AN EVALUATION OF SHOPPING FoR ENERGY CoNSERVATION IN MULTI-FAMILY BUILDINGS

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Contents

Executive Summary

"Shopping for Energy Conservation in Multi-family Housing" is a one day seminar designed by the Center for Neighborhood Technology (CNT). The purpose of the Seminar is to provide a practical and effective method to stimulate energy conservation financing in Chicago's neighborhoods, especially on older multi-family buildings. The objectives of the seminar are:

- to have the participants achieve a common understanding of the costs, methods and financing necessary to energy conservation; and
- to establish the initial linkages among the participants as a basis for future negotiations for work and financing.

In order to insure that the Seminar achieves the purpose and objectives and to refine and improve the quality of the Seminar, which will be offered 10 times in 1982, CNT engaged Woodstock Institute to evaluate the first series of seminars conducted. The first four Seminars were conducted in the fall of 1981 and form the basis of this interim evaluation report.

Overview of the Four Seminars

The seminar was conducted four times in the fall of 1981. The six hour seminar was structured around three sessions and a luncheon. The sessions involved identifying energy problems and solutions through energy audits, financing energy conservation improvements (retrofits), and implementing the improvements from getting contractor's bids to testing the improvements. The luncheon was used as an opportunity for informal discussions among faculty and participants.

The seminars were co-sponsored by three neighbohrood-based banks - Pioneer Bank and Trust Company, South Shore Bank, and Community Bank of Edgewater - and one downtown bank - the First National Bank of Chicago. The sponsoring banks provided space for the seminars, invited their multifamily borrowers to attend the seminar, and sent at least one loan officer to the seminar.

Of 45 participants in the four seminars, nine represented lending institutions, fourteen were building owners or managers, sixteen were technical assistance providers, and six were from a variety of other areas. Ten of the fourteen building owners/managers represented for-profit enterprises; one of the technical assistance providers was for-profit. The nine lenders represented five lending institutions.

Summary of Findings

Quality of the Seminar. Responses to the seminar in the group discussions, on the written questionnaires and in the follow-up interviews indicate that the seminar was perceived to be of very high quality compared to others that participants had attended on similar topics, and that the faculty and materials were well prepared. On the written questionnaire, all respondents who answered the question stated that the seminar was either good or excellent. Similar responses were obtained during the group discussions and the interviews. The seminar then must be judged as a success in terms of effectively presenting information and engendering an interested and serious response from the participants.

Specific presentations and individual faculty members were also evaluated by the participants. Some criticism and suggestions were made, but in all cases the numbers were very small.

The seminars to date have been less successful in establishing linkages among the participants. On the written questionnaires there were complaints that there was not enough opportunity to interact with other participants, either formally or informally, during the seminar. The follow-up interviews did reveal one case where two participants - a lender and a building owner - had met after the seminar to discuss issues related to the seminar.

<u>Impacts</u>. The follow-up interviews present a somewhat negative picture of impacts. However, two mitigating factors must be considered here: the short time that has elapsed since the seminar, and the abnormally high interest rates on loans. Abnormally high interest rates, despite the arguments presented at the seminar, were seen as a strong limiting factor. None of the bankers contacted felt that they could market a 17-20 percent loan, although they would generally be willing to make energy conservation retrofit loans.

The most positive response related to impact came from one of the developers interviewed. He was "sold" on the audit procedure and was planning to have most of his building rehab projects audited. He felt he would have no problems passing the cost of the audit and energy retrofit costs on to a prospective buyer.

Recommendations. Because the seminar was of such high quality and so favorably received by the participants, and because it is too early to fairly assess the effectiveness of the seminar in stimulating energy conservation retrofits on multi-family buildings, the nature of the recommendations is that of fine tuning. The dozen logistic and pedagogic suggestions found on pages 15 and 16 may guide the faculty, staff, and advisory board in honing an already fine instrument.

Quality of the Seminar

The Seminar As A Whole. The reactions of the participants to the quality of the seminar was almost uniformly very positive including responses made in the group discussions, the self-administered questionnaire, and the follow-up interviews. On the self-administered questionnaire, all those who answered the question regarding the overall quality of the seminar said that it was "good" or "excellent." Similarly, responses to questions about the quality of the faculty and relevance of the material were uniformly positive (see Table 1).

The follow-up interviews support these findings: all the interviewees stated that their initial impressions of the seminar have not changed, and they continue to rate the seminar as either "good" or "excellent." They were impressed with the amount of material that had been presented and with the overall quality of the staff. In addition, several of those interviewed had read all or almost all of the supplementary materials and had found them useful and at least as interesting as any similar material.

The Parts of the Seminar. Responses to the individual presentations and to each faculty member were on the whole, very favorable. On the questionnaire, all the responses to all the presentations were "good" or "excellent" with the exception of the Bid Processing, Installation and Monitoring for which about 17% of the respondents marked "fair."

The most frequent criticism of the presentations was that they were "too short." This response further indicates an interest in the material and an affirmation of the presentation.

TABLE 1: <u>OVERALL QUALITY OF THE SEMINAR - SELF-ADMINISTERED QUESTIONNAIRE</u>

41 Respondents

1. Quality of Seminar:*

   11-Excellent, 25-Good, 0-Fair or Poor .

2. Quality of Faculty

   37-Well Prepared, 0-Poorly Prepared .
   22-Interesting, 0-Boring .
   20-Knowledgeable, 0-Not Knowledgeable Enough, (First Seminar Not Included).

3. Quality of Material

   39-Relevant, 0-Irrelevant.
   32-All Covered, 1-Not All Covered .

4. Time

   36-Passed Quickly, 2-Passed Slowly.
   7-Too Short, 2-Too Long, 27-About Right .

   Time Allocation

   5-Excellent, 26-Good, 8-Fair, 0-Poor .

* The difference between the sum of the responses and the total number of respondents (41) is due to the fact that respondents did not necessarily answer all the questions.

The most significant criticisms were that not enough time was allocated for discussion, group work, and interaction among the participants. Comments in the group evaluation session, and responses on the questionnaire and in the interviews all supported that finding. Other responses critical of the presentations, though generally small in number, were made and are summarized in Table 2.

TABLE 2: <u>CRITIQUE OF PRESENTATIONS</u> *

<u>Problem Identification</u>

"Too elementary" - 5; Skipped around too much" - 3.

<u>Examination of the Workshop Manual</u>

"Skipped around too much" - 6.

<u>Working Through Your Choices On The Argyle Court Building</u>

"Too elementary" - 4.

<u>Bid Processing, Installation and Monitoring</u>

"Too elementary" - 6; "too long" - 6;
"Overall the session was "fair" - 5.

*For the sake of brevity and simplicity this table shows only the negative responses from the questionnaires. For a more complete picture, refer to the tabulated responses in the Appendix.

It should be noted that the preponderance of negative comments were made by participants in the December 4 seminar. The December 4 seminar started about a half-hour late because of transportation problems experienced by the opening instructor. The late start, resultant harriedness of the faculty and general tension about being on time probably contributed to the generally more negative responses at this seminar.

Interestingly enough, the December 4 participants were the most affirmative in response to the questions regarding what difference the seminar will make. Ten of eleven indicated they will attempt to do something, six of nine that they will do things differently, and eleven of eleven that they will recommend the seminar to others.

A sense of the relative importance of each part of the seminar to the questionnaire respondents can be found by examining Table 3. This table represents responses to two questions:

If the seminar were shortened, which session would you eliminate?

If the seminar were lengthened, which session would you expand?

TABLE 3: QUALITY OF INDIVIDUAL PRESENTATIONS

Presentation	Eliminate	Expand
Workbook Examination	6	2
Energy Audit	2	11
Financing	3	10
Bid Processing & Monitoring	7	6
Other		
None or abbreviate all	4	–
Question and answer	–	2
Group Work	–	4

The responses under "other" should be taken especially seriously because they require greater initiative. Six respondents felt the need for more active participation strongly enough to write it down.

As Table 3 shows, few respondents would eliminate the Energy Audit or Financing sessions and many would expand them. On the other hand, the respondents were split on the Bid Processing and Monitoring. Considerable care needs to be taken in interpreting these responses. It is a "forced choice" question; the responses do not necessarily mean the participants want to eliminate the presentations they identified. In fact, the other evidence indicates the contrary - with one or two exceptions, questionnaire responses, group evaluations, and interviews show that the participants would not want to eliminate any part of the presentation.

Further complicating interpretation is the fact that many respondents indicated that in a forced choice situation they would eliminate either the Slide Presentation or the Argyle Court Workshop. Since these were the primary pedagogic tools employed in the Energy Audit Presentation, elinimation of one or both of these pieces would greatly reduce the Energy Audit Presentation, apparently contradicting the low number who indicated they would eliminate that session. The point here is that Table 3 should be used to understand the *relative value* of the sessions to the participants and nothing more.

<u>The Faculty</u>. Respondents reactions to the faculty were highly favorable. All respondents indicated that each instructor was "well prepared," "knowledgeable," and, with one exception, "interesting." One respondent stated that one instructor was "boring." The only other criticism

indicated for each of the faculty members was "rambling," (as opposed to "to the point")-- ten of fifty-nine responses. Half of the indications of "rambling" and the only response of "boring" came from the December 4 seminar participants. This was the seminar that was started late.

The majority of the negative responses came in relation to the final session -- Bid Processing, Installation and Monitoring -- and the instructor for that session. This session came at the end of a rather intensive day and was the only session to take place after lunch. These factors probably contributed to the participants reactions.

Lest the reader forget, the negative responses just reviewed represent, in general, exceptions to the preponderance of positive responses made by the participants.

The data were examined to determine how building owners and managers, lenders, rehabbers, and technical assistance providers differed as groups in their responses to the seminar. No significant differences were found. It was discovered, however, that three fourths of the negative criticism came from participants with some energy conservation background (19 of 41 participants). The meaning of this is unclear, however. It could mean that the seminar tended to be less valuable for those with energy conservation backgrounds or that they as a group were better trained critics. In either case, most of the responses from this group were very favorable and the criticism should be understood in that context.

Additional Comments On The Seminar. An important part of the questionnaire was space for additional comments. Many of the comments made by respondents have a direct bearing on improving the seminar to meet their particular needs.

- Complexity was not a major issue, but several people commented that the presentation was too complex (several others stated that it was too elementary). For those with a limited background it was suggested that some terms should be explained more carefully.

- Many respondents (especially at the December 4 seminar) felt that the seminar was too rushed and that they were too much aware of time constraints and clock watching.

  - one person suggested abbreviating all of the presentations;

  - several specifically said that they wanted the seminar longer;

  - several suggested shortening the Slide Presentation;

  - one person felt that there was just too much material being forced into too little time, which allowed less than adequate time for digestion and discussion.

- There was some dissatisfaction with the lack of content in the Bid Processing and Monitoring session. The stories were considered interesting, but several people felt a need for more focus and more technical data.

  - several people suggested the need for showing a good bid;

  - many felt that the bid exercise was a good one and wished there were more opportunities like it throughout the seminar.

- The workbook organization was not considered satisfactory by a number of respondents. "Too much page flipping" was a common complaint.

- One participant suggested that because there are so few energy conservation financing programs that the seminar could be an opportunity to encourage participating banks to establish such programs.

- Other Comments:

  - not enough question and answer;

  - need for more group activity, especially to promote the networking function of the seminar;

  - not enough "how to" or "why" in the audit presentation.

In the follow-up interviews, respondents were specifically asked to suggest improvements for the seminar. These responses complement those given in the written questionaires.

The following list outlines the specific comments made during the interviews. We should also note that several persons had no specific comments on improving the seminar.

- Would have liked an engineer/technician present to make on the spot diagnoses.

- Too much information packed in - perhaps add a second day to the presentation. One lender felt that he was drained by lunch time.

- Encourage financial institution representatives to get more active in the financing section - put them on the spot, make them talk about their policies.

- A more hands-on approach was considered necessary by one of the rehabbers .

- Several saw a need to simplify the financing exercises and present it in a more entertaining way.

- A technical assistance provider suggested putting the contracting section before the financing section to give it more time.

- Might have focused more on technical aspects of energy conservation measures - comparing brick to frame construction, etc.

- Make some of the graphics, particularly in the contracting section of the workbook, more exciting.

- The seminar did not promote much networking either among participants, or between participants and CNT staff. Some of those interviewed wanted to see more group work and more opportunities to meet each other informally.

Impact of the Seminar

Twelve interviews were administered by telephone or in-person to individuals who had participated in one of the seminars. The following groups were represented: six lenders, one technical assistance provider, one not-for-profit rehabber, two for-profit developers, one not-for-profit building owner/manager and one for-profit building owner. Unfortunately, interviews could not be arranged with participants from the December 5 seminar.

It appears from the responses to the follow-up interviews that the seminar has had a limited impact on the actual practice of seminar participants. There are several perceived barriers that have caused difficulty for some individuals, particularly the lenders, and some rehabbers and owners in translating the theory into practice. The most obvious of these are high interest rates and,(for many of the lenders)interviewed, skepticism about the payback projections. Another barrier was lack of time. Given that only one to three months had passed since the seminar and this was the holiday season, it is not entirely surprising that little has been done.

The most positive response came from a developer who was "sold" by the audit presentation on the usefulness of the audit and its relatively low cost. This developer's firm rehabs and sells multi-family buildings. Future projects are expected to involve energy audits and conservation retrofits.

Interestingly, perhaps the most negative response also came from a developer. The developer felt that none of the methods presented could be applied to the type of work with which her firm is involved: scattered site multi-family rehab (the same as for the other developer). The major objection is the inability to justify the upfront costs for the audit and the retrofit. The developer apparently did not feel there is a way to pass these costs on or feared that they would stretch already tight debt-financing costs.

The lenders as a group are interested in the subject matter, but feel very little can be done in the present financial market. Tight money makes it impossible for them to engage in substantial marketing efforts or to consider preferential terms on loans. One problem encountered with the lenders is that very few of the loan officers who attended the seminar are involved in multi-family lending. Several are commercial loan officers and others are either single-family or consumer loan officers.

Three loan officers at one bank feel that it is up to community organizations to educate borrowers about energy conservation. The lenders are ready to make the loans, but feel it inappropriate for them to "impose" conditions or suggest audits. They feel that people are generally interested in borrowing for either cosmetic improvements or emergencies and it is difficult to persuade them to borrow more than originally intended (to have an audit included, for instance).

The lenders interviewed are, at this point, unwilling to include payback analyses in underwriting energy conservation retrofit loans. However two multi-family loan officers serving on the Advisory Committee are willing to use payback analyses from energy audits in evaluating loan applications. One lender expects to use it routinely; the second lender will use payback analyses only in cases in which his institution is the first mortgage holder and the borrower is a borderline credit risk.

The technical assistance provider interviewed was very interested in the program. He feels that the workbook materials will be especially helpful to him and is planning to reread the audit sections before conducting some walk-through audits in the near future. Since he works directly in the energy field it would be unusual if the seminar had any more impact on his activity than in providing new useful material for him, as it apparently has.

The not-for-profit building owner/manager was generally negative about the prospects of utilizing the particular methods suggested at the seminar. Since her organization owns, rehabs and manages low-income multi-family housing, market interest rates can not be justified for improvements from her perspective. In addition, the organization's tight cash flow situation makes an audit prohibitively expensive.

She also feels that because they were doing deep subsidy gut rehab the audit is less useful. Finally , the demise of heavy public subsidy programs throws future activity into question. She remains very interested in the subject, however, and very willing to incorporate energy conservation measures into her work.

The for-profit building owner interviewed is interested in pursuing conservation retrofits on his properties (three 80 unit buildings); however, he is unsure of where to obtain financing and unsure that he could bear the upfront costs of an audit. He also feels that financing is probably too expensive right now. However, he has checked with the city about possible programs and he has made some improvements on his own home in the last month including insulation, weatherstripping, and caulking. Finally, he has signed up to have a Residential Conservation Service audit done on his home, which he said he probably would not have done had he not attended the seminar.

Recommendations

The following recommendations are based on staff observations of the four seminars; analyses of written questionnaires, comments of seminar participants, follow-up interviews; and comments and suggestions made by Advisory Committee members.

1. Provide empirical data in support of the cost and return on investment assertions made in the seminar. One gets the impression that the participants want to believe that an energy audit and retrofit are a good investment and will improve cash flow in the near term, but aren't quite convinced.

2. Provide more group work, question and answer and more informal interaction to involve all participants and to enable more networking.

3. Consider alternative formats: an all day seminar, changes in starting hour, possibly a reduction of material, holding advanced or other follow-up sessions, alternative days of the week and locations.

4. The bid processing and monitoring session may not reflect the experiences that a small building owner may have with contractors. Consult someone who has had extensive dealings with contractors on small jobs on small buildings. Encourage building owner participants who have dealt with contractors to share their experiences during the seminar.

5. There is some question as to whether the seminar really addresses the objections and prejudices that some lenders may have concerning energy conservation lending. The important question, "why don't you do this kind of lending," was not asked on the financial institution survey.

6. Consider simplifying the financial exercise.

7. Consider reorganizing the manual, separating workshop materials from supplementary reading materials to reduce page flipping.

8. Identify and train back-up staff for the seminar. It is probable that present staff will not be able to attend all of the seminars and trained substitutes should be available.

9. Include materials in the workbook on the comparative costs of electric and gas heating in rehabilitated buildings.

10. Update the FHA lenders list in the workbook. The present list is out of date and contains many savings institutions which are no longer in existence.

11. Focus marketing efforts on building owners and managers. Owners and managers are the *sine qua non* for actualizing energy conservation retrofits. Further, their participation in the seminar enhances the discussions and imbues them with a greater sense of reality.

12. Consider either substituting another example for the Albany Avenue Building or presenting it as a more traditional ownership structure. There was a sense that the unusual ownership arrangement tended to mask the energy audit and retrofit lessons to be learned.

Methodology

The evaluation was based upon the results of group discussions at the conclusion of each seminar and two surveys: the first, a self-administered written questionnaire given to all participants at the conclusion of each seminar; and the second, telephone or personal interviews of selected participants conducted during the month of January. The purpose of the group discussion and the written questionnaire was to ascertain the perceptions of seminar participants regarding the quality and comprehensiveness of the presentations and faculty performance. The follow-up interview survey was designed primarily to assess the impact of the seminars on the activity of the following types of participants: financial institution representatives, building owners or managers, contractors and other rehab organization representatives, and technical assistance providers.

Seminar Evaluation Questionnaire - Design of the Evaluation. Of 45 participants in the four seminars, 41 completed questionnaires - an excellent response rate. However, it is impossible to make any statistically valid generalizations about any sub-groups (either by seminar or type of assistance group) because numbers become too small. Nonetheless, the data were tabulated by such sub-groups and those responses which appear to deviate significantly from the norm have been noted, because of the importance of understanding how each group responded. Finally, additional comments made by seminar participants have been recorded.

The results of this evaluation give an impressionistic picture of the strengths and weaknesses of the four seminars and the faculty. However, the relative consistency of responses suggests that these commments provide a useful point of departure for revising and refining the seminar and gauging the success of the first series of seminars.

Follow up Interview Evaluation Design. Twelve participants from the seminars were interviewed by telephone or in person. These participants were chosen from the pool of completed questionnaires. Because of the limited pool of participants, there was no attempt made at drawing a random sample. However, care was taken to attempt to interview respondents from each seminar and from each of the major groups represented. However, we were unable to interview any of the participants at the December 5 seminar. Members of the Advisory Committee were excluded from the sample. Interviews were conducted using an open-ended question format (a sample of questions is appended) covering the participants reflections about the seminar itself, the workbook materials, what they have or have not done as a result of the seminar and why.

The purpose of the interviews was to generate additional information to supplement the written questionnaires and group discussions in evaluating the presentations and materials, and to provide an indication of the impact of the seminar.

Participation in the Seminars. Institute staff attended all four seminars as critical observers. Staff observations are incorporated in the findings and recommendations. Additionally, the Advisory Committee overseeing the development and implementation of the seminar met in January to conduct a preliminary evaluation; comments by Committee members have also been incorporated into this report.

APPENDICES

Appendix A: Survey Instruments

Written Questionnaire

This questionnaire was administered to virtually all seminar participants.

Follow-up Survey

The general questions on the survey were asked of all those interviewed. Specific questions were directed at each group of participants: building owners, lenders, technical assistance providers, and rehab organizations. Only the building owner/rehab survey instrument is included in this Appendix. Questions asked of the other groups were similar.

SHOPPING FOR ENERGY CONSERVATION IN MULTI-FAMILY HOUSING

SEMINAR EVALUATION

Woodstock Institute, a not-for-profit research and technical assistance corporation, is assisting the Center for Neighborhood Technology in evaluating the *Shopping For Energy Conservation* Seminars. To insure that future Seminars are of the highest quality possible we would appreciate your candid evaluation of the Seminar just completed.

Since we find that immediate perceptions are of enormous value, please complete this questionnaire and return it to a Woodstock Institute staff member before you leave.

I. REPRESENTATION (please check the appropriate responses.)

Your Additional Comments

( )Lender: ( ) S&L, ( ) Bank;

( ) Loan Officer, ( ) Appraiser, ( ) Other(specify at right):

( )Multi-family Building Owner or Manager:

( ) 2-5 unit, ( ) 6-12 unit, ( ) over 12 unit, ( ) more than one building.

( )Building/Rehabber: ( ) For profit, ( ) Not-for-profit.

( )T.A. Provider: ( ) Energy audit, ( ) Other (specify at right):

( ) Other(specify): ____________________

II. ENERGY CONSERVATION BACKGROUND (please check appropriate responses.)

Your Additional Comments

( ) I have made or received an energy conservation retrofit loan.

( ) I have done energy conservation retrofits:

ON ( ) Single-family, ( ) 2-5 unit, ( )6-12 unit, ( ) over 12 unit.

FOR ( ) Low or no cost,( ) Moderate cost, ( ) High cost.

( ) I have assisted building owners/managers in energy conservation retrofit by:

( ) Providing energy audits, ( ) Referring contractors,

( ) Doing the work,( ) Other (specify): ____________________

( ) Additional information about my energy conservaton background is at right:

( ) I have had little or no previous energy conservation background.

III. OVERALL QUALITY OF THE SEMINAR (please check appropriate responses.)

Your Additional Comments

Overall, I think the Seminar was: ( )Excellent, ( )Good, ( )Fair, ( )Poor.

In general, the faculty was: (check one each)

1. ( ) Well prepared, ( ) Poorly prepared.
2. ( ) Interesting, ( ) Boring.
3. ( ) Knowledgeable, ( ) Not knowledgeable enough.

The material, in general, was: (check one each)

1. ( ) Relevant, ( ) Irrelevant.
2. ( ) Too complex, ( ) Too elementary, ( ) About right.

The Seminar was: ( ) Too Short, ( ) Too long, ( ) About right.

The time seemed to pass: ( ) Quickly, ( ) Slowly.

The time allocation was: ( ) Excellent, ( ) Good, ( ) Fair, ( ) Poor.

I would have liked the Seminar to:

Start: ( ) Earlier, ( ) Later, ( ) Same time.
End: ( ) Earlier, ( ) Later, ( ) Same time.
Take place on a: ( )Mon, ( )Tues, ( )Wed, ( )Thurs, ( )Fri, ( )Sat.

If the Seminar were shortened, I would eliminate the: (check one)

( ) Energy audit presentation.
( ) Slide presentation.
( ) Workbook examination.
( ) Other (specify) ____________________.
( ) Argyle court workshop.
( ) Financing presentation.
( ) Bid processing and monitoring presentation.

If the Seminar were lengthened, I would expand the: (check one)

( ) Energy audit presentation.
( ) Slide presentation.
( ) Workbook examination.
( ) Other (specify) ____________________.
( ) Argyle court workshop.
( ) Financing presentation.
( ) Bid processing and monitoring presentation.

The time allowed for discussion was: ( ) Adequate, ( ) Inadequate.

All the important material was: (check one)

[illegible] ( ) [illegible] it should have included: (explain at right)

IV. SECTION EVALUATIONS (please check the appropriate response...) — Your Additional Comments

A. *Energy Problem Identification and the Energy Audit*

Overall this session was: ( )Excellent, ( )Good, ( )Fair, ( )Poor.

The instructor was: (check one each)

1. ( ) Well prepared, ( ) Poorly prepared.
2. ( ) Interesting, ( ) Boring.
3. ( ) To the point, ( ) Rambling.
4. ( ) Knowledgeable, ( ) Not knowledgeable enough.

The Problem Identification and Energy Audit presentation was: (check one each)

1. ( ) Relevant, ( ) Irrelevant.
2. ( ) Too complex, ( ) Too elementary, ( ) About right.
3. ( ) Too long, ( ) Too short, ( ) About right.
4. ( ) Well sequenced, ( ) Skipped around too much.

The Examination of the Workshop Manual was: (check one each)

1. ( ) Relevant, ( ) Irrelevant.
2. ( ) Too long, ( ) Too short, ( ) About right.
3. ( ) Well sequenced, ( ) Skipped around too much.

The Slide Presentation was: (check one each)

1. ( ) Relevant, ( ) Irrelevant.
2. ( ) Too long, ( ) Too short, ( ) About right.
3. ( ) Well sequenced, ( ) Skipped around too much.

Working Through Your Choices on the Argyle Court Building was: (check one each)

1. ( ) Relevant, ( ) Irrelevant.
2. ( ) Too complex, ( ) Too elementary, ( ) About right.
3. ( ) Too long, ( ) Too short, ( ) About right.
4. ( ) Well sequenced, ( ) Skipped around too much.

The discussion was: (check one each)

1. ( ) Relevant, ( ) Irrelevant.
2. ( ) Too complex, ( ) Too elementary, ( ) About right.
3. ( ) Too long, ( ) Too short, ( ) About right.
4. ( ) Well sequenced, ( ) Skipped around too much.

B. *Financing: Packaging a Loan*

Overall this session was: ( )Excellent, ( )Good, ( )Fair, ( )Poor.

The instructor was: (check one each)

1. ( ) Well prepared, ( ) Poorly prepared.
2. ( ) Interesting, ( ) Boring.
3. ( ) To the point, ( ) Rambling.
4. ( ) Knowledgeable, ( ) Not knowledgeable enough.

The presentation was: (check one each)

1. ( ) Relevant, ( ) Irrelevant.
2. ( ) Too complex, ( ) Too elementary, ( ) About right.
3. ( ) Too long, ( ) Too short, ( ) About right.
4. ( ) Well sequenced, ( ) Skipped around too much.

C. *Bid Processing, Installation, and Monitoring*

Overall this session was: ( )Excellent, ( )Good, ( )Fair, ( )Poor.

The instructor was: (check one each)

1. ( ) Well prepared, ( ) Poorly prepared.
2. ( ) Interesting, ( ) Boring.
3. ( ) To the point, ( ) Rambling.
4. ( ) Knowledgeable, ( ) Not knowledgeable enough.

The presentation was: (check one each)

1. ( ) Relevant, ( ) Irrelevant.
2. ( ) Too complex, ( ) Too elementary, ( ) About right.
3. ( ) Too long, ( ) Too short, ( ) About right.
4. ( ) Well sequenced, ( ) Skipped around too much.

V. What difference will it make?

- Are there any things you will do (or try to do) as a result of attending the Seminar that you would not have done otherwise? ( )Yes, ( )No. If yes, please explain at right:
- Are there any things that you will do differently as a result of attending the Seminar? ( )Yes, ( )No. If yes, please explain at right:
- Will you recommend this Seminar to associates, friends or clients? ( )Yes, ( )No.

VI. Please complete the following:

Name ______________________ Phone ____________

Address ______________________ State __________ Zip ______

Please return to: Woodstook Institute 410 N. Michigan, Chicago, IL 60611 (644-4469)

Appendix B: Self Administered Questionnaire - Tabulations

CNT FOLLOW-UP SURVEY

General Questions

1. As you think back on the Seminar, what sticks out for you?

   Any highlights?

   Any low spots?

2. What is your overall impression of the Seminar at this point?

   Would you rate it excellent, good, fair, or poor?

3. In retrospect, what was the most valuable thing to you about the Seminar?

   What was the most important thing you learned?

4. Given a little "distance," are there any things about the Seminar you feel may need to be strengthened?

Any pieces missing?

5. If you were put in charge of running this Seminar next week, what would you do differently?

Materials

6. Have you had a chance to read any of the supplementary materials in the Workbook?

If yes, what parts have you read?

Did you find it (them) helpful?

Why or why not?

If no, do you think you are likely to read it in the foreseeable future?

If so, which sections(s) are you most interested in reading?

Behavior Changes - Building Owners and NHC/HRO

1. Are there any actions or decisions you have taken as a result of the Seminar?

   If so, what?

2. Do you have any plans to do anything?

   If so, what and when?

3. Do you look at your building(s) or the building(s) you are working on any differently now than you did before the Seminar?

   If so, how?

4. Are there any activities that you do differently now? or have a different perspective on?

   (e.g. maintenance, bookkeeping, contracting for equipment or services)

   If so, what activities (perspectives) and how have they changed?

5. Do you plan to do any building rehab in the foreseeable future?

   If yes, will it include any energy conservation retrofit?

   How do you plan to finance the rehab?

   If yes, have you discussed it with any lenders?

   If yes, what has been their response?

   If no, what kind of response do you expect?

6. Are you considering an energy audit on your building(s)?

If yes, what factors are you considering?

At this point, what do you think is the probability you will have an energy audit conducted within a year?

6 months ?

3 months?

If no, why not?

7. Have you talked with any of the other participants from the Seminar?

If yes, who and about what? Was it helpful?

CNT Staff?

8. Have you considered using the free loan packaging assistance offered by the Center For Neighborhood Technology?

If no, why not?

If yes, when do you anticipate using it?

(What factors are you considering?)

9. Any other comments about the Seminar? or Energy Conservation in general?

Thank you for your time and thoughtfulness.

SHOPPING FOR ENERGY CONSERVATION IN MULTI-FAMILY HOUSING

SEMINAR EVALUATION

Woodstock Institute, a not-for-profit research and technical assistance corporation, is assisting the Center for Neighborhood Technology in evaluating the *Shopping For Energy Conservation* Seminars. To insure that future Seminars are of the highest quality possible we would appreciate your candid evaluation of the Seminar just completed.

Since we find that immediate perceptions are of enormous value, please complete this questionnaire and return it to a Woodstock Institute staff member before you leave.

I. REPRESENTATION (please check the appropriate responses.)

9 Lender: ( ) S&L, ( ) Bank;

( ) Loan Officer, ( ) Appraiser, ( ) Other(specify at right):

10 Multi-family Building Owner or Manager:

( ) 2-5 unit, ( ) 6-12 unit, ( ) over 12 unit, ( ) more than one building.

16 Building/Rehabber: ( ) For profit, ( ) Not-for-profit.

10 T.A. Provider: ( ) Energy audit, ( ) Other (specify at right):

4 Other(specify): ______________________

Your Additional Comments

TOTAL RESPONSES FOR ALL FOUR SEMINARS

II. ENERGY CONSERVATION BACKGROUND (please check appropriate responses.)

( ) I have made or received an energy conservation retrofit loan.

( ) I have done energy conservation retrofits:

ON ( ) Single-family, ( ) 2-5 unit, ( )6-12 unit, ( ) over 12 unit.

FOR ( ) Low or no cost,( ) Moderate cost, ( ) High cost.

( ) I have assisted building owners/managers in energy conservation retrofit by:

( ) Providing energy audits, ( ) Referring contractors,

( ) Doing the work,( ) Other (specify): ______________________

( ) Additional information about my energy conservaton background is at right:

18 I have had little or no previous energy conservation background.

Your Additional Comments

III. OVERALL QUALITY OF THE SEMINAR (please check appropriate responses.)

Overall, I think the Seminar was: 11 Excellent, 25 Good, (–) Fair, (–) Poor.

In general, the faculty was: (check one each)

1. 37 Well prepared, (–) Poorly prepared.
2. 22 Interesting, (–) Boring.
3. 20 Knowledgeable, (–) Not knowledgeable enough. [NOT ASKED OCT 24]

Your Additional Comments

1. 39 Relevant, (–) Irrelevant.
2. 1 Too complex, 3 Too elementary, 16 About right.

The Seminar was: 7 Too Short, 2 Too long, 27 About right.

The time seemed to pass: 36 Quickly, 2 Slowly.

The time allocation was: 5 Excellent, 26 Good, 8 Fair, – Poor.

I would have liked the Seminar to:

Start: (– Earlier, 8 Later, 26 Same time.
End: 3 Earlier, 12 Later, 14 Same time.
Take place on a: (–)Mon, 2 Tues, 3)Wed, 3 Thurs, 8 Fri, 12 Sat.

If the Seminar were shortened, I would eliminate the: (check one)

2 Energy audit presentation.
3 Slide presentation.
6 Workbook examination.
Other (specify) ____.
9 Argyle court workshop.
3 Financing presentation.
6 Bid processing and monitoring presentation.

If the Seminar were lengthened, I would expand the: (check one)

11 Energy audit presentation.
2 Slide presentation.
2 Workbook examination.
6) Other (specify) QUESTION AND ANSWER, GROUP WORK, PARTICIPATION.
6 Argyle court workshop.
13 Financing presentation.
7 Bid processing and monitoring presentation.

The time allowed for discussion was: 15 Adequate, 12 Inadequate. [NOT ASKED OCT. 24]

All the important material was: (check one)

32 Covered, 1 Not covered; it should have included: (explain at right)

IV. SECTION EVALUATIONS (please check the appropriate responses.)

Your Additional Comments

A. *Energy Problem Identification and the Energy Audit*

Overall this session was: 13 Excellent, 22 Good, – Fair, (–) Poor.

The instructor was: (check one each)

1. 30 Well prepared, (–) Poorly prepared.
2. 26 Interesting, (–. Boring.
3. 18 To the point, (2) Rambling.
4. 25 Knowledgeable, (–) Not knowledgeable enough.

The Problem Identification and Energy Audit presentation was: (check one each)

1. 32 Relevant, (–) Irrelevant.
2. (2) Too complex, (5) Too elementary, 16 About right.
3. (3) Too long, (6 Too short, 14 About right.
4. 22 Well sequenced, (3) Skipped around too much.

The Examination of the Workshop Manual was: (check one each)

1. 30 Relevant, (–) Irrelevant.
2. (2 Too long, (11 Too short, 13 About right.
3. 13 Well sequenced, 6 Skipped around too much.

The Slide Presentation was: (check one each)

1. 32 Relevant, (– Irrelevant.
2. (6 Too long, 2) Too short, 17 About right.
3. 18 Well sequenced, 1 Skipped around too much.

Working Through Your Choices on the Argyle Court Building was: (check one each)

1. 22 Relevant, (–) Irrelevant.
2. 2 Too complex, (3) Too elementary, 12 About right.
3. (1 Too long, (7) Too short, 8 About right.
4. 16 Well sequenced, (1 Skipped around too much.

The discussion was: (check one each)

1. 29 Relevant, (– Irrelevant.
2. (– Too complex, (1 Too elementary, 18 About right.
3. (– Too long, (6 Too short, 15 About right.
4. 22 Well sequenced,

B. *Financing: Packaging a Loan*

Overall this session was: 12 Excellent, 20 Good, (/ Fair, (– Poor.

The instructor was: (check one each)

1. 31 Well prepared, (– Poorly prepared.
2. 24 Interesting, (— Boring.
3. 21 To the point, (1) Rambling.
4. 25 Knowledgeable, (— Not knowledgeable enough.

The presentation was: (check one each)

1. 34 Relevant, (–) Irrelevant.
2. (1) Too complex, (1) Too elementary, 19 About right.
3. (1) Too long, 8 Too short, 11 About right.
4. 20 Well sequenced, (1) Skipped around too much.

C. *Bid Processing, Installation, and Monitoring* [not asked in this way Oct 24]

Overall this session was: 10 Excellent, 14 Good, 5 Fair, — Poor.

The instructor was: (check one each)

1. 21 Well prepared, — Poorly prepared.
2. 18 Interesting, 1 Boring.
3. 11 To the point, 7) Rambling.
4. 21 Knowledgeable, –) Not knowledgeable enough.

The presentation was: (check one each)

1. 26 Relevant, — Irrelevant.
2. — Too complex, 6 Too elementary, 12 About right.
3. 4 Too long, 5 Too short, 9 About right.
4. 18 Well sequenced, 3 Skipped around too much.

V. What difference will it make?

- Are there any things you will do (or try to do) as a result of attending the Seminar that you would not have done otherwise? 27 Yes, 4 No. If yes, please explain at right:
- Are there any things that you will do differently as a result of attending the Seminar? 10 Yes, 10 No. If yes, please explain at right:
- Will you recommend this Seminar to associates, friends or clients? 31 Yes, 1 No.

VI. Please complete the following:

Name ______________________ Phone ______________

Address ______________________ State __________ Zip ______

Please return to: Woodstock Institute 410 N. Michigan, Chicago, IL 60611 (644-4469)

A HYPOTHETICAL ENERGY CONSERVATION LOAN

The following is hypothetical example of the process of extending a multi-family building energy conservation retrofit loan. It is hypothetical because, unfortunately, we have been unable to find an appropriate example of energy conservation lending for existing multi-family buildings. It is our intention to show how such lending could be done using fairly common underwriting standards and terms.

Encon Bank

Energy Conservation Retrofit Loans

Current Loan Terms For Multi-family Rehab

Loans of less than $7,500

Maximum term:	5 years
Security:	None
Interest:	Prime + 1
Points:	3
Maximum Loan:	100%

Special Considerations For Energy Conservation Retrofits:

Demonstration of positive immediate effect on cash flow will be considered a positive underwriting factor but will not substitute for other factors.

Persuasive evidence that retrofit will result in five year payback and immediate reduction in operating costs greater than debt service on the proposed loan; and evidence that work has been completed in a proper manner will qualify borrower for a refund of 1/3 of origination fee.

Loan may include cost of energy audit.

LOANS IN EXCESS OF $7,500

Maximum term:	20 years
Security:	2nd mortgage
Interest:	Prime + 1
Points:	3%
Maximum Loan:	to 90% of retrofit and audit costs if owner's total equity in the building doesn't fall below 20%.

Special considerations for energy conservation retrofits:

- Class "A" energy audit required.
- 5 year pay back on aggregate improvements required.
- Interest at prime – 2 and points at 2% if:

  Audit provides persuasive evidence that improvements will result in immediate operating cost reductions greater than the debt service;

  Value of security property will increase by at least the amount of loan;

  Encon Bank holds 1st mortgage; and

  All other underwriting standards are met.

- Loan may include cost of audit.
- Bid, contract, payout and inspection requirement same for all loans.

Application

The multi-family energy conservation retrofit loan process begins with the loan officer interviewing the applicant as he fills out an application form. With multi-family applicants, four factors are important: the creditworthiness of the borrower, the motivation of the borrower, his or her management ability, and the present and projected value of the security property - the building to be improved. Unlike the homeowner, who is chiefly interested in having a nice home, the apartment building owner may have a wide range of motivations from an intention to speculate, to a desire for a stable investment, to an interest in historic preservation or neighborhood revitalization. And unlike the single-family homeowner, the multi-family owner must have the talent necessary to supervise maintenance work, find good tenants, and balance costs and revenues.

The loan application and borrower interview are the first steps in collecting the information needed to determine the relative risks of the loan.

In addition, the loan officer requests additional information from the borrower including:

1) income and expense statements for the past five years;
2) income and expense projections;
3) utility bills for the past five years;
4) a complete energy audit by a qualified auditor;
5) a contractor estimate;
6) net worth statement from borrower; and
7) other information as required.

The loan officer reviews the application with the income property loan manager and the loan is either denied or a decision is made to collect the additional needed information.

The loan officer orders credit reports on the borrower and an appraisal which estimates the current and projected value of the building to be improved and notes the quality of care the building is receiving. Also, the title and property tax payment records are checked.

A critical part of appraising the energy conservation needs and potential of the building is to have a Class "A" Energy audit performed on the building by a qualified auditor. The audit must provide detailed information about the areas in the building where energy is being lost, retrofit recommendations, an estimate of the energy savings that will accrue from these recommendations, and the payback for each recommendation calculated by measuring the cost of the recommendation against the estimated savings. These recommendations must be written so as to make them easy to understand.

Evaluating The Loan. The accumulated information represents the loan application. At this point, the loan officer summarizes and evaluates the accumulated information, prepares a recommendation and reviews the loan file and recommendation with the manager. The loan may be denied at this point.

The recommendation is forwarded to the loan committee for approval. The committee might reject the loan, accept the recommendation, modify the recommendation, or table it pending acquisition of additional information -- in which case the process is repeated.

Implementing The Loan. The committee determines the size, terms and conditions of the loan, including whether the loan qualifies for preferential energy retrofit terms. The loan officer prepares a loan commitment offer for the borrower. If accepted, a closing date is set.

At closing, the lien, the contract and pay out structure are executed; and the loan is placed in an escrow account. Payments are made as work and inspections are completed and vouchers and waivers-of-lien are submitted. Final payment is withheld until completion of the heating (and/or cooling) season is completed to insure that all systems are performing satisfactorily.

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