgrounds well situated/located, and are they accessible to the majority of the community?

Yes	No
1	2

2(d) Do you think the parks/playgrounds are safe for children to play in?

Yes	No
1	2

2(e) How would you rate the extent to which parks and playgrounds in your area are maintained by the Municipality?

Totally inadequate	Inadequate/ could be improved	Adequate	Good	Excellent
1	2	3	4	5

2(f) Have you had a complaint in the last 3 months regarding parks and playgrounds?

Yes	No
1	2

If yes, do you have any suggestions on how to improve the provision and maintenance of parks and playgrounds in your area?

.....

3. COMMUNITY HALLS

3(a) How often did a member of your household make use of community halls in the last two months?

Never	Once	At least 3 times	More than 5 times
1	2	3	4

3(b) In your opinion; are there sufficient community halls in your area?

Sufficient	Insufficient
1	2

3(c) In your opinion, are the community halls well situated/located and are they accessible to the majority of the community?

Yes	No
1	2

3(d) How would you rate the maintenance of community halls by your Municipality?

Totally inadequately maintained	Inadequately maintained	Adequately maintained	Well maintained	Excellent maintained
1	2	3	4	5

3(e) Have you had a complaint in the last 3 months regarding community halls?

Yes	No
1	2

If yes, do you have any suggestions on how to improve the provision and maintenance of community halls in your area?

.....

.....

4. LIBRARIES`

4(a) How often did a member of your household make use of a municipal library?

Never	Once	At least 3 times	More than 5 times
1	2	3	4

4(b) In your opinion, are there sufficient libraries in your area?

Sufficient	Insufficient
1	2

4(c) In your opinion; are the libraries well situated/located and are they accessible to the majority of the community?

Yes	No
1	2

4(d) How would you rate the municipal public library service?

Totally inadequate	Inadequate/ could be improved	Adequate	Good	Excellent
1	2	3	4	5

4(e) Are you satisfied with the quality of service delivery in your library?

Yes	No
1	2

4(f) Are you satisfied with the way in which the library staff deals with your requests and enquiries?

Yes	No
1	2

4 (g) Have you had a complaint in the last 3 months regarding the library?

Yes	No
1	2

If yes, do you have any suggestions on how to improve the provision and maintenance of libraries in your area?

.....

.....

5. MUNICIPAL SPORTS FIELDS, SWIMMING POOLS & STADIUMS

5(a) How often did a member of your household make use of municipal sports fields, swimming pools, or stadiums in the last two months?

Never	Once	At least 3 times	More than 5 times
1	2	3	4

5(b) In your opinion, are there sufficient municipal sports fields, swimming pools or stadiums in your area?

Sufficient	Insufficient
1	2

5(c) In your opinion, are the sports fields, swimming pools and stadiums well situated/located and are they accessible to the majority of the community?

Yes	No
1	2

5(d) How would you rate the maintenance of municipal sports fields, swimming pools and stadiums by your Municipality?

Totally inadequately maintained	Inadequately maintained	Adequately maintained	Well maintained	Excellently maintained
1	2	3	4	5

5(e) Have you had a complaint in the last 3 months regarding a municipal sports fields, swimming pools or stadiums?

Yes	No
1	2

If yes, do you have any suggestions on how to improve municipal sports fields, swimming pools and stadiums in your area?

.....

.....

6. COMPLAINTS REGARDING COMMUNITY SERVICES

6(a) Have you had any complaint regarding a Community Service?

Yes	No
1	2

6(b) If yes, what was the response from the municipality? For example was the complaint satisfactorily addressed and were you called with follow up to let you know the problem has been addressed?

Incapable: They were very unprofessional and did not seem to know what they were doing	Adequately capable: They were reasonably professional and were able to help you but you would like to see the service improved.	Highly/ very capable: They were professional and helped you immediately.
1	2	3

6(c) Should you have any complaints, how would you rate the capability of the staff to deal with your problem:

Incapable: They are very unprofessional and do not seem to know what they are doing	Adequately capable: They are reasonably professional and would be able to help you but you would like to see the service improved.	Highly/ very capable: They are professional and will help you immediately
1	2	3

C. DEVELOPMENT SERVICES

1. RESIDENTIAL STREETS, ROADS, SIDEWALKS AND PAVEMENTS

1(a) Are the streets and roads in your area predominately tarred?

Yes	No
1	2

1(b) In your opinion; are the streets and roads your area in a good condition or are they often damaged, broken or have potholes?

Good Condition	Bad Condition
1	2

1(c) Does your municipality respond quickly to damages by repairing the damaged roads and bridges quickly?

Yes	No
1	2

1(d) If you think about the condition of streets, roads and bridges generally (not only in your area) - does your municipality keep them in a:

<i>Totally inadequate/ very poor condition</i>	<i>Inadequate/ poor condition</i>	<i>Adequate condition</i>	<i>Good condition but roads deteriorate before they are repaired</i>	<i>Excellent condition</i>
1	2	3	4	5

1(e) Have you had a complaint in the last 3 months regarding roads, streets and bridges?

Yes	No
1	2

If yes, do you have any suggestions on how to improve the residential streets and roads in your area?

.....

.....

2. STORMWATER

2(a) Are there often flooding of streets and houses in your area?

Yes	No
1	2

2(b) In your opinion, how would you rate the provision and maintenance of the storm water drainage system by your Municipality? Is the storm water drainage system

<i>Totally inadequate/ cannot cope at all</i>	<i>Inadequate/ struggles to cope</i>	<i>Adequate/cope most of the time</i>	<i>Good/struggles with extreme situations</i>	<i>Excellent/ cope with all situations</i>
1	2	3	4	5

2(c) Have you had a complaint in the last 3 months regarding storm water?

Yes	No
1	2

If yes, do you have any suggestions on how to improve the storm water drainage in your area?

.....

.....

3. HOUSING

3(a) What kind of house do you stay in:

A rental house that belongs to the council?	1
A rental house that belongs to a private person?	2
A house that has been provided by a housing subsidy?	3
Do you own the house that you are living in?	4
No, a shack dweller in a informal settlement	5

3(b) Only if yes in (a) above: How would you rate the maintenance of existing housing by your Municipality? In maintaining housing, does your municipality do a

Totally inadequate job/ houses are not maintained.	Inadequate job/ houses are poorly maintained	Adequate job/ houses are regularly maintained	Good job/ houses are generally well maintained	Excellent job/ houses are in good condition.
1	2	3	4	5

3(c) In your opinion; how high an importance do you attach to the provision of housing by the Buffalo City Municipality? Please rate your answer 1 to 5, where 1 is "no importance" and 5 is "highly important"

No importance	Unimportant	Neutral	Important	Highly important
1	2	3	4	5

4 FIRE DEPARTMENT

4(a) How would you rate the provision of fire protection service provided by the fire department? In terms of fire protection, does your fire department provide a

Totally inadequate service	Inadequate service/ could react quicker	Adequate service	Good service/ quick response	Excellent service/ immediate response
1	2	3	4	5

4(b) Have you had any contact with the fire department over the last 3 months?

Yes	No
1	2

If yes, for what reasons?

.....

4(c) In your contact with the fire department, how would you rate the capability of the staff?

Incapable: They were very unprofessional and did not seem to know what they were doing.	Adequately capable: They were reasonably professional and were able to help you but you would like to see the service improved.	Highly/ very capable: They were professional and helped you immediately.
1	2	3

4(d) Are there any suggestions that you would like to make regarding improving service delivery by the fire department?

.....

5 TRAFFIC SERVICES

5(a) How would you rate the traffic control provided by the Traffic Department? Would you say that your Traffic Department is

Totally inadequate/ poor and does not enforce regulations effectively at all	Inadequate / does not do a very good job	Adequate/ does a reasonable job of enforcing regulations	Good / generally does a good job in enforcing regulations.	Excellent/ well trained, highly visible and enforces road regulations
1	2	3	4	5

5(b) Have you had any contact with the traffic department over the last 3 months?

Yes	No
1	2

If yes, for what reasons?

.....

.....

5(c) In your contact with the traffic department, how would you rate the capability and friendliness of the staff?

Highly/ very capable: They were professional and helped you immediately	Adequately capable: They were reasonably professional and were able to help you but you would like to see the service improved.	Incapable: They were very unprofessional and did not seem to know what they were doing.
1	2	3

5(d) Are there any suggestions that you would like to make regarding improving service delivery by the traffic department?

.....

.....

.....

6. CIVIC PROTECTION

6(a) How would you rate the management of civic protection (provision of beach constables, dealing with civic offences, and so on) by your Municipality? In terms of managing civic protection, does your municipality provide a:

Totally inadequate service/ provide no response to complaints	Inadequate service/ service needs improvement	Adequate service/ response to complaints could be improved	Good service/ generally respond quickly to public complaints	Excellent service/ respond quickly and efficiently to public complaints
1	2	3	4	5

6(b) Have you had any contact with the municipality over the last 3 months regarding civic protection?

Yes	No
1	2

If yes, for what reasons?

.....

6(c) In your contact with civil protection staff, how would you rate the capability of the staff?

Incapable: They were very unprofessional and did not seem to know what they were doing.	Adequately capable: They were reasonably professional and were able to help you but you would like to see the service improved.	Highly/ very capable: They were professional and helped you immediately
1	2	3

6(d) Are there any suggestions that you would like to make regarding improving civic protection?

.....

.....

7. BUILDING PLANS AND LAND USE APPLICATIONS

7(a) Have you submitted a building plan/land use application in the last six months?

Yes	No
1	2

7(b) How would you rate the way that the Municipality approves and enforces building plans and regulations? In terms of approving and enforcing building plans and regulations, does your municipality do a;

Excellent job/ strict control and react immediately to complaints	Good job/ good control and enforcement	Adequate job/ reasonable control	Inadequate job/ should exert more control	Totally inadequate job/ need to be far stricter
1	2	3	4	5

7(c) How do you rate the standard of service delivery of the Municipality in respect of building plan and land use applications?

Excellent	Good	Adequate	Inadequate job	Totally inadequate
1	2	3	4	5

7(d) In your contact with building control or land use planning staff, how would you rate the capability of the staff?

<i>Incapable: They were very unprofessional and did not seem to know what they were doing.</i>	<i>Adequately capable: They were reasonably professional and were able to help you but you would like to see the service improved.</i>	<i>Highly/ very capable: They were professional and helped you immediately.</i>
1	2	3

7(c) Are there any suggestions that you would like to make regarding improving service delivery in terms of building plans and land use applications?

.....

8. ENVIRONMENTAL PROTECTION

8(a) In your opinion, does the municipality sufficiently protect the natural environment in areas under its control (forests, beach, and rivers)?

Yes	No
1	2

8(b) Are there any suggestions that you would like to make regarding improving environmental protection?

.....

9. PROTECTION OF HISTORICAL HERITAGE

9(a) In your opinion, is the municipality protecting historical buildings and cultural assets in your area?

Yes	No
1	2

9(b) Are there any suggestions that you would like to make regarding improving protection of historical and cultural assets?

.....

10. ECONOMIC DEVELOPMENT

10(a) In your opinion, is your municipality sufficiently supporting and promoting economic development of Buffalo City?

Yes	No
1	2

10(b) Do you think Council should do more for job-creation?

Yes	No
1	2

10(c) Do you have specific ideas on how the Municipality should grow the economy and create jobs?

.....

10(d) Can you think of an example of an economic development initiative in Buffalo City?

D OVERALL RATING OF BUFFALO CITY MUNICIPALITY

1. Have you dealt with Buffalo City Municipality during the past six months, either personally, telephonically, via internet / e-mail or regular mail?

Yes	No
1	2

2. How did you have your last interaction with Buffalo City Municipality? Did you:

Phone them	1
Visit their head offices in the centre of town	2
Visit a municipal service centre near your home	3
Make use of online (internet) services	4
Use e-mail	5
Use regular mail	6
Other Please specify:	7

Specify other:

3. In your dealings with the staff of Buffalo City Municipality what was your experience?,

STAFF	Yes	No
Have you found that staff are attentive	1	2
Have you found that staff are available to help at all times	1	2
Have you found that staff are competent	1	2
Have you found that staff are courteous	1	2
Have you found that staff are efficient	1	2
Have you found that staff are friendly	1	2
Have you found that staff are honest	1	2
Have you found that staff are punctual	1	2
Have you found that staff are responsible	1	2
Have you found that staff go out of their way to help	1	2
Have you found that staff have a positive attitude	1	2
Have you found that staff listen to your problems	1	2
Have you found that staff make you feel important	1	2
Have you found that staff treat you with respect	1	2
Have you found that staff understand your problem(s)	1	2

QUERIES	YES	NO
Have you found that you are helped with minimal referrals	1	2
Have you found that correspondence is answered promptly	1	2
Have you found that queries are resolved to your satisfaction	1	2
Have you found that queries are resolved in time	1	2

MUNICIPAL FACILITIES	YES	NO
Have you found that municipality facilities are clean and neat (Help text: This includes offices, libraries, civic centres, etc.)	1	2
Have you found that municipality working hours are acceptable	1	2
Have you found that parking facilities are adequate	1	2
Have you found that queues are short	1	2
Have you found that security around municipal offices is adequate	1	2
Have you found that municipality facilities are accessible	1	2

ACCOUNTS	YES	NO
Have you found that municipality communicates about the interruption of services in advance	1	2
Have you found that payment of accounts is easy	1	2
Have you found that payment of accounts is trouble-free	1	2
Have you found that account statements are accurate	1	2
Have you found that account statements are received on time	1	2
Have you found that flexibility of account payments (i.e., different options available)	1	2

COMMUNICATION	YES	NO	DON'T KNOW
Does your municipality keep you informed about its services?	1	2	3
Is your municipality honest in its communications?	1	2	3
Does your municipality provide you with all the facts you need to make informed decisions?	1	2	3
Is your municipality's advertising truthful and accurate?	1	2	3
Does your municipality ensure that its facilities are safe for the public?	1	2	3
Does your municipality offer services at competitive rates?	1	2	3
Does your municipality resolve queries / disputes in a fair manner?	1	2	3
Has your municipality established ways for you to complain?	1	2	3
Does your municipality ensure that information that you are entitled to is accessible?	1	2	3
Does your municipality offer quality service?	1	2	3

4. Using a rating scale of 1 to 10 where 1 is Very Poor and 10 is Excellent, how would you rate the overall value for money you receive from Buffalo City Municipality?

1 Poor	2	3	4	5 Neutral	6	7	8	9	10 Excellent
-------------------------	----------	----------	----------	----------------------------	----------	----------	----------	----------	-------------------------------

5. If the performance of this Municipality is a reflection of the current government, how happy are you with the performance of the government, where 1 is "Very disappointed" and 10 is "Excellent".

1	2	3	4	5 Neutral	6	7	8	9	10 Excellent
----------	----------	----------	----------	----------------------------	----------	----------	----------	----------	-------------------------------

6. How satisfied would you say you are with the overall performance of your Municipality in providing services to residents? Would you say you are;

Not Sure	Very Dissatisfied	Dissatisfied	Somewhat satisfied	Very Satisfied
1	2	3	4	5

7. Would you say that the Municipality has improved in the past 2-3 years?

No - have become a great deal worse	No- have deteriorated somewhat	Stayed the same	Yes - somewhat	Yes - a great deal
1	2	3	4	5

8. Which of the following statements best describes your knowledge of the Municipality?

I know nothing at all about the council	I know very little about the council	I know quite a lot about the Council	I know a great deal about the Council
1	2	3	4

9. How would you rate the Municipality's communications with the residents?

They do not communicate with the residents at all	They communicate quite poorly with the residents	They communicate adequately with the residents	They communicate quite well with the residents	They communicate very well with the residents
1	2	3	4	5

10. Have you seen or heard about the Municipality's publication or pamphlet about their services in the last 6 months?

Yes	No
1	2

11. Do you have any suggestions on how to improve communication between yourself and the municipality?

.....

12. Please indicate your preference in making use of the following facilities if it is available to you in interacting with the municipality for inquiries, information or complaints? Please indicate your preference from low [1] to high [5].

Choice	Preference				
	1	2	3	4	5
Approaching a community leader or influential person (such as a religious leader, civic leaders or taxi owners)	1	2	3	4	5
Approaching your Ward Councilor	1	2	3	4	5
Calling a Municipal Call Centre by telephone	1	2	3	4	5
Approaching a municipal service center close to your area of work	1	2	3	4	5
Approaching a municipal service center close to your home	1	2	3	4	5
Going to Municipal Offices in the center of Town (East London, Bisho, King Williams Town)	1	2	3	4	5
Using a municipal web-site and web portal	1	2	3	4	5

E. PERSONAL DETAILS

1(a) Can you please tell me how old you are?

0 - 18 years	19 - 34 years	35 - 60 years	61+ years
1	2	3	4

1(b) Gender:

Male	Female
1	2

1(c) Race

Black	White	Indian	Coloured	Other (specify)
1	2	3	4	5

Specify other:

.....

F. COMMUNICATION

1(a) Do you have access to a radio? If yes, to what Radio Station do you listen regularly?

ALGOA FM	BTFM	CKIFM	LINK FM	UMHLOBO WENENE	METRO
1	2	3	4	5	6

1(b) What newspapers do you read regularly (at least once a week?)

Daily Dispatch	Daily Sun	Other
1	2	3

1(c) Do you always, sometimes, never read pamphlets dropped in your post-box at home?

Yes	No
1	2

1(d) Do you always, occasionally, never attend public meetings organized by the municipality?

Never	Occasionally	Always
1	2	3

1(e) Can you name you ward councilor's name?

Yes	No
1	2

1(f) Do you know the number of the municipal ward in which you are currently living?

Yes	No
1	2

1(g) Do you read information that comes with your municipal account?

Yes	No
1	2

1(h) Do you belong to a rate-payer or civic organization?

Yes	No
1	2

1(i) Do you attend public participation/civic meetings and events regularly?

Yes	No
1	2

1(j) If you want to find out more about your municipality's services, would you get the information from;

Meetings	Pamphlets	Website	Newspapers	Posters	Radio
1	2	3	4	5	6

Appendix 3: Sample Selection

The initial task in preparing for the Customer Survey was draw up a list of 2000 customers to be interviewed. It was decided to stratify the sample into 1500 residences and 500 businesses and to use the Billing List provided by the BCM as the sampling frame.

The first difficulty was that the Billing List did not indicate the type of property owned or occupied by each customer. Information on property use was given in a separate file extracted by the BCM from the computer records of the Valuation Roll.

The second difficulty was that the Billing list and the Valuation Roll (VR) computer files did not share a key that would link each bill/customer reliably with a unique property. Such a key was constructed from the VR, but it proved effective only three quarters of the time. There was no way to be certain of the type of property represented by one quarter of the billing numbers.

Some 9,000 entries on the Billing List contained neither physical addresses nor numbers from which a VR number could be constructed.

The sample was drawn up in a staged process that took these limitations into account, but still maintained the protocols for a fully-inclusive, random survey, that would include, all areas, all income groups, both businesses and households and all household types.

A random sample requires that every element within the sampling frame has an equal chance of being included in the sample. A list of 10,500 random numbers was generated and applied to the 257,850 records in the billing list. After duplicate choices had been removed, this left a reference list of 10,395 numbers each attached to a billing ID and a rank for selection..

Step 1: Assembling the 'base sample' of 2,000

The first 2,000 numbers 'drawn' were used to select, in order of rank, 2,000 customers. (This required eliminating duplicate references, where one customer received a number of bills for one property.)

<i>Property Type</i>	<i>Grand Total</i>	<i>Note</i>
CHURCH	3	
COMMERCIAL	62	= Business
INDUSTRIAL	21	= Business
MUNICIPAL	62	
NATIONAL GOV	7	
PRIVATE	1388	= Private
PROVINSIAL GOV	2	
SATS	4	
UNKWOWN	7	[sic – name of field entry]
<i>No Match</i>	374	Unable to match the VR# in the Billing Record with data supplied in the VR
<i>No VR#</i>	70	No VR# in the billing record
Grand Total	2000	

There was insufficient property use data for 451 properties, close to a quarter of the sample. In 7 cases, the property type was recorded on the Valuation Roll itself as unknown. In 374 cases the computer programme was not able to find a close enough match between the property code in the billing list and the key constructed from the VR. In 70 cases the billing list had no data in the field normally occupied by the property code.

Step 2: Adjusting the sample to include 500 business and 1500 private customers

Rather than discard the customers for which the property type was unknown, an estimate was made of the likely number of business properties within them. Based on the proportion of commercial and industrial properties within the segment of the sample for which property type was known, it was assumed that about 24 of the 451 properties would prove to be business properties. The 'first sample' had thus identified about 107 businesses (24 plus 21 confirmed industrial properties plus 62 confirmed commercial properties.) Therefore, it was necessary to interrogate the random number list to choose an additional 393 business properties to make the total up to the target of 500.

With regard to the other properties, it was agreed that municipal and state owners would be excluded from the customer survey, unless the property in question was occupied by a tenant. Church property was also to be excluded.

An analysis of the sample after the above adjustments, reflected the following totals:

<u>Property Type</u>	<u>Grand Total</u>	<u>Private</u>	<u>Business</u>
CHURCH	0		
COMMERCIAL	382		382
INDUSTRIAL	94		94
MUNICIPAL	12	12	
NATIONAL GOV	5	5	
PRIVATE	1058	1058	
PROVINSIAL			
GOV	0		
SATS	0		
UNKWOWN	5		
No Match	374	425	24
No VR#	70		
Grand Total	2000	1500	500

Once adjustments were made for the 63 private customers found within the municipal and state properties, the number of known private properties in the 'base sample' needed to be reduced by 330, in order to make up an estimated 1,500 private customers.

Step 3: Preparing the "Reserve List"

The 330 private customers 'excluded' from the sample in the above process were placed in a Reserve list, for use during the survey if selected interview targets proved unlocateable. A similar reserve list comprising 48 business customers was retained for similar purposes. These were sorted in the order in which they were chosen in the random process, to allow replacements to be easily identified and 'ticked off' when used, from either the private list or the business list.

This complex method of constructing the sample was to avoid excluding customers for which all basic information was not available at the time of constructing the sample.

Step 4: Replacement Strategy

At least 43 customer records in the billing list did not include adequate information to identify a physical address to visit. In some cases a PO Box address was given for the account. In other cases the address was outside the BCM. The BCM was made aware of the data gaps and asked if they could access information to fill them. If the information could be obtained in time, the interview was conducted. If the information was not available – or if the bill did not represent a customer service related to the occupation of a property – a replacement property was selected from the Reserve lists, making use of the following rules:

- If the property is PRIVATE, a replacement is selected from the *Private* Reserve List in Count order.
- If the property is INDUSTRIAL or COMMERCIAL, a replacement is selected from the *Business* Reserve List in Count order.
- If the type of property is not clear from the information, one Business replacement is selected after every three Private replacements of this type.

This replacement strategy is also applicable if duplicate properties are encountered in the actual interviewing process. (One anomaly in the Valuation register is M E Vena who has 1,195 entries in the Valuation Roll for 1,195 properties from 1 erf and bills for each of them going to the same address. There are about 10 of these in the sample. If they house different people, the interviews will go ahead. If this is a development in progress, it may be necessary to replace most of them.)

There are 451 properties where the property status is not clear. The interviewers have to reach a determination on this in the field.

For these properties, interviewers:

- Proceed with interview if it is a private or business property and note on the interview sheet PRIVATE or COMMERCIAL OR INDUSTRIAL
- Choose the "property to the right" if interview is not possible (or it is a municipal or state property without a tenant)
- Replace the property from the "Reserve list" for private properties, in order, as described above

Step 5: Preparing the Interview List

The sample file / interview list was saved as BCM Sample 2 Printing Format.xls

This contains the following worksheets:

Index	Explanation and instructions
BCM customer survey	Printable sample list (retain the postal address fields and the ERF details, other columns may be hidden)
Reserve Lists	Reserve Surplus Private and Business customers for replacement
Type Summary	Summary of revised sample by Property Type
Area summary	Summary of revised sample by Area

Appendix 4: Data Analysis Guide

The database

The database constructed from the questionnaire replies is available as an Excel Spreadsheet:

[d:\Documents2005\Buffalo City Database Final.xls is the database without calculations]

d:\Documents2004\Buffalo\Buffalo City Questionnaire Final.xls

This comprises 2000 records, each of 205 fields. The field list, and how each field links to specific line numbers and question numbers in the Questionnaire is included in the worksheet "Index" Records have been numbered 1001 to 3000, so questionnaire number 782 corresponds to record number 1782.

The summing of answers is set out below the database (rows 2003 to 2048) with totals being assembled next to the coding number options allocated in the questionnaire (rows 2049 to 2090) and checked for consistency.

Not all records have all fields completed. The questionnaire is quite long and complex and interviewees may not have been able to answer all questions for this reason.

About 100 of questionnaires should be excluded from any future analysis of the data due to duplications when the five data capturing files were amalgamated by the Data Capturing Company. This adjustment has not been made in the present analysis in order to complete the report by the end of July 2005. The discrepancy, affecting about 5% of questionnaires, was only established when the comment fields were analysed. The inclusion of the duplicates will not have a material impact upon the overall results of the survey.

23 of the fields include comments, which are assembled separately.

The analysis spreadsheets

d:\Documents2005\BCM QUESTIONNAIRE Results 2.xls

Column GX in the database spreadsheet may be used to 'select' records for totalling and analysis. If this field is set to 1 for all records, the spreadsheet totals all records. It can, for example, be set to 1 only for records where the interviewee occupied a house rented from the council to extract only these records.

The totals can then be copied and transposed into the correct place in the analysis spreadsheet to obtain a report on the answers given by a particular segment of interviewees.

Appendix 4: Full Record of Responses

Basic data analysis sheet

<34 pages landscape>

– showing the answers to each question in the questionnaire.

d:\Documents2005\BCM QUESTIONNAIRE Results 2.xls Sheet1

Responses analysed by Population Group

<19 pages landscape>

– showing the percentages of responses to each quantitative question, for All respondents, Whites and PDIs

d:\Documents2005\BCM QUESTIONNAIRE Results 2.xls Sheet7

Full listing of comments

<22 pages portrait>

In the 'cleaning' and quality checking process, the database was filtered through a procedure which inadvertently truncated all fields longer than 50 characters. This affected comments on 86 questionnaires, which are not set out in full as a result.

Comments are assembled by area in d:\Documents2005\BCM Comments on Customer satisfaction.xls Sheet 1.

What did people comment about most?

<i>Area</i>	<i>No. of comments</i>
Economic Development	238
Traffic Services	121
Electricity Supply	112
Complaints on Trading Services	106
Streets, Roads & Pavements	104
Primary Health Care	102
Municipal Parks & Playgrounds	94
Water	88
Overall Rating of Municipality	87
Environmental Protection	83
Libraries	80
Refuse Removal	79
Stormwater	75
Fire Department	68
Civic Protection	67
Community Halls	52
Sports Fields, Pools & Stadiums	44
Protection Of Historical Heritage	31
Building Plans & Land Use Applications	15
	1646

Appendix 6: Detailed Technical Notes on Sample Assembly

It is hoped that when the Customer Care Survey is repeated in future, the data set upon which the sample is based will be cleaner and less flawed than that which had to be used for the 2005 survey. At that time, it might be decided that a different stratification would be appropriate – for example one that focused on 3 or 4 particular geographic regions within the city. With a better sample frame with more robust and consistent data, it would be a simple matter to select the sample.

In 2005, sample assembly was extremely difficult and complex. As stated above (see Appendix 2), there was no reliable key to link the billing list data to the valuation roll. In addition, there was no detailed field definition list that came with the data, which was provided in an undelimited (if fixed length!) format.

Under **ideal circumstances**, this is how sample selection would have worked:

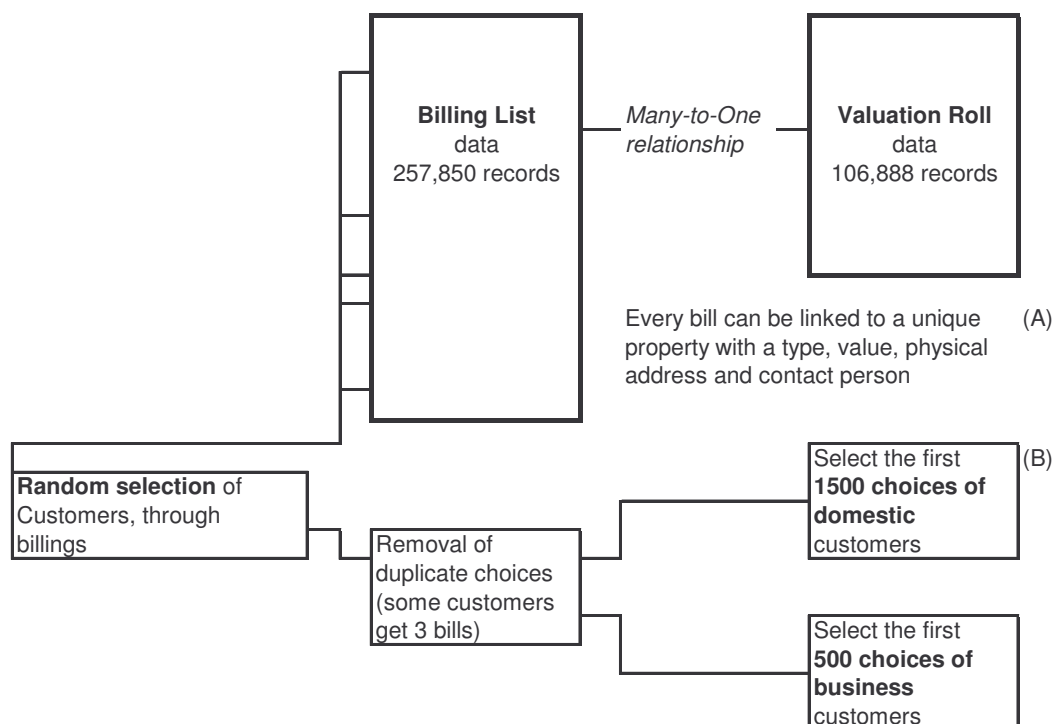


Figure 1: Ideal Situation for sample assembly

Problems experienced with the Buffalo City data

(A)

- The data supplied had no linking key field between the Billing List and the Valuation Roll.
- Data was supplied without a guide to field contents and field length.
- Billing list contained entries without references to a property.

- Billing list provided postal addresses (PO Boxes) not physical addresses in some cases.
 - About 25% of bills could not be linked reliably to the Valuation Roll, so there was no information on the property type or value for the customer.
 - The Valuation Roll was incomplete. Some properties lacked adequate physical address.
 - Insufficient information supplied to recognise the municipal value of properties.
- (B)
- Customer category depends on tenancy, not ownership. The Valuation Roll contains municipal and state property with domestic and business tenants. These have to be identified manually - and by some guess work.
 - For about 25% of the sample, property type is unknown and has to be ascertained / verified during the interview.

Description of Actual Sample Assembly

Overview: Database: BCMvaluationRoll.mdb - Summary of file inter-connections

The data was processed using Microsoft Access and Microsoft Excel.

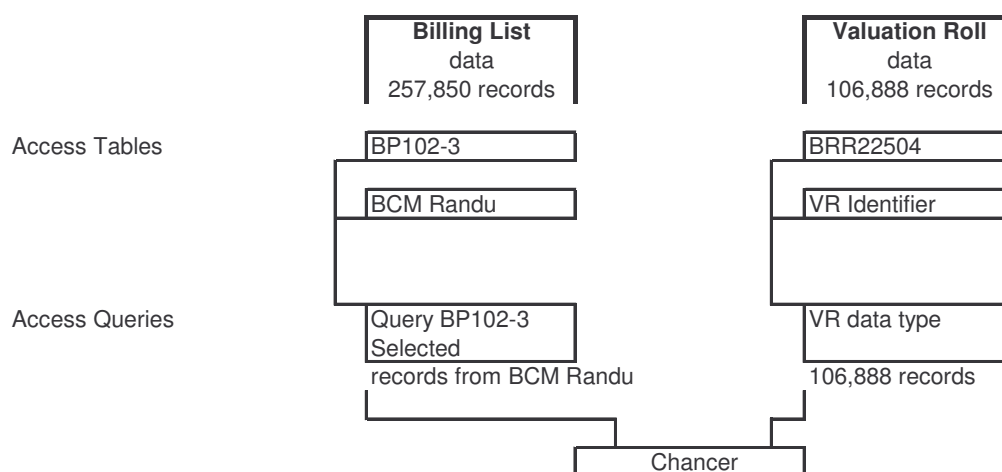


Figure 2: The Access Database

If the data were all consistently linked, clean and correctly tagged, the Access query named “Chancer” could be run once. As this is not the case, a staged process had to be employed. To understand this, it is necessary to describe the construction of the Tables and Queries in detail.

The Access Tables

<i>Access Table Name</i>	<i>No of records</i>	<i>Contents</i>	<i>Source</i>
1 BRR22504	106,888	The Valuation Roll	BCM text file: BRR22504.txt
2 VR Identifier	106,888	Valuation Roll with VR# numbers	Constructed
3 BP102-3	257,850	Billing List	BCM text file: BP102-3.txt
4 BCM Randu	10,395	Randomly selected bills from the list	Constructed: Sheet5!
5 BCM NoAddress Billing ID	43	Billing numbers w/o physical addresses	BCM Sample 2.xls
6 BCM Randu >2001	8,500	Choices beyond 2000	Constructed: Sheet5!

Access Table Name	No of records	Contents	Source
1 BRR22504	106,888	The Valuation Roll	BCM text file: BRR22504.txt

No contents guide; the VR# in the billing list is not in the VR - each has to be constructed

Field name	Description	Actual content (eg.)
ID	ID (set by Access)	1
Field1	First part of VR# (NB leading 0 dropped)	10010
Field2	Second part of VR#	ELM135
Field3	blank field	
Field4	Third part of VR#	+ ELM13517
Field5	Name	ARCADIA SCHOOL
Field6	Type of property	SCHOOLS
Field7	Physical address	. KIMBERLEY
Field8	Area	EAST LONDON CITY CBD
Field9	Code ?1	VA013
Field10	Code ?2	6000
Field11	Code ?3	16669000
Field12	Code ?4	5000
Field13	Code ?5	168827
Field14	Code ?6	1
Field15	Postal Addr1	C/O MRS NORTIER
Field16	Postal Addr2	PRIVATE BAG X3913
Field17	Postal Addr3	PORT ELIZABETH
Field18	Postal Code	9009

Access Table Name	No of records	Contents	Source
2 VR Identifier	106,888	Valuation Roll with VR# numbers	Constructed

Field name	Description	Actual content (eg.)
ID	ID	1
Expr1	Full VR#	010010ELM135170000000000000

Construction Procedure Used:

- Right click on Query 4: BRR22504 Query VR Identifier (described below)
- Export the file to a text file
- Go to the Tables window in Access and choose File, External data, to import the data to a new Access table
- Tell the programme to skip importing all the fields except for ID and Expr1
- Create ID as the primary key
- Name the Access Table: VR Identifier
[This could now be copied and appended to BRR22504, but other files would then have to be changed]
- Delete the text file

Access Table Name	No of records	Contents	Source
3 BP102-3	257,850	Billing List	BCM text file: BP102-3.txt

9000 entries have no VR# or physical address
As in the example here, the VR# created above may not match the VR# of the entity in question.

Field name	Description	Actual content (eg.)
ID	ID (set by Access)	9353
Field1	Account No?	10055684
Field2	Valuation Roll Link	010010ELM135160000000000000
Field3	?	ONS
Field4	Name	ARCADIA SCHOOL
Field5	Initial	
Field6	Physical Address	. KIMBERLEY ROAD
Field7	Postal Addr1	C/O MRS NORTIER
Field8	Postal Addr2	PRIVATE BAG X3913
Field9	Postal Addr3	PORT ELIZABETH
Field10	Postal Addr4	
Field11	Postal Code	9009
Field12	? Phone	
Field13	??	557
Field14	??	
Field15	??	RES001RES001
Field16	??	1
Field17	Area	EAST LONDON CITY CBD

Access Table Name	No of records	Contents	Source
4 BCM Randu	10,395	Randomly selected bills from the list	Constructed: Sheet5!

Construction Procedure Used:

- A list of 10,500 random numbers was generated and "frozen".
- Each random number was associated with one of the 257,850 records in the billing list.

A random number is generated by the computer in the range 0 to 1 using the formula Rand(). eg. 0.925426178

This is then applied to the billing list as follows:

- Interviewee No. = Random number X 257850 (rounded to the nearest whole number)
- In the example above, this will select the record with ID number 238,621
Formula: =ROUND(257850*{Random Number},0)
- A list of 10500 random numbers has been created and saved in file d:\Documents2005\BCM Roll Survey.xls, Sheet5
- This may be used to generate interview candidates. Retain the "Count" number as this gives the *order* in which the random numbers must be used.
- The random number list was saved in a text file and then imported into the database as a Table: BCM Randu

Field name	Description	Actual content (eg.)
ID	ID (set by Access)	471
Count	Order in which record selected	2006
Billing record ID	Record Number in BP102-3	168725

The Access Queries

The queries manipulate the data in the Tables. For the Customer Survey, the crucial task is to link each bill (or as many as possible) with a property so that we can determine whether it is a home or a business. The full task is achieved in the query called "Chancer". But this process relies on a set of other queries. There is no way of making the explanation simple.

Name	Description
1 VR data type	Attaches VR# code similar to that in the Billing List to each VR entry - to determine the type of property later.
2 Query BP102-3 Selected	Assembles all sample candidates from random selection procedure - duplicates still present
3 Chancer	Assembles sample candidates (with type details) depending on specific conditions - duplicates still present
3a Chancer 2000	Copy of Chancer – tailored for Step 1, assembly of the baseline sample
3b Chancer Business > 2000	Copy of Chancer – tailored for Step 2, assembly of additional business customers
4 BRR22504 Query VR Identifier	Used to create table VR identifier
5 BRR22504 Query 1	Lists 12398 VR entries not "private" (delete)
6 BRR22504 Query	Lists VR fields for type and area only (delete)

<i>Name</i>	<i>Description</i>
7 BRR22504 Query_ Crosstab	Used to create crosstab pivot table in sheet7 in this file
8 BCM NoAddress Billing ID Query	Used to attach account numbers to the lit of 43 billing IDs without addresses (for BCM)
9 Chancer Business	Extracts business records only
10 Chancer Private	Extracts private records only (NB - there will be none if Chancer is set to include only business!)
11 Find duplicates for Chancer Business	Finds duplicates - but this is a 4th generation query
12 New	Can Be Deleted
13 Selection to VR	Can Be Deleted

Detailed contents of each query are recorded for completeness

1 VR data type Attaches VR# code similar to that in the Billing List to each VR entry - to determine the type of property later.

```
SELECT VRIdentifier.*, BRR22504.Field4, BRR22504.Field5, BRR22504.Field6,
BRR22504.Field7, BRR22504.Field8
FROM VRIdentifier INNER JOIN BRR22504 ON VRIdentifier.ID = BRR22504.ID;
```

2 Query BP102-3 Selected Assembles all sample candidates from random selection procedure - duplicates still present

```
SELECT [BCM Randu].[Billing record ID], [BP102-3].Field2, [BP102-3].Field4, [BP102-3].Field5, [BP102-3].Field6, [BP102-3].Field7, [BP102-3].Field8, [BP102-3].Field17, [BCM Randu].Count
FROM [BCM Randu] INNER JOIN [BP102-3] ON [BCM Randu].[Billing record ID] = [BP102-3].ID;
```

3 Chancer Assembles sample candidates (with type details) depending on specific conditions - duplicates still present

```
SELECT [Query BP102-3 Selected].*, [VR data type].*
FROM [Query BP102-3 Selected] LEFT JOIN [VR data type] ON [Query BP102-3 Selected].Field2 = [VR data type].Expr1
WHERE ((([VR data type].Field6)="COMMERCIAL" Or ([VR data type].Field6)="INDUSTRIAL") AND (([Query BP102-3 Selected].Count)<10501));
```

Change these conditions depending on the part of the sample to be constructed.

4 BRR22504 Query VR Identifier USED TO CREATE TABLE VR IDENTIFIER

```
SELECT BRR22504.ID, BRR22504.Field1, BRR22504.Field2, BRR22504.Field4, BRR22504.Field5, BRR22504.Field6, BRR22504.Field7, BRR22504.Field8,
IIf([ID]<74326, ("0"+Trim(Str([Field1]))+[Field2]+Right([Field4],2)+"0000000000000000")), (Trim(Str([Field1]))+[Field2]+Right([Field4],2)+"0000000000000000")) AS Expr1
FROM BRR22504;
```

5 BRR22504 Query 1 LISTS 12398 VR ENTRIES NOT "PRIVATE"

```
SELECT BRR22504.ID, BRR22504.Field6, BRR22504.Field8
FROM BRR22504
WHERE ((Not (BRR22504.Field6)="PRIVATE"));
```


Step 1: Assembling the 'base sample' of 2,000

The first 2000 records in the Table BCM Randu need to be applied to the data, as a first step in the process.

- Open the table and click on the column title to sort it in Count order.
- Go to the 2001th record. This is associated with Count value of 2006 (6 random numbers pointed to billing numbers that had already been 'selected'. They were all discarded, so the bill counted 2005th is the 2000th bill number in the file.)
- Run the query Chancer for records with Count < 2006 (and no other conditions)
- This yields a response with 2163 records.
- Right click on Chancer and export the records to a text file, when should be opened in Excel - **call this file "BCM_X"**
- Sort the records in Billing Record ID order and eliminate the duplicates - there are 2163 records and 163 duplicates (where a VR# points to more than one property line in the VR data)

Chancer 2000

```
SELECT [Query BP102-3 Selected].*, [VR data type].*
FROM [Query BP102-3 Selected] LEFT JOIN [VR data type] ON [Query BP102-3
Selected].Field2 = [VR data type].Expr1
WHERE ((([Query BP102-3 Selected].Count)<2006));
```

The records for the first 2,000 customers identified showed the following characteristics:

<i>Property Type</i>	<i>Grand Total</i>	<i>Note</i>
CHURCH	3	
COMMERCIAL	62	= Business
INDUSTRIAL	21	= Business
MUNICIPAL	62	
NATIONAL GOV	7	
PRIVATE	1388	= Private
PROVINSIAL GOV	2	
SATS	4	
UNKWOWN	7	[sic – name of field entry]
<i>No Match</i>	374	Unable to match the VR# in the Billing Record with data supplied in the VR
<i>No VR#</i>	70	No VR# in the billing record
Grand Total	2000	

There was insufficient property use data for **451** properties, close to a quarter of the sample. In 7 cases, the property type was recorded on the Valuation Roll itself as unknown. In 374 cases our computer procedure was not able to find a close enough match between the property code in the billing list and the key constructed from the VR. In 70 cases the billing list had no data in the field normally occupied by the property code.

Step 2: Adjusting the sample to include 500 business and 1500 private customers

Rather than discard the customers for which the property type was unknown, an estimate was made of the likely number of business properties within them. Based on the proportion of commercial and industrial properties within the segment of the sample for which property type

was known, it was assumed that about 24 of the 451 properties would prove to be business properties. The 'first sample' had thus identified about 107 businesses (24 plus 21 confirmed industrial properties plus 62 confirmed commercial properties.) Therefore, it was necessary to interrogate the random number list to choose an additional 393 business customers to make the total up to the target of 500.

Collecting additional business customers by random sampling

It was not known how many records would have to be interrogated to accumulate the additional 393 business entries required. Based on the 107 or so business customers identified in the first 2000 sample, it was estimated that over 10,000 bills would have to be drawn to accumulate 500 businesses.

- Run the query Chancer for records with Count > 2005 and < 10501 for bills associated with "COMMERCIAL" or "INDUSTRIAL"
- Right click on Chancer and export the records to a text file, when should be opened in Excel - **call this file "BCM_Y"**
- Sort the records in Billing Record ID order and eliminate the duplicates - there are 477 records and 36 duplicates (where a VR# points to more than one property line in the VR data)
- 393 of these records are to be incorporated in the sample, the remaining 48 are placed in the Reserve List for business (sorted in Count order)

Chancer Business >2000

```
SELECT [Query BP102-3 Selected].*, [VR data type].*
FROM [Query BP102-3 Selected] LEFT JOIN [VR data type] ON [Query BP102-3
Selected].Field2 = [VR data type].Expr1
WHERE ((([VR data type].Field6)="COMMERCIAL" Or ([VR data
type].Field6)="INDUSTRIAL") AND (([Query BP102-3 Selected].Count)<10501 And
([Query BP102-3 Selected].Count)>2005));
```

With regard to the other properties, it was agreed that municipal and state owners would be excluded from the customer survey, unless the property in question was occupied by a tenant. Church property was also to be excluded.

"Cleaning" the base sample of 2000

- Open file "BCM_X"
- Sort the data by type and billing number ID
- Manually tag and excise Unknown, Municipal, State, Church and SATS property unless the government or municipal property may have a tenant in it. This is not a scientific process, some further properties may be abandoned during the survey.

Once adjustments were made for the 63 private customers found within the municipal and state properties, the number of known private properties in the 'base sample' needed to be reduced by 330, in order to make up an estimated 1,500 private customers.

- Sort the data by type and count
- Tag the 330 Private customers with the highest Count values (ie the last 330 private customers chosen)
- Cut and paste these records into the Reserve List Worksheet created in file "BCM_X"
- Paste in the 393 additional business customers from file BCM_Y into the BCM_X worksheet with the 'base' sample.

- Sort the entire sample by Area and Billing Record ID
- The full sample list will now include exactly 2000 entries. This includes a number of records where type and VR# are missing. This information will be obtained during the interviews - or the customer will be replaced by one in the Reserve List.
- Delete file "BCM_Y"

An analysis of the sample after the above adjustments, reflected the following totals:

<u>Property Type</u>	<u>Grand Total</u>	<u>Private</u>	<u>Business</u>
CHURCH	0		
COMMERCIAL	382		382
INDUSTRIAL	94		94
MUNICIPAL	12	12	
NATIONAL GOV	5	5	
PRIVATE	1058	1058	
PROVINSIAL			
GOV	0		
SATS	0		
UNKWOWN	5		
No Match	374	425	24
No VR#	70		
Grand Total	2000	1500	500

Step 3: Preparing the "Reserve List"

The 330 private customers 'excluded' from the sample in the above process were placed in a Reserve list, for use during the survey if selected interview targets proved unlocateable. A similar reserve list comprising 48 business customers was retained for similar purposes. These were sorted in the order in which they were chosen in the random process, to allow replacements to be easily identified and 'ticked off' when used, from either the private list or the business list.

This complex method of constructing the sample was to avoid excluding customers for which all basic information was not available at the time of constructing the sample.

Step 4: Replacement Strategy

At least 43 customer records in the billing list did not include adequate information to identify a physical address to visit. In some cases a PO Box address was given for the account. In other cases the address was outside the BCM. The BCM was made aware of the data gaps and asked if they could access information to fill them. If the information could be obtained in time, the interview was conducted. If the information was not available – or if the bill did not represent a customer service related to the occupation of a property – a replacement property was selected from the Reserve lists, making use of the following rules:

- If the property is PRIVATE, a replacement is selected from the *Private* Reserve List in Count order.
- If the property is INDUSTRIAL or COMMERCIAL, a replacement is selected from the *Business* Reserve List in Count order.

- If the type of property is not clear from the information, one Business replacement is selected after every three Private replacements of this type.

This replacement strategy is also applicable if duplicate properties are encountered in the actual interviewing process. (One anomaly in the Valuation register is M E Vena who has 1,195 entries in the Valuation Roll for 1,195 properties from 1 erf and bills for each of them going to the same address. There are about 10 of these in the sample. If they house different people, the interviews will go ahead. If this is a development in progress, it may be necessary to replace most of them.)

There are 451 properties where the property status is not clear. The interviewers have to reach a determination on this in the field.

For these properties, interviewers:

- Proceed with interview if it is a private or business property and note on the interview sheet PRIVATE or COMMERCIAL OR INDUSTRIAL
- Choose the "property to the right" if interview is not possible (or it is a municipal or state property without a tenant)
- Replace the property from the "Reserve list" for private properties, in order, as described above

Step 5: Preparing the Interview List

The sample file / interview list file "BCM_X" has been renamed **BCM Sample 2 Printing Format.xls**

This contains the following worksheets:

Index	Explanation and instructions
BCM customer survey	Printable sample list (retain the postal address fields and the ERF details, other columns may be hidden)
Reserve Lists	Reserve Surplus Private and Business customers for replacement
Type Summary	Summary of revised sample by Property Type
Area summary	Summary of revised sample by Area

File List

The following files have been archived with the electronic records of the survey:

1 **BCM Sample 2 Printing Format.xls** **Final sample selection**

Index	Explanation and instructions
BCM customer survey Reserve Lists Type Summary Area summary	Printable sample list Reserve Surplus Private and Business customers for replacement Summary of revised sample by Property Type Summary of revised sample by Area

2 **BCM Roll Survey.xls** **Main record file with explanations**

Index	Includes the Early Notes on the analysis of the Valuation Roll
Sample2 Selection Sheet1 Sheet 2 Sheet3 Sheet4	Sample Selection Methodology for the Buffalo City: Customer Care Survey Notes on calculation on sample size Detailed guide to the Access tables and queries and SQL Notes comparing the Valuation Roll and the Billing list First and second sample methods described (historical sheet - for forensic use only!)
Sheet5	List of the 10500 random numbers actually used to generate pointers to the billing numbers
Sheet7 Existing Categories	Analysis of the Valuation Roll 2004/5 by type of property and area. Existing categories of property for rating purposes - not the same as property types on the Valuation Roll

3 **BCMValuation Roll.mdb** **Sample selection database**

The query "Chancer" is the ultimate point.

- This combines query "VR Data Type" [itself made up from tables VR Identifier and BRR22504] with Query BP102-3 Selected [itself made up from tables BCM Randu and BP102-3]
- VR Identifier is created from the Query BRR 22504 Query VR Identifier [which pulls several BRR22504 fields into an Expression Expr1] and then is right clicked and saved as a file.

The spaghetti structure may be avoidable – but it works.

- | | | |
|---|------------------------------------|---|
| 5 | BCM Randu.csv | 10,395 unique billing numbers numbered in the order in which they were randomly chosen. |
| | Source: BCM Roll Survey.xls Sheet5 | Source file for the BCM Randu table in the Access database. [105 duplicate choices removed before saving] |
| 9 | BCM NoAddress Billing ID.csv | File sorted from the Sample 2 file to identify the Bills with inadequate address data |

10 d:\Documents2005\BCM Existing
Categories.xls

From Africon – list of categories of property, but these are not the same type names as appear in the Valuation Roll. Sheet incorporated into d:\Documents2005\BCM Roll Survey.xls for reference.