

**PUBLIC POLICY FOR HOME IMPROVEMENTS, REPAIRS, AND SERVICES:
A STRATEGIC PLANNING APPROACH**

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PUBLIC POLICY FOR HOME REPAIRS AND SERVICES:

A STRATEGIC PLANNING APPROACH

CHAPTER ONE: INTRODUCTION

I. A STRATEGIC PLANNING APPROACH TO PUBLIC POLICY FORMULATION

Public policy makers in countries throughout the world face exceedingly complex problems as well as a dismayingly large number of complex alternatives for preventing or remedying these problems. Although one may espouse a free-market philosophy and attempt to avoid unnecessary interventions into the marketplace, at times it may be necessary for policymakers to develop remedies which "intervene." One broad alternative category available to public policymakers involves "regulation"—laws, rules, standards, codes, and the like. Where policymakers are dealing with consumer problems or marketplace abuses, another broad set of alternatives involves "consumer information or education programs"—remedies which typically aim at improving the position of the consumer, so as to prevent problems or possibly remedy those which have occurred.

But given the frustratingly large array of problems as well as policy remedies, how does the policymaker select the appropriate remedies which are likely to enjoy success in preventing or remedying marketplace problems? One approach has been used with some significant success in the business sector for many years. It is easily adaptable to governmental applications. The approach makes use of what may be called a strategic planning process or outline. Following some stimulating interaction with Dr. John Evans and Mr. Lee McCabe, both then of the Consumer Research and Evaluation Branch, Consumer and Corporate Affairs Canada, this author proposed the use of a strategic planning framework as a method for developing and evaluating

consumer information programs. In their 1979 paper, "A Framework for Examining Consumer Information Systems," Dr. Evans and Mr. McCabe proposed a method for evaluating consumer information systems across the world. That paper was distributed to members of the Organization for Economic Cooperation and Development (OECD) during 1979. One aspect of the Evans and McCabe evaluative framework suggested that possibly product and service characteristics could signal the need for consumer information or education programs. Following this lead, this author explored the usefulness of product and service characteristics—within a strategic planning outline format—as one major set of indicators for the likely success of consumer education and information programs (cf. Miller, 1980). This paper is a further extension of the application of the strategic planning format to public policy analysis of the home improvements, repairs and services sector of the economy.

Although the strategic planning outline has been applied rather broadly in various business management areas, when investigating consumer and marketplace problems, it appears to be useful to follow the general outline format as applied by marketing managers (for example, Kotler 1980, especially Chapter 10). The classic strategic planning outline involves six separate elements: (1) Diagnosis; (2) Prognosis; (3) Objectives; (4) Strategies; (5) Tactics; and (6) Control.

The diagnosis and prognosis elements are like the situation analysis of a military tactical plan. Diagnosis is necessary for determining "where we are," defining the problem, and the like. Prognosis gives an indication of "where we are likely to be" if things continue as they are. The next three elements or phases—program objectives, strategies, and tactics—specify the "desired" situation and propose and evaluate alternative broad strategies and specific tactical implementations of those strategies as means for achieving those objectives. Finally, there must be some provision made for control—monitoring whether or not actual performance matches the desired or specified performance. Although all six elements of the strategic planning outline are

used in this paper, they are rearranged into three more convenient major categories: situation analysis; program objectives, strategies, and tactics; and control.

II. MAJOR ELEMENTS OF THE STRATEGIC PLANNING APPROACH

A. Situation Analysis (Diagnosis and Prognosis)

In public policy applications the situation analysis section of this strategic plan should give attention to several major subtopical areas. It should attempt to define and identify the problem or problems and abuses; it should identify consumers and suppliers involved; it should investigate characteristics of the products or services involved; and it should investigate relevant elements of the marketplace and the broad environment. In identifying and defining the problems and abuses, it is important that distinctions should be made between causes of the problems versus symptoms of the problems. Empirical data that are both accurate and up-to-date are most useful in this problem definition and identification phase. Chapter Two of this paper develops a brief Situation Analysis of the home improvements, repairs, and services sector.

B. Policy Objectives, Strategies, and Tactics

Policymakers should identify as carefully as possible objectives and goals which are to be achieved by the policy actions being considered. After identifying broad policy objectives, it is highly useful to write out in as specific and quantifiable terms as are possible measurable goals which are to be achieved. Once good clear goals and objectives have been identified and agreed upon, then it is possible to list alternative strategies and evaluate them in terms of their likelihood for preventing or remedying the problems and for achieving the objectives. As broad strategies are selected, specific tactical implementation plans—the selection of media, the drafting of messages, the development of regulations, and the like—can be formulated as the means for implementing those selected strategies. Chapter Three provides an overview and discussion of Objectives and Strategies relevant to the home improvements, repairs and services sector.

C. Control

Just as it is important for businesses to monitor what "works" and what does not, so also it is important for policymakers at the federal, provincial, and local levels to give attention to "control." When strategies have been selected, part of the implementation plan should specify the method(s) for measuring the impact and effectiveness of the strategies in a pre-implementation post-implementation mode. Only in this way can it be determined if the strategies are "on target" and are indeed achieving the objectives specified. Both before and after implementation it is also highly desirable to do a cost/benefit analysis in order to assess the tradeoffs involved for various sectors, various businesses, various consumer segments, and the like, as a result of implementing the strategic plan. Budgets and schedules which specify the necessary time, dollars, and people, are typically a part of the control elements of the plan. Chapter Four offers a very brief comment on the importance of the control phase of strategic planning in the home improvements, repairs and services sector.

III. SCOPE OF THIS PAPER

In view of the very broad and complex nature of the home-related repairs and services topic, this paper can serve merely as a beginning and as a basic framework perhaps for applying the strategic planning model to this aspect of public policy concern. It is not possible to treat each of the major areas or any of their subcategories in great depth at this time. From this broader overview, however, the policymaker can develop a perspective of the industry or industries involved, can identify certain widespread or serious problems deserving further attention, and can consider some of the major alternatives among strategic remedies for solving the problems selected for policy attention. Chapter Five consists of a short summary and discussion of problems and remedies for the home improvements, repairs and services area as a conclusion to this paper.

CHAPTER TWO: SITUATION ANALYSIS

I. HOME IMPROVEMENTS, REPAIRS, AND SERVICES

A. The Three Major Categories

It is necessary to begin with a statement of what is included in and excluded from this paper's discussion of home improvements, repairs, and services. Included are such things as improvements, replacements, repairs, and maintenance on single and multiple-unit owner- and renter-occupied residences. The discussion does not include mobile homes or new housing. Also excluded from the paper are most major home appliances, although there is a problem in determining exactly where to draw the line. Thus, for example, the discussion includes furnaces, air conditioners, water heaters, and water softeners. It excludes, however, such items as a built-in range, electric dishwasher, built-in central vacuum, and the like.

The majority of the discussion here has been divided into three major categories: (1) home improvements, including rehabilitation; (2) home repairs and maintenance, both routine and emergency; and (3) home-related services. In this taxonomy home improvements and rehabilitation tend to overlap home repairs. The distinction between the two categories is somewhat qualitative. Home improvements and rehabilitation include additions and improvements as well as major replacements which leave the homeowner somewhat better off than a simple repair or maintenance project might suggest. Home repairs and maintenance, both routine and emergency, tend to get elements of the home back in working order, but without major improvement. Home-related services include those generally routine services such as cleaning, lawn care, snow removal, and the like, which save the householder money and effort in operating the household.

It should be pointed out that these definitions are somewhat specific to this paper. Other authors and government agencies have used different terminology and categorizations to deal with these sectors of the economy. For example, in its quarterly series of "Construction Reports" the U.S. Department of Commerce, Bureau of the Census, includes two major categories under "residential alterations and repairs": the first is "maintenance and repairs (upkeep)" and the second is "additions, alterations, and major replacements (construction improvements)" to residential properties (Residential Alterations and Repairs, 1981). In their Consumer Federation of America report on Home Improvement Frauds: A Preliminary Report, to the U.S. Department of Housing and Urban Development, Stephen Brobeck and Edith Furst include several categories under the broad heading of "home improvements." Three major types of improvements are included: "maintenance and repair," "major replacements," and "additions and alterations to residential structures, and other property" (Brobeck and Furst, 1980, p. 3). Their introductory comments are useful in illustrating the wide expanse of the topical areas potentially included in the home improvements, repairs, and services topic:

"Home improvements are intended to serve purposes such as preservation, modernization, expansion, and protection. Homes may, for example, be preserved by replacing loose shingles or painting interior walls, modernized by installing central air conditioning or a more modern plumbing system, expanded by adding a garage or porch, and protected by installing burglar or fire alarm systems. One particular improvement sometimes serves more than one of these purposes. For instance, replacing an electrical system may check slow deterioration, protect against fire, and add such conveniences as light dimmers. . . .

. . .

These improvements can involve not only the inside and outside of the house, but also related structures and the grounds. They can be made to such exterior features of the house such as the roof, gutters, walls, porches, and foundation, and to interior features including heating, cooling, plumbing and electrical systems; floors, ceilings, and walls; windows, doors and fixed partitions; and such fixtures as kitchen cabinets or built-in bookcases. They can also be made to other structures such as detached garages and swimming pools, to such artificial outdoor surfaces as driveways, patios, and sidewalks, and to the grounds." (Brobeck and Furst, 1980, p. 3)

Notice that in their terminology, maintenance and repair items are included under home improvements, rather than being distinguished separately from the home improvements category, as is done in this paper.

1. Home Improvements (Including Rehabilitation)

A list of the examples of items that might be included within the home improvements category is provided in Table 1. Additions to the home might include building an extra room to the house, finishing a basement or attic, building a deck or patio, adding a screened porch or greenhouse to the home, and the like. Fire/smoke alarm and burglar alarm systems may also be added to the home. Electrical system improvements might include additional lighting fixtures, electrical outlets, overall upgraded electrical service installation, and the like. A current growing area in the home improvements category includes energy saving devices as well as solar heating installations. Such devices as solar water heaters and timed thermostat installations would be included here. Adding or significantly upgrading the flooring or floor coverings would be included—whether carpeting, linoleum, floor tile, or the like. Heating, ventilation, and air conditioning improvements are also on the list: new furnaces, air conditioners, heat pumps, attic or ceiling fans, and the like. Thermal insulation of various materials and in various forms, is another rapidly expanding subcategory under home improvements (see Hunt, Miller, and Olson, for a discussion of alternative materials and forms). Lawn irrigation and sprinkler systems, both manually operated and with self-timer devices are also in the list. Also included would be painting, principally new painting of the exterior or interior of the home, as well as paving driveways, walks and patios, whether done with concrete, brick, asphalt "black top," or the like. Plumbing improvements include additions of baths, toilets, showers, sinks, wet bars, hot water facilities, whirlpools and jacuzzi's, and the like. The general category of remodeling, including rehabilitation, is mentioned to point out that many homeowners are engaging in a major overhaul of existing housing, which includes and

cuts across many of the individual categories listed. Also in the list are roofing additions and improvements, whether they be of asphalt, shake shingles, or other materials. New septic systems may be installed. Siding may be improved through the addition of aluminum, wood, composition board, or stucco materials. Another energy saving-related subcategory is the addition or improvement of storm windows and doors of aluminum, wood, glass, or plastic materials. "Luxury" additions such as swimming pools if in-ground or indoor should be included also. New wall coverings such as wallpaper or paneling also should be in the list. It is not feasible to attempt to list every single type of home improvement in the table or in the discussion here. Many other items not included above would properly be added to this category: saunas, hot tubs, construction of gazebos, etc. This list is provided as a "memory jogger" to give the reader a perspective on the broad variety of elements which might be included in the home improvements category.

2. Home Repairs and Maintenance

The second major category is home repairs and maintenance. As noted above, although it tends to overlap the home improvements and rehabilitation category, home repair and maintenance expenditures tend to get items back into working order without significant improvements or additions. They also include both routine repairs and maintenance as well as emergency repairs and maintenance. Table 2 provides a short but exemplary list of the types of items that are considered in the home repairs and maintenance category. It includes such items as: electrical system repairs, heating, ventilation and air conditioning repairs and maintenance; painting or repainting of the interior or exterior of the home; repaving and paving repairs; plumbing repairs; repairs or partial replacement of roofing due to age, sun and cold weathering, hail or wind damage and the like; septic system repairs and maintenance; siding replacement or repairs; basement waterproofing; and the like. The important distinction between a routine repair and an emergency repair is given consideration in Section D, Product/Service Characteristics, below.

3. Home-Related Services

This service category includes generally routine time- or money-saving activities purchased by the homeowner. Table 3 is a partial listing of such services. These services include such activities as carpet or drapery cleaning; a relatively new service, energy audits; the services of exterminators or pest control services; landscaping services; lawn care services, including grass cutting, shrub maintenance, fertilization and pest and weed control; septic system cleaning; sewer service; snow removal services; servicing of water softeners and purifiers; window cleaning; and other activities, such as chimney cleaning, furnace cleaning, and the like.

B. Comparison with Standard Industrial Classification Codes

When one wishes to develop statistics for this very broad and diverse collection of construction, additions, maintenance, and services, the task is made more difficult because of the diversity of industry subcategories under which statistical data are collected. Several of the United States Standard Industrial Classification code categories are relevant; however, they are not totally inclusive. Major SIC codes which the reader should be aware of are:

150	Construction
15020	Modernization and repairs
1520	Residential buildings
1525	Additions and alterations

Notice that these categories, however, do not include many of the home-related services discussed just above.

C. Aggregate Housing and Expenditure Data

An overview of the profile of Canadian housing is provided in Tables 4 through 9. During the period 1971 to 1976 there was a 21.8% increase in owned residences but only a 14.1% increase in rental units (Table 4). A detailed breakdown of the numbers and percentages of single detached versus multiple unit housing by province is shown in

Table 5. Information on owned versus rented units by province and by size of urban area is reflected in Table 6 for both 1971 and 1976. The highest proportion of owned units is in Newfoundland, the lowest in Quebec.

One can get a perception of the age of Canadian housing by province up to 1971 from Table 7. Obviously a lot of change will have taken place in the eleven years since that census. But even in 1971 the youth of the western boom provinces—Alberta and British Columbia—is obvious.

Recent 1977 and 1978 construction activity among the provinces is reported in Table 8. The table also shows Canadian totals for New Construction versus Improvements for the years 1979 through 1978. The grand totals of residential construction for all Canada broken down by Repair versus New for 1976, 1977, and 1978 are provided in Table 9.

Recent statistics tend to indicate that the Canadian household's expenditures for improvements, additions, and repairs to existing housing totaled about 4.7 billion dollars in 1979 (see Table 10). That amount does not include expenditures for most home-related services, using our taxonomy. Although the categories may not match exactly, 1979 expenditures in the United States for residential alterations and repairs totaled about 42.23 billion dollars (See Table 11. A very general rough approximation of the ratio of U.S. to Canadian population, households, etc. is approximately 10:1; see Carlson, page 1).

That 4.7 billion dollar expenditure for improvements, additions, and repairs, in Canada in 1979, included 2.6709 billion dollars spent on "minor repairs" (56.75%), and 2.0358 billion dollars spent on "capital repairs, improvements, and additions" (43.25%), as shown in Table 10. Total Canadian expenditures in this category—improvements, additions, and repairs—have increased steadily from \$3.7192 billion in 1977 to \$4.1091 billion in 1978 (10.5% increase), to \$4.7067 billion in 1979 (14.5% increase). While the 1978 and 1979 data are preliminary, Statistics Canada appears to be anticipating a

very slight increase in the minor repairs category from 55.4% in 1977 to 56.75% in 1979. In the United States there appears to be a very slight reduction in the percentage of expenditures devoted to maintenance and repairs over the 4-year period. (From 36.3% to 32.8%, see Table 11)

Table 12 offers a detailed categorization of the types of work included in improvements, additions, and repairs to existing Canadian dwellings for 1977 and estimates for 1978 and 1979. The table also provides an approximate breakdown of the types of repairs done on Canadian housing. The picture of repair work activity is expanded by Tables 13 and 14 which show the kinds of work which homeowners and landlords did through their participation in the Residential Rehabilitation Assistance Program (RRAP is discussed in Chapter Three below). Table 13 gives homeowner data; Table 14 landlord responses.

The home improvements repairs and services expenditures by Canadians probably approach nearly \$10 billion including do-it-yourself activity materials.

D. Product/Service Characteristics

Characteristics of the products and services themselves must be examined for the implications they have for problems and abuses in the market as well as for policy strategies and remedies (see Miller, 1980).

1. Home Improvements

a. Importance

Although there is variation within this category, generally the importance of any home improvement is rather high. Importance can be reflected in costs, in whether or not the item is a necessity or luxury, in health or safety factors, in extent of distribution as well as in the item's importance as perceived by the consumer.

(1) Cost; Proportion of Budget

Dollar costs for additions, siding installation, swimming pools, paving, roofing work, furnace or air conditioning installations and the like are relatively high, ranging from several hundred to several thousand dollars.

Typically most home improvements are one-time rather than recurring purchases. As a result, although they may be large cost items, they may not be large portions of the consumer's budget from year to year. Similarly, since for most of the improvements the cost is a one-time cost, for such improvements one need not be too concerned about "lifetime" costs of the improvements.

(2) Necessity-Luxury

In view of the many strong constraints currently placed on consumers who are considering the purchase of new housing, the consumer may be forced to consider improvements as an alternative to the purchase of new housing. Improvements of certain types could be considered luxuries (new swimming pool). Others, however, may be necessities; if the electrical system or plumbing system are inadequate or dangerous, replacement may be a necessity.

(3) Health or Safety

In the case of several home improvements health or safety factors are necessarily involved—septic systems, electrical and plumbing systems, fire or smoke alarm systems. Improper installation, improperly functioning products and the like could endanger health or safety of the home's occupants. For other home improvements, health or safety issues may be peripheral at best.

(4) Extent of Distribution

Again, as consumers attempt to "make do" with their current housing, home improvements are becoming more widely distributed, taking over some of the dollar investment that formerly might have been spent on new housing. Given the characteristics of most home improvements, they are likely to be widely distributed across the middle income segment of the population rather than among very high income or low income segments. About one out of seven Canadian households reported that they had paid for some home redecorating work and about one out of six reported home improvement expenditures (such as siding or insulation installation) in a two-year period preceding 1979 (Table 15).

(5) Perceived Importance

The national survey of Canadian households satisfaction and dissatisfaction funded by Consumer and Corporate Affairs Canada in 1979 (see Ash) provides some empirical data here. Home redecorating as a general category was considered "highly important" by 59.1% of purchasing households surveyed. Home improvement services, including installation of siding or insulation—which may overlap significantly the home repairs category—was rated as "highly important" by 77.8% of purchasers (Table 15).

b. "Purchasing" Factors

(1) Shopping; Length of Purchase Deliberation

Because most home improvements are not emergency purchases, there typically would be time to "shop" by phone, use the Yellow Pages, gain information from friends, etc. Some consumers may obtain bids from several vendors before making a purchase decision. However, because of door-to-door or in-home selling of certain improvements—especially in low-income neighborhoods—with its frequently attendant high pressure techniques, certain consumer segments may end up purchasing certain home improvements without doing any shopping or information gathering (carpeting, siding, fire or burglar alarms, storm windows and doors, etc.). In these cases, the "urgency" of purchase is not a result of the product or service characteristic.

(2) Purchase-Repurchase Cycle

For home improvements the repurchase cycle is typically very lengthy, with several of the categories containing products or services which could be purchased once or twice in one's lifetime (a major addition to one's house). For some, the repurchase cycle could be shorter, depending on the number of times a family moves, whether or not they are renovating more than one home, etc.

c. "Assessability" Factors: Search, Experience, Credence Goods and Characteristics

Philip Nelson (1970) distinguished two categories of products which differ with regard to how consumers gain information about them: search goods and experience goods. Search goods, according to Nelson, are those which may be evaluated essentially by inspection or "search." Experience goods are susceptible to consumer evaluation by use or "experience." In considering characteristics of goods as they relate to consumer evaluation, Federal Trade Commission Office of Policy Planning and Evaluation staff members in 1974-75 labeled a third category of goods (or characteristics) "credence" goods. "Credence" goods are not readily evaluated by consumers either through investigation (search) or use (experience). These credence goods may require special expertise, special equipment or the like to allow evaluation.

Certain aspects of home improvements are primarily search characteristics. One is able to examine the appearance of the installation of siding, carpeting, and the like. Certain aspects of those home improvements or of others are primarily experience characteristics. After installation one can evaluate how well a smoke alarm works, how well the plumbing works, and the like. But for nearly all home improvements, there are certain important characteristics which fall in the "credence" category. Are there imperceptible hazardous fumes being emitted by the insulation? Are the aluminum wiring connections overheating in the walls? Is the furnace system adequately vented? In cases such as these the consumer must rely on outside expertise to evaluate the home improvement or to guarantee its safety or operability.

2. Home Repairs

Because of strong differences on many dimensions between home repairs which are routine (e.g., replacing worn out siding) and those repairs which are emergency repairs (e.g., repairing a broken water line), it is necessary to consider these as separate categories.

a. "Routine" Home Repairs

Included in the category of routine home repairs would be such activities as routine upgrading of electrical lights or outlets, replacement of an aging but still working furnace, repair of leaky faucets, replacement of old roofing material or siding, repainting, paving repair and the like.

(1) Importance

Again there is variation within the category of routine home improvements with regard to importance to consumers.

(a) Cost; Proportion of Budget

Routine repairs can range in cost from under \$100 for a minor electric or plumbing repair visit into the thousands of dollars for replacing roofing or siding, for example. As in the case of home improvements, major routine home repairs are typically one-time purchases and as a result may not consume a large proportion of the consumers budget over the consumer's lifetime or when aggregated across many consumers. They do involve significant costs, however, and as a result there has been a strong steady growth in the do-it-yourself activities of consumers in this category. There is time to complete routine repairs and the consumer may likely save large amounts (not always!) by do-it-yourself work rather than having a contractor or repairman perform it.

(b) Necessity-Luxury

Virtually all repairs, routine or emergency, are necessities—something that must be done to allow continued use of the home. Some may, however, fall into the luxury category if "deluxe" materials are selected or if the "product" involved is itself a luxury. Possible examples of each of those would be selection of cedar shake shingles to replace an old asphalt shingle roof or repair of the home's swimming pool filtration and water heating system.

(c) Health or Safety

Several routine repairs may be closely associated with the home occupants' health or safety. Furnace repairs in many cases could have prevented deaths from carbon monoxide poisoning due faulty flues or from fires. Similarly, electrical system repairs could have prevented fatal fires attributed to overloaded antiquated electrical systems. Years ago, lead-based paint was a major health hazard especially for young teething children living in older neighborhoods. But in many cases routine repairs may not be dramatically associated with health or safety factors.

(d) Extent of Distribution

Routine home repairs are almost universally distributed, i.e., nearly every household encounters the need to purchase these services or perform do-it-yourself repairs with purchased products. In the case of renters, the purchase of the services may be indirect—the lease or rental fee covers the cost of repairs performed or purchased by the landlord. Over one of every three Canadian households reported they had required heating or air conditioning repairs or services, or plumbing, carpentry, or other repairs or services in a two-year period preceding 1979 (Table 15).

(e) Perceived Importance

Again there is empirical data available from the CSD survey regarding the perceived importance of several home repairs and services. The data, however, do not make a distinction between "repairs" and "services" (e.g., annual furnace cleaning versus repair of an inoperable furnace), nor do they make a distinction between routine repairs and emergency repairs. "Heating and air conditioning repairs and services" were rated as "highly important" by 87.1% of purchasers surveyed (second of the twenty general services studied in the CSD survey), and "plumbing, carpentry, and other home repairs," were rated "highly important" by 76.6% (fourth place in importance rank of the twenty services studied). It is clear that consumers view home repairs generally as very important purchases (Table 15).

(2) "Purchasing" Factors

(a) Shopping; Length of Purchase Deliberation

By definition here, "routine" home repairs are not emergencies. Thus, there should be time available for information gathering and purchase deliberation before a purchase is made. Again, there are "horror stories" which have been documented about furnace and siding sales which show that high pressure and deceptive sales techniques can destroy the opportunity to "shop." The Holland Furnace Company's deceptive and high pressure tactics, it is said, cost U.S. consumers some \$30 million a year at the height of its business (Nader, 1968). Superior Improvement Company annually grossed \$400,000 using deceptive high pressure sales tactics in the aluminum siding business during the 1960's in the United States (Magnuson and Carper, 1968).

(b) Purchase-Repurchase Cycle

The repurchase cycle for many routine home repairs may be several years (e.g., repainting, new siding or roofing); in some cases there may be a one-time nonrecurring purchase (if basement waterproofing were effective); finally, for several repairs and certainly for the category aggregated across all routine home repairs the repurchase cycle may be less than a year. In general, the somewhat lengthy repurchase cycle and the specialized differences between the various routine home repairs in this category suggest that there may be little transfer of knowledge from one experience to another, although the process of finding, contracting, etc. should generally be quite similar across categories.

(3) "Assessability" Factors

As in the case of home improvements, all three types of factors are present in the routine home repairs category—search, experience, and credence. Experience is likely to predominate as the mode of consumer evaluation for this group of services and the related products.

b. "Emergency" Home Repairs

At times the householder will encounter situations which require immediate repair attention; there is no opportunity to postpone the work. A serious water leak, breakdown of a furnace in winter, a clogged sewer drain, serious damage to a roof and the like, all may require immediate repair. The consumer purchasing process for these services is considerably different from the purchase process involved in acquiring similar services, perhaps from the same vendor, in a more routine and leisurely setting.

(1) Importance

(a) Cost; Proportion of Budget

Most emergency home repairs, though costly (perhaps typically under \$100 or just over), are narrow, short-term remedial jobs which are not of major scope typically. Thus, though costs may involve high labor and at-home service call fees at a minimum (\$35 and up ?), they are not major revamps or large-scale projects typically.

(b) Necessity-Luxury

Almost all emergency home repairs would be considered necessities. Rare exceptions may be found, however. Consider a "necessary" emergency repair to a luxury home product (swimming pool, sauna, whirlpool bath, etc.); it is not necessarily clear how those should be classified.

(c) Health or Safety

In several cases (furnace, electrical, plumbing) serious health and safety factors may be involved. In many cases they may not be critical factors.

(d) Extent of Distribution

As in the case of routine home repairs, emergency home repairs are encountered by nearly every household at one time or another. The same comments made about routine home repairs apply here.

(e) Perceived Importance

Almost inherent in the definition of the category "emergency" is the implication of seriousness or importance. The urgency of the time dimension is part of that. Also contributing to importance here is the fact that often essential home services may not be available until the repair is accomplished. The furnace labors faithfully and quietly without attention through the winter; when it fails on a frosty day or night there is no question that the problem is accorded high importance by the consumer. As noted in the corresponding section above under routine home repairs, consumers generally report that both "heating and air conditioning repairs and services" and "plumbing, carpentry, and other home repairs" are "highly important" (Table 15).

(2) "Purchasing" Factors

(a) Shopping; Length of Purchase Deliberation

It is the lack of purchase deliberation and the urgent press of time which distinguish emergency home repairs from all the other home improvements, home repairs and services. The consumer must rely on past experience with a supplier or contractor (if there were any) or rush to the Yellow Pages to find a solution to the pressing problem. It should be observed that on-call availability for emergency service is typically a major element in the message of Yellow Pages advertisements for plumbers, electricians, sewer services, and the like. The time urgency in these cases may not permit a reasoned careful search of alternatives nor a selection of the most competent or lowest priced vendor.

(b) Purchase-Repurchase Cycle

Again, although emergency repairs of one sort or another may be encountered with more frequency by some households than others (older homes possibly), the repurchase cycle for most emergency repairs hopefully is fairly long. As a result, previous experience with a given vendor, etc., may no longer be of use to the consumer (cf. Friedman).

(3) "Assessability" Factors

Again, search, experience, and credence factors are likely to be present for many emergency home repair situations. In the postpurchase evaluation of the work, "experience" factors will likely predominate obviously (repairman arrived in a short time, cleaned up work area, item repaired appears to work well again, etc.).

3. Home-Related Services

Home services include such services for the homeowner or renter as cleaning, lawn care, pest control and the like. Certain elements of the home may require recurring services, some of which could be performed by the householder, others which may require the work of a specialist using specialized equipment.

a. Importance

Generally the routine and recurring services purchased by some consumers are not as important as home improvements or home repairs.

(1) Cost; Proportion of Budget

Nearly all the services considered in Table 3 are low in cost relative to home improvements and home repairs. In many cases they may be performed by the homeowner or renter or they can be performed by persons with very little training or equipment (e.g., window cleaning, lawn care, snow removal). Where a specialist's services are required (pest extermination, septic system cleaning or servicing), the costs will be higher. Even though these services may be a recurring purchase for some households, they would not typically accumulate to a noticeably large portion of the consumer's budget.

(2) Necessity-Luxury

Although for several services or for certain consumer segments the service may be a necessity (e.g., routine servicing of a water softener, chimney cleaning), in many cases the consumer could do the work himself/herself (lawn care, window cleaning, snow removal). For some households, thus, several of these services are optional time-saving or work-saving luxuries.

(3) Health or Safety

Health or safety factors are typically not terribly critical for most of these services. Several do involve health and safety factors, however—consider pest extermination or chimney cleaning, for example.

(4) Extent of Distribution

The extent of distribution for these services is less widespread than for home repairs. Although one out of five Canadian households may purchase carpet or window cleaning services, or yardwork, snow removal, and lawn care services, only about one out of 14 require cesspool or septic tank services and only about one out of 17 report that they use water softener services (Table 15).

(5) Perceived Importance

In general, as noted above, consumers do not rank the services in this category as being as important as home improvements or home repairs. Of those purchasing the various services in the CSD survey, the percent who rated the following four services as "highly important" relative to other services in 1979 was as follows: carpet cleaning, window cleaning, other home care services—42%; yardwork, snow removal, lawn care—55%; cesspool, septic tank services—64%; water softeners—54%. The home cleaning category, which may be most optional, was least important of these four; it ranked seventeenth in importance of the twenty services investigated in the CSD survey (Table 15).

b. "Purchasing" Factors

(1) Shopping; Length of Purchase Deliberation

For the most part the acquisition of these services is made without time pressure. There is time for the consumer to shop, acquire information, etc.

(2) Purchase-Repurchase Cycle

For most of the services included in this category, the purchase is both routine and recurring. One is likely to have the same service vendor provide the service on

regular occasions. The consumer can thus benefit from recent experience and from familiarity with a given vendor's services. For seasonal home-related services (lawn care, snow removal, possibly pest control) there may be a lapse of from six months up to nearly a year between purchases of the service.

c. "Assessability" Factors

Once again, all three types of assessability factors are present, but "experience" predominates as the major mode of evaluation for consumers. Yellow Pages information and newspaper ads and the like may allow some assessment of some vendor characteristics (location, hours, accept charge cards, franchise affiliation, etc.). For some services there may be a possibility of some "credence" characteristics which consumers cannot assess on their own. Examples might include presence of potentially harmful residual chemical vapors following a pest exterminator's visit, similar possible hazards from chemicals used in lawn and shrub care, and the like.

II. INDUSTRY CHARACTERISTICS

A. Contractors and Vendors for Home Improvements, Repairs, and Services

It is extremely difficult to find accurate, up-to-date, relevant statistics on the contractors and vendors for home improvements, home repairs, and services. One of the problems encountered in attempting to collect or develop statistics from secondary sources is that categories overlap in such a way as to prevent a "breaking out" of the data for residential improvements, repairs, and services. Data on new construction, government construction, business and commercial projects, and the like, may be lumped together with that of information on the residential sector. It was this type of problem that motivated two pilot studies conducted by John Clark for Canada Mortgage and Housing Corporation, attempting to identify and define characteristics of rehabilitation contractors (Clark, 1980; Clark, 1981). Although Statistics Canada currently may be working on this problem, attempting to get some specific and current information on this sector, it is necessary at this time to develop some approximations

and estimates in order to attempt to understand the nature and scope of the industry involved.

1. Numbers and Receipts

Because of the difficulty in obtaining accurate industry estimates for Canada, it may be useful to examine characteristics of U.S. contractors and vendors in this sector and from that data make some cautious inferences and projections to Canada. The range of estimates by various individuals regarding the numbers and receipts of contractors in this home improvement sector are wide indeed! A Standard and Poor's industry survey estimated that in 1979 about 40,000 contractors were active in the home improvement business (Clemen, 1981) but, especially in view of John Clark's work, one may conclude with some degree of confidence that that estimate is very conservative. In his second Ottawa pilot study, Clark concluded that the number of contractors listed in the Yellow Pages may represent only half the number active in home renovation in that city (Clark, 1981). Further, Clark came to that conclusion based on the number of building permits whose contractors were not listed in the phone directory. It is clear from many sources that for a large proportion of home improvements, repairs, and the like, a large number of projects are undertaken without obtaining building permits, even when those may be required.

In spite of the hazards involved, it may be useful to attempt to get a fix on the number of firms involved in home improvements and home repairs and maintenance in the United States. Table 16 provides a summary of data on two major categories of contractors involved in construction, maintenance and repair: general contractors and operative builders, and special trade contractors. That table provides both the number of firms involved in each category, as well as their dollar receipts for 1977, along with a breakdown between new construction and maintenance and repair activity for the year 1977 (the most recent published census of the U.S. construction industry). Of the 155,971 general contractors and operative builders counted in that census, about 83%

are active in residential construction, maintenance and repair—129,245 firms with receipts of 45.5 billion dollars for that residential activity. One also may note from Table 16 that 61.1% of the total of general contractors and operative builders are involved in some form of maintenance and repair activity. If that percentage holds for all contractors involved in residential construction, maintenance and repair, we would expect nearly 79,000 firms to have been involved in residential maintenance and repair during 1977 ($.61 \times 129,245 = 78,968$). But those 79,000 firms do not include the special trade contractors; notice that at least 77.1%—that is 221,710 special trade contractors—are involved in some form of maintenance and repair activity, although this activity also includes work for government and business/commercial projects.

To get some more accurate picture of the type of contractors involved in the two broad categories of general contractors and operative builders and special trade contractors, Table 17 provides a breakdown along with 1977 number of firm- and receipt-data for most of the major subcategories included in those two major categories. General contractors include primarily those contractors involved in the building of single family houses or other residential buildings in these tables. Operative builders essentially are speculative builders of new homes, although some may be involved in maintenance and repair activities, obviously. But the list of special trade contractors is especially informative (Table 17). They include plumbers, painters, paper hangers, electrical workers, stone workers, plasterers, carpenters, floor layers, roofers, concrete workers, well drillers, glaziers, excavators, etc. Although the general contractors and operative builders category excludes data on non-residential construction and repair activity and also does not include the construction contracting work (such as bridge or highway construction, water or utility line work), the special trade contractor figures in Table 17 do include work done on business, commercial and government projects as well as residential expenditures and activities.

It is possible to separate out expenditures on government projects. Table 18 provides information on the number of firms as well as their receipts for both the general building contractor and operative builder and the special trade contractor categories, broken down by government versus private funding.

In order to get an approximation of business establishments and receipts in the private residential maintenance and repair sector, one must combine data from Tables 17 and 18; that is done in Table 19 which offers an estimate of nongovernment, private maintenance and repair firms and receipts among the general contractor and operative builder categories. As already noted, of the 129,245 residential general contractors and operative builders, 61.1% are involved in residential maintenance and repair—78,968 firms. Further, of the 45.5 billion dollars of receipts for residential new construction and maintenance and repair by general contractors and operative builders, only about 10.5% were for maintenance and repair expenditures, the remainder being for new construction. That yields approximately 4.8 billion dollars of receipts by general contractors and operative builders for maintenance and repair on residential buildings. Table 20 continues this process for the special trade contractors category. Using data from Tables 16 and 18, one may begin to approximate the number of firms as well as their receipts in the special trade contractor categories which were involved in private (nongovernment) maintenance and repair activity. Of the 284,266 special trade contractors active in the private sector, 77.1% were involved in maintenance and repair activities; that would yield a crude estimate of approximately 219,169 firms among the special trades which are involved in private maintenance and repair. Of the \$68.2 billion in receipts for private construction and repair for the special trades sector, 23.7% was for maintenance and repair as opposed to new construction activity; that would yield about \$16.16 billion in receipts by special trade contractors for private maintenance and repair. Notice that Table 20, however, includes activity for business and commercial construction as well as private, residential construction and repair.

From Tables 19 and 20, one may infer that there are at least 80,000 general contractors and operative builders involved in maintenance and repair with some \$4.8 billion in receipts. Further, there is a significant portion of the 220,000 special trade contractors with their 16.16 billion dollars in receipts, which are likely involved in residential activity. If only half of these special contractors do residential work, that pushes the total number of firms in the maintenance and repair and remodeling activity, to nearly 200,000 for 1977. If one further assumes that approximately half of the 16.16 billion dollars in private maintenance and repair receipts of the special trade contractors was from the private consumer sector, that would add approximately 8 billion dollars to the 5 billion dollar receipts from the general contractors and operative builders, for a total of 13 billion dollars in 1977.

It is possible to do some ballpark validity checks on these numbers. Brobeck and Furst reported that in 1978 consumers spent 37.5 billion dollars for home improvements, maintenance and repair (Brobeck and Furst, 1980). In commenting on this report, Mr. Randolph J. Seifert, a vice president of the National Home Improvement Council, stated that contractors account for only 40% of those receipts; do-it-yourself activity accounts for 60% of it (Loomis, 1980). Thus, one might expect the \$13 billion total derived in Tables 19 and 20 might increase to 15 billion dollars of receipts by general contractors and special trade contractors in 1978. If 15 billion is 40%, then the total would be 37.5 billion (exactly that amount reported by the Consumer Federation of America report by Brobeck and Furst), and the do-it-yourself sector would have amounted to 22.5 billion dollars.

At some risk with regard to inaccuracy, we may project these numbers to Canada for 1978: we would expect that over 20,000 firms might be involved in this industry, with receipts over 1.5 billion dollars, supplemented by nearly 2% billion dollars in expenditures by do-it-yourself homeowners. Until firm and accurate data is available from Statistics Canada, these numbers may be useful as rough approximations.

It should be noted, in closing the discussion on the number and receipts for contractors and vendors in the home improvements, home repair and services sector, that there is a greater tendency for small vendors and contractors to be involved in remodeling, rehabilitation and repair, than for the very large contractors. Clark and others have referred to the renovation industry as a "cottage industry" (Clark, 1981, p. 38). A survey of U.S. builders conducted in 1979 by Professional Builder and Apartment Business magazine reports that small builders, with receipts under 1 million dollars, are much more likely to be involved in remodeling than are larger builders, with receipts over 1 million dollars. Table 21 points out that although approximately half of all builders with receipts of 1 million dollars or more are involved in remodeling and rehabilitation activities in the U.S., about 62% of small builders in the under 1 million receipts category are involved in remodeling (Adams, 1979).

The reader should notice that to this point the discussion on characteristics of contractors and vendors has centered on the home improvement, maintenance and repair categories, but no mention has been made of the home services categories. In the home services categories, the data are even more scattered and sporadic than in the construction sectors. Nevertheless, it is useful to explore some representative home services industries in order to be aware of the number of firms, as well as the receipts and expenditures included in the third of the three major categories discussed in this paper. Table 22 provides a list of selected service industries representative of the firms in the home service category. It is clear from the diversity of the SIC codes, as well as from the items included in the SIC categories that those categories were not designed for the specific purposes of this paper! Of major interest, however, are carpet and upholstery cleaning establishments, the general category of services to dwellings and other buildings and certain of the miscellaneous repair services. SIC 734, services to dwellings and other buildings, accounts for 4.6 billion dollars in receipts and some 67,000 firms, although some of these may be in business to serve

government and commercial organizations and they may not all serve the residential household sector. Such activities as window cleaning, disinfecting and exterminating services, and general cleaning and maintenance services are included in SIC 734. Among those activities included in SIC 76, miscellaneous repair services, are a number which are not included in this paper's purview (electrical appliance repairs, radio and TV repairs, refrigerator repairs, reupholstery and furniture repairs, watch and jewelry repairs, and the like). However, it does include refrigerator and air conditioning repair establishments, as well as sewer and septic tank cleaning services. In spite of the detailed data provided by the 1977 Census of Service Industries by the U.S. Department of Commerce, it is not possible to separate out the residential sectors expenditures from those of the business and government sector for the service industries. Nevertheless, their inclusion greatly expands the number of firms, as well as the dollar expenditures included within the scope of this investigation.

2. Other Characteristics of Contractors and Vendors

In addition to attempting to approximate the numbers and receipts of firms involved in this industry, it is useful to consider other characteristics of these contractors and service firms. Based on some pilot studies as well as anecdotal reports in the media, we are able to make some further inferences regarding characteristics of these firms, such as their degree of unionization, capital assets, education, etc.

a. Unionization

John Clark's first Ottawa pilot study reports the degree of unionization of twelve trades involved in home repairs and improvements. Clark found that in Ottawa, the degree of unionization varied from zero for carpentry, excavation, and landscaping firms, to as high as 32% for electrical workers (Clark, 1980; see also Swick, 1980). Table 23 briefly summarizes the percentage of union memberships for the Ottawa trades contacted in the pilot study; it could be significantly different from the

percentage for all trades across Canada. This pilot study is not projectible to the general Canadian industry.

From the viewpoint of the consuming household, one important characteristic of unionization in the construction trades is the likelihood of significantly increased cost of work done due to the higher wages and benefits won by union workers. Sperling notes that for several new construction projects in Canada, construction performed by union workers ran significantly higher than those projects constructed by non-union contractors (Sperling, 1978). Sperling reports that because of union labor costs, it costs 37% more to build a plant in Fort Saskatchewan than Houston, Texas; 28% more to build a plant east of Calgary, Alberta, than in Texas. Because of the costs, there appears to be an increase in non-union contracts and jobs. From 1966 to 1977, the number of non-union projects in Edmonton increased from 67.9% to 71%, and in Calgary such nonunionized projects increased dramatically from 13% to 30% (Sperling, 1978). Many observers of the home improvements, repairs, and services activities have pointed out that high labor and service call costs are responsible for the massive increase in do-it-yourself activity by homemakers over the last several years (e.g., "Do It Yourself," 1972).

b. Capital Assets

John Clark reports that capital assets owned by vendors in the household repairs and renovation industry are vehicles, construction equipment, and office equipment, in order of dollar importance (Clark, 1980). It may be obvious, but it bears repeating that this is a "cottage industry." Because of the relatively low need for capital equipment, ease of entry and exit by small "shoestring" operations is a general characteristic of the small contractor and vendor in this industry.

c. Skills and Education

Although in some cases licensing is required, and in other cases unionization provides for a progression from apprentice through journeyman, in general, for many

of the vendors in these categories the workers are, relatively speaking, without special or formal training who have acquired most of their expertise and skill on the job. In her excellent overview of the household repairs and renovation industry in Canada, Brenda Swick includes literature describing programs offered by Algonquin College in Ontario for such special trades as carpentry, construction electrician, lather, plumber, and the like. Education offered in these programs varied from basic eight-week introductory programs of studies through intermediate and advanced programs of similar eight- to ten-week duration, into 2-year diploma programs in several business management areas (Swick, 1980, Appendix C). Although special training may be appropriate or necessary for specialized trades (for example, electrical work, plumbing, and the like), there are many jobs and activities in the home improvements, repairs, and services categories which do not require significant amounts of specialized training at all (window cleaning, yard service, and the like).

d. Other Characteristics

A discussion of other characteristics of the home repairs and renovation contractors sampled in the Ottawa pilot study, are provided by Clark (1980). Although the information is somewhat dated, the National Home Improvement Council reports that for United States contractors involved in home improvements and remodeling, advertising costs in small towns ran a minimum of 2% of their gross volume, while in big cities the same figures ran 10 to 15% of gross volume. In small towns it costs from \$3 to \$8 for a contractor to get a single lead, while in big cities the cost for a lead ran from 10 to 18 dollars; industry average cost per lead was \$13 ("Aggressive Remodelers," 1976). As noted above, Clark observed that many home remodeling contractors (perhaps as many as half or more) do not even bother to list their services in the telephone directory (Clark, 1981). This lack of promotion activity, as well as of a comprehensive list of vendors and contractors in these sectors, has implications both for regulation and for availability of consumer information. It may not be surprising

that consumers are likely to encounter problems if many home improvement and repair firms "have few capital assets, little cash on hand, little professional, managerial, or technical training, etc." Yet these individuals are likely to encounter more "unknowns" when they try to repair or renovate existing structures with problems hidden behind walls, under floors, above ceilings, etc.!

B. Product Suppliers Including Home Centers

To get a more complete picture of this industry, one must look beyond the contractors for home improvement, home repair, and home-related services to the wholesalers which supply products used by these contractors, as well as to retailers who supply these products to the do-it-yourself consumer market.

1. Wholesalers

One must be careful of avoiding duplication in counting transactions and dollars here. Wholesalers' sales are included in the receipts of contractor and service vendors as well as of retailers of these materials, since by general definition the ultimate consumers purchases are not made from wholesalers. It is important to investigate wholesalers, however, because of their role in supplying contractors and service vendors, as well as their role in owning or controlling retail establishments selling home-related products. United Cooperatives of Ontario, for example, serves as a wholesaler to approximately 40 independent retail outlets selling home improvement items. But, United Cooperatives also owns 110 of its own retail outlets (Swick, 1980, Appendix B). Another typical channel of distribution arrangement is that of the "voluntary association." In a voluntary association, retailers join themselves contractually to a wholesaler while maintaining their independence as privately owned retail stores. In many cases, these voluntary associations are structured within a "franchise" setting. An example of this type of contractual relationship is the Handy Andy Company with over 150 outlets in six provinces. A full 99% of Handy Andy stores are owned and operated by independent dealers (Swick, 1980, Appendix B).

The merchandise and products used by contractors as well as ultimate consumers in home repairs, improvements, and home-related services work are obtained from a large variety of wholesalers and cover a broad range of merchandise lines. Table 24 may provide some insight into this phenomenon. The matrix illustrates how wholesale establishments in seven different categories supply merchandise in at least ten different product line categories, relevant to the home improvement, repair, and services industry. It should be pointed out again that these transactions include sale of merchandise to commercial establishments, for institutional use, and for government and business construction activity. It is clear from Table 24, although it provides only a partial example, that the task of assessing the size and scope of sales volume and activity in this industry area is an extremely complex one.

2. Retailers and Home Centers

For a broad variety of reasons, an increasingly large portion of sales of merchandise in the home improvement, repair, and services category is coming from the retail sector. Several phenomena are worth noting here. First, there has always been available to consumers the lumber and building materials stores where do-it-yourselfers could obtain merchandise and material for their home improvement or home repair activities. As a result of increasing do-it-yourself activity, the retail portion of their sales has continued to grow. A second phenomenon has been the marketing strategy known as "scrambled merchandising." In order to gain profitability and to respond to the consumer's desire for one-stop shopping convenience, many retailers began to carry product lines not traditionally carried by their type of retailer before. As a result, materials related to the home improvement and repair industry are available in a broader variety of outlets currently. The third phenomenon came about directly as a response to increased do-it-yourself activity in this sector; it was the evolution of the "home center," a store or a large area of a store given over to hardware, lumber, and home improvement materials.

Evidence of the first phenomenon, growth in the do-it-yourself home improvement and repair sector is discussed in Section C immediately below, "Do-it-Yourself Activity." The second phenomenon, scrambled merchandising, is fairly obvious in Table 25, which provides in matrix form, sales of five product lines in the home improvement and repair category for nine different types of retail outlets. As Table 25 indicates, nearly 75% of the 29 billion dollars plus in sales of lumber, building material, paints, and home repair items (merchandise line 640) came from lumber and building material stores (SIC 521). But notice also, that sales of that merchandise line came from a variety of other types of stores as well: approximately 2 billion dollars from paint, glass, and wallpaper stores (SIC 523), about 2 billion dollars from department stores (SIC 531), nearly 3/4 billion dollars from hardware stores (SIC 525), and nearly 1/4 billion dollars from general merchandise stores (SIC 539). The same thing happens with hardware, tools, plumbing and electrical supplies (merchandise line 600). Of the 10 1/2 billion dollars plus in retail sales of this category, nearly 5 billion dollars came from lumber and building material stores (SIC 521), 3 billion dollars from hardware stores (SIC 525), 2 billion dollars from department stores (SIC 531), about 1/2 billion from variety stores (SIC 533), and over 1/3 billion dollars from miscellaneous general stores (SIC 539).

The third phenomenon, emergence of the "home center" deserves expanded discussion.

a. Home Centers

By the 1970s, primarily as a result of the dramatic growth in do-it-yourself home improvement and repair activity, retailers recognized the emergence of the "home center." According to Hardware Age, a home center must have three characteristics:

- "1. The store must carry both hardware and lumber.
2. The store must have at least 7,500 square feet of merchandising floor space accessible to the customer (in fact, most home centers are far larger than this).

3. The store must be consumer oriented as evidenced by its hours, advertising, policies, etc." (Clemen, 1981, p. 6).

- b. Canadian Home Centers

By the late 1970s there were nearly 40 companies operating close to 2,400 home center establishments across Canada. Firms such as Allont, Ltd., Bold Lumber, Ltd., Colpo, Ltd., Dismat, Inc., Handy Andy Company, D. H. Howden and Company, Ltd., Marchands Ro-na, Inc., Revelstoke Company, Ltd., each had over 100 home centers located across the Canadian provinces. Table 26 provides a list of 38 companies which owned or operated home centers in Canada, along with the number of home center establishments and the number of provinces in which they operated.

- c. U.S. Home Centers

By the end of the '70s it was estimated that there were more than 175 home center chains (a firm with more than 5 outlets) operating about 5,000 outlets across the United States. The top eleven U.S. home center chains are listed in Table 27, along with their total sales and consumer sales. But in addition to these chains, a large number of leading general merchandise discounters and retailers in the U.S. are operating home center departments. Table 28 gives information on some of the leading discount chains with home center departments operating in the United States. Notice that this does not include the activity of several major nondiscount retailers like Sears, Montgomery Wards, and J.C. Penney, all of which are major factors in the home center/do-it-yourself sector.

- d. Home Center Growth

It has been repeated that dramatic growth has been characteristic of this home center phenomenon. In 1974 Hardware Age estimated that there were about 5,500 home centers with sales of approximately 8.5 billion dollars; by 1977 they estimated that there were approximately 13,000 outlets whose sales totaled nearly 16 billion dollars. As noted in the following section, "Do-it-Yourself Activity," in view of the plans of major retailers and discounters, that growth is likely to continue at a high rate.

C. Do-it-Yourself Activity

1. Extent

Consumers are much more likely today to attempt a home-repair or home improvement project on their own than they were a decade or two ago. According to the Bureau of Building Market Research, a report in Real Estate Today indicated that in 1973 approximately 40% of home improvement was do-it-yourself activity; by 1975 the do-it-yourself portion of home improvement activity had grown to 48% ("News Trends," 1978). It appears that today the do-it-yourself portion of home improvement expenditures is even higher. A 1980 statement by Randolph J. Seifert, vice president of the National Home Improvement Council, indicates that about 60% of the 40 billion dollar annual expenditure on home improvements came from the do-it-yourself sector (Loomis, 1980).

Labeled as the "fastest growing segment" of home improvement industry expenditures in the mid '70s ("Do-it-Yourself' Stocks," 1975), there is little doubt that this segment will continue to grow in importance and size. Major retailers and discounters have planned continued expansion through the early '80s in their do-it-yourself departments. Major discounters are planning expansion of the do-it-yourself home improvement area ("Discounters," 1977). Further, major portion of Sears-Roebuck and Company's new five-year plan—its "most ambitious project"—is the hefty development of the installed home improvement business, an area which represents 25% of Sears retail business ("Sears New Five-Year Plan," 1978). Similarly, Woolworth/Woolco has targeted the home improvement materials area of the firm for expansion and upgrading ("Woolworths" 1980).

2. Reasons Supporting Do-It-Yourself Activity

Many of the reasons for the dramatic growth in do-it-yourself home improvement and repair activity are fairly obvious. A primary cause for investing money on home repair and improvement has been the difficulty of moving to a new home due to

the high cost and limited availability of mortgage financing. In addition, the very high costs involving home improvement or repair work by professional contractors has put that out of the reach of many households (see Tygerson and Parliment, 1977; Blood, 1980; "Do-It-Yourself," 1972). According to a 1973 report in Nation's Business, the major motivations for doing do-it-yourself home repair and improvement are economic; pleasure is only secondary. Doing the work yourself makes it "affordable" ("Do-it-Yourself," 1973). Other observers have noted that for many in the ranks of the unemployed, time is available for tackling those long put-off home repair or minor home improvement projects ("The Housing Rebound," 1980). Another factor supporting the growth in do-it-yourself activity has been a change in lifestyles. In 1973, Mike Grossman, president of Evans Products' Retail Division, was in charge of some 170 retail lumber and building supply outlets; he observed:

"A few years ago it wasn't considered good form in some neighborhoods for a homeowner to drive in with a load of building materials roped to the roof of the family sedan or dangling off the tailgate of the station wagon. Now, it's kind of 'status.'" ("Do-it-Yourself," 1973).

All of the current economic and social factors tend to indicate that do-it-yourself home improvement and repair activity is likely to continue its growth through the mid-1980s, and possibly beyond. A 1977 national survey showed that a full 45% of U.S. households planned "substantive work" on their homes "within the next year or so" to save energy ("An Insatiable Market," 1977). Even in the face of high inflation in the 1980s consumers are spending more of their leisure time in at-home activities including home improvement projects (Giges, 1980).

D. Trade and/or Professional Organizations

To further sketch in the picture of this industry, it is useful to take notice of a large number of trade and/or professional organizations which lobby for their industries, provide for continuing education and training of tradesmen and professionals, establish standards and codes, disseminate information, and the like.

1. Canadian Organizations

Two important associations are very important for their activities related to home repairs and improvements in Canada. The first is the Housing and Urban Development Association of Canada (HUDAC), and the second is the Professional Home Renovators Association of Toronto.

a. HUDAC

The Housing and Urban Development Association of Canada is the major association for residential construction active in Canada. The Ontario wing has over 3,000 members who are active in 30 local associations. Its membership consists of builders, developers, trade contractors, suppliers, architects, members of financial institutions, and the like.

b. Professional Home Renovators Association of Toronto

A new group, the Professional Home Renovators Association of Toronto, was formed by 20 businesses. It already has developed a one-year warranty program for member work and hopes to establish standards for residential renovation (Swick, 1980).

2. U.S. Associations

Three major associations in the United States are involved with home improvement activities: the National Association of Home Builders, the National Home Improvement Council, and the National Housing Rehabilitation Association.

a. National Association of Home Builders

The National Association of Home Builders (NAHB) has a remodeling and rehabilitation department. The NAHB collects and disseminates industry data, offers seminars and workshops, publishes and distributes handbooks for tradesmen, and has a library available, all on the subject of home improvement topics.

b. National Home Improvement Council

The National Home Improvement Council (NHIC) also collects industry data, monitors and lobbies on federal and state legislation, and is active in disseminating information and education in the home improvement area (Clemen, 1981). In the mid-1970s, NHIC already had 1,700 members in 30 chapters, plus some 40 national members. They include contractors, lenders, wholesalers, manufacturers, trade associations, publishers, and the like ("Aggressive," 1976). In 1976 the National Remodelers Association was planning a merger with the National Home Improvement Council ("Aggressive," 1976).

c. National Housing Rehabilitation Association

The National Housing Rehabilitation Association (NHRA) is primarily involved in the regulative and legislative areas. It monitors federal and state rehabilitation programs, comments on proposed or pending legislation, and offers a forum in which members may interact with government regulators and legislators (Clemen, 1981).

3. Other Trade and Professional Associations in the U.S. and Canada

There are many other trade and professional associations whose activities or interests are closely allied with the home repair and improvement industry. A recent article in Air Conditioning, Heating, and Refrigeration News listed some 58 trade associations of interest to air conditioning, heating, and refrigeration contractors ("Profile," 1980). To provide a quick cross section of the types of organizations active in this area, following is a list of selected associations whose activities impinge on the home repair and improvement industry, most of them taken from the Air Conditioning, Heating, and Refrigeration News profile.

ACCA—Air Conditioning Contractors of America. Membership is self descriptive.

ARI—Air Conditioning and Refrigeration Institute. Membership consists of manufacturers of air conditioning, heating, and refrigeration equipment.

ARW—Air Conditioning and Refrigeration Wholesalers. Some 223 wholesalers are members.

ASA—American Subcontractors Association. An important association of subcontractors representing all construction trades.

ASA—American Supply Association. This group consists of some 1,200 wholesalers of the plumbing supply industry.

ASHRAE—American Society of Heating, Refrigeration, and Air Conditioning Engineers. This group consists of some 40,000 members from 118 countries, primarily engineers, who are active in engineering, standards specification, guidelines and research.

ASME—American Society of Mechanical Engineers. A group of 100,000 mechanical engineers and related professions.

BHCC—Better Heating-Cooling Council. Serves as a national information bureau for the hydronics industry.

HI—Hydronics Institute. This group consists of manufacturers of boilers, radiators, and accessories.

HVI—Home Ventilating Institute. An organization of 21 manufacturers of powered ventilating equipment, attic fans, exhaust fans, range hoods, and the like.

IAPMO—International Association of Plumbing and Mechanical Officials. This group consists primarily of government and trade professionals. The government officials are those who enforce the uniform plumbing code, UPC, along with tradesmen engaged in plumbing or mechanical construction.

IDHA—International District Heating Association. Consists of U.S. and Canadian companies and individuals interested in using steam, hot and chilled water, for heating, cooling, and other process use.

IES/NA—Illuminating Engineering Society of North America. This is a group of consultants, engineers, government officials, manufacturers, utilities, all interested in lighting and illumination engineering.

MCAA—Mechanical Contractors Association of America. This group of plumbing, heating, and electrical contractors is primarily engaged in commercial construction, with very few active in the residential area.

MIMA—Mineral Insulation Manufacturers Association. Members are manufacturers of rockwool and fiberglass insulation.

NAHRO—National Association of Housing and Redevelopment Officials. Not included in the Air Conditioning, Heating, and Refrigeration News list. Membership is self explanatory.

NAOHSM—National Association of Oil Heating Service Managers. Includes oil heating service managers, related trades and professions.

NAPHCC—National Association of Plumbing, Heating, Cooling Contractors. Described as the largest and oldest trade association in the construction industry.

NAWIC—National Association of Women in Construction. Consists of women holding positions in various construction trades, manufacturing companies, etc.

NECA—National Electrical Contractors Association. For some reason was not listed in the Air Conditioning, Heating, and Refrigeration News list. Membership is self-evident.

NFPA—National Fire Protection Association. Consists of business, industrial, government, academic individuals interested in fire protection.

NAHW—North American Heating and Air Conditioning Wholesalers Association. Consists of some 450 wholesalers of heating and air conditioning equipment and supplies.

NICA—National Insulation Contractors Association. Includes contractors, distributors, some manufacturers of insulation.

NLPGA—National LP Gas Association. A vertical trade association of LP gas manufacturers, wholesalers, retailers, and the like.

PC—Producers Council. Consists of manufacturers of steel, brick, concrete, roofing, glass, HVAC equipment, and the like. A major trade association cutting across all aspects of construction.

RETA—Refrigerating Engineers and Technicians Association. Membership open to anyone interested in, or involved in the installation, operation, maintenance, design, engineering and sale of refrigeration and air conditioning equipment.

RSES—Refrigeration Service Engineers Society. Members include individuals involved in refrigeration, air conditioning, and heating installation service, sales, and maintenance.

SEIA—Solar Energy Industries Association. Includes manufacturers, distributors, engineers, contractors, and builders interested in solar energy.

SMACNA—Sheet Metal and Air Conditioning Contractors National Association. An international association with membership in U.S., Canada, and elsewhere.

TIMA—Thermal Insulation Manufacturers Association. Self explanatory membership.

III. CONSUMERS

It is essential to consider consumers and consumer characteristics as well as those of specific consumer segments as part of the situation analysis for this policy paper. Here attention is given to characteristics of homeowners versus renters, to needs and characteristics of special segments or populations, and to the existence of consumer organizations.

A. Homeowners Versus Renters

It would be useful if an in-depth analysis of the differences, the needs, and the like, of homeowners versus renters existed. Such an analysis would consider demographic, psychographic, and behavioral characteristics in particular. Are there significant differences in demographic characteristics—knowledge, expertise, experience, income, age, occupation, and the like? Clearly there exist differences in

psycho graphics: differences in attitudes, opinions, lifestyle characteristics, personality, and satisfaction/dissatisfaction levels between the two groups. Finally, how are behavior patterns and tendencies different between the two groups?

In spite of the lack of availability of such a comprehensive analysis of differences and similarities among the two groups of renters and homeowners, we are able to identify the fact that significant differences do exist on the basis of a number of studies. For example, we are aware that satisfaction levels between homeowners and renters differ for a number of home-related repairs and services (Miller, 1981). For four of the eight home-related repairs and services categories studied in detail in the second phase of the CSD study sponsored by Consumer and Corporate Affairs of Canada, renters tended to be dissatisfied while owners tended to be satisfied: for plumbing and carpentry repair and services, for snow removal and yard work services, for home redecorating services, and for cesspool and septic tank services. Further, an aggregated measure based on satisfaction levels for all of the eight home-related repairs and services studied also indicated that renters were more dissatisfied (Miller, 1981, Table 19). It is not surprising also that for the 20 general repairs and services studied, in the nationally projectible CSD survey, renters showed high dissatisfaction, and owners did not (Miller, 1981, Table 21). In fact, when a discriminant analysis was conducted to determine different characteristics of satisfied versus dissatisfied consumers, it was discovered that the owner/renter variable had the highest canonical function coefficient of all the variables included in the discriminant function, indicating its key importance as a discriminator variable for indicating satisfaction versus dissatisfaction (Miller, 1981, Table 25). Although highly mobile, high income wealthy consumers may decide to rent rather than to buy a home because of their mobile lifestyles, we expect renters to be among the very young householders, as well as among the very old, and we expect renters to include low income groups because of their inability to purchase.

Although the owner has a specific responsibility for maintaining and repairing his or dwelling, the renter who pays for that repair and maintenance service in the rental or lease fee, suffers the tradeoff of losing some control over those areas.

B. Home Repairers and Renovators

Several recent studies have shed light on characteristics of those people who have invested time and money into home renovation and repair. The studies have not yet developed a nationally representative distinction between renovators and nonrenovators, but they have developed profiles for a major metropolitan area—Toronto—and for a major federal renovation program—RRAP.

Brenda Swick reports the results of a Toronto study of home renovators. The study found that there were two basic groups of people who buy renovated homes: (1) owners who renovate the home for their own personal use, and (2) those who purchase homes to renovate for later sale at a profit, or for rental. Swick's summary notes, that purchasers of renovated dwellings are often couples or non-family households, about half of whom are first-time buyers, who are generally young—about two-thirds under 45—with high incomes. Rental tenants who move into buildings renovated to add dwelling spaces usually are also non-family households whose heads are 20-34 years of age with incomes between \$10-20,000 a year (Swick, 1980, p. 34).

RRAP participants were identified through a survey of homeowners and landlords in the RRAP program. Homeowners tend to be over 45, in the larger metro areas as well as small communities, and most fall into the under \$11,000 income group due to the nature of the loan and loan forgiveness requirements (see Table 29). Landlord participants reflect higher incomes than the homeowners and tend to come more from the larger, over 30,000, cities; a third of the survey's landlord respondents came from Quebec (see Table 30).

A final observation—one may have stereotyped the person making the fix-up decision as the male head of household. But already in 1973, James Whitaker,

Merchandising Manager of the Consumer Division of Pease (home improvement center chain), pointed out perceptively that it is often if not primarily the woman who makes the decision regarding home improvements and more and more sees to it that the job gets done ("A Manufacturer's Vision," 1973).

C. Special Populations or Segments

Several segments of the consumer population in the housing market may deserve special attention in a policy analysis of home-improvement, repairs, and home-related services. Such segments would include young households, older households, low income households, and minority households.

1. Young Households

Young, newly formed households are likely to have a lack of experience in purchase, management, and/or repair and maintenance of the household. They may be forced into a home rental situation even though they may wish to buy, because of their lack of the necessary down payment. In view of high finance rates which recently approached 20% in both Canada and the United States, a large number of these young households are likely to include two-worker households.

2. Older Households

Many older households may be constrained by capped or fixed income levels, especially if they are retired. They may live in an older facility, within an older neighborhood. It appears that a larger percentage of the total population will be comprised by older households. For a good number of older households, a lack of mobility may also be a constraint. Many older households may find themselves facing possible displacement from low rental dwellings as a result of "white painting," the practice of "outsiders" purchasing older, low-priced housing units for renovation—units which then are made available either for sale or for rental at significantly higher rates after the renovation.

A recent study by Monroe Friedman indicated that older consumers tended to be satisfied with home repair services, but Friedman indicated that there may be need for concern since many older consumers drew almost exclusively upon past knowledge and experience in this highly changing area (Friedman, 1978). A 1971 study of living and health care needs of older people in Montgomery County, Maryland concluded that even when elderly residents were financially able to purchase assistance for home repairs or housekeeping, or to pay for better medical care, such services often were not available from the private sector (Noakes Associates, 1971). Some seven years later in studying the problems of rural, elderly households in Kentucky, Larson and Youmans concluded that home repair was an important need expressed by many elderly residents. Because of their low income typically, it was recommended that special financial assistance might be needed in order to make such home repairs possible. In fact, the need for home repairs was rated as more important than the need for transportation (Larson and Youmans, 1978). Clearly, for many older households home repair may be the only alternative for providing private housing of acceptable quality.

3. Low-Income Households

Many low-income households find that they lack mobility and are forced to reside in older, often substandard housing. Because of their low incomes, a high portion of which is spent for subsistence, food, and rent, they are unable to fix up or improve. For many—not all, of course—a lack of education places them at a disadvantage in considering home repairs or improvements or in evaluating a high pressure "offer" (such as the lien sale practice discussed in Section V below). Very recently the Association of Municipalities of Ontario (AMO) supported continuation of existing assistance programs for housing rehabilitation in view of the continued inability of the private sector to provide housing for low-income Canadians ("Municipal Perspective," 1981; see Auld and Steiner, 1981).

4. Minority Households

In many cases the problems that are faced by older households and low-income households are those faced by minority households. In some cases minorities may be collected in a low-income ghetto section of the city characterized by deteriorating housing among other living quality problems. In some cases also, language barriers could be a problem in understanding contracts and the like. Indeed, in view of subtle and not-so-subtle forms of bigotry or bias, minority populations may find that their choice of housing areas and neighbors may be partially or severely restricted.

D. Consumer Organizations

Certain consumers have been aided in dealing with the problems of home maintenance repair and improvement by a number of consumer organizations in the U.S. and Canada. Four of the major Canadian organizations in this area are the Home Service Club of Canada, the Homeowners Association, the Home Service Association, and the Consumers Association of Canada's Housing Committee. Both the Home Service Club of Canada and the Homeowners Association provide dues-paying members information on home improvements, as well as a screening of contractors and tradesmen whose work is then guaranteed. The Home Service Club of Canada has about 50,000 members and the Homeowners Association about 45,000. Members of the Home Service Club of Canada pay the club for work completed, and the club in turn pays workers on a uniform rate basis. The Homeowners Association similarly charges members for work done by the pre-screened tradesmen, but allows those workers to set their rates individually.

Similar services are provided by the Home Service Association, operating primarily in Ottawa, and the Blue Army which draws its membership from the western and central provinces of Canada (Swick, 1980). The Consumers Association of Canada has established a housing committee to deal particularly with problems related to home renovation work (Swick, 1980).

In the United States, Consumers Union and the Consumer Federation of America, as well as many other statewide or citywide consumer organizations have been active in dispersing information, providing educational materials, rating products and services, and generally lobbying for legislation to prevent or correct abuses in the home improvement and home repair areas (as an example, see Brobeck and Furst, 1980).

IV. GENERAL ENVIRONMENT

To gain further understanding of what is happening in the home improvement, repair and services industry, and possibly to get a feel for what is likely to continue to happen, we must investigate characteristics of the general environment. Those elements of the environment which deserve some attention are: economic, technological, political/legal, sociocultural, demographic, and international trade.

A. Economic

Probably the two most important aspects of the economic environment, obviously, are the current rates of inflation, as well as levels of unemployment and recession. Their realities, as well as consumer expectations related to them, have had a severe impact on housing and home improvement and repair. In 1977 the average mortgage rate for U.S. housing was 9%; in 1979 it was 11%; in April 1980 it was 17%! The impact of those rates is significant—in November 1979, to purchase a \$100,000 house one needed an income of \$36,500 to qualify for an \$80,000 loan. In April 1980 that same \$100,000 house required a \$55,000 income. Payments under the November 1979 mortgage rates would have been \$761 and under the April 1980 rates, \$1,140 ("Housing's Roof," 1980). The same situation has been occurring in Canada. Since 1965 housing prices have risen an average of more than 10% a year. In fact, in the first quarter of 1980 alone, housing prices rose 7%. Had they continued, that would have meant a 28% jump in one year. Interest rates for mortgages in Canada peaked at 20% during the spring of 1980. Fortunately, by September they had dropped to about

13-14% (Pole, 1980). The general problem which has accompanied these inflationary increases in housing prices has been that family income has not risen accordingly. From 1970 to 1976 in the U.S., the median price for existing housing rose 65% from \$23,000 to \$38,000; in the same period the median price of new housing rose 89% to \$44,000 while median family income rose only 47% ("News Trends," 1978). Faced with such high mortgage rates, the consumer has been unable to find relief even in rental housing in many areas. In 1980, the vacancy rate for rental housing in Winnipeg was 4.8%, in Montreal, 3.5%, but in Toronto it was only 1%, and in Vancouver and Victoria a mere .1%! (Grescoe, 1980)

As a result of the slump in new housing construction in both the U.S. and Canada, many related businesses are suffering severely. In spring 1980, of 190 plywood mills in the United States, 40 in the west and south had been closed due to bad markets, while 29 others were on "curtailed production" ("Anti-inflation," 1980). During the first five months of 1980, as a result of the drop in residential construction in Canada, about 500 Canadian builders declared bankruptcy (Pole, 1980). It may be some time—in spite of the somewhat counter-cyclical effects of home improvement expenditures—before the economy can recover, especially in view of these business losses.

B. Technological

Technological change has been characteristic recently of many of the areas involved in home improvement and repair. New materials have replaced traditional materials in several areas. Consumers now are aware of energy conservation devices, such as automatic flue dampers, timed thermostats, intermittent furnace pilot lights, and the like. In addition, individuals have begun investigating wind machines as alternative forms of energy generators, and many consumers have already invested in solar technology, whether in passive design features in new housing, or in retrofitting existing homes for hot water service and the like. Thermal insulation has gathered much attention. After a long period of reported problems related both to its

carcinogenic nature as well as to other headache and skin ailment problems and the like, ureaformaldehyde foam insulation (UFFI) can no longer be sold or installed as a result of a ban by the U.S. Consumer Product Safety Commission on February 22, 1982 ("Insulation Foam Banned," 1982). While technology has permitted improvements and new efficiencies, it also has involved some associated costs.

C. Political/Legal

Political/legal activity related to home improvements, repairs, and services, has been widespread at the federal, provincial, and local levels. Product standards and building codes have been in existence for many years. But recent regulations and programs have been aimed at improving the marketplace for housing across Canada and the United States. There have been many published evaluations of Canadian housing policy, and of federal and provincial programs aimed at housing rehabilitation, home insulation and energy efficiency, and the like. Some of these are mentioned in Chapters 3 and 4.

D. Sociocultural

Consumer's attitudes, opinions, interests, lifestyle, and expectations change over time. It is not only economic reality which shapes consumer attitudes and behavior, but consumer's expectations regarding inflation and recession are just as critical. It was not merely the actual interest rate in 1980 which kept many Canadian's from purchasing housing; Ken Pole observes that "recession psychology" kept many consumers out of the market because they were afraid to lock in to the high interest rates then existing in the market (Pole, 1980). Most Canadian and U.S. consumers still cherish the notion of a private home as opposed to multi-unit housing. Many still want a house with a yard for children, space for the garden or for play, and the like. As a result there is continued pressure on demand for private residential housing.

E. Demographic

Many demographic factors are of interest in a study of this home repair, improvement, and services area. Income, employment, wealth levels, rates of unemployment, new household formation rates, fertility and fecundity rates, and the like, all have direct impact on the demand and supply of housing. Worth special note, however, is the impact of population cohorts. The baby boom cohort which burst forth in post war 1945-46, is now 35 years old. As that population wave "ripples" through history, it continues to have significant impact on the demand for new housing as well as for home improvements and repairs.

F. International Trade

Because of differential demand and supply across international boundaries, a study of the housing market must take note of international trade activity as well. Between 1979 and 1981 alone, one company—Knowlton Realty, Ltd. of Calgary, Alberta—invested tens of millions of dollars in Canadian funds into the Denver real estate market. Of the 1.2 million square feet of new office space coming on to the market in Denver in 1981, Canadian developers accounted for nearly 900,000 square feet! ("Canadians Investing," 1981). Allen gives further examples of Canadian builders taking their work south into the United States (Allen, 1979).

Another aspect of international trade is that of immigration and emigration. A 1979 estimate of the conference of Housing and Urban Development Associations of Canada indicated that while there were about 50,000 Canadians emigrating to the United States, it was estimated that there were about 90,000 U.S. citizens and others emigrating to Canada (Hallstone, 1979). Mass population movements across geography occur not only within a country, but obviously move across national borders.

V. PROBLEMS AND ABUSES

A. General Scope of Problems in Home Improvements, Repairs, and Services

Problems and abuses in the home improvements, repairs, and services area generally fall into the "serious" area. While it is not the highest level of complaints (as compared to other complaint topics such as automobile repairs, mail order problems, and the like), it is potentially universal, possibly affecting every household. Further, the potential is high for large dollar losses for consumers. Most consumers could not lose their life's savings as a result of market abuses related to automobile repair or sale. They could, however, lose it as a result of market abuses in the home improvements, repairs, and services area.

Because of the importance of information on satisfaction levels and complaint level activity, that topic is treated separately in Section VI, immediately following this section.

B. Types of Marketplace Abuses and Consumer Problems

Because the general topic of home improvements, repairs, and services is so broad and complex and involves so many possible products and services, one encounters a wide variety of problems and marketplace abuses here. Where there is an opportunity for large dollar sales or receipts, where there is new technology with high demand, where consumers have little or limited expertise, etc.—there is likely to be a significant number of sharp practices, deceptions, and "ripoffs." Given the complexity and all the unknowns related to new technologies, to problems lurking within walls and under floors, and the like, it is not surprising to encounter abuses and problems. In this paper abuses and problems are categorized into four major areas: (1) those problems related to the representation and sale of home improvements, repairs, and services; (2) problems related to product and price; (3) problems related to service; (4) problems related to the financing of these improvements or services. This taxonomy is based primarily on the classification system used by Brobeck and Furst in their report on

home improvement frauds for the Consumer Federation of America (Brobeck and Furst, 1980).

1. Representation and Sale

Certain practices may likely be encountered in the sale of certain home improvements and services, especially where these services may be marketed door-to-door, or in-home. In some cases the consumer may encounter deception and misrepresentation. In other cases, high-pressure selling techniques may be used, forcing the consumer to make a decision without taking time to gather information or to make a more objective decision. Cooling off laws are designed to counteract these high-pressure techniques. A third category of practice may involve fraud, cases where there is clear intent to bilk the consumer. Brobeck and Furst give as an example of this last category, cases where a seller later fills in a blank signed contract.

A second major set of problems related to the representation or sale of home-related repairs and services has to do with the types or subjects of claims made. Product quality may be overstated. Product price may be underrepresented and/or inaccurately estimated in the case of repairs. The sales agreement may be falsely or inaccurately described or explained. In some cases the qualifications of the seller are overstated or fictionalized. At times the character of competition may be disparaged. In some cases sellers may dwell on and emphasize "secondary effects of the product," such as enhancing one's status according to Brobeck and Furst. There may be other types of claims that cause problems as well. One that comes to mind is the assertion that a product is in need of replacing in the home, when, in fact, it is actually operating properly.

2. Product and Price

Consumers may encounter problem situations, often unawares, in which the price charged for merchandise or services rendered is exorbitant, totally out of place with market prices for the product or service purchased.

Purchasers of home improvements and home repairs may encounter problems with the product or materials installed. The product may be flimsy, cheap, or substandard. It may be unsafe as in the case of flammable insulation or UFFI insulation. The installed product could be broken or defective, in fact in some cases used products may be installed and represented as if new. In some cases ineffective products or services may be sold to the consumer. At times unnecessary or ineffective pest control services may be involved; at other times it may be pressure-pumped basement waterproofing which doesn't do the job it was represented to.

3. Service

It may not be at all unusual for consumers to encounter problems in the delivery or timing of services offered. While not a "ripoff," much time, frustration, and inconvenience may be involved when service people do not turn up at appointed and prearranged times. It is not unusual for consumers to encounter delays in the completion of work. It is done eventually, but not within the time promised perhaps.

Other service-related problems deal with the workmanship itself. Some work is left incomplete and unfinished. In other cases consumers are charged for unneeded or inappropriate work. In some cases, while the work was completed and might have been needed, the workmanship was of a shoddy, substandard quality level.

It is interesting to note that the services questionnaire used in the national Canadian CSD survey conducted by CROP included a list of 20 possible reasons why a consumer might have been dissatisfied with a service which had been purchased or contracted for (cf. Miller, 1981, Table 4).

4. Financing

In certain cases the consumer may not only have paid exorbitant prices for the materials or services themselves, but the finance charge on credit contracts may also be exorbitant.

One particularly heinous practice became rather commonplace in California recently: the lien-sale contract. Unscrupulous home improvement contractors, financial institutions, and mortgage counselors approached elderly, disabled, and minority homeowners. Using high pressure techniques they obtained signatures on contracts for alarm systems, carpeting, or other home repairs or improvements. When consumers default on the credit payments for these often overpriced products or services (sometimes overpriced by 500% or more!), the finance company who may hold the loan papers often works in collusion with the contractors to initiate sale proceedings on the property by foreclosure. The property is then gobbled up by the contractor, financial institution, or the mortgage counselor. Over 1,000 families in southern California were threatened with loss of their homes, as a result of the lien-sale contract practice (Brobeck and Furst, 1980).

Although this cataloguing of types of abuse and problems in the home improvements, repairs, and services industry may not be completely exhaustive, it provides a framework into which most existing abuses and problems may be categorized.

VI. SELECTED HOME IMPROVEMENTS, REPAIRS, SERVICES—SATISFACTION LEVELS AND COMPLAINTS

A number of complementary and overlapping sources give information about the levels of consumer satisfaction and the frequency of complaints for home-related improvements, repairs, and services. Five U.S. and Canadian sources used here give the reader a general idea about problem areas as well as the extent and possible seriousness of these problems. The data come from: the National Canadian CSD Study, 1979; Swick's compilation of Canadian Business Bureau Complaint and Inquiry Statistics, 1979; 1981 complaint data from the state of Iowa's Attorney General's office on consumer complaints; a United States survey of problems with new housing in 1980; and finally the 1975 Survey of U.S. Housing.

A. The National Canadian CSD Study, 1979

Satisfaction and dissatisfaction levels of Canadian consumers with eight home-related repairs and services were recently investigated in some depth using data obtained from the National Canadian Consumer Satisfaction and Dissatisfaction Study in 1979 (Miller, 1981, see Ash, 1980). Of particular relevance here are two aspects of that data analysis: satisfaction/dissatisfaction levels and reasons for dissatisfaction.

For all eight home-related repairs and services, over 80% of using households were "somewhat" or "very satisfied" (see Table 31). On the other hand, that means that between 11.0 and 19.7% of Canadian households were somewhat or very dissatisfied with one or the other of the eight services studied. As Table 31 shows, the lowest level of dissatisfaction reported was 11.0% dissatisfied with home redecorating services. Of the eight home-related repairs and services, the four receiving the highest level of expressed dissatisfaction were: water softening services 19.7%; yard work, snow removal, lawn care services 18.8%; plumbing, carpentry, and other home repairs 18.3%; and home improvement services 15.9%.

Reasons for the high dissatisfaction with home-related repairs and services are given in Table 32, compiled from data from the 1979 CSD study. Of 1,052 respondents who completed the "services" satisfaction/dissatisfaction questionnaire, 716 had used one or more of the eight home-related repairs or services during the last two years. Of those 716 users, 63 (8.8%) reported high dissatisfaction with one or more of the eight services in that two-year period. The four most frequently cited reasons for that dissatisfaction were as follows: "the service was not performed correctly the first time," 57.1% of the 63 cases; "the service was provided in a careless, unprofessional manner" 39.7%; "the service was not completed in the agreed time" 36.5%; and "things were worse after the service than before" 25.4% (see Table 32).

More detailed information regarding the amount of loss involved, actions taken by consumers who were dissatisfied, consumer satisfaction with complaint handling, and reasons for not taking more direct action are discussed in the data analysis paper (Miller, 1981).

B. Canadian Better Business Bureau Statistics, 1979

Swick summarizes a set of frequency statistics derived from 1979 Canadian Better Business Bureau inquiries and complaints (Swick, 1980). Table 33 lists the ten most frequent topics of inquiries directed to the Canadian National Better Business Bureau. Table 34 summarizes the top ten most frequent topics of inquiry in the home-related repairs and services category. These top ten home-related topics account for well over 20% of inquiries directed to the Better Business Bureau. The top five areas in the home-related categories are home improvement and contractors 5.8% of all inquiries, home insulation 5.8%, paving 2.2%, roofing 2.1%, and home maintenance 1.8% (see Table 34).

Categories receiving the most frequent complaints by the Canadian Better Business Bureau are shown in Table 35. Table 36 excerpts the top seven home-related repairs and services categories from the complaint tables. These 7 home-related topics accounted for about 10% of all complaints received by the Better Business Bureau in 1979 (see Table 36). The top four categories in terms of complaint frequency were: contractors and home improvements 4.2% of all complaints, paving 2.0%, home maintenance 1.2%, and floor coverings 1.0%.

Table 37 summarizes the cause and disposition of eight selected home-related repairs and services based on the 1979 Canadian Better Business Bureau statistics. Of interest, curiously, are the large percentage of complaints in the home insulation area which were found to be "not valid"—40.9%! It is interesting to speculate whether or not some of these non-valid complaints involved complaints regarding ureaformaldehyde foam insulation.

C. U.S. Better Business Bureau Complaints, 1979

Selected summary statistics on complaint levels from the U.S. Better Business Bureau for 1979 reinforce the data collected by the Canadian Better Business Bureau. Tables 38 and 39 report complaint frequencies for both types of complaint as well as types of vendors involved. Table 38 shows that the majority of complaints related to home remodeling, maintenance, and roofing were based on unsatisfactory service and repair. The only other significant proportion of home-related complaints came as a result of poor quality or performance. Because the totals for all complaints received by the Better Business Bureau "a substantial number" of mail order complaints, the "delivery delay/damage" category is large for the total complaint column.

Of all complaints related to home improvements received by the U.S. Better Business Bureau, about 41% (about 9800) were complaints about the work of "miscellaneous home maintenance contractors" and "home remodelling contractors" (Table 39). The table does not reflect the relative proportion of dissatisfied customers among those who had purchased a given service—e.g., there were 1247 complaints for swimming pool companies, 5.3% of total complaints; but how many homes have swimming pools, and what portion of those complained? Clearly there are differences in the overall distribution of and need for the various services—geographically, by age of home, by urban/rural, etc.

D. U. S.—Iowa Consumer Protection Division Complaints, 1981

During 1981 the state of Iowa's Attorney General's office, Consumer Protection Division, received a total of 10,202 complaints across all categories. The most frequent complaints were about the consumer credit code, health spas and weight salons, advertising, and mail order. In fifth place were complaints about heating and air conditioning, accounting for 5.9% of all complaints. Table 40 summarizes the frequency of complaints for 11 home-related repairs and services from the 1981 Iowa data. Complaints for all 11 categories accounted for about 10% of all complaints to

the Attorney General's office. Notice that these complaints are not merely from unhappy consumers; they are from individuals who are seeking legal redress for wrongs they feel they suffered.

E. U.S. New Housing Problems Survey, 1980

Although this paper deals with repairs and services to existing housing—not to new housing—it is informative to note the frequency of complaints expressed by consumers regarding new houses they had recently purchased. The Federal Trade Commission and the U.S. Department of Housing and Urban Development jointly sponsored a national survey of new home buyers in the United States who had bought homes during 1977 through 1978, 12 to 30 months prior to the survey, in September through November 1979 (Kaluzny, 1980). A total of not less than 79% of households reported at least one problem estimated to cost at least \$100 to repair. The survey report indicates that the frequency of problem reporting increased with increases in purchase price of the home and with size of the subdivision, and decreased with age; fewer problems were reported by first-time purchasers and by those with less than 12 years of education. Table 41 shows the frequency of problems and their disposition broken down by problem categories. Problems with walls, ceilings, and floors were most frequent (29%), and next came "miscellaneous" problems (drainage, driveway, exterior concrete, etc.—24%). It may be that there is not a close quality check made after the completion of construction of new housing!

F. National Survey of U.S. Housing, 1975

Although the data are aging, a final source of satisfaction/dissatisfaction data on U.S. housing in 1974 is discussed by Myrtle (Myrtle, 1976). Myrtle's summary reflects the frequency of failures in heating and plumbing facilities and equipment during 1974 (Table 42). Nearly 18% of U.S. households reported rooms lacking heat somewhere in the home. Other deficiencies in housing (Table 43) include leaky roofs (6.6%), leaky basements (25% of homes with basements!), vermin problems with rats and mice

(9½%), cracks or holes in ceilings or walls (over 5½%), and electrical wiring problems (nearly 4½%). This summary of the U.S. national housing survey also reports very high frequency of dissatisfaction with regard to neighborhoods (noise, traffic, crime, etc.), and neighborhood services (public transportation, shopping, health care facilities, etc.) (Myrtle, 1976).

CHAPTER THREE: OBJECTIVES, STRATEGIES, AND TACTICS

I. OBJECTIVES

Objectives are very important because they determine strategies and tactics. Selecting strategies without clearly specifying objectives is like choosing travel routes without having a destination in mind. Although it is difficult, broad objectives must be selected and specific goals should be set as part of the broader objectives.

Housing policy objectives have been identified for several Canadian housing programs (cf. Canada Year Book 1980-81, esp. pp. 333-338). Carlson picks out the basic objectives of the Residential Rehabilitation Assistance Program from the program guide:

"The program is not designed to be used for wholesale demolition of deteriorated buildings and the subsequent construction of massive new building projects. The intent is rather to conserve and rehabilitate the housing stock (through the companion Residential Rehabilitation Assistance Program); to add or rehabilitate required social and recreational amenities or municipal services, to remove blighting land use, and to promote the maintenance of the neighborhood after the NIP project is terminated." (Carlson, 1979, p. 2)

Evaluators of RRAP have stated that its objectives were "a mixture of social and planning goals (An Evaluation of RRAP, p. 2).

A discussion of goals and objectives for Canadian housing rehabilitation policy is provided by Katherine Willson (Willson, 1980). Willson finds that six major policy objectives that could be specified for housing rehabilitation programs. The six she discusses are: (1) Increasing the supply of adequate housing through rehabilitation; (2) Improving the housing conditions of low income households through rehabilitation of the dwelling units in which they reside; (3) Local area improvement through housing rehabilitation; (4) Rehabilitation as a condition of historic preservation; (5) Developing a rehabilitation construction industry; (6) Universal improvement of the housing stock to meet new conditions (Willson 1980, esp. pp. 38-43).

Objectives vary on the basis of the types of ends they are to accomplish as well as according to the philosophy or legal source from which they are derived. Here attention is focused on two broad sets of objectives which may be directly relevant to the home improvements, repairs, and services topic: marketplace objectives and social or economic welfare objectives. The two are not mutually exclusive Aristotelian categories; they may overlap and reinforce one another.

A. Marketplace Objectives

Marketplace objectives focus primarily but not exclusively on private sector activities. The basic underlying philosophy for marketplace objectives is that free competition in a free market may be the best mechanism for efficiently providing products and services desired by consumers. Regulatory activity then is aimed at "helping" the marketplace to work and preventing, stopping, or remedying abuses in the marketplace which violate the rules of free market activity or which limit or weaken free competition. Several examples of marketplace objectives follow.

1. Let the Market Work

In some cases local regulations or joint actions by members of trades or industry associations could prevent or reduce free competition. "Let the Market Work" objectives would include objectives aimed at the removal of artificial barriers to competition, including restrictions on advertising or the right to practice a trade or offer a service at a low price, etc.

2. Help the Market Work

Because of certain externalities or possible short-term constraints, the market may not be providing products or services to certain populations or segments in different regions of the country. "Help the Market Work" objectives, for example, might be aimed at such things as providing private funds or capital at reasonable rates where market rates may be unusually high due to government involvement in the money market, etc.

3. Prevent Market Abuses Before They Occur

"Prevent Market Abuses" objectives are established to lessen the likelihood of occurrence of various types of market abuses such as unfair practices, deceptive practices, monopolizing activities, and the like. Educated and informed consumers are likely the best means of preventing widespread occurrence of various types of scams and ripoffs. It is better to have prevented abuses than to be faced with the problem of trying to stop or remedy them.

4. Stop Market Abuses Where They Occur

Where market abuses are occurring they should be stopped by government action. Certain regulations and policing activities may be aimed at stopping identified market abuses such as lien-sale contracts, high pressure sales practices, and the like.

5. Remedy Abuses or Restore the Market

Where consumers or competitors have been injured by market abusers, objectives may be set to "Remedy the Abuse" or to "Restore the Marketplace." Ill-gotten gains may be restored to harmed consumers or damages may be assessed to compensate damaged businesses. This set of objectives is, to some extent, a last resort. It is preferable to prevent an abuse than to have to attempt to remedy it. Often it may be impossible to actually remedy abuses or to restore the marketplace after predators have wasted their ill-gotten gains or have irreparably damaged individuals or their property.

B. Economic or Social Welfare Objectives

In addition to objectives which aim at market activities, government regulators or agencies may exist to provide for the economic and social welfare of their constituents. Canada's National Housing Act of 1954 not only was designed to promote the construction of new houses and the repair and modernization of existing ones, but it also more broadly was to promote "the improvement of housing and living conditions" (Canada Year Book 1980-81, p. 333). The "improvement of living

conditions" is a social or economic objective rather than a market objective. Local, provincial, and federal government agencies may be charged with or may themselves promulgate various economic or social welfare objectives. A few examples follow.

1. Provide Adequate, Affordable Housing . . .

The Canada Mortgage and Housing Corporation was formed to administer the National Housing Act. Originally its primary concern was to make mortgage money available or to insure mortgage loans, but more recently it has become active in "the pursuit of social housing goals . . ." (Annual Report of Canada Mortgage and Housing Corporation, 1980, p. 9). CMHC has established programs to develop "Social Housing" at "below market rents for families and individual of low and modest income" since 1949, both through nonprofit housing and cooperative housing (Annual Report, p. 9; Canada Year Book, 1980-81, p. 334).

Special segments may be targeted through these objectives. CMHC has given special attention to northern housing (geographic location target) and to rural and native housing (geographic and ethnic targets) (Annual Report, 1980, pp. 18 and 19).

2. To Improve Living Conditions or Standards

Housing obviously is an essential element in one's standard of living. Where housing does exist that is below acceptable standards for habitation, objectives may be established to bring that block of housing up to standard. Canada's Residential Rehabilitation Assistance Program (RRAP) and the Neighborhood Improvement Program (NIP) were designed to satisfy the objective of improving the quality of housing as well as the general amenities provided in one's residential neighborhood.

3. To Promote Health, Safety, and Welfare

Certain agencies may be responsible for enhancing or maintaining the health, safety, and well being of consumers. The U.S. Consumer Product Safety Commission is an obvious example. Objectives aimed at promoting or maintaining health, safety, or physical well being of individuals may be established which affect many aspects of

home improvements, repairs, or services. Such objectives may be implemented through strategies that may involve bans of unsafe, flammable, or toxic materials (e.g., urea formaldehyde foam insulation), inspections of heating or ventilation or electrical systems, codes with minimum standards for construction, etc.

C. Other Objectives

There may other important sets or categories of objectives which are relevant to the home improvements, repairs and services area. The previous examples are not an exhaustive list but serve merely as examples for establishing appropriate target objectives to be achieved by various strategies or programs.

II. STRATEGIES AND TACTICS

Strategies are statements which specify the type of broad-gauged activity which is to be followed in implementing or attempting to achieve objectives. Tactics are the specifics—programs, plans, regulations, campaigns—which actually are designed to implement the broad strategies selected.

In following the strategic planning approach one should first consider the available strategy alternatives which might be used to achieve the objectives established. Then the alternative strategies are evaluated as to their feasibility, appropriateness, effectiveness, and efficiency (costs/benefits) in order to select the best solution among those alternatives. This section attempts to establish an organized framework into which one may cast strategies available to government policymakers for the purpose of systematic scanning and evaluation. Because of the broad complexity of the number of products, services, practices, institutions, and consumer segments which comprise the home improvements, repairs and services area, once again the list of strategies and examples cannot be totally exhaustive and comprehensive. The framework, however, is the key to a systematic consideration of options which may prevent a more costly technique or one with more accompanying tradeoffs or side effects from being selected when simpler or better-targeted alternatives might have been available.

The framework proposed here includes six major categories of strategies for achieving objectives in the home improvements, repairs, and services area: 1) education and information, 2) regulation, 3) subsidies and incentives, 4) mediation and remediation, 5) insurance, and 6) other. Although there is clearly overlap in some of the detail, an alternative framework is provided by a list of some 20 possible approaches for reducing consumer fraud developed by the United States Law Enforcement Assistance Administration (Brobeck and Furst, p. 35). Their 20 items are listed under six major headings also: 1) payment planning, 2) post-sale alternatives, 3) complaint mediation, 4) private remedies, 5) coverage for consumer loss, and 6) document simplification. The complete list of 20 approaches is found in Table 44.

Note that while these strategies are considered under separate headings, a proper plan for achieving an objective or a set of objectives is likely to require a "mix" of several strategies which both reinforce and complement one another.

A. Education and Information

Although education and information may be considered as separate strategies, their tendency to overlap and their typical interdependence suggest it is appropriate to lump them together here. When considering education/information strategy alternatives it is important to give attention to several specific topics which should at least include the process, the target audience(s), the subject(s) treated, the source(s), and the media employed.

Education and information are among the most highly prized of strategies because they are usually least restrictive (Miller, 1978; Stern, 1967) and because the educated consumer is the best protection against most market abuses.

1. The Process

In designing education/information strategies, one should make use of knowledge of the models, tools, and techniques of communication and learning which have been derived from many years of empirical research. These involve such models as the hierarchy of effects, learning principles, and principles of persuasive communication.

a. The Hierarchy of Effects

Some years ago Lavidge and Steiner proposed a persuasive communication model which suggests that people move through various stages as a result of persuasive communication, from awareness to knowledge, to liking, to preference, to conviction, to purchase (Lavidge and Steiner, 1961). The usefulness of this model lies in the suggestion that there are different tasks for communication, e.g., making consumers aware of the existence of a remedy to their problem, providing information to create knowledge about what to consider in a home improvement contract, etc. Although the model has not been proven empirically, it is reinforced by parallel sequential models such as the one used in diffusion of innovation research (awareness, interest, evaluation, trial, adoption—Rogers, 1962) and the more recent work of Fishbein and Ajzen (belief, attitude, intention, behavior—Fishbein and Ajzen, 1975). The point is that a specific communication task or objective should be selected rather than to leap to the assumption that one message will change behavior!

b. Learning Principles

From the rich empirical literature on learning it is clear that several principles should be employed in developing education/information programs. Principles of repetition and reinforcement are important. Messages must be repeated and reinforced, distributed over time for learning to occur. One of the best rules to follow appears to be "repeat the theme with variations."

c. Communication Theory

Designers of education and information programs should incorporate the findings of communications research by Katz and by Hovland and his successors into their work. Characteristics of the source, message, and receiver(s) must be considered when designing effective communication programs (see, for example, Chapter 14 in Engel, Kollat, and Blackwell, 1973). Given specific characteristics of target audiences one may better select an attractive, credible spokesperson and decide on the merits of

one-sided or two-sided messages, primacy-recency effects, conclusion drawing and the like.

2. Target Audience(s)

Education/information programs must be tailored to the characteristics and needs of specific selected target audiences. Such audiences would include consumers, product/service suppliers, change agents, and provincial or local governments or other government agencies.

a. Consumers

Consumers are one of the most important target audiences for education/information programs in this area. Specific characteristics—age, education level, lifestyle or psychographic characteristics, locations, language, media preferences and habits, etc.—must be considered. Programs may fit large consumer groups or they may be tailored to very specific segments—e.g., rural, French-speaking, older Canadians.

b. Suppliers and Vendors

Suppliers of products and services may serve both as target audiences for education/information activities as well as information disseminators. Retailers and wholesalers, members of various trades, professionals—all may benefit from education/information programs developed by the government.

c. Change Agents or Opinion Leaders

Change agents or opinion leaders are important targets for education/information strategies. The "two-step flow" model, in fact, suggests that information should be directed to opinion leaders; these opinion leaders then will be sought out, imitated, or listened to by the masses of other consumers (Katz, 1957). Educators, officials of consumer organizations, media personalities, professionals, etc.—all may serve in this important opinion leadership role for other segments of less active consumers.

d. Government

Government agencies, officials, and staff at the federal, provincial or local level may require guidelines, handbooks, data and general information for implementing or administering programs in this area. They may also be change agents and may serve not only as audiences but also as educators and information disseminators.

3. Subject Matter

Education/information may have many possible topics as their subject matter. Important topics of subject matter in the home improvements, repairs, and services area might include information about processes, about products and services, about suppliers or vendors, and generally may provide "how to do" information for consumers and others.

a. Processes

Process information is important. Consumers should know how to look for, find, and select, hire, pay, etc. a contractor for home improvement services. They should know what is involved in reading or developing contracts or in soliciting bids. They should be aware of the process and remedies available for correcting wrongs—mediation of disputes, where and how to complain, how to get redress, etc.

b. Products and Services

Product/service information is also a common subject of great importance in this area. Product or service quality ratings, grade labeling, performance ratings and the like may be highly valuable. Informative labels may provide such information (Hunt, Miller, Olson, 1978) or reports may be published elsewhere. Government organizations, trade associations, independent rating services and the like all may develop and/or publish such information.

c. Suppliers, Vendors, Contractors

Supplier information is not as easily accessed or provided as information in the previous two categories. Some experiments have attempted to provide performance ratings on various vendors, but it is very difficult to remain accurate, fair, and up-to-date (cf. Maynes, 1975). More generic information about types of suppliers/vendors is more easily given: what to look for in a contractor, etc.

d. "How To" Information and Education

"How to" and its counterpart "what to avoid" are frequent topics of education/information in this area. Many articles in the popular press, many government and Better Business Bureau publications, and many books have been published on the "how to" subjects. Other media spots, radio and television, also provide such information. Especially in view of the dramatic and continuing growth of the do-it-yourself portion of this multi-billion dollar conglomerate industry, such "how to" information and educational activities will continue to be increasingly important elements in the strategy mix.

4. Source(s)

Although this policy analysis paper is being written with the federal level primarily in mind, a consideration of alternative sources of information/education programs must extend far beyond national government sources. In addition to local municipal governments, other sources of information include better business bureaus and trade associations, suppliers and vendors of services, the mass media, and various educational institutions.

a. Government

Federal, provincial and local government agencies are sources of information. The Canada Mortgage and Housing Corporation is a major source of information, data, reports, and policy analyses. Consumer and Corporate Affairs Canada similarly

gathers data and disseminates it in a variety of reports and publications. Statistics Canada also offers detailed data related to housing and home improvements, repairs, and services. Provinces and local governments offer warning and how-to information, "consumer buylines," home repairs "fact sheets," and various consumer guides (cf. Swick, 1980, pp. 12-15 for several examples). Bibliographies by the Canada Mortgage and Housing Corporation, by Corlase, by Silzer, by Auld and Steiner, and by Miller and Werdel, include many of the types of information and education materials available from these various government sources.

b. Industry

One of the significant batches of education/information materials comes from industry in a variety of forms. The Better Business Bureau and its local offices, supported by member business contributions, publishes complaint and information request data, how-to brochures, news releases about common abuses, and a broad array of information useful to business as well as consumers. Various trade associations as well as individual suppliers, home improvement centers, and the like publish "how to do it" pamphlets and booklets for tradesmen and consumers and conduct workshops on how to install, how to remodel, etc.

c. Mass Media

The mass media are important education/information sources. News broadcasts and special programs focus attention on widespread or local abuses. Handyman, fix-it-up, energy retrofit, and the like have been the subjects of TV and radio shows as well as of newspaper and magazine features. Special interest publications are geared directly toward this topic totally or in great part: Professional Builder and Apartment Business, Hardware Age, and the like for vendors and tradespeople; for consumers, The Family Handyman, Workbench, Mechanix Illustrated, Popular Mechanics, Good House-keeping, Better Homes and Gardens, House Beautiful, as well as Consumers Digest, and Consumer Reports.

e. Educational Institutions

While much of their work has been commissioned by or supported by Consumer and Corporate Affairs Canada or Canada Mortgage and Housing Corporation, many educational institutions, colleges and universities serve as important information sources also. But of particular interest are special institutes and centers whose major interest is allied to this housing and home improvements, repairs, and services topic. One of the best recognized of such organizations is the Centre for Urban and Community Studies of the University of Toronto. Its research and publications (such as the bibliography on housing rehabilitation in Britain, Canada and the United States, by Silzer) have been an important resource to persons interested in housing policy and research.

5. Media and Format

There are many ways to transmit information and conduct education. Several alternatives include labeling, various media, point-of-purchase devices, workshops, etc.

a. Labeling

Informative labeling, both voluntary and mandatory, is a most valuable source of information and education to consumers and business people alike. Labels can provide grade and quality information, warnings, usage instruction, safety and remedy information, etc.—all right at the time the consumer needs it where the consumer needs it. The broad and varied applications of various types of informative labeling and research related to it are discussed by Miller (Miller, 1978; see also Hunt, Miller, and Olsen; Thorelli and Thorelli, 1974). International symbols for use and care and the like and various national programs in informative labeling, quality certification, etc. have been a very widely used means for aiding consumers throughout the world (Thorelli and Thorelli, 1974; Thorelli and Thorelli, 1977; Miller, 1978). For many products used in home improvements, repairs, and services, especially for the do-it-yourselfer,

informative labels may be one of the primary means if not the primary means for information/education of consumers.

b. Sales Promotion or Point-of-Purchase Devices

Businesses make heavy use of various sales promotion techniques (couponing, premiums, contests, point-of-purchase devices, etc.) to supplement advertising and selling activities. The point-of-purchase devices which are part of sales promotion techniques are especially useful for do-it-yourself products purchased by consumers. Booklets, pamphlets, etc. available in racks at the point of sale can warn about safety or health hazards involved in installation of rock wool or fiberglass insulation, can provide "how to do" or "what to look for" guidance, etc. Again, a critical plus for point-of-purchase information/education material is its accessibility and availability when and where the consumer needs it.

c. Media

Several media are available for disseminating information and education materials. The traditional broadcast media, television and radio, of course, are important means to get wide distribution of information to almost all Canadian households. Published media including newspapers and magazines, as well as direct mail can provide more detailed information and explanatory discussions with visual illustrations.

The telephone—and in the near future the home computer/TV system—can provide a means for consumers to call in to access information. Several years ago an information utility was proposed to provide information similar to Consumers Union product ratings via a telephone call-in recording system (cf. Maynes, 1975). Several metropolitan area libraries have such recordings available on call. Obviously in this application the phone requires an active role of the consumer, whereas for most of the other media mentioned so far the consumer can be a relatively passive recipient of the information.

As movie theaters have come to be used for commercial messages, short film messages and features can be made available to theaters for screening to those audiences in attendance. Clearly, this medium would serve as a supplement for reinforcing messages to a select segment of the population rather than for reaching "the masses."

d. Workshops

Special education workshops, seminars, courses or classes may be conducted for a variety of audiences. Opinion leaders and change agents are often worth the cost of the investment in such special workshops; they then can dispense their expertise and knowledge to other groups and individuals. But many highly beneficial programs and workshops have been conducted to educate and inform consumers of topics of interest and importance to them. Voluntary participation of teachers or leaders may be an important cost saver in these seminars.

e. Other Means

There are other media, methods, or formats for disseminating information or for educating individuals. Salespeople may be required to show a card which discloses that they are selling rather than conducting research (cf. Miller, 1977, p. 67). One very important alternative for "educating" consumers is the simplification of documents themselves. "Legalese" and arcane jargon can be reduced to simple understandable terms without loss of accuracy and with great benefit to both customers and businesses (cf. "Appliance Maker," 1969, regarding Whirlpool Corporation's simplified warranty). Creative thought can identify many means (matchbook covers? outdoor posters? . . .) for carrying important information to consumer segments.

B. Regulation

Regulation is more "interfering" as a strategy alternative than are education or information activities. But in many cases, stronger action is demanded, especially to provide for consumer protection, to stop abuses, to provide remedies, and the like.

Regulation itself can take many forms such as licensing, codes, bonding and insurance requirements, warranty requirements, "cooling off" requirements, product standards, etc.

1. Licensing

Licensing laws attempt to regulate the providers of services. Passing a test, showing evidence of a period of on-the-job experience, giving evidence of having completed coursework or educational programs, and the like could be required before a license to practice a trade is issued. But it is difficult, if not impossible, to monitor or control the "black market" of providing services by nonlicensed contractors or tradesmen. Licensing could possibly provide a "quality assurance" mark to the consumer who shops among alternative purveyors of a service, however.

2. Codes and Zoning

Building codes and zoning requirements in theory can protect consumers. But misuse is possible and at times codes and zoning requirements or decisions have adversely affected consumers. Generally building codes specify minimum quality or performance standards for materials or construction practices (cf. CMHC Acceptable Building Materials, Systems, and Equipment, 1979). At times they may discourage the application of newer cost-efficient materials or techniques. Swick points out that zoning review may be a critical element necessary for encouraging residential rehabilitation or conversion of older housing stock in metropolitan areas. Ontario has recently commissioned a study of the influence of zoning on rehabilitation in five cities—Hamilton, London, Ottawa, Thunder Bay, and Windsor (Swick, 1980, p. 39). Because of the tradeoffs involved, careful consideration must be given to both building code reviews as well as review of zoning laws.

3. Bonding and Insurance Requirements

One means to protect consumers from possible loss is to require contractors and tradesmen to be bonded and/or to carry minimum insurance for the consumer's

protection. Again, the "black market" contractor or the "moonlighter" may slip past such requirements, and it is more likely to be such vendors who leave consumers with problems! Also, such requirements tend to place a proportionately heavier burden on the smaller contractor than on the larger ones (NAHB Remodelers Council Exchange, March 1981, pp. 38-39). The National Association of Home Builders feels that such bonding requirements also will increase costs to consumers and discourage new entrants from the home improvements and repairs market.

4. Warranties

It is possible to require contractors or tradespeople to offer a warranty on their services and work. But some protest that warranties also are costly to consumers. Mr. Bill Boley states that during 1978 some 50,000 service calls were made as a result of Canada's New Home Warranty Program; he asserts that builders lost 5 million dollars due to unnecessary trips and work (Hailstone, 1979). But clearly there have been some benefits to new home purchasers under this Canadian program and its U.S. counterpart, the Home Owners Warranty (HOW) program.

HUDAC Ontario has recently proposed a warranty program to cover renovation work which is much like the New Home Warranty Program (Swick, 1980, p. 28).

The nearest alternative currently may be the opportunity which buyers of existing houses have to purchase "repair insurance" at the time they close on the property. Swick observes that although Ontario's Consumer and Commercial Relations Ministry likes the plan, it has suffered badly from consumer apathy (Swick, 1980, p. 29).

A study of homeowner warranties sponsored by HUD involved interviews of 1800 U.S. homes. One conclusion was that warranties were needed, especially for FHA-insured homes 10 or more years old; they were likely to have higher repair bills than other houses. As in the case of Ontario's "repair insurance" program, the U.S. study observed there was very limited consumer interest in warranty protection due to

ignorance of the risks. The researchers recommended against a government warranty program due to the current lack of consumer interest and due to the fact that the private sector may be starting to cover the need for this type of protection (Brewster, et al., 1980).

5. "Cooling Off" Laws

Many home improvements, products, and services may be sold by solicitors contacting the consumer in his or her home. Often high pressure sales techniques and misrepresentations about the need for the work, the quality or performance of the work or product, and the price or value of the work may be involved (cf. Brobeck and Furst). "Cooling off" laws allow the consumer who was sold products or services in his or her home under certain conditions to break free of the contract. Every province has a "cooling off" law for door-to-door or at-home sales. The cancellation time allowed ranges from 2 to 10 days among the provinces and the "notice of cancellation" requirement also varies across the provinces (see Table 45). "Cooling off" laws are important methods of protecting consumers from high pressure, at-home selling practices, but to be effective these laws require an informed consumer who knows of his or her rights under the law.

6. Product Standards and Regulation

Where health or safety likely may be involved, it may be necessary to require minimum standards for product materials, configuration, or installation. In cases where products or materials are inherently unsafe or dangerous, it may be necessary to remove them from the marketplace. The federal governments of Canada and the United States have established certain minimum standards for product safety for several products and materials. Energy efficiency may also be an area where minimum standards are considered in the future. In a very recent action, after several years of accumulated evidence that urea formaldehyde foam insulation (UFFI) may be carcinogenic and may cause other consumer problems where installed such as

headaches, skin rash, etc. on February 22, 1982, the United States Consumer Product Safety Commission decided to ban its further use ("Insulation Foam Banned," 1982).

7. Other Regulatory Strategies

In addition to the regulatory control mechanisms already discussed, there are a number of other provisions which may protect consumers from market abuse. To prevent the somewhat commonplace problem of having a contractor abscond with a consumer's payment for improvement or remodeling work without paying subcontractors, various provincial laws provide for the withholding of part of the contracted amounts under their Mechanics or Builders Liens Acts (see Swick, pp. 24-27 and Appendix G). In view of the major abuse in lien sales contracts, especially in California (cf. Brobeck and Furst), there may be a need for close scrutiny of these practices and the related laws.

C. Subsidies and Incentives

Through a variety of forms of subsidies, grants, loans, tax breaks or other incentives, consumers, suppliers, governments and educational institutions can be supported or encouraged to participate in a set of activities desired by government policymakers. Both the federal government and the provincial and local governments participate in providing these grants and subsidies.

1. Means

Subsidies and incentives may be provided through a number of different mechanisms including outright grants, loans, subsidies, tax breaks and other means.

a. Grants

(1) To Provinces and Municipalities

In 1979 the Neighborhood Improvement Program (NIP), the Municipal Incentives Grants Program (MICP), and the Municipal Infrastructure Program (MIP) were merged into the Community Services Program (CSP) (Canada Year Book, 1980-81, p. 337). During the three years of its existence through the MICP, a total of \$130 million was

distributed in grants to municipalities "to encourage the development of moderate housing," increase density to better use land and to offset costs of medium-density levels (Canada Year Book, 1980-81, p. 336). The 18 year old Municipal Infrastructure Program, terminated in 1978, had provided during its existence over \$2 billion in grants to municipalities for some 6,000 plus projects which helped encourage residential development and reduce pollution. Between 1973 and 1978 through the Neighborhood Improvement Program about \$202 million in grants (in addition to \$64 million plus in loans) were disbursed by the federal government to 319 municipalities for upgrading neighborhoods through sidewalk, streetlighting, sewer and water repairs and improvements as well as development of parks, day care centers, etc. (Canada Year Book, 1980-81, p. 336-7). Since January 1979 the new Community Services Program provides block fund grants to the provinces based on both urban population and the municipalities tax capacity of the individual province. The funds are then distributed by the provinces to municipalities for improving older low-income neighborhoods, developing nonprofit housing, and improving certain municipal facilities.

(2) To Homeowners and Landlords

Both the Residential Rehabilitation Assistance Program and the two insulation programs—the Canadian Home Insulation Program (CHIP, 8 provinces), and the Home Insulation Program (HIP in Prince Edward Island and Nova Scotia)—offer direct grants to homeowners. Although the Residential Rehabilitation Assistance Program is primarily a loan program, households whose annual incomes were \$9,000 or less could receive a \$3,750 nonrepayable "loan"—in effect an outright grant of \$3,750. As household incomes increase to \$16,000, the homeowner may be eligible for up to a \$10,000 loan, but all of it is repayable (see Table 46 for more detail). The loans, of course, may be used only to cover costs of repairs and improvements.

Two separate federal programs begun in 1977 have provided grants to homeowners who add insulation to their residences: the Home Insulation Program in Prince

Edward Island and Nova Scotia, and the Canadian Home Insulation Program in the other provinces. As of December 1978 the programs had funded \$60.4 million in 190,760 grants across Canada (Canada Year Book, 1980-81, p. 337). By 1980 the programs had grown substantially. CHIP was allocated \$182 million for 1979 to cover the 294,327 requests (up from 76,170 requests in 1978!), and \$17 million was appropriated for the Home Insulation Program in 1979 (Swick, 1980, p. 43). In 1980 CHIP applications had increased to 467,000 for \$206 million, 45% over 1979; HIP approved 18,000 grants for \$8 million in 1980 (CMHC Annual Report, 1980, p. 22). It is estimated that over 95% of the housing in Nova Scotia and Prince Edward Island has benefitted from the HIP activity (CMHC Annual Report, 1980, p. 22). Consumers insulating their homes since April 20, 1979, under the Canadian Home Insulation Program could receive subsidies up to \$350 for insulating material for their residences and up to a third of the installation costs to a maximum of \$150 for the residence (Swick, 1980, Appendix I).

b. Subsidies

Although much the same as grants in that they are essentially nonrepayable gifts, subsidies are amounts to partially offset expenses or costs of materials or labor. The Assisted Home Ownership Program of CMHC offered direct contributions to qualifying moderately-priced housing purchasers during the first five years of their mortgage. Unfortunately, after that 5-year period, without the government aid, there were many defaults and the government unhappily had to repossess many homes—1,200 during the first quarter of 1980! (Pole, 1980).

Many of the subsidy and grant programs operate jointly with loan programs.

c. Loans

A major source of aid to consumers, especially in times of high interest rates, is the availability of loans at special low rates. The Residential Rehabilitation Assistance Program and the Graduated Payment Mortgage program of CMHC are

examples. As noted above, the RRAP provides loans, some of the amounts "forgivable," for selected lower income households, for the repair and improvements of homes. The Graduated Payment Mortgage program of CMHC is of benefit to home purchasers rather than those homeowners doing repairs or improvements. The Graduated Payment Mortgage system allows for low mortgage payments initially, which gradually are increased each year during the first 10 years of the mortgage (Canada Year Book, 1980-81, p. 336; Grescoe, 1980).

Home improvement loans in the U.S. have been used principally for kitchen or bath remodeling; the most expensive improvements involve adding rooms, garages, siding or attic remodeling. Best bets for home improvement loan recipients are new families in a home worth over \$75,000 built over 35 years ago (Thygerson and Parliment, September 1977).

The U.S. recently increased the limit on home improvement loans by the Federal Home Loan Bank from \$10,000 to \$15,000 ("Board Acts," 1977). And savings and loans find that home improvement loans offer high yields with normal risks while tending to show the fewest delinquencies ("New Service," 1978). Given Canada's geographically-based differential supply and demand for housing, there should be some interest in a new provision of the U.S. 1980 Housing Bill. The bill allows the Secretary of HUD to increase loan limits above the current \$67,500 for new house loans in selected geographic areas based on high costs and area median housing sales and prices (Wood, 1980).

For a thorough report on home improvement financing the reader is directed to the 1977 HUD report Home Improvement Financing (Foden, et al., 1977).

d. Tax Benefits

Through several types of tax incentive programs, governments may encourage activity and/or reduce the total costs of various activities related to home ownership or home improvement. Property taxes may be delayed on improvements, for example.

In the United States, the state of Illinois allows the homeowner to make up to \$15,000 in home improvements without having the property value assessment increased for four years ("Aggressive Remodelers," 1976). Remodeling and repair work may be encouraged by the removal or reduction of sales taxes on materials used for remodeling or repair.

Income tax credits and deductions are very important tax incentives. A 1976 study by Opinion Research Corporation for the Office of Energy Conservation and Environment of the United States Federal Energy Administration found that income tax credits were "more potent incentives" than guaranteed bank loans for getting consumers to make energy conserving home improvements ("Highlight Report," 1976). Of course U.S. homeowners have an important incentive for private ownership in the mortgage interest deduction from their taxable income—a benefit not available to Canadian homeowners (Pole, 1980).

Income, property, and sales tax credits for energy improvements such as the installation of solar systems are available from the U.S. federal government as well as most United States states (see Table 47 and NAHB Remodelers Council Exchange, March 1981, pp. 25-30).

e. Other

The creative and less inhibited government agency will find other types of incentives to encourage action. Various contests for remodeling and remodelers may be conducted with recognition and publicity as the prizes (cf., NAHB Remodelers Council Exchange, March 1981). In fact, the National Association of Home Builders and the Department of Energy have teamed up to conduct a sweepstakes—a novel approach! ("Sweepstakes Promo," 1979)

2. Recipients

Recipients of incentives, grants, and subsidies, include consumers, businesses, provincial and local governments, and educational institutions. The purpose of the

grant or incentive is related directly to which recipients are the targets of the strategy.

a. Consumers

Many grant and incentive programs are directed at the consumer. The two home insulation programs, the Residential Rehabilitation Assistance Program, and the Assisted Home Ownership Program are all examples of programs where aid is offered directly to the consumer/user. Although there were problems which arose for homeowners who were unable to pick up their share of the mortgage payments after being weaned from the federal subsidy, the Assisted Home Ownership Program was one example of a direct contribution to the homeowner (Pole, 1980). In 1980, only 999 dwelling units were participating in AHOP, down from 4,900 in 1979 when the program was more active (CMHC Annual Report, 1980, p. 15). Both the Home Insulation Program and the Canadian Home Insulation Program provide direct reimbursement to participating eligible homeowners. As noted above, the Residential Rehabilitation Assistance Program offers loans to homeowners which, depending on income levels, may be "forgivable" up to \$3,750. Many tax break incentive programs, of course, are of direct benefit to consumers.

b. Businesses

Several incentive and grant programs are available to businesses to encourage activities desired by federal, provincial, or local government policy. In order to encourage the creation or improvement of higher density affordable housing, Ottawa's Multiple Unit Residential Buildings program was implemented several years ago. It provided at one time a 10% tax incentive to builders; that incentive was then reduced to 5%, and at the end of 1979 the program was terminated (Grescoe, 1980).

Various forms of insurance on home improvement or construction loans serve as incentives to lenders and permit the financing of residential rehabilitation and home improvement. Beginning in 1979, through amendment of the National Housing Act,

CMHC was able to insure—in addition to new housing loans, loans for the purchase or rehabilitation of existing rental properties (CMHC Annual Report, 1980, p. 12).

c. Provincial and Local Governments

Wherever grants or incentives are made by the federal government directly to consumers, the federal government is saddled with the massive requirements of paperwork, record keeping, etc. By merging the Residential Rehabilitation Assistance Program and the Neighborhood Improvement Program into the new (January 1979) Community Services Program, the federal government of Canada was able to make block grants to the provinces on the basis of their urban population and municipal tax capacity; the provinces then were responsible for administering the programs, disbursing the funds, maintaining records, etc. (Canada Year Book, 1980-81, pp. 336-7). The broad base of federal support is still available, but the administration is decentralized and localized.

d. Educational Institutions and Researchers

Both the Canada Mortgage and Housing Corporation and Consumer and Corporate Affairs Canada have been very active in commissioning and funding technology- and policy-related research activity by private research consulting firms and by university centers and academic researchers. In 1979 CMHC appropriated \$5.9 million to fund various research, demonstration, and information activities; in 1980 it increased that commitment to \$9.3 million. Included in that \$9.3 million were \$700,000 for policy research; \$500,000 for institutional support; \$700,000 for educational support; \$4.8 million for technical research; \$1.4 million for 12 demonstration projects; and \$1.2 million for information (CMHC Annual Report, 1980, p. 24).

This policy analysis paper is part of a project which is one small facet of Consumer and Corporate Affairs Canada's commitment to public policy research related to housing and home improvements. Consumer satisfaction research, the development of relevant bibliographies to aid researchers, and various public policy

analyses have been commissioned by CCAC in the areas of new housing as well as home improvements, repairs, and services. Only with external support and funding are university researchers able to direct their efforts as well as the expertise of their graduate students to research questions of interest to policymakers and of likely benefit to consumers and businesses as well.

D. Mediation and Remediation

One set of strategic alternatives, particularly addresses situations in which consumers have suffered losses or damages or perceive that they have. These strategies provide for mediation—the resolution of disputes typically between consumers and product or service vendors—and remediation—methods for remedying or correcting problems or restoring funds or the like to individuals who have suffered losses or damages. Among the strategy alternatives in this situation are means for complaint mediation, methods for providing redress and/or refunds, private litigation and small claims court actions, as well as class actions on behalf of groups of consumers.

1. Complaint Mediation

Where a consumer feels he or she has not received satisfactory performance or work from a vendor and the vendor disagrees, it is necessary or desirable to have some mechanism for resolving disputes. Most reputable contractors and suppliers are eager to maintain the goodwill of customers and are interested in quick and fair resolution of problems. But even they may not agree with a customer's perception of a problem. In such cases the existence of a mediation board or group is most useful. The very large proportions of "unsettled" complaints in the home improvements, repairs, and services category (see Table 37), often about one-third of the complaint cases, suggests that there is need for such activity even though mediation cannot guarantee resolutions always satisfactory to all parties involved.

In the U.S. various trade associations and groups of suppliers have formed "Consumer Action Panels," such as the Major Appliance Consumer Action Panel, (MACAP) to resolve or mediate disputes between consumers and manufacturers, suppliers, or service trades. Similar programs in Canada are operated by the Canadian Appliance Manufacturers Association of Ontario and the Canadian Electronic and Appliance Service Association. The Electrical Service League of Manitoba operates the RSVP program to help third parties like newspapers or consumer organizations aid consumers in getting their complaints to the proper executive in the manufacturing firm (Swick, 1980, p. 33).

2. Refunds and Redress

If a consumer has suffered damage or loss due to the carelessness or deceit of a contractor or vendor, it may be important to require that the consumer be recompensed to offset the loss. Provisions for redress or refund, though not punitive, may not drastically discourage "ripoffs" but they at least may help to "restore the marketplace." "Cooling off" laws are one example of legally required refund laws which protect the consumer and prevent certain vendors from benefitting from unfair activities such as high-pressure or deceptive at-home selling (see Section II B of this chapter, above).

3. Private Litigation and Small Claims Courts

Following the basic model of English common law, both the United States and Canada have made provisions in the civil court system for individuals to sue for damages and loss under tort law. It is not too common, however, that consumers take the risk of investing dollars, time, and effort into hiring an attorney or barrister to bring a case to the courts. The existence of small claims courts provides an important, affordable means for consumers to take legal action where small dollar amounts may be involved (cf. Brobeck and Furst, p. 35). This alternative, accompanied by programs to educate consumers about its availability and how it works, can offer

lower -or modest-income consumers the opportunity for "justice" which otherwise could not be afforded by them.

4. Class Action

For cases where many consumers suffer small losses from the same activity or at the hands of the same contractor or vendor, being able to band together in a joint "class action" suit may be the only alternative for redress. Singly the amounts may not be worth pursuing in the court system. But in concert the group of harmed individuals may ask that the offending vendor return unfairly gotten gains or recompense the group members for the small losses each may have suffered. While individual losses may have been small, in cases of widespread abuse, deceptive or unfair practices may bring substantial gains to a ripoff artist. The class action suit is an important remedy alternative in such cases.

E. Insurance

Insurance may allow a protection at individual low cost for consumers caught in surprising or unusual loss situations. The possibility of requiring mandatory insurance or bonding from contractors was noted above as one form of remedy (Section II B, 3 and 4, this chapter). Consumers may protect themselves from unanticipated or hidden problems through the purchase of insurance on an existing house as well as on a new house. The seller of an existing house may buy repair insurance to cover various repairs or replacements. More common, of course, is the provision of insurance coverage on new housing (see Hailstone, 1979, Swick, 1980, and especially Kaluzny, 1980).

F. Other Strategies

The list of alternative strategies for preventing, stopping or remedying problems and abuses in the home improvements, repairs, and services industries developed here is not an exhaustive one. There may be other creative approaches and solutions available which are feasible, effective and efficient.

III. PLANNING AND IMPLEMENTATION

After problems have been identified, clearly documented and analyzed, the policymaker can generate and evaluate the various alternative remedies for the problems selected for resolution. Facing the constraint of scarce resources, the policymaker typically must select a subset of all existing problems based on an appropriate criteria set. Problem seriousness (frequency versus severity—cf. Miller 1976, Moss 1974, Weaver 1975), amenability to potential solutions, costs/benefits, etc. all will be assessed to select the highest priority problems or abuses for attention.

Once the problems have been selected, attention can be directed toward generation and evaluation of remedy alternatives. Again, costs/benefits, feasibility, efficiency, and effectiveness of alternate solutions will be among the critical evaluative criteria used to choose appropriate remedies. With the broad strategies chosen, specific plans must be constructed with detailed tactics for implementing the chosen strategies. As noted in the Introduction, special management tools such as Program Evaluation and Review Technique (PERT) may be useful in managing the complex "campaign implementation" task. Calendars, schedules, and detailed budgets for dollars, personnel resources, and time must be developed in this phase of the strategic plan approach.

It might be worth noting here that a multilateral approach and the development of joint strategy programs are very useful general tactics. It is critical that all parties be involved in constructing the strategy solutions—government, business, and consumers (cf. Miller, 1978, p. 70; Thorelli, 1971). The pluralistic or multilateral approach prevents oversight of important problem dimensions and permits diverse groups to participate in a solution they own or can live with. Further, as indicated in the switch to the Community Services Program, there are economies and efficiencies involved from shared, joint programs, such as federal/provincial, provincial/local, government/business, government/consumer organization, etc. joint efforts. Joint

programs with their wider base of participation and support are more apt to be successful or to survive (e.g., Thorelli and Thorelli, 1974, p. 182).

CHAPTER FOUR: CONTROL

Although the comments in this very brief section hardly deserve to be assigned a separate chapter, in the actual application of the strategic planning approach for public policy, the "CONTROL" section would be an important and large portion of the plan. A few points are made here which reinforce several ideas regarding pre and post control measures, cost/benefit analyses, and budgeting and scheduling.

I. IMPORTANCE OF PRE/POST CONTROL MEASURES

Many laws have been passed or programs initiated without implementation of a scheme for monitoring their impact. It is not impossible for a well-intentioned regulation or program to have unforeseen negative impacts or results. Even without negative consequences, it is possible for a costly program to have such minimal positive benefits that an informed decision would have been made to cancel it had the costs and results been monitored.

It is necessary to include pre/post control measures in program plans in order to keep track of whether or not or to what extent programs and regulations are achieving their objectives, at what costs and with what side effects (or to use the medical term "contraindications"). Even limited and inexpensive pre-implementation/post-implementation measures of selected segments or target populations or industries may be better than no measures at all. Without such pre/post measures it is very difficult to truly assess the real impacts and effects of program activities. Further, such pre/post monitoring may prevent programs from straying widely from their intended objectives and may permit timely and accurate corrections to bring the programs back on course.

Pre/post telephone or mail surveys of representative consumers or businesses, pre/post store audits, pre/post observations of retail activity, pre/post laboratory or

field experiments which test consumer knowledge or skills (for example, in selected shopping malls or with a mobile van at various locations), etc. are just a few of the readily available techniques for monitoring critical aspects of knowledge, behaviors, skills, and the like which reflect the achievement of program objectives or goals.

It is clearly important that such pre/post control measurement activities be designed into the program plan and funded as integral parts of it. Housing policy and housing programs have benefitted from post-implementation evaluations and reviews in several cases (cf., An Evaluation of RRAP; Willson 1980; etc.).

II. COST/BENEFIT ANALYSES

Virtually every program or law is selected on the basis of tradeoffs and compromise. Economic and social goals are achievable at some costs. Cost/benefit analyses should be explicitly included both in the program planning process to select strategies and tactics, as well as in program implementation activities as part of the program monitoring process. Although some costs and benefits are easily measured in dollar-and-cent terms, the policymaker will often face difficult assessment problems related to the quantifiable value of a human life, of health, of various forms of injury, of a satisfactory set of living conditions, etc. Even though actuarial science may provide some dollar valuations of lifetime earnings or injury costs, which are useful to insurance companies or for personal damage court litigation, often the cold numbers may not reflect what a person would be willing to pay to have a loved one restored to health or life or to have specially prized possessions restored to them. Nevertheless it is important to attempt to assess both costs and benefits of program alternatives.

Often when costs/benefits are assessed it is easy to consider only the direct costs/benefits attributable to a program while indirect costs/benefits are forgotten or overlooked. Does the threat of legal action for misinformation in product literature or advertising have a "chilling effect" resulting in legal but information-less ads or literature? The indirect costs of a law or a program must be considered. At times

some policy advisors have advocated assessment of a program on the basis of an evaluation of its direct benefits only. But many programs have had clearly documented "nonuse" or indirect benefits which may be the result of changes in industry or business practices, etc. (cf. Miller, 1978, pp. 62 and 63).

In addition to recognizing the importance of assessing indirect as well as direct costs/benefits, it is important to be sensitive to the time dimension. Some programs may require a "start up" period before impacts can be assessed fairly. Just as advertising requires some amount of repetition before it is recognized, learned, or has influence (cf. Aaker and Myers, 1975, pp. 519-530), so public policy programs may have impact only after some period involving information dissemination, consumer and business education, diffusion of the innovative idea or practice, etc.

Taxpayers' dollars and policymakers' scarce resources will be better spent if careful attention is given systematically to cost/benefit analyses of public policy programs and activities.

III. BUDGETING AND SCHEDULING

Motivated by concerns about managing complexity and efficiencies in resource allocation and program implementation, regulators and policymakers will want to use appropriate management tools and techniques for budgeting and scheduling in the program plan. Budgets for dollars and personnel resources are important elements of the strategic plan, obviously. Similarly, given the large number of important individual activities, elements, deadlines, etc. and the necessity to consider cumulative learning effects and change over time, the scheduling of complex program plans may be improved greatly by use of Program Evaluation and Review Technique (PERT) methodology or Critical Path Management (CPM) techniques (cf. Maynard, 1967, pp. 17-84 to 17-103). Through the use of PERT-TIME and PERT-COST, complex campaign implementation can benefit from improvement through cost reductions as well as reductions in the implementation time span.

CHAPTER FIVE: DISCUSSION AND CONCLUSION

The last chapter of this policy analysis briefly summarizes some of the prominent problems encountered by consumers in the home improvements, repairs, and services area, briefly reviews some important considerations regarding participants and alternative remedies, and offers a few short concluding comments.

I. PROBLEMS

This section briefly highlights some of the major problems and abuses related to marketing and financing practices, to products and services, and to vendors in the home improvements, repairs, and services area. Table 48 suggests a brief list of current problems requiring attention from public policymakers; Table 49 lists a few problems which are likely to need more attention in the future.

A. Practices

Several practices related to the sale or marketing of home improvements, repairs, and services, are innately related to abuses and problems. Among them are the lien-sale contract, at-home selling, "inspections," and "lowballing."

1. "Lien-Sale Contract"

The "lien-sale contract" has been a widespread and highly serious problem which has occurred primarily in California. Canadian policymakers will want to be thoroughly familiar with "lien-sale contract" abuses in order to prevent the spread of this blight into Canadian provinces and municipalities.

The "lien-sale contract" abuse typically begins with a salesperson's visit to a lower income consumer living in an older neighborhood in their own private residence. Often using high-pressure selling techniques, the consumer is pressed to sign a contract for some remodeling or addition—for example, burglar alarm systems, drapes or carpeting, "texacoating," or other repair or maintenance work for products and

services. Often the products or services are of low quality or are ineffectual, and typically the prices are highly inflated, sometimes running five times what market prices are. Once the consumer has signed the contract, the "lien-sale contract" abuse might follow this pattern:

"Specifically, lien-sale contracts, include a provision establishing a lien on a house when the homeowner signs the contract. When payments are missed, the holder of the lien may foreclose on the property, then sell it in a private process, taking as little as 3½ months. In a number of instances, the lienholder sold the property to himself for a price below its true market value, then turned around and sold it to another party for a higher price, pocketing the difference." (Brobeck and Furst, 1980, p. 8).

These lien-sale abuses are especially pernicious in that they exploit particularly vulnerable groups such as the elderly, disabled, and other disadvantaged minorities. Further, in California the practice was very widespread—by late 1978 the Los Angeles Times reported that about 1,000 families in southern California "were threatened with the loss of their homes." (Brobeck and Furst, 1980, p. 8). Canadian regulators will want to watch California's experiences and remedies carefully, so as to forestall the possibility of "lien-sale contract" abuses prospering in Canada. During 1979 California passed a half dozen laws specifically designed to "curb lien-sale contract-related frauds" by regulating foreclosure sales, adding stronger means of enforcement to the state's Contractor's License Law, and strengthening a number of laws relating to "unconscionable contracts" (Brobeck and Furst, 1980, p. 11).

2. At-Home Selling

At-home selling practices often have been related to a number of marketing abuses. Often sales of products and services in the consumer's home involve high pressure to sign contracts, misrepresentation regarding the price or value of the items or services sold, misrepresentations regarding the need for the product or service sold, and the like. Obviously, "lien-sale contract" abuses usually involve at-home selling practices. Common products or services which involve the use of at-home selling for closing the sale include fire and smoke alarm systems, burglar alarm systems,

aluminum or other types of siding, storm windows and doors, basement waterproofing and the like. At-home selling practices may frequently be targeted on particularly vulnerable groups, such as older consumers or members of various disadvantaged minorities. Because of the great potential for abuse and its rather spotted record, at-home selling deserves serious attention by policymakers, especially for those products and services which are related to the home improvements, repairs, and services category.

3. "Inspections"

One common practice related to at-home selling which deserves separate attention is that of "inspections" conducted in conjunction with the sale of home improvements, repairs, and services. At times salespeople may represent themselves as "inspectors"—possibly municipal inspectors—to gain entry to the consumer's home and ultimately to high-pressure the consumer into the purchase of the product or service which they represent. The use of "inspector" tactics has been associated with furnace and insulation sales, with termite or bug extermination services, with basement waterproofing, etc. Ralph Nader notes that for about 30 years the Holland Furnace Company had its salesmen pose as "safety inspectors" who mercilessly represented to naive consumers that they needed furnace repairs or servicing; Nader reports, "one elderly and ailing woman was sold 9 new furnaces in six years, costing a total of \$18,000" (Nader, 1968). In its complaint against a firm which was involved in both basement waterproofing and termite extermination ripoffs, the Federal Trade Commission order notes that National Meridian Services, Inc., and Meridian Waterproofing Services, Inc. used misrepresentation, deceit, and scare tactics in the high-pressure sale of its products and services. Often enough, a termite inspector working for an extermination service may bring along his own termites, which are then discovered and shown to the homeowner as evidence of the need for extermination services. Consumers should be educated and informed about the possibilities of these practices.

4. "Lowballing"

"Lowballing" has been the term used to describe the practice of quoting a very low price or low bid for work to be done or a product to be sold, and then later jacking up the price considerably higher when the consumer is ready to consummate the purchase. It is not uncommon in the sale of new and used automobiles, but it also has been recognized to be a frequent problem in the home improvements, repairs, and services area. Often the quoting of a low bid could be innocent, due to ineptness or due to the unanticipated problems a contractor involved in remodeling work is likely to encounter; but there is always the possibility that the "lowballing" practice may be fraudulent, using a low-priced come-on to get the consumer committed to purchase and then increasing the selling price to obtain a profit. Whether the practice involved innocent underestimating or deceitful "lowballing," the practice is targeted among the recommendations made regarding improvement of the RRAP program in Canada. Social Policy Research Associates recommended that:

"Canada Mortgage and Housing Corporation should review procedures for municipal agents counseling clients on bids, especially to reduce the tendency to select low bids which are not viable. (Evidenced as a major problem in the homeowner and landlord surveys, . . .)" (An Evaluation of RRAP, 1979, p. 124) (underlined in original source)

Educating both consumers and counselors in the RRAP program regarding the tendency toward "lowballing" is likely to have significant dollar -and trouble-saving impact.

B. Products and Services

A number of the problems identified in this study of home improvements, repairs, and services, are related to the products or services themselves. Among specific products and services which are problem-related are urea formaldehyde foam insulation (UFFI), solar and other energy-related products, basement waterproofing, driveway sealing and paving, and the like.

1. Urea Formaldehyde Foam Insulation

For the past several years, urea formaldehyde foam insulation has gained consumer, industry, and government attention as a result of a myriad of complaints related to its installation and use. In addition to the headaches, skin rashes, and flu-like symptoms which seem to be common among residents of homes which have recently been retrofitted with UFFI, the formaldehyde gas emitted from the installed UFFI has been identified as a potential carcinogen, causing nasal cancer in laboratory animals. Although not much can be done for the over 500,000 homes in the U.S. whose walls contain UFFI, as well as the scores of thousands or hundreds of thousands in Canada sharing the same problem, on February 22, 1982, the U.S. Consumer Product Safety Commission decided in a four-one vote "to bar further installations of urea formaldehyde foam insulation," in view of the possible cancer risks and other potential health problems ("Insulation Foam Banned," 1982). Canadian regulators obviously have been monitoring this problem; the CPSC's recent action may trigger similar activity in Canada.

2. Solar Products

Because of climate, geography, the increasing costs of energy, and the like, Canadians also have become highly energy conscious. There has been a boom in interest in solar energy and solar heating products recently. Unfortunately, with this infant technology, consumers are grossly uninformed and at times have been misinformed by overzealous salespeople advocating installation of their firm's solar technology devices. Although government policy clearly is set to encourage energy conservation (see, for example, Table 47), including solar technology applications, there is a strong need for education and information programs related to what solar can and cannot do.

Although the Brobeck and Furst paper concludes that the "incidence of fraud in residential solar systems is very low," the authors feel that regulatory attention should

be given to common problems with solar "advertising claims, sales techniques, installation and servicing procedures, and system performance," (Brobeck and Furst, p. 20). Their Consumer Federation of America report describes six forms of "Misuse and Misrepresentation of Federal and State Tax Credits," two "High Pressure Sales Techniques," and two forms of "Misuse of High Technology," (pp. 21-25). Currently, California has several remedies in place for these problems—ranging from industry-approved contractors lists to equipment testing and certification to licensing—and several new remedies are being explored—including tighter licensing, warranties, training programs, ad guidelines and consumer information programs (pp. 25-29).

3. Other Energy-Related Products and Services

In view of the concern for and activity in energy conservation and its likely continued near-term growth prospects, virtually all energy-related products and services deserve careful observation from public policymakers. Again, education and information programs are highly important. For example, while cellulose insulation may somewhat reduce heating requirements, some consumers have been frustrated to learn of related problems such as the potential for vermin infestation and flammability. In general, in view of the strong growing consumer interest and the national policy thrusts to reduce energy demand and conserve scarce valuable national resources, accompanying the encouragement to use energy-conservation products, there is a strong need for education and information and possibly for regulation.

4. Basement Waterproofing

Although the problem may be not nearly as widespread across Canada as it is in the United States, the problem of ineffectual soil injection basement waterproofing services has caused scores of thousands of complaints from consumers in eastern and midwestern United States, including Maryland, Virginia, the District of Columbia, Pennsylvania, New York, Ohio, Wisconsin, etc. Many consumers, faced with damp or watery basements, leap with great hope at the promises of many firms that bentonite

pumped around their basement foundation walls will solve their water problems. But the "Manual of Accepted Practices" used by both FHA and HUD in the United States reports that "pressure injected waterproofing has not demonstrated a satisfactory performance and is not acceptable under HUD standards" (Brobeck and Furst, 1980, p. 16). Because of widespread problems and consumer loss, the state of Wisconsin in 1975 developed what has been described as "the most extensive regulation of waterproofing firms." The Wisconsin law prohibits the wording of guarantees in such a way as to delay or deprive waterproofing purchasers from action for recourse, and permits pressure pumping only after a professional engineer recommends it (Brobeck and Furst, 1980, p. 18). Because of climate and geological differences across regions of Canada, the need for attention here will not be uniform in all provinces or municipalities.

5. Paving and Driveway Sealing

One of the high areas of complaint frequencies reported by Canada's Better Business Bureau involved paving contractors. Although the specifics of the complaints are not related in the summary report, it is clear from this frequency of complaint statistic that this area deserves attention. During the late 1960s and early 1970s a family of gypsies, the Williams family, traversed the midwest United States with a driveway sealing scheme. They would stop at a consumer's home, smoke and steam rising from the hot tar trailer behind their pickup truck, and tell the consumer that they had some driveway blacktop sealant left over after the completion of a job nearby. The consumer could have his or her driveway resealed at a dirt-cheap price! After mopping the warm material across the consumer's driveway, taking the cash, they left the consumer with the instruction that the sealant would take a couple days to dry and cure. After several days, when the substance was still tarry and sticky, the consumer who complained to a local law enforcement or consumer action agency learned much to his or her dismay that the primary ingredient in the so-called "sealant" was used motor oil; it was unlikely to harden or cure even in the near future!

6. Other Products and Services

This list of examples of products and services which appear to be inherently related to marketplace abuses and/or problems cannot identify every possible product- or service-related abuse. It does offer examples of some of the more widespread, serious abuses of current interest in the home improvements, repairs, and services area.

C. Problems With Vendors

As the case of the Williams family just reported may tend to indicate, it is difficult for public policymakers to deal with specific vendors, except through individual court actions. It may be possible, however, to deal with classes or groups of vendors, contractors, and tradespeople. Bonding and insurance requirements, although somewhat discriminatory, may protect consumers from abuses by firms or service vendors which are unable financially to stand behind their work. Licensing requirements may provide a guarantee of at least minimal training or minimal performance levels. Inspections during the course of home improvement activities by vendors allow for corrections to be made before full reimbursement is permitted (see An Evaluation of RRAP, p. 125). In view of the sad consequences of Seattle's home rehabilitation activities (see Nalder and Egan, Egan and Nalder), it may be wise to "qualify" contractors or tradespeople before they are eligible to work on government-funded improvement or repair activities.

II. PARTICIPANTS

As noted above, it is important that government policy action be multilateral, or pluralistic, involving government experts from various interested agencies at the federal, provincial, and municipal level, involving business experts from the professions and the trades, involving consumer affairs professionals from the business world, and involving academic researchers and experts who are often able to understand both the business and consumer points of view. Obviously, consumers must

be involved as well. Open hearings, solicitation of comments, seminars, and workshops may provide a structured framework for the solicitation of ideas from this diverse population. In order to guarantee program success and to avoid costly oversights, such multilateral participation is necessary. The importance of continuing research by research agencies, university institutes, and academic researchers has already been underscored. Given the continuing change in the home improvements, repairs, and services environment— technological, economic, sociocultural, etc.—such constant monitoring and professional research attention is absolutely essential.

III. REMEDIES

In attempting to develop solutions for a problem, abuse, or a targeted set of problems and abuses, it is best to develop a mix of remedies that complement and reinforce one another.

A. Education and Information

Education and information are recommended first, because they are the least restrictive of remedies and they can prevent occurrence of problems, not merely attempt to stop or correct them.

Because of the diversity of topics and the variety of sources of information and education, it may be worthwhile to do a thorough survey of consumer literature available from federal, provincial, municipal sources, as well as from trade associations, Better Business Bureaus, consumer organizations, and the like, on information related to home improvements, repairs, and services. Recent bibliographies by Corke, Auld and Steiner, Swick, Silzer, Miller and Werdel, are good starting points, but it may be beneficial to contact all the various agencies potentially involved, in order to update the picture of what information is available and where gaps might exist. If possible, one should attempt to determine how widely dispersed these information resources are—who is aware of them, who has access to them, who uses them. It is likely that the "information seekers," or "information elite," are apt to have and use

this information; they may police the market for others, but "the masses" still may need simple information distributed through the mass media, particularly through radio and television media.

Where there are serious problems and/or widespread abuse, it is important to determine that "information gaps" do not exist. After scanning the available information literature, where important "gaps" are found, remedial programs, campaigns, information pieces and the like should be developed to fill those gaps.

Information must be made available in a range of depth and detail, varying from a very summary chunk to fine detail. Not everyone wants "all the facts" but detailed information should be available for those who need and want it (Miller, 1978, pp. 10-11).

Various criteria are available for evaluating consumer information and consumer information programs. One such set of criteria includes the "Three 'U's"—useful, usable, and used:

"Useful—potentially applicable to purchase criteria or product performance evaluation; Usable—presented in a form that is understandable, relevant, and applicable in the consumer's decision processes; Used—actually employed by a significant portion of consumers in making purchase-related decisions. Even if information is useful to consumers, it cannot be used if it is not available at the appropriate time and place or in the appropriate media. At times critical purchase or use information is not usable, because consumers have not been educated about its availability or about how to make use of it in shopping or purchasing activities" (Miller, 1977, p. 70).

Especially where there is evidence of widespread or serious dissatisfaction, education and information may be as important as other forms of regulatory intervention. The high number of complaints on insulation in the Canadian Better Business Bureau's statistics reflects some sizable disparity between consumer expectations and their perceptions of delivered quality or performance. In view of the large number of complaints which the Better Business Bureau categorized as "not valid," it may be possible that consumer expectations were off target with regard to quality of the work, effectiveness of added insulation in reducing fuel bills, lack of fumes or

other problems, etc. Where consumer complaint frequency is high—if service performance and product quality are appraised objectively as satisfactory, then there may be a strong need to educate and inform consumers so that their expectations are accurate. Consumers should know what the service is likely to be able to do, as well as what it cannot do.

A similar case may be made for the importance of education and information programs where consumers are apt to be subjected to puffery and exaggerated claims by high-pressure or overly enthusiastic sales representatives, especially for at-home sales. Educated and informed consumers are better able to assess vendor claims with accuracy than are naive consumers.

It is likely that education and information activities should be planned to accompany the use of virtually all other remedies and strategies. Brobeck and Furst report that the LEAA's recommended 20 approaches to reduce consumer fraud (Table 44) should all include education:

"The [Sheldon and Zweibel, Consumer Fraud] study does not consider consumer education to be an independent strategy, but an essential component of every strategy. It recommends incorporating educational efforts as television spots, or the dissemination of brochures and other materials into all 20 strategies" (Brobeck and Furst, 1980, p. 35)

B. Regulation

At times more interventionist remedies and strategies than education or information may be necessary. The very recent action of the United States Consumer Product Safety Commission banning the use of urea formaldehyde foam insulation is an example. Where unsafe or probably unsafe products or practices are identified, merely attempting to warn or inform consumers may not be sufficient. Product bans or restrictions are highly interventionist and should be considered as serious strategies of last resort in most cases.

Although bonding requirements cost consumers and businesses, and although they place a proportionately heavier burden on smaller than larger contractors, it may be

advisable to consider requiring the posting of bonds by contractors who perform remodeling, rehabilitation, or insulation work which is to be paid or reimbursed by government programs (RRAP, HIP, CHIP). It is clear that contractors and their trade associations are opposed to such a program due to its added cost and paperwork, but the idea has been proposed as House Bill 1940 in the Indiana legislature (NAHB Remodelers Council Exchange, March 1981, pp. 38-39). When government funds are made readily available to homeowners, there may be a temptation for shady operators and con artists to try to get a piece of the pie. A Seattle, Washington, city-sponsored program for housing rehabilitation resulted in families being left homeless, in debt, houses "in shambles" primarily as a result of abuse by contractors (Nalder and Egan, 1982; Egan and Nalder, 1980). A system of "qualifying" eligible contractors may have prevented most of these cases from happening.

The provincial "cooling off" laws are important regulatory protection resources for consumers. It is important to determine the extent to which consumers are familiar with these regulations. If uninformed regarding their rights, consumers may not be able to avail themselves of cancellation provisions. Consumers should also be educated regarding various dodges which may exempt a practice from the authority or applicability of "cooling off" laws. In the U.S. a door-to-door contact or telephone contact is made, but the consumer is required to visit a motel room or storefront office to "claim a prize;" at the "office" the consumer is high-pressured into "signing up." Out of the home the consumer is stripped of the benefits of the "cooling off" laws protection.

C. Subsidies and Incentives

The Residential Rehabilitation Assistance Program and the two home insulation programs (HIP and CHIP) appear to be very useful and effective programs for encouraging and facilitating home repairs and renovations and energy-saving improvements. A fairly thorough study of RRAP based on a nationally representative survey of both homeowner and landlord participants concluded:

"RRAP is a popular and generally effective program which meets most of its stated goals, and which is well received by homeowners, landlords, and municipalities (evidence from all surveys)." (An Evaluation of RRAP, 1979, p. 117)

The consultants, however, identified several problems. As a result, they made eight recommendations regarding changes in income ranges for loan forgiveness, for forgiveness levels, and for the determination of adjusted family income (pp. 121-123). Among five recommendations regarding RRAP contractors, in addition to recommending research on problems and contracting and better using the trades in RRAP, are a strong recommendation to educate consumers about contractors and how to deal with them; the recommendation that a meeting between consumer-contractor-inspector be mandatory; that local RRAP agents advise consumers on bids to cut down the number of nonviable low bids; and to increase the rigor of inspection activities during and at the conclusion of the RRAP work. Other recommendations suggest stronger training of municipal agents in the RRAP program, protection of rental tenants from rent increases as a result of landlord's RRAP costs and from dislocation, improvement and development of educational materials for local agents' use, and for program planning, research, and monitoring and review of the RRAP program (pp. 119-135).

CMHC's "evaluation" of RRAP in 1979 is a good example of how monitoring program impact, discussed briefly in Chapter Four above, can be of great benefit to regulators, businesses, and consumers alike.

In order to encourage other remodeling, repair, and improvement activities, the federal government and the provinces may wish to consider the types of property tax breaks, sales tax reductions, income tax incentives, and similar incentives, which are suggested by the list in Table 47.

D. Mediation and Remediation

In view of the large number of complaints tallied in the areas related to home improvements, repairs, and services, it may be important that arbitration or mediation

panels with both trade/contractor and consumer representation be established where these do not exist. As noted above, existence of a mediation group does not guarantee resolution of disputes satisfactory to all parties involved. It does provide an objective forum where resolution may be made possible, however. Again, reputable, legitimate contractors and tradespeople will be more apt to participate in and abide by decisions of such arbitration panels than the "gypsy" contractors who are not concerned about long-term repeat business or consumer goodwill. Mediation boards or panels appear to be worth developing, probably at the provincial level and for major metropolitan areas as well.

In order to discourage the ripoff artists who prey upon naive targets of profitability, it may be important also to devise mechanisms for providing damages or loss compensation to "injured" consumers. The contractor/tradesman bonding requirements already discussed at least guarantee that there will be funds available to cover such losses suffered by consumers. "Ill gotten gains" should somehow, where possible, be returned to the victims so as not to serve as profit incentives to imitators of the "ripoff artists" (cf. Nalder and Egan, 1980; Egan and Nalder, 1980).

E. Other Strategies

Contests at the federal, provincial, or local level are one means for encouraging and recognizing the noteworthy accomplishments of exemplary tradespeople, contractors, and consumers. Even where the only prize is nonmonetary recognition, there is incentive for vendors and proud homeowners to have their achievements rewarded by the "laurel wreath." Often, private sector participants can serve as sponsors, organizers, or as prize donors. The accompanying publicity has the beneficial effect of serving as nonpaid "advertising" for desirable activities and projects.

Demonstration projects are usually worth funding as an investment in education and motivation. Showing how it can be done and tangibly demonstrating the favorable

attractive results certainly beats even the most eloquent attempts at verbal descriptions of what could be. CMHC is well aware of the importance of demonstration projects and has over the past several years continued its sponsorship and funding of such projects across Canada (cf. CMHC Annual Report, 1980, pp. 24-25).

It is possible to involve young people in high schools, community colleges, trade schools, and in universities in contests, demonstration projects, "fairs" and the like to encourage house fix-up and improvements, energy conservation, etc. Great enthusiasm and local participation can be obtained if the programs are designed to achieve specific education, information, or participation objectives.

IV. CLOSING COMMENTS: CAUTIONS, DISCLAIMERS, AND CONCLUSION

A. Cautions

Rather than being the definitive, conclusive work on the subject of home improvements, repairs, and services, this paper turns out to be a survey—it cannot pretend to treat in depth each of the categories of home improvements (our list identified 18 major categories, each containing many subcategories, Table 1), repairs (9 major categories were listed in Table 2), and services (10 categories were listed in Table 3). Considering the vast array of categories, problems, services, trades, contractors, wholesalers, retailers, organizations, associations, federal agencies, provincial and municipal agencies, etc.—it is clear that it could be only a "survey" at best. Along with the Auld and Steiner and the Miller and Werdel bibliographies, as well as earlier policy papers and bibliographies related to this broad subject, this paper can serve as an overview for policy review purposes.

Readers should be aware of problems with time lags associated with research and publication. When an area is investigated, most then-current available secondary data are at least two to three years old. By the time this paper is read or disseminated, that data will have aged even more. Censuses in the U.S. and Canada are infrequent and, again, even when they have just occurred, there are typically spans of years

before the data collected are available for users (even longer perhaps—see Blum, 1982!). It is therefore necessary to be careful in relying on "old" data, and readers should attempt to supplement use of this paper with most current available statistics, data, and reports whenever possible.

B. Disclaimers

The policy analysis, inferences, conclusions, and tentative recommendations are clearly those of the author alone. They should not be interpreted as positions or attitudes of the sponsor of this study and of the related pieces of the broader project—the data analysis of the home-related repairs and services section of the CCAC CSD data (Miller, 1981) and the bibliography (Miller and Werdel, 1982).

The judgments and suggestions in this paper are made by the author with some trepidation, particularly in view of the vast expanse of topics and categories touched on in this survey. It is felt, however, that the reader can get "a feel" for the nature of some current problems, the likelihood of future problems, as well as of some existing as well as potential remedies for these problems.

C. Conclusion

The home improvements, repairs, and services topic is without doubt worth serious attention from policymakers. In the U.S. it is estimated that home improvement and repairs expenditures were about \$46 billion-plus in 1980—that does not include any amounts spent in the home services category. Another \$2 billion-plus is likely to be added if the "services" expenditures for the residential sector were broken out of nearly \$4½ billion total spent by homeowners, industry, and government, for "Services to Dwellings and Other Buildings," and \$11 billion-plus for "Miscellaneous Repair Services" spent by these sectors.

Residential "repair" construction expenditures in Canada totalled about \$2¼ billion in 1978 (over and above the \$11 1/3 billion spent on new residential construction), according to the Canada Yearbook 1980-81, but these numbers also

appear to graphically understate the amounts spent by Canadians on home improvements, repairs, and services. As noted above, the true figures appear more likely to fall closer to an amount roughly 10% of the amounts spent in the U.S. (see Revitalizing North American Neighborhoods, p. 1)—perhaps closer to \$4½ billion for improvements and repairs if one includes all types of repairs, maintenance, and improvements, as well as DIY expenditures for those categories.

The magnitude of potential loss by consumers in the home improvements, repairs, and services area is far greater than in virtually any other problem area. Brobeck and Furst point out that although car repairs are a frequent source of complaints to Better Business Bureaus in the U.S. (and Canada), seldom does the amount of loss or damage involved in a car repair complaint reach \$1,000; yet most home improvements are above \$1,000. One basement waterproofing firm alone in Ohio defrauded more than 2,300 households of between \$1,000 and \$5,000 apiece. The "lien-sale contract" abuses in southern California involved over 1,000 California families—they faced the threatened loss or suffered actual loss of their entire homes whose individual values averaged \$30,000 each! (Brobeck and Furst, 1980, p. 1)

With the increasing necessity to stay in their existing homes since they cannot afford to buy a new one, consumer's investment in home improvements, remodeling, and repairs will increase in absolute numbers and in terms of the proportion of households participating as well. It is already clear that Better Business Bureaus have seen "dramatic increases" in the last couple of years in complaints related to home improvements; between 1977 and 1978 the number of complaints about home improvement contractors in California alone doubled (Brobeck and Furst, 1980, p. 1). In spite of increased consumer education the Director of Consumer Affairs in the New Jersey Attorney General's office several years ago already had concluded that the sheer factor of very strong demand alone would boost the number of fraudulent promoters of home improvement schemes ("Ripoffs," 1974).

The importance of continued monitoring and assessment of the home improvements, repairs, and services area will likely continue and even grow in the near future, especially in view of: (1) the lack of sophistication of many consumers in this area; (2) the universal need for housing; (3) the nearly universal need for home repairs and services; (4) the increasing necessity to "make do" or improve existing housing rather than "buy new"; (5) the continued growing interest and activity in energy-saving improvements, solar energy and heating, and the like; (6) the serious dollar, health, and safety issues related to market problems and abuses in this area; (7) the special needs of low-income and older consumers, etc.; (8) the high frequency of complaints to better business bureaus somehow involving home improvements, repairs, and services; etc.

REFERENCES

(For a more comprehensive set of references the reader is referred to more complete current bibliographies on the topic of home improvements, repairs, and services by Auld and Steiner, and by Miller and Werdel cited below.)

Aaker, David A. and John G. Myers, Advertising Management, (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1975).

Acceptable Building Materials, Systems, and Equipment (Ottawa: Canada Mortgage and Housing Corporation, 1979).

Adams, Eli, "1979 Profile: The Builders of America," Professional Builder and Apartment Business, Vol. 44, (July 1979), 118-27.

"Aggressive Remodelers Seek a Bigger Slice of the Housing Dollar," House and Home, Vol. 49 (April 1976), 40.

Allen, Tom, "Those Wealthy Canadians: Their Future Is Now," Housing, Vol. 56 (September 1979), 10, 14, 16.

An Evaluation of RRAP: A Report on the Urban Residential Rehabilitation Assistance Program as Seen by the Homeowner and Landlord Clients, and the Municipal Agents Who Deliver the Program (Ottawa: Canada Mortgage and Housing Corporation, December 1979).

Annual Report, 1980, Canada Mortgage and Housing Corporation, (Ottawa: Canada Mortgage and Housing Corporation, 1981).

"Anti-Inflation Backlash Hits Building Suppliers," Business Week, (April 14, 1980) 36.

"Appliance Maker Comes Clean," Business Week (September 6, 1969), 100.

Ash, Stephen B., Consumer Satisfaction, Dissatisfaction, and Complaining Behaviour: Major Findings and Directions for Action (Hull/Ottawa: Consumer and Corporate Affairs Canada, May 1980).

Auld, John and Karen Steiner, A Selected, Annotated Bibliography of the Home Repair and Renovation Industry (Hull/Ottawa: Consumer Research and Evaluation Branch, Consumer and Corporate Affairs Canada, 1981).

Blood, Jack, "Hardware Retailers Riding Crest of Do-It-Yourself Wave," Merchandising, Vol. 5, No. 8 (August 1980), 30, 40.

Blum, David J., "Slow Count: Census Details Lag Far Behind Schedule, Angering Cities, Firms," Wall Street Journal (March 9, 1982), 1, 21.

"Board Acts Quickly to Approve Expanded Investment Powers," Savings & Loan News, Vol. 98, No. 11 (November 1977), 14, 15.

- Brewster, J. Alan, Irving Crespi, Richard Kaluzny, James Ohls, and Cynthia Thomas, "Homeowner Warranties: A Study of the Need and Demand for Protection Against Unanticipated Repair Expense," American Real Estate and Urban Economics Association (AREUEA) Journal, Vol. 8, No. 2 (Summer 1980), 207-217.
- Brobeck, Stephen and Edith Furst, Home Improvement Frauds: A Preliminary Report (Washington, D.C.: U.S. Department of Housing and Urban Development, April 6, 1980).
- Canada Year Book, 1980-81: A Review of Economic, Social, and Political Developments in Canada (Hull/Ottawa: Statistics Canada, 1981).
- "Canadians Investing Heavily in Denver Building Projects," Chicago Tribune (August 24, 1981), Sec. 4, 14.
- Carlson, David, Revitalizing North American Neighborhoods: A Comparison of Canadian and U.S. Programs for Neighborhood Preservation and Housing Rehabilitation, NH 15-9/1979 (Washington, D.C.: U.S. Department of Housing and Urban Development, 1979).
- Clark, John, "An Examination of the Characteristics of Rehabilitation Contractors: Pilot Study for Ottawa," (Ottawa: Canada Mortgage and Housing Corporation, June 1981).
- Clark, John, "A Pilot Investigation into the Characteristics of Renovation/Rehabilitation Contractors," (Ottawa: Canada Mortgage and Housing Corporation, April 1980).
- Clemen, Robert, "Home Improvements: An Industry Study," unpublished paper, submitted in partial fulfillment of requirements for the MBA degree, University of Colorado, Colorado Springs, 1981.
- CMHC Publications (Ottawa: Canada Mortgage and Housing Corporation, 1981).
- "Consumer Complaints Report 1981," Iowa Attorney General's Office, Consumer Protection Division, Des Moines, Iowa, (January 23, 1982).
- Corke, S.E., A Selected, Annotated Bibliography of Canadian Housing Research, 1970-79, Bibliographic Series #13 (Toronto: Centre for Urban and Community Studies, University of Toronto, June 1980).
- Cullingworth, J. Barry, Canadian Housing Policy Research—Some Initial Impressions, Research Paper No. 117, (Toronto: Centre for Urban and Community Studies, University of Toronto, July 1980).
- Detomasi, D. D., "The Evaluation of Public Projects: The CMHC Evaluation of NIP," Plan Canada, Vol. 19, No. 1 (March 1979), 56-73.
- "Discounters Cream Home Center Market," The Discount Merchandiser, Vol. 17, No. 3 (March 1977), 27-8.
- "Do It Yourself is Big Business," Nation's Business, Vol. 60, No. 11 (November 1972), 62-68.

- "The 'Do-It-Yourself' Stocks," Financial World, Vol. 144, No. 3 (July 23, 1975), 15.
- Egan, Timothy and Eric Nalder, "City Program Under Fire: Houses in Ruins After 'Repairs'," Seattle Post Intelligencer (February 12, 1980), A1 and A3.
- Engel, James F., David T. Kollat and Roger D. Blackwell, Consumer Behavior, 2nd Edition (New York: Holt, Rinehart and Winston, Inc., 1973).
- Fishbein, Martin and Icek Ajzen, Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research (Reading, Mass.: Addison-Wesley Publishing Company, 1975).
- Foden, Harry G., Robert Dubinsky, and Dorothea Hass, Home Improvement Financing (Washington, D.C.: Department of Housing and Urban Development, 1977).
- Friedman, Monroe Peter and Ira M. Wasserman, "A County Survey of Purchase Experiences of Older Consumers," Journal of Consumer Affairs, Vol. 12, No. 2 (Winter 1978), 300-308.
- Frieser, George, "Housing Market 'Squeeze'," The Canadian Business Review, Vol. 7 (Winter 1980), 28-30.
- Giges, Nancy, "Inflation Doesn't Inflate Luxury Spending," Advertising Age, Vol. 51, No. 4 (January 28, 1980), 1, 70.
- Grescoe, Paul, "A Handyman's Special for Just \$200,000," Canadian Business, Vol. 53 (August 1980), 59-62, 64.
- Hailstone, Pat, "Canadian Builders Tighten Belts," Housing, Vol. 55 (April 1979), 30.
- Harris, Roy J., Jr., "Bucking the Trend: For Some Industries There's a Silver Lining in These Hard Times," Wall Street Journal (November 14, 1979), 1, 25.
- "Highlight Report: Vol. XXIV. Understanding the Energy Situation and Evaluation of Alternative Actions," (Washington, D.C.: Federal Energy Administration, 1976).
- "The Housing Rebound is Behind Schedule," Chemical Week, Vol. 127, No. 24 (December 10, 1980), 42-43.
- "Housing's Roof Caves In," Time, Vol. 115 (April 28, 1980), 42.
- Hunt, H. Keith, John Miller, and Jerry C. Olson, "Study of Informative Labeling for the Voluntary Consumer Product Information Labeling Program: Insulation, Smoke Detectors, Vacuum Cleaners," unpublished Marketing Science Institute report to National Bureau of Standards, U.S. Department of Commerce, January 20, 1978.
- "An Insatiable Market in Energy-Saving Supplies," Business Week (Nov. 28, 1977), 46G.
- "Insulation Foam Banned," Colorado Springs Gazette Telegraph (February 23, 1982), 9B.
- Kaluzny, Richard L., A Survey of Homeowner Experience with New Residential Housing Construction, (Washington, D.C.: U.S. Department of Housing and Urban Development and the Federal Trade Commission, August, 1980).

Katz, Elihu, "The Two-Step Flow of Communication: An Up-to-Date Report on an Hypothesis," Public Opinion Quarterly, Vol. 21 (Spring 1957), 61-78.

Kotler, Philip, Marketing Management: Analysis, Planning, and Control, 4th Edition, (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1980).

Larson, Donald K. and E. Grant Youmans, "Problems of Rural Elderly Households in Powell County, Kentucky," (Washington, D.C: Economic Research Service, 1978).

Lavidge, Robert J. and Gary A. Steiner, "A Model for Predictive Measurements of Advertising Effectiveness," Journal of Marketing, Vol. 25 (October 1981), 59-62.

Loomis, Donald O., "Home Improvement Hit for 'Abuse'," Housing, Vol. 58 (September 1980), 18.

Magnuson, Senator Warren G. and Jean Carper, The Dark Side of the Marketplace, (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1968), esp. 3-31.

"A Manufacturer's Vision of a Home Center," The Discount Merchandiser (September 1973), 73-74, 78.

Maynard, H. B., Editor in Chief, Handbook of Business Administration, (New York: McGraw-Hill Book Company, 1967).

Maynes, E. Scott, "The Local Consumer Information System: An Institution-to-Be?" in Proceedings of the Second Workshop on Consumer Action Research, (Berlin: Science Center, December 1975).

Miller, John A., "Exploring Some Alternative Measures of Consumer Satisfaction," pp. 661-664 in Proceedings of the American Marketing Association Conference, August 1976.

Miller, John A., "Federal Trade Commission Activities Related to Consumer Information," Journal of Consumer Policy, Vol. 1 (1977/1), 62-76.

Miller, John A., Labeling Research—The State of the Art (Cambridge, Mass.: Marketing Science Institute, November 1978).

Miller, John A., "Product/Service Characteristics—Signals for Consumer Education/Information Program Success," pp. 233-237 in Proceedings of the 1979 Conference of the Association for Consumer Research (Ann Arbor: Association for Consumer Research, 1980).

Miller, John A., Satisfaction and Dissatisfaction with Home-Related Repairs and Services, (Hull/Ottawa: Consumer and Corporate Affairs Canada, December 1981).

"More Than Shelter," (Washington, D.C.: U.S. Department of Housing and Urban Development, 1979).

Morrison, Philip S., Expenditures on Housing Maintenance and Repairs: Some Recent Evidence. An Analysis of Expenditures Made by Home Owners in Toronto in 1973, Research Paper #102, (Toronto: Centre for Urban and Community Studies, University of Toronto, November 1978).

Moss, Senator Frank E., "The Manufacturer's Role in Product Safety," The Conference Board Record, (April 1974), 30-32.

Municipal Perspective on Housing Programs in the 1980s, Report No. 42, (Toronto: Association of Municipalities of Ontario, 1981).

Myrtle, James W., "The Annual Housing Survey," Construction Review, Vol. 22 (August/September 1976), 4-9.

Nader, Ralph, "The Great American Gyp," from The New York Review of Books, 1968, reprinted in George A. Aaker and George S. Day, editors, Consumerism: Search for the Consumer Interest, 3rd Edition (New York: The Free Press, 1978).

NAHB Remodelers Council Exchange, (March 1981), (Washington, D.C.: National Association of Home Builders, 1981).

Nalder, Eric and Timothy Egan, "Homeless and 'No One Left to Pick up the Pieces . . .'," Seattle Post-Intelligencer (February 12, 1980), A-3.

"National Meridian Services, Inc., Meridian Waterproofing Services, Inc., et al., Complaint, Statement of Fact and Order," Docket No. 9027, Federal Trade Commission, March 25, 1975, and March 28, 1978.

Nelson, Philip, "Information and Consumer Behavior," Journal of Political Economy, Vol. 78 (March/April 1970), 311-329.

"New Service Expected to Increase Yield and Expand Market Base," Saving & Loan News, Vol. 99, No. 5 (May 1978), 96-97.

"News Trends . . . Home Improvement—Up," Real Estate Today, Vol. 11 (January 1978), 24-25.

1977 Census of Construction Industry: U.S. Summary (Washington, D.C.: U.S. Department of Commerce, Bureau of the Census, October 1980).

1977 Census of Retail Trade: Merchandise Line Sales (Washington, D.C.: U.S. Department of Commerce, Bureau of the Census, September 1980).

1977 Census of Service Industries: Vol. I, Subject Statistics (Washington, D.C.: U.S. Department of Commerce, Bureau of the Census, September 1981).

1977 Census of Wholesale Trade: Commodity Line Sales (Washington, D.C.: U.S. Department of Commerce, Bureau of the Census, January 1981).

Noakes Associates Architects, Study of the Living and Health Care Needs of Older People in Montgomery County, Maryland (Rockville, MD: Montgomery County Revenue Authority, 1971).

Pflaum, Peter, Pearle Levine, Martha McClelland, Mary McDonald and Susan Weinberger, Rational Economic-Social Planning Based on Needs Determination (Long Beach, CA: California State University Center for Public Policy, 1978).

Pole, Ken, "Canada's Housing Crisis: No End in Sight," Housing, Vol. 58 (September 1980), 22.

- The Potential Market for Residential Rehabilitation in Canada: A Pilot Study of Halifax (Ottawa: Canada Mortgage and Housing Corporation, November 30, 1979).
- "Profile of Industry Associations," Air Conditioning, Heating, and Refrigeration News, (January 28, 1980), 10, 11, 14, 19.
- Recent Part V Research Reports and Projects (Ottawa: Canada Mortgage and Housing Corporation, September 1981).
- Reckert, Clare M., "Business Trends: The Booming Home Remodeling Industry," New York Times ((Friday, July 9, 1976), D1, D10.
- "Residential Alterations and Repairs," Second Quarter 1981 Construction Reports, (Washington, D.C.: U.S. Department of Commerce, Bureau of the Census, September 1981).
- "Ripoffs on Remodeling," Dun's Review (April 1974), 103-104.
- Rogers, Everett M., Diffusion of Innovations (New York: The Free Press, 1962).
- "Sear's New 5-Year Plan: To Serve Middle America," Advertising Age, Vol. 49, No. 48 (December 4, 1978), 3, 18, 20, 24, 26, 28.
- Silzer, V. J., Housing Rehabilitation and Neighborhood Change: Britain, Canada, and U.S.A.: An Annotated Bibliography, Bibliographic Series No. 5 (Toronto: Centre for Urban and Community Studies, University of Toronto, August 1975).
- Sperling, George, "Why Labor's on the Defensive in Alberta's Construction Industry," Canadian Business, Vol. 51 (August 1978), 9, 11.
- Stern, Louis L., "Consumer Protection Via Increased Information," Journal of Marketing, Vol. 31, No. 2 (April 1967), 48-52.
- "Sweepstakes Promo Set for Energy Department Test Drive," Advertising Age, Vol. 50, No. 7 (February 12, 1979), 10.
- Swick, Brenda, Characteristics of the Household Repairs and Renovations Industry (Hull/Ottawa: Consumer Research and Evaluation Branch, Consumer and Corporate Affairs Canada, September 1980).
- Thorelli, Hans B., "Consumer Information Policy in Sweden—What Can Be Learned?" Journal of Marketing, Vol. 35, No. 1 (January 1971), 50-55.
- Thorelli, Hans B. and Sarah V. Thorelli, Consumer Information Handbook: Europe and North America (New York: Praeger Publishers, 1974).
- Thorelli, Hans B. and Sarah V. Thorelli, Consumer Information Systems and Consumer Policy, (Cambridge, Mass.: Ballinger Publishing Company, 1977).
- Thygerson, Kenneth J. and Thomas J. Parliment, "Home Improvement Boom Promises to Grow Stronger," Savings & Loan News, Vol. 98, No. 8 (August 1977), 30-31.

Thygerson, Kenneth J. and Thomas J. Parliment, "Home Improvement Loans—Who is the Customer—What Does He Spend?" Savings & Loan News, Vol. 98, No. 9 (September 1977), 32-33.

Weaver, Paul H., "The Hazards of Trying to Make Consumer Products Safer," Fortune, Vol. 92 (July 1975), 132-136.

Webb, Polly, "Remodeling Activity May Set a Record," Builder, (August 11, 1980), 5.

Willson, Katherine, Housing Rehabilitation in Canada: A Review of Policy Goals and Program Design, Major Report No. 16, (Toronto: Centre for Urban and Community Studies, University of Toronto, February 1980).

Wood, Burton C., "The 1980 Housing Bill," Mortgage Banker, Vol. 41, No. 3 (December 1980), 22-23.

"Woolworth's 2-in-1 Profit Concept," The Discount Merchandiser, Vol. 20, No. 3 (March 1980), 78-84.

TABLE 1

HOME IMPROVEMENTS INCLUDING REHABILITATION

Additions
Alarm Systems—Fire and Burglar
Electrical System
Energy Saving Devices, Including Solar
Flooring and Floor Coverings—Carpeting, Linoleum, Tile
Heating, Ventilation, Air Conditioning
Insulation, Thermal
Lawn Sprinkler Systems
Painting—Exterior and Interior
Paving—Drives, Walks, Patios
Plumbing
Remodeling, Including Rehabilitation
Roofing
Septic Systems
Siding
Storm Windows and Doors
Swimming Pools
Wall Coverings
Etc.

TABLE 2

HOME REPAIRS AND MAINTENANCE (ROUTINE AND EMERGENCY)

Electrical System
Heating, Ventilation, Air Conditioning
Painting
Paving
Plumbing
Roofing
Septic Systems
Siding
Waterproofing, Basement
Etc.

TABLE 3
HOME-RELATED SERVICES

Carpet and Drapery Cleaning
Energy Audits
Exterminators and Pest Control
Landscaping
Lawn Care Services
Septic System Cleaning
Sewer Service
Snow Removal Services
Water Softeners and Purifiers
Window Cleaning
Etc.

TABLE 4

HOUSING CHARACTERISTICS SUMMARY—CANADA—1966, 1971, 1976

Item		1966	1971	1976	Percentage Increase	
					1966-71	1971-76
Total occupied private dwellings	No.	5,180,475	6,034,510	7,166,095	16.5	18.8
	%	100.0	100.0	100.0	...	...
TYPE OF DWELLING						
Single detached	No.	3,234,125	3,591,770	3,991,540	11.1	11.1
	%	62.4	59.5	55.7	...	...
Single attached	No.	401,755	679,590 ^A	587,180	69.2	-13.6
	%	7.8	11.3	8.2	...	...
Apartment and duplex	No.	1,516,420	1,699,045 ^A	2,412,660	12.0	42.0
	%	29.3	28.2	33.7	...	...
Mobile	No.	28,180	64,105	174,710	127.5	172.5
	%	0.5	1.1	2.4	...	...
TENURE						
Owned	No.	3,269,970	3,636,925	4,431,235	11.2	21.8
	%	63.1	60.3	61.8	...	...
Rented	No.	1,910,505	2,397,580	2,734,860	25.5	14.1
	%	36.9	39.7	38.2	...	...

^AIn 1971, the "single attached" included some "apartment"; consequently, there should be more dwellings in "apartment and duplex" and less dwellings in "single attached" than the figures shown in this table.

Source: Canada Year Book, 1980-81, Table 9.3, p. 344.

TABLE 5

TYPE OF DWELLING—CANADA—1976, BY PROVINCE

Province	Total Occupied Private Dwellings ^A	Single Detached	Multiple- Unit Types ^B	Single Detached %	Multiple- Unit Types ^B %
Newfoundland	131,665	95,925	31,455	72.9	23.9
Prince Edward Island	32,930	24,315	7,000	73.8	21.3
Nova Scotia	243,100	162,550	66,570	66.9	27.4
New Brunswick	190,435	125,830	52,585	66.1	27.6
Quebec	1,894,110	745,595	1,120,630	39.4	59.2
Ontario	2,634,620	1,494,465	1,117,365	56.7	42.4
Manitoba	328,005	219,950	100,140	67.1	30.5
Saskatchewan	291,155	224,510	55,755	77.1	19.2
Alberta	575,280	372,420	174,610	64.7	30.4
British Columbia	828,290	516,485	268,690	62.4	32.4
Yukon	6,495	3,425	2,165	52.7	33.4
Northwest Territories	10,020	6,070	2,865	60.6	28.7
Canada Total	7,166,095	3,991,540	2,999,480	55.7	41.9

^AIncludes mobile homes and other movable dwellings.

^BIncludes double and row houses, apartments, duplexes and dwellings attached to non-residential structures.

Source: Canada Year Book, 1980-81, Table 9.4, p. 344.

TABLE 6

CANADIAN DWELLINGS—OWNED VERSUS RENTED, 1971 AND 1976,
BY PROVINCE AND TYPE OF LOCALITY

Province or Territory and Type of Locality	1971		Percentage		1976		Percentage	
	Owned	Rented	Owned	Rented	Owned	Rented	Owned	Rented
PROVINCE								
Newfoundland	88,335	22,110	80.0	20.0	106,180	25,485	80.6	19.4
Prince Edward Island	20,725	7,155	74.3	25.7	25,225	7,700	76.6	23.4
Nova Scotia	147,705	59,800	71.2	28.8	176,055	67,040	72.4	27.6
New Brunswick	109,450	48,185	69.4	30.6	136,795	53,640	71.8	28.2
Quebec	761,340	843,450	47.4	52.6	953,960	940,155	50.4	49.6
Ontario	1,400,340	825,145	62.9	37.1	1,676,250	958,370	63.6	36.4
Manitoba	190,585	97,790	66.1	33.9	217,685	110,320	66.4	33.6
Saskatchewan	194,535	73,035	72.7	27.3	219,925	71,230	75.5	24.5
Alberta	296,705	167,910	63.9	36.1	372,825	202,455	64.8	35.2
British Columbia	422,785	244,765	63.3	36.7	540,635	287,655	65.3	34.7
Yukon and Northwest Territories	4,425	8,240	35.0	65.0	5,705	10,820	34.5	65.5
Canada Total	3,636,925	2,397,585	60.3	39.7	4,431,235	2,734,860	61.8	38.2
TYPE OF LOCALITY								
Urban	2,572,885	2,164,535	54.3	45.7	3,123,330	2,489,720	55.6	44.4
500,000 and over	956,765	1,118,550	46.1	53.9	1,367,720	1,462,950	48.2	51.8
100,000-499,999	556,375	428,770	56.5	43.5	631,220	403,305	61.0	39.0
30,000-99,999	304,450	230,365	56.9	43.1	338,915	241,440	58.4	41.6
5,000-29,000	449,685	248,740	64.4	35.6	469,225	250,200	65.2	34.8
Under 5,000	305,610	138,105	68.9	31.1	316,245	131,825	70.6	29.4
Rural	1,064,045	233,050	82.0	18.0	1,307,905	245,145	84.2	15.8
Non-farm	758,830	210,830	78.3	21.7	1,071,475	229,200	82.4	17.6
Farm	305,210	22,215	93.2	6.8	236,425	15,945	93.7	6.3

Source: Canada Year Book, 1980-81, Table 9.5, p. 345.

TABLE 7

AGE OF HOUSING—CANADA—AS OF MAY, 1971, BY PROVINCE

Province	Period of Construction		
	% Built Before 1946	% Built 1946-60	% Built ^A 1961-71
Newfoundland	35.0	36.4	28.6
Prince Edward Island	62.2	18.7	19.0
Nova Scotia	53.2	25.6	21.1
New Brunswick	50.4	27.9	21.7
Quebec	37.5	33.9	28.6
Ontario	39.8	32.2	28.0
Manitoba	42.6	32.2	25.3
Saskatchewan	42.3	32.6	25.1
Alberta	26.8	38.7	34.5
British Columbia	29.6	35.1	35.3
Yukon and Northwest Territories	9.5	32.2	58.4
Canada Total	38.0	33.2	28.8

^AIncludes the first five months only of 1971.

Source: Canada Year Book, 1980-81, Table 9.7, p. 346.

TABLE 8
BUILDING PERMIT RESIDENTIAL CONSTRUCTION—CANADA—
1977 AND 1978, BY PROVINCE (\$1,000s)

Province	Year	New	Improvements	Total
Newfoundland	1977	47,880	6,241	54,121
	1978	41,308	7,761	49,069
Prince Edward Island	1977	34,958	5,136	40,094
	1978	34,457	5,402	39,859
Nova Scotia	1977	196,600	21,735	218,335
	1978	182,517	30,840	213,357
New Brunswick	1977	89,773	15,305	105,078
	1978	93,886	13,661	107,547
Quebec	1977	1,331,325	149,104	1,480,429
	1978	1,278,080	182,935	1,461,015
Ontario	1977	2,348,029	261,336	2,609,365
	1978	2,209,890	286,227	2,496,117
Manitoba	1977	242,453	19,551	262,004
	1978	269,384	22,245	291,629
Saskatchewan	1977	313,646	19,555	333,201
	1978	258,563	20,822	279,385
Alberta	1977	1,369,261	72,911	1,442,172
	1978	1,567,560	82,849	1,650,409
British Columbia	1977	962,318	87,662	1,049,980
	1978	862,647	94,944	957,591
Yukon	1977	4,844	197	5,041
	1978	12,712	675	13,387
Northwest Territories	1977	12,271	440	12,711
	1978	6,951	354	7,305
	1974	4,299,034	276,676	4,575,710
	1975	5,642,516	486,424	6,128,940
	1976	6,851,922	623,893	7,475,815
	1977	6,953,358	659,173	7,612,531
	1978	6,817,955	748,715	7,566,670

Source: Canada Year Book, 1980-81, Table 9.14, p. 349.

TABLE 9
RESIDENTIAL BUILDING CONSTRUCTION IN CANADA—
1976-1978 (\$1,000s)

Year	New	Repair	Total
1976	10,852,532	1,816,814	12,669,346
1977	10,931,954	2,018,674	12,950,628
1978	11,343,871	2,240,365	13,584,236

Source: Canada Year Book 1980-81, Table 9.21, p. 355.

TABLE 10

CANADA: IMPROVEMENTS, ADDITIONS AND REPAIRS TO EXISTING HOUSING (SUMMARY)—

MILLIONS OF DOLLARS

<u>Year</u>	<u>Total</u>	<u>Minor Repairs</u>	<u>Capital Repairs, Improvements, Additions</u>
1977	3,719.2	2,060.9	1,658.3
1978 ^A	4,109.1	2,329.4	1,779.7
1979 ^A	4,706.7	2,670.9	2,035.8

^APreliminary data

Source: Swick, 1980, Table 10-1

TABLE 11

UNITED STATES: RESIDENTIAL ALTERATIONS AND REPAIRS—

MILLIONS OF DOLLARS

Buildings		<u>Maintenance and Repairs</u>	<u>Improvements</u>				
<u>Year</u>	<u>Total</u>		<u>Total</u>	<u>Residential Additions</u>	<u>Residential Alterations</u>	<u>Outside Residence</u>	<u>Major Replacements</u>
1977	31,280	11,344	19,936	2,655	8,505	3,077	5,699
1978	37,461	12,909	24,552	3,713	8,443	4,302	8,094
1979	42,231	14,950	27,281	3,280	9,642	5,363	8,996
1980	46,338	15,187	31,151	4,183	11,193	5,960	9,816
1st Half 1980 ^A	43,900	15,000	28,900	19,400			9,500
1st Half 1981 ^A	45,100	15,600	29,500	18,900			10,600

^ASeasonally Adjusted Annual RatesSource: Residential Alterations and Repairs, Second Quarter 1981.

TABLE 12
IMPROVEMENTS, ADDITIONS AND REPAIRS TO EXISTING DWELLINGS
CANADA
(VALUES IN MILLION DOLLARS)

	Building Permits Required						Building Permits Not Required							Total Capital Repair Expendi- tures	Minor Repair (2)	Total Repair Expendi- tures
	Swimming Pools	Garages And Carports	Home Conver- sions	Structural Changes to Singles	Structural Changes to Multiples	Sub Total	Land- scaping	Fences, Patios, Driveways	Insulation	Exterior Walls	Roofing	Others	Sub Total			
1977	63.2	134.9	16.3	534.7	96.1	845.2	109.4	230.5	76.3	119.4	114.4	163.1	813.1	1,658.3	2,060.9	3,719.2
1978 (1)	66.8	155.6	21.7	594.0	119.4	957.5	112.4	240.4	81.9	125.1	122.8	139.6	822.2	1,779.7	2,329.4	4,109.1
1979 (1)	83.7	177.8	28.6	671.5	125.2	1,086.3	134.4	283.0	93.6	146.6	140.5	150.9	949.0	2,035.8	2,670.9	4,706.7

(1) 1978 and 1979 data are preliminary

(2) An approximate breakdown of repair work by trade would be as follows:

Interior and exterior painting	16.0 %
Roofing, gutters, downspout	10.7
Plumbing	5.7
Plastering, panelling	5.2
Heating and cooling system	5.2
Exterior walls	5.6
Wall papering	5.8
Floor, ceiling, wall tiles	4.3
Electrical work	2.5
Wooden floors	1.1
Masonry	1.6
Carpentry	6.3
Metalwork	0.7
Patio, Driveway, Fences	6.7
Other work	22.6

Source: Swick, 1980, Table 10-1, reproduced in entirety.

TABLE 13
TYPES OF REPAIRS HOMEOWNERS HAD DONE UNDER RRAP^A

Type of Repair	Yes %	No %
(1) repairs to the foundation or basement?	39	61
(2) repairs to the exterior walls?	58	42
(3) repairs to or replacement of doors or windows?	80	20
(4) repairs to the roof or eavestroughs?	76	24
(5) repairs to the chimney?	33	67
(6) addition of insulation?	69	31
(7) repairs to inside walls or ceilings?	50	50
(8) repairs to floors, stairs, or handrails?	52	48
(9) repairs to the heating system?	37	63
(10) repairs to the electrical system?	55	45
(11) repairs to the plumbing system?	55	45
(12) repairs to garages, sheds, or landscaping?	19	81
(13) repairs to or adding doors or emergency exits?	24 ^B	76
(14) enlargement of the dwelling by adding rooms?	8 ^B	92
(15) repairs to porches or verandas?	47	53
(16) division of the unit to create an additional separate living unit?	4 ^B	96
(17) were any other repairs done?	27	73

^AResponses to the question, "which of the following kinds of repairs did the RRAP loan cover?"

^BThese repairs are not allowable under RRAP. Most of these are thought to be accomplished with the clients' own funds, however, a portion of these instances may be inappropriate applications of RRAP.

Source: An Evaluation of RRAP, 1979, Table 7, p. 30.

TABLE 14
TYPES OF REPAIRS LANDLORDS HAD DONE UNDER RRAP^A

Type of Repair		Yes %	No %
(1)	repairs to the foundation or basement?	47	53
(2)	repairs to the exterior walls?	75	25
(3)	repairs to or replacement of doors or windows?	89	11
(4)	repairs to the roof or eavestroughs?	81	19
(5)	repairs to the chimney?	40	60
(6)	addition of insulation?	69	32
(7)	repairs to inside walls or ceilings?	77	23
(8)	repairs to floors, stairs, or handrails?	78	22
(9)	repairs to the heating system?	56	44
(10)	repairs to the electrical system?	76	24
(11)	repairs to the plumbing system?	75	25
(12)	repairs to garages, sheds, or landscaping?	26	74
(13)	repairs to or adding doors or emergency exits?	43 ^B	58
(14)	enlargement of the dwelling by adding rooms?	16 ^B	84
(15)	repairs to porches or verandas?	69	31
(16)	division of the unit to create an additional separate living unit?	14 ^B	86
(17)	were any other repairs done?	30	70

^AResponses to the question, "which of the following kinds of repairs did the RRAP loan cover?"

^BThese repairs are not allowable under RRAP. Most of these are thought to be accomplished with the clients' own funds, however, a portion of these instances may be inappropriate applications of RRAP.

Source: An Evaluation of RRAP, 1979, Table 12, p. 46.

TABLE 15

PURCHASERS AND IMPORTANCE RATING OF
HOME-RELATED REPAIRS AND IMPROVEMENT SERVICES

	Category	Purchaser N	% ^A %	Importance Rating ^B	Importance Rank of 20 General Repair Services ^C	Importance Rank of 8 Home-Related Repairs and Services ^D
3	Heating and Air Conditioning Repairs	403	38.3%	87.1	2	1
5	Plumbing, Carpentry and Other Home Repairs	393	37.5	76.6	4	3
7	Carpet Cleaning, Window Washing, Home Care Services	204	19.4	41.7	17	8
8	Yard Work, Snow Removal, Lawn Care Services	215	20.4	54.9	10	6
9	Home Redecorating	137	13.0	59.1	8	5
10	Home Improvement Services	176	16.7	77.8	3	2
11	Cesspool Septic Tank Services	77	7.4	63.5	6	4
17	Water Softening Service	61	5.8	54.1	11	7

^A% of 1052 Respondents who had purchased the service during previous 2 years.

^B% of Purchasers rating service as "Highly Important."

^COf 20 Repairs and General Services (Table 1), ranked by % rating "Highly Important."

^DOf 8 Home-Related Repairs and Improvement Services, ranked by % rating "Highly Important."

Source: Miller, 1981, Table 2.

TABLE 16

U.S. CONSTRUCTION, MAINTENANCE, AND REPAIR, 1977--

FIRMS AND RECEIPTS^A: NEW CONSTRUCTION VERSUS MAINTENANCE AND REPAIRS

<u>Type of Firm and Activity</u>	<u>Number of Firms</u>	<u>Dollar Receipts In Thousandths</u>
<u>General Contractors and Operative Builders</u>	155,971 ^B	85,540,339 ^C
New Construction Only	60,597 (38.9%)	49,419,662 (57.8%)
Both New and Maintenance and Repair	80,304 (51.5%)	33,121,460 (38.7%)
New	NA	27,126,754 (81.9%)
Maintenance and Repair	NA	5,994,706 (18.1%)
Maintenance and Repair Only	15,070 (9.7%)	2,999,218 (3.5%)

<u>Special Trade Contractors</u>	287,670	79,238,178
New Construction Only	65,960 (22.9%)	22,412,514 (28.3%)
Both New and Maintenance and Repair	187,009 (65.0%)	51,885,903 (65.5%)
New	NA	38,054,491 (73.3%)
Maintenance and Repair	NA	13,831,412 (26.7%)
Maintenance and Repair Only	34,701 (12.1%)	4,939,761 (6.2%)

^AIncludes nonresidential construction, maintenance and repair, such as government and business construction, maintenance and repair.

^B129,245 firms in residential construction (82.9%); 26,726 firms in nonresidential construction only (17.1%)

^C\$45,547,057,000 in residential construction (53.2%); \$39,993,282,000 in nonresidential construction only (46.8%)

Source: 1977 Census of Construction Industry: U.S. Summary, U.S. Department of Commerce, Bureau of the Census.

TABLE 17

U.S. CONSTRUCTION, MAINTENANCE, AND REPAIR, 1977--
TYPES OF FIRMS, NUMBERS, AND RECEIPTS

<u>SIC Code</u>	<u>Type of Firm</u>	<u>Number of Firms</u>	<u>Dollar Receipts In Thousandths</u>
152	General Contractors, Residential Buildings	129,245	45,547,057
1521	Single Family Houses	100,993	21,292,675
1522	Other Residential Buildings	4,775	4,442,110
1531	Operative Builders	23,477	19,812,272 ^A
17	Special Trade Contractors ^B		
1711	Plumbing, Heating, Air Conditioning	56,435	21,072,098
1721	Painting, Paper Hanging, Decorators	27,369	3,171,129
1731	Electrical Workers	36,754	14,221,277
1741	Masonry, Stone Setting, Other Stone Work	24,815	3,775,368
1742	Plastering, Drywall and Insulation Work	16,745	6,057,467
1743	Terazzo, Tile, Marble, Mosaic	3,891	766,114
1751	Carpentering	24,388	3,597,222
1752	Floor Laying and Other Floor Work	8,969	1,616,932
1761	Roofing and Sheet Metal Work	20,577	6,200,390
1771	Concrete Work	16,974	4,097,293
1781	Water Well Drilling	4,305	1,090,418
179	Miscellaneous Special Trade Contractors		
1793	Glass and Glazing	3,283	1,006,566
1794	Excavating and Foundation Work	16,521	4,215,722

^AFor these operative builders (essentially speculative new home builders) this amount includes \$2,632,242,000 in land receipts.

^BIncludes business, commercial and government projects as well as private residential.

Source: 1977 Census of Construction Industry: U.S. Summary, U.S. Department of Commerce, Bureau of the Census.

TABLE 18

U.S. CONSTRUCTION, MAINTENANCE, AND REPAIR, 1977--

PRIVATE VERSUS GOVERNMENT FUNDING

<u>Type of Firm and Funding Source</u>	<u>Number of Firms</u>	<u>Dollar Receipts In Thousandths</u>
<u>General Building Contractors and Operative Builders</u>	155,971	\$85,540,339
Government Only	1,624 (1.0%)	2,105,856 (2.5%)
Both Government and Private	14,186 (9.1%)	25,821,469 (30.1%)
Government	NA	9,338,399 (36.2%)
Private	NA	16,483,070 (63.8%)
Private Only	140,162 (89.9%)	57,613,014 (67.4%)

<u>Special Trade Contractors</u>	287,670	79,238,178
Government Only	3,404 (1.0%)	939,016 (1.2%)
Both Government and Private	58,277 (20.2%)	35,971,043 (45.4%)
Government	NA	10,111,296 (28.1%)
Private	NA	25,859,747 (71.9%)
Private Only	226,039 (78.6%)	42,328,119 (53.4%)

Source: 1977 Census of Construction Industry: U.S. Summary, U.S. Department of Commerce, Bureau of the Census.

ESTIMATE OF U.S. CONSTRUCTION, MAINTENANCE, AND REPAIR, 1977--

PRIVATE, RESIDENTIAL FIRMS AND RECEIPTS--GENERAL CONTRACTORS AND OPERATIVE BUILDERS

<u>SIC Code</u>	<u>Type of Firm</u>	<u>Number of Firms</u>	<u>Dollar Receipts In Thousandths</u>
152	General Contractors, Residential	105,768 (67.8%)	25,734,785 (30.1%)
1531	Operative Builders	<u>23,477</u> (15.1%)	<u>19,812,272</u> ^A (23.2%)
	Total Residential	129,245 (82.9%)	45,547,057 (53.2%)
154	General Contractors, Nonresidential	<u>26,726</u> (17.1%)	<u>39,993,283</u> (46.8%)
	GRAND TOTAL	155,971	\$85,540,339
	Percent General Contractors Residential and Operative Builders Residential in Maintenance and Repair	129,245 <u>61.1%</u>	45,547,057 <u>10.5%</u>
	Total General Contractors and Operative Builders, Residential, in Maintenance and Repair	78,968	\$4,782,441

^AIncludes \$2,632,242,000 for land.

Source: Tables 17 and 18.

TABLE 20

ESTIMATE OF U.S. CONSTRUCTION, MAINTENANCE, AND REPAIR, 1977--
 NONGOVERNMENT, FIRMS AND RECEIPTS--SPECIAL TRADE CONTRACTORS

	<u>Number of Firms</u>	<u>Dollar Receipts In Thousandths</u>
Total Special Trade Contractors	287,670	79,238,178
Private Nongovernment Projects	284,266 (99%)	68,187,866 (98.8%)
Percent Special Trade Contractors in Maintenance and Repair	<u>77.1% of total</u> 219,169 ^A	<u>23.7% of total</u> 16,160,524 ^A

^AIncludes business and commercial projects, as well as private residential.

Source: Tables 16 and 18.

TABLE 21

U.S. BUILDERS' PARTICIPATION IN REMODELING--BY SIZE OF FIRM

	Size of Firm			
	Small Under \$1,000,000 Receipts	Medium 1-5 \$1,000,000 Receipts	Large 5-15 \$1,000,000 Receipts	Giant \$15,000,000+ Receipts
% Firms Doing Remod./Rehab. Work	62%	51%	54%	52%
Sample N	222	287	114	73
Average Number Fulltime Employees Per Firm	5	13	38	87

Source: Adams, 1979, survey data from Professional Builder and Apartment Business magazine.

TABLE 22

U.S. SELECTED SERVICE INDUSTRIES 1977--FIRMS AND RECEIPTS^A

<u>SIC Code</u>	<u>Service Industry Category</u>	<u>Number of Firms</u>	<u>Dollar Receipts In Thousandths</u>
7217	Carpet and Upholstery Cleaning	3,391	\$278,929
734	Services to Dwellings and Other Buildings	67,288	4,596,863
7341	Window Cleaning	1,018	76,935
7342	Disinfecting and Exterminating Services	5,909	915,977
7349	Cleaning and Maintenance Services, NEC	19,345	3,217,375
76	Miscellaneous Repair Services	162,910	11,028,155
7623	Refrigerator and Air Conditioning Repair Shops	3,039	553,982
7699	Sewer and Septic Tank Cleaning Services	1,271	214,393

^AIncludes firms and receipts providing these services to government and business organizations, not merely private residences.

Source: 1977 Census of Service Industries, Vol. I, U.S. Department of Commerce, Bureau of the Census, 1979.

TABLE 23

DEGREE OF UNIONIZATION--HOUSEHOLD RENOVATION AND REHABILITATION CONTRACTORS
(OTTAWA PILOT STUDY DATA)

<u>Trade</u>	<u>Percent of Trade Unionized</u>
Electrical	32 %
Plumbing	18
Carpentry	14
Mechanical	14
Painting	14
Concrete	9
Plastering	5
Roofing	5
Excavating	0
Carpeting	0
Landscaping	0

Source: Clark, 1980 (see also Swick, 1980).

U.S. SELECTED WHOLESALERS BY SELECTED COMMODITY LINES, 1977—

ESTABLISHMENTS AND SALES

SIC and Type of Wholesaler	Totals: Establishment ^A \$ Sales in \$1,000s	Commodity Line Sales									
		0540 Floor Coverings	0600 Lumber	0650 Plywood Millwork	0700 Brick,Block, Tile,Cement	0720 Glass	0730 Roofing, Siding, Insulation	0760 Other Construction Material	1600 Hardware	1700 Plumbing, Heating Equipment	1800 Warm Air Heating Equipment
5021 Furniture, Etc.	4,670	548							69		
	6,284,852	74,246							8,427		
5023 Home Furnishings	6,422	2,928		111		42		192	306	78	
	15,747,528	6,723,135		23,949		8,222		208,567	89,133	13,407	
5031 Lumber, Plywood, and Millwork	7,227	347	4,643	5,373	743	435	1,584	1,072	998	300	
	27,295,786	42,861	13,491,137	11,381,566	253,596	64,485	670,829	404,259	150,446	37,402	
5039 Construction Materials NEC	8,486	540	404	1,147	3,554	1,068	2,917	3,377	801	331	248
	18,883,625	110,500	225,631	541,629	4,887,974	1,001,109	5,485,827	5,062,104	133,989	51,208	31,717
5072 Hardware	5,785	110		230			181	175	5,785	608	153
	10,284,524	20,846		52,375			33,190	28,252	7,971,751	260,780	28,055
7074 Plumbing, Heating, Equipment, and Supplies	7,540			81	63	131		74	1,769	1,599	7,450
	13,028,337			12,660	19,651	14,206		8,309	161,737	85,745	10,884,461
5075 Warm Air Heating and Air Condition- ing Equipment and Supplies	4,007	34		38			147	41	454	928	4,007
	5,857,797	3,396		3,662			23,114	3,771	22,436	181,218	5,075,757

^A Establishments equal the number of locations, not the number of owning companies.

Source: 1977 Census of Wholesale Trade: Commodity Line Sales, U.S. Department of Commerce, Bureau of the Census, 1979.

U.S. SELECTED RETAIL STORES BY SELECTED MERCHANDISE LINE SALES, 1977—

ESTABLISHMENTS AND SALES

SIC and Store Type	Totals: Establishments ^A \$ Sales in 1,000s	Merchandise Line Sales				
		280 ^B /281 ^C Curtains, Drapes Furniture Cover- ings, Etc.	360 Floor Coverings (Soft and Hard)	600 Hardware, Tools, Plumbing, and Electrical Supplies	620 Lawn and Garden Equipment, Sup- plies, Flowers, Shrubs, Fertilizer, Etc.	640 Lumber, Building Materials, Paints, Home Repair
521 Lumber and Other Building Materials Stores	24,698 24,489,054	1,551 ^B 25,529 ^B	10,991 427,654	35,573 5,119,105	26,025 2,173,621	50,075 23,844,524
523 Paint, Glass, Wallpaper Stores	9,287 2,315,237	525 ^B 9,498 ^B	2,755 140,773	539 26,965	324 8,558	9,287 2,034,035
525 Hardware Stores	19,351 5,695,140	767 ^B 10,341 ^B	1,740 25,099	19,351 3,101,310	13,861 466,443	15,662 773,856
526 Nurseries, Lawn and Garden Supply Stores	6,921 1,584,489			520 19,741	6,921 1,358,559	335 8,846
531 Department Stores	8,807 76,909,452	7,950 ^C 1,396,904 ^C	6,281 895,868	6,410 1,965,066	6,696 1,735,012	5,939 1,929,580
533 Variety Stores	14,152 6,948,311	10,713 ^C 127,309 ^C	7,545 47,893	12,146 239,644	10,712 205,178	5,986 71,416
539 Miscellaneous General Stores	15,394 9,597,694	9,521 ^B 442,968 ^B	3,990 74,528	8,434 399,073	7,259 216,957	4,962 241,629
5713 Floor Covering Stores	11,195 3,798,030	2,109 ^C 76,591 ^C	11,195 3,387,543	116 4,189		687 45,335
5714 Drapery, Curtain, Upholstery Stores	4,427 648,380	4,427 ^C 512,395 ^C	898 25,200	25 393		185 3,072

^A Establishments are the number of actual establishments carrying this merchandise line or categorized as this type of store (not owning companies).

^B 280—Curtains, draperies, sheets, blankets, towels, fabrics, notions, patterns, laces, trimmings.

^C 281—Window and furniture coverings (ready made, custom made, and curtain and drapery fabrics).

Source: 1977 Census of Retail Trade: Merchandise Line Sales, U.S. Department of Commerce, Bureau of the Census, 1978.

TABLE 26
SELECTED CANADIAN HOME CENTERS

	<u>Owner Company</u>	<u>Number of Outlets</u>	<u>Number of Outlets Which Are Home Centers</u>	<u>Number of Provinces Served</u>
1	Action Hardware, Ltd.	100	20	3
2	Allont, Ltd.	153	120	9
3	B.M.R. Centre, Ltd.	94	87	6
4	Beaver Lumber Company, Ltd.	251	60	7
5	Bold Lumber, Ltd.	180	170	8?
6	C.R.D., Inc.	3	3	1
7	Cochrane-Dunlop, Ltd.	225	6	4
8	Colpo, Ltd.	145	145	1
9	Columbia Lumber Company, Ltd.	2	2	1
10	Conklin Lumber Company, Ltd.	16	16	1
11	Crown Zellerbach Stores, Ltd.	32	9	3
12	Dismat, Inc.	135	135	1
13	Eagle Lumber, Ltd.	8	8	1
14	Federated Co-operatives, Ltd.	437	40	5
15	Halliday Craftsman	6	6	2
16	Handy Andy Company	150	150	6
17	Hartt Home Centre	3	2	2
18	Home Hardware Stores, Ltd.	545	60	6
19	D. H. Howden and Company, Ltd.	300	300?	1
20	Imperial Lumber Company, Ltd.	14	14	1
21	Independent Retail Lumber Yards	66	66?	4
22	Lacroix, Inc.	10	10	1
23	The Larkin Lumber Company, Ltd.	58	58	2
24	Link Hardware Company, Ltd.	413	?	4
25	Lockharts, Ltd.	8	8	2
26	Lumberking Associated Yards, Ltd.	7	7	1
27	Lumberland Building Materials, Ltd.	11	11	1
28	MacCulloch Home Centres	13	113	2
29	Marchands Ro-na, Inc.	477	100	3
30	North American Lumber, Ltd.	43	2	4
31	Pilon, Ltd.	124	?	4
32	Revelstoke Companies, Ltd.	109	109	4
33	Stanley Home Improvement Centre	1	1	1
34	Tim-Br-Marts, Ltd.	86	35	5?
35	Totem Building Supplies, Ltd.	4	4	1
36	United Co-operatives of Ontario	110	5?	1
37	Val Royal La Salle Ltee.	14	13	1
38	Wood Alexander, Ltd.	55	55?	1

Source: Swick, 1980, Appendix B.

TABLE 27
U.S. LEADING HOME CENTER CHAINS

<u>Chain</u>	<u>Total 1977 Sales in Millions</u>	<u>Consumer 1977 Sales in Millions</u>
Wickes	842	345
Lowe's	630	245
Lone Star	420	168
Evan's Retail	400	280
84 Lumber	280	140
Handy Dan/Angels	185	185
Payless Cashways	175	166
Diamond International	160	40
Handyman	145	145
Scotty's	135	101
Central Hardware	122	122

Source: Chain Store Age Executive, 1978; see Clemen, 1980.

TABLE 28

LEADING DISCOUNT CHAINS WITH HOME CENTER DEPARTMENTS

<u>Chain</u>	<u>Number of Do-it-Yourself Departments By End of 1978</u>	<u>Average Size of Department in Square Feet</u>
K-Mart	863	5,000
Murphy's Mart	65	2,200
Wal-Mart	60	2,000
Rinks	43	5,000
Two-Guys	41	10,000
Fisher's Big Wheel	39	800
S. E. Nichols	29	18,000
Fred Meyer	28	15,000
Fed Mart	21	15,500
Jamesway	22	5,000
Meijer's Thrifty Acres	19	11,000

Source: Chain Store Age Executive, 1978; see Clemen 1980.

TABLE 29
SOME CHARACTERISTICS OF HOMEOWNER CLIENTS OF RRAP

	Number of Homeowner Clients Responding to the Survey*	Percentage
Region:		
Maritimes	414	27.4
Quebec	103	6.8
Ontario	232	15.4
Prairies	428	28.4
British Columbia	332	22.9
Size of Municipality:		
Under 10,000 population	623	41.3
10,000 to 29,999 population	301	19.9
Over 30,000 population	585	38.8
Age:		
Under 45	214	15.0
45-64	477	33.4
65-74	460	32.2
75+	276	19.3
Income:		
\$0-\$3,999	270	17.9
\$4,000-\$5,999	269	17.9
\$6,000-\$10,999	556	36.8
\$11,000-\$15,999	92	6.1
\$16,000-\$20,999	50	3.3
\$21,000 or more	272	18.0

*N = 1,520 homeowners. N is weighted to account for differential survey response rates. Higher N's obtain for Quebec and Ontario in the unweighted data. N varies because of differing missing data in survey responses.

Source: An Evaluation of RRAP, 1979, Table 6, p. 29.

TABLE 30
CHARACTERISTICS OF LANDLORD CLIENTS OF RRAP

	Number of Homeowner Clients Responding to the Survey*	Percentage
Region:		
Maritimes	141	17.7
Quebec	264	33.2
Ontario	174	21.9
Prairies	99	12.4
British Columbia	117	14.7
Size of Municipality:		
Under 10,000 population	150	18.8
10,000 to 29,999 population	137	17.2
Over 30,000 population	510	64.0
Age:		
Under 45	273	35.4
45-64	350	45.3
65-74	115	14.9
75+	34	4.4
Income:		
\$0-\$3,999	48	5.9
\$4,000-\$5,999	53	6.4
\$6,000-\$10,999	156	18.9
\$11,000-\$15,999	128	15.5
\$16,000-\$20,999	133	16.2
\$21,000 or more	297	36.1

*Total N responding is 850. N is weighted to account for differential response rates. N varies because of missing data in survey responses.

Source: An Evaluation of RRAP, 1979, Table 10, p. 44.

TABLE 1
SATISFACTION/DISSATISFACTION WITH HOME-RELATED REPAIRS AND SERVICES

		% Respondents					% Respondents				
		Satisfied		Dissatisfied		%	Satisfied		%	Dissatisfied	
		Very	Somewhat	Somewhat	Very		20	8		20	8
							Rank	Rank		Rank	Rank
3	Heating and Air Conditioning Repairs	61.2	24.4	9.5	4.9	85.6	7	3	14.4	13	6
5	Plumbing, Carpentry and Other Home Repairs	50.1	31.6	10.2	8.1	81.7	11	6	18.3	10	3
7	Carpet Cleaning, Window Washing, Home Care Services	47.5	36.3	10.8	5.4	83.8	10	5	16.2	11	4
8	Yard Work, Snow Removal, Lawn Care Services	46.0	35.2	11.7	7.1	81.2	12	7	18.8	9	2
9	Home Redecorating	58.8	30.1	6.6	4.4	89.0	3	1	11.0	18	8
10	Home Improvement Services	56.3	27.8	9.7	6.2	84.1	9	4	15.9	12	5
11	Cesspool, Septic Tank Services	63.6	23.4	7.8	5.2	87.0	4	2	13.0	17	7
17	Water Softening Service	36.1	44.3	6.6	13.1	80.3	13	8	19.7	8	1

1. Satisfaction Rank based on % "Somewhat or Very Satisfied" with 20 Repairs and General Services.
2. Satisfaction Rank based on % "Somewhat or Very Satisfied" with 8 Home-Related Repairs and Services.
3. Dissatisfaction Rank based on % "Somewhat or Very Dissatisfied" with 20 Repairs and General Services.
4. Dissatisfaction Rank based on % "Somewhat or Very Dissatisfied" with 8 Home-Related Repairs and Services.

Source: Miller, 1981, Table 3.

REASONS FOR HIGH DISSATISFACTION WITH HOME-RELATED REPAIRS AND SERVICE

No	Reason	No. of Mentions	% of Cases	Rank In No. of Mentions	# Mentions As Highest Reason for Dissatisfaction	No. of Mentions As Most Serious Reason	Most Serious Rank
1	Service Unprofessional	25	39.7	2	12	19.0	2
2	Service Was Late	23	36.5	3	6	9.5	4
3	Service Incorrectly Performed	36	57.1	1	21	33.3	1
4	Charged for Service Not Done	8	12.7	9	1	1.6	9/10/11/12/13
5	Charged for Materials Not Supplied	2	3.2	16	--	--	--
6	Fee Higher Than Agreed	9	14.3	6/7/8	4	6.3	5
7	Fee Higher Than Advertised	--	--		--	--	--
8	Inferior Materials	12	19.0	5	3	4.8	6
9	Condition Worse After Service	16	25.4	4	8	12.7	3
10	Item Lost or Broken	4	6.3	13	1	1.6	9/10/11/12/13
11	Professional Confidence Broken	--	--		--	--	--
12	Professional Advice Incorrect	6	9.5	10	1	1.6	9/10/11
13	Incompetent Service	9	14.3	6/7/8	2	3.2	7/8
14	Tricked Into Buying Service	--	--		--	--	--
15	Results Inferior to Advertising	5	7.9	11/12	1	1.6	9/10/11/12/13
16	Harassed by Collectors	5	7.9	11/12	1	1.6	9/10/11/12/13
17	Misrepresented Credit Terms	1	1.6	17	--	--	--
18	Not Full Warranty Coverage	3	4.8	14/15	--	--	--
19	Treated with Rudeness	3	4.8	14/15	--	--	--
20	Other Unlisted Reason	9	14.3	6/7/8	2	3.2	7/8
		63 ^A			63 ^B		

* 63 Applicable Cases

^A Multiple reasons allowed as appropriate

^B Only single most serious reason for dissatisfaction reported

Source: Miller, 1981, Table 4.

TABLE 33

1979 CANADIAN BETTER BUSINESS BUREAU INQUIRIES--TOP TEN AREAS

<u>Business Category</u>	<u>Number of Inquiries</u>	<u>Per cent of all Inquiries</u>
1. Home Improvement and Contractors	36,935	5.8%
2. Home Insulation	36,930	5.8%
3. Auto Repair	22,494	3.6%
4. Mail Order	19,536	3.1%
5. Personal Services	16,350	2.6%
6. Paving	13,692	2.2%
7. Roofing	12,874	2.1%
8. Solicitations	12,518	2.0%
9. Moving	12,053	1.9%
10. Education	10,895	1.7%

Total number of inquiries = 632,152

Source: Swick, 1980, Table 9-1.

TABLE 34
1979 CANADIAN BETTER BUSINESS BUREAU INQUIRIES
REGARDING HOME-RELATED REPAIRS AND SERVICES

<u>Category</u>	<u>Number of Inquiries</u>	<u>Per cent of all Inquiries</u>
Home Improvement and Contractors	36,935	5.8%
Home Insulation	36,930	5.8%
Paving	13,692	2.2%
Roofing	12,874	2.1%
Home Maintenance	11,697	1.8%
Siding	8,626	1.4%
Floor Coverings	7,662	1.2%
Plumbing	<u>5,520</u>	<u>.9%</u>
TOTAL Of 8 Home-Related Repairs and Services	133,936	21.2%
Total Number of Inquiries	632,152	

Source: Swick, 1980, derived from Tables 9-1 and 9-2.

TABLE 35
1979 CANADIAN BETTER BUSINESS BUREAU COMPLAINTS—
TOP TEN AREAS

	<u>Category</u>	<u>Number of Complaints</u>	<u>Percent of all Complaints</u>
1.	Mail Orders	2,553	9.9%
2.	Auto Repair	2,126	8.2%
3.	Contractors and Home Improvement	1,088	4.2%
4.	Magazines	981	3.8%
5.	Dry Cleaning	865	3.3%
6.	Apparel	831	3.2%
7.	Furniture	827	3.2%
8.	Personal Services	820	3.1%
9.	Paving	524	2.0%
10.	T.V. Service	504	1.9%

Total Number of Complaints: 25,908

Source: Swick, 1980, Table 9-3.

TABLE 36
1979 CANADIAN BETTER BUSINESS BUREAU COMPLAINTS—
HOME-RELATED REPAIRS AND SERVICES

<u>Category</u>	<u>Number of Complaints</u>	<u>Percent of all Complaints</u>
1. Contractors and Home Improvement	1,088	4.12
2. Paving	542	2.0
3. Home Maintenance	315	1.2
4. Floor Coverings	263	1.0
5. Roofing	207	.8
6. Home Insulation	137	.5
7. Plumbing	<u>114</u>	<u>.4</u>
Total Number of Complaints Regarding Home-Related Repairs and Services	2,648	10.2

Total Number of Complaints: 25,908

Source: Swick, Tables 9-3 and 9-4.

TABLE 3
1979 CANADIAN BETTER BUSINESS BUREAU COMPLAINT CAUSE AND DISPOSITION
SELECTED HOME-RELATED REPAIRS AND SERVICES

Category	N	% Settled ^A	% Unsettled ^B	% Not Valid ^C	Cause ^D							
					1 %	2 %	3 %	4 %	5 %	6 %	7 %	8 %
1. Home Improvement and Contractors	1,088	650 59.7%	385 35.4%	53 4.9%	11 1.0%	54 4.9%	48 4.4%	96 8.8%	23 2.1%	39 3.5%	541 49.7%	276 25.4%
2. Paving	524	358 68.3	101 19.3	65 12.4	-- --	33 6.3	54 10.3	49 9.3	2 .4	34 6.5	284 54.1	68 13.0
3. Home Maintenance	315	196 62.2	107 34.0	12 3.8	-- --	18 5.7	8 2.5	39 12.4	4 1.2	9 2.8	171 54.3	66 20.9
4. Floor Coverings	263	180 68.0	82 31.0	1 .4	2 .7	59 22.0	9 3.4	15 5.7	7 2.6	6 2.3	132 50.0	33 12.5
5. Roofing	247	152 61.5	40 16.2	55 22.3	-- --	9 3.6	27 10.8	30 12.1	-- --	11 4.4	130 52.6	40 16.2
6. Siding	207	146 70.5	55 26.6	6 2.9	-- --	13 6.3	13 6.3	7 3.4	2 .9	10 4.8	135 65.2	27 13.0
7. Home Insulation	137	58 42.3	23 16.8	56 40.9	-- --	4 2.9	-- --	18 13.0	10 7.3	-- --	57 41.6	48 35.0
8. Plumbing	114	68 59.6	45 39.5	1 .9	-- --	7 6.1	8 7.0	4 3.5	-- --	3 2.6	70 61.4	22 19.3

^APercentage of settled complaints in each business category.

^BPercentage of unsettled complaints in each category.

^CPercentage of "not valid" complaints in each category.

^DPercentage of total complaints in category for each code.

Cause code:

1) Not as advertised.

2) Defective merchandise.

3) Guarantee ineffective.

4) Contract not fulfilled.

5) Misrepresentation.

6) Non or slow delivery.

7) Unsatisfactory service.

8) Other.

Source: Swick, 1980, Appendix K.

TABLE 38
U.S. BBB COMPLAINTS RECEIVED FOR SELECTED SERVICES—
JANUARY-JUNE, 1979—BY TYPE^A

Type	All ^B	Miscellaneous Home Maintenance	Home Remodelling	Roofing Contractors
Delivery-Delay/Damage	23.2	4.3	6.3	1.4
Unsatisfactory Repair	17.3	27.0	36.7	39.7
Unsatisfactory Service	17.3	31.2	31.0	22.6
Dispute Over Refunds	10.1	4.1	3.4	1.9
Product Quality/ Performance	9.8	18.6	12.9	15.6
Credit/Billing	9.7	4.2	1.2	2.4
Selling Practices	4.8	2.8	0.6	1.4
Guarantee/Warranty	3.8	5.2	4.8	11.3
Advertising Practices	2.6	0.8	0.9	0.9
Discontinued Business	1.4	1.8	2.2	2.8

^AColumns total 100 percent.

^BA substantial number are mail-order.

Source: Brobeck and Furst, 1980, p. 5.

TABLE 39

U.S. BBB HOME IMPROVEMENT COMPLAINTS RECEIVED—BY SERVICE VENDOR—
JANUARY-JUNE, 1979

Type of Business	Number	Percent
Miscellaneous home maintenance cos.	4968	21.2
Home remodelling contractors	4833	20.1
Roofing contractors	3044	13.0
Heating/central air conditioning	2351	10.0
Plumbing contractors	1504	6.4
Exterminating services contractors	1424	6.1
Swimming pool contractors	1247	5.3
Siding contractors	1163	5.0
Alarm systems dealers	842	3.6
Waterproofing contractors	819	3.5
Paving contractors	744	3.2
Electrical contractors	544	2.3

Source: Brobeck and Furst, 1980, p. 6.

TABLE 40

STATE OF IOWA ATTORNEY GENERAL'S OFFICE 1981 CONSUMER COMPLAINTS
FOR SELECTED HOME-RELATED REPAIRS AND SERVICES

<u>Category</u>	<u>Number of Complaints</u>	<u>%ofTotal Complaints</u>
1. Heating and Air Conditioning	600	5.9
2. Home Improvements	158	1.5
3. Energy Saving Devices	83	.8
4. Aluminum Siding	46	.5
5. Pest Control	42	.4
6. Floor Coverings	32	.3
7. Home Repair Schemes (Lightning Rods, Roofing, Septic Systems)	18	.2
8. Water Softeners, Conditioners, Purifiers	16	.2
9. Insulation	11	.1
10. Fire and Smoke Alarm	8	.01
11. Plumbing	<u>1</u>	<u>--</u>
Totals for 11 Home-Related Repairs and Services	1,015	9.9%
Total Complaints, All Categories	10,202	

Source: Iowa Attorney General, Consumer Protection Division Annual Complaints
Report, 1981.

TABLE 41

U.S. SURVEY OF HOMEOWNER EXPERIENCE WITH NEW HOUSING, 1980—
DISTRIBUTION OF PROBLEM TYPE BY PROBLEM RESOLUTION

Problem Type	Resolution of Problems (Percentage)				
	Total Number	%	Builder Resolved	Owner Resolved ^A	Unresolved
Walls, Ceilings, Floors	1,039	29	33	10	58
Miscellaneous ^B	837	24	20	14	66
Plumbing	489	14	63	8	29
Roof	337	9	50	13	37
Foundation/Basement	235	7	35	12	54
Central Heating	42	4	54	17	30
Central Cooling	138	4	59	15	25
Major Appliances	135	4	59	10	30
Interior Electrical	126	4	57	9	35
Work Not Completed	87	2	28	18	54
Total	3,565	100	39	12	49

^AIncludes problems jointly resolved by the owner and builder.

^BPrimarily yard drainage, driveway, and exterior concrete problems.

Source: Kaluzny, 1980, Table II.6.

TABLE 42
U.S. ANNUAL HOUSING SURVEY, 1974—
FAILURES IN PLUMBING AND HEATING FACILITIES AND EQUIPMENT

Type of Failure	Frequency in Millions	% of Households Reporting ^A
Heating breakdowns—2 or more in 90 days	1.4	1.98
Additional heat source used	5.0	7.06
Rooms lacking heat source	12.7	17.93
Room closure in winter	2.9	4.09
Lack some or all plumbing facilities	2.1	2.96
Bathroom—none or shared	2.6	3.67

^APercentage calculation based on 70,831,000 units.

Source: Myrtle, 1976, Table 2.

TABLE 43
U.S. ANNUAL HOUSING SURVEY, 1974—
DEFICIENCIES IN HOUSING OCCUPIED IN LAST 3 MONTHS OF 1974

Type of Failure	Frequency in Millions	% of Households Reporting ^A
Leaking roof	4.7	6.64
Leaking basement	8.7 ^B	24.93 ^B
Cracks, holes in ceiling or wall	4.0	5.65
Exposed wiring	2.4	3.39
Lacking electrical outlets in some rooms	3.1	4.38
Signs of rats, mice	6.7	9.46

^APercentage calculation based on 70,831,000 units.

^BOf 34,900,000 occupied units with basements.

Source: Myrtle, 1976, Table 3.

TABLE 44

TWENTY APPROACHES FOR REDUCING CONSUMER FRAUD

Payment Planning

1. Limited prepayment requirements
2. Withholding the final payment
3. Escrow
4. Pay as you go

Post-Sale Alternatives

5. Cooling off period
6. Rejection of goods
7. Warranty rights
8. Refund standards

Complaint Mediation

9. Increasing availability and visibility
10. Increasing merchant involvement
11. Improving actual mediation

Private Remedies

12. Small claims court
13. Class actions

Coverage for Consumer Loss

14. Bonding
15. Merchant financed insurance
16. Consumer financed insurance
17. Creditor liability
18. Bankruptcy reform

Document Simplifications

19. By public sector
20. By private sector

Source: Law Enforcement Assistance Administration, cited by Brobeck and Furst, 1980, p. 35.

TABLE 45
PROVINCIAL "COOLING-OFF" LAW PROVISIONS

<u>Province</u>	<u>Number of Days</u>	<u>How to Cancel</u>
Alberta	4	Send notice by registered mail (not required but recommended).
British Columbia	7	Registered mail advised.
Manitoba	4	Deliver notice personally or send by registered mail.
New Brunswick	5	Deliver notice personally or send by registered mail.
Newfoundland	10	Deliver notice personally or send by registered mail.
Nova Scotia	10	Deliver notice personally or send by registered mail.
Ontario	2	Deliver notice personally or send by registered mail.
Prince Edward Island	7	Deliver notice personally or send by registered mail.
Quebec	10	Return goods or send written notice.
Saskatchewan	4	Send notice via registered letter or telegram.

Source: Swick, 1980, pp. 16-17.

TABLE 46
RESIDENTIAL REHABILITATION ASSISTANCE PROGRAM—
FAMILY INCOME AND LOAN REPAYMENT REQUIREMENTS

Adjusted Family Income	Maximum Repayable Loan	Maximum Non-Repayable Amount
\$16,500	\$10,000	\$-----
15,000	9,250	750
13,500	8,500	1,500
12,000	7,750	2,250
10,500	7,000	3,000
9,000	6,250	3,750
or less		

Source: Swick, 1980, pages 41 and 42.

TABLE 47

U.S. STATE TAX BREAKS FOR RESIDENTIAL SOLAR SYSTEMS

<u>State</u>	<u>Property Tax Exemption</u>	<u>Income Tax Incentive</u>	<u>Sales Tax Exemption</u>
Alabama	no	no	no
Alaska	no	up to \$200 credit	not applicable
Arizona	exemption	up to \$1000 credit	exemption
Arkansas	no	100% deduction	no
California	no	up to \$3000 credit per application	no
Colorado	exemption	up to \$3000 credit	no
Connecticut	local option	not applicable	exemption
Delaware	no	\$200 credit for DHW systems	not applicable
Florida	exemption	not applicable	exemption
Georgia	local option	no	refund
Hawaii	exemption	10% credit	no
Idaho	no	100% deduction	no
Illinois	exemption	no	no
Indiana	exemption	up to \$300 credit	no
Iowa	exemption	no	no
Kansas	exemption, refund based on efficiency of system	up to \$1500 credit	no
Kentucky	no	no	no
Louisiana	exemption	no	no
Maine	exemption	up to \$100 credit	refund
Maryland	exemption statewide plus credit at local option	no	no
Massachusetts	exemption	up to \$1000 credit	exemption

<u>State</u>	<u>Property Tax Exemption</u>	<u>Income Tax Incentive</u>	<u>Sales Tax Exemption</u>
Michigan	exemption	up to \$1700 credit	exemption
Minnesota	exemption	up to \$2000 credit	no
Mississippi	no	no	exemption for colleges, junior colleges and universities
Missouri	no	no	no
Montana	exemption	up to \$125 credit	not applicable
Nebraska	no	no	refund
Nevada	limited exemption	not applicable	no
New Hampshire	local option	not applicable	not applicable
New Jersey	exemption	no	exemption
New Mexico	no	up to \$1000 credit	no
New York	exemption	no	no
N. Carolina	exemption	up to \$1000 credit	no
N. Dakota	exemption	5% credit for two years	no
Ohio	exemption	up to \$1000 credit	exemption
Oklahoma	no	up to \$2800 credit	no
Oregon	exemption	up to \$1000 credit	not applicable
Pennsylvania	no	no	no
Rhode Island	exemption	up to \$1000 credit	refund
S. Carolina	no	up to \$1000 deduction	no
S. Dakota	exemption	not applicable	no
Tennessee	exemption	not applicable	no
Texas	exemption	not applicable	exemption
Utah	no	up to \$1000 credit	no

<u>State</u>	<u>Property Tax Exemption</u>	<u>Income Tax Incentive</u>	<u>Sales Tax Exemption</u>
Vermont	local option	up to \$1000 credit	no
Virginia	local option	no	no
Washington	exemption	not applicable	no
W. Virginia	no	no	no
Wisconsin	exemption	no*	no
Wyoming	no	not applicable	no

*Wisconsin offers a direct rebate for part of solar expenditures; the rebate is unrelated to taxes.

Source: NAHB Remodelers Council Exchange, March 1981, pages 29-30, from the National Solar Heating and Cooling Information Center, Solar Data Bank Report.

TABLE 48

A LIST OF SOME CURRENT PROBLEMS OR "HOT TOPICS"
WHICH APPEAR TO DESERVE ATTENTION FROM POLICYMAKERS

- Urea formaldehyde foam insulation
- Insulation and its installation in general
- Solar energy and heating devices, their installation, performance, etc.
- Energy-saving devices for the home in general
- Paving improvements
- Basement waterproofing schemes (currently more prevalent in U.S.)
- Lowballing; problems with accuracy of estimates for home improvements and repairs
- At-home sales problems related to home improvements, repairs, and services
- Problems for low income and older residents due to "whitepainting"
- Shortage and cost of skilled trades for home improvements, repairs, and services
- Etc.

TABLE 49

A LIST OF SOME POSSIBLE FUTURE SERIOUS PROBLEMS

- Lien-sale practice and abuses
- Solar energy and heating devices and installation
- Insulation and energy-saving devices and alterations
- Etc.