

A STUDY TO FORECAST THE DEMAND
FOR TELIDON SERVICES OVER THE
NEXT TEN YEARS

A Report prepared for

DEPARTMENT OF COMMUNICATIONS

Roger W. Hough and Associates, Ltd.
Ottawa, Canada

December 1980

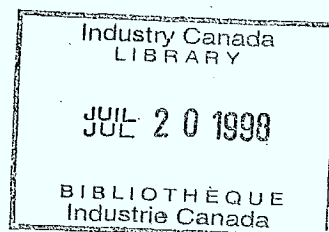
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ROGER W. HOUGH AND ASSOCIATES, LTD.

TELECOMMUNICATION CONSULTANT



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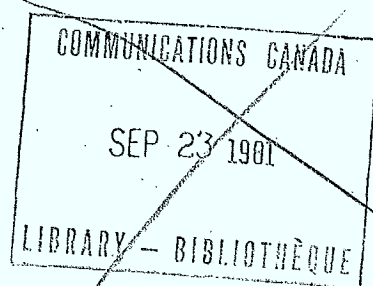
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PREFACE

This report has been prepared for the Canadian Federal Department of Communications (DOC) by R.W. Hough and M.E. Kirby of R.W. Hough and Associates Ltd., Ottawa, Canada. Thanks are due to R.M. Tyler, formerly of Communications Studies and Planning Ltd., London, England, for contributions relating to the income and expenditure analysis included herein, and particularly for the development of a preliminary version of that method included in a previous collaborative report prepared by our two companies; to Beverly Hillman of DOC for locating and making available some of the data used in this report; and to the Economics Branch of the Department of Communications for its support and encouragement.

Special thanks are extended to Mr. Maurice Estabrooks of the Economics Branch for assisting us in many ways during the course of the project, and to Mr. George Collins, formerly associated with DOC, for providing guidance, counsel, and a large portion of moral support and encouragement. Each of these individuals contributed to the successful completion of the report; however, Hough and Associates remains responsible for its content, including, of course, any errors that may inadvertently remain.

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EXECUTIVE SUMMARY

INTRODUCTION

This study, prepared over a period of approximately one year, has had as its objective the development of a set of realistic estimates of the potential for Telidon growth in Canada.

To accomplish the research, three specific methodologies were used, each of which has proven to be successful in earlier studies with regard to establishing useful and accurate results in the area of forecasting demand for new products and services. The names of these methods are

1. Historical analogy method
2. Income and expenditure analysis method
3. Competitive and complementary analysis method.

The first two of these methods were used in the study to develop numeric estimates of potential population growth of Telidon terminals between 1985 and 1991. The third method was used to make subjective comparisons between Telidon, and other, competitive and complementary service delivery systems.

SUMMARY

On the basis of the historical analogy method, the objective of which is to ascertain reasonable growth rates of Telidon in comparison to actual growth rates of previous services, we find that maximum numbers of Telidon terminals in the 1981 to 1991 time period conform to the following table:

| Estimated Starting Value For 1981 | Estimated range of terminals for | |
|---|----------------------------------|--------------------|
| | 1986 | 1991 |
| 2,000 | 85,000 to 140,000 | 260,000 to 750,000 |

On the basis of the income and expenditure analysis--the purpose of which is to determine from statistical data on income and expenditure patterns of Canadian households, how many such households can 'afford' videotex at various prices--we find the following, calculated for the year 1985:

| <u>Monthly Cost to Household</u> | <u>Estimated Number of Subscribers</u> |
|--------------------------------------|--|
| \$25.00 | 13,000 |
| 18.00 | 36,600 |
| 13.00 | 65,000 |
| 9.50 | 100,700 |
| 6.00 | 150,000 |

Finally, on the basis of the competitive and complementary analysis method, we find that, whereas information retrieval, transactions and person-to-person communications are very attractive application areas for Telidon, in comparison to alternative products and services now available or shortly to come on the market, most of the other applications suggested for Telidon service are not as promising. As these are subjective judgments based on comparing Telidon with other products and services that can do similar tasks--such as newspapers, books, magazines, home computers, electronic games, and competitive electronic information services--such judgments may turn out to be shortsighted. We attempt, however, to justify our conclusions in a convincing manner.

NEED FOR GOVERNMENT FUNDING

Despite the fact that the numeric estimates in this report are lower than some others that have been made public, we do not look on them as pessimistic or discouraging. On the contrary, if Telidon can reach such penetration rates it would represent a very good market for Canadian manufacturers, information providers, and system operators. To do this successfully, in our view, will require continued government funding and support, particularly in the face of formidable competition from Europe. Since Telidon technology has been fully recognized as superior to its competitors, it needs continued support, at this time, to reach a point of full market maturity.

Chapter 1

INTRODUCTION

This document represents the conclusion of a comprehensive, year-long study on potential markets for Telidon; Canada's entry in the worldwide race for television-based information systems.

These systems, generically called teletext and videotex,* are by now well known to be in an advanced stage of development technically--though they are, it should be noted, still very much untested in the market place. By contrast, certain additional systems, based principally in the United States, have developed from a considerably greater market orientation, and perform very similar functions--i.e., the display of a wide variety of types of information on computer-connected terminals, either in the home or in offices.

Considerable controversy surrounds the long range future prospects of all of these systems. In particular, regardless of (in some cases) very large amounts of money being spent to develop and market the new technologies, in no case are they, as yet, clearly developing as economically viable, consumer-desired, new home or business services. On the contrary, market issues are those that have yet to be resolved, and on which many public and private organizational entities are intensely pressing forward.

* This study uses the terms teletext and videotex in a manner that conforms to presently accepted standards. In this context, teletext refers to one-way reception of viewer-selectable text and graphics on a television set, while videotex refers to a two-way, interactive system, with connection accomplished via telephone lines or cable television channels.

This report, prepared under contract to the Canadian Department of Communications, deals with these questions in depth. Much has been written about these systems in the last few years, especially in 1979 and 1980, and the rate at which the systems are being discussed in professional and popular publications, including newspapers and all kinds of magazines, is itself increasing dramatically. One reason for this, of course, is that wide publicity is being given to the new systems by their developers and proponents. What has been conspicuous by its absence, however, has been a reasoned, thoughtful analysis and discussion of market prospects. The central purpose of this report is to attempt to fill at least some of this important information gap.

BACKGROUND

For those unfamiliar with this subject, it may be useful to begin with a brief resume of what Telidon is, what some of the competing systems and services are, and some general comments about the environment in which these systems are being developed.

As mentioned above, Telidon is one manifestation of what are now being referred to as teletext and/or videotex systems. The basic components of these systems are:

1. An information bank or data base stored in one or more computers;

2. Electronically controlled display terminals placed in homes and offices (described in more detail below); and
3. Communication lines or 'links' of various types (also described below) which connect the data banks with the terminals--and, in some cases, terminals with data banks.

A key feature of this type of information system arrangement is 'control'. Just as readers of books, newspapers, reports, telephone books, and other printed matter have selection capability over what they choose to read--as well as over how they read it, e.g., front to back, back to front, random scanning, selection with an index, and so on--so too do the electronic information systems have such capabilities.

In general, there are two basic types of devices that can provide such control. One of these, which is by far the most widespread in systems being implemented up to now, is a small, very simple, numeric keypad device designed to look like, and operate in a similar manner to, a small, hand-held four-function calculator--or, perhaps, the keypad on a push button telephone. The most important and far-reaching characteristic of this type of control device is its simplicity. We will describe the characteristics of systems having such control devices, and their implications, in more detail later. At the outset, however, it is important to make note of at least one major fact, that with a simple control device--i.e., numeric only--a user's interaction with the electronic information system must also be simple, and, in turn, the information system itself must often become considerably complex.

The second type of control device used with electronic information systems is a full alphanumeric--i.e., letters and numbers--keyboard. There are already in existence many keyboard-based pieces of electrical and electronic office equipment, including computer terminals, typewriters, word processing systems, and many others. In addition, typewriters, small computers, sophisticated electronic games and other similar devices are either already in homes, or are being designed to be in homes, as well as offices. Thus, keyboard-based instruments, as well as numeric-only devices, are also widespread and growing.

In the previous connection, it may be said that the first part of the emerging saga of videotex revolves around the most basic of all questions, namely, What is it? For example, as recently as November 1980, the international standards-setting body in telecommunications, CCITT,* gave notice that it had approved Telidon as the 'third recognized world standard for videotex', along with Prestel from Britain and Antiope from France, which had been previously so recognized. At the same time, however, Tandy Corporation, in the United States, had already designed, manufactured, and put up for sale through its Radio Shack stores in the U.S. (and presumably later in Canada) a computer-based terminal that it calls a videotex

* Comité Consultatif Internationale Télégraphique et Téléphonique

terminal--yet it does not look like and does not operate like those systems that are 'officially recognized' as videotex systems by the CCITT. What has happened, therefore, is that two streams of development effort have begun to occur in the provision of mass market electronic information systems. We begin the report by describing briefly each of these major streams of development effort.

PRESTEL, ANTIOPE AND TELIDON

Prestel in Britain, Antiope in France, and Telidon in Canada represent the three most widely known development efforts in videotex in the world. According to a recent article (New Scientist, 1980), Britain's Post Office-Telecommunications, now known as British Telecom, has invested over £26 million in the development of Prestel, especially over the last four years, but also dating back to its invention, some ten years ago. Originally, this system--called Viewdata initially--was designed with the thought in mind of increasing usage of British Telecom's lines during off-peak periods, principally nights and weekends. It was thus conceived of specifically for home consumption, presumably to be usable by individuals and families who, it was assumed, would have little familiarity with computers, terminals, sophisticated electronic devices and so on.

It should be noted, we believe, that this very early conceptual notion of the potential users of such a system was

responsible for its functional specifications and characteristics that exist today--and indeed for the basic characteristics of all such systems, save those that are developing in the United States. Specifically, the notion of uninitiated users gave rise to the idea of using a number-only control mechanism, which in turn led to the idea of 'tree-structured' data files.

It is, in this report, both unnecessary and unwise to attempt to define and describe tree-structured files in detail. Basically, however, they operate as follows. First, when the terminal device (television set or other) is turned on, the information system greets the user by some means (e.g., with the word(s) "TELIDON," "Welcome to Prestel," etc.), then a 'menu,' or numbered list of selection items, appears, which in effect says, "What is it you'd like to find out about?" The initial menu is, usually, the highest level set of selection options, including, for example, such items as 'Government Information,' 'Entertainment,' 'News/Weather/Sports,' 'Classified Advertising,' and so on. Since each item is numbered, by pressing only one or two buttons on the keypad, the user gets to the next level of detail in whichever information category he chooses. At that level there is another menu (for example, under 'Entertainment' the next level might offer 'Restaurants,' 'Movies,' 'Plays,' 'Sports Events,' and so on), thus allowing further selection to the particular information desired--perhaps through a number of searching levels.

The above scheme represents the essential searching

capability of a tree-structured file. However, it is also appropriate to note that in practice, published directories are available to users of such systems which allow access to be made to specific pages, deep in the tree structure, simply by pressing a series of digits in sequence, representing the number of the 'page' on which the desired information appears. When this is done, the page requested appears immediately on the screen, and it in turn (usually) has pointers to other pages the user may request for additional information on the same subject, related subjects, and so on.

The basic characteristics of tree-structured files, menus, numeric selection of pages that contain the information sought, and so on, are common to all three of the principal television-based videotex systems, Prestel, Antiope, and Telidon. At this point, however, the similarity ends abruptly, since there is a large difference in graphical complexity between Prestel and Antiope, on the one hand, and Telidon on the other.

In technical terms this complexity is due to the fact that pages--or images formed on the television screen--are constructed using an 'alphamosaic' method in the Prestel and Antiope systems, and an 'alphageometric' method in the Telidon system. This difference leads to vastly improved picture quality with Telidon (on average), and it is the one particular feature that most distinguishes Telidon from other teletext and videotex systems. Again, therefore, while it is unnecessary to go into detail on how this better graphics is accomplished

(since information of this type is available elsewhere) the fact that Telidon has better graphics, and the fact that that is recognized by potential buyers and users of videotex systems around the world--including the U.S.--is also important to make clear at the outset of this paper.

With this much said, there are several other aspects with respect to these systems that are important to bring out at the beginning of the report. The first of these has to do with initial construction of the data bases these systems use.

As is well known, remote terminal oriented computer systems have been in operation for many years, and are now very widespread. In fact, such systems date back to the late 1950s, more than twenty years ago, when Pan American, American, Air Canada and other airlines began to experiment with and develop the now very commonplace, automated airline reservation systems --e.g., American Airlines' Sabre System and others. These systems were the beginning, but an enormous number of additional applications of computers and communications has followed since, both in North America (especially Canada and the U.S.) and around the world.* These applications include both online, 'real-time'

* It may be useful to note here that Canada, and in particular the Department of Communications, has taken a leading role in studying such developments through the years, first with its Task Force on Computer/Communications convened in 1971, and subsequently with studies conducted by the Interdepartmental Computer/Communications Secretariat in DOC, DOC's Research Sector (e.g., DATACOM 76, a market survey of data communication users), and many other research and development efforts, including Telidon.

systems for requirements such as order entry, credit checking, stock exchange transactions, online banking, bibliographic data search, and an enormous range of other services--as well as what may be thought of, perhaps, as more 'mundane' types of applications such as those that require bulk data transfer over telephone lines to and from offline card readers, printers, magnetic tape machines, and so on.

The important thing about all of these various computer communication applications, and they are legion, is that not one of them uses data storage methods similar to those required for Prestel, Antiope, Telidon, and other videotex systems of their genre. As we will attempt to make clear as this report proceeds, there is 'good news and bad news' in this fact. In summary, however, the most important message has to do with the fact that, at this stage, the data bases being used by each of the tree-structured data file systems--Prestel, Antiope, Telidon, and others in other countries--must be built up 'from scratch', page by page, with very costly construction methods. This leads, of course, to Prestel, Antiope and Telidon pages that are (at least sometimes) interesting to look at, attractive graphically, and use colors lavishly--purportedly to make them attractive, easy to read, and so on. What is different about the situation, however, is that it contrasts markedly with more conventional uses of computer communications and, at this writing, takes little advantage of data bases already created for other purposes.

The last item to be discussed in this introduction (with respect to Prestel, Antiope and Telidon) is cost. This

subject is still one of considerable controversy. However, it is possible to identify roughly what terminal devices for such systems cost, if not their total costs or future costs. For example, it is now reasonably established that Telidon decoders, excluding the television set or other display device, have been reduced dramatically in price from something in the neighborhood of \$3,000 when they were first produced approximately 1 1/2 years ago, to about \$1,200 during most of the latter half of 1980. Moreover, a recent advertisement by Norpak,* the principal manufacturer of Telidon terminals at this time, indicates that they will sell Telidon terminal modules at US\$525 each, at quantities of 1,000 or more. This indicates, of course, that were an individual organization (or consortium of organizations) to place a contract with Norpak for a minimum of US\$525,000 today, they could, in fact, get their Telidon decoders for \$525 each--though it should be noted that at least as of December 1980, Norpak has had no buyers so far, at that price.

Whatever the case may be on individual decoder prices, however, one needs to add the cost of a modified television set to arrive at a total figure for a usable Telidon receiver terminal.** Here, there is also controversy over present prices,

* MICROS Journal, 1980.

** Inputting to Telidon systems, it should be noted, is another matter altogether. For example, the same advertisement referenced above indicates that 'information provider' terminals (i.e., those that are used to create pages for a Telidon data base) are available from Norpak for \$19,500--quite some distance, obviously, from prices for receiver terminals.

future prices, and so on. However, it may clearly be estimated that a figure of \$500-\$600 (in either U.S. or Canadian dollars) is not at all unreasonable, since these are essentially minimum prices even for conventional color television sets, let alone those that require modification in order to be used with the Telidon decoders discussed above. This being the case it seems reasonably clear that a minimum investment of \$1,000 to \$1,100 is required, and will be required for some time, to purchase and use a Telidon-equipped receiving device--i.e., barring presently unannounced entrants to the market. For this report, therefore, we will assume terminal prices to be in the above range, as a complete package.*

RADIO SHACK, COMPUSERVE, THE SOURCE, AND OTHERS

We have elaborated at some length in the last section concerning particular characteristics of Telidon (as well as Prestel and Antiope) that will be seen to have special signi-

* We are not inclined to go deeply into the subject of Prestel and Antiope terminal prices as they are essentially irrelevant to this particular report. It may be useful to point out, however, that according to the best information available at this time, Prestel prices, at least, are still substantially higher than those quoted above, and in some cases very much higher. Since they have less sophisticated graphics, however, it is entirely possible that they could at some time reach a level below Telidon prices, at greater production volumes than achieved at present. Similar remarks would probably be appropriate for Antiope decoders, but the picture is unclear in this situation also, at this time.

ficance with respect to market prospects for these systems. It is unnecessary to expound to the same degree on alternative systems; nevertheless, as before, certain characteristics are particularly important, especially those that differ substantially from what has been described above. This section outlines these aspects briefly, in order to put the analysis in the remainder of the report in its proper context.

In essence, what Radio Shack, CompuServe and others in the United States have to offer, already, are up-and-running information systems with (a) very large and diverse data bases, constructed for other purposes and thus already amortised for the most part; (b) ready made terminals, with user selection from a wide range of home computers, conventional computer terminals, and purpose-built terminals specifically for 'videotex' (i.e., mass-market information system) applications; and (c) a communication infrastructure that allows access to data base computers at very reasonable rates, most particularly at off-peak hours, e.g., nights and weekends.

Curiously, of course, the above description is (we would assume) very close to that envisioned for Viewdata some ten years ago, i.e., an overall inexpensive system that could conceivably be very widespread in a short time, easy to use, with attractive, marketable information, to be especially accessed from the home, during non-business hours.* Unfortunately,

* The latter characteristic, it may be noted, stems from what has often been reported as a key factor in the British Post Office's original rationale for Viewdata, namely, an opportunity to increase revenue from underutilized telephone plant --i.e., lines, switches, and telephone instruments--during off-peak hours. (See, for example, New Scientist, 1980).

as we will see, things have not yet turned out that way. On the contrary, Prestel, Antiope, Telidon and other similar systems are greatly more complex and expensive at this stage, because they require starting afresh with virtually all the components required to implement and deploy an operational system--hardware and software alike.

Briefly, then, to be explicit for future reference in the report, Radio Shack, CompuServe, The Source, and perhaps other systems as they develop, all share, and will continue to share, various aspects of the following set of characteristics:

1. Ready-made, off-the-shelf terminals with full alphanumeric keyboards, at least as low as \$800, even in color, and perhaps lower in the near future (black and white only, for example, already costs considerably less than \$800 now).
2. Ready-made data bases for certain sets of information.
3. Additional, newly constructed data bases, often derived as an off-shoot from other services--for example, full text of news stories that are input directly from computer-originated material prepared by newspaper publishers themselves.
4. Transaction services.
5. Communication services among and between users.
6. Inexpensive access and use charges, as low, for example, as \$2.75 per hour during non-business hours.
7. Full alphanumeric search capability, rather than numeric only.

8. Very extensive data bases covering a wide variety of subjects and interest levels, already available and accessible.
9. More terminals in place and operating now, in the United States alone, than in all other videotex systems combined, worldwide.*

SUMMARY OF INTRODUCTORY REMARKS, AND OUTLINE OF THE ANALYSIS

The basic facts described above are by now well known to many. However, a single study report has yet to put these various pieces of information in a total context, together with a specific, well documented methodology for forecasting potential demand, given that context, and given the environment in which the various systems presently exist. Since the purpose of this report is to carry out such a study for Telidon, we need also to describe briefly the methodologies we will be using.

To begin, it is appropriate to indicate that this study is an outgrowth of previous research concerning new methodological approaches to forecasting demand for telecommunication services. In particular, a previous report by Hough and Associates, in collaboration with Communications Studies and Planning Ltd.**, provided the basis for the present research, in

* We elaborate on this statement in some detail, later in the report.

** The title of this report was "Pilot Study to Develop a Methodology to Forecast Canadian Demand For New Home and Business Telecommunication Services For the Period 1980-1990." It was completed in May 1979, and is available to interested readers upon request to the Department of Communications. (Hough and Associates and Communications Studies and Planning, 1979).

that it outlined some 13 methods for studying new telecommunication services, from field trials, through laboratory experiments, to transaction models, surveys of various types including many new ones, and on to 'desk research' methods which could be used, it was claimed, to establish much better estimates of future demand than could simple guesses. Of these methods, three were identified as having the potential to especially contribute new knowledge, at modest cost. These methods were:

1. Analysis of demand based on historical analogy methods;
2. Competitive/complementary analysis; and
3. Analysis based on detailed examination of household expenditure and income patterns.

The present study was commissioned, in the main, to carry out analyses of the above types. In the course of the research over the past year, five very detailed working papers were prepared and forwarded to the DOC, in addition to a sixth, shorter paper which combined results from the previous five. While it is not anticipated that these reports will be made public, the principal purpose of this final report is to summarize all of them into one composite document, which it is hoped will be usable not only for its final results and conclusions, but for its methodological approaches to achieving those results.

ORGANIZATION OF THE REPORT

Principally, the report is organized in accordance with discussions of the three methodological approaches mentioned

above. Since the historical analysis is extensive it has been placed in a chapter of its own, Chapter 2. The other two methods, income and expenditure analysis and competitive and complementary analysis, are described in detail in Chapter 3, together with their principal results and conclusions.

Following these major analytical portions of the report, Chapter 4 considers a number of additional aspects to the task of forecasting potential growth of Telidon. Included therein are discussions of the validity of the estimating parameters and assumptions used in the analysis; consideration of the market demand aspects of the RGB vs. RF interface issue; separation of the overall results into forecasts for home and business; and a number of other issues. Finally, Chapter 5 summarizes the results of the study, and provides our conclusions based on those results.

Chapter 2

DEMAND ANALYSIS BASED ON HISTORICAL

ANALOGY METHOD

INTRODUCTION

In late 1969 and early 1970, a study was conducted for the U.S. National Aeronautics and Space Administration (NASA) that attempted to address the question of future demand for telecommunications in a new way. This study, conducted at Stanford Research Institute in California (Hough, et. al., 1970), was directed toward new telecommunications services for a very specific reason. In carrying out its major mission, that is, technical and technological research in space as well as aircraft, NASA had reason to consider, and explore the nature of, long range future applications that might be appropriate for very advanced communication satellites. Some of these potential missions, interestingly enough, are just now in their earliest stages of commercial experimentation, investigation, and exploitation--for example, direct broadcast satellites. Many other applications were also being considered at that time, however, such as much expanded use of television, including the addition of many new nationwide networks instead of the three that existed in the U.S. at the time, expanded use of such new innovations as video teleconferencing and other visual communication services, greatly increased data communications traffic (resulting, for

example, from expanded use of data base enquiry, electronic libraries, electronic funds transfer, law enforcement communication, telemedicine, and a very impressive list of other future services), and perhaps most impressive for a report of ten years ago, a substantial look at one of the most talked about topics of today, electronic mail.

The NASA study, we have found since, was in many ways a landmark one, especially because of two things. First, it dealt in an analytical way (not a journalistic, prognostic, or science fiction way) with a wide variety of possible future telecommunication services, some of which are just now coming to fruition, but many of which are still not commonplace at all, and may not be for some time. Second, it approached the problem of analysis from several entirely new methodological perspectives. Chief among these new approaches was that of considering the likelihood of new services in the light of how other, successful innovations had grown in the past, using actual historical data to the degree that they were available. We called this technique the historical analogy method.

It is interesting to note, of course, that the concept of historical analogy is not new. What was new, however, ten years ago, was the notion that numeric data on the early growth of already mature services might be available, and usable in sufficient detail to create an analytical model, not only for telecommunications but in a number of other related fields as well. Specifically, we found at the time, and made use of, early U.S. growth data on telephones, telephone calls, telegraph

messages, television sets in place, microwave transmission, computers, and automobiles. All of these products and services could be traced back essentially to their beginnings, or very close thereto. Thus, the time series representing growth of the services at those beginnings and immediately thereafter could be accurately displayed, and the patterns of each service could be compared with the others, as well as with theoretical patterns of growth and evolution of new services. In fact, what was seen to be remarkable, and will be displayed presently, was that many of the curves bore a strong resemblance to theoretical constructs, and in one case, that of television growth, the regularity of the pattern is exceptional.

To summarize, the historical analogy method was first developed some ten years ago, when it was applied to a project very similar to the present one, namely, forecasting demand for new (as well as conventional) information transfer services. In the previous case, requirements for highly aggregated services, such as voice, video, data, and so on, were required, whereas in this study the subject matter is more disaggregated--i.e., Telidon, by itself. In all other respects, however, the studies are similar, and the logic for using comparisons with growth of previous services is identical.

OUTLINE OF THE METHODOLOGICAL APPROACH

The essence of the historical analogy method, as

intimated above, is the collection of a number of sets of time series data on the early growth of new products and services in the past, with an eye toward using these data as indicators of potential growth of new products. Especially in the last year or two there has become an ever-expanding list of technological developments that may be compared to Telidon, and on which early growth data would be valuable. (See Table 1).

Unfortunately, sufficiently comprehensive and verifiable information is available only for some of these products and services. However, without question the available series comprise a more than adequate set of figures to analyze, using the historical analogy method.

To begin, we have illustrated in Figure 1 a picture of what the early growth of telephone service in the United States looked like, beginning with its first year, 1876. The data for this chart were drawn from records collected and made available by the U.S. Government, specifically in "Historical Statistics of the United States, Colonial Times to 1957," published by the U.S. Bureau of the Census.

It is interesting, of course, that such data even exist. As we will find, however, such 'richness' will by no means always occur, and we will be forced to make do with much less complete information in many cases. For U.S. telephone service though, the record is just what is needed, for our principal objective is to evaluate, numerically, the pattern of growth and change that took place in those early years.

Table 1

SERVICES FOR WHICH HISTORICAL GROWTH
DATA WOULD BE DESIRABLE AND USEFUL

| | |
|-----------------------|---------------------------|
| *Telephone | Electronic Games |
| *Telegraph | *Automobile Development |
| *Television | *Air Travel |
| *Color Television | Business Computers |
| *Radio | Business Copiers |
| FM Radio | Computer Terminals |
| *CB Radios | *Facsimile Transmission |
| *Cable Television | Telex/TWX |
| *Pay Television | Mailgram/Telepost |
| *Video Tape Recorders | Word Processing |
| Video Discs | *Packet Networks |
| Calculators | Typewriters |
| Electronic Watches | Electronic Cash Registers |
| Home Computers | *Microwave Transmission |

* Services for which sufficient data for analysis are available.

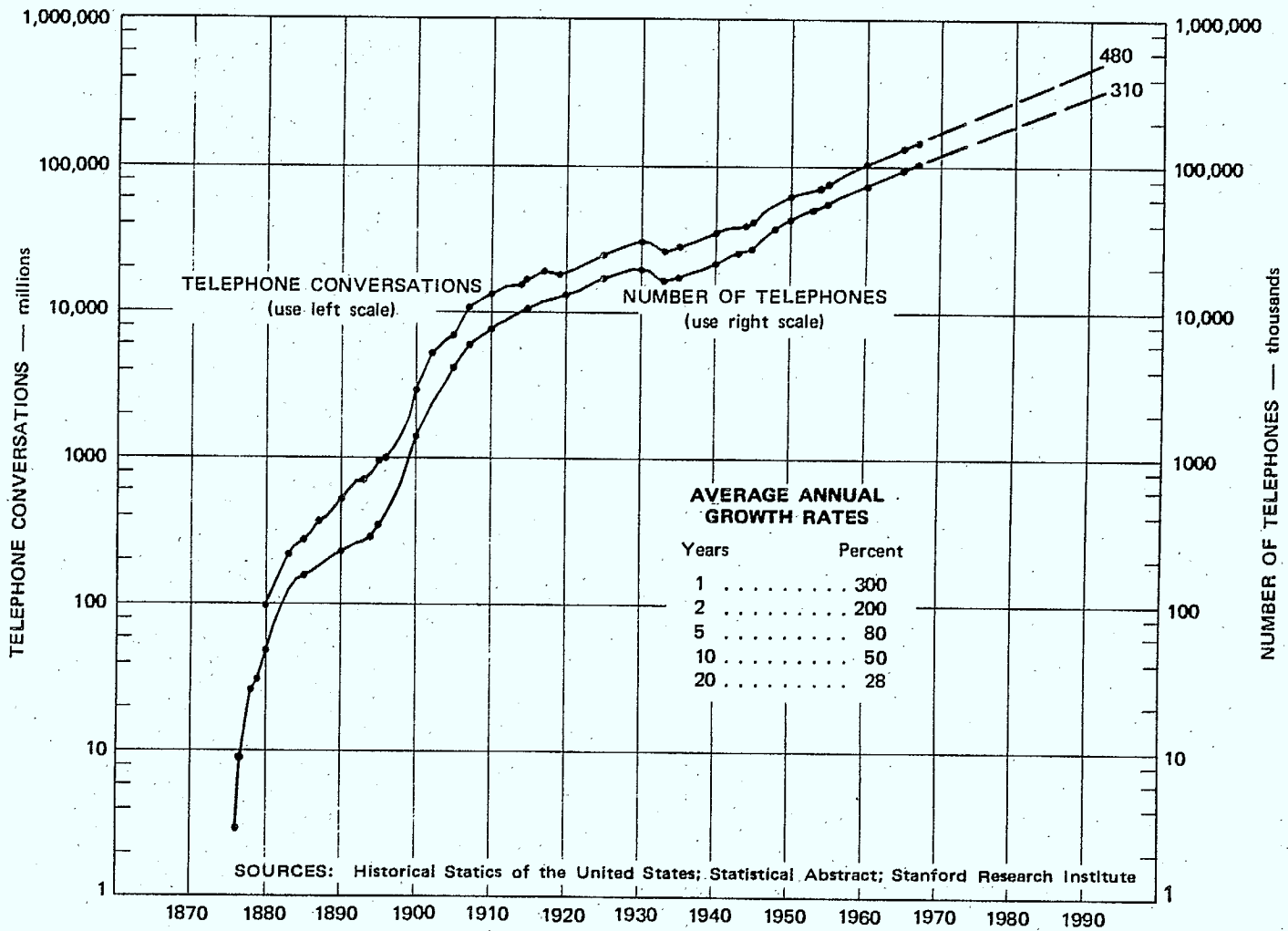


Figure 1. U.S. Telephone Growth, 1876-1970

Source: Hough, et al., 1970

There are undoubtedly many ways to do this. One way, however, which has proved to be eminently successful, is to record the value of the time series at specific points in time, say, at 'Year 1,' 'Year 2,' 'Year 5,' and so on, then compare these figures on some consistent basis. The comparison method itself, interestingly, need not be complicated. For example, it is sufficient to calculate, at each of the identified points in time, a figure representing average annual growth rate (AAGR) from the year of introduction of the service to the year in question, that is, average growth over the first year, then over two years, five years, ten years and so on. In the case of U.S. telephone service, these calculations indicate that that service increased by some 200% during its first year (based on number of telephones in use), continued at that same rate during the second year, then declined in its growth rate overall to a figure of 80%/year for the first 5 years, 50%/year over 10 years, and 28%/year when averaged over 20 years.*

From these results, a number of observations can be made. First, of course, is the fact that the rate of growth declines over time, indicating that additions to telephone service, while continuing to increase on a consistently positive basis in absolute terms, did so nonetheless at a continually decreasing rate for over thirty years, until about 1910. Then, as may be seen from the chart, growth continued steadily

* A typographical error on Figure 1 indicates average annual growth rate as 300% at year 1. The correct figure is 200%.

for about twenty years (1910-1930), declined during the Depression years, then picked up again at a pace very similar to that experienced from 1910 on. As we will see in much of what is to come, this general pattern--high growth at the beginning of introduction of a new service, followed by continually decreasing rates of growth over time--is characteristic of virtually all new products and services that are successful in the marketplace. Moreover, these patterns, having been observed many times before, have been given names, such as "S" curve growth, after the familiar form of such data when they are plotted on rectangular coordinate paper, as opposed to semi-logarithmic scales, as they are displayed here.

The second observation to be made with respect to the data displayed so far has to do with the absolute value of the growth rates that are observed. It should be noted carefully, for example, that at the beginning of U.S. telephone service, when growth rates were as indicated, 200% per year, this rate derived in fact from a tripling of units in place in both the second and third years of service, starting from 3,000 telephones in 1876. This represents, quite obviously, a substantial growth for such a new, untried, and unfamiliar development in an era when technical change was by no means taken for granted as it is today. Again, however, what will be seen to be more than surprising is that growth rates as high or higher than 200%/year

are consistently observed with successful products and services, in their first year or two.

Finally, the third observation that is relevant is that the above statements do not apply to rates of growth averaged over five or ten years. Between two and five years, in other words, the early high growth rates decline very rapidly on average, such that after that time a figure as high or higher than 100%/year will be seen to be highly unusual. These facts will be found to be very important in the context of forecasting Telidon's potential market.

In summary, with the above as background, what we will be doing in this chapter is documenting growth histories of a large number of technological developments, evaluating them in a similar manner to that shown above, then illustrating how the previously experienced numeric figures affect estimates of Telidon's growth, using this method. To do this we present the basic data in the following sections, with a separation of the products and services into four categories--first, those items (products or services) that we will identify as 'home-only or home-and-business' services, meaning the combined set of products and services that have developed either with a home-only (or home primarily) market (e.g., radio, television, cable television, pay television) or a home and business market (e.g., telephone, automobiles); second, those items that we will identify as 'business-only' services, meaning products or services that have developed with a business-only (or business primarily) market

orientation (e.g., computers,* microwave networks, packet switching); and finally, third and fourth, a further separation of the above data into the two categories, U.S. or Canadian.

THE BASIC DATA

Home-Only, or Home-and-Business, Services

Telephone Service. Having presented above the basic data on the growth of telephone service in the United States, we turn in this section to that same type of information for Canada.

We have already alluded to the fact that very often data are not as complete as we would like them to be. In this section we will see clearly what that statement means, and what must be accomplished to correct the problem. To begin, we present in Table 2 the available figures on telephone sets in use in Canada, derived from the publication, "Historical Statistics of Canada" (Urquhart and Buckley, 1965).** These data, as may be seen on the chart, begin in 1886, when some 13,000 sets are recorded as having been in use. Observing these numbers--i.e., the year and the number of sets--immediately brings to mind a recognition that, in comparison to the U.S. figures presented just above, something appears to be seriously different about

* Note that we are dealing at this stage with the early initial growth of computers, which did in fact occur exclusively in business, despite the advent of home computers today.

** In contrast to the United States, no publication that we know of has been produced officially by the Canadian government which contains historical statistics of the type being used here.

Table 2

GROWTH OF CANADIAN TELEPHONE SERVICE 1886-1909

| <u>Year</u> | <u>Number of Sets In Use (thousands)</u> | <u>Average Annual Growth Rate from 1886 (Percent)</u> |
|-------------|--|---|
| 1886 | 13 | |
| 1887 | 15 | 15 |
| 1888 | 16 | 11 |
| 1889 | 18 | |
| 1890 | 21 | |
| 1891 | 25 | 14 |
| 1892 | 32 | |
| 1893 | 34 | |
| 1894 | -- | |
| 1895 | -- | |
| 1896 | -- | 12 (est.) |
| 1897 | -- | |
| 1898 | 44 | |
| 1899 | 44 | |
| 1900 | 52 | |
| 1901 | 63 | |
| 1902 | 71 | |
| 1903 | 82 | |
| 1904 | 95 | |
| 1905 | -- | |
| 1906 | -- | 12 (est.) |
| 1907 | -- | |
| 1908 | -- | |
| 1909 | 239 | |

* Source: Urquhart and Buckley, 1965.

them. Indeed, that is clearly the case, for upon observation it becomes obvious that the initial figures don't at all represent the first year of introduction of the telephone in Canada, but instead only the first year for which consistent data are recorded in whatever historical records were available to the authors of the source document (Urquhart and Buckley, op. cit.). As these figures stand, therefore, they are considerably less useful than the U.S. figures in calculating early growth rates because, as pointed out already, it is the first few years that are crucial to the calculation method.* This being the case, the question arises, What can be done about it?

Fortunately, a great deal can be done in this particular situation, using logic, other knowledge of the beginnings of telephone service, and so on. First, for example, it may be recognized that Canadian and American telephone service began at very nearly the same time, though as with many innovations the initial starting date of commercial service was somewhat later in Canada.** Assuming that delay to be, say, two or three years, it is reasonable to place the initial start date of Canadian service at, approximately, 1879. Second, it is also reasonable to assume, on the basis of the substantial difference in population that has always existed between the U.S. and Canada,

* To illustrate this fact dramatically, incidentally, we have recorded on Table 2 calculations of average annual growth rate using 1886 as if it were the first year of service. As may be seen, these figures are entirely erroneous and misleading with respect to early Canadian telephone growth, since the characteristic high growth rates at the beginning of service introduction have been completely missed.

** Recall, of course, that while Bell was in Canada at the time the telephone was invented, he found the investment climate better in the U.S.--much as the same situation is reported to exist today.

that rather than there being 3,000 telephones in service the first year, instead there might have been, say, 1,000 units. Combining these data points, then, we have what may be viewed as at least a reasonable starting situation for Canadian service, which while it cannot be verified so far as we know, will be seen to vastly improve our estimates of the rate of early growth of this service.

To complete the picture it is necessary, first, to fill in estimated intermediate values between 1879 and 1886. The easiest way to do this is to plot the available data and our assumed starting value on semi-log paper, as before (Figure 2). With this accomplished we can then draw in freehand a very reasonable curve for the intermediate dates, read the new figures for those dates from the chart, and record the new series from 1879 on (Table 3). Finally, assuming that all these estimates are at least approximately correct, a new set of calculations may be made for early Canadian telephone growth as follows:

Estimated Growth of Canadian Telephone
Service, With Additional Data Points

| <u>Year</u> | <u>Average Annual Growth Rate (Percent)</u> |
|-------------|---|
| 1 | 90 |
| 2 | 73 |
| 5 | 52 |
| 10 | 34 |
| 20 | 21 |

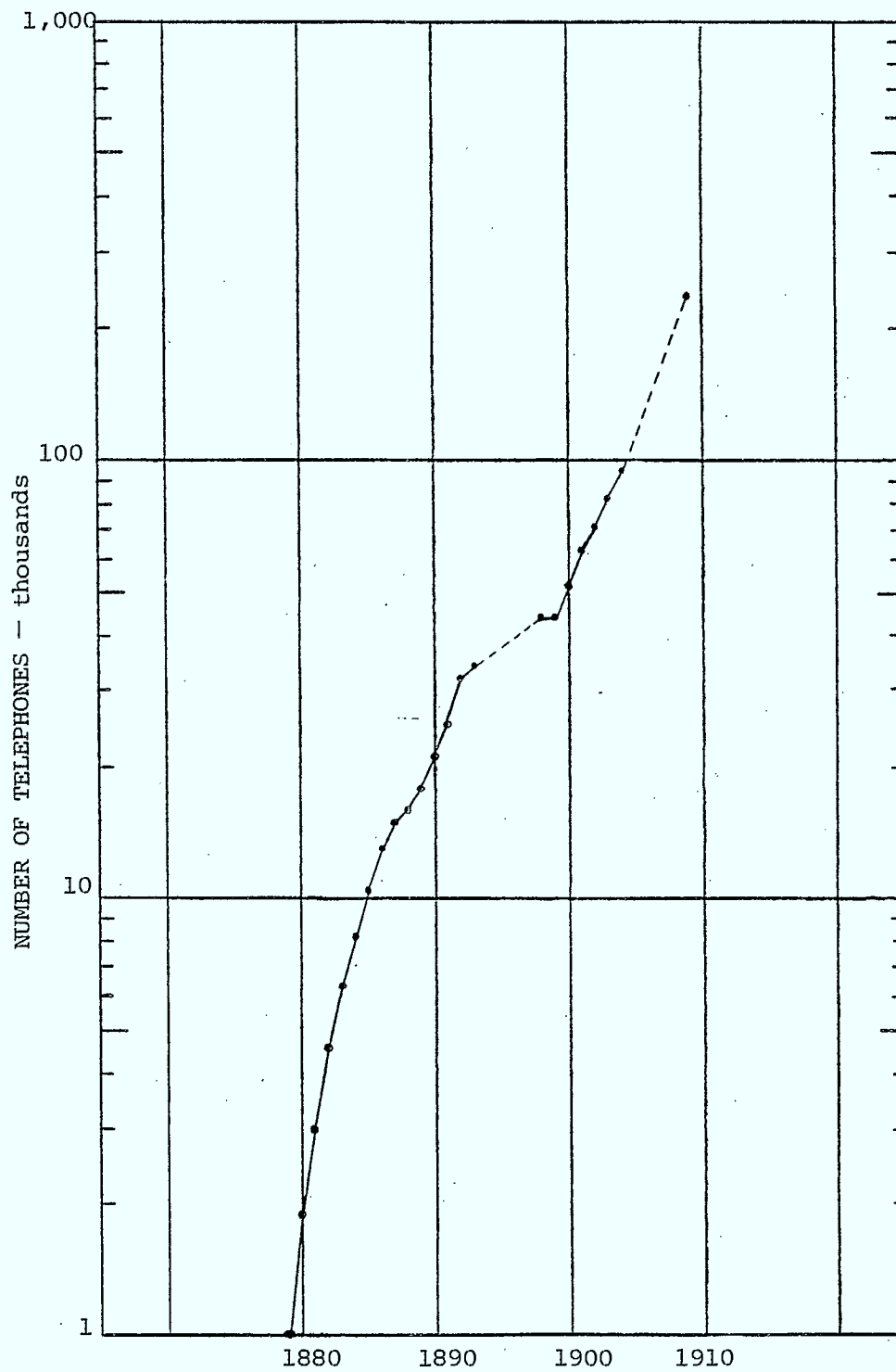


FIGURE 2 EARLY GROWTH OF TELEPHONES, CANADA,
WITH REVISIONS TO SHOW ESTIMATED
VALUES FOR 1879-1886.

Table 3
REVISED ESTIMATES FOR EARLY CANADIAN
TELEPHONE GROWTH, 1879-1886*

| <u>Year</u> | <u>Postulated Number Of Sets in Use</u> |
|-------------|---|
| 1879 | 1,000 |
| 1880 | 1,900 |
| 1881 | 3,000 |
| 1882 | 4,600 |
| 1883 | 6,300 |
| 1884 | 8,200 |
| 1885 | 10,400 |
| 1886 | 13,000 |

* Based on extrapolating backward from 1886 to an assumed start date of 1879, and an assumed starting figure of 1,000 sets in use.

Television. From here on in the discussion it will be unnecessary to elaborate to the same degree as above, since the methods to be used are, in general, consistent with those already presented. We will see, however, a general tendency for there to be substantially more data available for U.S. than for Canadian services, and we will be thus forced to use more U.S. information than we might like to.

In the case of television some striking comparisons may be made. In the U.S., for example, a remarkable pattern developed when this service was introduced immediately after the Second World War (1946). Because, as everyone now knows, television is such an incredibly 'demand-pull' service, the growth pattern for it took off exceedingly fast (Figure 3), and didn't stop even for a breath. In fact, this series is longer, steeper and more consistent than any other growth pattern available, and of course television sets are still selling, year over year, to this day.*

For Canada, television growth was almost as dramatic, although displaced, again, by about three years (See Figure 4). In this case, as with telephone service, consistent data are not available in the most common single statistical data source, since that series (Households with Television, Statistics Canada Catalog 64-202) does not begin until 1953, some four

* On Figure 3 it may be noted that growth at Year 1 for U.S. television is lower than in subsequent years. This phenomenon is due to the fact that immediately after the war, introduction of the service was severely supply limited at first. Within less than two years, however, industry had completely recovered, and was thus able to supply all the sets the market could absorb, according to these figures.

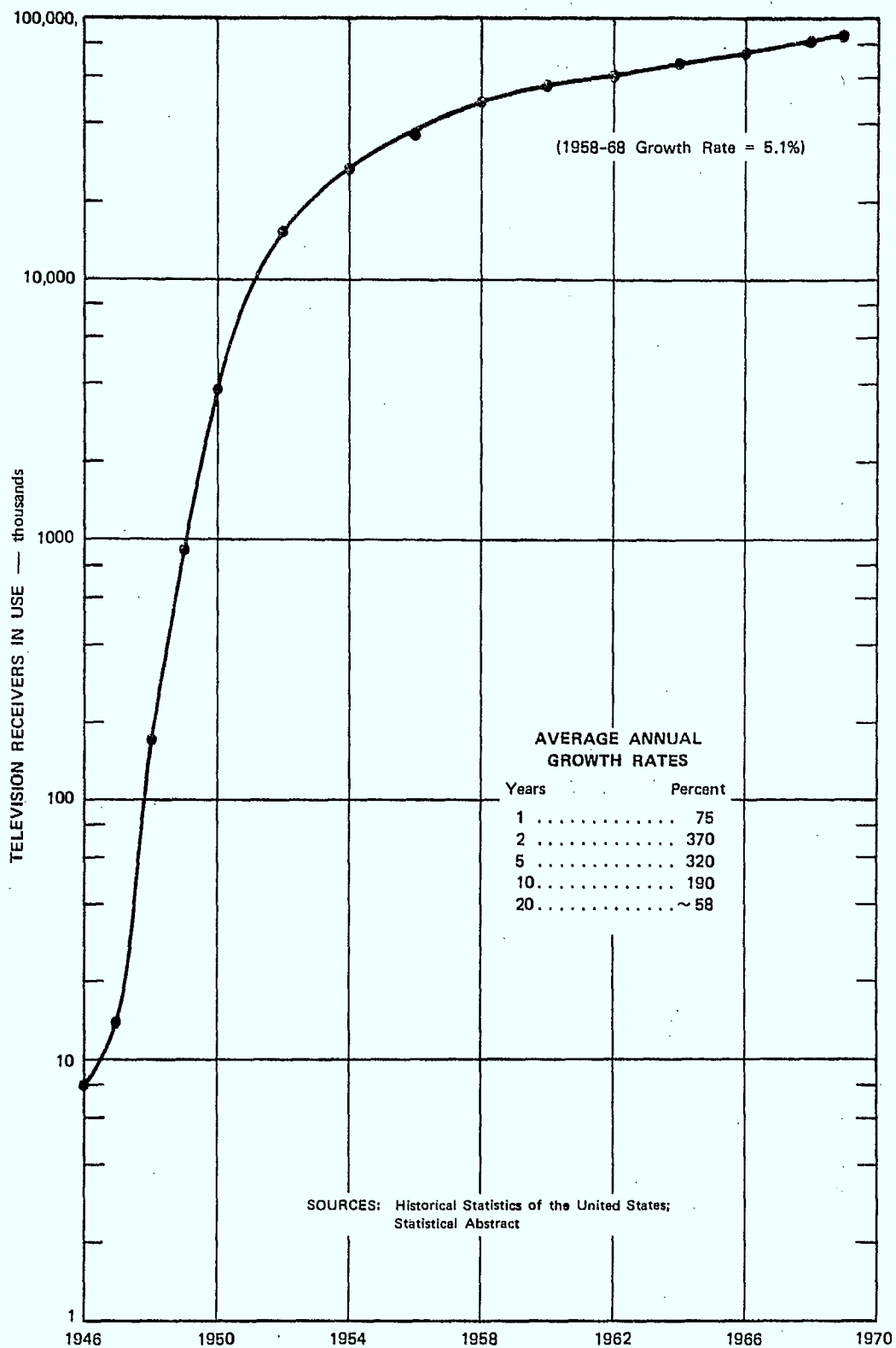


FIGURE 3 GROWTH OF TELEVISION IN THE UNITED STATES

Source: Hough, et al., 1970

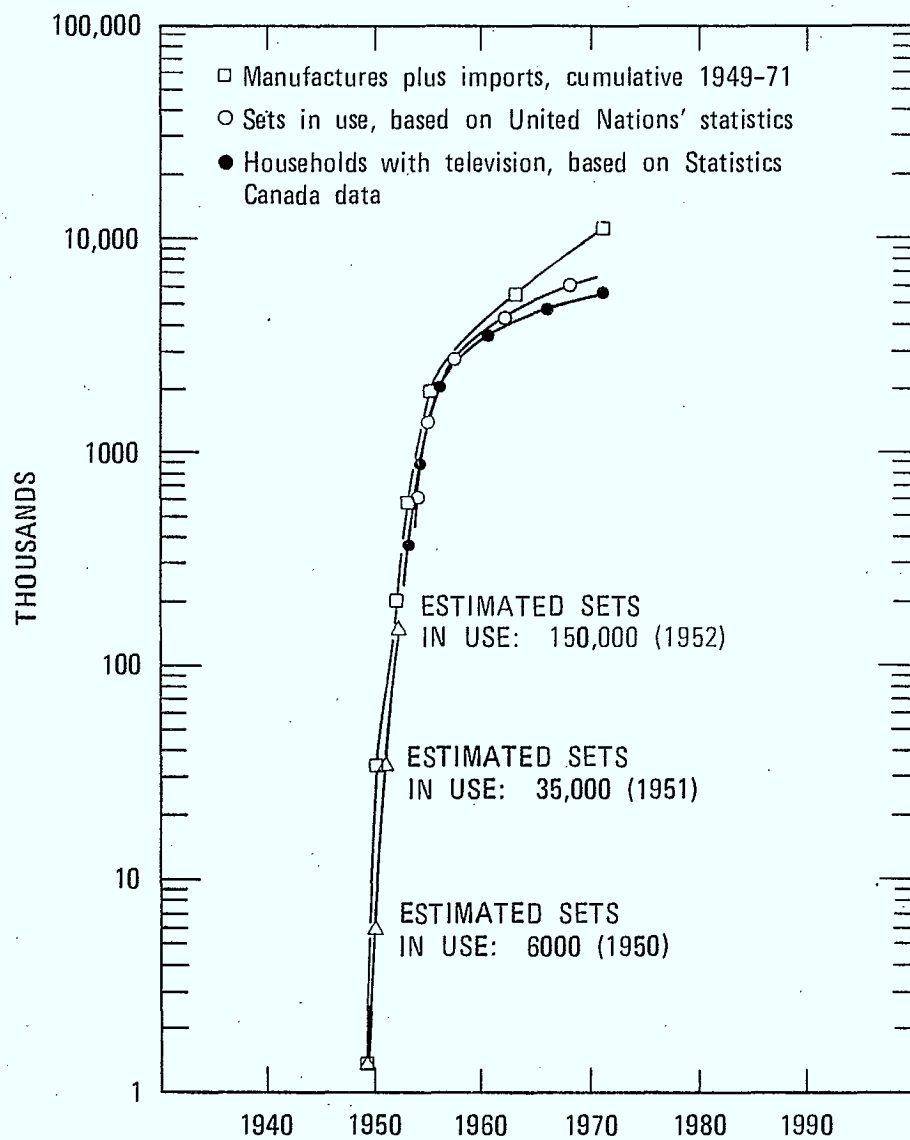


FIGURE 4 GROWTH OF TELEVISION IN CANADA
Manufactures, sets in use, and households with TV,
1949-1971.

Source: Hough, et al., 1973

years after the actual starting date of Canadian television. To get around this problem, two other series were made use of, namely imports and manufactures, in order to fill out the series in its beginning years. From this information, Canadian television is calculated to have grown as follows:

Early Growth of Canadian Television, 1949-1969

| <u>Year</u> | <u>Average Annual Growth Rate (Percent)</u> |
|-------------|---|
| 1 | 67 |
| 2 | 213 |
| 5 | 184 |
| 10 | 98 |
| 20 | 45 |

Color Television. The above being quite satisfactory for our use for television, we are not so fortunate for color television--again, that is, with regard to Canadian data. On the other hand, as we will see in the remainder of this section of the report, U.S. information is still substantially 'rich' in the information we are looking for. For color television, for example, data originate again at a point where less than .02% of U.S. households have such receivers, namely, in 1955 (Table 4). From these data, the early growth picture for this series may be constructed as shown below:

Table 4

COLOR TELEVISION SETS IN USE IN
THE UNITED STATES, 1955-1977

| <u>Year</u> | <u>Sets in Use (thousands)</u> |
|-------------|------------------------------------|
| 1955 | 5 |
| 1956 | 18 |
| 1957 | 85 |
| 1958 | 165 |
| 1959 | 250 |
| 1960 | 340 |
| 1961 | 445 |
| 1962 | 590 |
| 1963 | 950 |
| 1964 | 1,610 |
| 1965 | 2,810 |
| 1966 | 5,220 |
| 1967 | 9,000 |
| 1968 | 13,700 |
| 1969 | 18,660 |
| 1970 | 23,400 |
| 1971 | 27,800 |
| 1972 | 33,500 |
| 1973 | 39,400 |
| 1974 | 44,950 |
| 1975 | 48,500 |
| 1976 | 51,700 |
| 1977 | 54,340 |

Source: Sterling and Haight, 1978.

U.S. Color Television Growth, 1955-1975

| <u>Year</u> | <u>Average Annual Growth Rate (Percent)</u> |
|-------------|---|
| 1 | 260 |
| 2 | 312 |
| 5 | 133 |
| 10 | 88 |
| 20 | 58 |

Radio, CB Radio, Cable Television, Pay Television, and Video Cassette Recorders. With, now, a number of other home services, we can summarize quickly. The data for these services are depicted graphically in Figures 5-9, and as may be seen they bear, for the most part, quite a resemblance to each other. On the other hand, when viewing these charts it should be borne in mind that they are displayed on vastly different horizontal scales, since the data cover different time periods. Radio, for example, is shown for the years 1922-1977, while CB radios cover only the period 1974-1979. Similarly, cable television is displayed over a considerable period (1954-1979), whereas pay television and video cassette recorder growth are shown to cover less than a fifteen-year period each.

In summary, the data recorded in Figures 5-9 enable us to construct the following representations of either likely or actual early growth for these services, bearing in mind that they do all start at 'an' early period, although not necessarily the same early period:

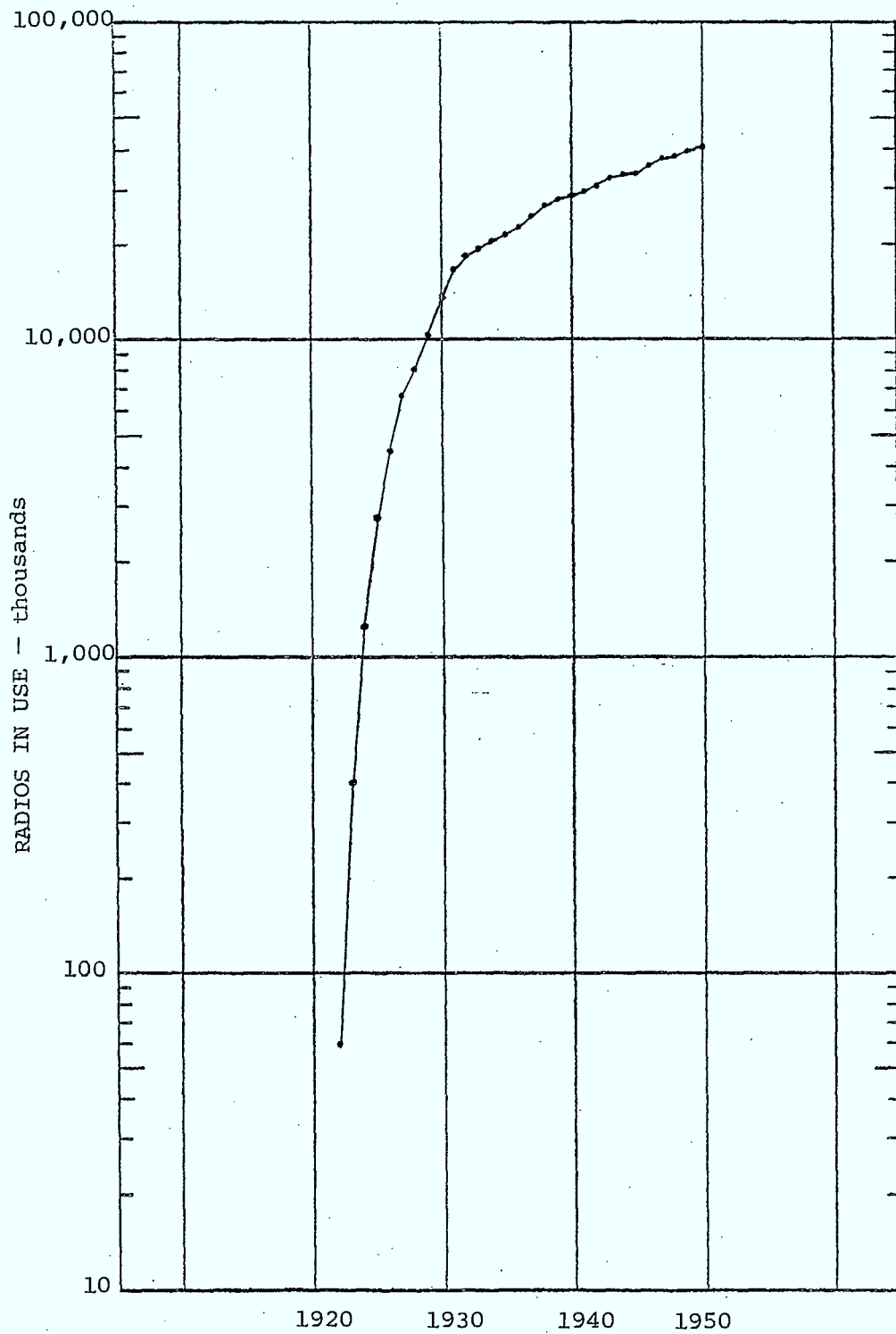


FIGURE 5 GROWTH OF RADIO IN THE UNITED STATES

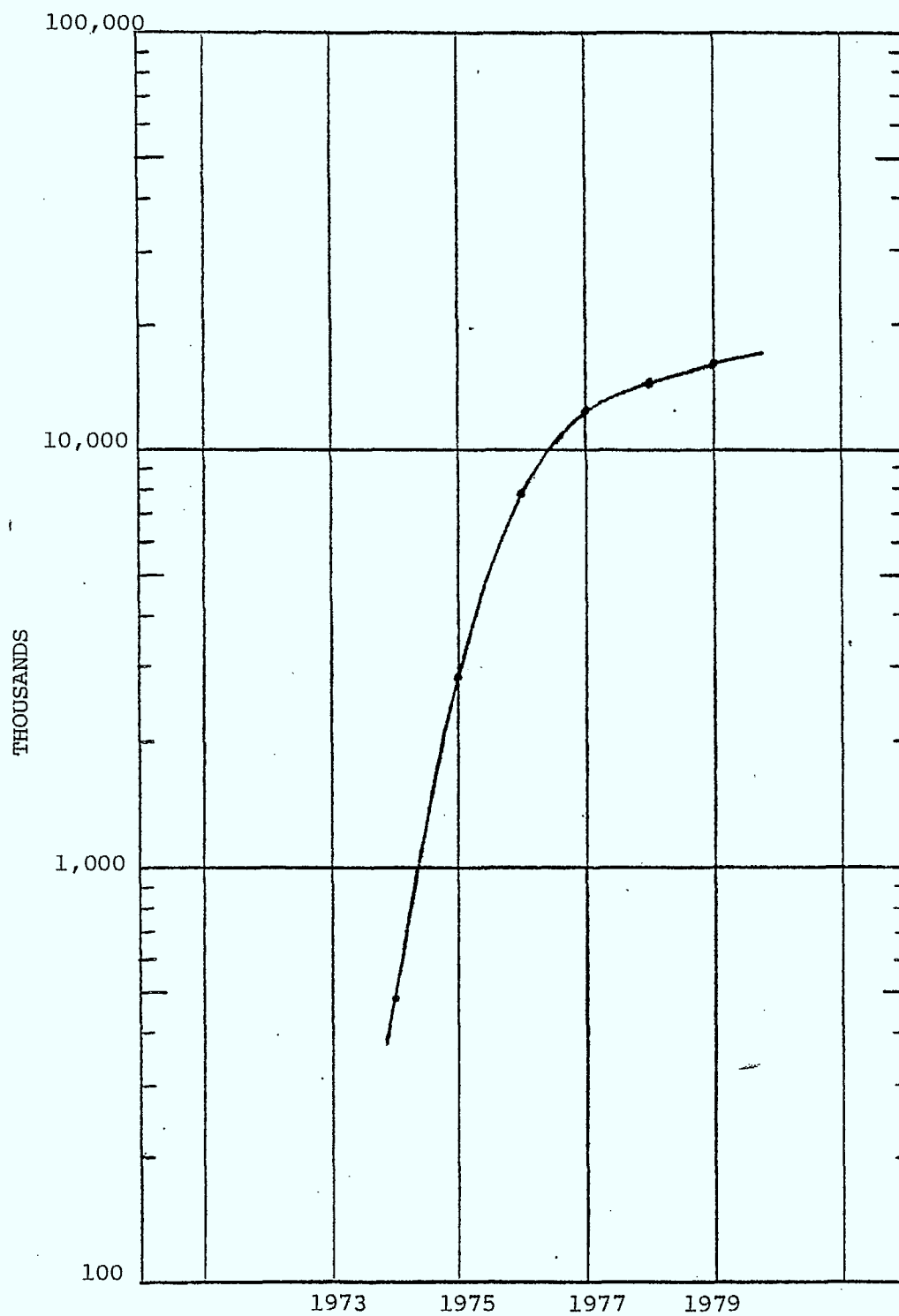


FIGURE 6 GROWTH OF CB RADIOS IN THE UNITED STATES

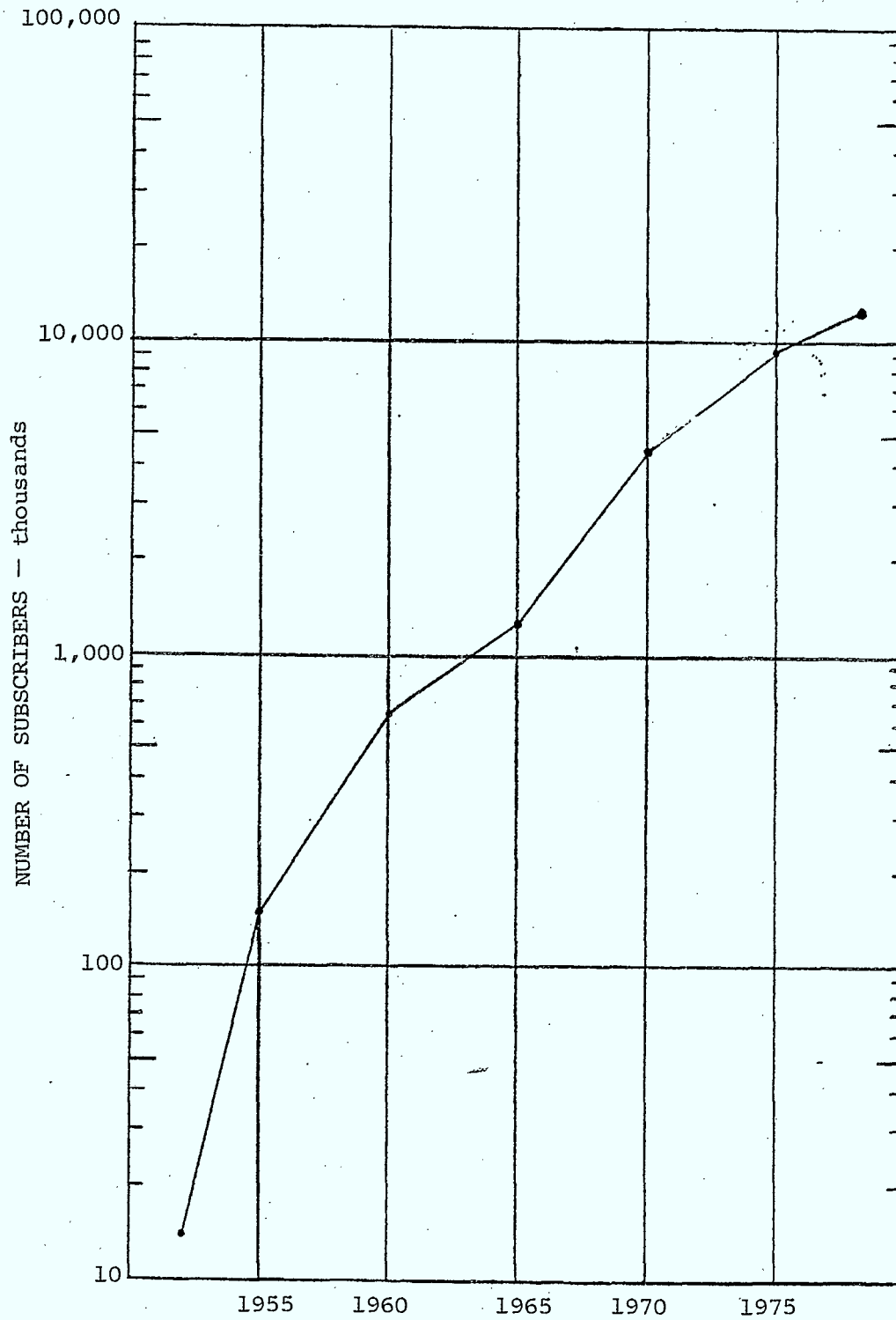


FIGURE 7 GROWTH OF CABLE TV IN THE UNITED STATES

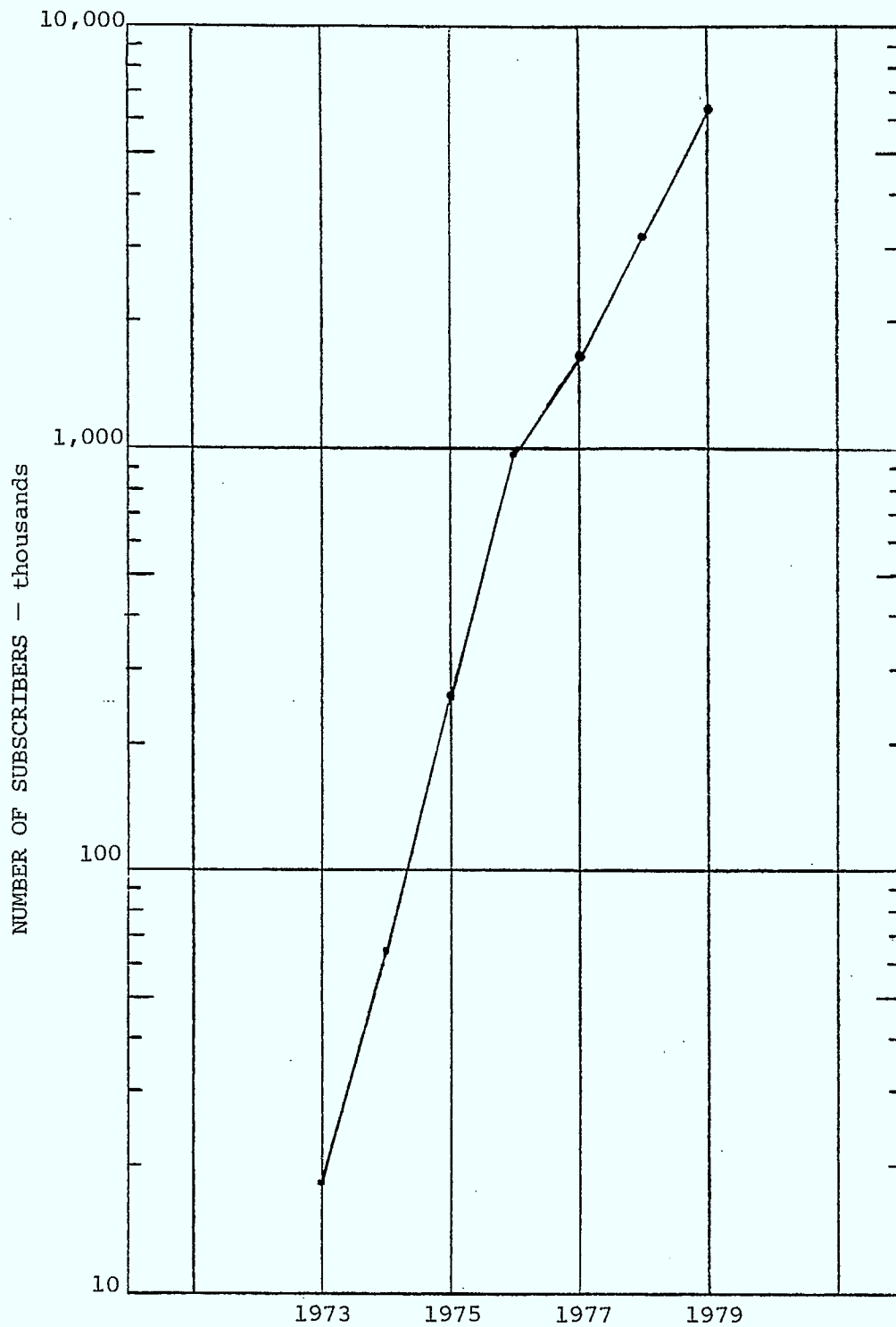


FIGURE 8 GROWTH OF PAY TV IN THE UNITED STATES

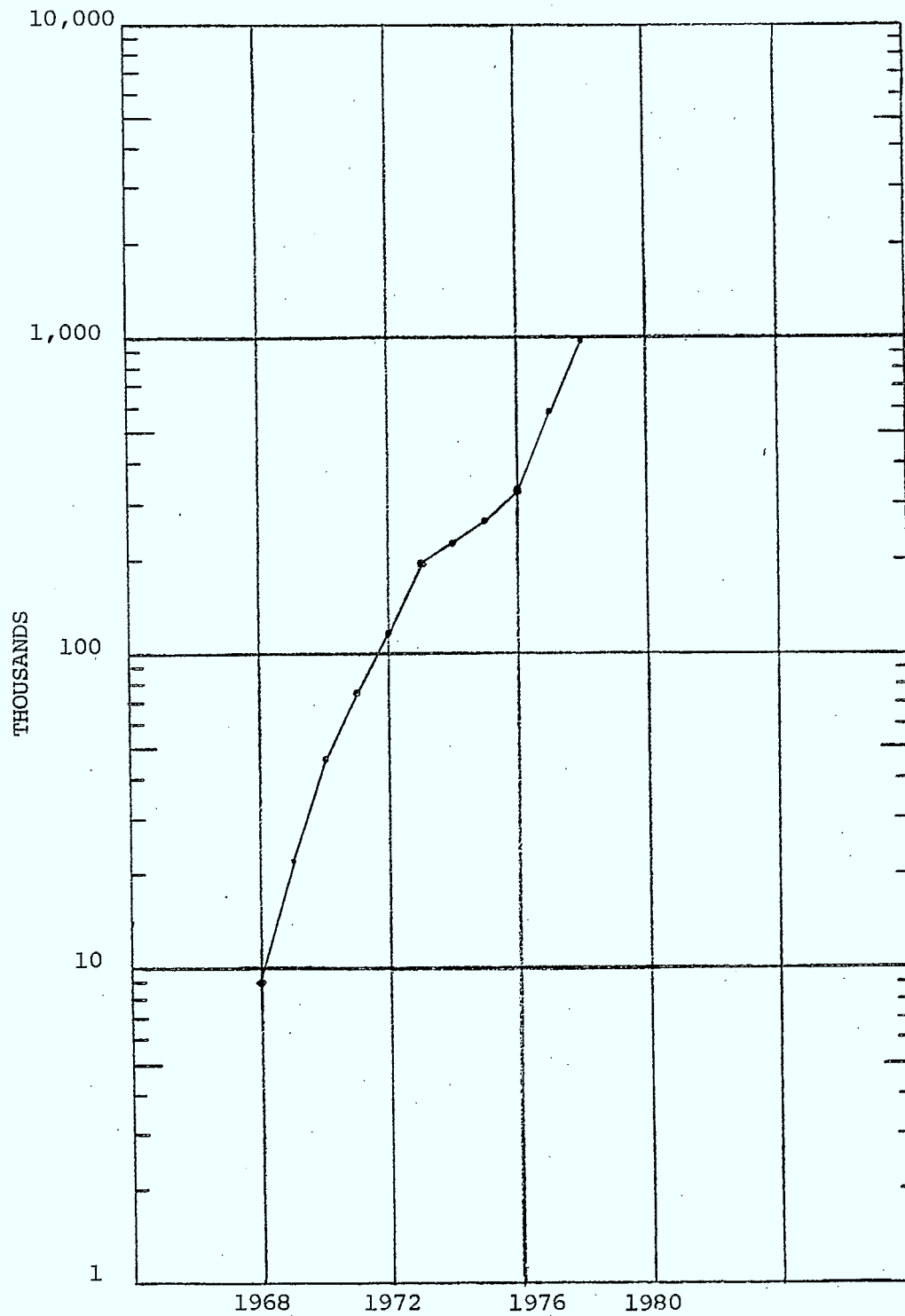


FIGURE 9 GROWTH OF VIDEO CASSETTE RECORDERS IN THE UNITED STATES

Likely Early Growth for Five Additional Services (U.S.)

Average Annual Growth Rates (Percent)

| <u>Service</u> | <u>First Year</u> | <u>First 2 Years</u> | <u>First 5 Years</u> | <u>First 10 Years</u> | <u>First 20 Years</u> |
|----------------|-------------------|----------------------|----------------------|-----------------------|-----------------------|
| Radio | 567 | 356 | 157 | 77 | 37 |
| CB Radio | 469 | 309 | 102(est) | -- | -- |
| Cable TV | 114 | 115 | 90 | 51 | 35 |
| Pay TV | 263 | 279 | 182 | -- | -- |
| VCRs | 144 | 126 | 85 | 60 | -- |

Automobiles and Air Travel. Finally, two other pieces of data complete the information available on home-only or home-and-business services, i.e., automobiles and air travel. In each of these cases, fortunately, we do have Canadian data, as shown in Figures 10 and 11. Here, as is obvious, growth results from both business and home use, and the numeric data result in the following calculations:

Early Growth of Automobiles and Air Travel, U.S. and Canada

Average Annual Growth Rate (Percent)

| <u>Year</u> | <u>Automobiles</u> | | <u>Air Travel</u> |
|-------------|--------------------|---------------|--------------------|
| | <u>U.S.</u> | <u>Canada</u> | <u>Canada Only</u> |
| 1 | 85 | 20 | 85 |
| 2 | 70 | 68 | 26 |
| 5 | 60 | 57 | 90 |
| 10 | 50 | 65 | 40 |
| 20 | 41 | 43 | 28 |

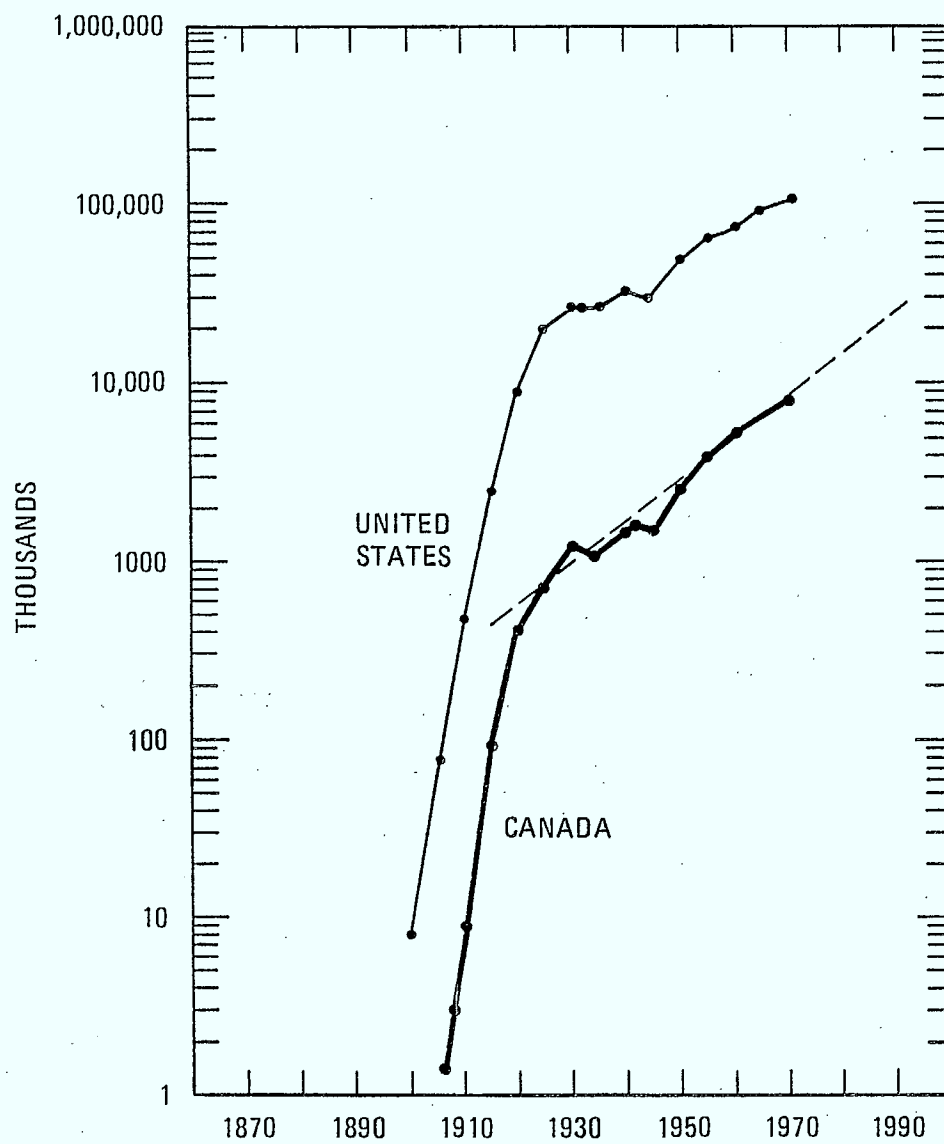


FIGURE 10 NUMBER OF MOTOR VEHICLE REGISTRATIONS,
UNITED STATES AND CANADA

Source: Hough, et al., 1973

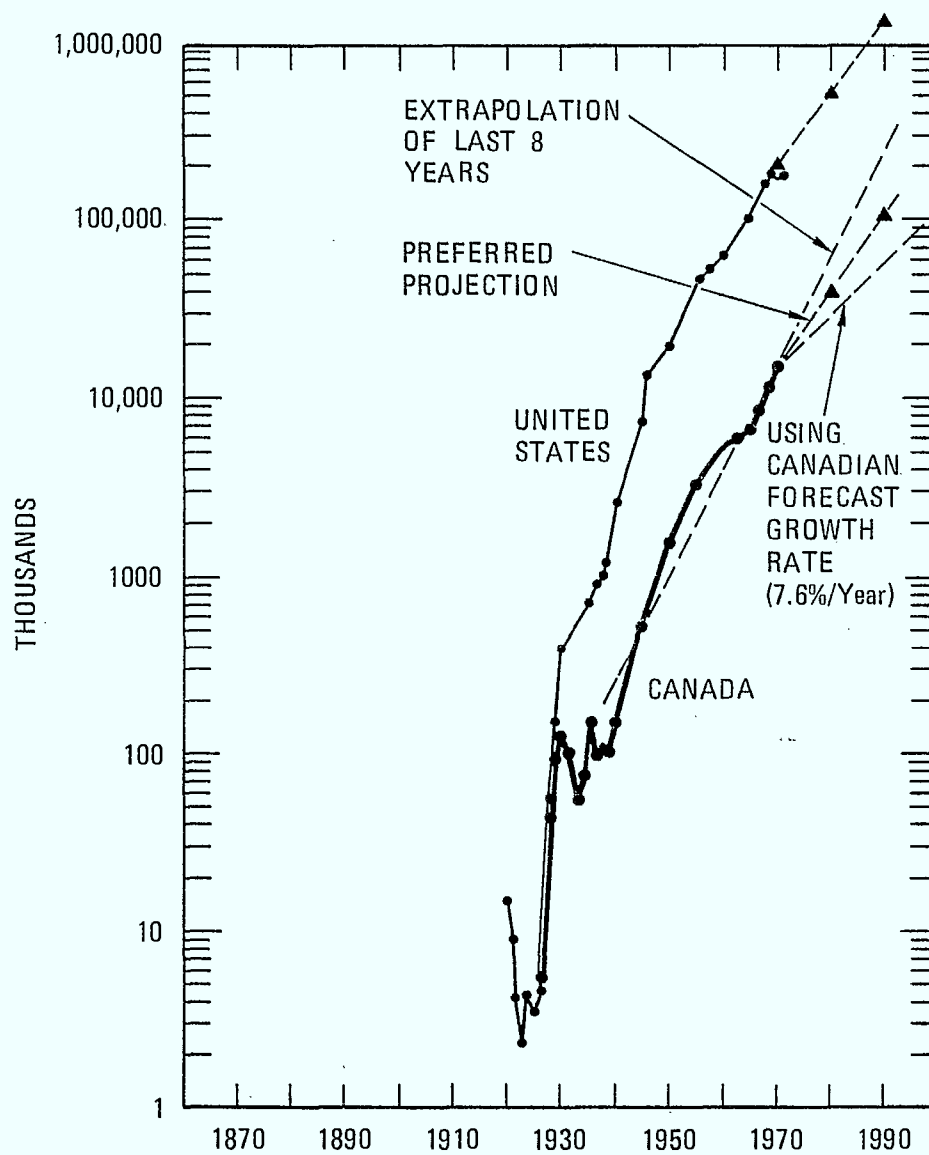


FIGURE 11 AIR PASSENGERS CARRIED, UNITED STATES AND CANADA

Source: Hough, et al., 1973

Business-Only Services

Turning now to the business world, we find that again there is a large amount of data to work with, although by no means all that it would be fortunate to have. To be specific, information is available in this area for computers, telegrams, facsimile transmission, microwave transmission, and packet networks --again with figures derived for the most part, but not exclusively, from U.S. data sources.

Computers. Figure 12 illustrates the growth of computers in both the U.S. and Canada. This figure indicates that, contrary to a number of situations presented in the last section, commercial introduction of these machines began in the two countries at essentially the same time, or very close thereto. Unfortunately, data are completely lacking for the Canadian time series between 1951 and 1964. We are forced, therefore to interpolate for these dates, much as was done for Canadian telephone service (See Table 5). Resulting growth calculations for the two countries are then developed from the appropriate time series as follows:

| <u>Growth of Business Computers, U.S. and Canada</u> | | |
|--|---|---------------|
| <u>Year</u> | <u>Average Annual Growth Rate (Percent)</u> | |
| | <u>U.S.</u> | <u>Canada</u> |
| 1 | 600 | 100 |
| 2 | 400 | 73 |
| 5 | 300 | 62 |
| 10 | 210 | 61 |
| 20 | 84 | 50 |

Table 5
POSTULATED CANADIAN COMPUTER
GROWTH, 1951-1964

| <u>Year</u> | <u>Estimated Number - Of Computers</u> |
|-------------|--|
| 1951 | 1 |
| 1952 | 2 |
| 1953 | 3 |
| 1954 | 4 |
| 1955 | 7 |
| 1956 | 11 |
| 1957 | 18 |
| 1958 | 28 |
| 1959 | 46 |
| 1960 | 74 |
| 1961 | 119 |
| 1962 | 192 |
| 1963 | 310 |
| 1964 | 500 |

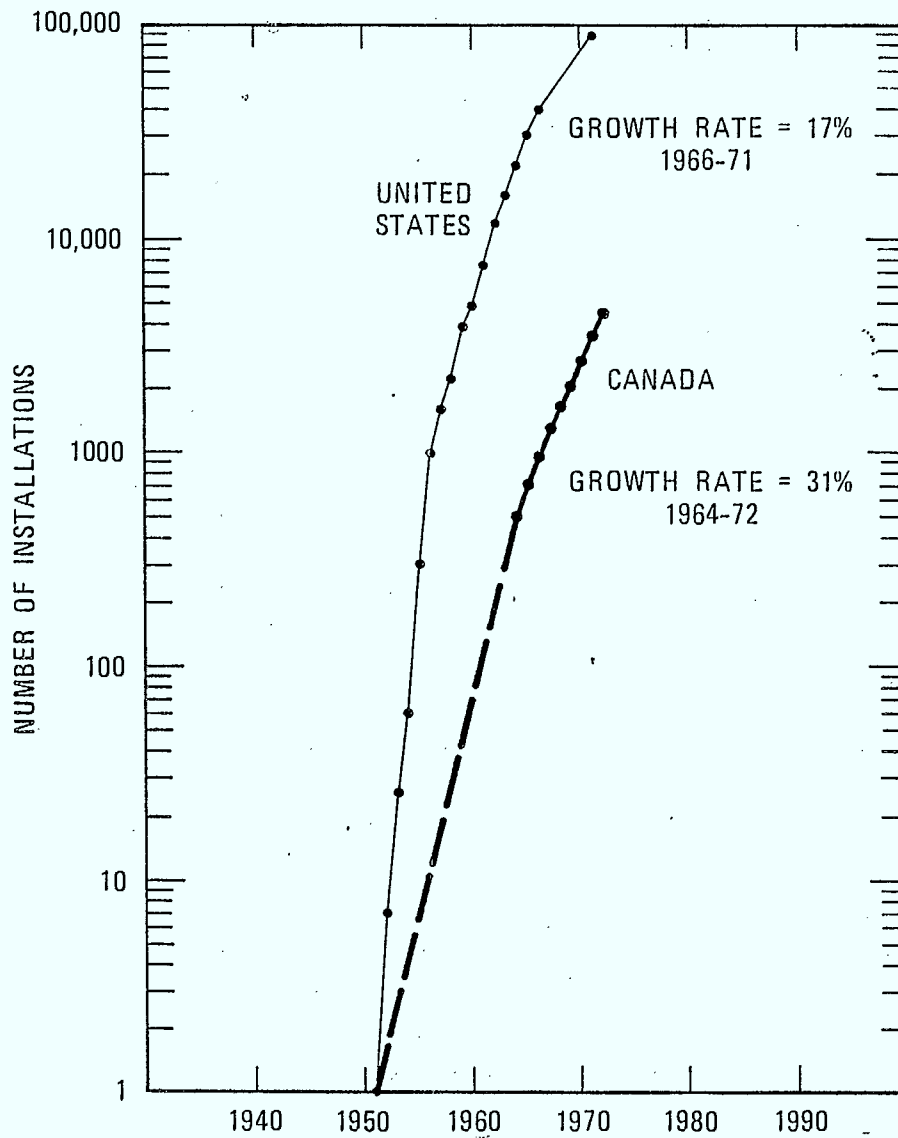


FIGURE 12 COMPUTERS INSTALLED, UNITED STATES AND CANADA

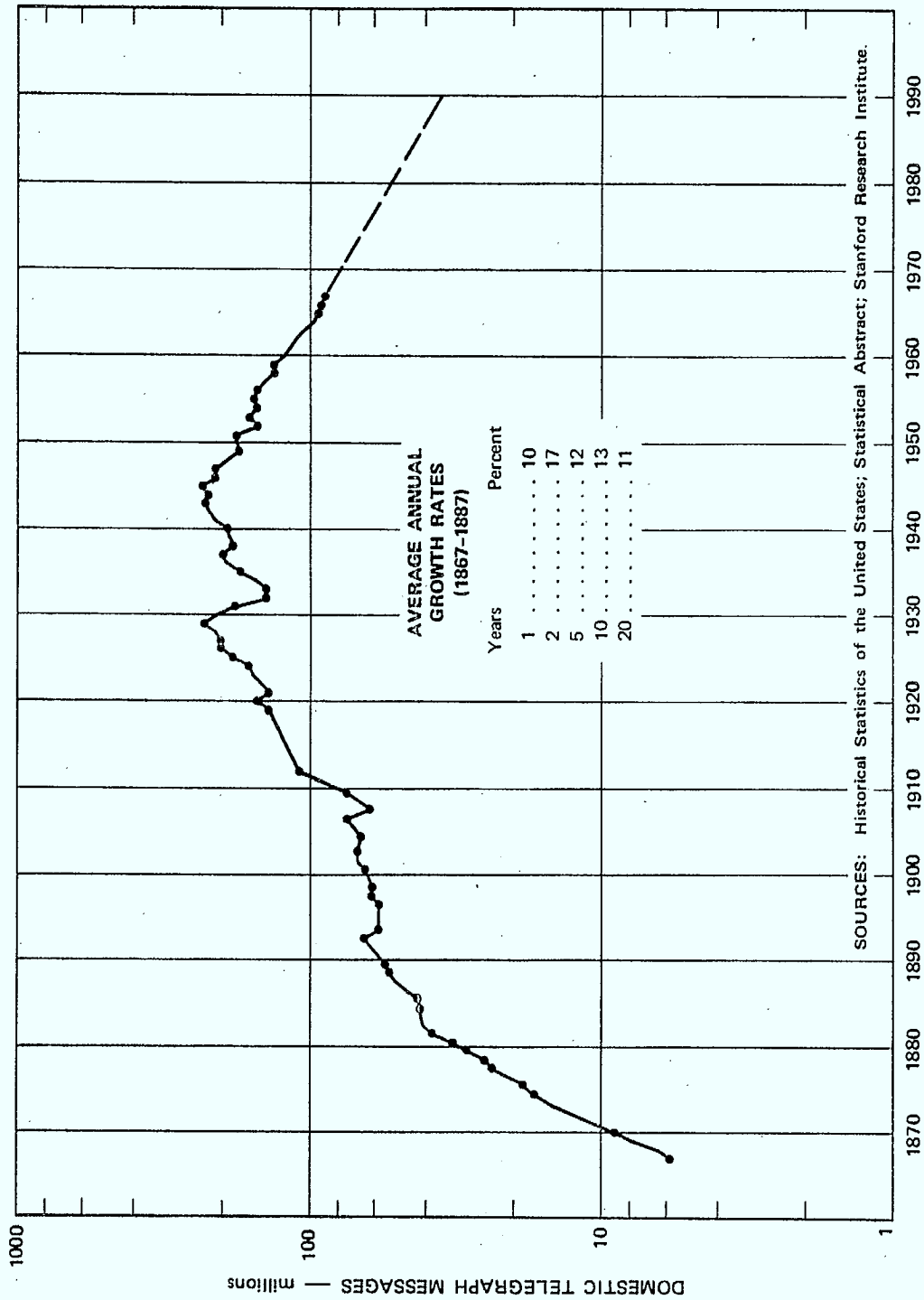
Source: Hough, et al., 1973

Telegraph Service. In contrast to all of the products and services presented so far, telegraph transmission has not been continually successful. We have no early Canadian data at all for this service. For the U.S., however, appropriate figures date back, as with telephones, to the service's initial beginnings-- in this case 1867. As shown in Figure 13, from that time on transmission of telegrams grew very slowly, reaching its peak rate of growth of only 17%/year at year 2. Overall, in fact, not only has the service been very sluggish during most of its life, but in 1945, following World War II, it began to decline in absolute value as well. This has continued to be the pattern, and other data confirm that the same situation exists in Canada. Clearly, therefore, other innovations have consistently been replacing telegrams as a message delivery service, with, no doubt, the telephone being the most important substitute.

Facsimile. In the case of facsimile, we have another service that has not grown to the extent that it might have under other circumstances or that proponents would like to have had it develop. Nonetheless, the picture is considerably brighter than telegrams, as illustrated with the following data, this time for Canada:

| <u>Year</u> | <u>Estimated Facsimile Units in Use, Canada</u> |
|-------------|---|
| 1971 | 1,050 |
| 1972 | 1,450 |
| 1973 | 2,100 |
| 1975 | 4,000 |
| 1977 | 7,000 |
| 1981 | 15,000 |

Figure 13 U.S. Telegraph Service 1867-1970.



Source: Hough, et al., 1970

These data are derived from private industry sources rather than publicly available information. On the basis that they are at least approximately correct, however, early growth for this service would appear as follows:

Early Growth of Facsimile in Canada

| <u>Year</u> | <u>Average Annual Growth Rate (Percent)</u> |
|-------------|---|
| 1 | 38 |
| 2 | 41 |
| 5 | 39 |
| 10 | 30 |

Microwave Transmission and Packet Networks. Finally, we present two very particularly business services, microwave transmission and packet networks. For these two technological innovations, data are available for the U.S. but not for Canada. Figure 14 shows the relevant information for microwave transmission, and Figure 15 depicts early growth of packet switching in the U.S.--in this case in the earliest such network, the ARPANET, named for the U.S. Defense Department's Advanced Research Projects Agency Network.

In summary, early growth histories for these two services appear as follows:

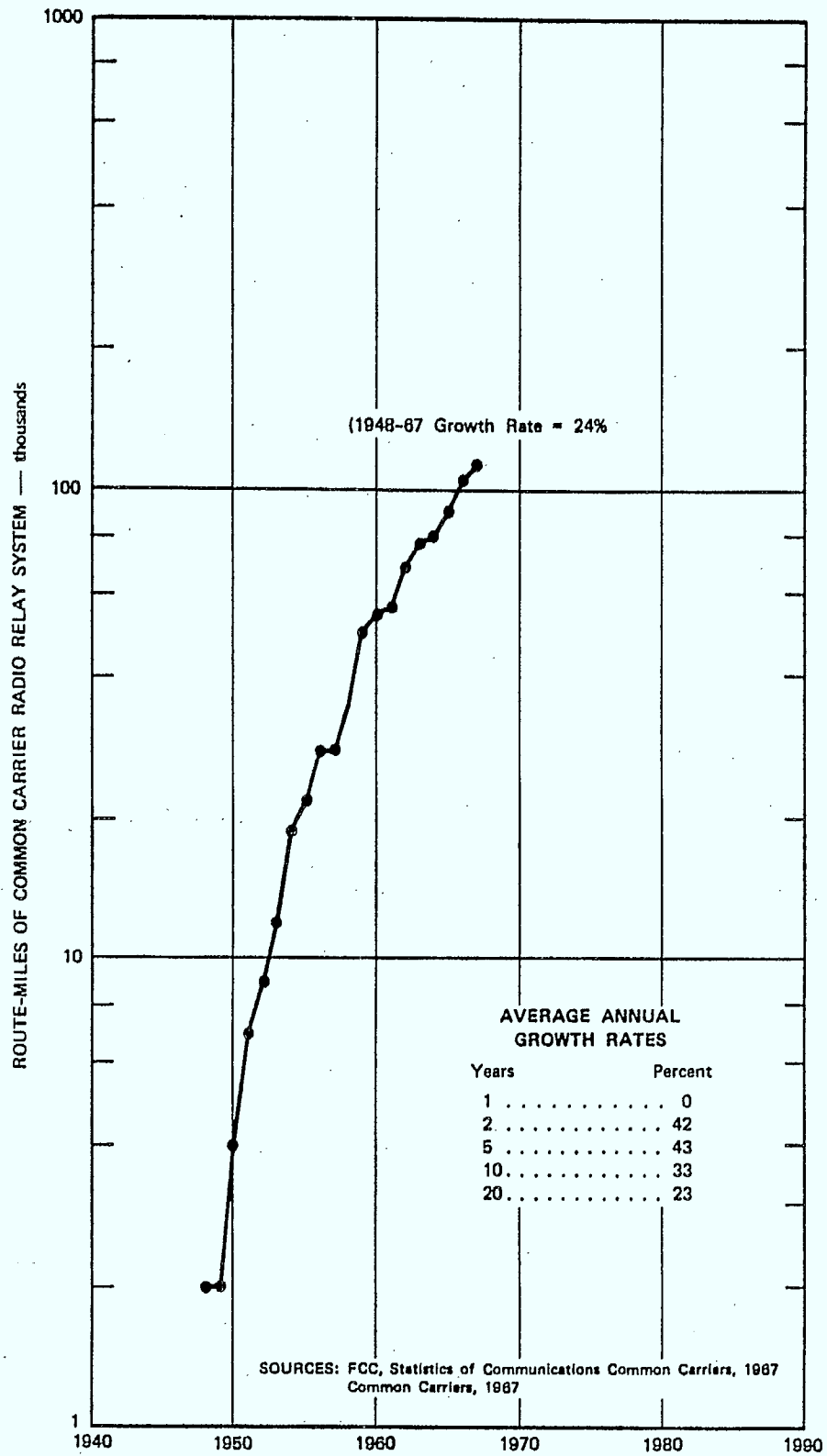
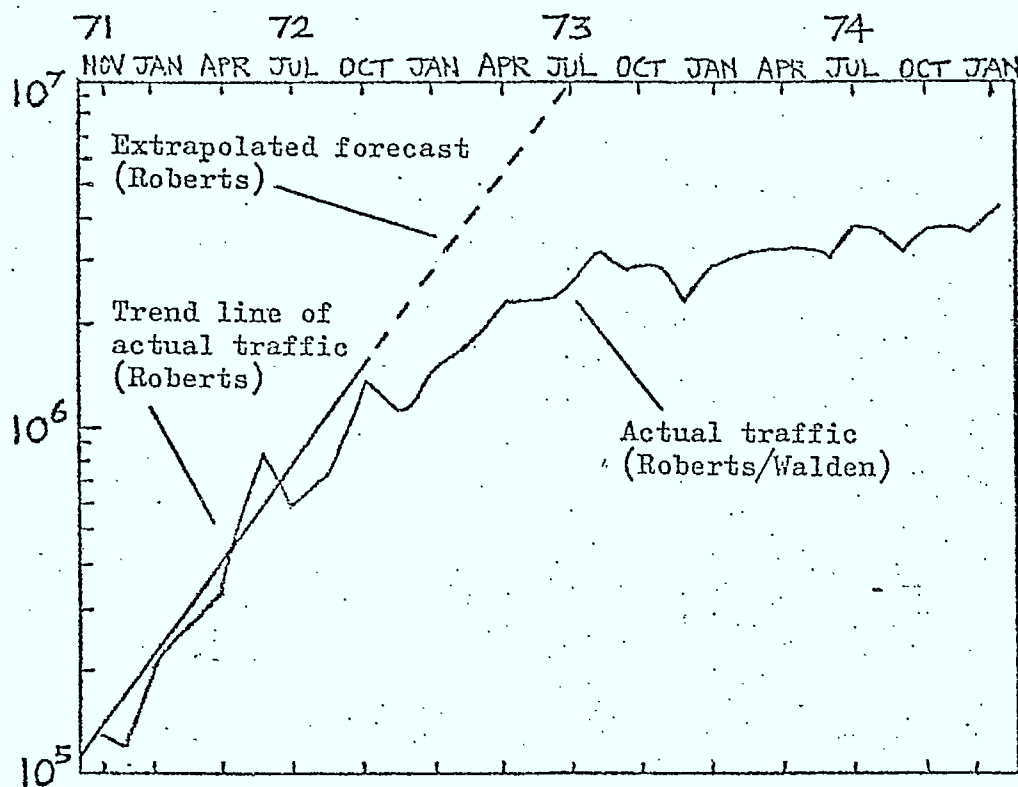


FIGURE 14 GROWTH OF MICROWAVE RADIO RELAY IN THE UNITED STATES

Source: Hough, et al., 1970

Figure 15 Internode Traffic of the ARPA network - Measurements and forecast.



Source: CS&P (1977). and Walden (1975).

Early Growth of Microwave and Packet Switching

| <u>Year</u> | <u>Average Annual Growth Rate (Percent)</u> | |
|-------------|---|-----------------------------|
| | <u>Microwave Transmission</u> | <u>Packet Switching</u> |
| 1 | 0 | 580 |
| 2 | 42 | 260 |
| 5 | 43 | 97 |
| 10 | 33 | -- |
| 20 | 23 | -- |

SUMMARY OF BASIC DATA

In this section we summarize our findings to this point. Tables 6-9 cover the relevant data, separated into the following categories:

- Home-only or Home-and-Business, U.S.
- Home-only or Home-and-Business, Canada
- Business-only, U.S.
- Business-only, Canada

From these tables, the first obvious point is that by far the majority of new services introduced over the last 100 years have experienced average annual growth rates (AAGR) substantially less than 100 percent per year, when averaged over ten years or more. This means, we assume, that it is highly unlikely that another new invention, such as videotex or teletext, will diverge from such a common pattern in its future growth and development. Moreover, when examined in more detail, it is clear that only two of the innovations we have catalogued--television

Table 6

SUMMARY: GROWTH RATES FOR U.S. HOME-ONLY
OR HOME-AND-BUSINESS SERVICES

Average Annual Growth Rate (Percent)

| | <u>First Year</u> | <u>First 2 Years</u> | <u>First 5 Years</u> | <u>First 10 Years</u> | <u>First 20 Years</u> |
|------------------------------|-----------------------|--------------------------|--------------------------|---------------------------|---------------------------|
| Telephone | 200 | 200 | 80 | 50 | 28 |
| Television | 75 | 370 | 320 | 190 | 58 |
| Color Television | 260 | 310 | 133 | 88 | 55 |
| Radio | 567 | 356 | 157 | 77 | 37 |
| CB Radio | 496 | 309 | 102 | -- | -- |
| Cable Television | 114 | 115 | 90 | 51 | 35 |
| Pay Television | 263 | 279 | 182 | -- | -- |
| VCRs | 144 | 126 | 85 | 60 | -- |
| Automobiles | 85 | 70 | <u>60</u> | <u>50</u> | 41 |
| Average Including Television | | | 134% | 81% | |
| Average Excluding Television | | | 111% | 63% | |

Table 7

SUMMARY: GROWTH RATES FOR U.S.
BUSINESS-ONLY SERVICES

| | <u>First Year</u> | <u>First 2 Years</u> | <u>First 5 Years</u> | <u>First 10 Years</u> | <u>First 20 Years</u> |
|----------------------|-----------------------|--------------------------|--------------------------|---------------------------|---------------------------|
| Computers | 600 | 400 | 300 | 210 | 84 |
| Microwave Trans. | 0 | 42 | 43 | 33 | 23 |
| Packet Networks | 580 | 260 | 97 | -- | -- |
| Telegrams | 10 | 17 | <u>12</u> | <u>13</u> | 11 |
| Average (4 Services) | | | 113% | 85% | |

Table 8

SUMMARY: GROWTH RATES FOR CANADIAN
HOME OR HOME-AND-BUSINESS SERVICES

| | <u>Average Annual Growth Rate (Percent)</u> | | | | |
|----------------------|---|--------------------------|--------------------------|---------------------------|---------------------------|
| | <u>First Year</u> | <u>First 2 Years</u> | <u>First 5 Years</u> | <u>First 10 Years</u> | <u>First 20 Years</u> |
| Telephone | 90 | 73 | 52 | 34 | 21 |
| Television | 67 | 213 | 184 | 98 | 45 |
| Automobiles | 20 | 68 | 57 | 65 | 43 |
| Air Travel | 85 | 26 | <u>90</u> | <u>40</u> | 28 |
| Average (4 Services) | | | 99% | 60% | |

Table 9

SUMMARY: GROWTH RATES FOR CANADIAN
BUSINESS-ONLY SERVICES

| | <u>First Year</u> | <u>First 2 Years</u> | <u>First 5 Years</u> | <u>First 10 Years</u> | <u>First 20 Years</u> |
|----------------------|-----------------------|--------------------------|--------------------------|---------------------------|---------------------------|
| Computers | 100 | 73 | 62 | 61 | 50 |
| Facsimile | 38 | 41 | <u>39</u> | <u>30</u> | -- |
| Average (2 Services) | | | 51% | 46% | |

and computers--have high growth rates that are maintained into a five or ten year time frame. All others, by contrast, decline much more rapidly, including even radio, CB radio, and packet networks, which exhibit growth rates in excess of 400%/year in their first year.

In addition, what is clear from this picture is that without exception the entertainment value of the services depicted has been responsible for most of the demonstrated growth. (See, for example, all of the television entries, specifically, total television, color television, pay TV, VCRs, and cable television). This situation has not abated, but has continued to increase, with video, computer, and hand-held electronic games as examples. While data for these developments is not extensive enough to include in the historical analogy method, early indications are that the public has embraced these new items also with great fervor, albeit again, perhaps, for only a short period of time. What this means to Telidon, then, is fairly obvious, i.e., that without a strong entertainment component, the innovation is more than likely to have a very modest growth pattern, and even with such a component, the competition will be formidable, to say the least.

CONCLUSION

In the concluding section in this chapter we evaluate the data in Tables 6-9, and use them to estimate two upper bound reference points for Telidon, based on the historical analogy method.

To begin, we postulate that an entirely reasonable method of estimating probable upper bound growth rates is on the basis of averages over a number of service developments in the past. Next, by observation it is clear that in all cases where a comparison can be made, growth rates in Canada (as well as absolute values) are lower than those in the U.S.* Using U.S. growth rates, therefore, would enable us to err on the "high side." Thirdly, in virtually all cases, growth rates are higher for home-only or home-and-business services, as opposed to business-only. This factor also, therefore, enables us to have confidence that, in using rates for home services, we will again estimate on the high side, i.e., toward an optimist's as opposed to a pessimist's position. Finally, bearing in mind the very unusual nature of television growth and the circumstances in which it occurred,** it is reasonable to exclude this series from our calculations, at least as an alternative scenario.

On the basis of these considerations, the two approaches mentioned above are to calculate upper bound estimates using (a) an average growth rate for all U.S. home or home-and-business

* An exception here would more than likely be cable television, but adequate Canadian data with which to make a comparison are unavailable.

** We have indicated in earlier studies, (e.g., Hough, et al, 1970) that the rapid growth of television was due, more than likely, to the fact that it was introduced on a commercial basis immediately after the Second World War and thus benefitted from a period of substantial pent-up demand for consumer products--in addition to the fact that it was highly innovative and had immediate consumer appeal, much as radio did, twenty five years earlier.

services including television and (b) those same figures, less television. As Table 6 shows, these averages are:

| | <u>AAGR Averaged Over Several Services (See Table 6) (Percent)</u> | |
|--------------------|--|-------------------------|
| | <u>At Five Years</u> | <u>At Ten Years</u> |
| With Television | 134% | 81% |
| Without Television | 111 | 63 |

Applying these rates to Telidon then, and assuming, say, 2,000 sets in use in 1981, results in the following estimates:

Estimated Upper Bound On Telidon Sets In Use,
1981-1991, Using Historical Analogy Approach

| | <u>Estimated Sets in Use (thousands)</u> | | |
|--|--|-------------|-------------|
| | <u>1981</u> | <u>1986</u> | <u>1990</u> |
| Using analogy with television as well as other services | 2 | 140 | 750 |
| Using analogy with other services exclud- ing television | 2 | 85 | 260 |

In summary, on the basis of evidence available concerning previous innovations, it appears quite unlikely that Telidon growth could reasonably exceed 85,000 to 140,000 sets in use in 1986, or 260,000 to 750,000 units in 1991. These are, therefore, our upper bound estimates on Telidon growth, using the historical analogy method.

Chapter 3

ALTERNATIVE METHODOLOGIES

In addition to the historical analogy method, two additional techniques of evaluating and estimating demand for Telidon were used in this study. These methods, household income and expenditure analysis, and competitive/complementary analysis, are described and discussed in this chapter.

INCOME AND EXPENDITURE ANALYSIS

The basic framework and rationale of the household income and expenditure analysis has to do with the facts, first, that households spend money according to certain patterns, which can be determined; second, that household incomes are distributed in ways that can be determined; and, third, that if Telidon is successful at all (in the home market), there will obviously exist at least some families and households that choose to buy or subscribe to a Telidon service, and these households must necessarily be able to 'afford' to do so according to both (a) the cost to them of receiving the service, and (b) experienced average family expenditures for similar services.

In essence, the last two aspects mentioned, cost and previous buying experience, are the most crucial in this analysis, and it is worthwhile explaining them in somewhat more detail prior to developing the main argument.

We have indicated in the Introduction that, according

to the most optimistic figures we are aware of, a complete Telidon receiving unit, including modified television set, will cost in the neighborhood of \$1,000 to \$1,100 at today's prices.* This, however, represents only the capital investment cost. To it, unfortunately, must be added a fairly substantial operating cost in order to underwrite development and maintenance of data bases, cost and operation of computer centers, communication charges, personnel throughout the system, and so on.

To cover these costs, of course, someone must pay. In the Prestel system, for instance, the user himself (supposedly) ends up with most or all of the charge, simply because it was assumed originally that the information available to householders would be of sufficient importance to them that the required charges would be justified and recoverable. Whether this hypothesis turns out to be eventually correct is a matter of serious debate; however, in any event there is a cost to be paid and the question at this stage is what is that cost.

It must be made clear here that this study has not, and was not intended to, deal in any depth at all with cost questions--i.e., the determination of costs. On the other hand, we have had at our disposal what is essentially a 'first cut,' rough estimate of what it would take to operate a videotex information system based on Telidon. This cost, which has been

* There are, of course, ways to reduce this price substantially, particularly by abandoning what is referred to as the 'RGB (for red, green, blue) interface.' This aspect is not a key factor in the present argument; however, it will be dealt with in a later chapter.

used often within DOC, is \$25 per month per household--assuming, of course, a certain number of users.

As stated above, it is clear that in order to estimate total cost, this \$25 operating cost must be added to some sort of monthly amortization of capital investment for the terminal. What we choose to do for this analysis, however, is to treat these costs separately--assuming, for example, that users purchase their television sets and decoders outright, much as they do now in North America,* and that they pay for them separately. On this assumption, then, \$25/month becomes our base, minimum figure for operating cost per household.

With respect to the second aspect listed above, previous buying experience, the question arises, Do we have any idea of how families do in fact spend their money, and can comparisons with potential Telidon expenditures be made? On this question the answer is, fortunately, a very strong 'Yes,' for a number of detailed periodic surveys have been conducted by Statistics Canada on just this issue. In particular, we are referring here to the Urban Family Expenditure Survey** which is conducted approximately every two years, and in which very explicit and comprehensive data are recorded on virtually every kind of household purchase imaginable, from food, to clothing, to long distance telephone charges, facial tissue, paper towels, toothpaste, ski equipment, colour television, medicines, lawyer's fees,

* Note that this scenario is different from that in Britain where television sets are for the most part rented.

** Statistics Canada Catalog 62-567, 1979 and previous years.

and taxes.* Understandably, much of this information is not relevant to us. As we will see, however, specific sets of data, such as income distributions and expenditures on recreation, reading, education and entertainment will be relevant.

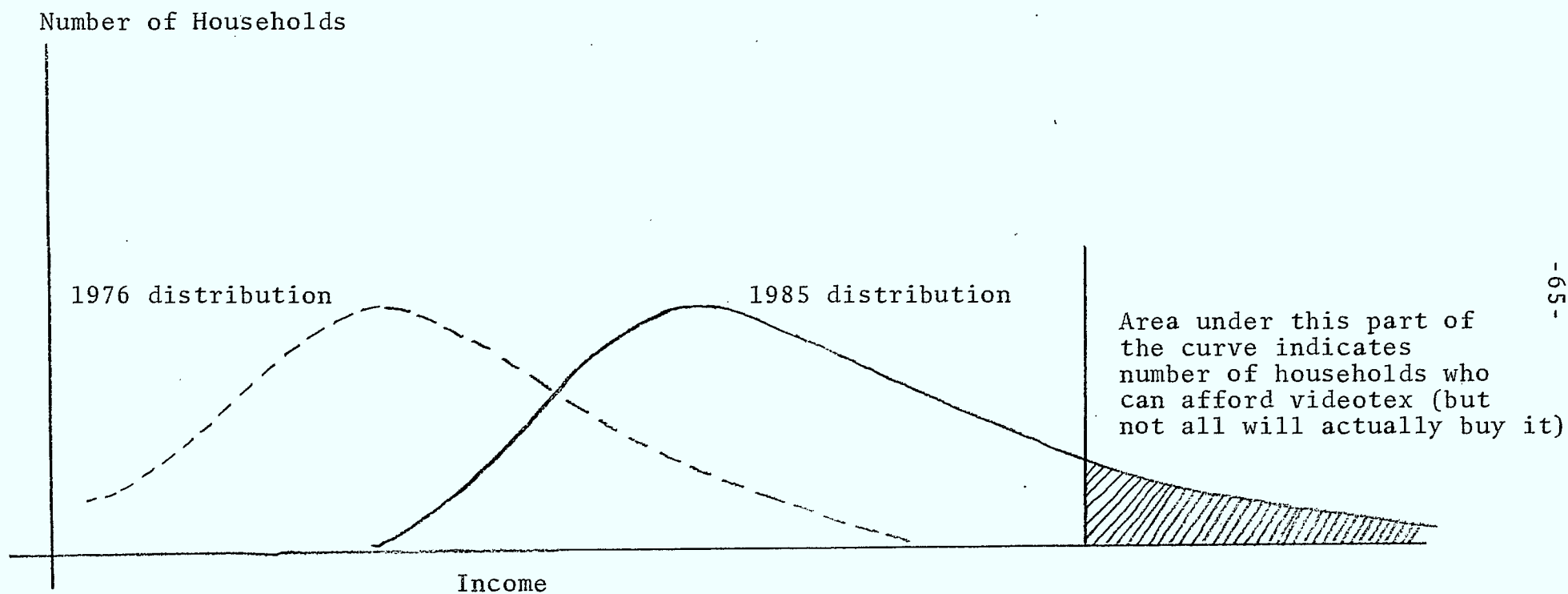
In summary, what we have recorded so far are the facts that a minimum monthly charge of \$25 per household will be required to support an operating Telidon system, and that if Telidon is successful at all, some households will be willing to subscribe and pay the required price. The central question of the analysis, then, is how many of these households might there be, and what might be their average level of income?

Initiation of the Argument

To begin the argument we note that in Canada, as elsewhere, average family incomes are distributed according to a fairly regular pattern, with quite a number at the lower incomes, by far the majority in the middle, and many fewer households in the highest brackets. (See Figure 16 for a schematic diagram of such a distribution). Now, these families and households

* Because we believe this is such an interesting and important aspect to this problem, we have included at Appendix A in this report a copy of just one table from this publication, namely, the table which contains "detailed data on expenditures, by income, for all families and unattached individuals." As may be seen, this table is some 18 pages long, and contains expenditure data on all of the above plus a great deal more.

Figure 16



spend money, obviously, at different levels. For example, according to the Urban Family Expenditure Survey (see Appendix A, pp. 15-16), average family expenditure over all families in 1976 was approximately \$17,900, whereas families in the \$25,000 to \$30,000 income category spent \$25,200 on average, and those in the \$35,000 and over bracket, an average of \$42,000.

What is more to the point than these overall averages, however, are expenditures on items relevant to Telidon. Here, we also have differences among the income categories, with \$917 being the overall average expenditure for items relevant to the information retrieval and entertainment components of Telidon service, and \$215 being the average for items relevant to 'communications.' (See Table 10).

Now the next part of our argument has to do with the fact that these incomes and expenditures are increasing over time. In particular, of course, is the effect of inflation. In addition, however, evidence is available that indicates that the share of information-, entertainment-, and education-related goods and services in an average household budget is also moving upward. The amount that each of these components is increasing, we will show later, may be set very generously at 3.5% per year, in real terms.* Together, then, these two components account for

* In fact, as we will demonstrate, 3.5% is higher than the actual figures in both cases, either for increases in real income or shares of Telidon-related expenditures. As in the last chapter, however, the objective in all our analysis is to use estimates and assumptions that favor higher rather than lower estimates of Telidon growth, and this is another case where optimistic estimates are used as opposed to pessimistic ones.

Table 10

ANNUAL EXPENDITURES BY URBAN CANADIAN
HOUSEHOLDS ON GOODS AND SERVICES POTENTIALLY
SUBSTITUTABLE BY VIDEOTEX, 1976

(\$ Canadian, rounded to nearest dollar)

| Expenditure Item | Average, all Households | Average, High-Income Households | | |
|--|----------------------------|---------------------------------|---------------------|----------------------|
| | | income | income | income |
| | | \$25,000- 29,999 | \$30,000- 34,999 | \$35,000- or over |
| Items relevant to information retrieval and games | | | | |
| 'Reading' (books, magazines, etc.) | 102 | 123 | 132 | 215 |
| Recreation (includes TV) | 687 | 1064 | 1149 | 1572 |
| Education | 128 | 183 | 266 | 387 |
| Total | 917 | 1371 | 1547 | 2174 |
| Items relevant to message service: post, telephone, telegraph | 215 | 253 | 281 | 355 |
| Average annual Expenditure of Group | 17,908 | 25,216 | 30,228 | 42,030 |
| Average Annual Income of Group | 18,495 | 27,222 | 32,050 | 46,505 |

Source: Based on table appearing in Hough and Associates and
Communications Studies and Planning, 1979, Appendix A.
Data taken from Urban Expenditure Survey 1976, Statistics
Canada Catalogue 62-567 (1979)

an overall average 7% per year increase in expenditures for goods and services in the information, entertainment, and education categories, for all families.

Our next step is to illustrate what all this, specifically, has to do with Telidon growth--or, more precisely, the potential for Telidon growth. To do this we must make some simple, but nonetheless very reasonable and supportable assumptions. First, we suggest that it is reasonable to assume, at first, that those families that choose to purchase and use a service as new and innovative as Telidon will more than likely be in high income brackets than in low ones, especially if the cost to an average household is \$25/month (--bearing in mind, of course, that that figure is very much higher than average monthly costs for, for example, cable television, newspaper subscriptions, basic telephone service, and so on.) Next, we take the position that expenditures for Telidon can be reasonably set at some percentage of actual average monthly expenditures in the Telidon-related goods and services categories just discussed. Again as shown in more detail later, this factor may be taken very reasonably, and again optimistically, at 5%.

Finally, on the basis of these assumptions, we can now turn to the basic household income and expenditure data, as developed in the Urban Family Expenditure Survey, to determine which families in Canada could 'afford' videotex service at \$25/month, and how many of them there are.

Presentation of Detailed Data

To begin, we illustrate in Table 11 actual family incomes by income group, as surveyed among Canadian families in 1976.* As may be seen, these data are given in separate income categories up to \$35,000. However, two factors make them unusable as they stand--first, the fact that the income categories are uneven, and second, the fact that all incomes over \$35,000 have been grouped together. As Figure 16 illustrated, in actuality this income distribution has a long 'tail' to it that is made up of continually declining numbers of families in the highest income categories, i.e., those over \$35,000. To use the data completely, therefore, it is necessary to reformat them, first, by equal increments on income, and, second, with estimates of numbers of families in income categories higher than \$35,000.

For those interested in the complexities of this process, we explain it in Appendix B. In essence, however, the result is as shown in Tables 12 and 13, and displayed in Figure 17.

* It may be useful here to make specific note of the fact that the expenditure survey is conducted on an urban basis, as revealed in its title. Since other data are available that reveal considerable income differences between metropolitan and non-metropolitan areas (e.g., Survey of Consumer Finances, Statistics Canada Catalog 13-550 and 13-551, 1979 and previous years), average incomes in Table 11 may be inflated somewhat compared to Canada as a whole. The distribution itself, however, has been adjusted to account for differences in family population among the income categories.

Table 11

AVERAGE INCOME BEFORE TAXES BY INCOME GROUP,
ALL FAMILIES AND UNATTACHED INDIVIDUALS,
CANADA, 1976

| <u>Income Group</u> | <u>Number of Families In Sample</u> | <u>Weighted Number of Families</u> | <u>Average Income Before Taxes</u> |
|---------------------|---|--|--|
| All Classes | 3,681 | 3,681.0 | \$18,494.90 |
| Under \$4,000 | 198 | 203.9 | 2,918.90 |
| \$ 4,000-\$ 4,999 | 91 | 102.0 | 4,546.60 |
| 5,000- 5,999 | 114 | 117.0 | 5,497.90 |
| 6,000- 7,999 | 261 | 245.7 | 6,954.60 |
| 8,000- 9,999 | 238 | 233.7 | 8,959.80 |
| 10,000- 11,999 | 220 | 212.0 | 10,991.80 |
| 12,000- 14,999 | 439 | 440.3 | 13,467.10 |
| 15,000- 19,999 | 743 | 783.3 | 17,442.00 |
| 20,000- 24,999 | 546 | 535.8 | 22,362.70 |
| 25,000- 29,999 | 371 | 378.6 | 27,223.70 |
| 30,000- 34,999 | 202 | 199.6 | 32,050.50 |
| 35,000 and over | 258 | 274.2 | 46,510.60 |

Source: Urban Expenditure Survey 1976, op.cit.

Table 12

AVERAGE INCOME BY "EQUAL INCREMENT" INCOME GROUPS,
ALL FAMILIES AND UNATTACHED INDIVIDUALS, CANADA, 1976

| <u>Income Group</u> | <u>Number of Families In Sample</u> | <u>Weighted Number of Families</u> | <u>Average Income Before Taxes</u> |
|---------------------|---|--|--|
| All Classes | 3,681 | 3,681.0 | \$18,494.90 |
| Under \$5,000 | 289 | 305.9 | 3,461.60 |
| \$ 5,000-\$ 9,999 | 613 | 596.7 | 7,454.60 |
| 10,000- 14,999 | 659 | 652.3 | 12,662.60 |
| 15,000- 19,999 | 743 | 738.3 | 17,442.00 |
| 20,000- 24,999 | 546 | 535.8 | 22,362.70 |
| 25,000- 29,999 | 371 | 378.6 | 27,223.70 |
| 30,000- 34,999 | 202 | 199.6 | 32,050.50 |
| 35,000 and over | 258 | 274.2 | 46,510.60 |

Source: Table 11, with additional calculations.

Table 13

ESTIMATED NUMBER OF HOUSEHOLDS IN TAIL OF FIGURE 17

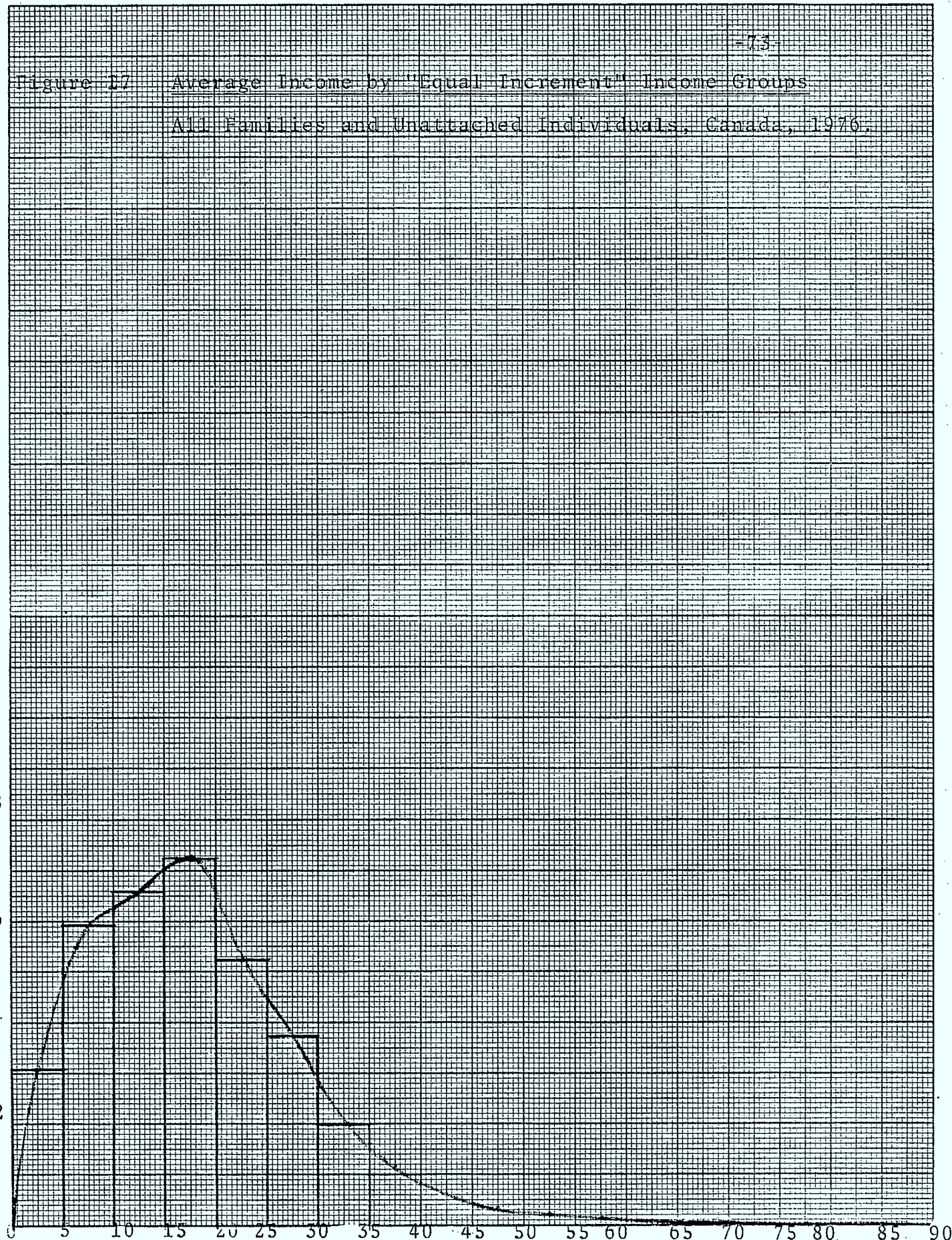
| <u>Income</u> | <u>Estimated Number Of Households</u> |
|-------------------|---|
| \$35,000-\$39,999 | 115 |
| 40,000- 44,999 | 64 |
| 45,000- 49,999 | 34 |
| 50,000- 54,999 | 23 |
| 55,000- 59,999 | 13 |
| 60,000- 64,999 | 9 |
| 65,000- 69,999 | 7 |
| 70,000- 74,999 | 4 |
| 75,000- 79,999 | 3 |
| 80,000- 84,999 | 2 |
| 85,000 and over | <u>1</u> |
| TOTAL | 275 |

Figure 27 Average Income by "Equal Increment" Income Groups
All Families and Unattached Individuals, Canada, 1976.

Weighted Number of Families (x100)

10
8
6
4
2

Family Income (thousands of dollars)



There, it may be seen that the actual data on incomes does conform to the general form of Figure 16, with the exception that it is skewed even more to one side, and shows a slight dip between \$10,000 and \$15,000. Most importantly, as we will see, Table 13 gives data from which estimates of the number of households that occur in the highest income brackets (in this survey), may be ascertained...

Turning then to the expenditure data, we observe a similar situation--that is, the original data (Table 14) are given on the basis of unequal income groups. Once again, however, it is an easy matter to reformat these figures to obtain new ones, with equal increment income groupings (Table 15). On this basis we can now calculate what we will refer to as "dollars available for videotex" in 1985. To do this we apply the two factors derived earlier, namely, the 7% growth rate on Telidon-related expenditures, and the 5% factor representing our estimate of the maximum proportion of those expenditures that might be divertable to Telidon by 1985.

The result of these calculations, which represents a singular point in the analysis, is shown in Table 16. Specifically, we refer to Column 5 of the table, where it may be seen that the average estimated dollars available for videotex is nowhere near \$25/month; instead, it is only \$7/month--less than one third the amount required. Moreover, even if one moves up the income scale to family incomes of \$35,000 and over, monthly amounts available for videotex purposes, according to this calculation method, are still only \$16.65, on average.

Table 14

AVERAGE EXPENDITURES ON RECREATION, READING
AND EDUCATION, ALL FAMILIES AND UNATTACHED
INDIVIDUALS, CANADA, 1976

| <u>Family Income</u> | <u>Recreation</u> | <u>Reading</u> | <u>Education</u> | <u>Total, Three Categories</u> |
|--------------------------|-------------------|----------------|------------------|------------------------------------|
| All Classes | \$ 687.0 | \$101.7 | \$128.2 | \$ 916.9 |
| Under \$4,000 | 101.0 | 29.4 | 41.8 | 170.2 |
| \$ 4,000-\$ 4,999 | 128.9 | 49.3 | 82.4 | 260.6 |
| 5,000- 5,999 | 208.8 | 49.6 | 49.5 | 307.9 |
| 6,000- 7,999 | 292.2 | 58.9 | 66.4 | 417.5 |
| 8,000- 9,999 | 383.3 | 63.7 | 57.9 | 504.9 |
| 10,000- 11,999 | 513.6 | 82.5 | 73.2 | 669.3 |
| 12,000- 14,999 | 524.7 | 89.0 | 95.8 | 709.5 |
| 15,000- 19,999 | 609.0 | 103.5 | 92.8 | 805.3 |
| 20,000- 24,999 | 851.1 | 118.1 | 120.3 | 1089.5 |
| 25,000- 29,999 | 1065.7 | 122.7 | 183.1 | 1371.5 |
| 30,000- 34,999 | 1148.7 | 132.0 | 265.5 | 1546.2 |
| 35,000 and over | 1572.5 | 214.7 | 387.5 | 2174.7 |

Source: Urban Expenditure Survey 1976, op.cit.

Table 15

REFORMATTED EXPENDITURE DATA IN EQUAL INCREMENT INCOME
CATEGORIES: AVERAGE EXPENDITURES, ALL FAMILIES AND
UNATTACHED INDIVIDUALS, CANADA, 1976

| <u>Family Income</u> | <u>Average Annual Expenditure per Household</u> | | | <u>Total, Three Categories</u> |
|------------------------------|---|----------------|------------------|------------------------------------|
| | <u>Recreation</u> | <u>Reading</u> | <u>Education</u> | |
| Under \$5,000 | \$ 110.30 | \$ 36.00 | \$ 55.30 | \$ 201.60 |
| \$ 5,000-\$ 9,999 | 311.50 | 59.00 | 59.70 | 430.20 |
| 10,000- 14,999 | 521.10 | 86.80 | 88.50 | 696.40 |
| 15,000- 19,999 | 609.00 | 103.50 | 92.80 | 805.30 |
| 20,000- 24,999 | 851.10 | 118.10 | 120.30 | 1089.50 |
| 25,000- 29,999 | 1065.70 | 122.70 | 183.10 | 1371.50 |
| 30,000- 34,999 | 1148.70 | 132.00 | 265.50 | 1546.30 |
| 35,000 and over | 1572.50 | 214.70 | 387.50 | 2174.70 |
| Average over All Families | 687.00 | 101.70 | 128.20 | 916.90 |

Note: Figures rounded to nearest \$0.10 in all calculations.

Source: Derived from Table 14.

Table 16
CALCULATION OF DOLLARS AVAILABLE FOR VIDEOTEX,
BY FAMILY INCOME

| (1) | (2) | (3) | (4) | (5) |
|-------------------|---|--|--|--|
| <u>Income</u> | <u>Total Relevant Expenditures 1976</u> | <u>Estimated Expenditures 1985</u> | <u>Monthly Expenditures 1985</u> | <u>Estimated Dollars Available For Videotex, Per Month</u> |
| All Families | \$ 916.90 | \$1685.70 | \$140.50 | \$ 7.00 |
| Under \$5,000 | 201.60 | 370.60 | 30.90 | 1.55 |
| \$ 5,000-\$ 9,999 | 430.20 | 790.90 | 65.90 | 3.29 |
| 10,000- 14,999 | 696.40 | 1280.30 | 106.70 | 5.33 |
| 15,000- 19,999 | 805.30 | 1480.50 | 123.40 | 6.17 |
| 20,000- 24,999 | 1089.50 | 2003.00 | 166.90 | 8.35 |
| 25,000- 29,999 | 1371.50 | 2521.40 | 210.10 | 10.51 |
| 30,000- 34,999 | 1546.30 | 2842.80 | 236.90 | 11.85 |
| 35,000 and over | 2174.70 | 3998.10 | 333.20 | 16.65 |

Note: Figures rounded to nearest \$0.10 in all calculations.

Finally, the question remains, What does family income have to be in order to afford the \$25/month operating cost? To find this figure is an easy matter, because all that is necessary is to plot the figures in Column 5 against income. When this is done (Figure 18) it can be seen that they show a remarkable tendency to increase in direct proportion to income--meaning that as incomes increase in Canada, families spend consistently more money, on a very regular basis, on goods and services relevant to Telidon. Assuming, then, that this relationship continues to hold for incomes greater than as well as less than \$35,000 leads us to the disarming result that a typical household needs an income of almost \$70,000 annually in Canada to support the \$25 per month cost for Telidon which we have hypothesized. Moreover, Table 13 tells us precisely the proportion of households in Canada that do have such incomes (that is, to the accuracy of the Urban Expenditure Survey) and this figure is 0.3%* of total households--or, approximately 26,100 in 1985, based on 8.7 million estimated households in that year.

In summary, what we have found by examining the income and expenditure data in detail is that the number of potential** videotex households that might reasonably be expected in 1985 (according to these calculation methods) is only 26,000. This,

* This figure is calculated as follows. From Figure 18 it may be seen that the plotted line intersects a \$25 monthly charge at approximately \$69,000. From Table 13, number of households in the tail of Figure 17 may be estimated as 11 (i.e., 10 in the categories \$70,000 and over and 1 from the category \$65,000-\$69,999). This figure is then divided by the total sample size from the survey (3,681) to obtain the ratio of families with incomes equal to or greater than \$69,000 to total families--i.e., $11/3681=0.3\%$.

** We have not yet calculated estimated actual subscribers.

Figure 18 Estimated Dollars Available for Videotex
as a Function of Family Income.

Expenditure Available (\$/month)

30

25

20

15

10

5

0

10

20

30

40

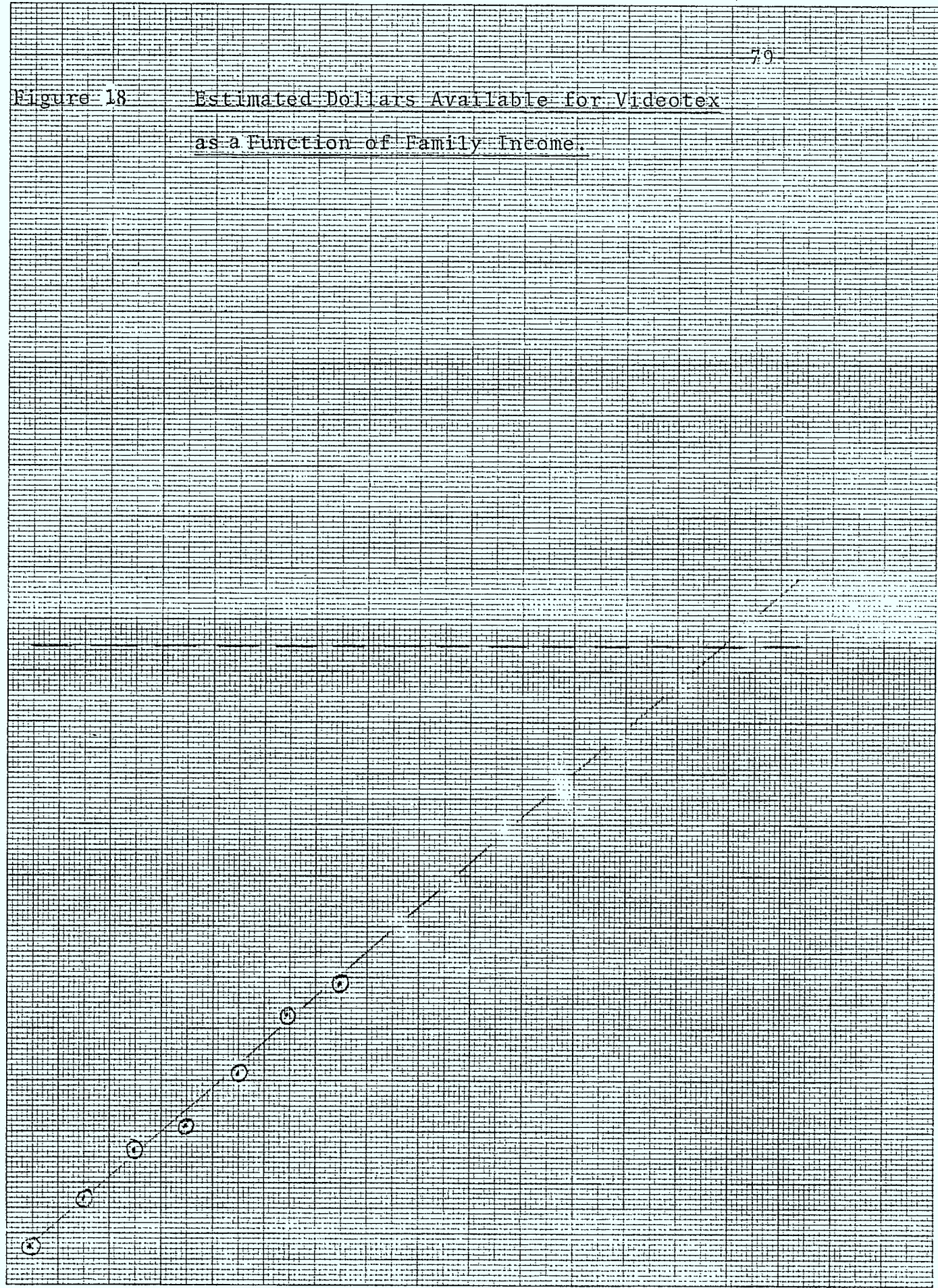
50

60

70

80

Family Income (thousands of dollars)



obviously, is a stark and inherently disappointing result. On the other hand, on its own, the result clearly begs a great number of questions, the most important of which, by far, is the assumption of a \$25 per month cost to the household. This assumption, we believe, is neither realistic for a service such as Telidon, nor necessary. On the contrary, moves have been afoot for many months to establish mechanisms by which substantial portions of the cost of such services might be borne by advertisers, or perhaps even governments, for certain purposes. On the basis of the above analysis, these moves are seen to be crucial, because in reducing out-of-pocket costs to end users, a disproportionate increase in households that can afford videotex is realized, as shown in Table 17. In particular, by reducing the cost by less than half, to \$13 instead of \$25 per month, an increase of 25 times is accomplished in the number of 'affording' households--from 26,000 to 650,000--due to the fact that at that price, all families whose incomes equal or exceed \$35,000 annually would be candidates for a videotex system, according to the analytical reasoning presented here.

Finally, there is one last step left in the analysis, namely, to estimate, from these potential households, how many might actually subscribe to a Telidon service. To do this it is necessary to recognize, very clearly, that it is not only high income households who are likely to be interested in such a service. Instead, families of all income brackets invest in new products, with purchase decisions based on a wide variety of variables, not just income.

Table 17

ESTIMATED NUMBER OF VIDEOTEX SUBSCRIBERS IN 1985,
AS A FUNCTION OF AVERAGE MONTHLY COST PER SUBSCRIBER

| (1) | (2) | (3) | (4) | (5) |
|--------------------------|--|---|---|---|
| <u>Family Income</u> | <u>Dollars Available For Videotex per Month*</u> | <u>Number of Households Able To Afford Videotex At That Price</u> | <u>Estimated Percentage Of Potential Subscribers Who Might Actually Subscribe</u> | <u>Estimated Number of Actual Subscribers</u> |
| \$69,000 and over | \$25.00 | 26,000 | 50% | 13,000 |
| 50,000 and over | 18.00 | 146,500 | 25 | 36,700 |
| 35,000 and over | 13.00 | 650,000 | 10 | 65,000 |
| 25,000 and over | 9.50 | 2,013,700 | 5 | 100,700 |
| 15,000 and over | 6.00 | 5,026,000 | 3 | 150,000 |

-81-

* Equals monthly charge

Source: Columns 1 and 2 from Figure 18; Column 3 calculated from Tables 12 and 13;
Column 4 estimated as given in text; Column 5= Column 3 x Column 4.

Despite this knowledge, however, there are no data which give us real evidence on number of actual purchasers from a population of potential purchasers. What we are left with, then, is a requirement to use less sophisticated information, specifically, data that have to do with the relative propensity to spend money on a given product, as a function of income. An example of such a series, for video cassette recorders, is given in Table 18. These data, based on a survey of actual VCR users, shows clearly that purchasing does increase with income, especially when the data are compared to household population differences among the income categories.* On the basis of this type of evidence, then, we have clear justification to assume that at the highest income brackets a much larger proportion of actual to potential subscribing will occur, and this ratio will decline gradually as one moves down the income scale. (See Table 17, column 4). In accordance with this evidence, we have assumed that fully 50% of the potential subscribers at incomes equal to or greater than \$69,000 would actually subscribe, that 25% of those above \$50,000 would subscribe (and so on), leading to estimated actual subscribers varying between 13,000 and 150,000 in 1985, depending on the monthly cost of the service. These data, then,--shown in Table 17, column 5--constitute our final estimates using the income and expenditure analysis method.

* The data in Table 18 are presented as an example only, because the survey data are from the U.S., while the household population data are from Canada. Comparisons between the figures in the last two columns, therefore, are only illustrative.

Table 18
DEMOGRAPHICS OF VIDEOCASSETTE SYSTEM
OWNERS: TOTAL HOUSEHOLD INCOME
BEFORE TAXES, 1978

| <u>Income Category</u> | <u>Percentage Distribution of VCR Purchasers*</u> | <u>Percentage Distribution Of Household Population*</u> |
|----------------------------|---|---|
| Under \$5,000 | 0.9% | 8.3% |
| \$ 5,000-\$ 9,999 | 1.0 | 16.2 |
| 10,000- 14,999 | 7.6 | 17.2 |
| 15,000- 19,999 | 10.9 | 20.0 |
| 20,000- 24,999 | 15.8 | 14.6 |
| 25,000- 34,999 | 24.0 | 15.7 |
| 35,000 and over | 39.8 | 7.4 |

Note: Comparisons are illustrative only, since VCR are based on U.S. VCR purchasers, while household population data are for Canada.

Source: Based on data given in Bowden, 1979.

COMPETITIVE AND COMPLEMENTARY ANALYSIS

The subject of competitive and complementary analysis, as we will attempt to convey in this part of the report, is complicated and difficult to deal with. The principal reason for this, especially with respect to Telidon and other videotex systems, is that now, in 1980 and beyond, an inordinate number of products, systems, services and capabilities exist or are anticipated that will without question have an impact on how and when videotex systems in general, and Telidon in particular, will develop in North America.

As we will see presently, it will be completely impossible to deal with all of these potential interactions in this report. What the reader may expect, however, is an introduction to the dimensions of the problem, and the development of a series of at least tentative conclusions with regard to impacts, as effectively as they can be developed at this time.

Dimensions of The Problem

In the series of working papers prepared for this project, we made it clear that products and services already existing and coming on the market daily have the potential of impeding or strengthening videotex and Telidon developments. Principally, we referred to the home computer as a potentially competitive device, but there are many others in both home and business environments --video tape recorders, videodiscs, electronic games, conventional

computer terminals, and newspapers, magazines, and books being but a few examples.

Each of these devices, systems, capabilities and so on has a cost or costs associated with it; they are in various stages of development, from mature to just now coming on the market, or in some cases not yet ready for market introduction but shortly to be so; and they exhibit one or more characteristics that pit them against (or for) videotex and Telidon systems. In addition, of course, they do different things for users, and thus are by no means uniform with respect either to themselves or to Telidon on the various measurement scales one might use for comparison purposes.

What is needed, therefore, is a road map, or series of road maps, through this maze. For example, at the outset it is useful to prepare, as best we can, a comprehensive list of the products, systems, and services that we should consider in this kind of a discussion, if for no other reason than to explore the dimensions of the problem. Such a list, prepared for both home and business applications, might be constructed along the lines of Table 19.

Next, it is relevant to reconsider the categories of household expenditures used in the income and expenditure analysis just completed. Here, as may be recalled, we have an even more extensive list, covering all items in the major categories 'recreation,' 'reading,' and 'education.' from the Urban Family Expenditure Survey, with the result that our list of relevant variables expands considerably, as shown in Table 20. (Note, here,

Table 19

COMPETITIVE AND COMPLEMENTARY PRODUCTS
AND SERVICES TO TELIDON

In the home market

| | |
|--------------------------------|-----------------------|
| Hifi and stereo systems | CB radios/car stereo |
| Videocassette recorders (VCRs) | Outside entertainment |
| Videodiscs | Movies |
| Home computers | Concerts and other |
| Electronic games | cultural events |
| Television | Museums, exhibitions |
| Radio | Sporting events |
| Cable TV | Communications |
| Pay TV | Telephone |
| Wide screen TV | Mail |
| Home movies | Travel |
| Cameras | Books |
| Conventional games | Newspapers |
| Calculators | Magazines |

In the business market

| | |
|---------------------|---------------------------|
| Business computers | Word processing |
| Copiers | Typewriters |
| Computer terminals | Electronic cash registers |
| Telex/TWX | Telephone |
| Mailgram/Telepost | Telegraph |
| Facsimile terminals | |

Table 20

CATEGORIES OF RECREATION, READING, AND EDUCATION
EXPENDITURES SUGGESTED BY STATISTICS CANADA'S
URBAN FAMILY EXPENDITURE SURVEY, 1976

Recreation

- Admission to events
 - Movies
 - Plays, concerts, operas, ballets, etc.
 - Museums, exhibitions, etc.
 - Spectator sports and other events
- Recreational fees, licences and dues
- Commercial establishments
- Non-profit social & recreational clubs
- Government
- Children's & adult games, cards, puzzles
- Children's play vehicles- tricycles, etc.
- Children's toys, dolls
- Recreational equipment- pool tables, etc.
- Above ground swimming pools
- Sporting & athletic equipment n.e.s.
 - Water sports, including fishing
 - Ski equipment
 - Golf equipment
 - Other- football, hockey, tennis, etc.
- Equipment for camping and picnicing
- Purchase and rental of musical instruments
- Recreation appliances (audio-visual)
 - Radio-am and am/fm
 - Radio-phonograph combinations
 - Sound components- tuners, speakers, etc.
 - Record players, tape recorders, etc.
- Televisions
 - Black and white
 - Colour
 - Combinations
- Parts, repairs for radios & phonographs
- Parts, repairs for televisions
- Phonograph records, tapes and cassettes
- Rental of television and radio, etc.
- Rental of cablevision

Table 20 (continued)

- Photographic equipment and processing
 - Photographic equipment
 - Films, prints and processing
 - Other photographic supplies
- Binoculars, telescopes, microscopes
- Hobbies, and crafts, n.e.s.
 - Handicraft and hobbycraft kits
 - Art materials and supplies
 - Collectors' items- stamps, coins, etc.
 - Other
- Pets- purchase, supplies, etc. (excl. food)
- Other recreational expenses
- Package holiday trips
- Other holiday expenses for all trips n.e.s.

Reading

- Newspapers
- Magazines and periodicals
- Books and pamphlets (excl. school books)

Education

- Tuition fees
 - Full-time students
 - Private kindergarten, nursery, etc.
 - Elementary and secondary education
 - Post-secondary education
 - Part-time courses
- Books
- Supplies
- Special lessons
- Other educational expenses

Source: Urban Family Expenditure Survey, op. cit.

n.e.s.: not elsewhere specified

that with only a few exceptions, all elements of Table 19 would logically be included under one of the categories listed in Table 20, even though they are not all found there in specific terms. Video cassette recorders, videodiscs, electronic games, and pay television provide a few examples. Exceptions would include, clearly, the category of "communications" from Table 19 --which appears elsewhere in the Urban Family Expenditure Survey-- and perhaps some others.)

Considering these two lists, then--i.e., Tables 19 and 20--it is sufficiently clear that the concepts of 'competitiveness' and 'complementarity' can be interpreted in different ways. In essence, what the two lists principally illustrate are the notions of tradeoffs between products, first, on the basis of services that they provide to users, and, second, on the basis of competition for user's dollars, i.e., competition in the allocation of family budgets over many competing categories of expenditure, and with respect to specific, desirable items within those categories. If, for example, we assume that one of Telidon's principal benefits is to provide (or assist in providing) recreation in the home, clearly every other item listed under 'recreation' in Table 20 would compete with Telidon for expenditures from a household's recreation budget--including purchases of ski equipment, television sets, stereo components, cameras, and so on. On the other hand, none of these items compete with Telidon in a functional sense--as would the telephone, for example, if Telidon had message capabilities. What is necessary, therefore, is to distinguish as best one can between these two types of competition,

recognizing fully that much subjective judgment will be required in the process.

What Does Telidon Provide--Or, What Might It Provide?

In the previous paragraphs we described the kinds of things that Telidon will compete with, both from the standpoint of function as well as budget allocations. But, what is it that Telidon will do for users--that is, what will be its functions?

A full answer to this question is, of course, still premature at this time. However, we do know what Telidon could do conceptually. Table 21 conveys this information, and we discuss it below.

First, we note that there are eight principal categories listed in Table 21, i.e., information retrieval, calculations, transactions, person-to-person communications, quizzes and games, educational tool (CAI), opinion polling, and telesoftware. Of these eight, it is generally clear that only the first one, information retrieval, has been developed to any reasonable degree of sophistication on any videotex system in the world, including both the most advanced such system, Prestel, and its Canadian counterpart, Telidon. We admit, of course, that there are attempts to develop some of the other capabilities in various other videotex and videotex-like systems--such as opinion polling using Warner's QUBE system in Ohio, attempts at transaction capabilities built into Knight-Ridder's experiment in Florida, and 'pseudo-transaction' capabilities implemented by innovative IPs on Prestel.

Table 21

INFORMATION HANDLING SERVICES
CONSIDERED AS CANDIDATES FOR TELIDON

Information Retrieval

- | | |
|---------------------|--------------|
| -public access | -interactive |
| -closed user groups | -broadcast |

Calculations

- | | |
|-------------|------------------------|
| -income tax | -business calculations |
| -mortgages | |

Transactions, e.g.,

- | | |
|--------------|---------------|
| -banking | -reservations |
| -bill paying | -theatre |
| -shopping | -travel |

Person-to-Person Communications

- | | |
|--------------------|----------------------------|
| -both predefined | -store & forward or direct |
| and user generated | -text and graphics |

Quizzes and Games

Educational Tool (CAI)

Opinion Polling

Telesoftware

Source: Telidon Project, DOC

To be honest, however, most or all of the capabilities listed in Table 21, with the exception of information retrieval, are still either nonexistent in any form, or at best in conceptual or development stages. For example, messaging has appeared for some time to be a relatively easy application to implement on videotex systems, yet users of Prestel--again used as an example because it is the most advanced such system--do not have access to messaging capabilities at all, except by proxy, and in most other systems, messaging is still at a very early stage of development, if it is being considered at all. Similarly, calculations are at a very rudimentary stage at this time, and like comments apply to each of the other application categories.

We will have more to say on these specific applications later in this section. At this point, however, to complete our discussion of the dimensions of the competitive/complementary analysis problem, we bring to the reader's attention one additional aspect, measurement.

The Problem of Measurement

As we have mentioned earlier, this study is an outgrowth of previous research performed for the DOC (Hough and Associates and Communications Studies and Planning, op.cit.). In that earlier report, we discussed all of the methods of analysis being used in this study--including the notion of competitive/complementary analysis--and in the section devoted to this technique, used the chart shown here as Figure 19.

Figure 19
HISTORICAL EVOLUTION OF MAIN INFORMATION
TRANSFER SERVICES

| | | | | | | |
|-------|----------|-----------|-----------|-----------|------------|--------------------------|
| | | | | | | COMP COMM. SATELLITES |
| | | | | | COURIERS | COURIERS |
| | | | | | DATA COMM. | DATA COMM. |
| | | | | | TWX | TWX |
| | | | | TELEX | TELEX | TELEX |
| | | | TELETYPE | TELETYPE | TELETYPE | TELETYPE |
| | | TELEPHONE | TELEPHONE | TELEPHONE | TELEPHONE | TELEPHONE |
| | TELEGRAM | TELEGRAM | TELEGRAM | TELEGRAM | TELEGRAM | TELEGRAM |
| MAIL | MAIL | MAIL | MAIL | MAIL | MAIL | MAIL |
| 1800s | 1850s | 1900s | 1930s | 1950s | 1960s | 1970s |

Source: Price Waterhouse Associates and R.W. Hough and Associates, 1977.

The main purpose of this chart, in its original context, was to illustrate that, since the early 1800s, mail has undergone a transformation in which it originally had no competition at all, then very gradually changed--during the one hundred year period from about 1850 to 1950--to a situation where a few competitors had emerged, until finally, in the 1970s a whole host of alternatives to mail had been developed, and had become extremely effective competitors.

The extent to which this was the case was not illustrated numerically in our previous report. However, some inkling of the changes that occurred can be gained with reference to Table 22, where we show, for the years up through 1975, how mail fared, in terms of message volume, with each of the principal competing message transfer services, telephone and telegraph. As shown there it didn't fare very well, really, since in time the telephone overtook mail completely, on this measurement scale.

The gist of these illustrations is essentially as follows. In the first case, we are making comparisons on a subjective and illustrative basis, i.e., identifying the increase in the 'number of alternatives' to mail over time--whereas in the second case we are measuring impacts numerically, with actual figures. Unfortunately, it is in the latter situation that we are completely stymied with respect to the present analysis, because there are no appropriate comparative figures to use, as yet. Instead, we must rely on judgment, reasoned hypotheses, and logic to make our case.

We begin this process by identifying, in Table 23, the

Table 22

DOMESTIC MESSAGES HANDLED BY TELEPHONE,
TELEGRAPH, AND POSTAL SERVICE, CANADA, 1930-1975

| Year | NUMBER OF MESSAGES | | | | | | FIRST CLASS | |
|------|--------------------|-----|-----------|------|-----------|-----|-------------|------|
| | TOTAL | | TELEPHONE | | TELEGRAPH | | MAIL | |
| | Millions | % | Millions | % | Millions | % | Millions | % |
| 1930 | -- | -- | 2,513 | -- | 13.0 | -- | n.a. | -- |
| 1935 | -- | -- | 2,321 | -- | 9.6 | -- | n.a. | -- |
| 1940 | -- | -- | 2,899 | -- | 11.3 | -- | n.a. | -- |
| 1945 | -- | -- | 3,210 | -- | 15.8 | -- | n.a. | -- |
| 1950 | 6,394 | 100 | 5,013 | 78.4 | 18.5 | 0.3 | 1,362 | 21.3 |
| 1955 | 8,830 | 100 | 6,962 | 78.8 | 17.9 | 0.2 | 1,850 | 21.0 |
| 1960 | 11,690 | 100 | 9,580 | 82.0 | 13.7 | 0.1 | 2,096 | 17.9 |
| 1965 | 15,030 | 100 | 12,440 | 82.8 | 11.8 | 0.1 | 2,578 | 17.2 |
| 1970 | 18,842 | 100 | 15,895 | 84.4 | 7.7 | 0.0 | 2,939 | 15.6 |
| 1975 | 24,448 | 100 | 21,194 | 86.7 | 4.4 | 0.0 | 3,250 | 13.3 |

Source: Price Waterhouse Associates and R.W. Hough and Associates
Ltd., 1977 (Exhibit 4-3, p. 29).

Table 23

DIMENSIONS OF THE COMPARISON MEASUREMENT PROBLEM

Competition For:

1. Time
2. Dollars

Competition with Respect to:

1. Entertainment/pleasure
2. Effectiveness
3. Return on investment
4. Information/decision making
assistance

fact that even on a subjective basis, measurement of comparisons between products and services can have a number of dimensions. We have mentioned already, for example, that Telidon will compete on a 'money' basis with all of the items in Table 20, and most of those in Table 19. On a 'time' basis, this is also true, in general terms.

Assume, for example, that budget allocation decisions have been made by a particular household, and that they include, for that household, purchase and use of Telidon. At the outset then, assuming that a specific television set was not purchased for the exclusive use of Telidon, sharing of a TV set between Telidon and conventional programming is required. Moreover, if the delivery method available to the user is the telephone line, ordinary use of the telephone is also cut off while Telidon is in use--again assuming, of course, that an additional telephone connection has not been installed for Telidon's exclusive use.

In addition to these factors, competition for time is relevant to the other items listed in Table 19 and 20 because, quite obviously, if one is using the Telidon facility for some specific, presumably worthwhile purpose, he or she can't very well be out skiing, watching television simultaneously on another set, helping the children in the family with their homework, or reading a book. (It should be emphasized, we believe, that while some of these points may appear trivial, they are not meant to be so. On the contrary, it is our contention that a given householder's eventual evaluation of the time factor, with respect to Telidon's alternatives, may prove to be just as important a

consideration as money, when purchase decisions are about to be made.)

Finally, there is a third aspect to the time comparison, namely, the time it takes to actually accomplish something on Telidon, and, perhaps, the time saved with Telidon over other methods of accomplishing a given task. Here, we are required to make very direct, functional comparisons--and it is mostly in this area that Telidon will be seen, in our view, to have its greatest potential advantage.

Alternatives To Telidon for Specific Services

In this section we carry out the bulk of our analysis. The procedure we will follow is to consider, in turn, each of the potential service categories for Telidon listed in Table 21, identifying, first, a representative list of alternative products, facilities, or capabilities that can or could be used in place of Telidon to carry out that service requirement.

Information Retrieval. It is a very natural development, we believe, to anticipate that at least one of Telidon's principal functions is apt to be that of supplying information to home-owners and businesses. As may be recognized, this was the original concept behind videotex developments, it is the farthest along in the development process, and it is still the most 'natural' form of use of videotex systems. At the same time, however, it cannot be forgotten that there are a host of other systems, services,

and information-carrying vehicles to which home and office users have access. Some of these, as listed in Table 24, are books, newspapers, magazines, 'Yellow Pages,' radio and television, videodiscs and VCRs, and now home computers and terminals linked to already existing data bases--as described in some detail in the Introduction.

All of these, it is well known, tend to compete with the idea of electronic information retrieval as characterised by Telidon and the other CCITT-recognized videotex developments. What is important to attempt to establish, then, is what kind of a 'niche' Telidon might fill, in comparison to the other services.

We are painfully aware, of course, that the above is essentially what everyone is trying to find out--not only ourselves. In this discussion, therefore, it would be ludicrous to think that we have the whole answer, for of course we don't. What we will be attempting to comment on though are at least some aspects and dimensions to the problem, principally for discussion purposes. As will be seen, in any event, our 'bottom line' conclusion will be that as an information retrieval device, Telidon has and will continue to have much potential.

To begin, we give in Table 25 only a partial list of the many positive features and characteristics that Telidon has to offer.* It is clear that with respect to information retrieval, all of these are very important. In advertising, for example, it is an accepted fact that graphics are crucial--whether they

* Table 25 represents only a partial list because we assume that there are many more features to come that will continue to enhance the system's attractiveness and effectiveness.

Table 24

ALTERNATIVES TO TELIDON FOR INFORMATION RETRIEVAL

- Newspapers
- Magazines
- Books
- Television
- Radio
- Mail
- Videodiscs & VCRs
- Reference libraries
- Word of mouth/travel/interaction
with others
- Home and business computers
- Home and business terminals,
conventional and 'intelligent'
- Advertising in, for example,
'Yellow Pages,' newsletters,
direct mail, etc.

Table 25

REPRESENTATIVE LIST OF FAVORABLE
CHARACTERISTICS OF TELIDON FOR
ALL APPLICATION CATEGORIES

- User friendly
- Easy to learn
- Little stress, fatigue
- Excellent graphics
- Excellent color presentation
- Animation relatively easily accomplished
- Terminal-independent graphic display protocol (i.e., picture description instructions)
- Flexible resolution capability as required

be pictures, diagrams, designs, contextual layout of words and pictures together, or the virtually infinite variety of combinations of type styles in text-only messages, from large, bold-face type to catch a reader's eye at the outset, to small print which the advertiser needs in his message, but is not as important in conveying the attractiveness of the product or service he is selling.

Colour, of course, adds a very important extra dimension in such applications, because again it tends to enhance the attractiveness of virtually any type of display. Moreover, colour can be used, it is now recognized in many contexts, to enhance the rapid readability and information carrying content of messages, whether they are advertising messages or not. For example, it is a recognized fact that even in the business world more and more use is being made of colour to enhance the means of conveying information rapidly--with charts, view graphs, slides and other displays, and now increasing introduction of colour video display units and graphics terminals.

All of these examples illustrate that the characteristics of Telidon have something to offer in the information retrieval application area. In the context of this discussion, however, we believe it may also be useful to point out some caveats. First, it must be recognized that it might be very difficult to justify 'browsing' in a videotex medium, unless, of course, pricing could be accomplished in such a way as to cause no penalty to the user for doing so. For example, if it were possible to charge for Telidon on a monthly basis regardless of usage (or perhaps on

the basis of classes of use), browsing among the pages might be extremely desirable to users, and consequently to advertisers as well. If such a capability is not allowed or provided for, however, newspapers and magazines, for example, will be able to withstand encroachment by Telidon on this particular dimension.

Second, with respect to information retrieval of a fairly standard, text nature, it is still not clear, we believe, where Telidon will have an advantage over other means of electronic information retrieval such as CompuServe and The Source in the United States. In this context, in other words, colour and graphics may not turn out to be as important as once thought.

Third, in both a business and home context, it may be found that, even though Telidon is user friendly, easy to use and so on, the complexities of searching through tree-structured data files becomes much more cumbersome than once thought. It is already recognized, for example, that cross-referencing is a nontrivial problem, and that there are substantial pricing complications involved in the retrieval process when such systems (Prestel, for example) are charged for on a per-page (i.e., usage) basis--for example, does one charge or not charge for intermediate pages as one 'searches' for what he or she is looking for?

In summary, while information retrieval is, obviously, a principal application candidate for Telidon, there are many problems that yet remain to be solved before markets for such services are assured.

Calculations. In contrast to the information retrieval application area, it appears, to us at least, that Telidon will

not be an especially effective calculation device, in comparison to its competitors. As an example, let us consider a Telidon calculation service versus its alternatives (Table 26) in terms of some of the measurement variables mentioned earlier--first, money.

As is well-known, four function calculators are now available for as little as \$10, and sometimes even less. Moreover, calculators that will perform sophisticated mortgage, annuity, present value and other business-type calculations can be purchased for as little as \$25-\$30, and again, sometimes less.

These types of calculators are highly desirable--as witness the fact that millions have been sold: they are compact, portable, rugged, flexible, easy to use, and come in an almost infinite variety, from the size of a wrist-watch to those that play musical notes and tunes. There is no question in other words, that they are cheaper, and more versatile and powerful, than Telidon.

On the dimension of time, alternatives are again superior. Consider, for example, the problem of sitting in front of a television screen trying to do a mortgage calculation. In the first place, Telidon must transmit a "page" to the viewer, presumably with a blank space to fill in a number, or perhaps several numbers. But the key pad the viewer is using must also be employed to change pages on the screen. Obviously, then, control keys are needed to tell the Telidon program whether the user is entering a series of numbers for the blank space on the machine, has changed his mind and wants a new page, is entering fill numbers but has made a mistake, etc. All of these processes are

Table 26

ALTERNATIVES TO TELIDON FOR CALCULATIONS

- Home computers
- Calculators
- Paper and pencil
- Intelligent terminals
- Time sharing services
- Business computers
- Sophisticated word processing systems
- Asking others to perform the necessary calculations--e.g., tax consultants, real estate brokers, etc.

awkward, and many would undoubtedly be useless in actually trying to perform the required steps. On a time and ease of use scale, then, Telidon again runs into difficulty compared to the alternatives.

Finally, on the dimensions of effectiveness and return on investment, similar comments apply. It is extremely unlikely, for example, that Telidon would be as effective and easy to use as a four-function calculator for simple math problems, so it would have to be programmed for more sophisticated tasks. Here, however, home computers will do the job better, cheaper, faster, with exceedingly greater capability (how would Telidon designers, for example, propose to store all of the household's relevant tax records?), and, in addition, with the facility for programming the calculating device in any way the user desires. On all these dimensions, then, other alternatives are better than Telidon as a calculation tool.

Transactions. In the third service to be considered, Telidon is on less shaky ground than with calculations, despite there being a greater number of alternatives for solving a transaction problem. (See Table 27). The reason for this, we believe, is that Telidon and other videotex systems can provide something useful and worthwhile to both buyer and seller in the transaction application--specifically, instant observation of what is being offered, rapid, 'on-line' acceptance of the product or service under consideration, and comparison shopping.

As is well known in marketing circles, the aspect of impulse buying is very powerful and, from the marketer's stand-

Table 27

ALTERNATIVES TO TELIDON FOR TRANSACTIONS

- Grocery store
- Department store
- Specialty store
- Bank
- Post Office
- Service station
- Transaction by mail
 - Bill paying
 - Ordering only or ordering and paying
at the same time
- Transaction by telephone
 - (As above)
- Home computers
- Other mass-market information systems

point, very effective. This is the basis, of course, for attractive and eye-catching displays in stores. Moreover, it is also the basis for flashy, high profile, emotionally-charged advertising on television in which a telephone number is flashed on the screen which the user may call to make an immediate, 'on-line' purchase.

We have no statistics on this type of advertising-plus-order-taking, but we assume it must be effective, and perhaps even very effective. In any event, it goes on continuously, for records, tapes, household appliances, and other products, as well as religious donations and fund raising.

These observations suggest that much the same mechanisms could work, though probably more modestly, for Telidon. For example, in contrast to the calculation application discussed above, very little feedback from a user would be required for most transaction applications to take place, and the features and characteristics of Telidon--i.e., superior graphics, imaginative presentation of products in page formats, and so on--could be utilized to the fullest.

From the standpoint of money expenditures for such a service, then, the usefulness to a homeowner or business-person would depend on what he or she got out of the system on a periodic basis, compared to what it cost. For example, it is not at all inconceivable that at, let us say, \$12-\$13/month, a typical homeowner might be easily able to get an acceptable return on his investment in Telidon either by making 'better' purchase decisions (i.e., more economical choices than he/she would realize without

Telidon), or by being able to select items easily, with less expenditure of time, effort, gasoline purchases and so on, than would be the case with other purchase methods.

In summary, our evaluation concerning Telidon in transaction modes is highly positive, if such applications can in fact be developed at an economical cost to end users. Obviously, subsidization of the cost of the videotex system by advertisers would assist in this process.

Person-to-Person Communication. As with transactions, person-to-person communications represents a positive application of videotex and Telidon systems. The reason for this, again, is that message transfer is a desirable and useful requirement for users, and despite the ubiquity and heavy use of the telephone, there is room for other message transfer means.

We have been convinced of this fact for many years, having initiated some of the early studies of computer based messaging, teleconferencing, and so on.* In recent years, this fact, that there are additional opportunities for message transfer, has become very widely recognized, and is, perhaps, even overstated with the current popular enthusiasm for electronic mail. The fact is, however, that the ability to send messages of various types is a demand pull situation--that is, users want such

* See, for example, R.W. Hough (with R.R. Panko), Teleconferencing Systems: A State-of-the-Art Survey and Preliminary Analysis (Hough and Panko, 1977) and R.C. Harkness, et al., Technology Assessment of Telecommunication/Transportation Interactions (Harkness, et al., 1977)

capabilities and will pay reasonable rates to get them.

It is in this context, then, that we see a positive response to such capabilities within a Telidon framework. As before, of course, there will continue to be developed very effective alternatives (e.g., Table 28), of which both home and business computers, and conventional and intelligent terminals, will be examples. In this case, however, what we are suggesting is that the application is a useful one, and that the competition is not so formidable as to make implementation of such a service on Telidon completely out of the question.

Quizzes and Games. The subject of quizzes and games is a difficult one in a Telidon context, because a number of mitigating factors emerge. It would not be difficult, for example, to write off such an application as very ineffective compared to alternative methods of obtaining this type of entertainment (Table 29). On the other hand, as we have mentioned earlier, in comparison to the fastest growing types of new technological developments, Telidon would stand only a modest chance of succeeding if it had very little of an entertainment value, especially in the home market. (This is not to say that businesses, being generally more pragmatically oriented, might not look differently on this subject.)

In the game area, however, as with calculators, the first obstacle has to do with the enormous popularity, and incredibly rapid penetration, of electronic, hand-held games. On the order of 30 million of these devices have been sold already, and the

Table 28

ALTERNATIVES TO TELIDON FOR PERSON-TO-PERSON
COMMUNICATIONS

- Telephone
- Mail
- Personal visits/travel
- Electronic message systems
 - Computer terminals
 - Facsimile terminals
 - Telex/TWX
 - Mailgram/Telepost (and Intelpost)
 - Communicating word processors
 - Electronic typewriters with message capabilities
 - Electronic funds transfer
- Courier and messenger services
- Home and business computers
- Conventional and intelligent terminals used at home
- New communication networks set up specifically for text (and perhaps graphics) message transmission. (Examples in this context include Bell Canada's Envoy, Xerox's Ethernet, and other similar networks).

Table 29

ALTERNATIVES TO TELIDON FOR QUIZZES AND GAMES

- Electronic games, video and non-video
 - Football
 - Baseball
 - Hockey
 - Star Wars
 - Chess
 - Backgammon
 - Dungeons and Dragons
 - Simon
 - etc.
- Other games (non-electronic)
- Lotteries and other betting games
- Home computers programmed for games
- Other mass-market information systems
having game programs

end does not appear to be in sight. Moreover, these are by no means the only entertainment appliances in the game field. On the contrary, video games of both commercial and home varieties continue to increase in number, and both small and large arcades devoted almost entirely to such games are opening daily.

What this means to Telidon, of course, is that its fortunes in the quiz and game field will be tied, inevitably, to how successfully sophisticated games are able to be developed. If users had no alternatives, these requirements would not be so stringent. As we are attempting to make clear, however, the competition is formidable in some areas, so hard choices and decisions on the part of designers must be made. What this will entail will be to ascertain carefully what will sell in competition with the alternatives (horoscopes and lotteries, for example, would probably make it, and Prestel IPs may have other successful examples). Concentration on these types of entertainment features could, then, make Telidon very attractive to certain groups of potential users.

Education. In contrast to quizzes and games, there is nothing questionable about the ultimate social significance and contribution of education. With respect to Telidon, however, there are very serious and important problems. Basically, these have to do with the fundamental question of whether any type of new, 'mechanical' education or instructional delivery system will be as effective as proponents would like them to be. Our first

thought here, of course, is of the vast and (if we are permitted to use such a word) incredible history of computer assisted instruction. This field, beginning as much as twenty years ago, has been forecast to have an enormous impact on education for at least half of those years--yet, it has not done so. Moreover, by this time early proponents and prognosticators have discovered that education via computer is not a trivial problem, that teachers are much harder to replace than once thought, and that students--while interested in computers and becoming more so all the time--are not at all wont to get very much of their instruction and training by these means. On the basis of all of this evidence then (and much more that we are not discussing explicitly), we would tend to classify Telidon as very marginal as an educational tool in the future, again, especially, in contrast to its alternatives, as given in Table 30.

Opinion Polling. The subject of opinion polling is another strange one (like quizzes and games), because it also has the characteristic of what may be identified as, or referred to as, 'mass-market consumer appeal.' Much has been made, for example, of the QUBE system in Columbus, Ohio with respect to its polling capabilities; and recent demonstrations thereof.

In actual fact, however, we are convinced that in the last analysis these types of applications will be found to be more gimmicky than they are real. As a single example, we point to the fact that there is not likely to ever be a way in which it can be determined without question who is voting--in other words, it

Table 30

ALTERNATIVES TO TELIDON FOR EDUCATION

- Home computers
- School
- School computers
- Part-time courses
- Television (conventional programming)
- Courses on television
- Educational teleconferencing (e.g.,
Wisconsin Educational Telecommunications Network)
- Tapes and records (audio)
- Videotapes
- Videodiscs
- Newspapers, books, magazines and all
other reading material.

will inevitably be the 'terminal' doing the voting, since determination of who is operating the terminal will be impractical. Secondly, while for some purposes such automatic collection of data might be useful, this type of surveying is already being done very successfully (certain types of Nielsen surveys, for example, use 'automatic' means of data collection)--indicating that Telidon would have to compete with those means on a cost/efficiency basis. Finally, we are inclined to ask the question, Why would anyone really want to do opinion polling this way--since again there are so many alternatives, as illustrated in Table 31--unless it is more for a publicity purpose than any other? Recognizing that we could be just as wrong here as on any of our other evaluations, then, our summary conclusion on opinion polling is, 'not promising.'

Telesoftware. Finally, on telesoftware, we have a very simple problem. It is undoubtedly true that this application can be accomplished technically. What Telidon faces, however, is exactly the same situation that exists in the other sophisticated application areas, namely, the fact that other, more complex and efficient devices are already on the market, proven, and being installed by real users, both in businesses and in homes. Again, therefore, what we are suggesting is not that Telidon developers will be unable to create telesoftware capabilities, but that the costs and the efficiencies of those additional capabilities will again be traded off by potential users against whatever else is available. If, for example, home computers can also be programmed to carry out many tasks and perform many packages of services--

which they can be--then Telidon will have to not only do the same, but do it better and at lower cost, in order to compete effectively. (As before, alternatives to Telidon for telesoftware are given in an accompanying table.)

Table 31

ALTERNATIVES TO TELIDON FOR OPINION POLLING

- Nielsen TV ratings (and others like them)
- Market surveys
- Gallup, Harris, and other polls
- Official government data collection activities--
e.g., Statistics Canada surveys, etc.
- TV show call-in schemes
- Telephone and mail surveys

Table 32

ALTERNATIVES TO TELIDON FOR TELESOFTWARE

Idea involves downloading programs and software, therefore, competition obviously includes, but is not limited to:

- Programs by mail, via tape, disc--any suitable recording media
- Programs purchased over the counter, using the same media as above
- Intellivision
- Playcable
- Software downloaded to home computers.

Chapter 4

ADDITIONAL CONSIDERATIONS

Following the development of overall growth trends and estimates of potential Telidon penetration in the previous two chapters, a number of additional aspects to the problem are now relevant. Among these issues are validation of estimates used in the analysis, home vs. business forecasts, the RGB vs. RF issue, implication of the results for field trial planning, the likely trade-off in growth between teletext and videotex forms of Telidon, and potential impacts of other forms of mass-market information systems. Each of these topics is dealt with in this chapter.

VALIDATION OF ASSUMPTIONS USED IN THE ANALYSIS

In studies of this type it is clear that much depends on assumptions used in intermediate parts of the analysis. Accordingly, in this section we provide evidence that illustrates our use of optimistic values for these variables with particular attention paid to the income and expenditure analysis.* Three variables there are of special interest, as follows:

1. The 7% estimate representing overall real growth of Telidon-related expenditures, (e.g., recreation, reading and education) in a typical household budget;
2. The 5% estimate representing anticipated maximum

* In the historical analogy chapter it was also documented that the principal of "erring on the high side" was being adhered to. Sufficient evidence was given there, however, so further discussion is unnecessary at this point.

share of the recreation, reading, and education category that could reasonably be 'captured' by Telidon in 1985; and

3. The figures in Table 17, column 4, representing estimated percentages of actual vs. potential subscribers at various price and income levels.

In this section we discuss these matters from two perspectives, first, the available evidence on what the real values for these parameters should be, and, second, a brief review of the effect of choosing other parameter values.

Validation

Validation of the values we have used can be accomplished easily, but the appropriate discussion is fairly lengthy--so readers might be forewarned! First, we reflect on the fact that the 7% parameter was composed of two parts, that is, an estimated 3.5%/year real growth rate attributable to increases in overall income levels, and another 3.5%/year component attributable to an estimated (or, better, assumed) increase in the share of Telidon-related expenditures to total expenditures in a typical household budget.

Table 33 addresses the first of these factors. These data, representing actual, experienced income growth in Canada for all families and unattached individuals, illustrate that for the most part, and certainly over the last several years, real growth in income has been nowhere near 3.5%, but rather closer to 2.0-2.5% (e.g., 1971-1978). The most recent years, moreover, show even lower rates of growth on a year-to-year basis (1.6% for 1978, for

Table 33

AVERAGE INCOME OF FAMILIES AND UNATTACHED INDIVIDUALS
IN CANADA; 1965-1978; IN CURRENT AND CONSTANT DOLLARS

| Year | Current Dollars | | Constant Dollars | |
|------|-------------------|--|-------------------|--|
| | Average Income | Growth Rate Year-to-Year (Percent) | Average Income | Growth Rate Year-to-Year (Percent) |
| 1965 | \$ 5,779 | | \$ 7,186 | |
| 1967 | 6,519 | 6.2% | 7,535 | 2.40% |
| 1969 | 7,686 | 8.6 | 8,170 | 4.13 |
| 1971 | 8,845 | 7.3 | 8,845 | 4.05 |
| 1973 | 10,694 | 10.0 | 9,486 | 3.56 |
| 1975 | 13,805 | 13.6 | 9,967 | 2.50 |
| 1976 | 15,849 | 14.8 | 10,650 | 6.85 |
| 1977 | 16,764 | 5.8 | 10,427 | -2.09 |
| 1978 | 18,547 | 10.6 | 10,590 | 1.56 |

Average Annual Rates of Growth Between Selected Years

| Years | Average Annual Growth Rate (Percent) | |
|---------|--------------------------------------|------------------|
| | Current Dollars | Constant Dollars |
| 1971-76 | 12.37% | 3.78% |
| 1971-78 | 11.16% | 2.61 |
| 1965-78 | 9.38% | 3.03 |
| 1976-78 | 8.18% | -0.28 |
| 1977-78 | 10.64% | 1.56 |

Source of data: Survey of Consumer Finances, Statistics Canada
Catalog 13-550, 13-551, 1979 and previous years.
Calculations, Hough and Associates.

example), and in 1977 incomes actually lost ground to price increases. This part of our first parameter, then has obviously been chosen on the high side.

The other part of the 7% growth variable is similarly estimated optimistically, and this time the contrast is even greater, as Table 34 demonstrates. Recalling that this parameter represents increases in the share of Telidon-related expenditures in the context of total household budgets, we see from Table 34 that those shares actually decreased rather than increased, from 1972 to 1976. Not having more recent data, however, we simply assumed that that period was not typical, and that over a longer term (and into the future) those shares would increase as a result of more leisure time, the great variety of products and services now coming on the market, and so on. Our choice of values for each of these variables, then, can obviously be seen to have been selected with an optimistic bias.

With regard to the second variable listed above, we again have evidence, from other comparable data, suggesting what its real value might be. Recalling that this variable represents an estimate of the reasonable maximum share that Telidon expenditures might represent out of total household expenditures for information-, recreation-, and education-based items, we have assembled an extensive list of just such items, and calculated their equivalent shares on the same basis. This list, shown in Table 35, illustrates that, contrary to the notion that any individual item can be large, in fact, they are mostly very small--with, again, some notable exceptions. As a significant illustration, we might, for example, take the case of cable television. Here we see, from the

Table 34

CHANGE IN SHARE OF RECREATION, READING,
AND EDUCATION EXPENDITURES AS A
PERCENTAGE OF TOTAL EXPENDITURES, ALL
FAMILIES AND UNATTACHED INDIVIDUALS,
CANADA, 1972-1976
(Current Dollars)

| <u>Year</u> | <u>Recreation, Reading, and Education Expenditures</u> | <u>Total Expenditures</u> | <u>Recreation, Reading and Education as A Percent of Total Expenditures</u> |
|-------------|--|-------------------------------|---|
| 1972 | \$557 | \$10,803 | 5.2% |
| 1974 | 729 | 14,049 | 5.2 |
| 1976 | 917 | 17,908 | 5.1 |

Source: Urban Expenditure Surveys, 1972, 1974, 1976.

Table 35

ANNUAL EXPENDITURES ON SPECIFIC ITEMS IN
AN AVERAGE FAMILY'S RECREATION, READING, AND
EDUCATION BUDGET, CANADA, 1976

| Expenditure Item | Average Annual Expenditure (Dollars) | Percent of Total Recreation, Reading and Education Budget (Percent) |
|--|--|--|
| Total Recreation, Reading and Education Expenditures | \$916.9 | 100.0% |
| Admission to events, total | 74.9 | 8.2 |
| Movies | 34.2 | 3.7 |
| Plays, concerts, etc. | 17.6 | 1.9 |
| Spectator sports, etc. | 16.6 | 1.8 |
| Other | 6.5 | 0.7 |
| Children's and adult games, cards, puzzles, etc. | 7.1 | 0.8 |
| Children's toys, dolls | 15.5 | 1.7 |
| Sporting and athletic equipment (fishing, skiing, golf, etc.) | 39.8 | 4.3 |
| Recreation appliances, total | 139.4 | 15.2 |
| Radio and radio-phonograph combinations | 19.7 | 2.1 |
| Sound components--tuners, speakers, etc. | 36.9 | 4.0 |
| Record players, tape recorders, etc. | 8.6 | 0.9 |
| Televisions (black and white, colour, and combinations) | 74.3 | 8.1 |
| Rental of cablevision | 28.8 | 3.1 |
| Photographic equipment and processing | 55.9 | 6.1 |
| Hobbies and crafts, n.e.s. | 31.7 | 3.4 |
| Package holiday trips | 101.3 | 11.0 |
| Reading, total | 101.7 | 11.1 |
| Newspapers | 47.6 | 5.2 |
| Magazines and periodicals | 18.3 | 2.0 |
| Books (excl. schoolbooks) | 35.8 | 3.9 |
| Education, total | 128.2 | 14.0 |

table, that this item--representing already an enormous market in Canada--in fact consumes on average only 3.1% of total expenditures for reading, recreation and education in an average family or household budget. Similarly, total expenditures for sound components, hifi, stereo, etc. represent only a 4% share, total expenditures for motion picture attendance represent a 3.7% share, total expenditures for sporting and athletic equipment purchases represent at most a 4.3% share, and so on. Finally, it is easily seen from the table that only a very few items from the entire list (other than combined categories) exceed our figure of 5% for Telidon, and those items, curiously enough, are for total expenditures on television itself, total expenditures on photographic equipment and processing, total expenditures on package holiday tours, and newspapers. Unless, therefore, one could be convinced that by 1985 households will spend amounts equivalent to some of these categories (or between, say, television and cable television, or television and motion picture attendance), 5% must represent a very generous assumption for Telidon expenditures as a percentage of total expenditures in the recreation, reading, and education budget category.

Lastly, referring to the set of parameters representing anticipated actual subscribers as a percentage of total subscribers, we refer back to Table 18, where supportive data of an illustrative nature were presented. As indicated at that point, we have no specifically relevant information for this set of variables, so they must be chosen on an 'informed judgment' basis. As a result these variables may be seen to have the least amount of 'hard data' behind them. However, we are more than convinced that they too,

are, if not highly optimistic, at least reasonable and conservative. To go farther than this, then, would require considerably more effort than is warranted.

Sensitivity Illustration

On the basis of the above discussion, we believe, quite clearly, that all of our intermediate estimates and assumptions represent an optimistic approach to the calculation methods used. Yet, it cannot of course be denied that underestimating could occur. For this reason we conclude this section with a brief presentation of the effect of using different parameters in the analysis.* Table 36 describes these data, and we discuss them below.

To begin, the table is organized into five columns, with the three parameters discussed above, heading columns 1, 2, and 4, respectively. Column 3 represents the intermediate value 'number of potential households' (which is equivalent to 'affording' households in Table 17, column 3), and Column 5 represents estimated actual subscribers. Finally, all calculations assume an average cost to the household of \$13 per month--whether or not that figure is reachable.

Now, in this table we have marked with an asterisk those combinations of the three variables that result in higher estimated

* This approach was first suggested to us by G.S. Collins of DOC, who kindly provided the data for the analysis.

Table 36

SENSITIVITY CALCULATIONS

| (1) Assumed Annual Growth Rate (in Real \$) Between 1976 and 1985, of Expenditures for "Recreation, Reading, and Education. | (2) Assumed % of Expenditures In Column 1 for Which Telidon Could form a Substitute, by 1985. | (3) Total Number of Households in Canada in 1985, for Which the Ex- penditures repre- sented by Column 2 exceed a \$13/month Assumed Cost of Telidon. | (4) Assumed % of Column 3 who Will Actually Be Subscribers By 1985 | (5) Total Number Of Telidon Subscribers In Canada, In 1985 |
|---|--|--|---|---|
| 2% | 3% | 2,300 | 5% | 115 |
| 2 | 3 | 2,300 | 10 | 230 |
| 2 | 3 | 2,300 | 25 | 575 |
| 2 | 5 | 100,000 | 5 | 5,000 |
| 2 | 5 | 100,000 | 10 | 10,000 |
| 2 | 5 | 100,000 | 25 | 25,000 |
| 2 | 7 | 500,000 | 5 | 25,000 |
| 2 | 7 | 500,000 | 10 | 50,000 |
| 2 | 7 | 500,000 | 25 | 125,000 * |
| 5% | 3% | 30,000 | 5% | 1,500 |
| 5 | 3 | 30,000 | 10 | 3,000 |
| 5 | 3 | 30,000 | 25 | 7,500 |
| 5 | 5 | 360,000 | 5 | 18,000 |
| 5 | 5 | 360,000 | 10 | 36,000 |
| 5 | 5 | 360,000 | 25 | 90,000 * |
| 5 | 7 | 1,270,000 | 5 | 63,500 |
| 5 | 7 | 1,270,000 | 10 | 127,000 * |
| 5 | 7 | 1,270,000 | 25 | 317,000 * |
| 7% | 3% | 65,000 | 5% | 3,250 |
| 7 | 3 | 65,000 | 10 | 6,500 |
| 7 | 3 | 65,000 | 25 | 16,250 |
| 7 | 5 | 650,000 | 5 | 32,500 |
| 7 | 5 | 650,000 | 10 | 65,000 ** |
| 7 | 5 | 650,000 | 25 | 162,500 * |
| 7 | 7 | 2,100,000 | 5 | 105,000 * |
| 7 | 7 | 2,100,000 | 10 | 210,000 * |
| 7 | 7 | 2,100,000 | 25 | 525,000 * |

Source: Collins, 1980.

numbers of subscribers than our figure of 65,000, and with two asterisks, the combination of parameters we used ourselves. From these indicators it may be seen that to reach any of the actual subscriber estimates greater than 65,000 the value of at least one variable must exceed our own value. Moreover, most of the higher estimates (five out of eight) are dependent upon a high estimate of the ratio of actual to potential subscribers (Column 4), and those that are not follow exclusively from assuming that Telidon expenditures will represent 7% rather than at most 5% of total recreation, reading, and education expenditures in a typical household budget. Of these possibilities, the latter seems very remote, based on the data presented in Table 35, and the former appears, to us at least, unlikely. Nevertheless, it could happen, and if it did, actual subscribers could range up to 160,000 in 1985 as opposed to 65,000. We believe it is important to reemphasize, however, that such figures are not put forward as alternative forecasts to those we have presented earlier.

SEPARATION OF FORECASTS INTO ESTIMATES FOR HOME AND BUSINESS

In contrast to the previous section, and previous chapters, we have little to go on for the task of estimating business and household penetrations of Telidon separately. There are, however, some comments that can be made.

First, we refer to the fact that in the historical analogy analysis we separated the available data into (in brief terms) home-and-business, and business-only. This was necessary, of course,

to take account of the fact that two of the nine services, telephones and automobiles, are found both in business and in homes. Under these circumstances the question of relative penetration in the two markets separately is very relevant.

In this context, there are some data that can be brought forward, but they refer to one service only,--i.e., telephones. Here, as a result of this industry being based on the principle of regulated monopoly, we have very complete data, which has been collected and made public for many years. Table 37 displays this information, total telephones broken down by residence and business, for the years 1959 to 1978. This series is available from earlier years, as well, but not the earliest years of the service. What we observe in the table, therefore, is a steady-state situation for a very mature service. Nevertheless, the data are illuminating, not least from the standpoint of the consistency of the business to residence (or business to total) ratio. As may be seen, business has consumed approximately 30% of total telephones for the entire period, and fluctuations about that ratio have been consistently small.

What this tells us about the potential breakdown between home and business for Telidon is unknown. If, however, one could anticipate that Telidon might be equally attractive in both markets, and priced according to what each market will bear, according to past experience, then conceivably such an overall steady-state ratio might be appropriate for Telidon also. On the other hand, as is well known, in the Prestel case business far exceeds residence usage at present, there being reported to be some 5,500 business

Table 37

TELEPHONES IN CANADA, 1959-1978

(000)

Business
as a
Percent
of Total

| <u>Year</u> | <u>Business</u> | <u>Residence</u> | <u>Total</u> | |
|-------------|-----------------|------------------|--------------|------|
| 1959 | 1569 | 3870 | 5439 | 29.8 |
| 1960 | 1674 | 4054 | 5728 | 29.2 |
| 1961 | 1730 | 4284 | 6014 | 28.8 |
| 1962 | 1817 | 4513 | 6330 | 28.7 |
| 1963 | 1910 | 4747 | 6657 | 28.7 |
| 1964 | 2016 | 5003 | 7019 | 28.7 |
| 1965 | 2142 | 5303 | 7445 | 28.8 |
| 1966 | 2290 | 5603 | 7893 | 29.0 |
| 1967 | 2423 | 5935 | 8358 | 29.0 |
| 1968 | 2557 | 6261 | 8818 | 29.0 |
| 1969 | 2719 | 6577 | 9296 | 29.2 |
| 1970 | 2854 | 6896 | 9750 | 29.3 |
| 1971 | 2996 | 7273 | 10269 | 29.2 |
| 1972 | 3183 | 7804 | 10987 | 28.9 |
| 1973 | 3428 | 8249 | 11677 | 29.4 |
| 1974 | 3691 | 8763 | 12454 | 29.6 |
| 1975 | 3928 | 9237 | 13165 | 29.8 |
| 1976 | 4127 | 9758 | 12885 | 29.7 |
| 1977 | 4309 | 10179 | 14488 | 29.7 |
| 1978 | 4528 | 10644 | 15172 | 29.8 |

Source: Statistics Canada, Catalogue 56-203.

units out of a total of approximately 6,000 at the present time. Bearing in mind that Prestel represents only videotex penetration, however, not teletext, the more important figures to use in suggesting comparisons to Telidon would be Prestel figures plus Oracle and Ceefax.* Here, the contrast is completely in the other direction, since the latter have much higher penetrations, now reported informally to be as much as 50,000 to 80,000 in total--all, of course, in the home market. On this basis the calculations would show a reversed situation, with residence consuming 90-95% of the total units in place, as against only 5-10% for business.

We see, therefore, that using installed base figures for present services leads to inconclusive results, and we are left with only qualitative, subjective information with which to work. In this context, we believe that the following observations are relevant, but they by no means should be assumed to be conclusive evidence of any specific situation developing.

We observe, first, that it is not really legitimate to make comparisons with present Prestel experience on the business/home question, because North America is different from Britain and Europe on a number of dimensions. The most important of these differences, here, is the fact that information systems have developed to a much higher degree of sophistication, complexity, and availability in the U.S. and Canada, as compared to Europe. Principally, this is based on the fact that data communications

* Ceefax and Oracle are the names of the two teletext services in Britain, one operated by the BBC, the other by the Independent Broadcasting Authority.

applications--i.e., the combination of computers and telecommunications--has grown much more rapidly and extensively in North America, and particularly in the United States. Consequently, a greater variety of terminals, computers, data bases, software, communications networks, and so on is available to business, and these systems are extremely sophisticated, and available now. Bearing these factors in mind, it seems only reasonable that Telidon will have a difficult time making inroads in such markets, and more than likely will manage to do so only where there are niches that haven't been filled. In this context, of course, it has been suggested that small business is an ideal target. Once again, however, it must be recognized that the competition has gotten there first--this time in the form of what were expected to be 'home' computers, but have now turned out to be, very obviously, 'small business' computers--specifically, Radio Shack, Apple, Commodore, Texas Instruments, Ohio Scientific, and now IBM, Digital Equipment, Hewlett Packard and a host of others. This, obviously, is now becoming an intense market, and each of these machines, if the user so desires, can be used as an information terminal connected to either remote or local databases. In summary, what we are suggesting in these comments is that in the business world, overall, competition with Telidon will be formidable, despite the present apparent evidence from Prestel.

THE RGB VS. RF ISSUE

We believe we can dispense with the RGB vs. RF issue rather quickly (from our perspective) for in fact the final answer

to this debate depends on technical as well as market aspects. One part of this debate, for example, is whether display standards of 20 lines x 40 characters or 16 lines x 32 characters are more appropriate for the teletext application. We are not in a position, of course, to get into the technical side of this debate. However, what we can say is that RF input, to whatever display standards are appropriate, would be of inestimable value in assisting the growth of Telidon.

As is patently obvious, North America is not like Europe in the context of the television industry, any more than it is with respect to business information systems and small computers. Specifically, the television rental market in Canada and the United States is miniscule compared to that in Britain and Europe, and we therefore cannot rely, as with Ceefax and Oracle, on having a small monthly increment added to the rent of an ordinary television set to boost the penetration of teletext decoders. Instead, the entire, enormous base of purchased, already-paid-for television sets in North America should be made available as potential Telidon receiving devices, and the only way to do this is with RF decoders--whatever the most appropriate standards might be.

Secondly, a comment with respect to quality requirements is, we believe, appropriate. This observation has to do with the fact that, contrary to what may be thought to be the case, markets are in some cases, rather indifferent to graphic quality. As a single example we mention the case of video games. Here, as is well known, graphics are distinctly of the alphamosaic variety, even in the latest, most sophisticated versions. Specifically, it is not well-defined pictures that are important on the screen, but

motion, animation, fast response time, and the ability to have the device calculate appropriate responses to the input provided by the game player(s). In a similar way, in the teletext application, it is more than likely that if a market exists at all it will have a large component of strictly text-only pages--although these could, of course, be composed using colour, different type styles, and so on. If, then, these prognostications prove to be correct, sophisticated graphics will again be found to be less important than might now be anticipated.

To summarize, the RGB vs. RF issue may clearly be stated in the context of the impact of 'market-pull.' We believe strongly, in other words, that in order to enhance as much as possible Telidon's market potential, some way should be found to produce and market a simple, inexpensive, RF version, as well as the more sophisticated RGB units now available. This may be easier said than done, of course. From the market standpoint, however, it appears to us essential.

IMPLICATION OF RESULTS ON PRESENTLY PLANNED FIELD TRIALS

As can easily be understood by now, we are interested in this report in real, paid-for, potential markets. Unfortunately, presently planned Telidon field trials are not addressing this issue because, at least as far as we know now, user charges are not expected to be incurred in any of those trials. It is obvious, however, that paying for these services is the ultimate objective and, we expect, will be eventually addressed in a comprehensive

manner.

In the meantime, there are other things that can be accomplished with respect to results developed in this report, and testing of those results in the context of real users. Specifically, it is our thought that the hypotheses developed in the competitive and complementary analysis might be thoroughly examined, perhaps in laboratory or very small field trial settings. What we have in mind here, it should be noticed, is not asking people what they would like--which is more or less the standard format for traditional market research, focus groups, and the like--but presenting small groups of individuals, both in home and business environments, with the best that Telidon has to offer in each of the eight application categories discussed in Chapter 3, then comparing results. By doing this in a well organized manner, we believe that many excellent answers could be obtained to the question, What is it that Telidon really will do for users?

To carry out such a program of research is, of course, nontrivial. Moreover, we are well aware that the above objectives are, in fact, precisely the same as those of at least some of the trials now underway. What we have seen happen before, however, and suggest that it would be well to avoid this time if possible, is simply putting new technology in place to 'see if anyone is interested'. In this context it is important to reiterate that our focus of attention in the competitive and complementary analysis was on what other ways householders and business people have, and will have, to address the same problems (or opportunities) that Telidon can deal with. In the marketing

context, in other words, it is not enough to provide Telidon to a household or business without cost, then measure usage and assume projectable results. On the contrary, the first thing a real user who must pay for the service will look for is, What other options do I have?

What the above would generally imply, of course, is that market tests with real money are needed. It is important to realize, however, that there are other ways of going about the problem as well. For example, with respect to our earlier comments about games, etc. on Telidon, it would be entirely possible and feasible to develop such games and other recreational material, then make provision, in laboratory or small field trial settings, for testing user reaction against what is available with computers or other devices. Such hypothesis testing, it should be noticed, could still be done without cost to the user--provided, of course, that the field trial organizing entity (or someone else) puts up the money for additional equipment and operating costs. Despite such costs, however, we believe wholeheartedly that if such comparison testing was carried out, it would add greatly to the present store of knowledge in this field.

POTENTIAL TRADEOFF IN GROWTH BETWEEN TELETEXT AND VIDEOTEX FORMS OF TELIDON

We are inclined to begin this next-to-last section with a simple list of the items that we believe are relevant to the above

topic. In a sense, these are hypotheses, but we believe substantially supportable ones:

1. Teletext terminals should undoubtedly be less expensive to begin with, especially if RF versions are made available;
2. No continuous monthly cost is incurred by users;
3. There appears to be a real market need for such devices, even if they were used only for enhanced captioning;
4. Experience in other countries, specifically Britain, illustrates that teletext penetration can, at least, far exceed that for videotex; and
5. It is obvious that the U.S. is very interested in teletext, at much higher levels than videotex--specifically, the major networks, the federal government (with its contribution to the WETA trial in Washington), the Public Broadcasting System, numerous individual stations around the country, and representatives of the manufacturing industry through the Electronic Industries Association (EIA).

While it cannot be argued, therefore, that videotex, being two-way, interactive, more flexible, able to carry more information and so on, is more 'exciting', nonetheless, the market might still favor the teletext form. The key here, we believe, is 'exciting to whom?' We are inclined to suggest that the real answer is exciting to the technology-push rather than the market-pull side of the equation. This is not to suggest, of course, that work should not proceed with all due haste on continuing to solve the many problems and questions still facing full videotex implementation plans, either via the telephone or transmitted and received over cable television channels. What it does suggest, however, is a need for caution in anticipating that the market

is necessarily ready for interactive information capabilities of the type that Telidon provides.

RADIO SHACK, COMPUSERVE, THE SOURCE, AND TELIDON

At this point we have now, finally, come full circle, to the concept we introduced at the beginning of this report, namely, What is videotex?

Reflecting on this question, we are inclined to suggest that in the last analysis, the market will decide, for, "all too often, standards follow markets, rather than the other way around."* This being the case, the issue of impacts of Radio Shack, CompuServe, and so on, is very important.

Perhaps more importantly than anything else in this context is the fact that these systems are ahead of Telidon in the real market--i.e., the race for consumer dollars, whether at home or in business. It is reported, for example, that there already exist some 31,000 users of 'commercial viewdata-type services' in various countries (including Prestel), of which more than 24,000 are in the United States, Canada and Australia. As seen in Table 38, the majority of these are operated by Dow Jones News/Retrieval Service which operates an essentially specialized service for business and investors. However, more than 11,000 users are reported to be subscribers to the much more general

* This quotation, parenthetically, is from our earlier report, where we made a similar observation. (Hough and Associates and Communications Studies and Planning Ltd., 1979, p.3).

Table 38
COMMERCIAL VIEWDATA-TYPE SERVICES

| <u>Company</u> | <u>Name of Service</u> | <u>Start-Up Date</u> | <u>Locale</u> | <u>Users</u> |
|--------------------------------------|---|----------------------|--|-----------------|
| Helsingin Telset Oy | Telset | 1978 | Helsinki | 200+ |
| British Post Office | Prestel | Oct., 1978 | Seven Countries | 6,300 |
| Dow Jones Source Telecomputing | News Retrieval Service The Source | 1977 June, 1979 | U.S.A., Canada U.S.A., Canada, Australia | 13,500 7,000 |
| CompuServe | CompuServe Information Service | July, 1979 | U.S.A. | 4,000 |
| VNU/TVS | TVS | 1980 | Amsterdam | 50 |

Source: Viewdata/Videotex Report, LINK Resources Corporation,
December 1980.

purpose information retrieval vendors, CompuServe and The Source. Understandably, there is very likely to be double counting in some of these figures since terminal owners can easily sign up for both (or all three) services, then use all of them or none of them. What the figures at least illustrate, however, is that as far as Telidon is concerned, others are ahead in the videotex, or videotex-like, game. We believe, therefore, that in this context Telidon system providers must reduce costs, make provision for the use of already-prepared data bases, provide for alphanumeric as well as numeric-only input, and in general attempt to establish highly competitive systems to those mentioned here. If this can be done, Telidon can and will establish itself with a very bright future.

Chapter 5

SUMMARY AND CONCLUSIONS

SUMMARY

We have in this report attempted to establish, using proven, reliable methods, estimates of reasonable maximum growth for Telidon over the next five to ten years. The establishment of these estimates has been based principally on two forecasting and demand estimation methods called, respectively, the historical analogy method and the income and expenditure analysis method. In addition we used a third analytical approach, called the competitive and complementary analysis method, to compare Telidon with other means of providing online information, calculation, recreation, and other one-way and interactive services.

The results of this work were essentially as follows. First, from the historical analogy method--in which potential growth of Telidon was compared to actual growth of other technological developments in the past--we found that maximum penetration rates might range from 84,000 to 140,000 terminals in 1986, or 260,000 to 750,000 in 1991. Of these estimates we have the greatest confidence in the lower figures, because they are based on growth rates of a composite of previous services found in home and business environments, but excluding television--which is shown to have developed in its early years much more rapidly and uniquely than other services.

From the income and expenditure analysis, which was

carried out using explicit and comprehensive Canadian income and household expenditure data, we found that, similarly, maximum penetration rates could reach 65,000 to 100,000 units by the mid-1980s, but only if average cost to using households could be brought into the range of ten to thirteen dollars per month. Above such a cost range, potential penetration rates drop off rapidly.

From the third analytical method, dealing with competitive and complementary products and services, we found that, at least on a subjective, non-quantitative basis, Telidon is likely to be most successful with information retrieval, person-to-person, and transaction applications. By contrast, considering alternatives available to homeowners and businesses, we have much less confidence that Telidon services can be effectively competitive in such applications as calculations, quizzes and games, education (i.e., 'Telidon assisted instruction'), opinion polling, and telesoftware. The principle reason for this conclusion is that other products and services already on the market or shortly coming on the market--that is, products and services such as small home and business computers, purpose-built electronic games, video cassette recorders, videodisc players, alternative mass-market information systems, and so on--form together a set of competitive devices and systems against which Telidon is likely to have much less success than in the other application areas.

Finally, in a section devoted to 'additional considerations,' we made a number of other observations with respect to market aspects. Included there were, among others, these major points:

1. In the home vs. business area, evidence on which to base forecasts is still very inconclusive, since in some cases it appears that business is more interested in Telidon, and from other stand-points the reverse is the case. In general, however, we are more confident of a strong 'home' market in North America than a business one, because businesses have a much wider variety of other information devices, systems, and capabilities to choose from than do homeowners.
2. With respect to the RGB vs. RF issue (i.e., that referring to the question of appropriate interface electronics between Telidon decoders and television sets), we believe that it is imperative that some type of inexpensive RF unit be made available, to whatever technical standards are appropriate and feasible. If this is not done, the entire base of presently installed, already-paid-for television sets in the U.S. and Canada will be unusable as Telidon information terminals; if it is done, on the other hand, the reverse will be the case.
3. Lastly, with respect to teletext and videotex forms of Telidon, we believe strongly that the market is just as apt, if not more apt, to favor teletext as against videotex in the long run. This conclusion is supported by a number of factors, not least of which is the very encouraging interest in the field in the United States. In order to reach this market, however, much effort will continue to be required, just as it has been up to now.

IMPORTANCE OF GOVERNMENT FUNDING IN STARTING THE PROCESS

In considering ways to start the process of producing and marketing Telidon-based information systems, it is clear that government funding will be needed. This conclusion is based on the fact that what Telidon faces is essentially the same 'chicken and egg' situation that impacts all new communication developments, whether they are broadcast- or telecommunication-oriented. In essence, the problem is one of connectivity: potential users of a

new telephone system will not be interested in such a service until they have someone to call, potential buyers of radios and television sets have no incentive to purchase such units if there is nothing to listen to or view, potential broadcasters cannot justify setting up broadcasting facilities and programming unless there are listeners and viewers, and so on.

In many countries, of course, this problem is solved strictly by the government--that is, with government ownership and operation of the means of communications, both broadcast and telecommunications. In Canada and the United States, however, this approach has not at all been followed exclusively, and it is not anticipated that it will be for Telidon. On the contrary, the objective of government up to now has been to encourage and to assist in the process, leaving to private industry the ultimate goal of creating economically feasible market opportunities.

In this context, we strongly believe that such support should continue and be further strengthened in the case of Telidon, because the systems and services it represents are, clearly, still some distance from market maturity. Particularly in the face of the formidable, continuing challenges from Prestel and Antiope, it is our view that funding of the order of several millions of dollars is entirely feasible and appropriate, and will at least assist in breaking the 'chicken and egg' problem.

CONCLUSIONS AND RECOMMENDATIONS

Despite the fact that market estimates for Telidon are suggested as being lower in this report than in other, earlier

documents addressing this subject, it should not at all be assumed that we are pessimistic on this subject. On the contrary, if Telidon could reach the market penetrations suggested herein, that would be a very good market indeed.

To do so, we recommend that the Federal Government continue its support of the development effort, and especially fund the purchase of additional terminals and further terminal development. Especially important in our view, is the requirement for inexpensive, teletext-type decoders that could be purchased just as cable converters are today. The availability of such devices would, we believe, enhance the market for Telidon-compatible receiving devices very significantly.

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APPENDIX A

EXTRACT FROM URBAN EXPENDITURE SURVEY 1976:
"DETAILED AVERAGE EXPENDITURE, BY FAMILY INCOME,
EIGHT CITIES, CANADA, 1976--ALL FAMILIES AND
UNATTACHED INDIVIDUALS"

TABLE 20. Detailed Average Expenditure, by Family Income.
Eight Cities, Canada, 1976

All Families and Unattached Individuals

| | | Family income - Revenu de la famille | | | | | | | | | | | | | |
|---------|---|--------------------------------------|--------------------|-----------------------------------|--------------------|-------------------------------|--------------------|-------------------------------|--------------------|-------------------------------|--------------------|-------------------------------|--------------------|-------------------------------|--------------------|
| | | All classes Toutes catégories | | Under \$4,000 Moins de \$4,000 | | \$4,000 - 4,999 | | \$5,000 - 5,999 | | \$6,000 - 7,999 | | \$8,000 - 9,999 | | \$10,000 - 11,999 | |
| | | Av. per fam. Moy. par fam. | % rptg. % décl. | Av. per fam. Moy. par fam. | % rptg. % décl. | Av. per fam. Moy. par fam. | % rptg. % décl. | Av. per fam. Moy. par fam. | % rptg. % décl. | Av. per fam. Moy. par fam. | % rptg. % décl. | Av. per fam. Moy. par fam. | % rptg. % décl. | Av. per fam. Moy. par fam. | % rptg. % décl. |
| 1- 12 | Food..... | 2869.4 | 100.0 | 973.5 | 99.3 | 1329.6 | 100.0 | 1661.9 | 100.0 | 1741.5 | 100.0 | 1854.9 | 100.0 | 2242.6 | 100.0 |
| 1 | Prepared at home | 2214.2 | 99.5 | 836.9 | 94.2 | 1152.7 | 98.5 | 1499.2 | 100.0 | 1453.1 | 99.1 | 1490.6 | 99.4 | 1815.8 | 100.0 |
| 2- 4 | Board paid to private households | 12.0 | 3.0 | 35.2 | 4.5 | 31.3 | 4.8 | 11.0 | 2.4 | 22.0 | 4.7 | 7.5 | 1.8 | 13.2 | 2.4 |
| 5- 8 | Food consumed in eating places | 525.6 | 87.7 | 88.2 | 49.8 | 106.0 | 63.6 | 109.7 | 63.4 | 214.3 | 70.7 | 307.0 | 86.1 | 363.6 | 91.8 |
| 9- 12 | Food away from home (overnight or longer) | 117.6 | 46.9 | 13.3 | 17.5 | 39.6 | 20.3 | 42.0 | 16.1 | 52.1 | 30.3 | 49.8 | 33.3 | 50.1 | 35.4 |
| 9- 11 | Meals in eating places-restaurants, etc. | 104.4 | 42.4 | 12.4 | 16.0 | 35.3 | 17.6 | 39.9 | 14.8 | 47.7 | 26.5 | 45.5 | 28.6 | 42.2 | 31.3 |
| 12 | Food etc. purchased and prepared on trip | 13.2 | 14.7 | .9 | 2.8 | 4.3 | 7.4 | 2.0 | 5.2 | 4.4 | 8.2 | 4.3 | 8.2 | 7.9 | 9.4 |
| 20-118 | Shelter..... | 2809.6 | 99.6 | 1173.5 | 96.1 | 1580.5 | 100.0 | 1663.8 | 100.0 | 1859.3 | 99.4 | 2067.5 | 99.4 | 2153.9 | 99.5 |
| 20- 22 | Reoted living quarters | 1035.3 | 52.0 | 836.9 | 75.6 | 1049.1 | 68.9 | 1073.9 | 71.4 | 1123.3 | 67.7 | 1453.4 | 78.1 | 1275.2 | 67.0 |
| 20 | Rent | 1012.8 | 51.7 | 833.0 | 75.6 | 1041.9 | 66.7 | 1051.8 | 71.0 | 1104.7 | 66.9 | 1430.0 | 77.8 | 1252.8 | 66.5 |
| 21 | Repairs paid by family | 16.7 | 10.9 | 1.0 | 2.2 | 4.8 | 5.5 | 19.6 | 17.0 | 12.9 | 12.9 | 17.4 | 12.8 | 19.0 | 20.3 |
| 22 | Premium for tenant's insurance | 5.8 | 10.3 | 3.0 | 7.0 | 2.4 | 2.7 | 2.5 | 7.8 | 5.7 | 12.6 | 6.1 | 11.5 | 3.5 | 8.1 |
| 30- 85 | Owned living quarters | 1193.5 | 50.2 | 146.4 | 19.3 | 265.5 | 32.1 | 259.8 | 26.1 | 399.2 | 32.3 | 308.5 | 22.6 | 495.9 | 35.8 |
| 30 | Property taxes and assessments | 322.9 | 49.4 | 81.2 | 19.2 | 129.7 | 30.9 | 111.2 | 24.8 | 167.5 | 31.6 | 128.1 | 22.0 | 203.0 | 35.0 |
| 31 | Premiums for insurance on home | 53.4 | 44.5 | 12.6 | 17.4 | 21.0 | 23.4 | 19.1 | 21.2 | 32.1 | 28.7 | 20.1 | 19.3 | 33.2 | 31.4 |
| 32 | Condominium charges and special levies | 14.3 | 2.5 | .8 | .7 | 8.8 | 1.0 | 10.9 | .9 | 8.7 | 1.0 | 5.2 | .4 | 3.5 | 1.2 |
| 40- 75 | Repairs and maintenance | 213.4 | 37.1 | 32.0 | 13.0 | 61.3 | 24.1 | 93.0 | 18.5 | 133.5 | 20.0 | 79.0 | 16.9 | 103.9 | 25.1 |
| 40- 55 | Materials | 114.2 | 31.7 | 10.8 | 8.0 | 21.0 | 15.8 | 10.4 | 12.0 | 61.3 | 15.3 | 33.9 | 13.4 | 46.4 | 18.6 |
| 60- 75 | Contract cost | 99.2 | 15.0 | 21.2 | 9.1 | 40.3 | 11.9 | 82.6 | 12.8 | 79.2 | 13.0 | 45.1 | 6.8 | 57.5 | 13.2 |
| 80- 81 | Interest on mortgages..... | 546.0 | 32.7 | 17.8 | 2.0 | 31.0 | 6.3 | 23.1 | 1.6 | 44.1 | 7.0 | 64.4 | 8.8 | 124.8 | 12.1 |
| 82- 85 | Other expenses | 43.5 | 13.7 | 2.1 | .7 | 13.7 | 1.7 | 2.5 | 3.3 | 13.3 | 3.6 | 11.6 | 4.1 | 27.4 | 9.0 |
| 90- 99 | Other housing | 142.8 | 38.1 | 24.4 | 6.8 | 27.4 | 13.1 | 34.5 | 11.3 | 40.8 | 19.9 | 56.0 | 19.8 | 41.5 | 24.4 |
| 90 | Lodging while away at school or college | 10.5 | 1.2 | 6.4 | .5 | 9.8 | .3 | 9.8 | .3 | 3.6 | 1.0 | 6.0 | .3 | 10.5 | .3 |
| 91 | Lodging at work away from home | 7.5 | 1.1 | 1.1 | .1 | 11.4 | 1.3 | 11.4 | 1.3 | 1.1 | .2 | 1.1 | .2 | 7.5 | .2 |
| 92- 94 | Lodging on vacation, travelling n.e.s. | 79.6 | 30.5 | 13.8 | 5.6 | 24.0 | 11.2 | 5.9 | 6.8 | 24.6 | 14.6 | 29.3 | 16.1 | 30.6 | 20.9 |
| 95- 99 | Vacation home | 45.1 | 9.5 | 4.3 | 1.2 | 3.3 | 2.0 | 7.5 | 2.9 | 12.7 | 4.6 | 20.5 | 4.2 | 10.9 | 5.3 |
| 95 | Reoted vacation home | 6.4 | 2.4 | .4 | .7 | .4 | .7 | .4 | .7 | .3 | .7 | 1.4 | .6 | 2.3 | 1.3 |
| 96- 99 | Owned vacation home | 38.7 | 7.2 | 4.3 | 1.2 | 3.3 | 2.0 | 7.0 | 2.2 | 12.3 | 3.9 | 19.2 | 3.5 | 8.6 | 4.0 |
| 110-118 | Water, fuel and electricity | 438.0 | 83.0 | 165.7 | 53.7 | 238.5 | 65.0 | 295.7 | 79.3 | 295.9 | 75.8 | 249.6 | 71.2 | 341.3 | 80.5 |
| 110 | Water | 44.8 | 55.7 | 23.9 | 34.3 | 24.3 | 37.3 | 31.1 | 49.2 | 32.3 | 43.0 | 29.1 | 36.9 | 29.4 | 42.8 |
| 111 | Oil and other liquid fuel | 115.8 | 31.4 | 41.0 | 14.7 | 74.7 | 22.5 | 87.9 | 29.8 | 83.1 | 25.4 | 68.4 | 21.7 | 89.1 | 24.1 |
| 112 | Piped gas | 90.1 | 30.7 | 32.5 | 15.2 | 38.9 | 20.0 | 53.5 | 22.5 | 53.3 | 23.2 | 45.7 | 20.4 | 73.2 | 29.8 |
| 113 | Electricity | 178.2 | 81.7 | 65.9 | 51.6 | 90.6 | 65.0 | 119.8 | 79.3 | 121.9 | 74.6 | 101.6 | 68.8 | 142.3 | 78.2 |
| 114-117 | Other fuels and heating costs | 5.1 | 10.6 | 1.1 | 1.8 | 8.7 | 5.1 | 2.5 | 1.2 | 1.6 | 3.0 | 3.7 | 3.4 | 3.1 | 6.3 |
| 118 | Rental of heating equipment | 3.8 | 10.2 | 1.3 | 3.2 | 1.3 | 4.2 | .8 | 1.6 | 3.9 | 6.3 | 1.1 | 3.5 | 4.2 | 8.8 |
| 120-178 | Household operation..... | 697.1 | 99.9 | 217.5 | 99.3 | 296.2 | 100.0 | 352.0 | 100.0 | 408.3 | 99.2 | 469.1 | 100.0 | 537.8 | 100.0 |
| 120-124 | Communications | 215.2 | 99.1 | 97.2 | 93.3 | 130.9 | 97.3 | 135.5 | 98.9 | 151.5 | 97.9 | 184.0 | 99.0 | 182.1 | 99.9 |
| 120-122 | Telephone | 195.9 | 97.9 | 85.8 | 86.0 | 121.7 | 94.8 | 125.2 | 98.6 | 140.0 | 93.7 | 168.1 | 97.9 | 170.2 | 98.2 |
| 120 | Basic charge | 105.7 | 96.0 | 71.0 | 78.4 | 85.4 | 90.6 | 94.0 | 95.7 | 86.4 | 90.3 | 94.9 | 95.6 | 101.1 | 97.7 |
| 121 | Long distance charges | 86.8 | 79.5 | 13.3 | 38.1 | 34.2 | 52.0 | 27.5 | 65.8 | 50.8 | 63.1 | 68.5 | 73.5 | 65.9 | 78.7 |
| 122 | Other charges | 3.4 | 22.0 | 1.5 | 16.7 | 2.2 | 17.5 | 3.7 | 20.1 | 2.9 | 22.2 | 4.8 | 21.1 | 3.2 | 24.2 |
| 123 | Postage | 18.1 | 87.9 | 11.3 | 78.6 | 8.7 | 77.2 | 10.0 | 79.2 | 11.0 | 86.4 | 15.0 | 84.0 | 11.3 | 87.4 |
| 124 | Telegraph, express | 1.2 | 7.7 | .1 | 1.2 | .4 | 5.3 | .2 | 1.3 | .5 | 6.2 | .8 | 6.1 | .6 | 4.1 |
| 130-133 | Child care expenses | 65.5 | 14.5 | 1.4 | 1.0 | 5.4 | 2.2 | 1.5 | 3.6 | 5.1 | 2.9 | 32.2 | 7.8 | 46.3 | 13.3 |
| 130 | Day care centres and day nurseries | 13.5 | 2.6 | 1.0 | .3 | 1.9 | 1.5 | 1.9 | 1.5 | 3.8 | 1.2 | 6.3 | 1.6 | 10.3 | 2.9 |
| 131 | Licensed family day care | 1.1 | .3 | .4 | .4 | .4 | .4 | .4 | .4 | .4 | .4 | .4 | .4 | .4 | .4 |
| 132 | Other care outside home | 13.7 | 2.0 | 1.3 | .8 | 1.3 | .8 | 1.3 | .8 | 1.3 | .8 | 1.3 | .8 | 1.3 | .8 |
| 133 | Baby-sitting and other home care | 37.2 | 12.0 | .4 | .8 | 3.5 | .7 | 1.5 | 3.6 | 5.1 | 2.9 | 22.2 | 6.5 | 22.9 | 11.4 |
| 134-135 | Domestic help (excl. child care) | 37.4 | 8.3 | 5.7 | 3.6 | 4.2 | 4.4 | 2.8 | 6.1 | 19.6 | 5.5 | 6.6 | 4.6 | .9 | 2.4 |
| 134 | Wages, uniforms for domestic help | 31.6 | 5.1 | 3.4 | 2.2 | 4.0 | 2.4 | 2.2 | 4.1 | 18.6 | 2.8 | 3.4 | 2.2 | .4 | .5 |
| 135 | Other paid help in or around dwelling | 5.8 | 4.6 | 2.3 | 2.1 | .2 | 2.0 | .7 | 2.0 | .9 | 3.0 | 3.2 | 3.1 | .5 | 2.4 |
| 136-139 | Cleaning services | 80.4 | 83.4 | 27.8 | 59.5 | 34.1 | 70.5 | 38.3 | 63.2 | 57.8 | 78.5 | 65.7 | 82.7 | 63.6 | 76.5 |
| 136 | Laundry sent out (incl. diaper service) | 7.0 | 7.7 | 3.2 | 5.7 | 3.7 | 5.5 | 5.1 | 9.4 | 8.2 | 7.2 | 8.1 | 6.4 | 3.9 | 7.3 |
| 137 | Cleaning sent out | 47.3 | 68.7 | 8.4 | 35.1 | 15.1 | 50.5 | 10.7 | 39.1 | 21.5 | 54.2 | 22.1 | 58.3 | 31.5 | 54.3 |
| 138 | Coin-operated washer and dryer | 22.3 | 30.9 | 14.3 | 39.5 | 15.2 | 34.6 | 21.4 | 26.6 | 25.8 | 42.1 | 29.8 | 49.0 | 25.9 | 41.6 |
| 139 | Self-service dry cleaning | 3.7 | 7.6 | 1.8 | 6.0 | .1 | 2.5 | 1.1 | 8.5 | 2.4 | 7.6 | 5.8 | 10.2 | 2.4 | 10.2 |
| 140-150 | Household cleaning supplies | 91.8 | 98.3 | 28.9 | 90.4 | 41.3 | 96.1 | 59.4 | 96.6 | 59.1 | 98.5 | 61.2 | 97.0 | 85.8 | 99.5 |
| 140 | Detergent liquid | 13.8 | 91.5 | 5.6 | 74.7 | 8.9 | 85.0 | 9.9 | 86.5 | 11.1 | 88.6 | 11.4 | 87.6 | 15.3 | 94.4 |
| 141 | Detergent powder | 19.2 | 67.0 | 6.7 | 57.6 | 8.5 | 57.6 | 12.7 | 65.9 | 12.2 | 66.2 | 11.4 | 60.1 | 16.3 | 64.2 |
| 142 | Automatic dishwasher detergent | 8.6 | 30.3 | 1.3 | 9.2 | 3.4 | 17.1 | 5.4 | 12.0 | 3.5 | 14.0 | 4.2 | 18.9 | 6.8 | 27.0 |

Source: Urban Expenditure Survey 1976, Statistics Canada
Catalogue 62-567, 1979, pp. 36-53.

TABLEAU 20. Dépenses moyennes détaillées, selon le revenu de la famille,
huit villes, Canada, 1976

Toutes familles et des personnes seules

| Family income — Revenu de la famille | | | | | | | | | | | | | |
|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|---------|
| \$12,000 — 14,999 | | \$15,000 — 19,999 | | \$20,000 — 24,999 | | \$25,000 — 29,999 | | \$30,000 — 34,999 | | \$35,000 and over — \$35,000 et plus | | | |
| Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | | |
| 2475.7 | 100.0 | 2958.9 | 100.0 | 3400.2 | 100.0 | 3726.4 | 100.0 | 4141.8 | 100.0 | 4971.9 | 100.0 | Alimentation | 1- 12 |
| 1939.2 | 99.6 | 2335.8 | 100.0 | 2619.9 | 100.0 | 2795.2 | 100.0 | 2998.2 | 100.0 | 3493.8 | 100.0 | Aliments préparés à la maison | 1 |
| 8.3 | 1.7 | 4.1 | 2.3 | 7.5 | 2.4 | 8.7 | 2.8 | 19.5 | 4.6 | 17.6 | 5.4 | Pension payée à des ménages privés | 2- 4 |
| 449.3 | 89.4 | 529.3 | 93.8 | 637.1 | 95.5 | 742.3 | 94.0 | 877.2 | 97.7 | 1114.9 | 97.7 | Aliments consommés dans des restaur., etc. | 5- 8 |
| 78.9 | 45.1 | 89.8 | 45.3 | 135.8 | 58.2 | 180.2 | 62.8 | 247.0 | 71.7 | 345.7 | 72.2 | Repas à l'ext. (absence 1 nuit ou plus) | 9- 12 |
| 69.0 | 39.3 | 76.9 | 40.5 | 121.3 | 53.9 | 159.2 | 58.7 | 221.6 | 63.4 | 311.8 | 67.7 | Repas dans des restaurants, etc. | 9- 11 |
| 9.9 | 15.1 | 12.9 | 15.9 | 14.4 | 17.5 | 20.9 | 20.3 | 25.4 | 20.3 | 33.9 | 24.2 | Aliments achetés et préparés en voyage | 12 |
| 2378.5 | 100.0 | 2819.7 | 99.8 | 3306.1 | 99.9 | 3553.7 | 100.0 | 3969.7 | 99.7 | 4786.3 | 100.0 | Logement | 20-118 |
| 1371.3 | 67.9 | 1101.9 | 52.1 | 957.1 | 41.4 | 794.1 | 30.6 | 709.3 | 25.0 | 545.4 | 16.8 | Logement loué | 20- 22 |
| 1345.2 | 67.4 | 1077.3 | 51.9 | 934.8 | 41.2 | 765.2 | 30.2 | 697.2 | 25.0 | 512.6 | 16.8 | Loyer | 20 |
| 16.6 | 16.2 | 18.4 | 12.6 | 15.5 | 8.8 | 23.7 | 8.8 | 8.9 | 4.0 | 26.9 | 5.2 | Réparations payées par la famille | 21 |
| 9.4 | 15.5 | 6.2 | 12.3 | 6.8 | 11.0 | 5.3 | 9.7 | 3.1 | 4.9 | 5.9 | 4.5 | Prime d'assurance de locataire | 22 |
| 582.4 | 34.1 | 1160.8 | 51.5 | 1693.5 | 63.7 | 1953.0 | 72.1 | 2327.4 | 78.2 | 2939.3 | 86.8 | Logement appartenant à l'occupant | 30- 85 |
| 184.5 | 33.8 | 307.8 | 50.5 | 401.2 | 62.7 | 488.5 | 70.4 | 562.7 | 77.7 | 770.0 | 85.7 | Taxes et cotisations foncières | 30 |
| 11.7 | 29.3 | 48.8 | 45.8 | 63.9 | 56.0 | 81.9 | 64.5 | 88.5 | 70.4 | 135.7 | 80.2 | Primes d'assurance sur la maison | 31 |
| 4.2 | 1.2 | 15.7 | 2.9 | 19.1 | 3.7 | 23.2 | 3.6 | 20.6 | 4.0 | 35.5 | 5.1 | Frais de condominium et taxes spéciales | 32 |
| 107.9 | 25.3 | 200.6 | 39.4 | 301.5 | 48.8 | 364.4 | 52.2 | 320.1 | 58.8 | 472.6 | 63.2 | Réparations et entretien | 40- 75 |
| 66.9 | 22.0 | 104.5 | 33.8 | 174.8 | 44.2 | 227.8 | 46.0 | 178.7 | 54.0 | 218.1 | 54.0 | Matériaux | 40- 55 |
| 41.0 | 9.3 | 96.1 | 13.2 | 126.7 | 14.7 | 136.7 | 20.6 | 141.4 | 22.8 | 254.6 | 32.5 | Coût à forfait | 60- 75 |
| 234.8 | 19.8 | 535.4 | 35.8 | 853.1 | 49.2 | 926.0 | 55.3 | 1256.6 | 60.8 | 1425.1 | 66.1 | Intérêts sur hypothèques | 80- 81 |
| 19.5 | 9.2 | 52.6 | 16.2 | 54.6 | 20.8 | 69.0 | 17.9 | 78.9 | 24.4 | 100.4 | 26.7 | Autres dépenses | 82- 85 |
| 84.3 | 29.6 | 112.5 | 40.3 | 140.3 | 47.9 | 228.9 | 55.7 | 295.6 | 62.7 | 513.5 | 71.2 | Autres frais de logement | 90- 99 |
| 1.7 | 1.0 | 2.8 | .7 | 5.6 | .9 | 13.4 | 2.1 | 29.1 | 2.9 | 65.5 | 5.6 | Logement à l'école ou au collège | 90 |
| 54.2 | 23.0 | 5.4 | 1.2 | 4.4 | .9 | 23.6 | 2.2 | 14.7 | 1.3 | 26.6 | 3.8 | Logement à l'extérieur pour l'emploi | 91 |
| 28.3 | 7.1 | 59.6 | 30.8 | 87.0 | 40.0 | 125.4 | 45.1 | 190.0 | 52.1 | 247.9 | 57.3 | Logement en vacances, en voyage, n.d.a. | 92- 94 |
| 8.8 | 2.4 | 44.7 | 10.7 | 43.2 | 10.3 | 66.5 | 12.5 | 61.9 | 14.6 | 173.4 | 24.7 | Maisons de villégiature | 95- 99 |
| 19.5 | 4.7 | 7.4 | 3.3 | 8.3 | 3.7 | 3.7 | 1.5 | 4.3 | 3.3 | 23.9 | 6.0 | Louée | 95 |
| | | 37.3 | 7.5 | 34.9 | 6.5 | 62.8 | 10.9 | 57.5 | 12.0 | 149.5 | 19.6 | Possédée en propre | 96- 99 |
| 340.4 | 80.5 | 444.4 | 87.5 | 515.2 | 88.6 | 577.6 | 91.5 | 637.4 | 91.2 | 788.2 | 94.9 | Eau, combustible et électricité | 110-118 |
| 37.0 | 48.4 | 47.7 | 58.2 | 52.6 | 64.4 | 54.0 | 69.5 | 57.4 | 70.8 | 78.4 | 76.6 | Eau | 110 |
| 85.8 | 26.0 | 114.2 | 33.7 | 129.8 | 34.5 | 165.4 | 42.1 | 183.6 | 41.0 | 196.7 | 42.1 | Huile et autres combustibles liquides | 111 |
| 61.4 | 22.5 | 89.3 | 30.3 | 122.6 | 39.8 | 115.5 | 38.8 | 134.2 | 42.1 | 169.6 | 42.2 | Gaz canalisé | 112 |
| 151.3 | 78.4 | 184.2 | 86.7 | 200.3 | 87.5 | 232.9 | 89.8 | 248.3 | 91.2 | 320.3 | 94.1 | Electricité | 113 |
| 1.9 | 6.2 | 5.6 | 10.2 | 4.8 | 13.7 | 4.7 | 14.5 | 10.1 | 24.0 | 14.9 | 26.4 | Autres coûts combustible et de chauffage | 114-117 |
| 3.0 | 10.5 | 3.5 | 9.8 | 5.1 | 14.4 | 5.1 | 14.7 | 3.8 | 10.9 | 8.3 | 18.1 | Location d'appareils de chauffage | 118 |
| 624.2 | 100.0 | 668.2 | 100.0 | 811.6 | 100.0 | 890.2 | 100.0 | 978.2 | 100.0 | 1425.9 | 100.0 | Services ménagers | 120-178 |
| 202.5 | 99.2 | 208.5 | 99.2 | 246.1 | 100.0 | 253.2 | 100.0 | 281.7 | 100.0 | 355.1 | 100.0 | Communications | 120-124 |
| 186.5 | 98.8 | 190.2 | 98.5 | 224.4 | 99.4 | 229.6 | 100.0 | 254.7 | 100.0 | 314.5 | 100.0 | Téléphone | 120-122 |
| 102.1 | 96.8 | 104.9 | 97.3 | 110.7 | 98.4 | 116.0 | 99.0 | 128.6 | 99.7 | 140.9 | 99.6 | Tarif de base | 120 |
| 80.5 | 81.5 | 82.6 | 83.2 | 110.5 | 88.2 | 109.8 | 90.0 | 123.1 | 91.9 | 167.7 | 93.1 | Appels interurbains | 121 |
| 3.9 | 24.6 | 2.7 | 23.0 | 3.3 | 22.4 | 3.7 | 20.1 | 3.0 | 21.1 | 5.8 | 22.6 | Autres frais | 122 |
| 14.8 | 88.5 | 17.5 | 87.5 | 20.4 | 90.4 | 22.0 | 91.6 | 24.9 | 94.8 | 36.6 | 92.8 | Poste | 123 |
| 1.1 | 5.9 | .8 | 7.9 | 1.3 | 11.2 | 1.6 | 9.2 | 2.1 | 8.0 | 4.1 | 15.4 | Télégraphe, messageries | 124 |
| 56.3 | 15.2 | 60.3 | 19.2 | 83.8 | 21.9 | 104.6 | 17.0 | 155.5 | 16.4 | 133.6 | 18.3 | Dépenses pour la garde des enfants | 130-133 |
| 11.9 | 3.8 | 12.6 | 2.4 | 12.4 | 3.7 | 34.3 | 3.9 | 16.9 | 3.2 | 30.2 | 3.7 | Gardiennes de jour | 130 |
| 1.3 | .4 | 3.0 | .5 | 1.9 | .6 | | | | | | | Centre autorisé de garderie familiale | 131 |
| 14.0 | 1.8 | 18.8 | 2.6 | 23.5 | 3.5 | 27.3 | 3.1 | 3.7 | .6 | 11.4 | 1.8 | Autre garde en dehors du foyer | 132 |
| 29.0 | 10.4 | 25.9 | 16.0 | 46.0 | 18.4 | 43.0 | 12.7 | 135.0 | 15.3 | 91.9 | 17.5 | Gardiennes et autres services à domicile | 133 |
| 17.7 | 4.7 | 18.2 | 6.4 | 31.4 | 6.9 | 53.7 | 10.4 | 45.0 | 15.2 | 225.1 | 30.5 | Service domestique (sauf soin des enfants) | 134-135 |
| 10.9 | 3.2 | 12.5 | 2.9 | 29.2 | 4.3 | 49.4 | 6.8 | 38.7 | 9.9 | 194.4 | 21.8 | Salaires, uniformes (service domestique) | 134 |
| 6.8 | 2.0 | 5.8 | 4.1 | 2.2 | 3.7 | 4.4 | 5.0 | 6.3 | 7.9 | 30.6 | 18.1 | Autre aide rémunérée à domicile | 135 |
| 80.6 | 83.4 | 76.6 | 85.8 | 90.8 | 88.8 | 101.5 | 86.9 | 95.1 | 91.6 | 149.7 | 96.6 | Services de nettoyage | 136-139 |
| 6.1 | 7.7 | 7.2 | 8.1 | 3.1 | 4.3 | 7.4 | 7.3 | 6.5 | 8.8 | 21.3 | 16.4 | Blanchissage à l'ext. service de couchers | 136 |
| 36.3 | 68.1 | 43.6 | 71.3 | 58.5 | 78.9 | 74.2 | 80.9 | 71.0 | 85.6 | 111.3 | 91.0 | Nettoyage fait à l'extérieur | 137 |
| 33.1 | 39.5 | 22.8 | 28.7 | 23.2 | 27.4 | 17.7 | 19.8 | 15.5 | 18.3 | 10.4 | 14.8 | Lavage et séchage, blanchisserie autom. | 138 |
| 5.0 | 8.0 | 3.0 | 8.6 | 6.0 | 8.7 | 2.2 | 5.9 | 2.1 | 5.4 | 6.7 | 5.1 | Nettoyage à sec (libre-service) | 139 |
| 83.0 | 98.6 | 104.5 | 99.3 | 111.3 | 99.4 | 105.5 | 99.1 | 110.5 | 99.1 | 140.7 | 99.1 | Produits de nettoyage ménagers | 140-150 |
| 13.6 | 93.5 | 14.7 | 93.4 | 15.3 | 94.7 | 15.5 | 94.2 | 15.3 | 94.2 | 17.3 | 91.9 | Détergent liquide | 140 |
| 18.3 | 66.2 | 20.3 | 63.9 | 25.0 | 72.3 | 22.3 | 74.3 | 27.6 | 77.8 | 27.0 | 68.8 | Détergent en poudre | 141 |
| 5.6 | 20.3 | 10.5 | 33.4 | 9.0 | 33.6 | 10.8 | 40.1 | 10.8 | 47.0 | 20.8 | 61.4 | Détergent pour lave-vaisselle automatique | 142 |

TABLE 20. Detailed Average Expenditure, by Family Income,
Eight Cities, Canada, 1976

All Families and Unattached Individuals

| | | Family income — Revenu de la famille | | | | | | | | | | | | | | | |
|--|---|---------------------------------------|-------------------------|--|-------------------------|------------------------------------|-------------------------|------------------------------------|-------------------------|------------------------------------|-------------------------|------------------------------------|-------------------------|------------------------------------|-------------------------|--|--|
| | | All classes — Toutes catégories | | Under \$4,000 — Moins de \$4,000 | | \$4,000 — 4,999 | | \$5,000 — 5,999 | | \$6,000 — 7,999 | | \$8,000 — 9,999 | | \$10,000 — 11,999 | | | |
| | | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | | |
| Household operation — concluded | | | | | | | | | | | | | | | | | |
| Household cleaning supplies — concluded: | | | | | | | | | | | | | | | | | |
| 143 | Laundry soap, bars, flakes and powders | 7.3 | 38.4 | 3.9 | 34.8 | 3.3 | 34.1 | 5.1 | 37.1 | 5.7 | 43.2 | 5.4 | 35.2 | 5.8 | 39.0 | | |
| 144 | Laundry bleach | 8.5 | 77.9 | 2.8 | 53.5 | 3.9 | 57.0 | 6.8 | 77.8 | 5.8 | 70.8 | 5.7 | 69.9 | 9.2 | 76.3 | | |
| 145 | Fabric softener | 7.6 | 57.8 | 1.3 | 21.5 | 2.0 | 21.7 | 4.1 | 42.6 | 3.7 | 40.6 | 4.6 | 46.4 | 7.1 | 53.4 | | |
| 146 | Laundry starch, blueing, dyes, etc. | .7 | 9.6 | .4 | 5.6 | | .6 | .1 | 2.3 | .4 | 10.6 | .2 | 4.3 | .7 | 6.0 | | |
| 147 | Disinfectants and domestic deodorizers | 7.4 | 69.4 | 2.4 | 45.3 | 4.2 | 47.8 | 4.7 | 64.3 | 5.3 | 60.6 | 4.9 | 60.8 | 6.4 | 63.7 | | |
| 148 | Polishes and waxes, all types | 8.0 | 71.1 | 1.4 | 34.4 | 2.7 | 51.0 | 3.9 | 59.2 | 4.3 | 60.2 | 5.6 | 56.1 | 7.7 | 72.8 | | |
| 149 | Scouring powders, cleaners, steel wool | 8.2 | 86.0 | 2.7 | 62.7 | 3.7 | 74.7 | 5.2 | 82.3 | 5.3 | 83.0 | 6.8 | 82.1 | 8.2 | 81.6 | | |
| 150 | Other | 2.7 | 21.7 | .4 | 8.4 | .7 | 12.2 | 1.6 | 16.0 | 1.7 | 19.9 | 1.2 | 17.7 | 2.0 | 20.1 | | |
| 152-165 | Paper supplies, food wraps, etc. | 113.1 | 99.4 | 40.4 | 95.7 | 52.3 | 100.0 | 74.9 | 100.0 | 71.1 | 99.1 | 80.2 | 99.0 | 101.1 | 99.5 | | |
| 152 | Facial tissue | 19.7 | 94.0 | 10.0 | 82.2 | 11.1 | 84.0 | 15.3 | 89.5 | 15.1 | 90.2 | 15.4 | 88.7 | 18.1 | 93.5 | | |
| 153 | Toilet paper | 25.5 | 96.8 | 11.0 | 85.6 | 15.7 | 94.1 | 20.7 | 96.5 | 19.5 | 95.1 | 18.0 | 94.8 | 24.9 | 98.8 | | |
| 154 | Paper towels | 13.1 | 75.7 | 3.0 | 40.3 | 4.9 | 61.6 | 5.8 | 58.0 | 7.6 | 69.2 | 8.5 | 64.9 | 11.5 | 69.4 | | |
| 155 | Paper table napkins, table cloths, etc. | 4.2 | 56.8 | 1.1 | 33.4 | 2.0 | 47.8 | 1.8 | 40.4 | 2.0 | 44.5 | 2.9 | 41.0 | 3.5 | 53.6 | | |
| 156 | Paper bags | 2.4 | 29.4 | .1 | 4.2 | .8 | 8.8 | .9 | 9.9 | 1.3 | 16.7 | 2.3 | 27.1 | 2.5 | 29.7 | | |
| 157 | Paper plates, cups, etc. | 1.0 | 17.5 | | .9 | .1 | 2.8 | | | .3 | 7.9 | .4 | 8.5 | .6 | 11.4 | | |
| 158 | Writing paper and envelopes | 4.5 | 65.5 | 2.4 | 49.7 | 2.6 | 52.0 | 3.4 | 58.9 | 2.7 | 57.6 | 3.5 | 60.8 | 3.4 | 69.7 | | |
| 159 | Wrapping paper in rolls or sheets | 5.7 | 65.6 | 1.2 | 33.6 | 1.8 | 37.4 | 2.7 | 41.5 | 2.5 | 44.6 | 3.1 | 55.8 | 4.1 | 52.7 | | |
| 160 | Greeting cards | 8.6 | 77.4 | 4.1 | 54.4 | 3.7 | 58.6 | 5.0 | 65.8 | 5.1 | 66.0 | 5.5 | 68.2 | 5.8 | 71.6 | | |
| 161 | Other paper products | 4.3 | 56.8 | 1.6 | 40.5 | 1.4 | 36.8 | 4.4 | 43.0 | 2.1 | 42.9 | 2.7 | 49.2 | 3.3 | 55.8 | | |
| 162 | Foil wraps and other foil products | 6.8 | 79.1 | 1.6 | 46.8 | 2.7 | 59.6 | 5.8 | 62.5 | 3.6 | 68.5 | 5.2 | 71.9 | 6.0 | 78.7 | | |
| 163 | Plastic garbage bags | 12.2 | 73.0 | 3.2 | 39.8 | 4.1 | 48.5 | 7.7 | 56.2 | 6.7 | 56.1 | 9.2 | 64.0 | 11.0 | 69.8 | | |
| 164 | Other plastic bags and wraps | 3.8 | 41.9 | .7 | 19.0 | .9 | 19.7 | .9 | 16.2 | 1.9 | 32.5 | 2.7 | 35.2 | 3.3 | 36.0 | | |
| 165 | Other—ribbon, string, etc. | 1.4 | 33.2 | .4 | 16.1 | .3 | 13.7 | .5 | 18.1 | .7 | 18.9 | .8 | 25.0 | 1.2 | 25.4 | | |
| 168-178 | Other household supplies | 93.7 | 85.4 | 16.1 | 60.7 | 28.0 | 74.9 | 39.6 | 71.3 | 44.1 | 77.4 | 39.2 | 73.7 | 58.1 | 81.7 | | |
| 168 | Cut flowers and potted plants | 11.4 | 36.6 | 2.2 | 11.5 | 2.4 | 14.3 | 2.3 | 15.7 | 5.7 | 25.4 | 5.2 | 25.8 | 6.7 | 30.3 | | |
| 169 | Garden shrubs, trees, bulbs, plants | 10.6 | 30.9 | 1.1 | 7.1 | 1.1 | 11.3 | 2.4 | 13.2 | 2.0 | 13.9 | 3.7 | 16.3 | 4.5 | 23.1 | | |
| 170 | Seeds—vegetable, flower and grass | 2.9 | 28.1 | .6 | 9.2 | 1.2 | 17.6 | 1.5 | 14.7 | 1.8 | 18.5 | 1.1 | 15.2 | 2.7 | 18.8 | | |
| 171 | Fertilizers | 5.3 | 35.5 | .8 | 8.0 | .6 | 14.4 | 2.2 | 19.5 | 1.7 | 17.8 | 1.4 | 18.2 | 2.5 | 27.9 | | |
| 172 | Pest control products—garden and home | 2.9 | 32.1 | .3 | 8.7 | .7 | 14.7 | 1.2 | 13.6 | 1.2 | 21.4 | .7 | 11.2 | 2.4 | 23.0 | | |
| 173 | Pet food | 35.3 | 34.4 | 6.3 | 12.4 | 9.1 | 21.0 | 24.4 | 28.1 | 19.1 | 27.6 | 16.0 | 19.7 | 21.2 | 24.6 | | |
| 174 | Typewriters | 4.6 | 4.6 | | .8 | .4 | 2.7 | | | 4.3 | 6.3 | 1.4 | 2.1 | 2.9 | 6.8 | | |
| 175 | Calculating machines | 5.3 | 14.4 | .4 | .3 | 7.4 | 5.3 | .3 | 1.3 | 1.2 | 5.4 | 2.1 | 7.1 | 1.7 | 8.8 | | |
| 176 | Pens and pencils, writing desk sets | 2.4 | 31.7 | 1.3 | 24.9 | .8 | 21.4 | .7 | 16.9 | 1.4 | 21.9 | 1.6 | 26.4 | 2.4 | 30.1 | | |
| 177 | Batteries (excluding automobile) | 4.2 | 50.0 | 1.5 | 19.0 | 2.1 | 38.2 | 1.8 | 25.4 | 1.9 | 33.2 | 2.1 | 34.4 | 3.4 | 42.2 | | |
| 178 | Other supplies for home use | 8.7 | 57.1 | 1.6 | 31.9 | 2.3 | 36.3 | 2.7 | 43.1 | 3.6 | 35.7 | 3.8 | 43.2 | 7.6 | 50.3 | | |
| 180-314 | Furnishings and equipment | 855.6 | 96.7 | 105.0 | 78.2 | 161.1 | 88.0 | 233.6 | 89.6 | 344.4 | 95.4 | 418.7 | 96.3 | 561.5 | 97.2 | | |
| 180-208 | Furniture | 291.3 | 49.0 | 18.0 | 12.7 | 36.7 | 21.4 | 68.8 | 26.5 | 125.3 | 31.5 | 133.2 | 40.6 | 214.5 | 46.2 | | |
| 180 | Unfinished—all kinds | 3.5 | 2.5 | | | | | | | 1.4 | 1.5 | .5 | .7 | 3.7 | 2.1 | | |
| 181-192 | Wooden furniture | 160.0 | 32.1 | 4.5 | 4.5 | 10.0 | 8.9 | 27.3 | 13.9 | 62.4 | 19.3 | 60.1 | 24.8 | 108.4 | 29.7 | | |
| 181 | Wooden bedroom suites, dressers, beds | 62.8 | 12.6 | .4 | .4 | 4.4 | 4.6 | 12.2 | 6.8 | 19.3 | 7.3 | 28.9 | 9.2 | 56.9 | 14.6 | | |
| 182 | Wooden living room, tables, chairs | 27.7 | 8.3 | 1.5 | 2.5 | 2.7 | 2.3 | 2.2 | 2.9 | 18.9 | 6.7 | 10.5 | 5.5 | 15.4 | 8.3 | | |
| 183 | Wooden dining room, buffets, tables | 35.3 | 5.6 | 1.2 | .9 | | | 4.3 | 1.4 | 8.5 | 4.8 | 5.0 | 2.9 | 6.1 | 3.1 | | |
| 184-192 | Other wooden furniture n.e.s. | 34.2 | 17.0 | 1.4 | 2.2 | 2.8 | 4.8 | 8.6 | 6.9 | 15.8 | 7.8 | 15.7 | 11.8 | 30.0 | 15.6 | | |
| 193-202 | Metal and other—non-upholstered | 17.3 | 14.4 | 2.3 | 5.5 | 4.0 | 6.1 | 3.2 | 9.6 | 8.0 | 9.2 | 11.7 | 12.3 | 16.8 | 14.2 | | |
| 203-208 | Upholstered furniture | 110.4 | 24.7 | 11.2 | 6.5 | 22.7 | 11.2 | 38.2 | 14.6 | 53.3 | 18.9 | 60.9 | 18.0 | 85.6 | 24.8 | | |
| 203 | Couches, sofas, chesterfields | 54.1 | 9.6 | 3.0 | 2.0 | 7.3 | 1.4 | 1.8 | 1.2 | 25.3 | 7.0 | 34.2 | 7.1 | 53.0 | 11.7 | | |
| 204 | Davenports, convertible chesterfields | 11.2 | 2.6 | 4.6 | 1.7 | 1.5 | .5 | 12.3 | 2.9 | 2.7 | 1.1 | 4.6 | .7 | 8.8 | 2.6 | | |
| 205 | Other upholstered living room | 22.3 | 7.2 | 3.2 | 3.0 | 6.0 | 5.8 | 15.3 | 4.9 | 16.0 | 6.9 | 8.6 | 5.2 | 10.8 | 6.4 | | |
| 206 | Upholstered studio couches | 4.4 | 1.3 | | | 6.4 | 2.1 | 3.2 | 2.3 | .3 | .6 | 2.0 | 1.4 | .3 | .9 | | |
| 207 | Other upholstered furniture n.e.s. | 1.5 | 1.6 | .1 | .3 | | | .6 | 1.3 | .5 | 1.6 | 1.5 | 2.4 | 1.1 | 2.3 | | |
| 208 | Mattresses, box springs, etc. | 16.9 | 8.8 | .2 | .3 | 1.5 | 1.5 | 5.1 | 4.9 | 8.5 | 7.7 | 10.0 | 7.1 | 11.5 | 8.7 | | |
| 210-249 | Household appliances | 182.0 | 64.1 | 22.2 | 26.1 | 43.1 | 26.8 | 47.2 | 35.4 | 70.0 | 47.1 | 81.4 | 50.1 | 120.2 | 61.3 | | |
| 210-230 | Major household appliances | 153.9 | 33.8 | 17.2 | 10.5 | 38.5 | 9.3 | 38.7 | 17.8 | 55.5 | 19.5 | 61.9 | 19.0 | 95.5 | 29.1 | | |
| 210-213 | Refrigerators and freezers | 39.1 | 9.9 | 7.7 | 2.9 | 2.4 | 1.4 | 7.5 | 4.0 | 19.0 | 5.9 | 17.3 | 4.2 | 24.4 | 8.5 | | |
| 214-216 | Cooking stoves, ranges, built-in units | 20.0 | 5.4 | .9 | 2.1 | 9.7 | 4.4 | 3.8 | 2.9 | 7.2 | 3.7 | 6.0 | 1.6 | 5.3 | 2.1 | | |
| 218 | Dishwasher (portable and stationary) | 14.0 | 3.4 | | | | | | | 1.2 | .7 | .2 | .5 | .8 | 1.8 | | |
| 219-222 | Washing machines and dryers | 33.6 | 8.3 | 5.1 | 1.4 | 11.8 | 2.4 | 8.1 | 4.9 | 11.6 | 4.0 | 11.4 | 3.6 | 22.6 | 8.8 | | |
| 223 | Vacuum cleaner (upright and canister) | 22.1 | 10.6 | 1.5 | 3.3 | 14.6 | 6.6 | 8.5 | 4.7 | 6.4 | 5.9 | 12.7 | 7.8 | 17.6 | 10.7 | | |
| 224-225 | Sewing machines | 9.8 | 3.7 | 1.2 | 1.2 | | | 5.0 | 1.3 | 1.7 | 1.1 | 6.8 | 3.6 | 4.5 | 2.3 | | |
| 226-230 | Other major electrical appliances | 15.2 | 6.9 | .8 | .8 | | | 5.8 | 5.5 | 8.4 | 3.8 | 5.1 | 3.7 | 13.9 | 7.2 | | |
| 231-249 | Small electrical appliances | 28.1 | 51.3 | 5.0 | 18.3 | 4.6 | 19.6 | 8.5 | 23.5 | 14.5 | 34.5 | 19.5 | 43.2 | 24.7 | 48.7 | | |
| 231-239 | For cooking and warming food | 9.5 | 25.8 | 2.2 | 10.5 | 2.0 | 9.6 | 4.3 | 13.3 | 5.1 | 19.9 | 4.9 | 16.6 | 7.7 | 21.6 | | |
| 240-243 | For preparing food | 5.4 | 13.0 | .5 | 2.3 | .2 | 1.4 | .5 | 3.7 | 2.1 | 7.6 | 3.9 | 9.7 | 6.8 | 17.4 | | |
| 244-246 | For personal care | 8.5 | 25.0 | .6 | 2.0 | .7 | 4.6 | 2.3 | 9.3 | 4.1 | 13.6 | 4.5 | 15.5 | 6.2 | 20.2 | | |
| 247-249 | Other small electrical appliances | 4.8 | 15.3 | 1.7 | 7.4 | 1.6 | 9.8 | 1.4 | 6.9 | 3.2 | 13.7 | 6.1 | 16.6 | 3.9 | 12.7 | | |

TABLEAU 20. Dépenses moyennes détaillées, selon le revenu de la famille,
huit villes, Canada, 1976

Toutes familles et des personnes seules

| Family income — Revenu de la famille | | | | | | | | | | | | | | |
|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|---|---------|--|
| \$12,000 — 14,999 | | \$15,000 — 19,999 | | \$20,000 — 24,999 | | \$25,000 — 29,999 | | \$30,000 — 34,999 | | \$35,000 and over — \$35,000 et plus | | | | |
| Av. per fam. — Moy. par fam. | ¢ rptg. — ¢ décl. | Av. per fam. — Moy. par fam. | ¢ rptg. — ¢ décl. | Av. per fam. — Moy. par fam. | ¢ rptg. — ¢ décl. | Av. per fam. — Moy. par fam. | ¢ rptg. — ¢ décl. | Av. per fam. — Moy. par fam. | ¢ rptg. — ¢ décl. | Av. per fam. — Moy. par fam. | ¢ rptg. — ¢ décl. | | | |
| | | | | | | | | | | | | Services ménagers — fin | | |
| | | | | | | | | | | | | Produits de nettoyage ménagers — fin: | | |
| 6.4 | 36.2 | 7.5 | 37.7 | 9.0 | 38.5 | 7.4 | 37.2 | 8.3 | 43.6 | 12.8 | 44.5 | Savon de blanch. en pain, flocons, poudre | 143 | |
| 7.7 | 78.5 | 10.7 | 81.4 | 10.0 | 81.9 | 9.6 | 84.5 | 7.7 | 84.7 | 10.8 | 85.7 | Produits de blanchiment | 144 | |
| 7.9 | 61.3 | 9.0 | 62.3 | 9.3 | 67.0 | 8.9 | 68.5 | 8.1 | 70.3 | 13.1 | 74.1 | Adoucisseur de tissus | 145 | |
| 6 | 8.1 | 7 | 9.8 | 8 | 10.9 | 1.1 | 13.6 | 1.4 | 17.6 | 1.1 | 13.0 | Amidon, bleu, teintures, etc. | 146 | |
| 7.1 | 71.0 | 8.5 | 74.0 | 9.5 | 74.9 | 8.7 | 75.1 | 8.6 | 77.0 | 8.8 | 77.4 | Désinfectants et désodorisants ménagers | 147 | |
| 6.7 | 70.9 | 10.3 | 77.5 | 9.6 | 77.2 | 9.2 | 78.8 | 9.3 | 86.0 | 11.9 | 81.5 | Encaustiques et cires, tous genres | 148 | |
| 7.3 | 87.5 | 9.1 | 89.2 | 10.3 | 89.4 | 9.1 | 89.6 | 8.9 | 91.5 | 11.6 | 92.5 | Poudres et tampons à récurer, nettoyeurs | 149 | |
| 1.9 | 20.7 | 3.1 | 21.8 | 3.4 | 25.2 | 3.0 | 22.8 | 4.6 | 32.6 | 5.5 | 29.1 | Autre | 150 | |
| 104.6 | 99.4 | 116.6 | 99.9 | 132.6 | 100.0 | 138.0 | 99.8 | 150.7 | 99.6 | 186.0 | 99.0 | Articles en papier, emballages, etc. | 152-165 | |
| 18.2 | 95.6 | 20.6 | 95.9 | 23.2 | 96.6 | 21.5 | 96.5 | 22.9 | 98.7 | 29.2 | 97.1 | Papiers-mouchoirs | 152 | |
| 23.7 | 97.3 | 26.2 | 97.8 | 28.5 | 98.0 | 30.4 | 98.1 | 33.5 | 99.6 | 37.1 | 97.4 | Papier hygiénique | 153 | |
| 12.2 | 75.0 | 14.1 | 78.7 | 15.9 | 82.1 | 16.2 | 83.9 | 17.8 | 91.9 | 22.1 | 91.6 | Essuie-tout | 154 | |
| 3.2 | 51.0 | 4.6 | 58.9 | 5.1 | 63.9 | 5.4 | 67.5 | 5.9 | 69.4 | 8.4 | 77.2 | Serviettes et nappes en papier, etc. | 155 | |
| 2.0 | 27.3 | 2.5 | 32.7 | 3.0 | 37.0 | 2.9 | 36.8 | 3.3 | 36.8 | 3.9 | 40.8 | Sacs en papier | 156 | |
| 8 | 16.2 | 1.0 | 19.5 | 1.6 | 27.3 | 1.3 | 26.1 | 1.8 | 25.4 | 2.6 | 24.2 | Assiettes et gobelets en carton, etc. | 157 | |
| 4.7 | 61.2 | 4.2 | 66.8 | 5.0 | 71.0 | 5.1 | 68.6 | 6.5 | 75.5 | 8.6 | 74.4 | Papier à lettres et enveloppes | 158 | |
| 5.3 | 67.2 | 5.7 | 70.4 | 7.3 | 78.4 | 7.5 | 77.6 | 9.2 | 78.2 | 10.7 | 81.0 | Papier d'emballage, rouleaux ou feuilles | 159 | |
| 9.0 | 78.7 | 7.2 | 76.8 | 10.0 | 86.4 | 11.2 | 86.7 | 12.3 | 88.2 | 16.7 | 87.0 | Cartes de souhaits | 160 | |
| 3.7 | 56.6 | 4.5 | 58.3 | 5.3 | 61.7 | 5.8 | 64.4 | 5.2 | 65.2 | 6.0 | 69.9 | Autres produits en papier | 161 | |
| 6.6 | 81.8 | 6.9 | 81.0 | 8.0 | 86.7 | 8.9 | 90.2 | 8.7 | 88.3 | 10.1 | 88.6 | Emball. et autres prod. en papier métalliques | 162 | |
| 11.9 | 74.7 | 13.5 | 76.6 | 13.4 | 81.4 | 14.7 | 83.5 | 15.6 | 84.5 | 20.4 | 88.3 | Sacs à ordures en plastique | 163 | |
| 3.0 | 39.7 | 4.3 | 45.8 | 4.5 | 49.3 | 5.1 | 52.2 | 6.0 | 56.7 | 7.2 | 49.9 | Autres sacs et emballages en plastique | 164 | |
| 1.3 | 32.4 | 1.3 | 31.2 | 1.8 | 42.3 | 1.9 | 41.1 | 2.0 | 44.7 | 3.1 | 55.1 | Autre: ruban, ficelle, etc. | 165 | |
| 79.6 | 86.0 | 83.5 | 86.1 | 115.6 | 93.3 | 133.7 | 94.6 | 139.6 | 93.8 | 235.7 | 96.9 | Autres articles ménagers | 168-178 | |
| 8.1 | 35.9 | 9.7 | 37.3 | 14.0 | 41.0 | 16.3 | 46.0 | 14.7 | 50.8 | 35.3 | 64.6 | Fleurs coupées et plantes en pots | 168 | |
| 4.8 | 20.3 | 8.1 | 32.3 | 13.2 | 42.4 | 17.8 | 42.6 | 17.2 | 44.6 | 39.0 | 62.2 | Arbres, buibes, plantes de jardin | 169 | |
| 1.7 | 20.4 | 3.1 | 29.6 | 3.9 | 36.4 | 4.2 | 37.9 | 4.2 | 40.4 | 5.5 | 48.2 | Semences- légumes, fleurs et pelouse | 170 | |
| 3.6 | 27.8 | 4.4 | 34.2 | 6.6 | 46.3 | 8.1 | 50.1 | 9.8 | 54.5 | 16.2 | 68.6 | Engrais | 171 | |
| 2.1 | 22.0 | 2.7 | 32.7 | 3.9 | 42.1 | 4.3 | 49.8 | 5.3 | 50.5 | 6.5 | 55.7 | Pesticides pour le jardin et la maison | 172 | |
| 36.6 | 33.2 | 34.2 | 34.1 | 43.5 | 41.8 | 50.4 | 46.7 | 48.1 | 41.2 | 68.5 | 51.2 | Aliments pour animaux favoris | 173 | |
| 3.9 | 3.6 | 3.0 | 5.0 | 4.1 | 3.3 | 5.8 | 5.4 | 4.6 | 4.2 | 20.1 | 11.4 | Machines à écrire | 174 | |
| 5.1 | 17.9 | 4.2 | 15.2 | 7.2 | 18.1 | 8.1 | 20.2 | 9.9 | 21.9 | 12.1 | 23.5 | Calculatrices | 175 | |
| 1.9 | 30.5 | 2.3 | 34.3 | 3.0 | 36.1 | 2.5 | 33.1 | 4.2 | 35.2 | 4.7 | 43.3 | Stylos, crayons, nécessaires à écrire | 176 | |
| 4.1 | 50.8 | 4.1 | 55.4 | 4.8 | 58.9 | 5.6 | 58.5 | 6.1 | 64.2 | 7.8 | 67.5 | Piles (sauf batteries d'automobile) | 177 | |
| 7.8 | 59.4 | 7.7 | 58.3 | 11.3 | 68.1 | 10.7 | 64.9 | 15.6 | 67.6 | 20.0 | 78.9 | Autres articles pour la maison | 178 | |
| 673.1 | 97.6 | 837.8 | 99.0 | 988.0 | 99.2 | 1205.3 | 99.6 | 1399.4 | 99.3 | 2199.3 | 100.0 | Articles et accessoires d'ameublement | 180-314 | |
| 251.4 | 47.6 | 282.4 | 55.7 | 334.6 | 59.4 | 411.8 | 57.9 | 457.5 | 56.5 | 742.4 | 67.2 | Meubles | 180-208 | |
| 4 | 7 | 3.1 | 2.8 | 4.3 | 3.3 | 6.5 | 4.4 | 3.0 | 3.2 | 14.0 | 6.7 | Meubles non finis - tous genres | 180 | |
| 120.6 | 30.7 | 151.3 | 37.0 | 180.8 | 39.8 | 224.2 | 40.0 | 301.2 | 39.4 | 455.7 | 46.6 | Meubles en bois | 181-192 | |
| 52.7 | 11.4 | 66.9 | 13.8 | 73.4 | 16.1 | 81.6 | 13.8 | 116.9 | 18.9 | 144.1 | 18.7 | Meubles de chambre à coucher, en bois | 181 | |
| 16.1 | 7.6 | 24.7 | 8.8 | 31.5 | 9.2 | 46.5 | 11.5 | 51.3 | 9.5 | 75.5 | 13.5 | Meubles de salle de séjour, en bois | 182 | |
| 23.1 | 6.2 | 26.4 | 5.1 | 34.0 | 4.0 | 54.3 | 9.3 | 69.5 | 6.8 | 154.4 | 15.5 | Meubles de salle à manger, en bois | 183 | |
| 28.7 | 16.8 | 33.3 | 20.3 | 41.9 | 22.0 | 41.8 | 20.3 | 63.5 | 24.5 | 81.6 | 22.9 | Autres meubles en bois, n.d.a. | 184-192 | |
| 15.8 | 12.1 | 15.1 | 15.0 | 20.2 | 18.2 | 26.4 | 14.5 | 31.3 | 22.7 | 32.2 | 20.9 | Meubles en métal et non rembourrés | 193-202 | |
| 114.6 | 25.7 | 112.9 | 27.4 | 129.3 | 29.3 | 154.8 | 29.6 | 122.0 | 22.6 | 240.5 | 35.1 | Meubles rembourrés | 203-208 | |
| 62.6 | 12.7 | 52.6 | 9.8 | 66.3 | 11.8 | 69.8 | 11.9 | 63.6 | 7.6 | 114.0 | 12.9 | Divans, sofas, canapés | 203 | |
| 12.8 | 2.2 | 13.8 | 3.0 | 16.3 | 4.5 | 13.2 | 2.4 | 14.2 | 3.4 | 10.4 | 3.0 | Divans et canapés transformables | 204 | |
| 19.2 | 5.1 | 20.0 | 6.8 | 19.6 | 7.8 | 38.0 | 10.1 | 25.6 | 9.6 | 64.1 | 12.4 | Autres meub. rembourrés, salle de séjour | 205 | |
| 3.1 | 1.8 | 7.9 | 1.6 | 6.0 | 1.8 | 3.6 | 1.0 | | | 9.5 | 1.3 | Divan-studio rembourrés | 206 | |
| 5 | 7 | 1.7 | 2.1 | 1.8 | 2.2 | 1.7 | 1.4 | 3.1 | 1.0 | 3.2 | 2.3 | Autres meubles rembourrés, n.d.a. | 207 | |
| 16.4 | 8.0 | 16.9 | 9.3 | 19.3 | 10.7 | 28.4 | 12.8 | 15.5 | 7.0 | 39.3 | 13.4 | Matelas, sommiers, etc. | 208 | |
| 155.2 | 63.0 | 193.2 | 67.7 | 225.0 | 76.1 | 248.1 | 74.9 | 334.7 | 85.0 | 371.0 | 86.6 | Appareils ménagers | 210-249 | |
| 131.3 | 32.0 | 166.6 | 36.8 | 192.0 | 41.4 | 209.9 | 42.2 | 286.7 | 50.1 | 313.2 | 52.3 | Gros appareils ménagers | 210-230 | |
| 33.8 | 8.4 | 40.5 | 11.5 | 50.4 | 11.8 | 65.4 | 14.5 | 62.2 | 12.6 | 87.6 | 16.7 | Réfrigérateurs et congélateurs | 210-213 | |
| 15.9 | 4.5 | 23.8 | 6.1 | 25.2 | 6.7 | 24.2 | 5.6 | 52.4 | 10.9 | 39.5 | 8.7 | Cuisinières encastrées | 214-216 | |
| 9.1 | 2.3 | 11.5 | 3.0 | 20.1 | 5.2 | 28.9 | 6.6 | 29.5 | 6.1 | 33.6 | 6.9 | Lave-vaisselle (portatifs ou fixes) | 218 | |
| 36.7 | 7.9 | 48.3 | 11.9 | 39.5 | 9.5 | 37.6 | 8.9 | 37.9 | 9.2 | 56.4 | 12.2 | Laveuses et sècheuses | 219-222 | |
| 19.8 | 11.8 | 22.4 | 9.5 | 29.3 | 14.2 | 18.6 | 9.6 | 47.2 | 18.4 | 47.1 | 16.6 | Aspirateurs type vertical ou traineau | 223 | |
| 6.8 | 3.3 | 9.8 | 4.2 | 12.3 | 4.9 | 9.1 | 4.4 | 20.4 | 6.5 | 28.5 | 6.0 | Machines à coudre | 224-225 | |
| 9.2 | 5.7 | 11.2 | 6.3 | 15.2 | 7.5 | 26.2 | 10.3 | 37.0 | 11.7 | 40.4 | 14.2 | Autres gros appareils ménagers | 226-230 | |
| 23.9 | 49.4 | 26.6 | 52.3 | 33.0 | 61.2 | 38.2 | 61.6 | 48.0 | 73.8 | 57.8 | 73.8 | Petits appareils électriques | 231-249 | |
| 9.0 | 24.4 | 9.6 | 26.7 | 10.9 | 30.2 | 13.2 | 31.2 | 13.5 | 35.7 | 19.4 | 41.4 | Pour cuire et réchauffer les aliments | 231-239 | |
| 3.8 | 10.2 | 5.0 | 13.0 | 6.2 | 16.6 | 6.6 | 14.6 | 11.3 | 23.3 | 12.0 | 20.7 | Pour préparer les aliments | 240-243 | |
| 7.0 | 22.7 | 7.7 | 23.5 | 10.7 | 34.0 | 12.7 | 35.2 | 16.7 | 43.0 | 17.4 | 41.9 | Pour soins personnels | 244-246 | |
| 4.2 | 13.3 | 4.4 | 13.9 | 5.3 | 17.4 | 5.7 | 17.9 | 6.6 | 21.1 | 9.1 | 23.7 | Autres petits appareils électriques | 247-249 | |

TABLE 20. Detailed Average Expenditure, by Family Income,
Eight Cities, Canada, 1976

All Families and Unattached Individuals

| | | Family income — Revenu de la famille | | | | | | | | | | | | | |
|---------------------------------------|---|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|
| | | All classes — Toutes catégories | | Under \$4,000 — Moins de \$4,000 | | \$4,000 — 4,999 | | \$5,000 — 5,999 | | \$6,000 — 6,999 | | \$8,000 — 9,999 | | \$10,000 — 11,999 | |
| | | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. |
| Furnishings and equipment — concluded | | | | | | | | | | | | | | | |
| 250-251 | Electric lighting | 26.3 | 79.1 | 2.7 | 56.9 | 4.3 | 62.4 | 6.4 | 68.9 | 10.2 | 69.0 | 8.3 | 73.3 | 14.5 | 73.2 |
| 250 | Lamps, lampshades, chandeliers, etc. | 19.7 | 20.6 | .7 | 3.6 | 1.9 | 6.2 | 1.2 | 9.0 | 6.8 | 14.3 | 4.7 | 14.0 | 10.3 | 16.4 |
| 251 | Light bulbs and tubes | 6.6 | 75.5 | 2.0 | 56.2 | 2.4 | 58.8 | 3.2 | 65.4 | 3.4 | 66.5 | 3.6 | 70.4 | 4.2 | 70.9 |
| 254-259 | Non-electric kitchen equipment | 15.5 | 38.4 | 2.9 | 13.6 | 1.7 | 15.2 | 2.8 | 18.2 | 9.2 | 29.2 | 13.2 | 30.3 | 11.7 | 33.3 |
| 260-265 | Tableware and decorative ware | 21.8 | 35.7 | 2.5 | 9.6 | 1.2 | 12.2 | 3.9 | 15.8 | 6.5 | 24.8 | 10.2 | 23.6 | 9.9 | 31.7 |
| 266-274 | Household textiles and plastics | 87.5 | 71.7 | 22.7 | 39.9 | 24.2 | 41.2 | 34.4 | 54.8 | 37.8 | 57.7 | 43.8 | 61.6 | 62.7 | 72.0 |
| 275-277 | Floor covering | 82.1 | 29.0 | 8.4 | 9.6 | 18.6 | 17.7 | 25.2 | 21.1 | 29.6 | 19.7 | 57.5 | 21.9 | 42.2 | 20.6 |
| 275 | Rugs, broadloom and carpeting | 74.7 | 27.0 | 6.8 | 8.6 | 18.2 | 17.1 | 22.1 | 19.9 | 26.7 | 18.3 | 52.0 | 19.8 | 38.5 | 19.5 |
| 276 | Underpadding | 2.5 | 2.8 | | | | | | | .5 | 1.1 | 1.0 | 1.7 | .5 | 2.0 |
| 277 | Hard surface floor covering, sheeting | 5.0 | 3.4 | 1.6 | 1.0 | .4 | .7 | 3.1 | 3.7 | 2.3 | 2.0 | 4.5 | 2.9 | 3.3 | 2.2 |
| 280-302 | Miscellaneous | 92.4 | 72.8 | 11.2 | 35.9 | 14.0 | 41.3 | 14.6 | 47.9 | 21.1 | 61.2 | 31.0 | 64.8 | 47.9 | 70.9 |
| 310-314 | Services and repairs | 56.6 | 60.8 | 14.4 | 26.3 | 17.3 | 40.0 | 30.4 | 48.4 | 34.7 | 48.6 | 40.2 | 45.0 | 37.9 | 50.1 |
| 320-396 | Clothing | 1253.7 | 99.4 | 187.7 | 91.6 | 277.6 | 97.8 | 414.7 | 99.9 | 525.7 | 99.4 | 624.0 | 99.4 | 861.6 | 100.0 |
| 320-384 | Women, 14 and over | 610.8 | 89.3 | 128.8 | 66.0 | 170.3 | 70.8 | 234.6 | 88.9 | 294.5 | 82.9 | 370.5 | 85.6 | 423.5 | 84.6 |
| 320-328 | Coats and suits | 122.6 | 67.1 | 29.5 | 29.0 | 31.1 | 36.0 | 46.2 | 48.0 | 57.5 | 54.2 | 81.4 | 54.1 | 89.1 | 58.5 |
| 320 | Winter coats, fur trimmed and untrimmed | 33.7 | 24.2 | 8.8 | 8.8 | 13.3 | 14.3 | 12.2 | 12.9 | 19.9 | 16.8 | 28.7 | 20.1 | 26.4 | 24.9 |
| 321 | Spring coats | 8.5 | 13.4 | 3.0 | 6.3 | 4.0 | 8.6 | 5.6 | 9.9 | 4.8 | 11.7 | 10.2 | 14.5 | 5.6 | 9.5 |
| 322 | All weather coats (incl. raincoats) | 8.9 | 14.0 | 3.8 | 7.0 | 1.9 | 4.8 | 4.1 | 9.1 | 3.9 | 8.1 | 9.3 | 9.3 | 5.4 | 9.0 |
| 323 | Leather coats and jackets | 19.8 | 14.1 | 3.2 | 3.9 | 1.8 | 2.4 | 3.6 | 4.5 | 9.7 | 7.5 | 9.1 | 7.2 | 15.4 | 12.1 |
| 324 | Separate jackets and blazers | 4.2 | 10.5 | 1.6 | 6.8 | .7 | 2.0 | 1.8 | 7.4 | 1.7 | 7.3 | 1.5 | 4.2 | 3.9 | 7.5 |
| 325 | Knitted suits and pant suits | 15.9 | 18.2 | 4.0 | 7.2 | 2.6 | 4.8 | 7.2 | 10.8 | 5.9 | 10.9 | 6.5 | 8.8 | 10.9 | 16.3 |
| 326 | Other suits and pant suits | 23.5 | 24.4 | 5.0 | 6.7 | 4.8 | 7.2 | 10.4 | 10.2 | 8.2 | 13.9 | 14.6 | 21.8 | 17.9 | 22.0 |
| 327 | Ski jackets and ski suits | 6.6 | 12.7 | | .3 | 1.8 | 3.8 | 1.2 | 5.8 | 1.9 | 6.6 | 1.0 | 3.5 | 3.2 | 9.7 |
| 328 | Other sports suits | 1.6 | 3.5 | | | .4 | 1.0 | .2 | .9 | 1.5 | 3.9 | .5 | 1.4 | .5 | 2.0 |
| 330-331 | Furs and artificial furs | 34.1 | 5.3 | 1.9 | 2.1 | 33.4 | 2.7 | 6.7 | 5.8 | 19.6 | 4.9 | 13.1 | 3.9 | 14.3 | 4.1 |
| 330 | Fur coats and jackets, stoles, hats | 32.8 | 4.3 | .9 | 1.0 | 33.4 | 2.7 | 3.7 | 3.2 | 18.6 | 3.4 | 12.9 | 3.5 | 13.9 | 3.3 |
| 331 | Artificial fur coats and jackets, etc. | 1.3 | 1.0 | 1.1 | 1.1 | | | 3.0 | 2.5 | 1.0 | 1.5 | .2 | .4 | .4 | .8 |
| 335-338 | Dresses and skirts | 77.4 | 61.4 | 18.0 | 32.8 | 17.6 | 30.8 | 32.5 | 46.0 | 38.1 | 45.3 | 45.6 | 52.0 | 53.0 | 56.0 |
| 335 | Knitted dresses | 17.6 | 19.0 | 2.1 | 5.2 | 1.2 | 3.5 | 13.6 | 15.1 | 8.8 | 13.2 | 9.3 | 13.1 | 8.6 | 15.6 |
| 336 | Other dresses | 44.7 | 43.8 | 13.4 | 26.1 | 14.5 | 23.3 | 16.1 | 30.9 | 22.6 | 32.1 | 29.4 | 36.1 | 34.8 | 38.3 |
| 337 | Knitted skirts | 3.9 | 8.8 | .1 | .7 | | .5 | .3 | 1.6 | 1.5 | 5.7 | 1.0 | 5.3 | 2.8 | 6.4 |
| 338 | Other skirts | 11.1 | 24.8 | 2.4 | 10.4 | 1.9 | 6.3 | 2.5 | 9.1 | 5.3 | 14.0 | 5.9 | 16.5 | 6.7 | 20.3 |
| 340-344 | Slacks and shorts | 52.7 | 66.6 | 8.1 | 25.5 | 8.4 | 26.0 | 17.9 | 37.9 | 28.0 | 51.7 | 32.0 | 54.4 | 35.4 | 56.6 |
| 340 | Knitted slacks and pants | 14.5 | 28.5 | 2.3 | 12.2 | 1.4 | 5.8 | 7.7 | 17.3 | 8.2 | 22.3 | 9.2 | 22.1 | 11.3 | 23.9 |
| 341 | Jeans (including corduroy jeans) | 18.0 | 34.7 | 2.2 | 8.6 | 3.7 | 12.6 | 3.2 | 9.4 | 9.0 | 18.7 | 10.4 | 28.5 | 12.3 | 26.0 |
| 342 | Other slacks and pants | 17.5 | 31.8 | 3.2 | 10.4 | 2.9 | 11.9 | 5.5 | 17.3 | 9.3 | 22.7 | 11.0 | 20.2 | 10.4 | 25.2 |
| 343 | Knitted shorts | .7 | 5.1 | .1 | .8 | .1 | 1.3 | .5 | 4.2 | .2 | 1.8 | .2 | 2.1 | .4 | 2.4 |
| 344 | Other shorts | 2.0 | 12.8 | .3 | 2.2 | .3 | 2.9 | 1.0 | 5.9 | 1.3 | 6.5 | 1.2 | 10.2 | 1.0 | 6.7 |
| 350-353 | Blouses, shirts and sweaters | 62.6 | 74.5 | 13.1 | 34.3 | 11.2 | 38.4 | 17.9 | 52.5 | 30.9 | 58.7 | 37.9 | 67.7 | 45.1 | 67.7 |
| 350 | Knitted blouses and shirts | 12.4 | 27.9 | 2.1 | 10.5 | 1.8 | 8.5 | 4.0 | 12.5 | 5.3 | 17.3 | 7.5 | 20.9 | 9.1 | 23.0 |
| 351 | Other blouses and shirts | 21.1 | 41.1 | 4.9 | 17.2 | 3.8 | 14.7 | 6.5 | 28.7 | 10.9 | 29.5 | 14.3 | 35.3 | 16.3 | 36.4 |
| 352 | T-shirts and other jerseys | 8.8 | 31.7 | 1.7 | 8.0 | 1.5 | 7.6 | 1.3 | 9.6 | 4.4 | 18.5 | 4.3 | 23.3 | 5.8 | 25.3 |
| 353 | Sweaters, cardigans and pullovers | 20.4 | 46.4 | 4.4 | 18.8 | 4.2 | 20.8 | 6.1 | 26.3 | 10.3 | 32.9 | 11.8 | 33.6 | 13.8 | 38.8 |
| 355-364 | Hosiery, lingerie and sleepwear | 92.1 | 87.3 | 24.0 | 60.6 | 33.4 | 64.1 | 31.0 | 82.9 | 47.8 | 79.9 | 66.6 | 84.5 | 69.7 | 81.3 |
| 355 | Pantyhose | 29.4 | 75.8 | 5.8 | 37.0 | 9.5 | 48.1 | 16.4 | 59.5 | 15.4 | 56.9 | 25.5 | 71.6 | 20.8 | 67.2 |
| 356 | Regular stockings and other hosiery | 5.1 | 32.4 | 2.3 | 27.1 | 2.4 | 22.4 | 2.6 | 29.8 | 3.7 | 35.7 | 3.1 | 28.7 | 6.2 | 32.8 |
| 357 | Slips and half slips | 3.1 | 21.9 | 1.0 | 9.3 | .6 | 7.1 | 1.4 | 16.5 | 2.3 | 17.1 | 1.7 | 15.1 | 1.9 | 15.4 |
| 358 | Panties | 10.8 | 68.5 | 3.4 | 37.5 | 4.1 | 44.8 | 5.8 | 54.4 | 6.5 | 58.4 | 6.8 | 62.2 | 8.9 | 60.3 |
| 359-360 | Foundation garments | 21.1 | 69.2 | 6.5 | 34.2 | 8.0 | 40.2 | 13.1 | 57.5 | 10.5 | 50.8 | 14.1 | 50.5 | 16.3 | 62.1 |
| 361 | Pyjamas | 2.9 | 15.3 | 1.0 | 6.8 | 1.5 | 4.1 | 1.7 | 10.2 | 1.5 | 9.3 | 2.9 | 16.0 | 2.5 | 14.1 |
| 362 | Nightgowns | 8.7 | 35.8 | 1.4 | 11.7 | 3.1 | 17.6 | 4.9 | 26.5 | 4.0 | 26.2 | 6.2 | 30.8 | 5.6 | 25.9 |
| 363 | Loungewear, robes and dressing gowns | 10.1 | 30.4 | 2.2 | 11.8 | 4.0 | 13.1 | 4.8 | 17.8 | 4.7 | 15.5 | 6.1 | 26.0 | 6.8 | 24.2 |
| 364 | Other lingerie and sleepwear | .7 | 2.9 | .4 | 3.5 | .2 | .5 | .1 | 2.7 | .1 | .8 | .2 | 1.1 | .7 | 3.6 |
| 370-376 | Other clothing and accessories | 39.1 | 69.2 | 9.5 | 29.4 | 8.9 | 36.0 | 16.3 | 48.5 | 19.4 | 57.4 | 23.5 | 57.9 | 27.6 | 64.7 |
| 370 | Gloves and mittens | 4.9 | 35.6 | 1.3 | 13.7 | .7 | 11.7 | 2.0 | 22.9 | 2.0 | 22.9 | 2.6 | 26.3 | 3.2 | 32.0 |
| 371 | Hats and other headwear | 3.1 | 19.2 | 3.2 | 12.4 | 2.2 | 13.2 | .9 | 5.4 | 1.2 | 14.6 | 1.8 | 15.6 | 1.6 | 17.6 |
| 372 | Scarves, shawls, etc. | 2.4 | 20.3 | .5 | 7.8 | .4 | 6.4 | .3 | 6.7 | 1.0 | 14.1 | 2.3 | 18.6 | 1.6 | 14.1 |
| 373 | Bathing suits and other beachwear | 7.5 | 26.4 | .5 | 3.2 | .4 | 2.8 | 1.8 | 9.7 | 2.7 | 11.8 | 2.5 | 12.9 | 5.0 | 22.0 |
| 374 | Uniforms and occupational clothing | 3.1 | 5.2 | .1 | 1.2 | 1.5 | 1.0 | 2.6 | 3.8 | 2.9 | 3.3 | .9 | 3.6 | 2.2 | 3.4 |

TABLEAU 20. Dépenses moyennes détaillées, selon le revenu de la famille,
huit villes, Canada, 1976

Toutes familles et des personnes seules

| Family income — Revenu de la famille | | | | | | | | | | | | | | |
|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|---------|--|
| \$12,000 — 14,999 | | \$15,000 — 19,999 | | \$20,000 — 24,999 | | \$25,000 — 29,999 | | \$30,000 — 34,999 | | \$35,000 and over — \$35,000 et plus | | | | |
| Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | | | |
| | | | | | | | | | | | | Articles et accessoires d'ameublement — fin | | |
| 19.9 | 80.1 | 24.5 | 81.7 | 27.7 | 84.1 | 48.2 | 85.5 | 41.2 | 88.6 | 71.1 | 90.0 | Eclairage électrique | 250-251 | |
| 12.9 | 20.5 | 18.1 | 23.9 | 19.1 | 22.1 | 40.8 | 28.8 | 30.7 | 27.1 | 59.0 | 30.9 | Lampes, abat-jour, chandeliers, etc. | 250 | |
| 7.0 | 75.6 | 6.4 | 76.5 | 8.7 | 80.2 | 7.4 | 82.7 | 10.5 | 87.5 | 12.1 | 86.1 | Ampoules et tubes électriques | 251 | |
| 15.7 | 38.1 | 14.8 | 42.2 | 18.3 | 46.0 | 17.5 | 41.2 | 24.5 | 53.2 | 33.5 | 53.5 | Articles de cuisine non électriques | 254-259 | |
| 15.7 | 35.8 | 16.7 | 38.3 | 22.6 | 43.6 | 30.5 | 44.3 | 45.6 | 45.7 | 76.8 | 53.7 | Articles de table et de décoration | 260-265 | |
| 62.9 | 74.2 | 87.0 | 76.3 | 97.8 | 79.2 | 130.7 | 78.6 | 130.6 | 83.7 | 213.0 | 85.3 | Articles ménagers en tissu et en plastique | 266-274 | |
| 48.5 | 27.5 | 79.5 | 33.0 | 92.0 | 33.5 | 121.4 | 36.2 | 144.3 | 36.7 | 225.9 | 39.1 | Couvre-parquets | 275-277 | |
| 44.4 | 25.7 | 71.9 | 29.9 | 86.6 | 32.3 | 108.6 | 34.2 | 131.6 | 33.0 | 203.5 | 36.5 | Moquettes, tapis et carpettes | 275 | |
| 1.4 | 1.8 | 2.4 | 3.6 | 2.2 | 3.6 | 2.4 | 2.2 | 6.4 | 6.8 | 10.4 | 5.8 | Sous-tapis | 276 | |
| 2.7 | 2.7 | 5.2 | 4.6 | 3.2 | 3.1 | 10.4 | 4.4 | 6.3 | 5.5 | 12.0 | 4.7 | Couvre-parquets à surface rigide | 277 | |
| 62.4 | 75.2 | 87.7 | 77.5 | 105.9 | 82.2 | 129.3 | 81.0 | 132.3 | 81.5 | 320.1 | 88.6 | Divers | 280-302 | |
| 41.4 | 54.9 | 52.0 | 66.0 | 64.0 | 70.7 | 67.7 | 72.0 | 88.7 | 76.2 | 145.5 | 83.8 | Entretien et réparations | 310-314 | |
| 951.6 | 99.7 | 1175.1 | 100.0 | 1546.3 | 100.0 | 1755.7 | 100.0 | 2076.9 | 100.0 | 3091.8 | 100.0 | Habillement | 320-596 | |
| 476.8 | 88.6 | 531.5 | 90.8 | 709.9 | 93.8 | 824.0 | 97.7 | 1002.3 | 96.8 | 1582.3 | 98.2 | Vêtements pour femmes de 14 ans et plus | 320-384 | |
| 97.5 | 66.5 | 109.6 | 67.9 | 137.5 | 78.3 | 176.2 | 82.8 | 186.2 | 83.4 | 303.7 | 87.7 | Manteaux et tailleurs | 320-328 | |
| 24.9 | 19.6 | 34.2 | 24.2 | 33.3 | 27.0 | 49.2 | 32.4 | 44.1 | 28.7 | 75.6 | 41.0 | Manteaux d'hiver avec ou sans fourrure | 320 | |
| 9.0 | 13.9 | 6.3 | 11.5 | 8.8 | 14.9 | 10.3 | 14.4 | 11.8 | 18.4 | 19.5 | 21.6 | Manteaux de printemps | 321 | |
| 8.3 | 14.2 | 6.5 | 12.3 | 11.3 | 17.3 | 12.2 | 17.6 | 13.8 | 21.9 | 19.1 | 25.0 | Manteaux toutes saisons, imperméables | 322 | |
| 13.1 | 9.6 | 17.8 | 13.9 | 24.9 | 18.2 | 31.1 | 19.1 | 43.9 | 28.0 | 39.7 | 26.0 | Manteaux et vestes de cuir | 323 | |
| 4.0 | 12.2 | 3.9 | 9.8 | 5.1 | 13.4 | 7.0 | 15.8 | 5.7 | 10.5 | 7.4 | 15.0 | Vestes et blazers non assortis | 324 | |
| 14.4 | 16.9 | 13.0 | 17.5 | 18.5 | 24.3 | 25.2 | 25.0 | 22.2 | 25.2 | 42.5 | 28.4 | Tailleurs et pantailleurs tricotés | 325 | |
| 19.5 | 24.8 | 19.8 | 24.0 | 25.3 | 29.2 | 30.8 | 30.1 | 33.3 | 36.3 | 70.9 | 38.6 | Autres tailleurs et pantailleurs | 326 | |
| 3.6 | 9.4 | 7.4 | 13.5 | 8.7 | 17.5 | 7.6 | 16.2 | 8.2 | 15.7 | 22.8 | 30.4 | Vestes et costumes de ski | 327 | |
| .6 | 1.7 | .8 | 2.1 | 1.7 | 4.7 | 2.7 | 5.3 | 3.1 | 6.8 | 6.2 | 9.4 | Autres costumes de sport | 328 | |
| 25.9 | 5.5 | 19.9 | 4.2 | 47.9 | 5.6 | 45.4 | 7.0 | 57.0 | 7.2 | 108.0 | 9.6 | Fourrures et simili-fourrures | 330-331 | |
| 23.2 | 3.9 | 19.2 | 3.1 | 45.2 | 4.7 | 44.0 | 5.7 | 56.4 | 6.2 | 108.0 | 9.6 | Manteaux, vestes, etc. de fourrure | 330 | |
| 2.7 | 1.5 | .7 | 1.2 | 2.7 | .9 | 1.4 | 1.3 | .7 | 1.0 | | | Manteaux, vestes, etc. simili-fourrure | 331 | |
| 60.1 | 58.2 | 64.4 | 61.2 | 85.2 | 68.7 | 106.7 | 77.3 | 132.2 | 79.4 | 211.7 | 83.8 | Robes et jupes | 335-338 | |
| 13.9 | 16.9 | 11.4 | 16.1 | 21.4 | 24.8 | 26.1 | 26.4 | 26.1 | 26.4 | 56.6 | 33.5 | Robes tricotées | 335 | |
| 36.3 | 42.6 | 38.5 | 43.1 | 46.3 | 45.7 | 59.9 | 57.6 | 83.1 | 59.9 | 110.5 | 61.1 | Autres robes | 336 | |
| .8 | 5.9 | 3.8 | 9.1 | 5.1 | 9.9 | 5.9 | 13.8 | 5.1 | 12.9 | 12.9 | 20.5 | Jupes tricotées | 337 | |
| 8.1 | 22.4 | 10.7 | 25.2 | 12.3 | 28.9 | 14.8 | 31.8 | 17.8 | 35.8 | 31.7 | 46.0 | Autres jupes | 338 | |
| 45.3 | 65.0 | 51.4 | 72.7 | 64.5 | 80.3 | 71.3 | 80.3 | 81.1 | 83.2 | 115.7 | 84.4 | Pantalons tout-aller et shorts | 340-344 | |
| 10.6 | 25.0 | 14.4 | 28.6 | 19.5 | 37.7 | 20.3 | 36.2 | 14.9 | 34.9 | 32.2 | 40.7 | Pantalons tout-aller et tricotés | 340 | |
| 16.8 | 33.2 | 16.6 | 37.5 | 20.0 | 42.3 | 23.6 | 42.8 | 32.7 | 50.6 | 43.5 | 56.1 | Jeans (y compris en velours côtelé) | 341 | |
| 15.9 | 29.1 | 17.6 | 35.5 | 21.3 | 38.5 | 23.4 | 42.0 | 29.6 | 42.4 | 34.8 | 43.7 | Autres pantalons | 342 | |
| .5 | 3.9 | .5 | 3.8 | 1.2 | 8.5 | 1.4 | 8.2 | 1.3 | 10.7 | 1.6 | 7.5 | Shorts tricotés | 343 | |
| 1.5 | 11.5 | 2.3 | 16.9 | 2.6 | 16.5 | 2.7 | 14.2 | 2.6 | 16.0 | 3.6 | 19.1 | Autres shorts | 344 | |
| 52.9 | 73.1 | 55.8 | 77.7 | 70.7 | 85.2 | 89.7 | 90.1 | 103.6 | 88.7 | 151.3 | 93.2 | Blouses, chemises et chandails | 350-353 | |
| 10.4 | 26.5 | 12.4 | 31.1 | 13.0 | 31.3 | 18.6 | 36.5 | 18.1 | 38.0 | 29.7 | 41.6 | Blouses et chemises tricotées | 350 | |
| 18.9 | 40.4 | 17.5 | 38.9 | 25.5 | 50.8 | 30.1 | 51.2 | 33.7 | 52.6 | 47.2 | 59.1 | Autres blouses et chemises | 351 | |
| 7.1 | 27.7 | 7.7 | 32.9 | 10.4 | 38.8 | 12.5 | 41.4 | 16.1 | 48.9 | 22.0 | 55.1 | Tee-shirts et autres jerseys | 352 | |
| 16.5 | 40.7 | 18.2 | 47.4 | 21.9 | 53.5 | 28.5 | 63.9 | 35.7 | 62.8 | 52.3 | 70.1 | Chandails, cardigans et tricotés | 353 | |
| 76.9 | 86.4 | 93.2 | 89.8 | 107.8 | 93.2 | 117.6 | 96.2 | 133.7 | 96.0 | 186.4 | 96.4 | Bas, lingerie et vêtements de nuit | 355-364 | |
| 24.3 | 74.0 | 28.8 | 79.8 | 37.0 | 86.5 | 34.0 | 86.5 | 44.6 | 92.0 | 60.5 | 93.3 | Bas-culottes | 355 | |
| 3.8 | 30.9 | 5.2 | 26.3 | 6.0 | 33.2 | 6.1 | 35.7 | 7.5 | 38.1 | 8.3 | 49.8 | Bas ordinaires et autres | 356 | |
| 2.0 | 16.8 | 2.3 | 20.1 | 3.1 | 26.4 | 4.9 | 29.1 | 6.9 | 33.8 | 8.0 | 39.0 | Combinaisons-jupons et jupons | 357 | |
| 9.4 | 68.3 | 11.5 | 73.4 | 12.3 | 75.0 | 14.7 | 75.3 | 14.4 | 81.1 | 19.3 | 84.6 | Culottes | 358 | |
| 19.1 | 68.7 | 22.0 | 73.7 | 23.6 | 78.9 | 28.4 | 81.6 | 30.2 | 82.5 | 39.0 | 87.1 | Vêtements de base | 359-360 | |
| 2.1 | 13.1 | 3.0 | 16.2 | 3.5 | 19.7 | 2.9 | 12.4 | 4.8 | 22.0 | 5.9 | 24.7 | Pyjamas | 361 | |
| 7.2 | 32.1 | 9.3 | 40.0 | 9.9 | 43.8 | 12.7 | 41.7 | 11.4 | 42.6 | 17.7 | 51.3 | Chemises de nuit | 362 | |
| 8.5 | 27.9 | 10.2 | 32.7 | 11.6 | 36.1 | 13.1 | 37.4 | 13.2 | 35.1 | 25.7 | 51.0 | Vêt. de détente, robes d'intérieur | 363 | |
| .6 | 3.5 | .9 | 3.1 | .7 | 2.7 | .7 | 2.3 | .8 | 3.1 | 2.0 | 5.5 | Autres art. de lingerie, vêt. de nuit | 364 | |
| 31.1 | 65.6 | 33.6 | 71.6 | 47.6 | 80.9 | 53.4 | 81.7 | 56.5 | 86.6 | 100.2 | 90.5 | Autres vêtements et accessoires | 370-376 | |
| 3.9 | 31.6 | 4.0 | 35.7 | 5.9 | 45.1 | 6.8 | 40.0 | 6.8 | 45.6 | 14.6 | 62.5 | Gants et mitaines | 370 | |
| 3.2 | 18.6 | 2.5 | 18.5 | 3.3 | 23.3 | 4.0 | 21.4 | 2.7 | 21.6 | 8.4 | 30.8 | Chapeaux et autres coiffures | 371 | |
| 1.6 | 19.0 | 1.8 | 19.3 | 2.8 | 24.0 | 2.9 | 22.7 | 3.8 | 34.1 | 7.9 | 37.4 | Echarpes, châles, etc. | 372 | |
| 6.0 | 21.9 | 6.5 | 28.3 | 9.7 | 32.8 | 10.7 | 38.1 | 11.7 | 39.8 | 21.9 | 51.4 | Maillots de bain et vêt. de plage | 373 | |
| 2.4 | 3.7 | 3.0 | 5.3 | 3.9 | 6.9 | 4.0 | 7.9 | 4.0 | 7.7 | 6.7 | 8.4 | Uniformes et vêtements professionnels | 374 | |

TABLE 20. Detailed Average Expenditure, by Family Income,
Eight Cities, Canada, 1976

All Families and Unattached Individuals

| | | Family income — Revenu de la famille | | | | | | | | | | | | | |
|--|--|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|
| | | All classes — Toutes catégories | | Under \$4,000 — Moins de \$4,000 | | \$4,000 — 4,999 | | \$5,000 — 5,999 | | \$6,000 — 7,999 | | \$8,000 — 9,999 | | \$10,000 — 11,999 | |
| | | Av. per fam. — Moy. par fam. | ¢ rptg. — ¢ décl. | Av. per fam. — Moy. par fam. | ¢ rptg. — ¢ décl. | Av. per fam. — Moy. par fam. | ¢ rptg. — ¢ décl. | Av. per fam. — Moy. par fam. | ¢ rptg. — ¢ décl. | Av. per fam. — Moy. par fam. | ¢ rptg. — ¢ décl. | Av. per fam. — Moy. par fam. | ¢ rptg. — ¢ décl. | Av. per fam. — Moy. par fam. | ¢ rptg. — ¢ décl. |
| Clothing — continued | | | | | | | | | | | | | | | |
| Women, 14 and over — concluded: | | | | | | | | | | | | | | | |
| Other clothing, accessories — concluded: | | | | | | | | | | | | | | | |
| 375 | Handbags, wallets, etc. | 16.2 | 49.6 | 3.1 | 18.1 | 3.3 | 20.2 | 7.7 | 32.2 | 8.7 | 38.5 | 12.0 | 42.3 | 12.8 | 47.8 |
| 376 | Other: handkerchiefs, umbrellas, etc. | 1.8 | 14.9 | .6 | 5.3 | .3 | 3.5 | 1.1 | 7.9 | 1.0 | 11.5 | 1.3 | 10.9 | 1.2 | 11.8 |
| 377-379 | Jewellery | 57.5 | 44.2 | 2.3 | 12.3 | 4.5 | 13.3 | 8.7 | 22.8 | 14.9 | 23.3 | 20.7 | 36.0 | 30.9 | 34.3 |
| 377 | Watches | 10.2 | 15.2 | .6 | 3.6 | .5 | 1.5 | 4.3 | 7.0 | 4.6 | 9.3 | 5.2 | 13.3 | 8.1 | 14.7 |
| 378 | Lighters and cigarette cases | .9 | 4.0 | | | .4 | 5.7 | | 1.7 | .2 | 2.7 | .2 | 2.9 | .5 | 4.1 |
| 379 | Jewellery and costume jewellery | 46.4 | 37.8 | 1.7 | 10.4 | 1.5 | 7.6 | 4.3 | 17.0 | 10.1 | 15.7 | 15.2 | 26.2 | 22.3 | 25.0 |
| 380-384 | Footwear | 72.7 | 82.1 | 22.5 | 50.3 | 21.7 | 57.3 | 37.3 | 70.4 | 38.3 | 72.4 | 49.8 | 73.7 | 58.5 | 79.8 |
| 380 | Shoes and sandals | 48.8 | 75.9 | 15.8 | 41.8 | 14.3 | 48.5 | 25.3 | 62.0 | 27.4 | 63.3 | 35.3 | 67.8 | 39.3 | 69.6 |
| 381 | Boots (excl. rubber and plastic) | 15.7 | 30.6 | 3.8 | 12.8 | 3.2 | 8.5 | 9.0 | 20.9 | 8.1 | 23.8 | 9.9 | 22.4 | 13.1 | 29.1 |
| 382 | Rubber and plastic footwear | 2.1 | 9.6 | 1.4 | 8.8 | 2.0 | 10.2 | 1.4 | 8.1 | .7 | 5.6 | 1.4 | 7.7 | 2.2 | 7.9 |
| 383 | Sports and athletic footwear | 3.3 | 11.8 | .2 | 1.4 | 1.0 | 1.8 | .6 | 3.2 | .6 | 4.2 | 1.2 | 7.0 | 1.8 | 10.5 |
| 384 | Other | 2.9 | 29.4 | 1.2 | 16.6 | 1.2 | 17.0 | 1.1 | 21.0 | 1.5 | 18.8 | 2.0 | 19.8 | 2.2 | 25.2 |
| 390-454 | Girls, 4-13 | 57.0 | 18.5 | 2.7 | 2.6 | 22.8 | 9.6 | 26.6 | 13.5 | 20.2 | 9.9 | 17.4 | 8.5 | 36.3 | 18.6 |
| 390-401 | Coats, suits, and jackets | 9.8 | 16.6 | .9 | 1.9 | 2.2 | 6.8 | 3.4 | 10.8 | 4.1 | 8.7 | 2.9 | 6.8 | 5.5 | 15.6 |
| 405-408 | Dresses and skirts | 4.8 | 11.5 | .2 | 1.1 | 1.8 | 7.5 | 1.7 | 7.0 | 1.1 | 5.4 | 1.4 | 4.8 | 2.1 | 9.3 |
| 410-414 | Socks and shorts | 9.8 | 16.9 | .4 | 2.6 | 4.8 | 8.2 | 5.6 | 13.5 | 3.6 | 8.3 | 2.6 | 7.3 | 7.1 | 14.8 |
| 420-422 | Blouses, shirts and sweaters | 7.0 | 16.5 | .1 | 1.8 | 1.8 | 7.5 | 3.3 | 11.1 | 2.3 | 8.5 | 1.9 | 6.7 | 5.3 | 15.9 |
| 425-434 | Hosiery, lingerie and sleepwear | 8.6 | 18.1 | .4 | 2.6 | 5.7 | 9.6 | 3.8 | 13.5 | 2.9 | 9.7 | 2.9 | 8.5 | 5.5 | 17.9 |
| 440-448 | Other clothing, accessories, jewellery | 5.4 | 16.5 | .1 | 1.3 | 2.3 | 9.6 | 2.5 | 13.4 | 1.7 | 8.1 | 1.8 | 6.6 | 3.3 | 13.7 |
| 450-454 | Footwear | 11.5 | 18.1 | .7 | 1.9 | 4.2 | 9.6 | 6.3 | 13.4 | 4.4 | 9.1 | 3.8 | 8.5 | 7.6 | 18.6 |
| 460-504 | Men, 14 and over | 447.9 | 81.4 | 35.6 | 26.1 | 59.2 | 44.8 | 109.0 | 55.4 | 160.5 | 63.3 | 176.3 | 61.7 | 282.6 | 78.3 |
| 460-468 | Coats and jackets | 69.1 | 55.0 | 5.6 | 9.6 | 5.2 | 15.4 | 21.5 | 24.4 | 26.8 | 34.0 | 26.6 | 30.6 | 49.4 | 49.5 |
| 460 | Overcoats (including topcoats) | 12.9 | 11.8 | 1.3 | 1.9 | 1.5 | 1.5 | 1.3 | 2.1 | 8.7 | 9.5 | 6.3 | 7.4 | 11.4 | 11.3 |
| 461 | Other winter coats: duffle, etc. | 6.2 | 9.5 | .3 | .7 | .7 | 2.5 | .9 | 2.5 | 4.5 | 6.7 | 3.7 | 6.5 | 6.0 | 11.5 |
| 462 | All-weather coats (incl. raincoats) | 3.9 | 6.9 | .3 | 1.7 | .1 | 1.5 | 2.4 | 4.7 | 2.8 | 4.7 | 2.2 | 4.0 | 2.9 | 6.8 |
| 463 | Parkas and windbreakers | 5.2 | 14.2 | .9 | 3.3 | .6 | 3.2 | 2.0 | 6.7 | 2.8 | 8.2 | 2.8 | 9.6 | 4.6 | 11.6 |
| 464 | Ski jackets and ski suits | 6.4 | 11.8 | .3 | 1.0 | .7 | 1.8 | .3 | 1.2 | 1.4 | 3.8 | 1.2 | 3.0 | 4.6 | 9.5 |
| 465 | Suits for other sports | 4.1 | 6.0 | .1 | .3 | .6 | 1.0 | .1 | .3 | .7 | 1.0 | .8 | 1.6 | 1.6 | 3.2 |
| 466 | Light weight jackets | 4.9 | 13.6 | .4 | 1.6 | 1.0 | 6.0 | 3.5 | 8.0 | 1.1 | 5.3 | 2.6 | 8.7 | 3.3 | 10.3 |
| 467 | Leather coats and jackets | 23.6 | 16.3 | 2.0 | 1.2 | | | 11.1 | 5.3 | 4.9 | 3.6 | 7.1 | 6.4 | 14.7 | 11.9 |
| 468 | Fur and artificial fur coats, jackets | 1.8 | .6 | | | | | | | | | | | .3 | .7 |
| 470-473 | Suits, sports coats and blazers | 102.6 | 47.2 | 6.4 | 7.2 | 6.4 | 7.3 | 18.3 | 17.5 | 30.4 | 25.1 | 38.1 | 27.2 | 50.9 | 35.5 |
| 470 | Knitted suits | 16.0 | 9.0 | | .4 | | | 1.1 | 1.7 | 7.5 | 5.0 | 8.7 | 6.3 | 10.0 | 7.1 |
| 471 | Other suits | 72.3 | 32.1 | 6.0 | 5.1 | 5.6 | 3.8 | 12.3 | 9.7 | 20.2 | 13.2 | 24.6 | 16.1 | 34.1 | 22.5 |
| 472 | Knitted sports coats, jackets, blazers | 6.5 | 9.1 | .3 | 1.8 | .1 | 1.0 | 2.5 | 8.4 | 1.2 | 3.4 | 3.2 | 5.6 | 4.0 | 6.5 |
| 473 | Other sports jackets and blazers | 7.7 | 9.2 | .1 | .7 | .8 | 2.5 | 2.3 | 3.8 | 1.5 | 4.1 | 1.7 | 2.7 | 2.7 | 4.8 |
| 475-478 | Pants, jeans and shorts | 68.4 | 71.4 | 6.5 | 17.8 | 15.4 | 24.9 | 16.2 | 37.7 | 27.5 | 49.0 | 30.4 | 49.4 | 49.6 | 65.7 |
| 475 | Knitted pants and slacks | 17.7 | 29.4 | 1.6 | 6.2 | 2.0 | 8.3 | 5.1 | 14.6 | 8.5 | 19.3 | 8.3 | 17.4 | 12.2 | 22.9 |
| 476 | Jeans (including corduroy jeans) | 26.8 | 41.9 | 2.9 | 6.3 | 8.4 | 9.6 | 6.2 | 13.9 | 9.8 | 17.6 | 12.1 | 24.2 | 20.2 | 38.7 |
| 477 | Other pants and jeans | 22.1 | 35.2 | 2.0 | 8.8 | 4.8 | 14.2 | 4.9 | 13.4 | 8.5 | 20.7 | 9.5 | 22.4 | 16.2 | 32.0 |
| 478 | Shorts | 1.8 | 11.9 | | | .2 | 1.0 | | | .8 | 4.8 | .5 | 5.1 | 1.1 | 6.4 |
| 480-485 | Shirts and sweaters | 69.9 | 72.7 | 4.6 | 16.2 | 12.7 | 27.2 | 18.8 | 39.6 | 22.0 | 45.9 | 25.8 | 48.8 | 42.0 | 67.8 |
| 480 | Dress shirts | 29.3 | 52.4 | 1.5 | 8.5 | 3.9 | 16.4 | 9.3 | 20.8 | 7.7 | 22.5 | 11.8 | 31.5 | 16.0 | 40.1 |
| 481 | Knitted sport shirts | 7.1 | 18.0 | .5 | 2.2 | .3 | 1.6 | 1.2 | 5.4 | 3.7 | 10.5 | 2.1 | 8.6 | 5.1 | 15.8 |
| 482 | Other sport shirts | 9.6 | 23.5 | .6 | 2.4 | 4.9 | 11.6 | 1.4 | 8.0 | 3.2 | 12.5 | 3.0 | 10.4 | 5.4 | 16.1 |
| 483 | Work shirts | 3.5 | 13.1 | .4 | 3.4 | .6 | 4.4 | .5 | 1.6 | 1.2 | 6.2 | 1.8 | 8.2 | 2.6 | 13.8 |
| 484 | Sweaters, cardigans, pullovers | 12.4 | 32.4 | 1.1 | 6.6 | 1.0 | 3.9 | 3.8 | 14.5 | 2.5 | 10.9 | 4.2 | 18.9 | 8.0 | 25.1 |
| 485 | T-shirts and other jerseys | 7.9 | 33.4 | .5 | 5.3 | 2.0 | 7.6 | 2.5 | 13.4 | 3.6 | 17.4 | 2.8 | 16.5 | 4.9 | 25.4 |
| 486-489 | Socks, underwear and sleepwear | 28.9 | 71.9 | 2.7 | 16.8 | 6.8 | 36.8 | 12.1 | 43.1 | 11.7 | 50.6 | 14.8 | 51.2 | 21.2 | 69.6 |
| 486 | Dress socks | 8.4 | 50.8 | .5 | 8.9 | 1.2 | 20.2 | 2.8 | 21.2 | 3.5 | 33.5 | 3.5 | 32.0 | 6.3 | 45.6 |
| 487 | Sport and work socks | 4.0 | 27.4 | .3 | 3.1 | 1.4 | 9.9 | .9 | 8.4 | 1.3 | 12.0 | 1.5 | 13.6 | 2.7 | 25.1 |
| 488 | Undershirts, briefs, boxer shorts etc. | 12.0 | 58.5 | 1.5 | 13.0 | 3.1 | 23.5 | 5.5 | 31.6 | 4.5 | 34.8 | 6.8 | 40.8 | 9.0 | 53.1 |
| 489 | Pyjamas, bathrobes, dressing gowns | 4.6 | 20.4 | .4 | 3.1 | 1.0 | 7.5 | 3.0 | 12.6 | 2.3 | 14.2 | 3.0 | 12.9 | 3.2 | 15.4 |
| 490-496 | Other clothing and accessories | 25.1 | 60.8 | 2.2 | 13.5 | 1.3 | 13.3 | 4.8 | 25.5 | 8.7 | 33.6 | 7.7 | 38.7 | 14.7 | 54.6 |
| 490 | Gloves and mittens | 4.6 | 29.9 | .3 | 5.5 | .2 | 5.3 | 1.4 | 10.7 | 1.5 | 17.2 | 1.1 | 12.5 | 3.5 | 26.4 |
| 491 | Ties | 7.3 | 33.3 | .6 | 5.6 | .2 | 2.5 | 1.5 | 8.0 | 1.5 | 11.9 | 1.9 | 15.6 | 3.0 | 21.4 |
| 492 | Belts | 3.2 | 25.9 | .3 | 3.5 | .4 | 6.5 | .8 | 7.8 | .9 | 11.0 | 1.1 | 13.9 | 2.3 | 21.7 |

TABLEAU 20. Dépenses moyennes détaillées, selon le revenu de la famille,
huit villes, Canada, 1976

Toutes familles et des personnes seules

| Family income — Revenu de la famille | | | | | | | | | | | | | | |
|--------------------------------------|-------------------|------------------------------|-------------------|------------------------------|-------------------|------------------------------|-------------------|------------------------------|-------------------|--------------------------------------|-------------------|--|--|---------|
| \$12,000 — 14,999 | | \$15,000 — 19,999 | | \$20,000 — 24,999 | | \$25,000 — 29,999 | | \$30,000 — 34,999 | | \$35,000 and over — \$35,000 et plus | | | | |
| Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | | | |
| | | | | | | | | | | | | Habillement — suite | | |
| | | | | | | | | | | | | Vêtements pour femmes de 14 ans et plus — fin: | | |
| 12.6 | 46.3 | 14.5 | 48.0 | 19.9 | 59.0 | 22.2 | 60.4 | 25.2 | 65.9 | 36.1 | 73.0 | Autres vêtements et accessoires — fin: | | |
| 1.4 | 14.0 | 1.4 | 13.6 | 2.2 | 19.9 | 2.6 | 20.2 | 2.2 | 18.6 | 4.6 | 23.6 | Sacs à main, portefeuilles, etc. | | 375 |
| | | | | | | | | | | | | Autres- mouchoirs, parapluies, etc. | | 376 |
| 25.7 | 40.6 | 38.2 | 43.9 | 65.2 | 56.7 | 68.1 | 57.7 | 131.5 | 59.7 | 249.1 | 74.4 | Bijoux | | 377-379 |
| 5.6 | 12.7 | 7.2 | 13.0 | 9.6 | 18.1 | 16.8 | 20.6 | 17.9 | 21.5 | 36.8 | 31.6 | Montres | | 377 |
| .5 | 4.3 | .3 | 4.0 | .7 | 6.4 | .4 | 2.8 | .4 | 3.7 | 6.7 | 5.4 | Briquets et étuis à cigarettes | | 378 |
| 19.5 | 35.0 | 30.7 | 39.0 | 54.9 | 49.4 | 50.9 | 49.3 | 113.3 | 53.9 | 205.6 | 68.5 | Bijoux et bijoux de fantaisie | | 379 |
| 61.3 | 81.8 | 65.4 | 84.5 | 83.5 | 90.1 | 95.5 | 91.2 | 120.4 | 93.6 | 156.2 | 95.3 | Chaussures | | 380-384 |
| 41.8 | 75.5 | 42.5 | 77.9 | 55.7 | 85.3 | 66.5 | 86.3 | 79.0 | 89.6 | 102.7 | 92.9 | Chaussures et sandales | | 380 |
| 12.8 | 29.0 | 15.4 | 32.0 | 17.9 | 35.9 | 18.1 | 33.0 | 27.2 | 40.4 | 34.9 | 48.7 | Bottes (sauf caoutchouc et plastique) | | 381 |
| 1.7 | 8.5 | 1.9 | 10.4 | 2.0 | 9.1 | 2.3 | 9.3 | 4.0 | 14.5 | 4.3 | 14.8 | Chaussures caoutchouc et plastique | | 382 |
| 2.4 | 9.3 | 2.9 | 11.6 | 4.7 | 14.8 | 4.9 | 16.8 | 5.4 | 17.0 | 8.9 | 27.0 | Chaussures de sport et d'athlétisme | | 383 |
| 2.6 | 29.6 | 2.8 | 30.1 | 3.2 | 34.3 | 3.8 | 34.0 | 4.7 | 42.5 | 5.5 | 40.2 | Autres | | 384 |
| 29.2 | 13.1 | 64.6 | 22.8 | 87.6 | 27.0 | 90.1 | 20.9 | 90.1 | 24.0 | 100.9 | 25.3 | Vêtements pour fillettes de 4 à 13 ans. | | 390-454 |
| 5.1 | 11.1 | 12.2 | 20.8 | 15.1 | 24.1 | 13.4 | 20.4 | 17.1 | 22.7 | 17.1 | 22.8 | Manteaux, tailleurs et vestes | | 390-401 |
| 2.7 | 6.7 | 5.3 | 13.1 | 6.6 | 17.2 | 8.2 | 15.5 | 8.2 | 17.7 | 10.5 | 17.3 | Robes et jupes | | 405-408 |
| 5.7 | 11.2 | 10.1 | 20.6 | 15.7 | 25.5 | 16.1 | 19.3 | 16.0 | 23.3 | 15.1 | 23.9 | Pantalons tout-aller et shorts | | 410-414 |
| 3.2 | 10.4 | 7.7 | 20.6 | 9.8 | 24.3 | 12.6 | 19.7 | 10.9 | 23.2 | 13.8 | 23.9 | Blouses, chemises et chandails | | 420-423 |
| 3.9 | 12.3 | 10.3 | 22.3 | 13.6 | 26.3 | 14.0 | 20.5 | 12.3 | 24.0 | 13.3 | 24.8 | Bas, lingerie et vêtements de nuit | | 425-434 |
| 2.2 | 10.7 | 5.7 | 20.2 | 9.0 | 26.2 | 9.3 | 19.4 | 7.9 | 21.5 | 10.5 | 22.1 | Autres vêtements, accessoires et bijoux | | 440-448 |
| 6.4 | 12.5 | 13.3 | 22.2 | 17.7 | 26.5 | 16.6 | 20.9 | 17.8 | 23.2 | 20.6 | 25.3 | Chaussures | | 450-454 |
| 316.0 | 80.4 | 421.1 | 91.6 | 569.1 | 95.6 | 672.6 | 95.9 | 787.3 | 95.6 | 1150.6 | 98.8 | Vêtements pour hommes de 14 ans et plus | | 460-504 |
| 48.7 | 52.6 | 64.2 | 63.2 | 88.8 | 68.2 | 104.4 | 73.4 | 118.8 | 70.5 | 171.7 | 79.5 | Manteaux et vestons | | 460-468 |
| 7.8 | 11.1 | 12.6 | 12.6 | 17.8 | 16.2 | 15.2 | 14.5 | 15.0 | 13.1 | 35.9 | 19.7 | Pardessus (y compr. parkets) | | 460 |
| 5.7 | 8.6 | 5.6 | 9.0 | 6.4 | 11.8 | 12.6 | 13.6 | 6.7 | 13.3 | 12.1 | 15.7 | Autres manteaux d'hiver | | 461 |
| 2.7 | 6.1 | 3.0 | 6.5 | 3.8 | 7.1 | 6.3 | 9.6 | 7.2 | 12.4 | 10.5 | 12.3 | Manteaux toutes saisons, imperméables | | 462 |
| 5.9 | 17.3 | 5.4 | 14.8 | 5.6 | 15.7 | 7.7 | 18.3 | 8.5 | 20.7 | 8.5 | 20.7 | Parkas et blousons | | 463 |
| 2.4 | 6.9 | 6.4 | 13.4 | 8.6 | 18.3 | 8.7 | 15.8 | 13.7 | 18.0 | 19.5 | 25.6 | Vestes et costumes de ski | | 464 |
| 2.4 | 4.1 | 3.7 | 6.0 | 4.8 | 8.2 | 5.7 | 7.7 | 7.1 | 8.8 | 15.9 | 19.3 | Autres costumes de sport | | 465 |
| 5.0 | 11.7 | 4.4 | 13.8 | 5.9 | 17.5 | 8.2 | 20.5 | 9.2 | 23.9 | 8.8 | 19.7 | Vestes légères | | 466 |
| 16.6 | 12.6 | 22.1 | 18.1 | 32.6 | 22.3 | 34.0 | 22.9 | 47.5 | 28.0 | 57.6 | 33.4 | Manteaux et vestes de cuir | | 467 |
| .1 | .1 | 1.0 | .8 | 3.2 | .9 | 6.1 | 1.1 | 3.9 | 1.1 | 2.9 | 1.4 | Manteaux et vestes, fourrure et simili | | 468 |
| 60.6 | 39.1 | 84.7 | 53.8 | 118.4 | 59.3 | 168.3 | 68.7 | 209.8 | 67.9 | 320.8 | 77.8 | Complets, manteaux sport et blazers | | 470-473 |
| 13.3 | 8.8 | 14.9 | 9.1 | 18.3 | 11.3 | 23.7 | 12.6 | 32.6 | 16.8 | 38.8 | 14.2 | Complets tricotés | | 470 |
| 39.2 | 23.9 | 55.4 | 36.4 | 85.0 | 40.5 | 120.1 | 47.9 | 153.9 | 50.7 | 237.3 | 59.9 | Autres complets | | 471 |
| 3.1 | 5.4 | 6.3 | 9.9 | 6.2 | 10.9 | 12.3 | 17.3 | 12.7 | 12.1 | 19.1 | 14.3 | Manteaux sport et vestes tricotés | | 472 |
| 5.0 | 6.3 | 8.2 | 10.4 | 8.8 | 12.4 | 12.0 | 13.9 | 10.6 | 12.0 | 25.6 | 20.7 | Autres vestons sport et blazers | | 473 |
| 60.5 | 70.6 | 68.2 | 82.3 | 83.8 | 87.4 | 100.1 | 86.9 | 106.5 | 88.2 | 152.2 | 93.5 | Pantalons, jeans et shorts | | 475-478 |
| 19.1 | 30.7 | 17.9 | 33.3 | 21.0 | 34.6 | 25.8 | 39.0 | 26.1 | 41.3 | 35.1 | 40.9 | Pantalons tricotés | | 475 |
| 25.1 | 39.8 | 25.2 | 49.2 | 33.5 | 55.2 | 39.1 | 55.3 | 44.8 | 55.0 | 57.4 | 61.5 | Jeans (y compr. en velours côtelé) | | 476 |
| 15.1 | 29.4 | 23.3 | 41.2 | 26.8 | 42.1 | 32.7 | 47.8 | 32.9 | 47.1 | 53.6 | 62.4 | Autres pantalons et jeans | | 477 |
| 1.0 | 8.9 | 1.7 | 14.2 | 2.5 | 16.7 | 2.5 | 17.2 | 2.7 | 15.3 | 6.1 | 24.7 | Shorts | | 478 |
| 50.3 | 72.1 | 66.1 | 83.2 | 91.1 | 90.0 | 106.7 | 90.7 | 117.2 | 89.9 | 178.2 | 96.0 | Chemises et chandails | | 480-485 |
| 20.4 | 47.0 | 26.1 | 60.1 | 38.1 | 67.6 | 48.6 | 70.8 | 52.5 | 71.4 | 75.4 | 85.7 | Chemises habillées | | 480 |
| 4.7 | 13.1 | 5.7 | 16.6 | 10.6 | 28.5 | 11.0 | 26.6 | 12.7 | 25.0 | 17.4 | 31.7 | Chemises sport tricotées | | 481 |
| 6.1 | 17.5 | 9.2 | 25.3 | 11.1 | 26.6 | 15.1 | 35.4 | 16.9 | 38.1 | 27.0 | 48.2 | Autres chemises sport | | 482 |
| 4.4 | 16.2 | 4.6 | 17.3 | 5.3 | 18.1 | 3.8 | 12.6 | 4.1 | 14.7 | 3.8 | 11.8 | Chemises de travail | | 483 |
| 8.7 | 27.1 | 11.9 | 36.5 | 15.8 | 40.8 | 17.1 | 43.9 | 19.5 | 45.7 | 36.7 | 62.6 | Chandails, cardigans, tricotés | | 484 |
| 6.1 | 31.6 | 8.7 | 40.2 | 10.2 | 44.6 | 11.2 | 44.5 | 11.5 | 41.9 | 17.9 | 47.9 | Tee-shirts et autres jerseys | | 485 |
| 21.3 | 70.0 | 28.0 | 79.2 | 35.9 | 88.9 | 42.5 | 86.8 | 49.5 | 89.2 | 64.9 | 94.5 | Chaussettes, sous-vêt. et vêt. de nuit | | 486-489 |
| 6.0 | 45.3 | 8.5 | 55.8 | 10.0 | 64.1 | 12.4 | 66.7 | 14.6 | 66.8 | 19.7 | 78.0 | Chaussettes habillées | | 486 |
| 3.1 | 22.9 | 4.0 | 30.7 | 5.5 | 38.4 | 5.4 | 34.9 | 7.3 | 42.9 | 8.2 | 42.4 | Chaussettes sport et travail | | 487 |
| 9.4 | 53.8 | 11.9 | 66.2 | 14.1 | 71.6 | 18.0 | 72.8 | 19.5 | 79.4 | 26.4 | 83.5 | Canisoles, caleçons, etc. | | 488 |
| 2.8 | 15.7 | 3.6 | 19.8 | 6.3 | 27.4 | 6.7 | 27.7 | 8.1 | 32.0 | 10.6 | 34.1 | Pyjamas, peignoirs, robes de chambre | | 489 |
| 15.9 | 54.7 | 23.9 | 68.7 | 34.2 | 78.3 | 32.8 | 79.1 | 42.8 | 82.8 | 73.7 | 89.6 | Autres vêtements et accessoires | | 490-496 |
| 3.1 | 27.4 | 5.5 | 36.5 | 5.5 | 34.0 | 5.6 | 38.8 | 7.2 | 43.1 | 11.8 | 50.6 | Gants et mitaines | | 490 |
| 3.6 | 24.9 | 5.4 | 34.7 | 10.2 | 44.7 | 11.7 | 48.8 | 12.8 | 51.8 | 25.5 | 72.2 | Cravates | | 491 |
| 2.3 | 22.3 | 2.9 | 27.8 | 4.3 | 34.2 | 4.4 | 34.3 | 6.0 | 35.5 | 8.2 | 49.8 | Ceintures | | 492 |

TABLE 20. Detailed Average Expenditure, by Family Income,
Eight Cities, Canada, 1976

All Families and Unattached Individuals

| | | Family income — Revenu de la famille | | | | | | | | | | | | | |
|---------|---|--------------------------------------|---------|------------------|---------|-----------------|---------|-----------------|---------|-----------------|---------|-----------------|---------|-------------------|---------|
| | | All classes | | Under \$4,000 | | \$4,000 — 4,999 | | \$5,000 — 5,999 | | \$6,000 — 7,999 | | \$8,000 — 9,999 | | \$10,000 — 11,999 | |
| | | Toutes catégories | | Moins de \$4,000 | | | | | | | | | | | |
| | | Av. per fam. | % rptg. | Av. per fam. | % rptg. | Av. per fam. | % rptg. | Av. per fam. | % rptg. | Av. per fam. | % rptg. | Av. per fam. | % rptg. | Av. per fam. | % rptg. |
| | | Moy. par fam. | % décl. | Moy. par fam. | % décl. | Moy. par fam. | % décl. | Moy. par fam. | % décl. | Moy. par fam. | % décl. | Moy. par fam. | % décl. | Moy. par fam. | % décl. |
| | Clothing — concluded | | | | | | | | | | | | | | |
| | Men, 14 and over — concluded: | | | | | | | | | | | | | | |
| | Other clothing, accessories — concluded: | | | | | | | | | | | | | | |
| 493 | Uniforms and occupational clothing | 3.8 | 5.3 | .2 | .5 | | | | | | | 1.5 | 2.0 | 1.6 | 2.7 |
| 494 | Bathing suits and other beach wear | 2.4 | 17.5 | .2 | 1.2 | .2 | 1.5 | .1 | 1.3 | .5 | 5.6 | .6 | 7.1 | .9 | 10.4 |
| 495 | Billfolds and wallets | 1.5 | 12.5 | .2 | 3.0 | .1 | 2.5 | .4 | 4.6 | .8 | 8.9 | .6 | 6.1 | 1.4 | 11.4 |
| 496 | Other: hats, handkerchiefs, umbrellas | 2.3 | 18.6 | .3 | 4.6 | .3 | 4.0 | .7 | 8.8 | 1.0 | 11.2 | 1.1 | 10.4 | 2.0 | 18.6 |
| 497-499 | Jewellery | 21.4 | 23.2 | 1.1 | 3.4 | .5 | 3.7 | .8 | 4.8 | 7.5 | 12.5 | 8.2 | 13.9 | 12.1 | 19.8 |
| 497 | Watches | 12.2 | 16.1 | 1.0 | 2.5 | .5 | 3.7 | .7 | 2.7 | 4.4 | 8.3 | 4.7 | 11.0 | 6.9 | 13.4 |
| 498 | Lighters and cigarette cases | .7 | 4.7 | | 1.1 | | | .1 | 2.4 | .3 | 1.7 | .5 | 3.7 | .6 | 5.3 |
| 499 | Cuff links, tie clips, rings, etc. | 8.5 | 6.4 | | .1 | | | | | 2.8 | 3.7 | 2.9 | 2.5 | 4.6 | 4.2 |
| 500-504 | Footwear | 62.6 | 72.9 | 6.5 | 18.3 | 10.9 | 26.1 | 16.4 | 38.2 | 25.9 | 52.9 | 24.7 | 49.8 | 42.8 | 70.7 |
| 500 | Shoes and sandals | 38.4 | 61.4 | 4.2 | 14.7 | 5.9 | 20.0 | 10.4 | 29.3 | 17.0 | 39.6 | 14.4 | 36.7 | 24.7 | 58.2 |
| 501 | Boots (excl. rubber and plastic) | 12.1 | 25.5 | 1.2 | 4.2 | 2.4 | 7.6 | 4.4 | 5.1 | 5.5 | 15.5 | 6.6 | 15.5 | 11.2 | 28.7 |
| 502 | Rubber and plastic footwear | 3.3 | 18.8 | .6 | 5.6 | 1.1 | 5.2 | .5 | 5.5 | 1.6 | 14.8 | 1.0 | 9.2 | 1.6 | 13.6 |
| 503 | Sports and athletic footwear | 6.9 | 20.0 | .3 | 1.0 | 1.1 | 7.0 | .7 | 4.8 | .9 | 4.3 | 1.5 | 6.5 | 3.3 | 12.1 |
| 504 | Other | 1.9 | 13.7 | .2 | 2.9 | .4 | 5.0 | .4 | 4.9 | .9 | 9.8 | 1.2 | 7.6 | 2.0 | 15.6 |
| 510-554 | Boys, 4-13 | 52.0 | 19.3 | 2.7 | 1.9 | 7.4 | 7.3 | 14.8 | 9.5 | 17.2 | 9.6 | 16.7 | 7.2 | 36.9 | 19.5 |
| 510-518 | Coats and jackets | 6.9 | 16.2 | | .3 | .8 | 4.1 | 1.8 | 8.2 | 3.1 | 8.8 | 2.3 | 6.6 | 5.0 | 16.8 |
| 520-523 | Suits, sports coats and blazers | 2.2 | 6.5 | .2 | .7 | | | .4 | 1.3 | .2 | 1.9 | .6 | 2.3 | 1.7 | 5.4 |
| 525-528 | Pants, jeans and shorts | 13.1 | 18.8 | 1.0 | 1.9 | 1.6 | 7.3 | 2.8 | 8.1 | 4.9 | 9.4 | 4.5 | 7.2 | 9.1 | 18.1 |
| 530-535 | Shirts and sweaters | 8.4 | 18.1 | .5 | 1.0 | .8 | 5.9 | 1.6 | 7.7 | 2.2 | 8.8 | 2.7 | 6.5 | 5.5 | 17.7 |
| 536-539 | Socks, underwear and sleepwear | 6.0 | 18.4 | .1 | 1.2 | 1.1 | 5.9 | 2.2 | 9.3 | 1.9 | 9.0 | 2.5 | 7.1 | 5.0 | 18.6 |
| 540-548 | Other clothing, accessories, jewellery | 3.7 | 16.8 | .2 | 1.9 | .9 | 4.5 | .9 | 7.4 | 1.0 | 7.4 | 1.0 | 5.0 | 2.0 | 15.1 |
| 550-554 | Footwear | 11.6 | 18.9 | .5 | 1.9 | 2.2 | 5.9 | 5.1 | 9.5 | 4.0 | 9.6 | 3.0 | 7.2 | 8.6 | 18.5 |
| 560-584 | Children, under 4 | 27.4 | 13.6 | 1.4 | 2.5 | 2.4 | 2.2 | 8.1 | 6.7 | 7.7 | 5.7 | 10.6 | 7.8 | 34.2 | 16.0 |
| 585-596 | Clothing materials and services | 58.5 | 73.1 | 16.6 | 51.5 | 15.5 | 56.2 | 21.5 | 59.9 | 25.5 | 62.2 | 32.6 | 66.3 | 48.1 | 68.7 |
| 600-636 | Personal care | 280.1 | 99.9 | 70.0 | 98.8 | 111.7 | 100.0 | 139.9 | 100.0 | 143.4 | 99.4 | 191.0 | 100.0 | 222.7 | 100.0 |
| 600-604 | Personal care services | 119.2 | 90.0 | 31.5 | 67.2 | 51.5 | 74.8 | 64.8 | 82.8 | 60.1 | 81.8 | 81.1 | 87.3 | 93.2 | 89.9 |
| 600 | Barber shop and hair styling services | 41.8 | 70.7 | 6.0 | 25.5 | 15.1 | 34.7 | 13.6 | 45.2 | 17.4 | 50.2 | 21.2 | 53.9 | 27.5 | 65.6 |
| 601-603 | Beauty parlour services | 76.1 | 70.5 | 25.5 | 42.6 | 36.4 | 50.6 | 51.2 | 64.1 | 42.6 | 56.9 | 59.0 | 66.3 | 64.5 | 63.2 |
| 601 | Permanents | 12.5 | 27.8 | 7.2 | 26.4 | 7.7 | 23.1 | 15.6 | 39.9 | 9.0 | 27.3 | 11.1 | 28.6 | 11.4 | 27.4 |
| 602 | Shampoos, hair cuts, manicures | 57.8 | 63.0 | 18.1 | 33.8 | 28.5 | 39.0 | 33.0 | 50.0 | 31.9 | 43.8 | 45.3 | 60.3 | 49.3 | 55.6 |
| 603 | Hair tintings, etc. | 5.8 | 7.9 | .2 | 1.0 | .2 | 1.9 | 2.6 | 7.6 | 1.7 | 3.8 | 2.6 | 3.3 | 3.8 | 7.8 |
| 604 | Other: massages, slenderizing, etc. | 1.3 | 1.6 | | | | | | | .1 | .7 | .9 | 1.1 | 1.3 | .6 |
| 610-625 | Toilet preparations | 133.1 | 99.5 | 32.4 | 98.0 | 51.3 | 99.0 | 61.7 | 100.0 | 68.9 | 98.2 | 90.8 | 98.8 | 104.9 | 100.0 |
| 610-613 | Hair preparations | 31.8 | 93.0 | 7.8 | 63.1 | 16.3 | 82.0 | 17.2 | 87.4 | 18.5 | 88.2 | 23.3 | 92.8 | 25.2 | 93.3 |
| 614-616 | Make-up preparations | 17.5 | 70.7 | 3.4 | 31.6 | 3.5 | 34.3 | 7.4 | 58.1 | 7.3 | 50.3 | 13.8 | 66.1 | 11.8 | 63.0 |
| 617 | Beauty preparations, creams, lotions, etc. | 9.1 | 55.6 | 2.5 | 31.0 | 2.4 | 33.2 | 4.5 | 45.6 | 4.6 | 39.3 | 6.4 | 49.7 | 5.8 | 47.0 |
| 618-619 | Fragrance preparations | 15.3 | 57.7 | 2.4 | 24.2 | 3.1 | 28.5 | 5.3 | 36.2 | 5.1 | 32.1 | 9.1 | 53.5 | 11.3 | 59.7 |
| 620 | Toilet soap, shaving soap | 15.4 | 90.5 | 6.0 | 77.1 | 8.2 | 80.4 | 8.5 | 89.3 | 9.9 | 83.6 | 11.3 | 86.3 | 13.3 | 94.3 |
| 621-622 | Shaving preparations n.e.s. | 9.2 | 57.6 | 1.3 | 17.9 | 3.2 | 29.7 | 2.7 | 36.1 | 3.1 | 35.4 | 4.1 | 36.6 | 6.1 | 47.1 |
| 623 | Personal deodorants | 14.2 | 83.4 | 3.4 | 50.0 | 5.8 | 61.6 | 6.3 | 69.4 | 7.5 | 70.0 | 9.7 | 75.7 | 12.4 | 81.4 |
| 624 | Oral hygiene products: toothpaste, etc. | 17.8 | 91.9 | 5.2 | 72.2 | 8.5 | 80.9 | 8.8 | 85.8 | 11.6 | 89.0 | 12.8 | 90.8 | 17.0 | 94.2 |
| 625 | Other toilet preparations | 2.7 | 34.8 | .4 | 8.3 | .4 | 7.3 | 1.0 | 26.7 | 1.4 | 21.5 | 1.3 | 22.0 | 1.9 | 29.2 |
| 630-636 | Other personal care supplies | 27.8 | 90.4 | 6.0 | 60.4 | 8.8 | 75.3 | 13.3 | 82.4 | 14.4 | 82.9 | 19.0 | 88.6 | 24.7 | 89.6 |
| 650-707 | Medical and health care | 350.5 | 95.0 | 65.4 | 75.0 | 147.8 | 85.2 | 146.4 | 87.3 | 160.7 | 89.0 | 245.9 | 94.6 | 283.4 | 96.6 |
| 650-663 | Health insurance premiums | 131.9 | 67.1 | 17.6 | 28.1 | 22.5 | 33.7 | 32.1 | 47.1 | 47.8 | 45.9 | 80.2 | 66.8 | 115.2 | 71.1 |
| 650-651 | Public prepaid plans | 109.0 | 58.3 | 14.6 | 21.0 | 19.7 | 26.2 | 27.8 | 26.9 | 42.7 | 39.0 | 71.1 | 58.5 | 100.5 | 64.2 |
| 660-663 | Other prepaid plans | 22.9 | 25.1 | 3.0 | 7.8 | 2.7 | 10.3 | 4.5 | 11.4 | 5.2 | 11.3 | 9.1 | 17.7 | 14.7 | 18.7 |
| 670-707 | Direct costs to family | 218.6 | 90.7 | 47.8 | 69.1 | 125.4 | 81.5 | 114.3 | 83.7 | 112.9 | 82.4 | 165.7 | 88.1 | 168.2 | 88.3 |
| 670-677 | Physicians' care | 9.4 | 16.9 | 3.1 | 5.5 | 6.9 | 5.4 | 3.8 | 15.0 | 6.3 | 11.5 | 9.1 | 13.1 | 6.0 | 18.0 |

TABLEAU 20. Dépenses moyennes détaillées, selon le revenu de la famille,
huit villes, Canada, 1976

Toutes familles et des personnes seules

| Family income — Revenu de la famille | | | | | | | | | | | | | | |
|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|---------|--|
| \$12,000 — 14,999 | | \$15,000 — 19,999 | | \$20,000 — 24,999 | | \$25,000 — 29,999 | | \$30,000 — 34,999 | | \$35,000 and over — \$35,000 et plus | | | | |
| Av. per fam. — Moy. par fam. | ¢ rptg. — ¢ décl. | Av. per fam. — Moy. par fam. | ¢ rptg. — ¢ décl. | Av. per fam. — Moy. par fam. | ¢ rptg. — ¢ décl. | Av. per fam. — Moy. par fam. | ¢ rptg. — ¢ décl. | Av. per fam. — Moy. par fam. | ¢ rptg. — ¢ décl. | Av. per fam. — Moy. par fam. | ¢ rptg. — ¢ décl. | | | |
| | | | | | | | | | | | | Habillemeut — fin | | |
| | | | | | | | | | | | | Vêtements pour hommes de 14 ans et plus — fin: | | |
| | | | | | | | | | | | | Autres vêtements et accessoires — fin: | | |
| 3.3 | 5.3 | 3.6 | 7.2 | 6.4 | 8.3 | 3.2 | 5.7 | 5.7 | 7.7 | 10.6 | 7.9 | Uniformes et vêtements professionnels | 493 | |
| 1.4 | 13.7 | 2.2 | 19.2 | 3.0 | 23.9 | 3.4 | 23.5 | 5.5 | 32.3 | 7.5 | 37.6 | Maillots de bain et vét. de plage | 494 | |
| 1.0 | 9.6 | 1.7 | 16.8 | 1.9 | 14.7 | 1.8 | 14.2 | 2.5 | 15.6 | 3.7 | 20.3 | Porte-billets et portefeuilles | 495 | |
| 1.2 | 15.0 | 2.6 | 21.6 | 2.9 | 23.8 | 2.7 | 20.2 | 3.1 | 25.3 | 6.3 | 32.6 | Autres: chapeaux, mouchoirs, parapluie | 496 | |
| 11.4 | 18.9 | 24.5 | 27.2 | 35.1 | 33.7 | 24.0 | 26.7 | 34.1 | 31.9 | 52.2 | 37.6 | Bijoux | 497-499 | |
| 3.3 | 12.7 | 13.5 | 19.0 | 19.1 | 23.2 | 14.6 | 21.6 | 26.4 | 21.1 | 26.4 | 22.7 | Montres | 497 | |
| 4.4 | 4.7 | .9 | 6.4 | 1.2 | 6.7 | .7 | 3.0 | .5 | 6.3 | 1.2 | 5.5 | Briquets et étuis à cigarettes | 498 | |
| 4.7 | 4.1 | 10.1 | 5.5 | 14.8 | 10.4 | 8.7 | 6.1 | 7.2 | 9.8 | 24.6 | 19.7 | Boutons de manchettes, bagues, etc. | 499 | |
| 47.2 | 69.0 | 61.4 | 84.3 | 81.7 | 88.3 | 93.8 | 87.7 | 108.6 | 91.4 | 137.0 | 96.6 | Chaussures | 500-504 | |
| 29.1 | 55.1 | 36.9 | 71.6 | 50.3 | 75.7 | 57.8 | 77.8 | 62.6 | 80.1 | 89.4 | 86.5 | Chaussures et sandales | 500 | |
| 9.7 | 23.4 | 12.3 | 29.2 | 16.1 | 32.3 | 19.6 | 34.5 | 18.5 | 34.0 | 19.2 | 33.8 | Bottes (sauf enrouchoir et plastique) | 501 | |
| 2.0 | 13.7 | 3.8 | 21.8 | 4.3 | 23.4 | 3.7 | 19.1 | 6.5 | 34.2 | 7.8 | 35.3 | Chaussures enrouchoir et plastique | 502 | |
| 4.9 | 17.7 | 6.6 | 23.9 | 8.6 | 25.7 | 10.5 | 28.8 | 17.3 | 33.9 | 16.8 | 37.2 | Chaussures de sport et d'athlétisme | 503 | |
| 1.6 | 10.6 | 1.8 | 14.9 | 2.5 | 17.3 | 2.3 | 16.6 | 3.7 | 20.9 | 3.8 | 21.2 | Autres | 504 | |
| 46.1 | 18.8 | 54.5 | 22.6 | 80.6 | 26.2 | 70.3 | 23.9 | 89.2 | 26.3 | 88.1 | 26.2 | Vêtements pour garçons de 4 à 14 ans | 510-554 | |
| 5.7 | 15.3 | 7.3 | 18.8 | 10.7 | 22.5 | 9.7 | 19.6 | 11.4 | 23.4 | 11.3 | 21.7 | Manteaux et vestons | 510-518 | |
| 2.6 | 6.5 | 2.1 | 7.7 | 3.6 | 9.6 | 2.2 | 8.2 | 5.4 | 12.8 | 3.5 | 7.7 | Complets, manteaux sport et blazers | 520-523 | |
| 11.2 | 17.9 | 13.2 | 21.8 | 21.0 | 26.0 | 18.7 | 23.5 | 22.4 | 26.3 | 21.6 | 26.2 | Pantalons, jeans et shorts | 525-528 | |
| 7.8 | 17.2 | 8.4 | 20.8 | 13.5 | 25.8 | 11.5 | 23.4 | 13.9 | 26.3 | 15.5 | 24.3 | Chemises et chandails | 530-535 | |
| 5.3 | 17.8 | 6.6 | 21.3 | 8.5 | 25.3 | 8.0 | 23.0 | 9.2 | 26.3 | 10.9 | 25.6 | Chaussettes, sous-vêt. et vét. de nuit | 536-539 | |
| 3.2 | 15.5 | 3.8 | 19.9 | 5.7 | 24.3 | 5.3 | 21.8 | 7.3 | 24.8 | 6.5 | 23.0 | Autres vêtements, accessoires et bijoux | 540-548 | |
| 10.3 | 18.5 | 13.1 | 22.0 | 17.5 | 26.2 | 14.9 | 23.2 | 19.4 | 26.3 | 18.9 | 25.2 | Chaussures | 550-554 | |
| 32.3 | 17.5 | 43.7 | 22.4 | 31.8 | 17.2 | 26.5 | 10.9 | 20.0 | 9.5 | 37.7 | 9.0 | Enfants, moins de 4 ans | 560-584 | |
| 51.2 | 74.5 | 59.8 | 76.1 | 67.3 | 78.3 | 72.3 | 79.0 | 88.0 | 80.8 | 132.1 | 88.1 | Tissus pour vêtements et services connexes | 585-596 | |
| 246.9 | 99.8 | 267.4 | 100.0 | 323.3 | 100.0 | 382.6 | 100.0 | 414.7 | 100.0 | 565.1 | 100.0 | Soins personnels | 600-636 | |
| 99.4 | 89.5 | 104.8 | 92.8 | 127.9 | 93.8 | 175.1 | 96.0 | 185.7 | 97.0 | 266.1 | 98.2 | Services de soins personnels | 600-604 | |
| 32.6 | 69.3 | 42.1 | 76.9 | 51.2 | 83.0 | 61.2 | 88.8 | 73.4 | 86.4 | 86.9 | 89.6 | Salons de coiffure | 600 | |
| 66.0 | 63.1 | 62.2 | 72.1 | 75.3 | 77.2 | 112.6 | 83.4 | 112.2 | 83.6 | 171.0 | 90.1 | Services de salon de beauté | 601-603 | |
| 10.6 | 23.8 | 9.5 | 24.2 | 11.1 | 26.8 | 18.4 | 32.1 | 16.3 | 31.8 | 24.7 | 34.9 | Permanentes | 601 | |
| 49.5 | 56.0 | 48.2 | 65.7 | 58.3 | 71.3 | 84.1 | 75.3 | 88.2 | 78.7 | 129.4 | 84.5 | Shampooing, coupe de cheveux, manucure | 602 | |
| 5.9 | 8.5 | 4.5 | 6.9 | 6.0 | 8.8 | 10.1 | 11.8 | 7.7 | 9.5 | 16.8 | 16.3 | Teintures capillaires, etc. | 603 | |
| .8 | 1.2 | .5 | 1.3 | 1.4 | 2.3 | 1.4 | 1.6 | .5 | 1.6 | 8.2 | 6.6 | Autres (massages, amincissement, etc.) | 604 | |
| 120.2 | 99.8 | 134.2 | 100.0 | 161.1 | 100.0 | 171.4 | 99.6 | 189.4 | 99.3 | 252.9 | 99.7 | Produits de toilette | 610-625 | |
| 29.1 | 94.6 | 31.6 | 96.7 | 40.6 | 97.7 | 40.1 | 97.1 | 43.2 | 93.3 | 54.7 | 98.0 | Produits capillaires | 610-613 | |
| 14.3 | 71.5 | 17.3 | 73.8 | 19.8 | 79.4 | 24.7 | 83.8 | 25.0 | 83.0 | 40.2 | 93.1 | Produits de maquillage | 614-616 | |
| 8.5 | 52.2 | 8.7 | 57.4 | 11.6 | 63.3 | 10.0 | 65.3 | 16.1 | 70.3 | 18.1 | 73.5 | Produits de beauté, crèmes, lotions | 617 | |
| 14.0 | 58.0 | 14.9 | 59.9 | 18.0 | 68.2 | 21.4 | 64.3 | 22.3 | 74.8 | 35.6 | 79.4 | Produits parfumés | 618-619 | |
| 14.3 | 91.8 | 15.5 | 92.6 | 18.1 | 93.5 | 19.0 | 92.4 | 21.5 | 92.8 | 25.1 | 93.6 | Savon de toilette, savon à barbe | 620 | |
| 7.4 | 57.9 | 9.8 | 63.6 | 11.3 | 68.4 | 14.2 | 74.3 | 13.6 | 73.0 | 19.9 | 80.8 | Produits pour le rasage, n.d.a. | 621-622 | |
| 14.3 | 88.1 | 14.7 | 88.4 | 17.1 | 91.5 | 17.4 | 88.1 | 19.8 | 91.4 | 24.5 | 92.7 | Désodorisants personnels | 623 | |
| 16.0 | 92.7 | 18.7 | 95.8 | 20.9 | 94.3 | 21.7 | 94.1 | 23.9 | 94.3 | 29.0 | 94.2 | Prod. d'hyg. buccale (dentifrice, etc.) | 624 | |
| 2.4 | 33.8 | 3.1 | 35.6 | 3.6 | 43.6 | 2.9 | 38.5 | 4.0 | 51.5 | 5.7 | 59.9 | Autres produits de toilette | 625 | |
| 27.3 | 92.2 | 28.4 | 93.8 | 34.3 | 95.0 | 36.1 | 96.2 | 39.7 | 95.3 | 46.1 | 97.8 | Autres articles de soins personnels | 630-636 | |
| 316.2 | 97.0 | 345.8 | 97.4 | 426.4 | 98.8 | 475.7 | 97.8 | 503.9 | 97.3 | 671.0 | 99.2 | Frais médicaux et de santé | 650-707 | |
| 145.7 | 74.8 | 144.5 | 73.8 | 149.9 | 71.7 | 183.0 | 78.2 | 165.5 | 71.7 | 246.2 | 79.7 | Primes d'assurance-maladie | 650-663 | |
| 123.6 | 67.6 | 123.7 | 65.0 | 121.9 | 61.4 | 147.4 | 69.0 | 135.8 | 59.6 | 184.4 | 68.6 | Régimes publics (payés à l'avance) | 650-651 | |
| 22.1 | 23.7 | 20.8 | 26.8 | 28.0 | 31.2 | 35.6 | 34.6 | 29.7 | 31.2 | 61.8 | 41.8 | Autres régimes (payés à l'avance) | 660-663 | |
| 170.5 | 91.9 | 201.3 | 92.4 | 276.5 | 97.4 | 292.7 | 94.4 | 338.4 | 96.0 | 424.8 | 96.7 | Frais payés directement par la famille | 670-707 | |
| 12.5 | 16.8 | 6.4 | 15.2 | 10.0 | 20.3 | 11.0 | 22.3 | 8.9 | 23.1 | 22.9 | 23.5 | Soins de médecins | 670-677 | |

TABLE 20. Detailed Average Expenditure, by Family Income,
Eight Cities, Canada, 1976

All Families and Unattached Individuals

| | | Family income - Revenu de la famille | | | | | | | | | | | | | | | |
|-------------------------------------|--|--------------------------------------|---------|-----------------------------------|---------|-----------------|---------|-----------------|---------|-----------------|---------|-----------------|---------|-------------------|---------|---------------|-------------------|
| | | All classes Toutes catégories | | Under \$4,000 Moins de \$4,000 | | \$4,000 - 4,999 | | \$5,000 - 5,999 | | \$6,000 - 7,999 | | \$8,000 - 9,999 | | \$10,000 - 11,999 | | Moy. par fam. | % rptg. - % décl. |
| | | Av. per fam. | % rptg. | Av. per fam. | % rptg. | Av. per fam. | % rptg. | Av. per fam. | % rptg. | Av. per fam. | % rptg. | Av. per fam. | % rptg. | Av. per fam. | % rptg. | | |
| | | Moy. par fam. | % décl. | Moy. par fam. | % décl. | Moy. par fam. | % décl. | Moy. par fam. | % décl. | Moy. par fam. | % décl. | Moy. par fam. | % décl. | Moy. par fam. | % décl. | | |
| Medical and health care - concluded | | | | | | | | | | | | | | | | | |
| Direct costs to family - concluded: | | | | | | | | | | | | | | | | | |
| 680-682 | Eye care | 26.7 | 29.4 | 8.1 | 15.5 | 7.1 | 15.2 | 17.6 | 22.0 | 17.7 | 22.1 | 19.6 | 25.9 | 22.0 | 28.6 | | |
| 680 | Medical care, examination by doctors | .1 | 1.6 | .1 | 1.0 | | | | | .2 | 1.0 | .2 | 1.5 | | .9 | | |
| 681 | Optometrists | .9 | 3.3 | .2 | 1.4 | | | 1.0 | 1.5 | .1 | 2.2 | .3 | 2.7 | 1.1 | 2.5 | | |
| 682 | Eye glasses and contact lenses | 25.6 | 27.5 | 7.8 | 14.8 | 7.3 | 15.2 | 16.7 | 20.5 | 17.4 | 20.8 | 19.1 | 24.6 | 20.9 | 27.4 | | |
| 690-692 | Dental care | 113.6 | 56.1 | 9.6 | 17.4 | 34.4 | 32.9 | 40.4 | 31.1 | 34.6 | 30.2 | 75.1 | 50.4 | 82.2 | 50.1 | | |
| 690 | Dentists (excl. dentures) | 97.9 | 51.9 | 8.1 | 14.6 | 15.1 | 24.7 | 14.8 | 20.6 | 21.3 | 24.4 | 57.9 | 44.3 | 67.1 | 45.1 | | |
| 691-692 | Dentures and denture repairs | 15.6 | 7.9 | 1.4 | 2.8 | 19.3 | 8.2 | 25.6 | 12.7 | 13.3 | 6.8 | 17.2 | 10.3 | 15.0 | 10.3 | | |
| 693-702 | Other medical and hospital care | 9.4 | 9.4 | 4.8 | 5.9 | 35.3 | 6.2 | 3.1 | 6.0 | 3.6 | 6.6 | 6.0 | 6.8 | 5.0 | 4.7 | | |
| 703 | Medicines and drugs prescribed by doctor | 38.6 | 57.7 | 14.1 | 29.8 | 18.8 | 30.2 | 22.5 | 34.5 | 25.9 | 45.8 | 37.0 | 50.9 | 34.8 | 55.1 | | |
| 704 | Other medicines, drugs, preparations | 16.6 | 60.1 | 7.0 | 37.5 | 14.1 | 48.5 | 11.6 | 52.7 | 13.9 | 50.5 | 14.7 | 61.6 | 15.2 | 56.1 | | |
| 705-707 | Other supplies and services | 4.3 | 21.6 | 1.1 | 12.4 | 8.6 | 12.3 | 15.3 | 13.1 | 10.9 | 19.9 | 4.1 | 16.6 | 3.0 | 19.1 | | |
| 710-741 | Smoking and alcoholic beverages | 585.0 | 93.2 | 137.3 | 66.2 | 194.2 | 79.0 | 245.2 | 88.6 | 324.8 | 85.1 | 418.1 | 88.6 | 513.6 | 96.0 | | |
| 710-714 | Cigarettes and tobacco | 237.9 | 63.5 | 75.9 | 39.6 | 104.5 | 44.8 | 154.0 | 54.7 | 173.1 | 57.3 | 200.0 | 60.2 | 230.5 | 65.6 | | |
| 710 | Cigarettes | 220.3 | 57.3 | 61.4 | 27.0 | 87.0 | 33.6 | 135.6 | 48.2 | 157.0 | 49.6 | 191.1 | 56.6 | 207.9 | 59.7 | | |
| 711 | Cigars | 5.7 | 6.5 | 2.8 | 3.0 | 1.1 | 1.5 | 3.1 | 3.2 | 3.0 | 2.6 | 2.1 | 2.7 | 1.7 | 3.7 | | |
| 712-713 | Tobacco | 9.8 | 9.6 | 10.5 | 11.8 | 14.6 | 12.3 | 14.1 | 12.0 | 11.4 | 11.0 | 5.3 | 6.3 | 17.4 | 12.1 | | |
| 714 | Smokers' supplies | 2.2 | 19.9 | 1.2 | 14.1 | 1.8 | 14.1 | 1.1 | 16.7 | 1.7 | 13.9 | 1.5 | 16.1 | 3.5 | 20.5 | | |
| 720-741 | Alcoholic beverages | 347.0 | 89.1 | 61.4 | 48.8 | 89.6 | 68.3 | 91.3 | 74.2 | 151.7 | 75.0 | 218.2 | 83.8 | 283.1 | 91.0 | | |
| 720-721 | Beer | 132.8 | 74.5 | 25.8 | 29.0 | 45.8 | 43.5 | 51.4 | 53.5 | 72.6 | 55.7 | 96.1 | 57.9 | 120.6 | 73.0 | | |
| 721 | Purchased from stores | 84.8 | 72.1 | 12.1 | 24.8 | 31.2 | 42.5 | 44.0 | 51.3 | 47.0 | 51.4 | 66.6 | 54.8 | 74.0 | 69.1 | | |
| 721 | Consumed on licensed premises | 48.1 | 32.5 | 13.7 | 11.0 | 14.6 | 11.5 | 7.5 | 14.4 | 25.6 | 18.8 | 29.5 | 27.1 | 46.6 | 29.6 | | |
| 730-731 | Liquor (incl. liqueurs) | 151.1 | 77.3 | 25.5 | 30.0 | 32.0 | 44.7 | 29.9 | 46.5 | 57.4 | 57.5 | 91.1 | 67.3 | 113.5 | 75.7 | | |
| 730 | Purchased from stores | 105.2 | 75.2 | 18.3 | 29.1 | 19.4 | 41.9 | 25.8 | 45.7 | 46.0 | 54.9 | 66.4 | 64.8 | 87.5 | 72.9 | | |
| 731 | Consumed on licensed premises | 45.9 | 35.3 | 7.2 | 6.9 | 12.6 | 11.2 | 4.1 | 11.5 | 11.4 | 17.2 | 24.7 | 25.8 | 26.0 | 25.7 | | |
| 740-741 | Wine | 63.1 | 64.4 | 10.1 | 29.7 | 11.9 | 36.0 | 9.9 | 32.7 | 21.7 | 46.5 | 31.0 | 55.7 | 49.0 | 55.6 | | |
| 740 | Purchased from stores | 48.6 | 61.9 | 8.8 | 29.3 | 11.5 | 35.4 | 8.2 | 31.5 | 19.9 | 45.6 | 27.1 | 52.0 | 38.2 | 53.3 | | |
| 741 | Consumed on licensed premises | 14.4 | 23.3 | 1.2 | 1.4 | .4 | 1.6 | 1.7 | 5.6 | 1.8 | 6.4 | 3.9 | 13.5 | 10.9 | 17.9 | | |
| 750-834 | Travel and transportation | 2198.3 | 98.7 | 133.0 | 88.7 | 433.7 | 97.0 | 393.0 | 96.9 | 696.0 | 97.3 | 1233.9 | 99.3 | 1258.4 | 98.6 | | |
| 750-751 | Automobile and truck purchase | 759.3 | 23.6 | 1.3 | .9 | 103.1 | 2.7 | 65.7 | 5.3 | 163.9 | 10.6 | 452.7 | 17.9 | 396.3 | 19.5 | | |
| 750 | Car purchase | 690.7 | 22.1 | .2 | .8 | 103.1 | 2.7 | 65.7 | 5.3 | 152.7 | 10.1 | 443.1 | 17.1 | 387.4 | 19.3 | | |
| 751 | Truck purchase | 68.6 | 1.9 | 1.1 | .1 | | | | | 11.2 | .5 | 9.6 | .9 | 8.8 | .5 | | |
| 760-776 | Automobile and truck operation | 969.4 | 72.8 | 43.6 | 7.7 | 100.8 | 22.3 | 164.5 | 30.6 | 330.6 | 45.5 | 469.1 | 51.6 | 572.9 | 63.7 | | |
| 760 | Gasoline | 401.2 | 72.3 | 13.3 | 7.7 | 33.8 | 19.4 | 52.2 | 30.6 | 127.3 | 44.7 | 189.5 | 51.6 | 224.9 | 62.5 | | |
| 761 | Oil and oil changes, lubrication | 27.8 | 66.1 | 1.0 | 6.0 | 2.8 | 17.7 | 4.8 | 25.8 | 9.9 | 37.1 | 15.7 | 46.0 | 15.8 | 54.7 | | |
| 762-763 | Tires and tubes | 42.0 | 35.5 | 1.2 | 1.3 | 2.8 | 2.8 | 3.7 | 3.0 | 14.7 | 17.1 | 13.6 | 19.3 | 24.7 | 30.3 | | |
| 764 | Automobile batteries | 7.5 | 17.2 | .7 | 1.4 | .8 | 1.4 | 3.8 | 8.5 | 3.6 | 8.8 | 2.6 | 7.5 | 5.4 | 12.7 | | |
| 765 | Repair parts purchased separately | 21.4 | 26.2 | 3.7 | 2.5 | .5 | .8 | 2.4 | 6.3 | 10.3 | 14.3 | 9.3 | 16.4 | 15.4 | 21.5 | | |
| 766-769 | Repair jobs not covered by insurance | 138.5 | 55.6 | 8.8 | 5.5 | 11.7 | 13.3 | 25.6 | 19.8 | 44.8 | 30.5 | 65.4 | 32.6 | 77.2 | 41.7 | | |
| 766 | Tune-ups | 46.4 | 40.5 | 3.4 | 3.8 | 5.1 | 9.3 | 7.5 | 13.4 | 15.1 | 19.9 | 22.0 | 19.1 | 34.4 | 30.6 | | |
| 767 | Other mechanical repairs | 47.7 | 26.0 | .5 | 1.7 | 2.7 | 3.7 | 5.1 | 7.1 | 11.2 | 12.1 | 17.0 | 13.0 | 17.3 | 15.5 | | |
| 768 | Body repair jobs | 22.0 | 9.8 | .5 | .9 | 1.8 | .4 | 10.0 | 1.6 | 10.4 | 5.7 | 13.6 | 7.1 | 10.6 | 5.3 | | |
| 769 | Other repair jobs | 22.4 | 11.0 | 4.4 | 1.5 | 2.1 | 1.6 | 3.0 | 3.2 | 8.1 | 8.0 | 12.7 | 6.4 | 14.9 | 7.9 | | |
| 770 | Other services- washing, tire repair | 9.9 | 32.3 | .4 | 3.2 | .9 | 4.9 | .8 | 6.2 | 3.3 | 15.9 | 4.3 | 20.2 | 4.0 | 19.7 | | |
| 771 | Vehicle insurance premiums | 255.0 | 70.8 | 11.5 | 6.1 | 34.9 | 19.4 | 57.4 | 29.4 | 94.4 | 42.6 | 131.7 | 47.8 | 164.3 | 61.5 | | |
| 772 | Registration fees and drivers licences | 32.1 | 70.8 | 1.9 | 6.8 | 6.9 | 21.3 | 9.4 | 29.4 | 13.8 | 43.6 | 18.0 | 49.6 | 22.6 | 61.6 | | |
| 773 | Garage rent and parking costs n.e.s. | 15.5 | 15.9 | .4 | .4 | 2.7 | 2.5 | 2.3 | 3.8 | 3.3 | 5.2 | 12.4 | 11.7 | 7.2 | 13.0 | | |
| 774 | Other fees- association, toll, etc. | 6.7 | 18.9 | .4 | 1.8 | 1.0 | 5.5 | 1.1 | 5.2 | 2.7 | 11.8 | 2.7 | 10.7 | 4.6 | 19.7 | | |
| 775 | Other expenses- radios, heaters, etc. | 11.0 | 38.4 | .4 | 3.1 | .4 | 5.9 | 1.0 | 10.5 | 2.5 | 19.4 | 3.7 | 24.0 | 5.3 | 29.4 | | |
| 776 | Repairs to other party vehicles | .9 | .8 | | | 1.5 | .4 | | | .1 | .2 | .3 | .3 | 1.4 | 2.0 | | |
| 780-787 | Other vehicle purchase | 93.2 | 5.4 | | | 28.1 | 1.7 | 5.1 | 1.3 | .3 | .4 | 41.4 | 1.9 | 8.3 | .7 | | |
| 790-793 | Other vehicle operation | 28.0 | 14.0 | | | .9 | 1.5 | 9.3 | 3.0 | 4.2 | 3.8 | 5.7 | 4.8 | 9.4 | 7.1 | | |
| 790 | Gasoline, etc. | 7.2 | 9.6 | | | .1 | 1.5 | 1.0 | 2.0 | 1.4 | 3.4 | 2.4 | 3.9 | 2.8 | 4.4 | | |
| 791 | Servicing, repairs (incl. parts) | 6.3 | 5.3 | | | | | 4.7 | 1.7 | 2.6 | 2.1 | 1.0 | 1.7 | 1.1 | 2.2 | | |
| 792 | Insurance premiums, registration fees | 8.9 | 10.3 | | | .8 | 1.5 | 3.6 | 2.6 | .2 | 1.2 | 1.9 | 3.3 | 5.2 | 4.9 | | |
| 793 | Other expenses- parking, airport fees | 5.7 | 2.8 | | | | | | | .2 | .2 | .5 | .5 | .2 | .9 | | |
| 800-801 | Bicycles | 18.9 | 20.2 | 3.0 | 2.8 | 6.7 | 6.3 | 3.8 | 6.6 | 8.1 | 11.3 | 6.3 | 7.4 | 12.6 | 17.8 | | |
| 800 | Purchase | 17.6 | 16.2 | 3.0 | 2.3 | 6.5 | 3.9 | 3.8 | 6.6 | 7.2 | 7.1 | 6.3 | 6.8 | 11.5 | 14.9 | | |
| 801 | Other expenses- repairs, parts, etc. | 1.3 | 6.9 | .1 | .5 | .2 | 2.4 | | | .9 | 4.6 | .8 | | 1.2 | 5.0 | | |
| 810-812 | Rented and leased vehicles | 28.9 | 9.1 | .1 | .5 | | | .4 | 1.4 | 5.3 | 4.7 | 6.0 | 7.3 | 13.4 | 6.4 | | |

TABLEAU 20. Dépenses moyennes détaillées, selon le revenu de la famille,
huit villes, Canada, 1976

Toutes familles et des personnes seules

| Family income — Revenu de la famille | | | | | | | | | | | | | |
|--------------------------------------|-------------------|------------------------------|-------------------|------------------------------|-------------------|------------------------------|-------------------|------------------------------|-------------------|--------------------------------------|-------------------|---|---------|
| \$12,000 — 14,999 | | \$15,000 — 19,999 | | \$20,000 — 24,999 | | \$25,000 — 29,999 | | \$30,000 — 34,999 | | \$35,000 and over — \$35,000 et plus | | | |
| Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | | |
| 20.3 | 24.7 | 21.9 | 28.9 | 31.2 | 32.7 | 39.6 | 39.0 | 46.2 | 39.2 | 52.3 | 40.5 | Frais médicaux et de santé — fin | |
| .3 | 2.2 | .7 | 2.5 | .3 | 2.1 | .1 | 1.9 | .1 | .8 | 1.3 | 2.2 | Frais payés directement par la famille — fin: | |
| 20.0 | 22.8 | 20.8 | 26.4 | 29.7 | 30.5 | 37.2 | 36.4 | 45.1 | 37.0 | 49.4 | 38.5 | Soins des yeux | 680-682 |
| 72.6 | 53.0 | 101.4 | 57.3 | 155.0 | 71.1 | 171.8 | 66.9 | 200.9 | 75.6 | 253.3 | 79.8 | Soins et examens par des médecins | 680 |
| 64.6 | 49.9 | 86.2 | 54.1 | 133.1 | 66.2 | 151.4 | 62.9 | 186.2 | 73.3 | 236.0 | 77.5 | Optométristes | 681 |
| 7.9 | 5.8 | 15.2 | 7.2 | 21.9 | 10.3 | 20.4 | 8.6 | 14.7 | 7.8 | 17.3 | 6.5 | Lunettes et verres de contact | 682 |
| 7.0 | 9.6 | 12.1 | 11.3 | 10.9 | 9.4 | 8.7 | 11.4 | 9.3 | 11.2 | 11.8 | 13.6 | Soins dentaires | 690-692 |
| 38.8 | 59.2 | 39.7 | 62.4 | 49.2 | 70.6 | 41.7 | 60.2 | 48.7 | 64.6 | 50.8 | 68.1 | Frais de dentistes (sauf dentiers) | 690 |
| 17.1 | 59.2 | 15.9 | 62.9 | 17.7 | 61.8 | 16.7 | 68.2 | 22.3 | 64.0 | 27.2 | 72.2 | Dentiers et réparations de dentiers | 691-692 |
| 2.3 | 20.4 | 3.8 | 26.0 | 2.5 | 24.0 | 3.2 | 23.2 | 2.0 | 23.8 | 6.6 | 25.3 | Autres soins médicaux et hospitaliers | 693-702 |
| | | | | | | | | | | | | Médicaments prescrits par le médecin | 703 |
| | | | | | | | | | | | | Autres médicaments et prod. pharmac. | 704 |
| | | | | | | | | | | | | Autres fournitures et services | 705-707 |
| 536.3 | 96.1 | 581.0 | 96.1 | 740.7 | 97.1 | 763.7 | 99.1 | 772.2 | 97.4 | 1040.3 | 98.8 | Tabac et alcool | 710-741 |
| 249.2 | 65.2 | 260.2 | 67.7 | 289.3 | 71.0 | 274.8 | 64.9 | 263.8 | 68.5 | 292.2 | 64.8 | Cigarettes et tabac | 710-714 |
| 222.6 | 58.1 | 243.7 | 62.3 | 274.0 | 64.9 | 261.2 | 59.4 | 246.0 | 64.2 | 268.7 | 60.1 | Cigarettes | 710 |
| 8.9 | 7.8 | 6.0 | 7.8 | 5.9 | 9.8 | 3.6 | 6.7 | 10.1 | 6.3 | 12.2 | 9.6 | Cigares | 711 |
| 14.5 | 9.7 | 8.2 | 7.9 | 7.4 | 10.0 | 8.2 | 9.3 | 5.5 | 8.2 | 8.5 | 10.2 | Tabac | 712-713 |
| 3.1 | 23.4 | 2.3 | 22.9 | 2.0 | 21.7 | 1.7 | 18.3 | 2.3 | 23.9 | 2.8 | 18.6 | Articles pour fumeurs | 714 |
| 287.1 | 93.4 | 320.9 | 94.5 | 451.3 | 96.0 | 488.9 | 97.1 | 508.3 | 95.4 | 748.2 | 98.3 | Boissons alcoolisées | 720-741 |
| 130.2 | 77.0 | 143.5 | 83.5 | 178.5 | 84.3 | 183.9 | 88.1 | 178.4 | 88.2 | 156.7 | 85.4 | Bière | 720-721 |
| 79.2 | 74.0 | 91.8 | 81.0 | 117.9 | 82.6 | 124.7 | 86.9 | 101.4 | 86.9 | 91.8 | 84.5 | Achetée au magasin | 720 |
| 50.9 | 31.7 | 51.7 | 37.3 | 60.7 | 38.3 | 59.2 | 37.7 | 77.0 | 48.2 | 64.9 | 41.2 | Consommée dans bars, restaurants, etc. | 721 |
| 114.9 | 79.3 | 126.2 | 83.5 | 199.7 | 89.1 | 212.4 | 92.3 | 221.3 | 89.7 | 399.3 | 92.9 | Spiritueux (y compr. les liqueurs) | 730-731 |
| 78.3 | 76.2 | 91.2 | 81.5 | 138.6 | 86.6 | 162.2 | 90.5 | 152.9 | 88.3 | 237.9 | 92.2 | Achetés dans des magasins | 730 |
| 36.6 | 36.2 | 35.0 | 34.6 | 61.1 | 42.8 | 50.1 | 47.1 | 68.4 | 54.0 | 161.3 | 62.8 | Consommés dans bars, restaurants, etc. | 731 |
| 42.0 | 64.0 | 51.1 | 68.9 | 73.1 | 73.5 | 92.7 | 78.2 | 108.6 | 77.6 | 192.2 | 87.3 | Vin | 740-741 |
| 33.5 | 60.1 | 41.1 | 64.9 | 57.1 | 70.9 | 71.2 | 76.9 | 75.3 | 73.8 | 139.2 | 86.1 | Acheté au magasin | 740 |
| 8.5 | 20.6 | 10.0 | 23.7 | 16.1 | 27.8 | 21.4 | 33.6 | 33.4 | 38.6 | 53.0 | 52.7 | Consommé dans bars, restaurants, etc. | 741 |
| 1797.9 | 99.2 | 2201.9 | 99.8 | 2730.7 | 99.9 | 3140.9 | 100.0 | 4254.0 | 100.0 | 4850.3 | 99.5 | Déplacements et transport | 750-834 |
| 674.2 | 23.3 | 719.6 | 24.8 | 878.0 | 28.4 | 1106.6 | 33.2 | 1791.3 | 41.2 | 1719.3 | 37.1 | Achat d'automobile et de camion | 750-751 |
| 610.6 | 21.6 | 648.4 | 23.2 | 793.5 | 26.2 | 983.7 | 30.7 | 1640.5 | 40.1 | 1562.5 | 34.3 | Achat d'automobile | 750 |
| 63.6 | 1.8 | 71.2 | 1.9 | 84.5 | 2.8 | 122.9 | 3.1 | 150.9 | 3.4 | 156.8 | 3.7 | Achat de camion | 751 |
| 782.1 | 72.4 | 1077.6 | 85.3 | 1303.2 | 90.9 | 1388.8 | 93.4 | 1715.5 | 97.2 | 1863.9 | 92.4 | Utilisation, automobile et camion | 760-776 |
| 317.0 | 71.7 | 470.3 | 84.9 | 548.4 | 90.9 | 575.9 | 93.1 | 695.3 | 96.5 | 743.3 | 91.8 | Essence | 760 |
| 20.6 | 65.2 | 31.1 | 77.8 | 38.0 | 85.0 | 40.4 | 85.9 | 56.2 | 91.2 | 46.6 | 84.7 | Huile et vidange, graissage | 761 |
| 33.8 | 34.1 | 45.4 | 41.5 | 60.4 | 49.6 | 54.1 | 47.5 | 76.7 | 49.0 | 91.3 | 53.0 | Pneus et chambres à air | 762-763 |
| 6.3 | 14.4 | 9.6 | 22.3 | 9.6 | 22.7 | 10.0 | 22.1 | 12.4 | 29.1 | 10.8 | 22.9 | Batteries | 764 |
| 17.5 | 26.6 | 23.7 | 30.8 | 24.9 | 34.1 | 31.2 | 37.2 | 34.6 | 36.7 | 45.7 | 33.0 | Pièces achetées séparément | 765 |
| 113.6 | 55.2 | 139.8 | 64.1 | 205.5 | 71.9 | 190.8 | 75.0 | 248.1 | 78.7 | 277.0 | 79.0 | Réparations non couvertes par l'ass. | 766-769 |
| 33.6 | 37.6 | 42.9 | 44.9 | 60.7 | 54.2 | 66.6 | 56.5 | 90.5 | 59.2 | 110.2 | 65.8 | Mises au point | 766 |
| 45.1 | 28.2 | 51.1 | 32.8 | 80.7 | 34.6 | 68.0 | 34.0 | 79.9 | 34.7 | 78.7 | 35.6 | Autres réparations mécaniques | 767 |
| 19.0 | 9.8 | 17.5 | 8.5 | 30.5 | 13.5 | 26.8 | 12.9 | 48.1 | 16.4 | 51.9 | 20.2 | Réparation de la carrosserie | 768 |
| 16.0 | 10.1 | 28.3 | 12.7 | 33.6 | 17.3 | 29.5 | 11.8 | 29.6 | 14.8 | 36.2 | 14.3 | Autres réparations | 769 |
| 7.7 | 30.0 | 10.7 | 36.7 | 14.4 | 46.1 | 14.1 | 43.0 | 15.3 | 48.9 | 22.2 | 48.0 | Autres services- lavage, crevaisons | 770 |
| 212.7 | 70.2 | 279.0 | 84.0 | 311.2 | 88.5 | 375.8 | 92.3 | 466.5 | 96.0 | 494.6 | 91.0 | Primes d'assurance-automobile | 771 |
| 27.6 | 69.3 | 35.0 | 83.4 | 42.4 | 89.2 | 45.9 | 91.7 | 54.9 | 95.3 | 53.3 | 89.5 | Immatriculation et permis de conduire | 772 |
| 9.1 | 11.6 | 13.3 | 15.9 | 21.4 | 23.3 | 24.2 | 22.6 | 27.9 | 27.0 | 40.4 | 28.3 | Garage et stationnement n.d.a. | 773 |
| 5.8 | 18.2 | 7.0 | 21.6 | 9.4 | 20.6 | 9.5 | 26.1 | 11.3 | 25.0 | 12.2 | 31.1 | Autres frais- associations, péage, etc. | 774 |
| 10.0 | 37.6 | 11.9 | 46.6 | 16.4 | 54.0 | 14.5 | 47.8 | 16.1 | 49.5 | 24.7 | 52.6 | Autres dépenses- radio, chauff., etc. | 775 |
| 2 | 2 | 9 | 9 | 1.3 | 1.2 | 2.5 | 1.1 | 3 | 3 | 1.7 | 1.7 | Répar. aux véh. de tierces personnes | 776 |
| 22.0 | 3.4 | 97.0 | 7.1 | 154.1 | 6.7 | 120.4 | 10.0 | 190.6 | 10.3 | 293.8 | 10.3 | Achat d'autres véhicules | 780-787 |
| 16.9 | 10.0 | 25.3 | 16.9 | 32.6 | 18.4 | 42.1 | 22.6 | 49.6 | 22.7 | 102.5 | 27.7 | Utilisation d'autres véhicules | 790-793 |
| 3.2 | 6.5 | 6.9 | 10.8 | 9.3 | 12.1 | 10.9 | 15.6 | 9.9 | 15.6 | 26.1 | 22.3 | Essence, etc. | 790 |
| 5.1 | 3.5 | 5.4 | 6.3 | 6.4 | 6.9 | 6.2 | 7.6 | 9.2 | 7.7 | 28.1 | 12.5 | Entretien, répar. (y compr. pièces) | 791 |
| 6.5 | 8.7 | 9.3 | 12.3 | 10.4 | 15.0 | 13.2 | 16.0 | 10.4 | 14.6 | 29.8 | 19.7 | Primes d'ass., frais d'immatr. | 792 |
| 2.1 | 2.4 | 3.7 | 3.2 | 6.5 | 2.5 | 11.8 | 5.1 | 20.0 | 5.3 | 18.5 | 8.3 | Autres dépenses (stationn., amarrage) | 793 |
| 15.2 | 17.9 | 18.1 | 21.1 | 29.8 | 31.6 | 20.5 | 20.4 | 31.0 | 27.7 | 42.3 | 38.2 | Bicyclettes | 800-801 |
| 14.1 | 14.3 | 16.7 | 16.3 | 27.7 | 26.2 | 19.6 | 16.2 | 29.0 | 20.3 | 39.0 | 31.9 | Achat | 800 |
| 1.1 | 5.5 | 1.4 | 7.4 | 2.1 | 11.5 | 9 | 5.8 | 2.0 | 13.2 | 3.3 | 13.5 | Autre- réparation, pièces, etc. | 801 |
| 29.5 | 7.7 | 17.6 | 8.8 | 35.7 | 10.1 | 50.9 | 13.2 | 38.5 | 13.8 | 104.4 | 21.8 | Véhicules loués | 810-812 |

TABLE 20. Detailed Average Expenditure, by Family Income,
Eight Cities, Canada, 1976

All Families and Unattached Individuals

| | | Family income — Revenu de la famille | | | | | | | | | | | | | | | |
|---------------------------------------|--|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|--|-------------------------------|
| | | All classes — Toutes catégories | | Under \$4,000 — Moins de \$4,000 | | \$4,000 — 4,999 | | \$5,000 — 5,999 | | \$6,000 — 7,999 | | \$8,000 — 9,999 | | \$10,000 — 11,999 | | | |
| | | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. |
| Travel and transportation — concluded | | | | | | | | | | | | | | | | | |
| 820-834 | Transportation services | 300.7 | 86.6 | 84.9 | 85.8 | 194.1 | 93.8 | 144.2 | 89.4 | 183.7 | 83.6 | 252.6 | 90.1 | 245.6 | 84.2 | | |
| 820-824 | Local and commuting | 139.6 | 80.5 | 59.6 | 83.6 | 91.5 | 85.8 | 91.9 | 86.5 | 104.0 | 78.8 | 158.3 | 86.7 | 155.6 | 82.1 | | |
| 820 | Street car, bus, and train | 103.9 | 71.7 | 43.0 | 70.8 | 63.9 | 78.1 | 61.6 | 80.8 | 75.9 | 70.5 | 119.4 | 79.9 | 108.1 | 74.8 | | |
| 821 | Taxi (incl. tips) | 23.2 | 38.2 | 13.5 | 33.2 | 21.8 | 39.8 | 28.5 | 50.1 | 18.3 | 38.8 | 28.8 | 49.0 | 32.6 | 40.3 | | |
| 822 | Household mover | 7.1 | 4.6 | 2.5 | 1.1 | 2.5 | 2.7 | .6 | 1.2 | 7.1 | 3.1 | 4.7 | 7.1 | 7.0 | 7.0 | | |
| 823 | Other delivery service | .6 | 2.6 | .6 | 3.1 | .2 | 2.0 | 2.7 | 7.5 | .5 | 3.7 | .3 | 1.4 | .2 | .9 | | |
| 824 | Other- car sharing, etc. | 4.8 | 2.3 | | | 3.2 | 2.0 | .5 | .3 | 2.2 | 1.8 | 5.0 | 3.1 | 7.6 | 3.0 | | |
| 830-834 | Inter-city | 161.1 | 39.3 | 25.3 | 23.9 | 102.6 | 41.3 | 50.3 | 32.2 | 79.7 | 31.1 | 94.3 | 45.6 | 90.1 | 33.3 | | |
| 830 | Train (incl. sleeping car) | 8.2 | 8.2 | 4.9 | 4.8 | 6.5 | 6.0 | 6.3 | 7.0 | 7.4 | 8.3 | 7.7 | 11.1 | 2.7 | 5.7 | | |
| 831 | Highway bus | 7.7 | 12.0 | 4.2 | 14.0 | 16.2 | 22.4 | 8.5 | 21.5 | 7.8 | 13.1 | 12.5 | 19.7 | 10.1 | 14.1 | | |
| 832 | Air travel | 137.2 | 23.9 | 15.0 | 8.0 | 73.0 | 21.6 | 30.9 | 9.0 | 60.0 | 15.5 | 65.0 | 22.6 | 74.9 | 16.6 | | |
| 833 | Household movers and other | 3.2 | 1.3 | .1 | .4 | .4 | .4 | 4.3 | 1.4 | 1.5 | .9 | 7.3 | 1.9 | .3 | .7 | | |
| 834 | Other- boat, steamship, ferries, etc. | 4.7 | 7.5 | 1.0 | 5.3 | 6.5 | 3.5 | .3 | 2.2 | 2.9 | 5.4 | 1.9 | 6.3 | 2.1 | 4.5 | | |
| 840-911 | Recreation, reading and education | 916.9 | 98.6 | 172.2 | 87.5 | 260.7 | 96.0 | 307.9 | 95.4 | 417.5 | 97.7 | 504.9 | 98.6 | 609.3 | 98.7 | | |
| 840-888 | Recreation | 687.0 | 94.1 | 101.0 | 63.5 | 128.9 | 78.8 | 208.8 | 81.7 | 292.2 | 86.4 | 383.3 | 91.1 | 513.6 | 97.1 | | |
| 840-843 | Admission to events | 74.9 | 75.1 | 10.1 | 30.9 | 29.1 | 46.4 | 16.5 | 38.2 | 31.2 | 52.7 | 42.6 | 64.2 | 58.1 | 77.4 | | |
| 840 | Movies | 34.2 | 61.4 | 4.7 | 18.1 | 12.2 | 35.0 | 7.2 | 29.0 | 15.0 | 38.9 | 27.6 | 51.1 | 30.2 | 60.2 | | |
| 841 | Plays, concerts, operas, ballets, etc. | 17.6 | 33.1 | 1.7 | 9.7 | 8.2 | 14.9 | 3.6 | 14.7 | 6.1 | 20.6 | 7.3 | 26.0 | 9.0 | 24.4 | | |
| 842 | Museums, exhibitions, etc. | 6.6 | 25.2 | .6 | 9.8 | 2.7 | 11.6 | 1.3 | 6.9 | 2.5 | 17.4 | 3.3 | 18.4 | 6.9 | 20.8 | | |
| 843 | Spectator sports and other events | 16.6 | 26.0 | 3.1 | 6.3 | 6.0 | 11.1 | 4.4 | 10.5 | 7.6 | 13.1 | 4.5 | 13.2 | 12.0 | 24.5 | | |
| 844-846 | Recreational fees, licences and dues | 43.5 | 38.3 | 2.5 | 14.6 | 2.4 | 13.5 | 11.1 | 19.8 | 8.7 | 16.9 | 12.8 | 21.0 | 14.2 | 28.0 | | |
| 844 | Commercial establishments | 21.3 | 15.6 | 1.4 | 2.8 | .5 | | 5.6 | 7.2 | 4.8 | 5.1 | 7.5 | 8.4 | 3.6 | 10.0 | | |
| 845 | Non-profit social & recreational clubs | 18.5 | 20.2 | 1.0 | 12.1 | 2.3 | 13.0 | 5.5 | 13.7 | 3.2 | 8.6 | 5.1 | 11.4 | 8.5 | 13.6 | | |
| 846 | Government | 3.7 | 14.6 | .2 | 2.0 | .1 | 1.5 | .3 | .3 | .8 | 4.7 | .2 | 3.4 | 2.2 | 10.4 | | |
| 847 | Children's & adult games, cards, puzzles | 7.1 | 27.5 | .3 | 3.3 | .7 | 4.9 | 2.2 | 11.6 | 1.9 | 12.8 | 3.7 | 15.5 | 3.8 | 20.8 | | |
| 848 | Children's play vehicles- tricycles, etc. | 1.6 | 5.8 | .3 | 1.4 | | | .2 | 1.3 | .3 | 1.7 | .7 | 2.8 | 1.2 | 7.1 | | |
| 849 | Children's toys, dolls | 15.5 | 25.3 | .9 | 3.1 | 4.8 | 10.8 | 7.7 | 17.1 | 6.0 | 12.2 | 8.3 | 14.7 | 10.7 | 26.5 | | |
| 850 | Recreational equipment- pool tables, etc. | 4.8 | 8.6 | | | .1 | 1.5 | | | .5 | 1.3 | 2.0 | 5.6 | .9 | 5.1 | | |
| 851 | Above ground swimming pools | 4.6 | 1.5 | | | | | .8 | 1.2 | | | .2 | .9 | 4.4 | 1.3 | | |
| 852-855 | Sporting & athletic equipment n.e.s. | 39.8 | 34.3 | 1.7 | 3.3 | 7.3 | 9.4 | 3.3 | 6.7 | 5.5 | 10.8 | 8.3 | 12.4 | 12.2 | 22.6 | | |
| 852 | Water sports, including fishing | 4.5 | 8.5 | .2 | .5 | .3 | 2.9 | .4 | 2.6 | 1.6 | 4.2 | .4 | 1.8 | 1.6 | 4.6 | | |
| 853 | Ski equipment | 12.8 | 9.0 | .5 | .5 | 6.2 | 3.8 | .5 | 1.7 | .5 | .6 | 3.2 | 2.9 | 3.8 | 5.4 | | |
| 854 | Golf equipment | 5.9 | 6.1 | | | | | .1 | 1.3 | .3 | 1.5 | .4 | 1.7 | .8 | 1.4 | | |
| 855 | Other- football, hockey, tennis, etc. | 16.6 | 22.0 | 1.1 | 2.2 | .9 | 4.2 | 2.2 | 4.1 | 3.1 | 5.4 | 4.3 | 8.2 | 6.0 | 16.3 | | |
| 856-858 | Equipment for camping and picnicking | 10.3 | 15.6 | .4 | .3 | 4.3 | 5.1 | .3 | 1.7 | 3.3 | 5.3 | 4.4 | 6.3 | 5.6 | 12.9 | | |
| 859 | Purchase and rent of musical instruments | 25.8 | 6.8 | 9.3 | 2.0 | 3.3 | 1.7 | 1.3 | 2.4 | 7.9 | 2.7 | 20.1 | 2.1 | 8.4 | 4.3 | | |
| 860-867 | Recreation appliances (audio-visual) | 339.4 | 35.7 | 25.8 | 8.7 | 16.0 | 14.4 | 54.1 | 13.8 | 92.3 | 27.7 | 92.6 | 24.6 | 136.4 | 35.2 | | |
| 860 | Radio-am and am/fm | 8.8 | 14.9 | .5 | 1.5 | 3.1 | 8.5 | 2.0 | 2.0 | 3.6 | 8.9 | 2.5 | 5.9 | 8.6 | 12.9 | | |
| 861 | Radio-phonograph combinations | 10.9 | 2.7 | | | .3 | | .3 | | 2.2 | 1.5 | 4.3 | 1.9 | 4.6 | 1.3 | | |
| 862 | Sound components- tuners, speakers, etc. | 36.9 | 8.2 | 1.9 | 1.7 | | | 3.9 | 3.5 | 25.9 | 7.3 | 34.2 | 10.4 | 20.8 | 7.2 | | |
| 863-864 | Record players, tape recorders, etc. | 8.6 | 6.4 | .3 | .5 | 1.0 | 3.2 | .1 | .1 | 3.2 | 3.2 | 12.4 | 4.9 | 7.3 | 4.9 | | |
| 865-867 | Televisions | 74.3 | 15.1 | 23.1 | 5.2 | 11.9 | 3.8 | 47.8 | 10.4 | 57.4 | 14.9 | 39.1 | 9.7 | 95.2 | 19.4 | | |
| 865 | Black and white | 6.2 | 4.1 | .9 | .5 | 1.5 | 2.2 | 6.4 | 2.9 | 10.1 | 6.5 | 4.1 | 3.7 | 10.1 | 4.1 | | |
| 866 | Colour | 66.4 | 11.0 | 22.2 | 4.7 | 10.4 | 1.6 | 35.1 | 7.2 | 47.2 | 8.4 | 32.0 | 5.6 | 85.2 | 15.2 | | |
| 867 | Combinations | 1.7 | .3 | | | | | 6.4 | 1.2 | .1 | .2 | .3 | .3 | | | | |
| 868 | Parts, repairs for radios & phonographs | 1.2 | 4.0 | .6 | .7 | .3 | 2.5 | .3 | 2.5 | 1.5 | 4.8 | .9 | 4.0 | .6 | 2.0 | | |
| 869 | Parts, repairs for televisions | 8.9 | 16.2 | 6.2 | 14.6 | 5.2 | 11.7 | 6.6 | 17.4 | 5.2 | 9.6 | 7.5 | 15.5 | 5.7 | 12.1 | | |
| 870 | Phonograph records, tapes and cassettes | 35.4 | 50.6 | 1.7 | 9.1 | 4.5 | 14.6 | 7.1 | 19.4 | 11.5 | 29.1 | 21.7 | 36.8 | 25.3 | 43.7 | | |
| 871 | Rental of television and radio, etc. | 2.0 | 1.3 | 1.0 | 1.2 | 1.6 | .5 | 3.9 | 2.8 | 1.3 | 1.5 | 1.8 | 1.3 | .8 | .9 | | |
| 872 | Rental of cablevision | 28.8 | 41.0 | 8.1 | 14.3 | 11.5 | 18.1 | 19.3 | 27.7 | 14.2 | 22.5 | 15.7 | 27.2 | 20.7 | 32.4 | | |
| 873-878 | Photographic equipment and processing | 55.9 | 61.3 | 4.4 | 15.4 | 8.1 | 22.0 | 16.6 | 30.4 | 14.9 | 39.9 | 22.2 | 44.9 | 38.7 | 56.3 | | |
| 873-876 | Photographic equipment | 23.0 | 18.0 | .3 | .3 | 2.4 | 4.7 | 9.7 | 8.9 | 2.3 | 7.4 | 8.2 | 10.7 | 18.3 | 12.7 | | |
| 877 | Films, prints and processing | 29.8 | 57.3 | 4.0 | 15.4 | 5.6 | 22.0 | 6.2 | 27.7 | 11.7 | 36.3 | 12.5 | 41.5 | 17.8 | 52.6 | | |
| 878 | Other photographic supplies | 3.1 | 19.0 | .1 | 2.0 | .1 | 3.3 | .7 | 8.9 | .8 | 7.6 | 1.5 | 15.2 | 2.6 | 15.6 | | |
| 879 | Binoculars, telescopes, microscopes | 1.2 | 2.7 | .3 | | | | .5 | 1.2 | .1 | .2 | .1 | .3 | 1.1 | 2.7 | | |
| 880-883 | Hobbies and crafts, n.e.s. | 31.7 | 26.8 | 5.1 | 6.9 | 3.7 | 10.3 | 14.5 | 14.5 | 9.6 | 15.0 | 14.4 | 19.0 | 14.0 | 16.3 | | |
| 880 | Handicraft and hobbycraft kits | 6.2 | 12.2 | 1.0 | 3.4 | 2.0 | 6.4 | 9.8 | 9.8 | 3.1 | 7.3 | 3.4 | 10.0 | 3.0 | 7.3 | | |
| 881 | Art materials and supplies | 6.8 | 10.6 | .5 | 2.0 | .5 | 2.8 | 1.7 | 2.6 | 5.8 | 7.5 | 4.8 | 8.4 | 3.1 | 7.1 | | |
| 882 | Collectors' items- stamps, coins, etc. | 13.7 | 8.2 | .3 | | | | 2.9 | 2.1 | .1 | .6 | 4.4 | 3.1 | 7.7 | 4.4 | | |
| 883 | Other | 5.1 | 3.1 | 3.6 | 1.5 | 1.1 | 1.3 | .1 | .5 | .7 | .7 | 1.8 | 1.7 | .2 | .8 | | |
| 884 | Pets- purchase, supplies etc.(excl.food) | 14.9 | 21.0 | 2.4 | 5.9 | 3.1 | 7.2 | 3.2 | 13.2 | 4.4 | 9.8 | 15.6 | 13.6 | 6.8 | 16.5 | | |
| 885 | Other recreational expenses | 4.3 | 3.4 | 3.5 | 1.7 | 2.2 | 3.1 | 1.4 | 1.4 | .5 | .5 | 3.1 | 1.7 | 1.8 | 2.2 | | |
| 886-887 | Package holiday trips | 101.3 | 10.2 | 13.2 | 2.7 | 16.1 | 2.6 | 34.0 | 4.8 | 56.0 | 6.5 | 66.1 | 8.7 | 122.2 | 11.1 | | |
| 888 | Other holiday expenses for all trips nes | 34.0 | 15.6 | 3.3 | 6.4 | 4.7 | 4.8 | 3.7 | 7.3 | 15.2 | 9.8 | 18.6 | 12.0 | 19.8 | 13.3 | | |
| 890-896 | Reading | 101.7 | 93.7 | 29.4 | 73.5 | 49.3 | 83.7 | 49.6 | 87.1 | 58.9 | 86.4 | 63.7 | 92.9 | 82.5 | 91.5 | | |
| 890-891 | Newspapers | 47.6 | 86.7 | 22.8 | 64.0 | 32.7 | 72.6 | 33.1 | 79.6 | 38.7 | 77.3 | 36.8 | 78.8 | 42.7 | 87.3 | | |
| 892-893 | Magazines and periodicals | 18.3 | 57.2 | 2.7 | 22.4 | 6.6 | 31.8 | 6.5 | 31.7 | 8.1 | 38.1 | 9.4 | 49.0 | 12.3 | 48.1 | | |
| 894-896 | Books and pamphlets (excl. school books) ... | 35.8 | 51.1 | 3.9 | 13.9 | 10.1 | 22.8 | 10.0 | 25.9 | 12.0 | 30.4 | 17.6 | 44.0 | 27.5 | 40.8 | | |

TABLEAU 20. Dépenses moyennes détaillées, selon le revenu de la famille,
huit villes, Canada, 1976

Toutes familles et des personnes seules

| Family income - Revenu de la famille | | | | | | | | | | | | | | |
|--------------------------------------|------------|----------------------|------------|----------------------|------------|----------------------|------------|----------------------|------------|--|------------|--|---------|--|
| \$12,000 - 14,999 | | \$15,000 - 19,999 | | \$20,000 - 24,999 | | \$25,000 - 29,999 | | \$30,000 - 34,999 | | \$35,000 and over - \$35,000 et plus | | | | |
| Av. per fam. | % rptg. | Av. per fam. | % rptg. | Av. per fam. | % rptg. | Av. per fam. | % rptg. | Av. per fam. | % rptg. | Av. per fam. | % rptg. | | | |
| Moy. par fam. | % décl. | Moy. par fam. | % décl. | Moy. par fam. | % décl. | Moy. par fam. | % décl. | Moy. par fam. | % décl. | Moy. par fam. | % décl. | | | |
| | | | | | | | | | | | | Déplacements et transport - fin | | |
| 258.2 | 85.3 | 246.7 | 85.7 | 297.1 | 87.4 | 411.5 | 85.9 | 437.4 | 89.2 | 724.0 | 87.5 | Services de transport | 820-834 | |
| 148.8 | 81.6 | 125.0 | 79.3 | 146.8 | 79.8 | 159.9 | 79.5 | 130.7 | 75.6 | 229.1 | 76.1 | Transport local ou de banlieue | 820-824 | |
| 108.4 | 74.1 | 94.1 | 70.1 | 108.1 | 68.9 | 122.5 | 73.0 | 107.0 | 68.1 | 173.1 | 65.0 | Tramway, autobus et train | 820 | |
| 25.8 | 40.6 | 18.9 | 35.4 | 25.6 | 36.7 | 20.9 | 36.9 | 13.0 | 31.8 | 34.6 | 37.8 | Taxi (y compr. pourboires) | 821 | |
| 7.2 | 5.9 | 7.6 | 5.0 | 6.8 | 4.5 | 6.8 | 3.7 | 10.3 | 5.6 | 14.1 | 4.4 | Déménageurs | 822 | |
| 6 | 2.6 | 9 | 3.2 | 5 | 2.6 | 8 | 3.0 | 5 | 1.1 | 2 | 1.3 | Autres services de livraison | 823 | |
| 6.8 | 3.4 | 3.5 | 2.2 | 5.8 | 2.4 | 9.0 | 3.2 | | | 7.2 | 3.4 | Autres: co-voiturage, etc. | 824 | |
| 109.4 | 35.1 | 121.8 | 34.4 | 150.3 | 38.0 | 251.6 | 44.7 | 306.7 | 59.1 | 494.9 | 59.7 | Transport interurbain | 830-834 | |
| 10.7 | 6.9 | 7.8 | 8.7 | 5.9 | 6.2 | 8.8 | 8.2 | 8.4 | 11.5 | 18.3 | 13.0 | Train (y compr. wagons-lits) | 830 | |
| 9.3 | 12.3 | 4.7 | 8.5 | 5.8 | 9.7 | 10.6 | 10.7 | 5.7 | 10.9 | 7.8 | 10.2 | Autobus interurbains | 831 | |
| 77.3 | 18.1 | 101.9 | 20.1 | 130.9 | 24.9 | 223.9 | 33.5 | 277.9 | 43.9 | 457.9 | 47.1 | Avion | 832 | |
| 10.3 | 1.6 | 9 | 1.3 | 2.3 | 4 | 2.6 | 1.7 | 7.5 | 4.4 | 5 | 7 | Déménageurs et autres | 833 | |
| 1.7 | 5.6 | 6.5 | 7.3 | 5.4 | 8.8 | 5.6 | 8.2 | 7.2 | 12.2 | 10.4 | 15.3 | Autres: bateaux, traversiers, etc. | 834 | |
| 709.4 | 99.7 | 805.3 | 99.5 | 1089.5 | 100.0 | 1371.5 | 99.6 | 1546.3 | 100.0 | 2174.7 | 100.0 | Loisirs, lecture et éducation | 840-911 | |
| 524.7 | 96.7 | 609.0 | 97.7 | 851.1 | 99.4 | 1065.7 | 99.6 | 1148.7 | 98.5 | 1572.5 | 100.0 | Loisirs | 840-888 | |
| 56.8 | 79.1 | 63.4 | 78.8 | 92.6 | 86.2 | 101.2 | 89.1 | 125.1 | 89.8 | 197.5 | 93.7 | Billets d'entrée | 840-843 | |
| 27.4 | 66.6 | 32.1 | 65.6 | 43.4 | 69.5 | 46.8 | 76.1 | 51.3 | 78.3 | 70.5 | 78.6 | Cinéma | 840 | |
| 13.7 | 30.7 | 13.8 | 30.7 | 18.9 | 35.1 | 26.2 | 45.7 | 29.3 | 49.6 | 57.9 | 65.6 | Pièces, concerts, opéras, ballets, etc. | 841 | |
| 4.5 | 21.0 | 5.5 | 26.8 | 9.4 | 33.7 | 9.2 | 31.4 | 14.4 | 38.1 | 12.2 | 33.8 | Musées, expositions, etc. | 842 | |
| 11.2 | 23.7 | 12.0 | 25.9 | 20.9 | 33.8 | 19.0 | 33.9 | 30.1 | 40.9 | 56.9 | 43.0 | Evénements sportifs, etc. (spectateur) | 843 | |
| 26.3 | 35.3 | 33.3 | 39.5 | 52.1 | 48.2 | 62.3 | 51.3 | 88.6 | 64.6 | 163.0 | 60.1 | Cotisations, permis, droits pour loisirs | 844-846 | |
| 8.8 | 11.1 | 17.3 | 16.6 | 27.7 | 19.2 | 31.2 | 22.4 | 45.3 | 31.5 | 78.3 | 31.1 | Établissements commerciaux | 844 | |
| 15.4 | 17.8 | 12.6 | 17.4 | 18.8 | 24.3 | 25.4 | 30.0 | 35.7 | 34.2 | 74.2 | 33.7 | Clubs sociaux et récr. sans but lucr. | 845 | |
| 2.1 | 14.6 | 3.4 | 18.2 | 5.6 | 23.1 | 5.7 | 21.2 | 7.6 | 20.8 | 10.5 | 16.6 | Administration publique | 846 | |
| 5.5 | 27.3 | 6.4 | 31.4 | 10.7 | 38.2 | 10.3 | 35.6 | 15.0 | 38.2 | 14.1 | 39.5 | Jeux pour enfants et adultes | 847 | |
| 1.0 | 4.4 | 2.6 | 9.4 | 2.1 | 8.4 | 9 | 3.5 | 3.8 | 8.7 | 2.5 | 7.0 | Véhicules pour enfants: tricycles, etc. | 848 | |
| 15.2 | 26.6 | 22.3 | 35.5 | 20.2 | 32.0 | 18.0 | 26.3 | 21.6 | 24.8 | 17.9 | 26.5 | Jouets d'enfants, poupées | 849 | |
| 4.0 | 7.8 | 4.5 | 10.6 | 5.9 | 13.1 | 6.2 | 9.2 | 14.0 | 10.9 | 12.7 | 17.2 | Matériel de loisirs: billard, etc. | 850 | |
| 1.4 | 1.1 | 4.4 | 2.5 | 2.8 | 1.3 | 21.8 | 2.4 | 5.4 | 1.8 | 4.7 | 1.6 | Piscines non creusées | 851 | |
| 27.0 | 31.3 | 34.8 | 38.9 | 55.3 | 48.2 | 59.0 | 45.6 | 65.8 | 52.6 | 132.8 | 63.7 | Matériel de sport et d'athlétisme n.d.a. | 852-855 | |
| 5.0 | 7.9 | 4.0 | 10.1 | 6.1 | 11.3 | 7.6 | 12.6 | 5.3 | 11.1 | 12.3 | 15.5 | Sports nautiques, y compris la pêche | 852 | |
| 10.8 | 8.1 | 8.6 | 8.4 | 15.7 | 10.9 | 16.3 | 11.9 | 24.9 | 15.5 | 51.3 | 27.1 | Équipement de ski | 853 | |
| 3.0 | 5.0 | 5.5 | 5.7 | 9.3 | 9.6 | 11.4 | 8.5 | 7.0 | 10.6 | 18.8 | 16.0 | Équipement de golf | 854 | |
| 8.2 | 19.0 | 16.7 | 26.6 | 24.1 | 32.7 | 23.7 | 29.3 | 28.7 | 34.9 | 50.4 | 46.0 | Autre: football, hockey, tennis, etc. | 855 | |
| 7.2 | 15.0 | 9.3 | 14.9 | 11.8 | 21.9 | 15.4 | 24.5 | 19.6 | 27.4 | 30.4 | 25.2 | Matériel de camping et de pique-nique | 856-858 | |
| 10.3 | 6.3 | 12.3 | 6.8 | 42.4 | 8.3 | 51.5 | 11.5 | 52.5 | 9.2 | 64.6 | 13.3 | Achat et location d'instr. de musique | 859 | |
| 138.7 | 38.6 | 135.0 | 37.1 | 160.6 | 43.9 | 201.9 | 43.8 | 214.9 | 47.3 | 220.8 | 45.9 | Appareils audio-visuels (pour loisirs) | 860-867 | |
| 7.1 | 17.4 | 7.6 | 13.1 | 13.2 | 21.4 | 11.1 | 18.0 | 13.0 | 20.8 | 21.1 | 26.4 | Radios am et am-fm | 860 | |
| 11.2 | 2.5 | 12.9 | 3.5 | 7.1 | 2.6 | 22.5 | 5.1 | 8.2 | 3.7 | 33.2 | 3.9 | Radios-phonos combinés | 861 | |
| 39.2 | 7.2 | 26.4 | 7.2 | 49.5 | 9.8 | 52.3 | 11.8 | 62.7 | 10.9 | 74.7 | 12.6 | Éléments de chaînes stéréo | 862 | |
| 11.2 | 8.3 | 8.4 | 6.1 | 7.2 | 8.1 | 15.0 | 7.8 | 13.6 | 9.3 | 10.2 | 9.8 | Phonographes, enregistreuses, etc. | 863-864 | |
| 69.9 | 14.6 | 79.6 | 16.6 | 83.5 | 16.2 | 100.9 | 18.8 | 117.5 | 21.0 | 81.7 | 15.5 | Téléviseurs | 865-867 | |
| 6.5 | 4.4 | 7.5 | 5.3 | 5.4 | 3.7 | 6.1 | 4.5 | 5.5 | 3.3 | 5.5 | 2.8 | En noir et blanc | 865 | |
| 63.4 | 10.7 | 67.2 | 11.1 | 77.6 | 12.5 | 94.8 | 14.5 | 112.0 | 17.7 | 73.5 | 12.4 | Télécouleurs | 866 | |
| | | 5.0 | 6 | 5 | 3 | | | | | 2.7 | 3 | Téléviseurs combinés | 867 | |
| 1.5 | 4.0 | 1.1 | 2.5 | 1.8 | 5.7 | 7 | 2.9 | 2.4 | 7.4 | 1.9 | 8.1 | Pièces et répar., radios et phonos | 868 | |
| 5.2 | 12.8 | 9.8 | 16.7 | 11.9 | 20.0 | 8.7 | 15.9 | 14.0 | 20.6 | 14.0 | 22.2 | Pièces et réparation de téléviseurs | 869 | |
| 28.5 | 51.0 | 34.3 | 57.0 | 46.1 | 59.2 | 56.6 | 67.4 | 54.4 | 68.5 | 74.7 | 73.3 | Disques, bandes et cassettes | 870 | |
| 3.2 | 1.9 | 1.8 | 1.1 | 1.8 | 1.3 | 1.5 | 6 | 2.4 | 1.1 | 2.8 | 2.1 | Location de téléviseur et de radio, etc. | 871 | |
| 23.9 | 36.3 | 29.9 | 42.2 | 39.3 | 53.2 | 40.5 | 56.2 | 41.6 | 54.8 | 44.4 | 59.4 | Télédistribution | 872 | |
| 41.4 | 59.9 | 53.5 | 67.9 | 81.2 | 75.4 | 81.7 | 77.3 | 92.3 | 81.3 | 125.9 | 79.8 | Matériel de photo et développement | 873-878 | |
| 13.4 | 13.4 | 23.4 | 19.0 | 33.3 | 24.5 | 32.2 | 23.0 | 36.9 | 29.0 | 59.3 | 36.5 | Équipement photographique | 873-876 | |
| 25.0 | 55.9 | 26.6 | 63.0 | 44.6 | 71.6 | 45.5 | 72.9 | 49.7 | 76.1 | 60.0 | 73.4 | Pellicules, épreuves et traitement | 877 | |
| 3.0 | 19.0 | 3.6 | 22.1 | 3.3 | 24.5 | 4.0 | 23.1 | 5.7 | 27.9 | 6.6 | 26.3 | Autres fournitures de photographie | 878 | |
| 1.7 | 3.9 | 1.7 | 1.6 | 1.7 | 4.0 | 1.7 | 3.7 | 2.6 | 5.5 | 2.7 | 5.9 | Jonelles, télescopes et microscopes | 879 | |
| 24.6 | 23.8 | 29.4 | 26.0 | 47.5 | 34.6 | 44.0 | 38.3 | 57.8 | 35.5 | 68.7 | 47.1 | Passe-temps et bricolage, n.d.a. | 880-883 | |
| 6.9 | 12.9 | 4.5 | 10.9 | 5.8 | 13.6 | 9.7 | 17.2 | 9.2 | 16.0 | 15.1 | 21.6 | Ensembles d'artisanat et de bricolage | 880 | |
| 6.7 | 8.5 | 6.6 | 11.4 | 8.3 | 12.5 | 8.1 | 13.5 | 9.8 | 15.5 | 15.0 | 20.2 | Matériel et fournitures d'art | 881 | |
| 8.5 | 6.8 | 10.3 | 6.7 | 23.7 | 12.9 | 21.8 | 14.6 | 31.3 | 12.5 | 31.9 | 18.9 | Art. de collectionneur: timbres, etc. | 882 | |
| 2.5 | 2.0 | 7.9 | 3.8 | 9.8 | 4.8 | 4.5 | 4.3 | 7.5 | 4.5 | 6.6 | 4.7 | Autres | 883 | |
| 15.1 | 17.5 | 15.4 | 21.5 | 15.1 | 27.1 | 17.4 | 28.7 | 25.9 | 31.5 | 34.8 | 34.2 | Animaux de maison (sauf nourriture) | 884 | |
| 3.0 | 2.2 | 4.0 | 4.0 | 6.4 | 4.9 | 5.8 | 4.0 | 5.6 | 3.9 | 9.4 | 6.3 | Autres frais de loisirs | 885 | |
| 58.2 | 8.6 | 70.6 | 8.4 | 105.6 | 11.2 | 204.4 | 16.4 | 157.4 | 15.9 | 242.4 | 17.2 | Voyages tous frais compris | 886-887 | |
| 25.0 | 14.8 | 30.2 | 13.3 | 36.3 | 15.6 | 54.5 | 22.9 | 66.1 | 29.0 | 89.9 | 28.3 | Autres dépenses, tous voyages n.d.a. | 888 | |
| 89.0 | 95.8 | 103.5 | 95.7 | 118.1 | 98.5 | 122.7 | 96.8 | 132.0 | 97.3 | 214.7 | 99.2 | Lecture | 890-896 | |
| 48.1 | 90.0 | 48.9 | 88.0 | 49.3 | 91.8 | 54.6 | 92.5 | 54.7 | 93.4 | 76.4 | 94.6 | Journaux | 890-891 | |
| 15.5 | 55.7 | 16.1 | 59.7 | 23.5 | 67.3 | 22.4 | 67.8 | 29.3 | 75.5 | 47.2 | 81.9 | Revue et périodiques | 892-893 | |
| 25.4 | 48.1 | 38.5 | 52.7 | 45.3 | 62.2 | 45.7 | 65.7 | 48.0 | 68.7 | 91.1 | 79.1 | Livres (sauf livres scolaires) | 894-896 | |

TABLE 20. Detailed Average Expenditure, by Family Income, Eight Cities, Canada, 1976

All Families and Unattached Individuals

| | | Family income — Revenu de la famille | | | | | | | | | | | | | |
|--|--|---------------------------------------|-------------------------|--|-------------------------|------------------------------------|-------------------------|------------------------------------|-------------------------|------------------------------------|-------------------------|------------------------------------|-------------------------|------------------------------------|-------------------------|
| | | All classes — Toutes catégories | | Under \$4,000 — Moins de \$4,000 | | \$4,000 — 4,999 | | \$5,000 — 5,999 | | \$6,000 — 7,999 | | \$8,000 — 9,999 | | \$10,000 — 11,999 | |
| | | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. |
| Recreation, reading and education— concluded | | | | | | | | | | | | | | | |
| 900-911 | Education | 128.2 | 41.7 | 41.8 | 8.7 | 82.4 | 20.6 | 49.5 | 14.4 | 66.4 | 26.9 | 57.9 | 26.3 | 73.2 | 33.8 |
| 900-903 | Tuition fees | 78.3 | 21.5 | 27.9 | 6.5 | 49.9 | 12.5 | 33.9 | 5.3 | 40.3 | 13.3 | 39.3 | 13.8 | 40.9 | 13.7 |
| 900-902 | Full-time students | 53.9 | 11.1 | 26.4 | 5.3 | 38.4 | 10.2 | 22.0 | 2.3 | 24.0 | 7.2 | 23.3 | 4.8 | 24.5 | 6.5 |
| 900 | Private kindergarten, nursery, etc. | 4.7 | 2.0 | | | | | | | .3 | .9 | 2.2 | .2 | 1.2 | 2.1 |
| 901 | Elementary and secondary education | 12.3 | 2.7 | .1 | .5 | | | .4 | .4 | .6 | 1.1 | .6 | .7 | 4.5 | 2.7 |
| 902 | Post-secondary education | 36.9 | 6.8 | 26.3 | 4.8 | 38.4 | 10.2 | 21.6 | 1.9 | 23.1 | 5.3 | 20.5 | 4.0 | 18.9 | 3.3 |
| 903 | Part-time courses | 24.4 | 12.4 | 1.5 | 1.2 | 11.5 | 3.7 | 11.9 | 3.0 | 16.3 | 6.7 | 16.0 | 10.1 | 16.3 | 8.1 |
| 904-906 | Books | 16.9 | 18.4 | 8.5 | 5.4 | 22.2 | 14.9 | 10.1 | 4.9 | 11.2 | 12.5 | 8.1 | 13.1 | 11.3 | 16.2 |
| 907-909 | Supplies | 9.7 | 22.3 | 1.8 | 4.0 | 9.2 | 12.5 | 3.5 | 11.5 | 5.0 | 12.9 | 3.3 | 10.1 | 7.6 | 20.8 |
| 910 | Special lessons | 21.2 | 13.7 | 2.1 | 3.3 | .4 | 1.5 | 1.9 | 1.8 | 7.1 | 6.2 | 6.5 | 7.9 | 9.2 | 9.0 |
| 911 | Other educational expenses | 2.0 | 2.8 | 1.5 | 1.4 | .7 | 2.8 | | .5 | 2.8 | 2.7 | .6 | 1.7 | 4.2 | 2.2 |
| 920-931 | Miscellaneous | 388.2 | 93.6 | 43.6 | 59.4 | 114.5 | 74.7 | 142.7 | 82.6 | 127.0 | 86.6 | 181.4 | 95.0 | 282.1 | 95.1 |
| 920 | Interest on personal loans | 133.7 | 42.5 | 3.5 | 4.7 | 5.4 | 12.7 | 13.4 | 18.4 | 26.8 | 19.7 | 58.6 | 33.2 | 89.8 | 44.7 |
| 921 | Interest on property n.e.s. | 9.2 | .7 | | | | | | | | | | | 7.9 | .7 |
| 922 | Bank charges (incl. deposit box rent) | 11.0 | 46.8 | 1.3 | 19.3 | 2.7 | 27.4 | 6.2 | 28.4 | 4.2 | 37.7 | 5.1 | 38.3 | 7.9 | 41.8 |
| 923 | Expenses for land owned but not used | 15.0 | 4.9 | | .3 | 1.1 | 1.9 | | | 3.6 | 3.8 | 1.8 | 1.2 | 4.6 | 3.4 |
| 924 | Lawyer's fees n.e.s. | 23.0 | 7.2 | 10.8 | 2.0 | 12.2 | 7.0 | 17.0 | 6.0 | 6.0 | 5.1 | 9.0 | 7.4 | 17.3 | 5.7 |
| 925 | Funeral expenses, cemetery lots, etc. | 25.8 | 12.8 | 4.3 | 5.5 | 59.2 | 10.4 | 66.0 | 18.1 | 28.8 | 11.1 | 6.9 | 7.1 | 39.7 | 13.9 |
| 926 | Forfeiture of deposits, fines, money lost | 18.8 | 14.4 | 1.2 | 2.6 | 2.4 | 4.0 | 2.5 | 5.1 | 12.7 | 9.1 | 24.4 | 12.3 | 9.8 | 13.2 |
| 927 | Lottery and raffle tickets | 66.2 | 78.6 | 14.2 | 41.5 | 24.5 | 51.9 | 30.0 | 63.0 | 29.8 | 56.2 | 45.8 | 74.3 | 63.0 | 79.6 |
| 928 | Dues to unions & professional associations | 62.7 | 43.2 | .5 | 3.1 | 3.1 | 3.5 | 4.4 | 10.5 | 9.7 | 15.4 | 19.9 | 29.0 | 26.9 | 31.4 |
| 929 | Contributions & dues, other associations | 4.4 | 6.8 | 6.0 | 1.5 | 1.4 | 3.4 | .7 | 4.3 | 3.4 | 5.6 | 3.4 | 2.6 | 2.0 | 5.8 |
| 930 | Work tools and equipment n.e.s. | 9.3 | 6.5 | 1.5 | 1.1 | 1.8 | 2.4 | .3 | 1.5 | .7 | 1.4 | 1.7 | 3.1 | 5.9 | 3.4 |
| 931 | Other | 9.1 | 18.3 | .4 | 2.3 | .7 | 7.7 | 2.4 | 11.4 | 1.3 | 9.0 | 4.8 | 16.4 | 7.3 | 18.9 |
| 940-964 | Personal taxes, security, gifts | 4704.2 | 95.8 | 114.5 | 61.2 | 298.9 | 75.0 | 446.2 | 80.6 | 760.1 | 91.9 | 1418.5 | 97.9 | 1999.4 | 99.0 |
| 940-941 | Personal taxes | 3355.9 | 89.9 | 16.6 | 11.1 | 131.3 | 43.0 | 192.8 | 47.7 | 440.6 | 74.0 | 909.3 | 93.3 | 1213.8 | 96.6 |
| 940 | Income tax | 3353.3 | 89.3 | 16.5 | 10.9 | 131.3 | 43.0 | 192.7 | 47.7 | 439.0 | 73.5 | 908.8 | 93.3 | 1208.9 | 96.6 |
| 941 | Gift tax and other | 2.6 | 1.3 | .1 | .2 | | | .1 | .1 | 1.6 | 1.2 | .6 | .8 | 4.9 | 1.9 |
| 950-955 | Security | 921.0 | 87.1 | 11.0 | 17.8 | 43.6 | 33.7 | 73.6 | 44.9 | 130.9 | 63.1 | 277.5 | 85.6 | 391.0 | 91.6 |
| 950 | Life insurance premiums (incl. group) | 151.2 | 49.6 | 4.4 | 8.3 | 20.5 | 15.0 | 35.7 | 26.1 | 24.7 | 22.8 | 45.7 | 29.2 | 74.9 | 36.2 |
| 951 | Mutual aid society payment | 3.2 | 2.6 | .1 | .3 | | | .1 | .1 | 2.5 | 1.0 | .7 | 2.7 | .3 | 1.1 |
| 952 | Unemployment insurance payments | 170.1 | 81.8 | 3.1 | 9.3 | 11.6 | 21.6 | 18.8 | 28.0 | 40.8 | 51.4 | 87.4 | 75.8 | 113.2 | 86.6 |
| 953-955 | Retirement or pension fund payments | 596.5 | 84.2 | 3.3 | 10.1 | 11.5 | 21.6 | 19.0 | 29.2 | 62.8 | 54.2 | 143.7 | 78.2 | 202.6 | 88.7 |
| 953 | Canada & Quebec pension plan | 159.5 | 83.9 | 2.8 | 9.4 | 11.5 | 21.6 | 17.2 | 28.3 | 43.5 | 53.8 | 91.4 | 78.2 | 115.6 | 88.7 |
| 954 | Other government | 90.3 | 10.7 | .2 | .7 | | | .4 | 1.4 | .6 | .9 | 15.1 | 4.6 | 24.8 | 6.0 |
| 955 | Other (incl. retirement savings plan) | 346.8 | 29.5 | .2 | .2 | | | 1.4 | 1.4 | 18.6 | 4.7 | 37.2 | 11.8 | 62.2 | 19.8 |
| 960-964 | Gifts and contributions | 427.3 | 79.8 | 86.9 | 53.0 | 124.0 | 61.4 | 179.8 | 61.8 | 188.7 | 73.0 | 231.7 | 72.9 | 394.6 | 77.0 |
| 960-962 | Persons outside spending unit | 322.8 | 71.7 | 63.5 | 43.3 | 85.3 | 48.2 | 106.3 | 52.0 | 132.1 | 63.2 | 186.5 | 64.6 | 323.1 | 68.9 |
| 960-961 | Money gifts and contributions | 235.3 | 52.5 | 44.4 | 29.2 | 64.4 | 38.2 | 88.4 | 39.2 | 91.9 | 45.3 | 136.5 | 49.8 | 281.5 | 50.7 |
| 960 | Persons living inside Canada | 178.7 | 46.9 | 27.3 | 26.3 | 58.2 | 37.9 | 87.6 | 39.2 | 75.9 | 42.6 | 98.6 | 43.5 | 123.6 | 46.5 |
| 961 | Persons living outside Canada | 56.5 | 16.1 | 17.1 | 5.2 | 6.1 | 4.8 | .8 | 2.7 | 16.0 | 8.4 | 37.9 | 12.8 | 157.9 | 12.8 |
| 962 | Other gifts—flowers, clothing, toys | 87.6 | 39.4 | 19.0 | 19.0 | 20.9 | 22.1 | 17.8 | 19.7 | 40.2 | 29.8 | 50.0 | 31.3 | 41.6 | 31.9 |
| 963-964 | Charitable organizations | 104.5 | 57.6 | 23.4 | 34.9 | 38.7 | 46.6 | 73.5 | 40.0 | 56.6 | 44.5 | 45.2 | 45.5 | 71.5 | 54.5 |
| 963 | Religious organizations | 60.9 | 30.4 | 19.0 | 24.0 | 24.2 | 28.4 | 57.8 | 32.3 | 45.9 | 27.5 | 34.0 | 23.1 | 50.2 | 33.6 |
| 964 | Other charitable organizations | 43.6 | 48.1 | 4.4 | 24.0 | 14.4 | 37.4 | 15.7 | 27.5 | 10.7 | 32.0 | 11.2 | 37.0 | 21.2 | 39.0 |
| 1-931 | Total current consumption | 13204.4 | 100.0 | 3278.6 | 100.0 | 4907.5 | 100.0 | 5701.0 | 100.0 | 6748.6 | 100.0 | 8209.3 | 100.0 | 9587.1 | 100.0 |
| 1-964 | Total expenditure | 17908.6 | 100.0 | 3393.1 | 100.0 | 5206.4 | 100.0 | 6147.2 | 100.0 | 7508.7 | 100.0 | 9627.8 | 100.0 | 11586.5 | 100.0 |
| 1000-1025 | Total value of items not purchased | 166.8 | 63.6 | 99.1 | 43.3 | 91.7 | 50.1 | 126.6 | 56.2 | 124.6 | 57.3 | 132.8 | 59.6 | 140.5 | 64.7 |
| 1000-1001 | Value of food not purchased | 22.4 | 23.7 | 25.2 | 12.6 | 14.7 | 12.2 | 19.7 | 17.3 | 11.9 | 16.9 | 12.9 | 14.5 | 27.5 | 15.5 |
| 1000 | Home produced for family use | 16.5 | 22.0 | 4.4 | 10.6 | 14.7 | 12.2 | 13.2 | 14.9 | 7.5 | 13.6 | 7.1 | 12.9 | 27.5 | 15.5 |
| 1001 | Received by family as part of wages | 5.9 | 2.2 | 20.8 | 3.7 | | | 6.6 | 2.4 | 4.4 | 3.8 | 5.9 | 1.6 | | .7 |
| 1020-1025 | Value of gifts received | 144.4 | 54.8 | 73.9 | 40.7 | 77.0 | 45.1 | 106.8 | 50.4 | 112.7 | 50.4 | 119.8 | 52.7 | 113.0 | 58.2 |
| 1020-1023 | Household durables | 49.8 | 21.5 | 19.9 | 14.6 | 17.0 | 12.7 | 32.2 | 19.8 | 50.5 | 22.7 | 45.7 | 22.3 | 29.4 | 14.8 |
| 1020-1022 | Household furnishings and equipment | 39.4 | 15.5 | 18.4 | 12.3 | 14.7 | 6.1 | 28.5 | 15.7 | 36.7 | 18.9 | 40.8 | 17.4 | 23.6 | 11.4 |
| 1020 | Furniture | 15.6 | 5.8 | 5.0 | 3.4 | 5.0 | 2.7 | 8.9 | 6.2 | 19.2 | 9.3 | 14.6 | 6.6 | 6.8 | 3.7 |
| 1021 | Audio-visual equipment | 6.5 | 3.7 | 11.0 | 6.9 | 6.9 | 2.5 | 15.0 | 4.1 | 8.6 | 4.9 | 17.0 | 6.0 | 9.9 | 3.1 |
| 1022 | Other equipment and appliances | 17.3 | 8.7 | 2.4 | 4.0 | 2.8 | 3.5 | 4.6 | 7.8 | 9.8 | 8.4 | 9.2 | 7.0 | 7.0 | 6.1 |
| 1023 | Other household durables | 10.3 | 8.6 | 1.6 | 3.6 | 2.3 | 8.1 | 3.6 | 4.7 | 12.9 | 8.5 | 4.9 | 7.2 | 5.8 | 7.0 |
| 1024 | Clothing | 40.4 | 30.6 | 20.1 | 22.5 | 35.9 | 29.3 | 25.0 | 24.9 | 40.4 | 33.0 | 35.6 | 29.2 | 36.3 | 33.8 |
| 1025 | Other | 54.2 | 32.0 | 33.8 | 29.3 | 24.0 | 25.0 | 49.7 | 27.6 | 21.8 | 22.0 | 38.6 | 26.8 | 47.3 | 35.8 |

TABLEAU 20. Dépenses moyennes détaillées, selon le revenu de la famille,
huit villes, Canada, 1976

Toutes familles et des personnes seules

| Family income — Revenu de la famille | | | | | | | | | | | | | |
|--------------------------------------|-------------------|------------------------------|-------------------|------------------------------|-------------------|------------------------------|-------------------|------------------------------|-------------------|--------------------------------------|-------------------|---|-----------|
| \$12,000 — 14,999 | | \$15,000 — 19,999 | | \$20,000 — 24,999 | | \$25,000 — 29,999 | | \$30,000 — 34,999 | | \$35,000 and over — \$35,000 et plus | | | |
| Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | Av. per fam. — Moy. par fam. | % rptg. — % décl. | | |
| 95.8 | 37.6 | 92.8 | 43.2 | 120.3 | 52.6 | 183.1 | 51.7 | 265.5 | 62.6 | 387.5 | 70.5 | Loisirs, lecture et éducation — fin | |
| 62.4 | 20.7 | 52.9 | 20.2 | 70.9 | 22.6 | 118.2 | 29.3 | 160.3 | 36.0 | 235.7 | 44.3 | Education | 900-911 |
| 27.2 | 8.2 | 32.4 | 9.8 | 47.8 | 12.0 | 84.1 | 14.3 | 119.9 | 19.9 | 192.3 | 27.9 | Frais de scolarité | 900-903 |
| 4 | 1.3 | 1.6 | 1.8 | 7.0 | 3.0 | 7.1 | 3.0 | 22.9 | 3.0 | 14.8 | 5.1 | Etudiants à temps plein | 900-902 |
| 3.7 | 2.1 | 7.1 | 2.7 | 10.4 | 2.8 | 25.0 | 4.1 | 22.6 | 4.6 | 64.8 | 7.1 | Maternelle et prémat. privées, etc. | 900 |
| 23.1 | 5.1 | 23.7 | 5.8 | 30.4 | 6.4 | 52.0 | 7.6 | 74.4 | 12.9 | 112.7 | 16.2 | Enseignement primaire et secondaire | 901 |
| 35.2 | 15.2 | 20.6 | 11.3 | 23.0 | 12.7 | 34.1 | 18.0 | 40.4 | 21.2 | 43.4 | 22.5 | Enseignement postsecondaire | 902 |
| 16.5 | 17.4 | 11.9 | 16.5 | 14.1 | 21.1 | 17.5 | 21.4 | 31.7 | 30.4 | 38.5 | 34.9 | Cours à temps partiel | 903 |
| 9.0 | 20.1 | 6.7 | 22.1 | 8.3 | 26.1 | 11.8 | 28.9 | 27.7 | 34.0 | 26.3 | 43.6 | Livres | 904-906 |
| 6.4 | 6.9 | 20.1 | 14.6 | 25.7 | 18.8 | 33.7 | 18.1 | 42.3 | 24.6 | 71.1 | 31.5 | Fournitures | 907-909 |
| 1.4 | 2.6 | 1.2 | 2.2 | 1.3 | 3.7 | 1.9 | 2.3 | 3.6 | 4.3 | 5.9 | 6.1 | Cours spéciaux | 910 |
| | | | | | | | | | | | | Autres dépenses d'éducation | 911 |
| 295.2 | 96.7 | 398.2 | 97.3 | 483.4 | 98.1 | 591.3 | 98.8 | 580.5 | 98.7 | 859.6 | 99.1 | Dépenses diverses | 920-931 |
| 108.0 | 46.9 | 144.3 | 52.1 | 177.4 | 51.1 | 184.6 | 52.2 | 205.1 | 51.8 | 328.3 | 48.5 | Intérêt sur emprunts personnels | 920 |
| 9 | 3 | 5 | 3 | 1.0 | 3 | 65.4 | 2.9 | 4.6 | 1.3 | 19.4 | 1.8 | Intérêt sur la propriété n.d.a. | 921 |
| 7.9 | 40.6 | 9.8 | 46.9 | 11.7 | 50.8 | 17.1 | 59.4 | 18.6 | 63.7 | 29.5 | 69.2 | Frais bancaires (y compr. coffr. de sûreté) | 922 |
| 6.3 | 3.8 | 19.2 | 4.6 | 11.2 | 6.0 | 30.7 | 8.6 | 31.3 | 6.1 | 39.7 | 11.4 | Dépenses pour terrains non utilisés | 923 |
| 19.5 | 6.4 | 18.1 | 5.7 | 38.1 | 9.0 | 27.7 | 9.9 | 15.2 | 7.8 | 58.2 | 12.6 | Honoraires d'avocat n.d.a. | 924 |
| 17.8 | 12.0 | 27.5 | 12.4 | 21.6 | 12.9 | 15.8 | 15.9 | 31.3 | 11.7 | 41.6 | 21.3 | Frais funéraires | 925 |
| 11.7 | 14.8 | 11.3 | 14.2 | 24.5 | 17.2 | 35.9 | 18.9 | 44.4 | 18.2 | 31.4 | 23.6 | Dépôts perdus, amendes, argent perdu | 926 |
| 64.6 | 81.2 | 68.7 | 83.7 | 83.4 | 88.1 | 85.5 | 90.3 | 95.3 | 86.8 | 102.4 | 86.6 | Billets de loterie, de tombola | 927 |
| 40.7 | 39.3 | 78.2 | 54.6 | 80.9 | 53.7 | 92.5 | 60.9 | 102.7 | 60.9 | 155.8 | 66.1 | Cotisations syndicales et professionnelles | 928 |
| 1.2 | 3.8 | 5.3 | 6.8 | 4.2 | 6.5 | 5.1 | 9.9 | 5.5 | 10.9 | 10.7 | 16.2 | Contributions à d'autres associations | 929 |
| 13.0 | 7.2 | 7.9 | 7.7 | 14.3 | 10.3 | 17.6 | 9.2 | 14.4 | 8.8 | 10.9 | 7.1 | Outils et matériel de travail n.d.a. | 930 |
| 3.4 | 14.9 | 7.2 | 20.7 | 13.3 | 21.2 | 13.4 | 18.8 | 12.1 | 26.4 | 31.8 | 33.8 | Autres | 931 |
| 2894.2 | 100.0 | 4070.4 | 100.0 | 5725.7 | 100.0 | 7358.8 | 100.0 | 9589.9 | 100.0 | 15393.6 | 100.0 | Impôts personnels, sécurité, dons | 940-964 |
| 1960.5 | 99.5 | 2942.6 | 99.8 | 4067.0 | 99.7 | 5296.2 | 100.0 | 6819.2 | 100.0 | 11504.9 | 100.0 | Impôts personnels | 940-941 |
| 1957.1 | 99.4 | 2937.9 | 99.8 | 4065.6 | 99.7 | 5294.2 | 100.0 | 6818.0 | 100.0 | 11500.5 | 100.0 | Impôt sur le revenu | 940 |
| 3.4 | 1.8 | 4.7 | 1.8 | 1.5 | 1.3 | 2.0 | 1.3 | 1.2 | 1.2 | 4.5 | 1.5 | Impôt sur les dons et autres | 941 |
| 628.0 | 99.1 | 808.7 | 97.9 | 1165.9 | 99.4 | 1484.6 | 99.0 | 1775.7 | 98.0 | 2846.1 | 99.2 | Sécurité | 950-955 |
| 100.0 | 50.5 | 144.6 | 55.1 | 219.4 | 62.7 | 224.0 | 67.2 | 251.5 | 68.0 | 413.6 | 74.8 | Primes d'ass.-vie (y compr. ass. coll.) | 950-950 |
| 1.2 | 2.3 | 4.2 | 3.4 | 5.3 | 3.5 | 7.8 | 3.7 | 2.5 | 3.1 | 4.1 | 2.8 | Contribution, société de secours mutuel | 951 |
| 159.3 | 95.5 | 186.1 | 94.7 | 233.1 | 96.4 | 264.9 | 97.1 | 269.4 | 95.8 | 295.5 | 92.7 | Cotisations d'assurance-chômage | 952 |
| 367.6 | 97.6 | 473.8 | 97.2 | 708.1 | 99.0 | 987.9 | 98.9 | 1252.3 | 98.0 | 2132.9 | 98.6 | Contributions à une caisse de retraite | 953-955 |
| 154.0 | 97.1 | 172.5 | 96.9 | 212.5 | 99.0 | 243.2 | 98.9 | 250.9 | 97.6 | 275.4 | 97.7 | Régime de pensions, Canada ou Québec | 953 |
| 47.5 | 10.1 | 76.9 | 12.2 | 118.9 | 16.3 | 140.6 | 15.9 | 167.2 | 15.1 | 347.2 | 19.6 | Autre régime public | 954 |
| 166.1 | 29.5 | 224.4 | 30.1 | 376.6 | 42.2 | 604.1 | 43.3 | 834.2 | 49.7 | 1510.3 | 58.2 | Autre (y compr. épargne-retraite) | 955 |
| 305.6 | 80.7 | 319.1 | 81.4 | 492.7 | 87.8 | 578.0 | 85.7 | 995.1 | 90.6 | 1042.6 | 91.3 | Dons et contributions | 960-964 |
| 253.5 | 73.2 | 249.7 | 72.1 | 400.6 | 80.1 | 472.6 | 80.8 | 540.8 | 85.3 | 774.3 | 83.9 | Personnes ne faisant pas partie de l'ud | 960-962 |
| 172.6 | 49.1 | 172.5 | 52.7 | 291.5 | 59.5 | 344.0 | 62.0 | 391.2 | 65.9 | 576.7 | 59.9 | Dons et contributions en espèces | 960-961 |
| 130.9 | 43.3 | 119.1 | 47.4 | 212.3 | 51.2 | 281.5 | 54.2 | 326.1 | 58.8 | 500.9 | 53.0 | Personnes résidant au Canada | 960 |
| 41.6 | 15.9 | 53.4 | 16.6 | 79.3 | 22.1 | 62.5 | 23.2 | 65.2 | 20.4 | 75.8 | 21.0 | Personnes résidant hors du Canada | 961 |
| 81.0 | 41.8 | 77.2 | 40.2 | 109.1 | 46.9 | 128.6 | 47.1 | 149.6 | 45.7 | 197.6 | 54.5 | Autres dons- fleurs, vêtements, jouets | 962 |
| 52.1 | 54.1 | 69.3 | 56.8 | 92.1 | 66.9 | 105.4 | 63.7 | 454.2 | 74.0 | 268.2 | 79.4 | Organismes philanthropiques | 963-964 |
| 36.0 | 25.6 | 48.6 | 29.8 | 56.0 | 35.0 | 68.1 | 29.3 | 142.6 | 39.9 | 165.2 | 35.8 | Institutions religieuses | 963 |
| 16.1 | 44.9 | 20.7 | 45.7 | 36.1 | 58.2 | 37.4 | 58.6 | 31.6 | 67.8 | 103.1 | 72.3 | Autres organismes philanthropiques | 964 |
| 11005.0 | 100.0 | 13059.5 | 100.0 | 15846.1 | 100.0 | 17857.1 | 100.0 | 20637.6 | 100.0 | 26636.2 | 100.0 | Total, dépenses de consommation courante | 1-931 |
| 13899.2 | 100.0 | 17129.9 | 100.0 | 21571.7 | 100.0 | 25215.9 | 100.0 | 30227.5 | 100.0 | 42029.8 | 100.0 | Total, dépenses | 1-964 |
| 173.7 | 67.8 | 139.7 | 63.2 | 187.1 | 67.8 | 204.5 | 65.0 | 231.8 | 74.2 | 272.2 | 72.0 | Valeur totale des articles non achetés | 1000-1025 |
| 19.0 | 21.0 | 23.9 | 24.8 | 25.2 | 33.0 | 19.6 | 26.5 | 33.8 | 31.5 | 29.9 | 33.4 | Valeur des aliments non achetés | 1000-1001 |
| 17.5 | 20.2 | 16.6 | 22.8 | 17.8 | 31.1 | 15.8 | 24.8 | 27.1 | 29.5 | 24.5 | 31.7 | Produits pour consommation familiale | 1000 |
| 1.5 | 1.1 | 7.3 | 2.5 | 7.4 | 2.4 | 3.7 | 2.9 | 6.7 | 2.0 | 5.4 | 2.2 | Reçus à titre de rémunération | 1001 |
| 154.7 | 58.7 | 115.8 | 52.2 | 161.9 | 57.7 | 184.9 | 58.1 | 198.0 | 60.4 | 242.3 | 60.4 | Valeur des cadeaux reçus | 1020-1025 |
| 54.5 | 24.2 | 35.1 | 18.7 | 65.8 | 27.0 | 55.6 | 25.3 | 62.1 | 21.8 | 94.0 | 20.8 | Biens durables ménagers | 1020-1023 |
| 43.9 | 17.4 | 28.1 | 12.4 | 53.3 | 18.9 | 38.4 | 17.2 | 31.1 | 15.4 | 85.6 | 15.7 | Articles d'ameublement et accessoires | 1020-1022 |
| 28.8 | 7.5 | 13.3 | 4.3 | 18.9 | 6.0 | 21.7 | 8.1 | 13.0 | 5.2 | 7.0 | 4.0 | Meubles | 1020 |
| 4.3 | 4.1 | 3.4 | 2.6 | 3.5 | 3.6 | 6.9 | 3.2 | 3.7 | 2.9 | 5.4 | 3.4 | Matériel audio-visuel | 1021 |
| 10.8 | 10.0 | 11.3 | 7.5 | 31.0 | 12.7 | 9.9 | 9.5 | 14.4 | 8.8 | 73.1 | 10.2 | Autres matériel et appareils | 1022 |
| 10.7 | 10.2 | 7.0 | 8.2 | 12.5 | 10.5 | 17.2 | 11.3 | 31.0 | 9.1 | 8.4 | 8.1 | Autres biens durables ménagers | 1023 |
| 46.3 | 36.1 | 36.1 | 29.4 | 39.9 | 32.0 | 50.2 | 30.0 | 42.9 | 27.5 | 58.5 | 30.1 | Vêtements | 1024 |
| 53.9 | 32.8 | 44.7 | 31.2 | 56.1 | 32.0 | 79.2 | 35.3 | 93.0 | 40.7 | 89.8 | 39.0 | Autre | 1025 |

TABLE 20. Detailed Average Expenditure, by Family Income,
Eight Cities, Canada, 1976

All Families and Unattached Individuals

| | | Family income — Revenu de la famille | | | | | | |
|------|--|---|--|--------------------|--------------------|--------------------|--------------------|----------------------|
| | | All classes — Toutes catégories | Under \$4,000 — Moins de \$4,000 | \$4,000 — 4,999 | \$5,000 — 5,999 | \$6,000 — 7,999 | \$8,000 — 9,999 | \$10,000 — 11,999 |
| | Family characteristics | | | | | | | |
| 1100 | Number of families in sample | 3,681 | 198 | 91 | 114 | 261 | 238 | 220 |
| 1101 | Weighted number of families | 3,681.0 | 201.9 | 102.0 | 117.0 | 245.7 | 233.7 | 212.0 |
| | Average: | | | | | | | |
| 1102 | Family size | 2.86 | 1.15 | 1.61 | 1.95 | 2.02 | 1.93 | 2.61 |
| 1103 | Number of children under 5 years | .20 | .03 | .05 | .12 | .08 | .12 | .23 |
| 1104 | Number of children 5 to 15 years | .56 | .06 | .25 | .34 | .30 | .21 | .57 |
| 1105 | Number of adults 16 to 17 years | .11 | .01 | .01 | .04 | .06 | .03 | .08 |
| 1106 | Number of adults 18 to 64 years | 1.81 | .44 | .60 | .79 | .97 | 1.23 | 1.56 |
| 1107 | Number of adults 65 years and over | .23 | .62 | .71 | .71 | .66 | .38 | .24 |
| 1108 | Number of women 14 and over | 1.18 | .76 | .85 | .99 | 1.04 | 1.00 | 1.07 |
| 1109 | Number of girls 4 to 13 years | .24 | .04 | .16 | .16 | .12 | .11 | .21 |
| 1110 | Number of men 14 years and over | 1.08 | .32 | .50 | .61 | .71 | .68 | .95 |
| 1111 | Number of boys 4 to 13 years | .25 | .02 | .08 | .14 | .12 | .09 | .26 |
| 1112 | Number of children under 4 years | .16 | .03 | .02 | .11 | .07 | .10 | .18 |
| 1113 | Number of part-time earners | .60 | .15 | .26 | .38 | .51 | .53 | .63 |
| 1114 | Number of full-time earners | .91 | .02 | | .08 | .22 | .46 | .67 |
| 1115 | Age of head | 44.9 | 62.4 | 56.2 | 56.8 | 51.8 | 45.5 | 44.1 |
| 1116 | Income before taxes | 18494.9 | 2918.9 | 4546.6 | 5497.9 | 6954.6 | 8959.8 | 10991.8 |
| 1117 | Other money receipts | 577.2 | 405.8 | 623.6 | 251.5 | 281.5 | 271.7 | 416.0 |
| 1118 | Net change in assets and liabilities | 1066.2 | 80.5 | 22.7 | 386.5 | 245.1 | 352.4 | 99.7 |
| 1119 | Account balancing difference | 97.3 | 12.3 | 13.2 | 11.1 | 27.4 | 43.7 | 78.8 |
| | Percentage: | | | | | | | |
| 1120 | Homeowners | 49.7 | 19.5 | 31.8 | 26.1 | 32.4 | 21.1 | 34.7 |
| 1121 | Car or truck owners | 71.5 | 8.1 | 18.2 | 28.4 | 43.3 | 49.9 | 58.6 |
| 1122 | With children under 5 years | 16.4 | 2.8 | 3.7 | 7.9 | 7.0 | 8.8 | 19.7 |
| 1123 | With children 5 to 15 years | 32.3 | 5.0 | 15.4 | 14.9 | 17.7 | 14.1 | 30.8 |
| 1124 | With adults 16 to 17 years | 10.3 | .9 | 1.5 | 4.3 | 5.3 | 2.6 | 6.9 |
| 1125 | With adults 18 to 64 years | 90.1 | 40.6 | 53.1 | 64.1 | 74.1 | 83.9 | 92.5 |
| 1126 | With adults 65 years and over | 17.9 | 60.8 | 54.3 | 51.4 | 43.1 | 25.8 | 18.6 |

TABLEAU 20. Dépenses moyennes détaillées, selon le revenu de la famille,
huit villes, Canada, 1976

Toutes familles et des personnes seules

| Family income - Revenu de la famille | | | | | | | |
|--------------------------------------|----------------------|----------------------|----------------------|----------------------|--|---|------|
| \$12,000 - 14,999 | \$15,000 - 19,999 | \$20,000 - 24,999 | \$25,000 - 29,999 | \$30,000 - 34,999 | \$35,000 and over - \$35,000 et plus | | |
| | | | | | | Caractéristiques de la famille | |
| 439 | 743 | 546 | 371 | 202 | 258 | Nombre de familles dans l'échantillon | 1100 |
| 440.3 | 738.3 | 535.8 | 378.6 | 199.6 | 274.2 | Nombre pondéré de familles | 1101 |
| | | | | | | Moyennes: | |
| 2.57 | 3.09 | 3.39 | 3.40 | 3.73 | 4.10 | Taille de la famille | 1102 |
| .25 | .33 | .26 | .15 | .15 | .16 | Enfants de moins de 5 ans | 1103 |
| .46 | .67 | .81 | .67 | .75 | .81 | Enfants de 5 à 15 ans | 1104 |
| .06 | .12 | .14 | .16 | .20 | .26 | Adultes de 16 à 17 ans | 1105 |
| 1.78 | 1.95 | 2.18 | 2.34 | 2.57 | 2.84 | Adultes de 18 à 64 ans | 1106 |
| .10 | .10 | .07 | .13 | .13 | .08 | Adultes de 65 ans et plus | 1107 |
| 1.07 | 1.15 | 1.26 | 1.36 | 1.51 | 1.67 | Femmes de 14 ans et plus | 1108 |
| .16 | .32 | .35 | .29 | .30 | .33 | Filles de 4 à 13 ans | 1109 |
| .95 | 1.13 | 1.28 | 1.40 | 1.54 | 1.72 | Hommes de 14 ans et plus | 1110 |
| .28 | .30 | .37 | .28 | .35 | .31 | Garçons de 4 à 13 ans | 1111 |
| .20 | .28 | .21 | .12 | .11 | .11 | Enfants de moins de 4 ans | 1112 |
| .61 | .61 | .66 | .67 | .83 | .89 | Travailleurs à temps partiel | 1113 |
| .83 | 1.00 | 1.23 | 1.45 | 1.49 | 1.59 | Travailleurs à temps plein | 1114 |
| 40.3 | 40.6 | 40.7 | 43.7 | 44.6 | 45.5 | Age du chef | 1115 |
| 13467.1 | 17442.0 | 22362.7 | 27223.7 | 32050.5 | 46510.6 | Revenu avant impôt | 1116 |
| 802.2 | 395.6 | 523.2 | 531.9 | 716.0 | 1670.6 | Autres recettes monétaires | 1117 |
| 475.3 | 655.0 | 1143.8 | 2126.2 | 2120.3 | 5903.4 | Variation nette de l'actif et du passif | 1118 |
| 105.1 | 52.7 | 170.4 | 413.5 | 418.7 | 248.0 | Sold du compte | 1119 |
| | | | | | | Pourcentages: | |
| 34.1 | 50.8 | 63.2 | 71.1 | 78.2 | 85.6 | Propriétaires de logement | 1120 |
| 70.5 | 84.6 | 89.9 | 92.6 | 97.4 | 92.7 | Propriétaires d'automobile ou de camion | 1121 |
| 20.9 | 26.1 | 21.6 | 12.7 | 12.0 | 12.4 | Avec enfants de moins de 5 ans | 1122 |
| 26.6 | 35.6 | 45.8 | 40.2 | 46.2 | 48.5 | Avec enfants de 5 à 15 ans | 1123 |
| 6.0 | 11.3 | 13.0 | 14.2 | 19.2 | 24.7 | Avec adultes de 16 à 17 ans | 1124 |
| 97.5 | 98.3 | 99.3 | 99.4 | 98.7 | 99.1 | Avec adultes de 18 à 64 ans | 1125 |
| 9.1 | 8.5 | 6.3 | 10.0 | 10.3 | 6.7 | Avec adultes de 65 ans et plus | 1126 |

APPENDIX B

PROCEDURE FOR REFORMATTING INCOME AND EXPENDITURE
DATA FROM ORIGINAL FORM TO 'EQUAL
INCREMENTS' BASIS ON INCOME

Appendix B

PROCEDURE FOR REFORMATTING INCOME AND EXPENDITURE DATA FROM ORIGINAL FORM TO 'EQUAL INCREMENTS' BASIS ON INCOME

The process of converting the data from the Urban Expenditure Survey to an 'equal income increments' basis is simple and easily done, but requires the knowledge that categories cannot simply be added together. Instead, the weighting factors in each income strata (see Table B-1, column 3) must be brought into play. To be specific, the procedure is accomplished by combining categories according to the weighted number of families in each group,* using the following formula:

$$\text{Income}_{\text{(combined group } x_1 + x_2)} = \frac{(\text{Income}_{x_1} \times \text{Weight}_{x_1}) + (\text{Income}_{x_2} \times \text{Weight}_{x_2})}{\text{Weight}_{x_1} + \text{Weight}_{x_2}}$$

As an example, consider the first two categories, "Under \$4,000" and "\$4,000 to \$4,999". On the assumption that equal income intervals of \$5,000 would be suitable and desirable, these two categories may be combined as follows:

$$\begin{aligned} \text{Income}_{(0-\$5,000)} &= \frac{(\$2,918.9 \times 203.9) + (\$4,546.6 \times 102.0)}{(203.9 \times 102.0)} \\ &= \$3,461.644 \text{ (i.e., \$3,461.60, rounded to nearest 10 cents.)} \end{aligned}$$

Combining classes in this manner gives the results shown in tables 12 and 15 in the text.

* "Weighted Number of Families" refers to a correction of the family population distribution from the survey to make it conform to the population distribution on family income which is characteristic of the country as a whole, rather than of the more limited sample of urban households which the survey data represent.

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| | |
|---------|------|
| MAR - 1 | 1982 |
| AUG 30 | 1982 |
| OCT 28 | 1982 |
| NOV 18 | 1982 |
| FEB 17 | 1983 |
| NOV 2 | 1983 |
| MAY 25 | 1984 |
| JUN 15 | 1984 |
| OCT - 5 | 1984 |
| JUL 15 | 1986 |
| JAN - 3 | 1990 |

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