Resident Satisfaction Survey - Roanoke Housing Authority, 1998

Prepared by the
Center for Housing Research
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Introduction

In a continuing effort to be responsive to residents’ concerns and satisfaction, the Roanoke Housing and Redevelopment Authority requested the assistance of the Virginia Tech Center for Housing Research in assessing resident satisfaction. The approach developed with the Center was twofold: a series of focus groups with residents at two RRHA locations and a mailed survey of all residents. The focus groups were conducted to gain residents’ comments about the performance of RRHA’s housing staff in managing their apartments. The focus group results have been reported separately and helped to identify issues to cover in the mailed survey.

During our review of various approaches to obtaining feedback from residents on their satisfaction with RRHA services, the U.S. Department of Housing and Urban Development announced that it would require housing authorities to conduct an “assessment of resident satisfaction with their living conditions.” Consequently, the Center focused on the development of an affordable annual survey approach that would include all tenants. The Center conducted a mailed survey using the “Dillman” technique of an initial mailing of the questionnaire with return postage paid and a cover letter explaining the survey; a follow-up postcard after one to two weeks; and, a second letter with a replacement questionnaire mailed after three weeks. Prior experience with mailed surveys using this technique has shown that the second and third mailings significantly increase response rates, making the survey more reliable. The response rate achieved in this survey was 46%, a very respectable level for a tenant survey. This response rate is unadjusted for undeliverable questionnaires, which would make the actual response rate for delivered questionnaires even higher.

The purpose of this report is to explain the contents of the questionnaire, present the results of the survey, and document the survey methodology. With nearly half of all tenants responding to the survey, the survey results should be highly reliable. The opinions of the residents who did not respond would have to be significantly different from the residents who responded in order to materially change the results. The Center’s comparison of later returns with earlier returns found the opinions of the two groups to be very similar, but the later returns were consistently less positive. Consequently, we can reasonably assume that the perceptions of the non-respondents are less positive than the perceptions of the respondents. The differences, however, appear to be minor.

The Questionnaire

The questionnaire was modeled on the Customer Satisfaction Survey developed by the consulting firm of KPMG Peat Marwick to meet the U.S. Department of Housing and Urban Development’s requirement for “assessment of resident satisfaction with their living conditions.” Modifications to this questionnaire were made to improve its use in a mailed survey and to reflect the results of focus group interviews conducted with three groups of residents during the summer of 1998. The RRHA Residents Council assisted in pre-testing the questionnaire and additional modifications were made to remove possible ambiguities in wording and to make completion of the survey easier.

Residents were asked to rate a variety of facilities and services on a scale of Excellent, Good, Poor, or Bad. The items rated included maintenance of common area physical facilities (laundry, recreation, parking lots, etc.), maintenance of utility services (electric service, hot water service, air conditioning, etc.), maintenance of apartment and grounds, management performance and response, human services (child care, health care, employment services, etc.), community development (improvement efforts by RRHA, police, and churches), and leasing/management...
services. Residents were asked to rate security problems (burglaries, drug-related activities, etc.) on a scale of Very Serious, Serious but Declining, Moderate Problem, or Minor Problem. In addition, residents were asked, “How would you describe general conditions at your apartment complex compared to similar locations where you have lived before?” The response categories to this question were Better, About the Same, Worse, Much Worse, and Not Applicable.

Survey Results

Summary Ratings
In order to prepare summary ratings for the major areas covered in the survey, response categories were weighted and averaged across the individual questions in each of the major topic areas. For the seven following areas the weighting scheme was Bad = 1, Poor = 2, Good =3, and Excellent = 4:

- maintenance of community facilities,
- maintenance of utilities,
- maintenance of apartment and grounds,
- tenant relations (management performance in responding to emergency repairs and keeping residents informed and involved),
- human services,
- community development, and
- leasing services.

For the security questions, the weighting was Very Serious =1, Serious but Declining = 2, Moderate Problem = 3, and Minor Problem = 4.

The overall results for these summary measures are shown in Figure 1. Average ratings were good or slightly higher (3.0+) for leasing/management services, maintenance of apartment and grounds, community development, management performance and response, and maintenance of utilities. Human services and maintenance of community facilities were rated slightly below the "Good" level. Security was rated as a “moderate problem” on average (2.99).

\[1\] At the 95% confidence level, sample results for estimated percents from the full sample would be within plus or minus 3.9 percent.
General Conditions at Apartment Complex
Residents were asked to rate the general conditions at their current apartment complex compared to similar locations where they had lived before, with response categories of Better, About the Same, Worse, Much Worse and Not Applicable. Over one-third (35.6%) rated their current housing as better than previous locations where they lived and another 38.4% rated their current housing as about the same as previous locations. About one-in-six (15.7%) rated their current housing as worse (9.6%) or much worse (6.1%).

Maintenance of Apartments and Grounds
The summary scale for apartment and grounds included three measures (Figure 2): tenant’s apartment, tenant’s building and outside area. Both the tenant’s apartment and tenant’s building items were rated slightly above "Good", on average. The “outside area” was rated somewhat below "Good". One-in-four respondents (24.3%) rated their individual apartments as excellent and 21.3% rated their buildings as excellent. Nearly identical proportions (66.7% and 66.2%) labeled their apartments and buildings as "Good". On the negative side, 9.0% classified their apartments as "Poor" (7.5%) or "Bad" (1.5%); more respondents rated their buildings negatively (10.2% poor, 2.4% bad). Outside common areas were significantly less likely to be classified as excellent (12.6%) and more likely to be classified as poor (19.5%) or bad (5.1%). (There was also a higher percentage of ‘non-respondents’ for the latter question, 12.1% compared with 3.9% and 5.6%.)
Reflective of the rating given to maintenance of outside areas, the five of the six items related to maintenance of community facilities were rated below “good” (Figure 3) on average. Sidewalks received the highest rating, followed by hallways and common areas, laundry facilities, recreational facilities, parking lots, and streets.

Throughout all of these measures the modal category is "Good". (A “fair” option was not included on the questionnaire and it is reasonable to interpret the good category as “good or fair”.) The percentage of "Good" classifications ranged from 57 percent to 68 percent. However, significantly more residents rated these areas as poor or bad than as excellent, with the exception of sidewalks. For streets, recreational facilities, and parking lots, residents were twice as likely to rate them as poor or bad than as excellent.
Utilities
Six utility services were evaluated: electrical, water/sewer, hot water, heating, air conditioning, and trash pick-up (Figure 4). All but air conditioning received average ratings of good or above. The rating for air conditioning is difficult to interpret because only a few sites have air conditioning. Even though the survey requested that the item should be evaluated only if available, some residents apparently rated air conditioning as poor because it is not available. Consequently, this item should be evaluated only for those locations where it is available. (For example, Morningside Manor, which has air conditioning, rated it overwhelmingly as good to excellent (96%) and virtually every respondent rated this item. In contrast, the residents of Landsdowne, where the Housing Authority does not provide air conditioning, nearly half of the respondents rated the service anyway and over 60 percent rated it as poor or bad.
Six questions dealt with management’s response to emergency repairs and keeping residents informed about various items, which we have grouped “tenant relations”. These questions covered responding to emergency repairs, providing information about important events and meetings, informing residents about community issues, involving residents in management meetings, informing residents about maintenance and repair activities, and including residents in special programs (such as drug elimination and job training). On average, all of these items were rated as "Good" or better (Figure 5).

Excellent ratings for these activities ranged from 20.2% (information about management meetings) to 30.5% (information about important events and meetings), with another 57 to 63 percent rating management performance as "Good". For example, over 85% of the residents rated management’s performance in responding to emergency repairs as good (57.3%) or excellent (28.6%). Between 10 to 15 percent rated management performance in these areas as poor or bad.
Ratings of Human Services

Nine human or “community” services were covered in the survey: child care, health care, employment services, welfare services, parks, recreation facilities, grocery stores, schools, and public transportation. Only two of these services received average ratings of good or above: public transportation and schools (Figure 6). Health care, child care, employment services, and welfare services were rated slightly below good, while parks, recreation facilities, and grocery stores were rated between poor and good.

From 10 to 15 percent of the residents rated child care, health care, employment services, welfare services, parks, recreation facilities, and grocery stores as excellent. From 12 to 16 percent rated child care, health care, employment services and welfare services as poor or bad; 25 to 30 percent rated recreation facilities and grocery stores as poor or bad. In contrast 21 to 29 percent rated schools and public transportation as excellent and only 7 to 8 percent rated these as poor or bad.
Ratings of Community Development Activities
The residents were asked to rate efforts by the Housing Authority, the police, and churches to improve their apartment complexes. Churches were rated the most favorably (Figure 7): 26.6% excellent and 64.4% good. The Housing Authority (18.2% and 66.7%) and the police (19.8% and 58.9%) followed closely.
Ratings of Leasing Services
Most of the interaction between the Housing Authority and residents involves traditional property management services. Residents were asked to rate the Housing Authority’s performance in handling eight specific leasing/management services: application to rent an apartment; the lease agreement; move-in; repairs to apartments; tenants’ complaints against management; tenants’ complaints against fellow tenants; income certification and re-certification interviews; and charges for damages to apartments. Not surprisingly, the more routine functions of leasing and servicing apartments were rated more favorably than the areas involving disputes or conflicts (Figure 8). All of the routine services were rated, on average, above “Good”, whereas the dispute-oriented interactions were rated below good on average.

From 21 to 28 percent of residents rated the routine management services as excellent, but only 12 to 15 percent so rated the dispute-oriented services. On the negative side, only 6 to 10 percent rated management’s handling of the application, lease, move-in, and income certification processes as poor or bad. Seventeen percent of residents rated repair services as poor or bad. However, 22 to 33 percent rated as poor to bad management’s handling of complaints against management, complaints against other tenants, and charges for damages. The lowest rating was for management’s handling of complaints against other tenants. It bears noting that fewer residents rated the dispute-oriented services, perhaps a reflection that fewer have experience with management’s performance in this area.
Ratings of Security
Rating security services was conducted in a slightly different way than the rest of the survey. Following HUD’s questionnaire, the security questions asked about the severity of the problem rather than the quality of the management services provided. Five specific security areas were included: overall crime, burglaries, harassment, drug-related activities, and noise. Drug-related activities were rated as most serious on average, followed by overall crime and noise (Figure 9). Harassment and burglaries were rated as less serious problems. Across all five security questions, from 56% (for drug-related activity) to 82% (for burglaries) of residents rated these as moderate to minor problems. (Fifty-five percent rated burglaries and harassment as minor problems.)
Ratings by Location
Average scores for the summary measures for each of the residential locations are given in Table 1. The shaded scores fall below the overall average for the given summary measure and those noted with an asterisk fall at least 10 percent below the average.

Three locations are consistently above average: Bluestone Park, Melrose Towers, and Morningside. Additionally, Jamestown Place falls below the overall average in only one measure—security.

Three locations are consistently below average: Lincoln Terrace, Indian Rock, and Landsdowne.

Hunt Manor and Hurt Park are below average on five of the eight measures.
Table 1. Average Summary Scores by Location

<table>
<thead>
<tr>
<th></th>
<th>Blue-</th>
<th>Hunt</th>
<th>Hurt</th>
<th>Indian</th>
<th>James-</th>
<th>Lands-</th>
<th>Lincoln</th>
<th>Melrose</th>
<th>Morning</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilities</td>
<td>3.17</td>
<td>3.07</td>
<td>3.18</td>
<td>2.97</td>
<td>3.12</td>
<td>3.00</td>
<td>2.90</td>
<td>3.22</td>
<td>3.11</td>
<td>3.09</td>
</tr>
<tr>
<td>Apt &amp; Grounds</td>
<td>3.12</td>
<td>2.81</td>
<td>3.02</td>
<td>2.85</td>
<td>3.13</td>
<td>2.83</td>
<td>2.73</td>
<td>3.22</td>
<td>3.23</td>
<td>3.01</td>
</tr>
<tr>
<td>Commun. Facilities</td>
<td>3.12</td>
<td>2.74</td>
<td>2.84</td>
<td>2.84</td>
<td>2.96</td>
<td>2.54*</td>
<td>2.48*</td>
<td>3.10</td>
<td>3.07</td>
<td>2.86</td>
</tr>
<tr>
<td>Tenant Relations</td>
<td>3.26</td>
<td>3.01</td>
<td>2.91</td>
<td>2.92</td>
<td>3.10</td>
<td>3.02</td>
<td>3.06</td>
<td>3.18</td>
<td>3.11</td>
<td>3.08</td>
</tr>
<tr>
<td>Human Services</td>
<td>3.10</td>
<td>3.03</td>
<td>2.95</td>
<td>2.84</td>
<td>2.98</td>
<td>2.83</td>
<td>2.84</td>
<td>3.02</td>
<td>2.98</td>
<td>2.93</td>
</tr>
<tr>
<td>Com. Development</td>
<td>3.13</td>
<td>3.06</td>
<td>2.98</td>
<td>2.92</td>
<td>3.21</td>
<td>2.82</td>
<td>2.99</td>
<td>3.18</td>
<td>3.05</td>
<td>3.04</td>
</tr>
<tr>
<td>Leasing Services</td>
<td>3.24</td>
<td>3.04</td>
<td>2.92</td>
<td>2.89</td>
<td>2.99</td>
<td>2.89</td>
<td>2.92</td>
<td>3.14</td>
<td>3.06</td>
<td>3.01</td>
</tr>
<tr>
<td>Security</td>
<td>3.44</td>
<td>2.69*</td>
<td>2.98</td>
<td>1.91*</td>
<td>2.83</td>
<td>2.48*</td>
<td>2.65*</td>
<td>3.43</td>
<td>3.41</td>
<td>2.99</td>
</tr>
</tbody>
</table>

Although there is clear consistency in these patterns, it is also apparent that there are only a few major differences in these summary measures. Only six scores are below the overall average by 10 percent or more and four of these are for security (Hunt Manor, Lincoln Terrace, Indian Rock, and Landsdowne). The two additional scores that are below the overall average by at least 10 percent are maintenance of common facilities for Lincoln Terrace and Landsdowne.

The variation in the summary measure for security is also reflected by the responses to the individual questions about security. The percentages of respondents identifying crime, burglaries, harassment, drug activities, and noise as very serious are presented in Table 2. Bluestone Park, Melrose Towers, and Morningside are significantly less likely than other locations to rate most of these as serious problems. Across all five of these measures, Indian Rock appears to have the most serious security problems. From one-third to nearly two-thirds of the respondents identified these as serious problems (with burglaries and harassment at the high end). Landsdowne and Lincoln Terrace were more likely than other locations to identify drug-activities as serious problems.

Table 2. Percent Identifying Security Problems as Very Serious

<table>
<thead>
<tr>
<th></th>
<th>Crime</th>
<th>Burglaries</th>
<th>Harassment</th>
<th>Drug Activities</th>
<th>Noise</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Respondents</td>
<td>14.5%</td>
<td>7.1%</td>
<td>11.9%</td>
<td>25.0%</td>
<td>19.0%</td>
</tr>
<tr>
<td>Bluestone Park</td>
<td>2.9%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>9.4%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Hurt Manor</td>
<td>21.7%</td>
<td>5.0%</td>
<td>18.2%</td>
<td>21.7%</td>
<td>21.7%</td>
</tr>
<tr>
<td>Hurt Park</td>
<td>4.8%</td>
<td>2.7%</td>
<td>15.8%</td>
<td>26.8%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Indian Rock</td>
<td>34.8%</td>
<td>60.9%</td>
<td>55.6%</td>
<td>30.4%</td>
<td>39.1%</td>
</tr>
<tr>
<td>Jamestown</td>
<td>16.3%</td>
<td>13.6%</td>
<td>27.5%</td>
<td>31.0%</td>
<td>15.6%</td>
</tr>
<tr>
<td>Landsdowne</td>
<td>31.3%</td>
<td>9.9%</td>
<td>15.8%</td>
<td>46.4%</td>
<td>43.4%</td>
</tr>
<tr>
<td>Lincoln Terrace</td>
<td>19.1%</td>
<td>6.9%</td>
<td>12.6%</td>
<td>40.0%</td>
<td>23.3%</td>
</tr>
<tr>
<td>Melrose Towers</td>
<td>8.6%</td>
<td>7.1%</td>
<td>9.2%</td>
<td>8.9%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Morningside</td>
<td>7.9%</td>
<td>4.9%</td>
<td>3.6%</td>
<td>4.1%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

The survey results for all the individual questions would be too detailed to review for each location in this summary report. However, when examining the results for individual locations it is important to note that their reliability decreases with the smaller samples associated with individual sites. Confidence intervals for individual sites are given in Table 3 for the 90% level.
Given the high response rates for Melrose Towers (71%), Morningside (69%), and Indian Rock (63%), the estimated sampling variability given in Table 3 can be considered maximums. It is highly unlikely that repeated samples of these sizes conducted at the same time for these locations would have produced any meaningful differences. Similarly, over half the residents of Bluestone Park responded to the survey. Unless the non-respondents were very dissimilar from the respondents, the confidence interval in Table 3 for Bluestone Park is probably overstated.

### Table 3. Number of Respondents, Response Rate, and Confidence Intervals

<table>
<thead>
<tr>
<th>Location</th>
<th>N</th>
<th>Response Rate</th>
<th>90% Confidence Interval, +/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Sample</td>
<td>621</td>
<td>46.4%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Bluestone Park</td>
<td>36</td>
<td>53.7%</td>
<td>13.7%</td>
</tr>
<tr>
<td>Hunt Manor</td>
<td>23</td>
<td>27.4%</td>
<td>17.1%</td>
</tr>
<tr>
<td>Hurt Park</td>
<td>43</td>
<td>43.0%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Indian Rock</td>
<td>47</td>
<td>62.7%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Jamestown</td>
<td>46</td>
<td>34.6%</td>
<td>12.1%</td>
</tr>
<tr>
<td>Landsdowne</td>
<td>101</td>
<td>35.7%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Lincoln Terrace</td>
<td>94</td>
<td>37.5%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Melrose Towers</td>
<td>141</td>
<td>70.5%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Morningside</td>
<td>70</td>
<td>69.3%</td>
<td>9.8%</td>
</tr>
</tbody>
</table>

The sample sizes for Lincoln Terrace, Landsdowne, Jamestown Place and Hurt Park are generally sufficient to produce results reliable within the estimated parameters. However, the response rates for these areas were much lower (35% to 43%), making it difficult to assess the effects of differences between respondents and non-respondents. The low sample size (23) and the low response rate (27%) for Hunt Manor make it even more troublesome. Its results should be interpreted with extreme caution.

**Conclusion**

Since this survey is the benchmark for subsequent surveys, we cannot compare the results to determine trends in these resident ratings. Lacking a benchmark for comparison or clear normative standards, it is difficult to establish what level of performance is "Good". Nonetheless, it is clear that residents evaluate most services favorably. The areas receiving the highest ratings were maintenance of utilities (highest rating for hot water) and management performance in keeping tenants informed and in responding to problems. The areas with the lowest ratings were security (particularly, drug-related problems) and maintenance of common area physical facilities. Other areas with lower ratings were management's response to complaints about fellow tenants and availability of recreation facilities.
Methodology

The Roanoke Redevelopment and Housing Authority (RRHA) contracted the Center for Housing Research at Virginia Tech to design a mail survey to measure satisfaction of public housing residents and to assess the quality of services received from the Roanoke Redevelopment and Housing Authority. In addition, the Center was responsible for preparing the survey for mailing, processing and analyzing the survey results, and writing a final report based on the analyses.

Questionnaire

The questionnaire consisted of 47 questions on satisfaction, ranging in topics from maintenance and grounds to human services and security. Residents were instructed to check boxes (generally four choices: Excellent, Good, Poor, Bad) to indicate satisfaction with a particular service. In addition, residents were asked to identify which project they lived in and when they moved into their present unit. Residents were encouraged to write down any comments after completing the survey.

The back outside page of the questionnaire was printed with the address of the Center for Housing Research and a Business Reply Mail first-class mail permit. After completing the questionnaire, the residents were instructed to fold and tape (tabs were supplied) the questionnaire so that the Center address would show. The residents were informed that no postage was necessary and asked to mail the questionnaire.

Mailing Procedures

To promote a good response rate, the Dillman’s Total Design Method was used for conducting the survey. Once RRHA approved the questionnaire, the Center had enough questionnaires printed to ensure adequate numbers would be available for a first and second mailing (if a respondent did not send back a completed questionnaire after a reasonable amount of time, a second questionnaire was mailed). RRHA provided the Center with mailing labels for all public housing residents broken down by project. The Center copied the mailing labels to create a master list of residents. The Center then assigned a unique number to each resident on the master list. A corresponding number was stamped on a questionnaire so that each resident could be matched with a particular questionnaire. The purpose of the numbering was to be able to mark off residents once they had returned their questionnaire and avoid sending those residents a reminder or duplicate questionnaire. Residents were assured of the confidentiality of their answers (questionnaires were mailed from RRHA but were returned directly to the Center for Housing Research).

The Center transported the numbered questionnaires to RRHA keeping them in the same order as the mailing labels and/or master list of residents. RRHA and Center personnel put mailing labels on RRHA envelopes, carefully inserting the matching numbered questionnaire, a letter from the Director of RRHA explaining the purpose of the questionnaire, and tabs for sealing the questionnaire for mailing back to the Center.

The RRHA mailed the questionnaire to 1339 public housing residents representing 100 percent of the residents living in 10 separate housing projects.

The Center marked off a resident's name on the master list when their completed questionnaire was returned. Approximately three weeks after the initial mailing, the Center mailed a reminder postcard to those who had not yet responded.
Two weeks after the reminder postcard was mailed, the Center took a second set of questionnaires to RRHA for mailing. The second questionnaire was mailed without an identification number in order to provide more security for those residents who had not responded for fear of being identified (this was a concern voiced to RRHA from residents and on comments from questionnaires returned). This eliminated the need for matching a questionnaire with the appropriate mailing label. For the second mailing, the questionnaire was accompanied by a letter from the Director of the Center for Housing Research (again explaining the purpose of the survey).

The first mailing, reminder postcard, and second mailing were designed to get maximum participation from respondents. Of the 1339 questionnaires mailed to residents, 621 were completed and returned for a response rate of 46 percent. The response rate does not take into account any questionnaires that were undeliverable and returned to RRHA (otherwise the response rate is slightly higher than reported).

Analysis
The questionnaire was designed to facilitate the coding of data with "Bad" receiving a code of 1 and "Excellent" receiving a code of 4 (for the section on security, "Very Serious" received a code of 1 and "Minor Problem" received a code of 4). Center personnel entered coded numbers directly into a computer file from the questionnaire. After a thorough check of the data, Center personnel analyzed the data through the use of Excel, a Microsoft Office program. In addition to a computer file for all the respondents, Center personnel created a separate file containing only the respondents from each of the ten public housing projects. For the overall group and each of the projects, the Center produced frequencies and means for each variable and for selected groups of variables. For the overall group, the Center produced charts that ranked and compared satisfaction of respondents within selected areas such as security and human services.

Future Surveys
The mailed survey proved highly effective in obtaining resident participation. The cost of future surveys would be restricted to printing (questionnaires, accompanying letters, postcard), postage, and staff to administer the survey. With established procedures for analyzing the results (e.g. the calculation of the summary measures) and a format for reporting results, the analysis and report can be completed in much less time in the future.

Future reports should include the results of this "benchmark" survey for comparisons of significant changes. Estimates of statistical significance for differences between the benchmark and subsequent surveys can be readily produced. Only those differences reaching a 90% confidence level should be reported.

Several improvements were noted for future surveys. The RRHA should consider adding a "fair" response to the current categories of Excellent, Good, [Fair], Poor, Bad. A few respondents noted that they felt the "Good" category did not adequately describe their assessment and suggested another category between Good and Poor. Also, the questionnaire should be revised to show "Bad" (which has a code of 1) as the first box and "Excellent" (which has a code of 4) as the last box. Switching the order would make data entry more "natural" with the code numbers ascending left to right.

In processing the survey results, it would be better in the future to eliminate clearly illogical responses from calculating system-wide averages. The ratings for air conditioning are a case in
point. The RRHA should identify which services are not available at specific sites and the ratings for these services should not be included in system-wide averages.

For future surveys, the RRHA should keep a count of non-deliverable questionnaires, which would allow a better estimate of the true response rate.

If the RRHA decides to conduct the survey ‘in-house’ in the future, the Center will provide any necessary technical assistance in explaining survey procedures to staff. The Center can readily transfer the survey and data base procedures to RRHA staff, including a Microsoft Excel spreadsheet prepared to assist the RRHA in analyzing survey results.

Alternatively, the Center will conduct the survey on behalf of the RRHA for an agreed upon cost. The cost of future surveys will be significantly less than the initial survey, assuming few changes in the questionnaire and in survey procedures.