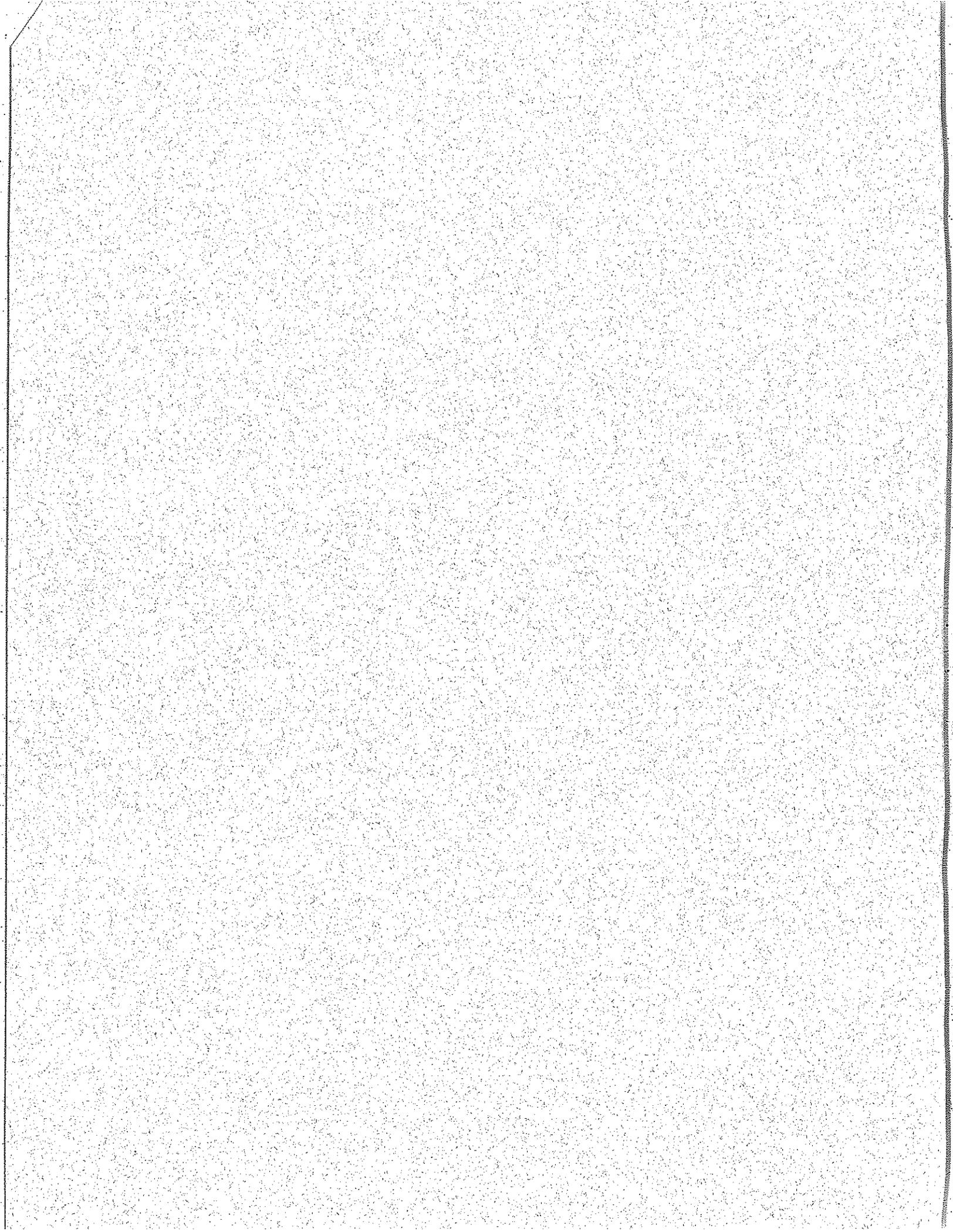


Nebraska Public Buildings Energy Program

Marketing Research



CONTENTS

EXECUTIVE SUMMARY.....	A-3
Introduction	A-3
Market Research Objectives	A-3
Methodology	A-3
Description of Programs	A-4
Summary of Findings.....	A-4
Market Conditions.....	A-4
Program Implementation and Marketing	A-7
Recommendations	A-8
Program Focus	A-8
Program Design.....	A-9
Program Marketing	A-9
INTRODUCTION.....	A-11
The Task Force Process	A-11
Market Research Objectives and Methodology	A-11
Description of Programs	A-13
Organization of the Report.....	A-14
MARKET RESEARCH FINDINGS.....	A-15
Market Conditions.....	A-15
Municipal Government	A-15
County Government.....	A-18
School Districts	A-20
Health Care Institutions	A-22
Program Implementation.....	A-25
Energy Circuit Rider Program	A-25
The Zero-Interest Loan Program.....	A-28
Marketing Channels	A-28
Marketing Themes	A-32
RECOMMENDATIONS.....	A-33
Program Focus	A-33
Program Design.....	A-33
Program Marketing	A-34
APPENDICES.....	A-35
AA. Completed Telephone Interviews:	
List of Respondents	A-35
Municipal Government	A-35
County Government.....	A-36
School Districts	A-36
Health Care Institutions	A-37

Technical Community Colleges	A-38
Engineering Firms	A-38
AB. Telephone Interview Questionnaires	A-39
Nebraska Market Research Report	A-39

EXECUTIVE SUMMARY

INTRODUCTION

During the spring of 1988, the Nebraska Public Buildings Energy Program Task Force met to identify programs to help public sector and private nonprofit organizations reduce energy costs in their facilities. The Task Force, staffed by the Nebraska Energy Office and a group of consultants led by Technical Development Corporation, developed technical assistance and financing options to facilitate the implementation of major energy improvement projects.

The program design process took into account the technical potential for energy efficiency in various kinds of facilities, capital budgeting and financing practices in the different jurisdictions, and the policy goals of the Nebraska Energy Office. As a result of these considerations, the Task Force designed different programs for two groups: State government facilities, and the facilities of local jurisdictions including municipal and county government, school districts, health care institutions and private colleges.

The Nebraska Energy Office then retained Technical Development Corporation to conduct research on the market for these programs among local jurisdictions, and to prepare recommendations concerning program implementation and marketing.

MARKET RESEARCH OBJECTIVES

The three objectives of this research are:

- to determine if the proposed program designs meet the needs of local jurisdictions and to recommend program design changes if necessary;
- to identify marketing strategies and channels for the programs;
- to evaluate proposed delivery mechanisms and suggest others if necessary.

METHODOLOGY

Information for the analysis was collected through in-depth interviews with 4-5 individuals from each group deemed to have a key role in the various programs. The groups included:

- elected and appointed officials of the institutions at which the programs are targeted;
- representatives of architects, engineers and other contractors that serve the targeted sectors;
- officials of trade associations of the targeted institutions; and,
- officials of the technical community colleges and other organizations that could deliver the programs.

The rationale for the selection of interviewees was to gain different perspectives on the issues mentioned above.

DESCRIPTION OF PROGRAMS

The Task Force recommended two programs for local jurisdictions. The Energy Circuit Rider Program, a technical assistance program, would make the services of an energy expert available on a contractual basis to local jurisdictions. The Energy Circuit Rider would be based at a local technical community college and would help local jurisdictions set up an energy use and cost accounting system and identify both low cost and capital intensive energy improvement projects. The Circuit Rider would offer training to facilities managers and operators in the energy efficient operation of buildings and would also help local jurisdictions apply for financing for energy projects.

The financing program consists of a zero-interest revolving loan fund which would be made available to local jurisdictions for funding energy improvement projects.

SUMMARY OF FINDINGS

MARKET CONDITIONS

Municipal Government

Capital Improvement Priorities: Population shifts and difficulties in the farm economy have severely constrained capital budgets among municipalities, particularly in rural areas. In general, only the most urgent capital improvements — those required by state and federal regulations or to keep a facility operable — are undertaken.

The highest priority projects in Nebraska municipalities are infrastructure improvements to water supply, wastewater treatment and street systems (a limited number of federal 75% grants are available for these projects). Deferred maintenance projects such as

roof repairs are also high priority capital budget items. In some cases, building replacement and expansion are higher priority projects than more limited projects such as energy improvements. Unless energy projects are grant-subsidized or occur in catastrophic circumstances (failure of a boiler), they will be deferred.

Most of the municipal officials interviewed were aware of energy-related improvements that could be made in their buildings. They simply held a very low priority.

Capital Financing Methods: In general, municipal officials are reluctant to borrow to finance capital improvements. Most are financed through current expenditures, variants on sinking funds or federal grants. Occasionally, municipalities will borrow through general obligation bonds, but the use of this vehicle is complicated by the need for a referendum.

Reaction to Proposed Programs: Municipal officials believed there was a strong need for the services of the Circuit Rider program, and most understood the potential value of these services. On the other hand, most expressed reservations about paying for these services until they were convinced that the expenditures would be cost-effective. City councils would have to approve any such contracts, further complicating the implementation of a fee-for-service proposal.

Municipal officials expressed interest in a zero-interest loan option for project financing, particularly if amortization schedules were flexible. Municipal officials understood there was a backlog of energy efficiency projects in their facilities, however, school districts have been relatively reluctant to use an existing zero-interest loan program. It is therefore difficult to predict what kind of demand there will be for a zero-interest loan program for municipalities.

County Government

Capital Improvement Priorities: With a few exceptions, counties face more economic difficulties than municipalities. Many counties have reached the limit of their tax levy. Moreover, the capital budgeting process is more inherently conservative in counties. Voters must approve the capital budget each year, and most counties are administered by elected (as opposed to appointed) officials. There is a great deal of direct pressure to keep expenditures down.

Counties own relatively few buildings, and most of these are old and in fairly poor shape. Under these conditions, energy-related improvements take very low priority. Unlike their counterparts in cities and towns, most county officials interviewed were not aware of energy efficiency improvements that could be made in their facilities.

Capital Financing Methods: Counties generally pay for capital improvement projects out of the capital budget which is approved by the voters each year. Counties are averse to borrowing and rarely do so although general obligation bond issues may be used to finance new buildings. These are not easy to pass given economic conditions.

Reaction to the Proposed Program: The reaction of county officials to the usefulness of the services of the Energy Circuit Rider was mixed. In general, county officials interviewed had greater difficulty in understanding the value of the proposed program.

There is clearly a need, however, to implement energy improvement projects. Many county courthouses are aging facilities and few energy efficiency projects have been implemented. A grant program that ultimately financed energy projects in five courthouses, had 25 applicants to the program.

School Districts

Capital Improvement Priorities: Energy improvements hold low priority for school officials. Federal requirements for asbestos abatement, the need to replace aging facilities and partial market saturation from the ICP grant program and the state School Weatherization Program all contribute to this situation.

Capital Financing Methods: School districts finance major capital improvement projects, such as new buildings, through general obligation bonds which are often presented to voters several times before they are passed. As a result, the capital improvement budgeting process includes substantial opportunity for public input. School districts finance lesser projects from currently available funds.

Reaction to Proposed Programs: Respondents expressed cautious interest in the services of the Energy Circuit Rider but voiced concern about the amount of fees. Most officials and administrators interviewed were not able to cite specific energy efficiency projects that they wanted to implement. Respondents gave mixed responses when asked if the availability of more loan monies would move energy projects up in their capital budgeting process.

Health Care Institutions

Capital Improvement Priorities: Energy improvements hold low priority for most health care institutions. Energy costs account for only 5 to 8% of hospital operating costs. Also, operating expense reimbursement practices do not reward efficiency improvements. More urgent needs are renovations to expand or provide new services, as well as, the replacement and maintenance of medical equipment.

Capital Financing Methods: Hospitals finance most capital improvements out of retained revenues or through private fundraising. Less frequently they borrow from commercial banks or public borrowing entities.

Reaction to the Proposed Programs: Hospital officials interviewed generally saw little value in the proposed programs, due largely to the minor financial impact of energy expenditures on their operations.

PROGRAM IMPLEMENTATION AND MARKETING

Respondents from all the targeted sectors held very similar views about how the programs should be designed and marketed. Therefore, the discussion does not separate out findings by sector, except as noted in the text.

Assessment of Technical Community College Capabilities: A number of the respondents praised the community colleges and their programs. Most of the respondents in all sectors, except health care, have had professional contact with the community colleges and expressed approval of their implementing this program.

Community colleges deliver a number of programs comparable to the Energy Circuit Rider Program. These are technical assistance/education/training type programs for local jurisdictions as well as to individual industries and families. These programs are funded through state or federal agencies and require the community colleges to hire new staff with the appropriate expertise and to market the programs. Several of these programs require the community colleges to pay part of the costs from fees for services.

The community college's experience implementing programs similar to the Energy Circuit Rider has been largely positive. An evaluation of one such program commented on the lack of consistency in delivery across the state. This problem is caused, according to the community college trade association, by lack of markets in some regions for fee-based services.

Other Potential Program Providers: Several county and municipal officials noted that regional economic development districts offer services similar to the Energy Circuit Rider. The development districts provide technical assistance to municipalities and counties on a wide range of projects including assistance in applying for federal and state grants and loans. Several development districts are now or have been formally involved in delivering energy efficiency programs. If the development districts do not actually deliver grant and loan programs, they market these funding opportunities to their constituents.

The Nebraska Energy Office and several state-wide trade organizations report that the development districts are uneven in both the extent of the services they offer to their constituents, and the quality of delivery of those services. Some development districts are innovative and experienced and retain highly qualified staff. Others provide more limited services and have difficulty retaining professional staff and so are losing members. Several out-of-state development districts serve Nebraska communities, and several counties in south central Nebraska are not formally served by a development district.

Marketing Channels: The opportunities for marketing by trade associations are excellent. Each of the local jurisdictions have trade associations that agreed to market the technical assistance and funding opportunities to their constituents. In each trade association, there are a variety of avenues for marketing including monthly newsletters, annual state-wide meetings, regional meetings and workshops.

Contractual service providers will also be an effective means of marketing the programs. These groups include architectural and engineering firms, the development districts and educational service units. In each case, the incentive for marketing the programs is increased business or fulfillment of the groups' mission of assisting their constituents.

Marketing Themes: Observers such as engineers, contractors and trade association officials noted that, for the most part, the potential users for these programs have very little knowledge of energy efficiency improvements. The potential users are:

- largely unaware of the potential benefits of energy efficiency improvements;
- unclear as to how to go about designing and implementing such improvements;
- skeptical of claims for the financial benefits and very conservative about incurring costs speculatively.

These observations were thoroughly corroborated in our conversations with local officials.

RECOMMENDATIONS

PROGRAM FOCUS

The program focus should be services to municipalities and counties. School districts and hospitals have already been well-served

by federal and state grant and loan programs. While there clearly are cost-effective energy improvement projects that remain to be implemented in schools and hospitals, some degree of market saturation has occurred.

PROGRAM DESIGN

The Energy Circuit Rider Program should be offered without a fee schedule. In general, municipal and county officials have no experience with energy related improvements. Both groups expressed considerable resistance to fees. The first few years of the program must be used to develop a track record. Fees will be an unnecessary obstacle in gaining acceptance for the program.

The Energy Circuit Rider Program should have an intensive education component and a flexible approach to the kinds of services that are provided. Local jurisdictions in Nebraska, especially the smaller municipalities and counties, will need considerable education and hand-holding in order to be able to evaluate energy improvement projects among their other capital budget priorities.

The zero-interest loan program should have a flexible loan retirement schedule. As with the successful School Weatherization Loan Program, amortization periods should be geared to the energy savings produced by the measures financed.

Loan funds should be available to fund projects that have wider impacts than energy cost savings. Many local jurisdictions have general renovation projects, deferred maintenance projects and even new building projects in which energy efficiency improvements would be very cost-effective. These projects are higher priority capital funding items than energy improvement projects by themselves. This program should allow energy improvement loan funds to be rolled into financing from other sources to allow implementation of these major projects.

PROGRAM MARKETING

With adequate contractual controls, the technical community colleges appear to be the appropriate organizations to deliver the Energy Circuit Rider Program.

The trade associations and service providers such as economic development districts and educational service units can offer strong marketing support for the programs. This function is within their mission and can be accomplished through existing staff.

The Nebraska Energy Office should directly manage any loan programs. Local officials showed no preference for local banks or other institutions as program operators or agents. It will probably

cost less for the Energy Office to manage this part of the program itself.

The Nebraska Energy Office should develop case studies of successful examples of local jurisdictions implementing energy efficiency projects in Nebraska. Effectively communicated local case studies are convincing evidence of the reality of estimated benefits and costs. Development of such case studies and their presentation should be a formal part of the Energy Circuit Rider Program.

To ensure that case materials are developed quickly, the Energy Office should fully subsidize technical assistance audit costs in a selected set of facilities.

These programs should be high visibility state programs with direct and vigorous support from the Governor. Active support and encouragement from the highest levels of state government will be essential in elevating the visibility and establishing the legitimacy for these programs.

INTRODUCTION

THE TASK FORCE PROCESS

During April, May and June of 1988, the Nebraska Public Buildings Energy Program Task Force met to identify and design programs to help public sector and private nonprofit organizations reduce energy costs in their facilities. Members of the Task Force included representatives of cities, counties, hospitals, K-12 public schools, higher education and state government; legal, financial and engineering professionals familiar with public sector; and three state senators.

The Task Force developed program and financing options that take into account the technical potential for energy efficiency in various kinds of facilities, capital budgeting and financing practices in the different jurisdictions and the policy goals of the State of Nebraska. As a result of these considerations, the Task Force divided the market into two segments: state-owned buildings, and facilities of local jurisdictions including municipal and county government, school districts, health care institutions and private colleges. The subject of this report is market research results and recommendations on the programs for the local jurisdiction segment.

To design the program and financing options, the Task Force used a variety of expert opinions on the practices and behaviors of the local jurisdictions. Members of the Task Force and research conducted by Technical Development Corporation (TDC), the lead consultant to the Task Force, were the main sources of information used to identify appropriate technical assistance and financing programs.

Once the Task Force had designed programs, the market research effort could begin by questioning potential users of programs about how the programs could specifically meet their needs. It was also important to identify the most effective ways to implement and market the proposed programs. Therefore, the Nebraska Energy Office asked TDC to do additional market research for local jurisdictions.

MARKET RESEARCH OBJECTIVES AND METHODOLOGY

The market research objectives are to obtain information on local jurisdiction needs, procedures, practices and attitudes to:

- determine whether the proposed program designs meet the needs of local jurisdictions and recommend program design changes if necessary;
- identify marketing strategies and channels for the programs; and;
- evaluate proposed delivery mechanisms and suggest others if necessary.

TDC used telephone interviews as the instrument for performing the market research. TDC interviewed the following groups:

- Constituents of programs: elected and appointed decision-makers who would participate in the programs;
- decision-makers within organizations which would have responsibility for implementing or marketing the program,
- directors of trade organizations which represent the institutional sectors and,
- staff of organizations that provide other services to local jurisdictions.

The interview strategy was to obtain information from primary sources — that is, the potential users of the programs and then to verify this information by interviewing people with different perspectives and degrees and sources of expertise. This latter group consisted of trade association directors and providers of technical and managerial services to local jurisdictions.

The interview questionnaires and a list of respondents are included as appendices to this report. In summary, interviews with trade association administrators and the potential users of programs began with questions to obtain information on recently completed and future priorities for capital improvement projects. These included the priority of energy improvement projects, current energy management practices, current practice in funding capital improvement projects and management and financial resources available for undertaking energy improvement projects. The interviewers then described the proposed programs and asked respondents if the programs would provide a service which would meet their needs. The final set of questions addressed how the respondents kept abreast of developments in their areas of responsibility. Trade association directors were also asked if they would agree to market the programs and how they would go about doing so.

The interviews with the technical community colleges as the proposed program delivery agency were intended to assess their capabilities and requirements. Questions focused on their experience with similar programs, relationships with the program constituents and opinions on the administrative arrangements that would contribute to the successful implementation of the Energy Circuit Rider Program. The community colleges were also queried on their needs for the program services for their own facilities.

TDC also conducted interviews with providers of services to local jurisdictions including architectural and engineering firms, regional economic development districts, educational service units and Bioelectronics, Incorporated — a firm that provides repair and maintenance services for medical equipment to hospitals in Nebraska. TDC asked respondents questions to determine whether they perceived the programs to be in competition with or complementary to their services, and whether they had an interest in co-marketing the programs. TDC also asked the organizations to describe their experience with local jurisdictions as customers in order to corroborate TDC's conclusions from the interviews with potential program constituents.

TDC was also asked by the Nebraska Energy Office to interview regulators of local jurisdictions. Regulation of local jurisdictions consists primarily of limits on the levy power of municipalities, counties and school districts; requirements for referenda on issuing general obligation bonds; competitive bid requirements; and reimbursement procedures and allowances for health care institutions. TDC interviewed regulators as part of the Task Force process. Regulators assured the Task Force that the regulations currently in place do not present a barrier to implementing energy improvement projects or participating in a revolving loan fund. This report does not include additional comment on this subject.

DESCRIPTION OF PROGRAMS

The Task Force recommended a program of technical assistance to local jurisdictions: the Energy Circuit Rider Program. The program will serve municipalities, counties, public school districts, technical community colleges, nonprofit health care corporations and other nonprofit institutions. The Energy Circuit Rider is an energy expert, based at the local technical community college, who will assist local jurisdictions in the following areas:

- **Energy Management.** The Energy Circuit Rider will train administrators and set up accounting and analysis procedures to track energy consumption and cost data.
- **Education and Training.** Facilities personnel will be trained in efficient operation and preventative maintenance of

energy systems. Training will include identification and implementation of low-cost/no-cost efficiency measures.

- **Technical Energy Audits.** The Energy Circuit Rider will perform technical energy audits of facilities and assist local jurisdictions in obtaining engineering services for more complex engineering studies.
- **Technical Assistance in Obtaining Financing.** The Energy Circuit Rider will assist local jurisdictions in applications for the revolving loan fund or other financing sources.
- **Technical Assistance for Projects.** The Energy Circuit Rider will provide technical assistance (specification writing, obtaining qualified contractors, construction management) or assist local jurisdictions in obtaining these services, to support the implementation of energy efficiency projects.

These services will be performed on-site except for some of the education and training services which may be organized as curricula of the technical community colleges. Fees will be charged to client local jurisdictions. The Task Force recommends that the program be implemented as a pilot effort for two years with Energy Circuit Riders based at two technical community colleges. The program is expected to be self-sustaining in two years.

The financing program for local jurisdictions recommended by the Task Force is a zero-interest revolving loan fund administered by the Nebraska Energy Office. The fund would finance the capital costs of the projects, the costs of services of the Energy Circuit Rider related to the development of these major projects and costs of the required engineering studies for the projects.

ORGANIZATION OF THE REPORT

The remainder of the report presents a narrative of the findings from the interviews and then TDC's recommendations on the design, implementation and marketing of the programs. The findings are reported by sector: municipalities, counties, school districts and health care institutions. The report also presents findings on program implementation and marketing.

MARKET RESEARCH FINDINGS

MARKET CONDITIONS

MUNICIPAL GOVERNMENT

TDC conducted interviews with elected and appointed municipal officials from the following towns:

Name	Population
Oshkosh	1,055
Pawnee City	1,156
Gordon	2,245
Aurora	3,717
Seward	5,713
Chadron	5,972
Blair	6,418
McCook	8,404
Scottsbluff	14,156
Columbus	18,063
Norfolk	19,450

TDC also conducted interviews with the directors of the League of Nebraska Municipalities, the Nebraska City Management Association, several regional economic development districts and engineering firms that service municipal clients. A complete list of respondents is included in Appendix AA.

Capital Spending Priorities

Municipal officials report that their top capital spending priorities include:

- infrastructure improvements in wastewater treatment systems, water supply systems, municipal electric utility distributions systems and streets; and
- new buildings or major renovations to create new space for key municipal functions.

Municipal contractors (engineering firms and regional economic development districts) confirm these priorities. Infrastructure improvements become necessary due to increases in the demand for services or to deferred maintenance. Furthermore, pollutants such as nitrates from runoff from agricultural lands must be removed from the water supply. A number of Nebraska municipalities appear to be facing this problem.

Municipal officials also mentioned buildings improvements as high priority capital spending items. The kinds of projects mentioned were new facilities to replace aging ones, and major renovations to obtain additional space, change the usage of existing space or meet handicap access requirements. Farmers Home Administration (FHA) loans and Community Block Development Grants (CBDG) are available for some facilities improvements. The smaller municipalities use FHA monies largely for new facilities but occasionally for renovations. CBDG grants for building improvements are only available for community facilities such as senior citizen centers and other activity centers.

Municipal officials could usually name specific energy projects as part of a backlog of capital improvement projects. HVAC (Heating, Ventilating and Air-Conditioning) replacements and window replacements were mentioned most often. It was clear that these projects were being deferred, however, until more urgent needs were met. Most municipal officials explicitly gave energy projects a low priority. This was confirmed by grant administrators and contractors.

The availability of grant monies undoubtedly has an impact on the prioritizing of capital improvement projects by municipalities. At the moment, there are no grant programs that target energy-related improvements. Federal grants and below market interest loans are available to Nebraska municipalities under both the FHA and CDBG for infrastructure improvements. Communities with populations under 10,000 are eligible for FHA loans and grants. The level of the grants for water supply, wastewater treatment and street improvements depends on the median income of the community and can be as high as 75% of the cost of the improvement. Recent FHA loans with 40 year terms were made at interest rates as low as 5% for low income communities. CBDG funds administered by the Nebraska Department of Economic Development are also available to municipalities for infrastructure improvements.

In general, municipal officials spoke of tight capital improvement budgets. Many Nebraska towns are losing population and changes in the agricultural economy have reduced municipal revenues from property taxes. This assessment was confirmed by trade association directors and contractors to municipalities. According to regional economic development district administrators, only the cities of Lincoln, Omaha, Columbus, Norfolk, Grand Island, Kearney and Scottsbluff are experiencing economic growth.

Capital Budgeting Processes and Financing Methods

Capital improvement budgets are approved by city councils after public hearings. Projects are often initiated by city administrators or mayors. Municipal officials report a general aversion of borrowing to fund projects. If projects are small, they are paid for out

of the capital budgets which accumulate for that purpose. Municipalities are prohibited from creating a sinking fund using property tax revenues, but municipalities report that there are other sources of funds, such insurance claims, which can be accumulated for capital improvement projects. Occasionally even larger projects such as a \$6 million electric distribution system project in one Nebraska town, are financed in this way.

As mentioned previously, many large municipal projects are financed by federal grants or below market interest loans. The FHA administrator in Nebraska noted that loans are decidedly less attractive to the smaller communities than the FHA grants. When grants are not available for projects, municipalities report issuing general obligation bonds. An election is required for these bonds and municipalities must sometimes go to the voter three or four times before the issue is approved.

Reactions to Proposed Programs

Municipal officials generally reacted favorably to the services in the Energy Circuit Rider Program. However, they all expressed caution on the matter of fees and said that they would have to be convinced that the fees would be cost effective. Contracts for the Circuit Rider would have to have the approved of city councils.

Only one municipality reported having an energy cost accounting system in place. Respondents thought the ability to track energy usage and costs would be useful although they could not be precise about how it would be useful. In most cases, there is no clear management structure to support an energy cost control program.

The municipal respondents varied as to their practices with regard to training facilities operators. Most municipal building operators are long-term, janitorial level employees. Several municipalities said that their employees were near retirement age and expressed a strong interest in comprehensive building operation training. Some municipalities did not provide training, however, larger towns provided substantial and periodic release time of training for building superintendents. The reaction to the availability of training through the Energy Circuit Rider Program was largely positive. Most municipal officials expressed an interest in training although their training needs are more comprehensive than the optimization and efficient operation of energy systems.

Municipal officials were generally favorable towards assistance from the Energy Circuit Rider in applying for the zero-interest loans, letting bids and reviewing proposals. The smallest towns said they did not have the expertise to do these tasks.

All of the municipalities have had professional contact with their local technical community colleges and expressed confidence in

the competence of the community colleges to undertake the proposed programs.

Municipal officials said their general aversion to borrowing would not extend to a zero-interest loan as long as the projects could be shown to be cost-effective and the amortization period was long term. Only one town official said that there were no energy projects in his community's capital improvements backlog. The other officials said that the availability of a zero-interest loan at favorable amortization rates would move energy projects up in their capital spending priorities.

One official expressed concern about "red tape" and said he would be interested if there were as little as possible. No strong preference was expressed between the state as administrator of the loan and a local bank as agent for the loan. Nebraska municipal officials certainly did not express the distrust of state government often encountered in rural areas.

COUNTY GOVERNMENT

TDC conducted interviews with elected and appointed county officials from the following counties:

Name	Population	Region
Webster County	4,800	Central
Dawes County	9,604	Panhandle
Richardson County	11,300	Southeast
Dakota County	17,000	Northeast
Cass County	20,295	Southeast
Gage County	26,000	Southeast
Platte County	30,000	Central
Dodge County	35,000	Northeast
Lincoln County	36,000	West Central

In addition, TDC interviewed the Nebraska Association of County Officials. A complete list of county respondents is given in Appendix AA.

Capital Spending Priorities

County officials cited building renovation and occasionally new buildings as their most recent capital projects and capital spending priorities. County courthouses are often aging structures in need of major renovation including a number of energy improvement components such as lowered ceilings and insulation, window replacements and new HVAC systems. This characterization was confirmed by the respondents as well as their trade association director.

Additions or completely new structures usually involve the jail or hall of justice building in Nebraska counties. Some counties do not have any capital improvement projects planned, citing capital improvement budgets so low that they are only able to implement the most urgent maintenance projects. In general, except for the four or five growth counties in Nebraska, counties operate with constrained budgets due to a declining tax base. A number of the county officials TDC interviewed said that they had reached or were close to reaching the ceiling of their tax levy authority. The reasons for the decline are the same as for municipalities: loss of population and a changing agricultural economy. Many county officials commented on this situation which was also confirmed by the director of their trade association.

Four of the county officials interviewed had been unsuccessful applicants to the Courthouse Trails Program funded with oil overcharge funds. Courthouse Trails offered matching grants for energy efficiency projects in county courthouses. The program was vigorously marketed by the Nebraska Association of County Officials as well as some regional economic development districts and attracted 25 applicants out of 93 counties, five of whom received grants. Observers generally agree that the large number of applicants for basically 75% grants demonstrates that a backlog of energy improvement projects exists.

Capital Budgeting Processes and Financing Methods

Capital improvement projects in counties are generally initiated by the county board. Counties have no appointed administrators, as a rule. All officials are elected and have clear responsibilities and areas of authority. It is the county board that has responsibility for capital spending and the county facilities. One county board has a buildings and grounds sub-committee which initially prioritizes projects. The largest county TDC interviewed has a director of buildings and grounds. In general, most capital spending projects are initiated by the county board.

County officials seem to be somewhat more averse to debt financing — that is, to the idea of financially obligating future board members not yet elected — than municipalities. Like municipalities, counties operate on annual budgets as much as possible. Major projects such as a new building are financed through general obligation bond issues. Counties must get approval of the voters for general obligation bond financing. As in the municipalities, these bond issues are sometimes difficult to pass.

Reactions to Proposed Programs

County officials were much more cautious than municipalities in expressing their interest in the services of the Energy Circuit Rider. Certainly, no county interviewed by TDC has an energy cost accounting system in place. In some counties, training of facilities

operators is simply not undertaken or is considered a responsibility of contractors when new equipment is installed. County officials saw the loan application assistance service of the Energy Circuit Rider as redundant to services provided by their regional economic development district. County officials did not express an interest in assistance in actual project management once financing had been obtained. This reaction appeared to stem more from a lack of knowledge of project management requirements than from consideration of the value of the service.

Similar to municipal reaction, county officials expressed concern about the amount of fees charged for the Energy Circuit Rider's services. County boards would have to approve fees and would have to be convinced that future projects would return utility costs savings enough to cover fees as well as other project costs. Although all but two of the county officials interviewed could identify specific energy improvement projects that needed to be implemented, there seemed to be uncertainty about whether fees for technical assistance projects would be cost-justified.

County officials expressed an interest in the zero-interest loan program. Since they could identify a backlog of energy projects in most cases, the availability of a zero-interest loan could, they said, enable them to implement the projects.

SCHOOL DISTRICTS

TDC conducted interviews with four school board members and two school administrators in six school districts. The sizes of the school districts varied from three to twenty buildings and represented districts with declining school age populations as well as those with growing enrollment.

To corroborate school district reactions to the proposed programs, TDC interviewed the Nebraska Energy Office and the administrators of two state-wide trade associations: the Nebraska Council of School Administrators and the Nebraska Association of School Boards. TDC also interviewed two engineering firms that have provided engineering services to schools for energy improvement projects, and an administrator of an educational service unit (ESU). The ESUs provide a number of administrative and technical services for public schools in Nebraska. A list of respondents is included in Appendix AA.

Capital Spending Priorities

Like Nebraska municipalities and counties, school officials spoke of tight capital improvement budgets. In the short term, asbestos abatement is the foremost need. Longer term priorities are building additions and major renovations of aging facilities.

Asbestos Abatement

Asbestos abatement is a top priority capital budgeting item for schools. Federal regulations require school districts to complete asbestos inspections and plans for abatement by October 12, 1988, with the work to be completed within ten months.

New Buildings

School district officials cited new school buildings and additions to existing buildings as top priorities. While few school districts in Nebraska have growing school age populations, there is a backlog of new building projects. For example, one school administrator said that his district's top priority is replacing a school that is completely made up of temporary additions which were erected 18 years ago.

General Renovation Projects

Some school officials cited general renovation projects as top priorities for capital budgets. Many school districts have aging facilities and have deferred maintenance until the need is urgent. One school official said that he is currently working with the Nebraska Energy Office to obtain an energy improvement loan but that because the energy portion of the project is small relative to the other renovations required, he must borrow a much larger sum elsewhere in order to implement the project.

Availability of Grants and Loans

An additional reason for the low priority given energy improvement projects by school districts is that many projects have already been implemented. Only two of the six school districts had not received grants or loans from the Nebraska Energy Office for energy projects. Thus, school officials were, in general, not able to cite energy improvement projects that need to be implemented in their facilities. In two cases, school officials cited projects that did not qualify for the Nebraska Energy Office grants and loans because of long payback periods. Substantial grants (80%) were available to school districts from 1981 through 1985. Zero-interest revolving loan funds are now available for energy improvement projects in public schools through the Energy Efficiency School Loan Program.

Capital Budgeting Processes and Financing Methods

School district officials report that capital budget priorities are approved by the school board after obtaining public input. Superintendents often bring capital improvement projects to the attention of the board.

Financing

School district officials report a number of different financing mechanisms for their most recent capital projects. General obligation bond issues, subject to voter approval, approved in public ref-

erenda are used to finance large projects such as new buildings. Current capital improvement funds are used to fund smaller projects. One school official said that his district had lease-purchased the building of a gymnasium but that a new state law curtailed lease-purchase authority.

Reactions to Zero-Interest Loans

School districts did not show the same degree of aversion to borrowing as municipalities and counties. However, the zero-interest loans now available to schools appear to be considerably less attractive than the 80% grants they used to receive for energy projects. School district officials did not explicitly give this evaluation, but they were not able to say that the availability of additional zero-interest loan funds would change the funding priority of remaining energy projects. Engineers who performed energy audits of schools for both the grant and loan programs said they observed much less of a market for the loans than for the previously available grants.

Reactions to Proposed Programs

Only the largest school district contacted by TDC had energy cost accounting procedures in place. Training of facilities operating personnel appears to take place in half of the school districts contacted. Several of these depend on the contractor who installed or services the equipment for training. Asbestos training for both administrators and janitorial is required by law and so is currently the top training priority of school districts.

Energy Circuit Rider Program

In general, school officials did not express a need for the services of the Energy Circuit Rider. Some board members and administrators specifically said that the services were not needed. Others said that they would review their needs and determine whether the fees were cost-justified. Only one school district expressed a strong interest in a Energy Circuit Rider service: training of building operating personnel.

Zero-Interest Loan Program

Reactions to the zero-interest loan program were noted above. School officials did not think that availability of additional zero-interest loan funds would cause them to shift the priorities of their remaining energy improvement projects. Several did ask for a liberalization of the terms of the current school loan program so that they could implement projects like window replacements that have relatively long paybacks.

HEALTH CARE INSTITUTIONS

TDC interviewed the chief administrators or plant operations directors of three hospitals ranging from small municipal hospitals

to larger nonprofit institutions. To corroborate the respondents reactions to the proposed programs, TDC also interviewed representatives from one trade association, the Nebraska Health Care Association, and two service providers: a CPA firm and a firm providing repair and maintenance services for biomedical equipment.

Capital Spending Priorities

No hospital administrator interviewed by TDC cited energy projects as top priority capital projects. Nebraska has an excess of hospital beds according to the director of the Nebraska Hospital Association. Hospitals are competing for patients and/or converting space to long-term nursing home facilities for which there is more of a need in the state. Thus hospital administrators cite as top priority capital improvement projects those major renovations that bring aging facilities up to modern standards and that attract new kinds of patients. Nursing homes have as their major capital spending priorities renovations to meet new standards for space utilization.

Nebraska health care institutions have implemented a number of energy improvement projects with 50% matching grants from the federally funded Institutional Conservation Program (ICP) administered by the Nebraska Energy Office. There appears to be some degree of market saturation in the health care sector, at least among those institutions whose management is aware of the opportunities offered by energy efficiency.

Capital Budgeting Process and Incentives to Conserve Energy

Health care institutions vary in their capital budgeting procedures depending on whether they are private, nonprofit, county or municipal facilities. The majority of hospitals and nursing homes in Nebraska are private, nonprofit institutions with capital spending priorities set by a board of directors.

Operating Budgets and Reimbursement

Energy costs are part of hospital operating budgets. Recovery of health care institution operating costs are regulated and tied to the number of patient days for Medicaid patients, or the per patient/illness category for other patients. Neither set of reimbursement criteria particularly rewards energy cost savings.

In addition, there is an operational cost ceiling for all types of health care institutions. According to Bill Seim, the principal of a CPA firm that serves 35% of the hospitals in the state, most hospitals exceed their operating budgets. Thus, energy cost savings would be an important goal if such savings could significantly reduce operating costs. However, hospital administrators estimate that energy costs represent only from 5% to 8% of operating costs. Reducing energy costs is simply not an important opportunity.

Thus, with one exception, none of the hospital administrators could cite a backlog of energy efficiency projects that they hoped could be funded.

Technical Potential

There are, however, opportunities in health care institutions for energy savings. Hospitals are 24-hour operations with a high demand for hot water. Usually large percentages of efficiency can be gained in this area. Furthermore, many hospital buildings in Nebraska are aging facilities that could generate substantial energy savings from thermal insulation and air infiltration measures.

Kearney Hospital is an outstanding example in Nebraska of a hospital that has invested considerable capital and captured substantial energy savings. TDC interviewed Roger Ihle, Director of Plant Operations and President of the Nebraska Hospital Engineers Association, as part of this market research effort. Kearney Hospital invested in an incinerator with a waste heat boiler, a solar water heating system and many conservation measures; some of this work by grants from the ICP program. Mr. Ihle noted that Kearney Hospital was recognized by the U. S. Department of Energy as the most energy efficient full-service hospital in the United States.

In TDC's judgement, Kearney Hospital's success in conserving energy is due to the leadership of Mr. Ihle, who seems to be a very unusual man. He came from an energy-related background and is able to operate in an administrative structure that recognizes facilities operation as an important function. Mr. Ihle reports that there are very few directors of facilities in the health care sector in Nebraska.

Reaction to Proposed Programs

Administrators of health care institutions did not express an interest in the services of the Energy Circuit Rider. Energy conservation, as a way to reduce operating costs, is just not a high enough priority to warrant, in their view, an administrative commitment to systematic energy management of hospital facilities. There is a commitment to training facilities operators since reliability is essential in health care institutions. Hospital administrators did not see the need for training by the Energy Circuit Rider.

Hospital administrators did not think that the availability of zero-interest loans would increase the likelihood of their undertaking energy improvement projects. Hospitals are not averse to borrowing. It may be, although it wasn't explicitly expressed, that hospitals are accustomed to grants for energy efficiency projects. Fund-raising is the major source of funding for all kinds of capital improvements in private hospitals. Loans, even at zero-interest, look considerably less attractive than grants.

PROGRAM IMPLEMENTATION

THE ENERGY CIRCUIT RIDER PROGRAM

Recommendations of the Task Force

The Task Force recommends that the technical community colleges implement the Energy Circuit Rider Program, by basing the Circuit Rider at the community college and covering the service territory corresponding to the community college area. To explore the capabilities of the technical community colleges to implement the program, TDC interviewed three community college area administrators and Tom Johnston, the director of the Nebraska Technical Community College Association.

Administration

The area administrators and Mr. Johnston confirmed that the Circuit Rider Program would come under the jurisdiction of the community college's community services department. Programs for this department are planned and administered at the community college area level rather than the campus level. There are six community college areas in Nebraska and 14 campuses. The community colleges also hold classes off campus at municipal facilities and schools.

Based on experience with other programs, the area administrators and Mr. Johnston agreed that programs should be fully funded. Some of the community college areas are under intense budget pressures and could not undertake a program like the Energy Circuit Rider Program unless full funding were guaranteed for the period of implementation. The community colleges have implemented other programs that depended wholly or in part on revenues generated by the colleges. Areas with a sufficient demand for these programs were able to effectively implement them. Areas where demand was more limited had to curtail services and were generally not able to meet the objectives of the programs.

Experience

The community colleges have implemented a number of programs with features similar to those in the Energy Circuit Rider Program. The "Agriculture in Transition" program involves financial counseling services to farm households. The services of other community groups are marshalled as part of the program which involves a number of training components conducted both at the community colleges and at the client's location. Mr. Johnston and the area administrators consider the program a success, although, according to an independent evaluation of the program after its third year, there is considerable variation in the consistency and quality of services depending on the demand for the services, in various parts of the state.

The community colleges operate another program with many features similar to the Energy Circuit Rider Program. As part of the "Transition of American Industry" program of Ford Motor Company and Jackson (Michigan) Community College, the Nebraska community colleges provide short term job training to help Nebraska industries remain competitive. The cornerstone of the training is courses in statistical process control. Federal funds underwrite the program although fees are charged in some areas. TDC interviewed several administrators of relatively large Nebraska cities who highly praised this program.

Mr. Johnston noted that the Nebraska Energy Office and the community colleges are currently working together to develop an energy management training program for county and municipal officials. The proposal is being reviewed by the Office of Hearing and Appeals of the U.S. Department of Energy. The community colleges were also approached by the state to provide the asbestos training required for school administrators. The area administrators found, as this program was developed, that private sector providers were already active in the field. Mr. Johnston said that lack of coordination on the state level led to provision of redundant services and left the community colleges open to charges of competing with private industry.

Based on this experience, Mr. Johnston feels that state coordination of the Energy Circuit Rider Program should be thorough, should avoid overlap in the provision of services and should be cognizant of issues of competition.

Interest on the Part of the Technical Community Colleges

The technical community college area administrators interviewed by TDC (three out of the six) expressed interest in implementing the Energy Circuit Rider Program. They expressed confidence that the colleges could implement the program successfully given their experience with other projects.

Reaction to Community College Implementation

All of the municipal and county officials interviewed by TDC have had professional contact with the technical community colleges including training, joint use of space and joint implementation of programs. Some local government officials praised the colleges for competently and cooperatively carrying out programs. All of the local officials felt it was appropriate to base the program at the community colleges. No one thought that they were too far away from the local campus to participate in the programs if they thought the programs were cost-effective.

School officials had less experience with the community colleges. However, there were no objections to the community colleges administering the Energy Circuit Rider Program.

Other Implementation Alternatives

While municipal and county officials reported good relations with the community college four or five asked why the program could not be implemented by the regional economic development districts. To investigate this question, TDC interviewed the directors of three regional development districts and the Nebraska Energy Office about the development districts' involvement with Energy Office programs.

Regional Economic Development Districts: Background

The regional development districts in Nebraska grew out of the more numerous councils of government that were funded with federal monies beginning in the early 1970s. Some economic development districts did not survive the transition from federally funded to fee-based operations. Among those that did, some have been more successful than others at maintaining a consistent administrative framework and at serving the municipalities and counties in their regions. Both the development district administrators and the Nebraska Energy Office agreed on the current unevenness of development district operations.

Range of Services

The development districts provide a wide range of administrative services both as part of a package available to dues-paying municipalities and counties, and as fee-based contractual arrangements with both member and non-member communities. The services range from writing municipal ordinances to providing the engineering expertise needed to apply for Farmers Home Administration grants and loans and Community Block Development Grants. While the development districts have no formal arrangements to administer the FHA and CBDG programs, they do appear to market these important sources of funding for municipal infrastructure projects effectively.

In general, the development districts look for funding opportunities and help with applications for local jurisdiction capital improvement projects. The West Central Nebraska Development District proposed and implemented a community energy awareness program. A number of years ago, the Southeast Nebraska Development District marketed the school grant program of the Nebraska Energy Office.

Level of Interest in Implementing Programs

TDC's interviews with development district administrators revealed that they would be eager to implement the Energy Circuit Rider Program if its funding included salaries for the extra staff needed. Some municipalities in Nebraska are served by out-of-state development districts. Several counties are not officially in the service territory of any development district.

Trade Association Implementation of Programs

TDC queried the trade associations in all the local jurisdiction sectors as to their interest in and capacity for implementing the Energy Circuit Rider Program. Each of the trade associations said they were not interested in implementing the program because it does not fit their mission (largely lobbying) or was beyond their scope administratively. While some of the trade associations do provide training (such as the League of Nebraska Municipalities and the Association of Nebraska School Boards), the scope of services envisioned for the Energy Circuit Rider Program is much larger than they could or would want to undertake.

THE ZERO-INTEREST LOAN PROGRAM

Recommendations of the Task Force

The Task Force recommended that the zero-interest revolving loan fund be implemented by the Nebraska Energy Office.

Reaction to Energy Office Administration

Municipal, county and school officials endorsed the recommendation that the Nebraska Energy Office administer the revolving loan program. Many school officials have experience with Energy Office's administration of the School Weatherization grant and loan program and evaluated that contact with the Energy Office as positive. No one cited excessive red tape as a problem, although several respondents hoped that the amortization period for the loans would be flexible so that measures with relatively long paybacks would qualify. None of the respondents expressed a preference for local bank administration of loans over the Nebraska Energy Office.

MARKETING CHANNELS

Task Force Recommendations

The Task Force recommended that the Energy Circuit Rider and zero-interest revolving loan programs be marketed by the Energy Circuit Riders and the Nebraska Energy Office. TDC interviewed the administrators of a number of trade associations to ascertain their willingness to market the programs and specific channels for their doing so.

Marketing Channels for Municipalities

The League of Nebraska Municipalities and the Nebraska City Management Association expressed a strong desire to market these programs to their constituents. They feel that doing so fits with their objective of keeping their members informed about funding opportunities. Specific marketing channels are listed below:

League of Nebraska Municipalities

The League is the major lobbyist for Nebraska municipalities. The staff includes a utilities field person who markets, makes arrangements for and sometimes teaches workshops on subjects important to municipalities. These include water operator training, training for electric utility employees and training in public safety. In spite of the extensive training undertaken by the League, Dave Chambers, the League's executive director, does not feel that the training envisioned for the Energy Circuit Rider Program competes in any way with the League's efforts.

Specific League marketing opportunities for the Energy Circuit Rider are as follows:

- Formal endorsement by the League.
- Articles or inserts in the League's monthly utilities newsletter.
- Articles in the League's monthly magazine, *Nebraska Municipal Review*.
- Regional workshops set up by the League's utilities field staffperson.
- A workshop at the League's annual convention.
- A workshop in the League's Mayor-Council Conference in January, 1989.

Nebraska City Management Association

The Association is a separate organization from the League but uses the League for administrative support. The Association's annual meeting is held in conjunction with the League's annual meeting. TDC interviewed the secretary of the Association. He indicated that marketing the Energy Circuit Rider Program is within the mission of the Association but any formal arrangement would have to be approved by the Association board.

Specific marketing channels through the Association are as follows:

- Formal endorsement by the Association.
- Articles or inserts in the Association's newsletter.
- Information sessions at the Association's periodic regional meetings.

Regional Economic Development Districts

The development districts appear to have well-established and good relationships with municipalities. They could be important marketing avenues for the Energy Circuit Rider Program and the availability of the revolving loan fund. It is in their self-interest to know about technical assistance and funding opportunities for their municipal and county members. The specific marketing channels could be the development districts' periodic newsletters and their on-site contacts with municipal officials.

Contractors to Municipalities

Architectural and engineering firms with municipal clients expressed an interest in the programs and reported that keeping their clients informed of technical assistance and funding opportunities was in their own interest. They did not view the Energy Circuit Rider's services as in any way in competition with their own professional services.

Marketing Channels for Counties

The Nebraska Association of County Officials expressed a strong interest in marketing the proposed programs. The Association played an important role in the marketing of the Courthouse Trails Program which provided matching grants for energy improvements in five county courthouses. Specific marketing channels through the Association are:

- Formal endorsement through a letter mailed to each county.
- A workshop at the Association's annual meeting.
- Workshops at the Association's twice-yearly district meetings.
- A workshop at the Association's workshop for county clerks in June, 1988.

Additional Channels

The development districts serve county governments as well as municipalities. Similarly, the engineering firms that have municipal clients may also have some involvement with counties. Marketing of the proposed programs to counties by both of these service providers is viewed as being advantageous to their own marketing efforts.

Marketing Channels for Schools

The Nebraska Association of School Boards and the Nebraska Council of School Administrators expressed a strong desire to market these programs to their members. They feel that doing so

fits with their objective of keeping their members informed about funding opportunities. Specific marketing channels are listed below:

Nebraska Association of School Boards

Association membership includes 300-350 school districts and 2500 school board members. Specific marketing channels through the Association are as follows:

- Formal endorsement by the Association.
- Mailings to schools and board members. Reimbursement for the cost of mailings would be required.
- A seminar/clinic at the annual state-wide convention.
- Workshops through field service activities.

Nebraska Council of School Administrators

Council membership include school superintendents, school business officers and school assistant superintendents. The Council has marketed the School Weatherization Program. Specific marketing channels for the proposed program through the Council are as follows:

- Formal endorsement by the Council.
- Articles or inserts in the Council's monthly newsletters.
- A workshop at the Council's annual conference, March 29-31, 1988.
- A workshop at the annual conference for business officials in March, 1989. Superintendents also attend this conference. There are 60 designated school business officials in Nebraska school districts.

Additional Channels

A number of architectural and engineering firms could market the proposed programs to schools. According to Ravi Maniktala, president of Maniktala Associates, a number of firms including Maniktala Associates, Ferris Engineering, Raymond G. Alvine Associates, Olsson Associates and Schemmer Associates, have considerable experience providing engineering services to schools. Marketing a funding and technical assistance program for capital improvement projects that require engineering design services is in these firms best interests.

Nebraska Educational Service Units (ESU)

Two educational service units, Omaha and Lincoln, are themselves school districts. The remaining 17 ESUs are separate political jurisdictions funded through tax levies. The educational services units provide a number of services and personnel for schools including school nurses, media services and professional staff development. While facilities improvements are outside the normal scope of ESU services. Keith Pollard, Director of ESU No. 7, indicated that a notice about the program could be inserted in his ESU newsletter. All ESUs have newsletters. Mr. Pollard is also president of the Educational Service Unit Administrators Association.

Marketing Channels for Health Care Institutions

Two state-wide trade associations serve health care institutions in Nebraska: the Nebraska Health Care Institution and the Nebraska Hospital Association. The directors of both trade associations indicated their interest in marketing the programs. Channels include newsletters and workshops at state-wide annual meetings.

MARKETING THEMES

Observers of the market segments for the proposed programs (engineers, contractors, trade associations and other service providers) noted that, for the most part, the potential users for the programs have very little knowledge of energy efficiency improvements. They are:

- unaware of the potential benefits of energy efficiency improvements;
- unclear about designing and implementing such improvements;
- skeptical of claims for the financial benefits; and
- conservative about speculatively incurring costs.

These observations were corroborated in TDC's interviews with local jurisdiction officials.

TDC queried local jurisdiction officials and service providers, particularly engineering firms, about what kinds of marketing themes and presentations would be convincing. They recommended very clear presentation of costs and benefits from engineering studies and the use of case studies of successful Nebraska projects. Case studies used in a specific jurisdiction should present the results of a project that is similar in terms of building type and recommended measures.

RECOMMENDATIONS

PROGRAM FOCUS

The program focus should be services to municipalities and counties. School districts and hospitals have already been well-served by federal and state grant and loan programs. While there clearly are cost-effective energy improvement projects that remain to be implemented in schools and hospitals, some degree of market saturation has occurred. Counties and municipalities on the other hand, have not had technical assistance or financial incentives to implement energy improvement projects with the exception of the Courthouse Trails program. There is a large backlog of energy projects in municipalities and counties.

PROGRAM DESIGN

The Energy Circuit Rider Program should be offered without a fee schedule. In general, municipal and county officials have no experience with energy related improvements. Both groups expressed considerable resistance to fees. The first few years of the program must be used to develop a track record, demonstrating that cost-effective projects can be identified and that energy management practices are cost effective. Fees will be an unnecessary obstacle in gaining acceptance for the program.

The Energy Circuit Rider Program should have an intensive education component and a flexible approach to the kinds of services provided. Local jurisdictions in Nebraska, especially the smaller municipalities and counties, will need considerable education and hand-holding in order to be able to evaluate energy improvement projects among their other capital budget priorities. The Energy Circuit Riders should have appropriate technical credentials but should be particularly strong as educators/marketers. The services they offer should be capable of precise tailoring to individual jurisdiction needs.

The zero-interest loan program should have a flexible loan retirement schedule. As with the successful Energy Efficiency School Loan Program amortization periods should be geared to the energy savings produced by the measures financed. However, a longer amortization period should be considered so that energy improvement projects such as window replacements can be financed.

Loan funds should be available to fund projects that have wider impacts than energy cost savings. Many local jurisdictions have

general renovation projects, deferred maintenance projects and even new building projects in which energy efficiency improvements would be very cost-effective. These projects are higher priority capital funding items than energy improvement projects by themselves. This program should allow energy improvement loan funds to be rolled into financing from other sources to allow implementation of these major projects.

PROGRAM MARKETING

With adequate contractual controls, the technical community colleges appear to be appropriate organizations to deliver the Energy Circuit Rider Program.

The trade associations and service providers such as economic development districts and educational service units can offer strong marketing support for the programs. This function is within their mission and can be accomplished through existing staff.

The Nebraska Energy Office should directly manage any loan programs. Local officials showed no preference for local banks or other institutions as program operators or agents. It will probably cost less for the Energy Office to manage this part of the program itself.

The Nebraska Energy Office should develop case studies of successful Nebraska examples of local jurisdictions implementing energy efficiency projects. Effectively communicated local case studies can be convincing documents that provide evidence of the reality of estimated benefits and costs. Development of such case studies and their presentation should be a formal part of the Energy Circuit Rider Program.

To ensure that case materials are developed quickly, the Energy Office should fully subsidize technical assistance audit costs in a selected set of facilities.

These programs should be high visibility state programs with direct and vigorous support from the Governor. Active support and encouragement from the highest levels of state government will be essential in elevating the visibility and establishing the legitimacy for these programs.

APPENDIX AA

COMPLETED TELEPHONE INTERVIEWS: LIST OF RESPONDENTS

MUNICIPAL GOVERNMENT

Elected Municipal Officials

Mayor Ray A. Griffin Aurora
Mayor Larry Marik Columbus
Mayor Jack Nerud Oshkosh
Mayor Donald Overman Scottsbluff

Appointed Municipal Officials

Douglas E. Bullock, Administrator Blair
Carl G. Dierks, City Manager Chadron
Richard Dietrick, City Manager McCook
Fred Hlava, City Manager Gordon
Glenn Schultz, City Clerk Pawnee City
Merlin Lindahl, Utility Superintendent Columbus
Don Eikmeier, City Administrator Seward
Mike Nolan, City Administrator Norfolk

Trade Associations

League of Nebraska Municipalities
David L. Chambers, Executive Director
(402) 476-2829

Nebraska City Management Association
Steven J. Crowell, Jr.
Secretary, NCMA
City Administrator, La Vista, Nebraska
(402) 331-4343

Additional Marketing Channels

Northeast Nebraska Economic Development District
Rick Noyes, Acting Director
(402) 564-8584

Southeast Nebraska Development District
George Frye, Executive Director
(402) 483-5410

West Central Nebraska Development District
Fred Armstrong, Community Development Specialist
(308) 284-6077

Additional Contacts

Farmers Home Administration
Harlan Inman
(402) 437-5564

Olsson Associates
Rich Horrocks, CBDG Grant Administration Specialist
(402) 474-6311

Nebraska Energy Office
Allison Meyer, Project Coordinator
John Osterman, Chief of Finance

COUNTY GOVERNMENT

Elected County Officials

Carol Abold, ClerkDawes County
Gerald Bucher, Member, County Board ..Richardson County
Joseph Hewgley, Chairman, County Board ...Lincoln County
Gretchen Hirschback, Member,
County BoardDakota County
Calvin Gullion, ClerkGage County
Lonnie Knehans, Clerk..... Webster County
Fred Mytty, ClerkDodge County
Ronald Saalfeld, Member, County BoardPlatte County
Alan D. Wohlfarth, Clerk.....Cass County

Trade Associations

Nebraska Association of County Officials
Jack D. Mills, Executive Director
(402) 474-3328

Additional Contacts

Nebraska State Historical Society
Mike Rindone, State Preservation Office
(402) 471-3270

SCHOOL DISTRICTS

Elected School Officials

Martha Fricke, Member,
School Board.....Ashland-Greenwood
Roger Koehler, President, School BoardMillard P.S.
Kenneth Miller, President, School BoardDavid City P.S.
Jane Otto, Past President,
School BoardRaymond Central P.S.

Appointed School Officials

Jack Herweg, SuperintendentPlattsmouth P.S.
David Swartz, Assistant SuperintendentColumbus P.S.

Trade Associations

Nebraska Association of School Boards
Dale Seifkes, Executive Director
(402) 475-4951

Nebraska Council of School Administrators
June Remington, Assistant Director
(402) 476-8055

Additional Marketing Channels

Education Service Unit No. 7, Columbus
Keith Pollard, Administrator of Education
President, Nebraska Educational Service Unit Association
(402) 564-5753

Additional Contacts

Nebraska Energy Office
John Osterman, Director, School Weatherization Program

HEALTH CARE INSTITUTIONS

Hospital Administrators

Gary Bieganski, AdministratorMcCook Community
Roger Ihle, Director of
Plant OperationsGood Samaritan Hospital, Kearney
Rex Kelly, AdministratorPhelps Memorial
Mike Steckler, AdministratorJenny Milham Memorial

Trade Associations

Nebraska Hospital Association
Harlan Heald, Executive Director
(402) 476-0141

Nebraska Health Care Association
Pat Snyder, Executive Director
(402) 471-2133

Service Providers

Bioelectronics, Inc.
Marlin Bartel
(402) 423-1042

Seim, Johnson, Sistak and Quist, Inc.
Bill Seim
(402) 330-2660

TECHNICAL COMMUNITY COLLEGES

Area Office Administrators

Central Technical Community College Area

Dr. Joseph Preusser, Area President

Metropolitan Technical Community College Area

Dr. J. Richard Gilliland

Southeast Technical Community College Area

Dr. Robert Eicher, Area President

Trade Associations

Technical Community College Association

Tom Johnston, Executive Director

(402) 471-4685

ENGINEERING FIRMS

Maniktala Associates

Ravi Maniktala, President

Olsson Associates

Patricia Hecker, Marketing Department

Richard Horrocks, CBDG Grant Administrator

Raymond G. Alvine

Larry Noteck, Engineer

R. W. Beck and Associates

Tim Corregan, Associate

APPENDIX AB

TELEPHONE INTERVIEW QUESTIONNAIRES

NEBRASKA MARKET RESEARCH REPORT

Potential users of the proposed programs for local jurisdictions: Cities and towns, school districts counties, technical community colleges and health care institutions

Capital Decision-Making Process

1. Background. What capital investments has your jurisdiction made within the last five years? What kind of borrowing was used {bonds, notes, leases}? What was the source of capital? Were any energy related projects implemented or planned? Have any energy audits been performed for your facilities? Who typically initiates capital improvement projects?

2. Priorities. What are your capital investment priorities for the next three to five years? Why are these high on your priorities list? How do you expect to fund these projects? How difficult is it to get approval from the voters on general obligation bond issues?

Proposed Financing Program

3. Zero-Interest Loans. A revolving loan fund offering capital at zero-interest has been proposed for energy improvement projects in Nebraska local jurisdictions. The fund would be administered by the Nebraska Energy Office with commercial banks possibly acting as the local agents. Would access to low or zero-interest loans increase the likelihood of your jurisdiction making energy related investments? Would your jurisdiction be more likely to use a loan made by the State or one made by a local bank?

Has your jurisdiction received grants from the Institutional Conservation Program or the School Weatherization Program? Has your jurisdiction received a zero-interest loan from the School Weatherization Program? If yes, what has your experience been working with the Nebraska Energy Office on these projects? Were the projects successfully implemented and are they saving energy in your facilities?

Proposed Energy Circuit Rider Program

4. Background. Who has responsibility for facilities management in your jurisdiction? How many full-time employees manage and

operate facilities? What is their background? Do these employees receive training in their areas of responsibility (e.g., operating and maintenance procedures, boiler operation, energy management)? If so, who provides the training? How is it paid for? Does your jurisdiction provide release time for training?

Does your jurisdiction have energy management procedures? For example, do you regularly track energy use and costs, and/or inspect facilities and review operating and maintenance procedures to identify energy savings opportunities?

The primary objective of the Energy Circuit Rider Program is to provide assistance to local jurisdictions in managing energy use and costs. The Energy Circuit Rider, based at the local community college, would provide a number of services including:

- helping local jurisdictions set up an energy use and cost accounting system;
- training administrators and facilities personnel to use the energy accounting system and to identify both low cost and more capital intensive energy efficiency projects; and,
- assisting local jurisdictions in obtaining financing for the projects.

5. Energy Circuit Rider Services. Would you use the services of the Energy Circuit Rider? {Question the interviewee on each service}. Does your jurisdiction have other facilities related training needs?

The Energy Circuit Rider services would be paid for on a fee basis (on an hourly basis for on-site services, and per course for training services). Fees would be recovered in the loan process if projects are implemented. Would your jurisdiction be willing to pay these fees? Whose approval would need to be obtained?

The Energy Circuit Rider Program may be operated by the technical community colleges. Has your jurisdiction had any professional contact with the college in your area? What was the nature of that interaction? What is your evaluation of that interaction? What is your opinion of the community college as a base for the Energy Circuit Rider? Would you send employees to the community college in your area for training in energy management?

Potential Marketing Channels and Strategies

6. Background. How do you usually keep abreast of developments in the area of your local jurisdiction responsibility? What associations do you belong to? What is your judgement as to the mission of the association and the effectiveness of their publications and regular meetings?

What other organizations provide services to your jurisdiction?
What are these services and what is your evaluation of the quality and costs of delivery?

Questionnaire for engineering and architectural firms

1. Qualifying questions. What is the scope of your firm's services: design, engineering, construction management, installation, operation and maintenance service? What is the geographic extent of your firm's practice? Does your firm have clients among the following groups: county, city or town government, school districts, the technical community colleges, or hospitals and nursing homes? If so, how many such clients has your firm had and what were the services performed for them? How profitable is your work with local jurisdictions relative to other clients? Have you seen changes over time in the kinds of capital improvement projects undertaken by local jurisdictions?

2. Attitudes and capabilities. For your local government and nonprofit clients, what were the most important motivators for their retrofit work? To what extent was energy efficiency considered in replacement, retrofit or new construction work? In general, how aware are your clients of the benefits and costs of energy efficiency improvements?

3. Feasibility. What have been the major problems in taking projects from the design stage to implementation in local jurisdictions? What were the major barriers? How effective was the internal management of the process/project?

4. Reaction to programs. Obtain the respondents reaction to the concept of the Energy Circuit Rider Program as well as to the specific services offered. Does the contractor believe there is a need for those services among local jurisdictions? Does the contractor think these services compete with those of the firm? Would the program facilitate the firm's marketing to local jurisdictions?

5. Review the financing strategy. In the respondent's experience, what is the preferred method of financing capital improvement projects? What is their judgement as to the attractiveness of zero-interest loans among their local jurisdiction clients?

6. Potential marketing channels and strategies. In the respondent's view, what arguments would be effective in convincing local jurisdictions to undertake energy improvement projects? What kind of expertise do they respect?

Questionnaire for potential marketing channels

1. Experience. What is the principal mission of your organization? In general, how do you communicate with your jurisdictions {annual meetings, newsletters, personal contact, workshops}? What services do you provide to local jurisdictions? Are these services provided on a fee basis or is the cost of them included in annual dues payments? Which services are the most successful and why? Which services have failed to find a market and why?

2. Interest in marketing the programs. Describe the Energy Circuit Rider Program and the financing program. Do you think the local jurisdictions would use these services? What is the basis for your opinion? Would your organization promote these programs? What vehicles would you use to promote these programs? What advantage would promoting these programs provide for your organization?

Questionnaire to explore the capability of the technical community colleges for implementing the energy circuit rider program

1. Experience. Describe the Energy Circuit Rider Program. Does your college offer similar programs to the jurisdictions of interest? If so, describe the programs. What were the institutional and management arrangements? How many employees are involved? What has been the reception to these programs by the local jurisdictions? What are the colleges' marketing strategy for these programs? What improvements should be made with regard to implementing these programs?

2. Reaction to programs and interest in implementing them. Describe the Energy Circuit Rider Program and proposed financing program. Does the respondent think the jurisdictions of interest need these services? What is the basis for the respondent's opinion? Does the college have an interest in operating the Energy Circuit Rider Program. What are the capabilities of the college for implementing the program?

What division would have administrative responsibility for the program? What is the current level of administrative staffing of that division and what are its programs? Where does that division fit in the organizational structure of the college? What are the requirements of the college in terms of administrative authority, personnel? How would the college market the program? What geographic area could be served cost-effectively? What is the lead time for operation of a full-scale program? What lessons would the respondent apply to operating this program based on the college's previous experience offering service-type programs to local jurisdictions?