

Vanpool Implementation Manual

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Purpose of this Document

This is one of two manuals developed by Grey Advertising, Inc., under contract with the Federal Energy Administration, which became a part of the Department of Energy on October 1, 1977, to design and implement a Vanpool Demonstration Program involving large employers in various parts of the country.

This manual is intended to explain the concept of vanpooling and its benefits to both employers and employees, while serving as a practical guide for the implementation of such a program.

The other manual, "Marketing Plan to Accelerate the Use of Vanpools," is the first step in translating the success of a few companies' vanpool programs into a prototype for national expansion. It attempts to present and analyze the dynamics of the vanpool market--i.e., the conditions which create demand (market)..for the product (vanpools), factors which stimulate and impede the growth of this market, supportive governmental actions/incentives desired by prospective vanpool companies, and forecasts of market conditions which would impact upon the viability of vanpools.

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I. AN INTRODUCTION TO VANPOOLING

A. What is Vanpooling?

Vanpooling is a commuter transportation mode in which employees whose residences are geographically clustered ride to and from their work sites in a van --- a van which is driven and maintained by one of the employee passengers. A van can carry from 8 to 15 riders, is larger than a station wagon, and smaller than a conventional bus.

Vanpooling offers virtually all the commuting advantages of carpooling to employees, such as:

- ... Convenience of door-to-door service.
- ... Savings owing to inexpensive, personalized rapid transit.

Vanpools are organized, more or less, on a permanent basis, and institutionalized to render regular service to constituent members on a cost sharing - break even - fare structure plan. They eliminate the costs of providing special drivers, expensive equipment, and subsidized operations.

The primary advantage of vanpools over carpools is the added occupancy rate per vehicle. As a transportation mode, vanpooling comes very close to the commuter's dream of personalized rapid transit at low cost.

B. Vanpools Complement Carpooling Activity

On the surface, it may seem that vanpooling is simply an alternative to carpooling. In practice, however, it has been discovered that vanpools not only supplement but also encourage the growth of carpools. For example:

... At the 3M Company in St. Paul, Minnesota, as early as 1970 about 1,000 (or 14.3%) of 7,000 employees engaged in carpooling. A vanpool program was started with 6 vans in the beginning of 1973. Today, over 80 vans are in operation with 830 participants, representing 7.4% of the current labor force of 9,500. At the same time, employee participation in carpooling has doubled, and over 2,000 (or more than 20%) of the employees are currently using carpools. Thus, the spectacular growth of vanpooling at 3M has not impeded the growth of carpooling. It has given an impetus to carpooling, and increased the total impact of both ride-sharing programs by increasing the employee participation rate from 14.3% to 28.4%.

... Although precise figures for other companies are not available, Conoco Cenex, General Mills, Aerospace, Hoffman-LaRoche, and other companies have found that vanpool programs have not diminished the level or growth of their employees' carpooling activity. If anything, vanpooling has stimulated employee interest in other ride-sharing programs.

Thus, vanpools and carpools tend to complement each other and increase the total impact of both types of ride-sharing programs by stimulating employee participation.

C. Why Vanpools Deserve Special Consideration

Vanpools deserve employers' special consideration because:

- ... Saving of company funds is realized through reduction of parking and related facilities.
- ... The company gains in employer-employee relations.
- ... Valuable public relations benefits and positive local national publicity accrue to the company.
- ... The company benefits from improvement in relations with the surrounding community.
- ... The company benefits because of the expansion of its potential employee market.

These benefits are detailed in Section II of this manual.

Perhaps the most important reason vanpools deserve employers' special consideration is the overriding need to be well-prepared to face expected near-term and long-term fuel shortages.

In 1975, the United States imported roughly 40% of its petroleum requirements, valued at about \$27 billion. In 1976, U.S. consumption has expanded while domestic production has remained inelastic. We are, consequently, importing at a higher rate than in 1975. The value of imports in 1976 will most likely exceed \$30 billion. Persistent and rising deficits of these proportions, on the petroleum account alone, are apt to endanger our economic stability and political security. Thus, it is evident that oil imports must be curtailed. The need for such action becomes even greater when it is realized that our known

petroleum reserves are hardly enough to last us for ten more years at the present rate of consumption.

FEA studies indicate that about one-third of all gasoline consumed in the United States is used for commuting to and from work. The average number of people in each car is only 1.4. Vans average approximately nine to ten miles per gallon of gas, which is not much higher than the current average consumption for a full-sized passenger car which gets an average 13 miles per gallon. On an average round-trip of 20 miles, a van would consume about two gallons of gasoline. One van, on the average, supplants about seven cars which would otherwise consume about 10.5 gallons of gasoline. The net gasoline saving per van, per day, then, is estimated at 8.5 gallons. Annually, on the basis of 240 working days, this would mean a saving of 2,040 gallons of gas per vanpool.

The immense fuel-saving potential of vanpools is an important benefit for the nation. But the important direct benefits which vanpools offer to companies are even more immediate. Vanpools can help insure employees' ability to get to work in the event of a gasoline shortage. Other benefits are identified and documented with concrete examples in the next section.

D. How Do Vanpools Work?

A typical vanpool program works on the basis of the following five major elements:

- ... Preliminary planning
- ... Development of administrative procedures and details
- ... Development of operating procedures and details
- ... Ordering of vans
- ... Plans for expansion of programs

1. Preliminary Planning

Major planning steps include:

- ... Dissemination of information on the vanpool's benefits to employees
- ... Identification of employee resident location through distribution of a simple questionnaire
- ... Analysis of the level of employee interest through a simple survey, often taken at the same time residential location information is obtained.
- ... Establishment of the initial number of vanpools, for each area, on the basis of available participants.

2. Developing Administrative Procedures and Details

In most companies, vanpool-related administrative and supervisory costs are assumed by the employer. These are generally modest, and in some cases negligible. The employer's costs are compensated for by the reduction in parking facilities required, reduction of parking space maintenance costs, possible company use of vans during working hours, reduction in employee

absenteeism and tardiness, greater employee loyalty, greater employee accessibility to company work sites resulting in improved labor supply, greater productivity of vanpooling employees, and improved public and community relations.

A successful vanpool works on the basis of simple and minimal administration and many of these responsibilities are delegated to the vanpool driver/coordinator.

Administration of the program falls to people in the company involved either in transportation, personnel, or administrative services. The legal, traffic, insurance, and public relations departments may also be involved in initiating the program. The responsibilities of the administrators include organizing resident clusters, selecting driver/coordinators, holding pool formation meetings, accounting, and, in some instances, collecting fares.

3. Developing Operating Procedures and Details

The vanpool driver/coordinator is responsible for the following operating procedures:

- ... Obtaining special driver's license where necessary
- ... Training backup drivers and getting the necessary license.
- ... Maintaining minimum ridership (with the administrator's help).
- ... Keeping records of the van operations and log sheets of riders for each day
- ... Servicing, maintaining, and cleaning the van as necessary, and all pertinent accounting.

- ... Collecting fares (where this function is delegated).
- ... Getting group agreement on schedules and related arrangements which are satisfactory for each vanpool.

Operating procedures are designed to give maximum possible autonomy to each vanpool and its driver/coordinator in its day-to-day operations.

4. Ordering Vans

In a typical program, vans are purchased or leased by the employer, and operated on a non-profit self-supporting basis. The employees who commute in the vans cover the depreciation and operating costs by paying monthly fees. The initial van purchase costs are assumed by the employer and are recovered from passenger fares over a period of four years. If the van is leased, monthly employee payments cover the leasing charges.

5. Plans for Expanding the Program

Some of the most successful vanpooling companies have found that a realistic plan for expansion is essential for the growth of the program. In the absence of a growth plan, administrators tend to become satisfied with the fulfillment of the initial plan, and employee interest tends to abate without sustained company promotion to increase vanpool participation. When faced with the responsibility to fulfill self-developed expansion targets, vanpool administrators tend to be more innovative in developing ways and means to sustain employee interest and develop demand for vanpools. This approach is well founded, because the evidence reveals that over 90% of all employees who have participated in vanpools intend to stay with them.

Thus, Vanpools deserve employers' special consideration because:

- ... The "product" is good.
- ... It works.
- ... People love it, and stay with it after they have tried it.

The following pages provide the documentation for these findings.

II. OPPORTUNITIES AND PROBLEMS WITH RESPECT TO VANPOOLING

A. Employer Benefits/Opportunities In Vanpooling

1. Saving Company Funds through Reduction of Parking and Related Facilities

Opportunities for saving company funds in these areas include:

- ... Reduced capital investments in land and construction of parking facilities, access streets, ramps, signal lights, and signs.
- ... Alternative uses of available land, originally allocated to parking, for plant expansion, other facilities, or leasing.
- ... An estimated savings of \$1,000 for each parking space on the ground, and about \$5,000 for each parking space on an elevated structure.
- ... Savings on maintenance of parking spaces of at least \$60 to \$80 per space. . . per year.
- ... Substantial savings on rising real estate taxes on unnecessary parking land and facilities.
- ... The opportunity cost of tying up the company's financial resources in parking and related facilities.

The following documentation demonstrates that many companies have been able to realize all or most of the parking-related benefits of vanpooling:

... The 3M Company had appropriated \$3 million for enlarging its parking facilities and improving limited access routes which were causing severe traffic bottlenecks near the 3M Center. The vanpool and carpool programs have enabled the company to save at least \$2.5 million in this area alone by eliminating the need for construction 1,500 additional parking spaces. During the past 5 years, there has been a net decrease in drivers at the 3M Center, even though the number of employees has increased by about 2,000.

... Other companies which have made significant savings on parking facilities through vanpooling include the following:

<u>Company</u>	<u>Vanpooling Period Referred To</u>	<u>Savings Of Parking Spaces</u>
Cenex (Farmers' Union Central Exchange, Inc.) St. Paul, Minn.	Oct., 1973 to Oct., 1975	120+
Corning Glass Works Corning, N.Y.	June, 1974 to Oct., 1975	70+
General Mills, Inc. Minneapolis, Minn.	Jan., 1974 to Oct., 1975	100+
R.M. Parsons Co. Pasadena, Calif.	March, 1975 to Oct., 1975	300

... It should be noted that savings on parking-related needs were directly proportional to the size of the vanpool program. Accordingly, all companies derived these benefits in varying

degrees. Further expansion in programs is expected to increase the estimated savings.

... Nabisco, for example, which moved to East Hanover, N.J., from its New York headquarters in October, 1975, immediately started a program with 13 vans, as it had only 400 parking spaces for over 1,000 employees. The company was able to save substantially by not having to invest in additional land and parking facilities. The vanpool program has become popular with Nabisco employees, and the company is planning to expand it further.

Companies which implemented vanpooling programs with the primary objective of solving parking and traffic congestion at the company site, were able to identify their achievements in concrete terms. Many of these programs have been operating for only two years or less, yet the tangible results of their performance have been quite impressive.

2. Company Gains In Employer-Employee Relations

Major vanpooling companies have noted marked improvements in employer-employee relations. The 3M Company, Continental Oil, General Mills, Hoffman-LaRoche, and many other companies have observed that vanpooling has fostered greater company loyalty and company identification among their employees. This employee attitude stems from the awareness of the substantial benefits of this management service. These benefits include:

... Estimated annual savings of about \$400 in commuting costs (largely gasoline) for the employees who previously drove alone

in a standard-sized automobile, making a daily 20 mile round trip to work and even greater savings with longer trips.

- ... Additional savings of at least \$1,000 a year or more, if the employee disposed of his or her second car. (All these savings are in "after tax dollars".)
- ... Guaranteed door-to-door all-weather service.
- ... Comfortable and relaxed chauffeured commutation.
- ... Opportunity to meet fellow-employees and to develop new friendships and interests.
- ... Opportunity to exchange ideas on company matters.
- ... Elimination of long walks after parking, which tend to be trying during bad weather conditions.
- ... Various company incentives to encourage vanpooling, such as preferred parking, initial free rides for regular vanpoolers, and special recognition within the company.

Although none of the ongoing vanpool programs was started with these objectives in mind, a number of vanpooling companies have recognized marked improvement in employee morale, punctuality, and productivity, which could be traced to vanpooling. 3M, General Mills, Cenex, Hoffman-LaRoche, Continental Oil, and others have experienced these improvements, although they have not as yet quantified the corresponding savings.

3. Valuable Public Relations Benefits and Positive Local and National
Publicity for the Company

Vanpooling has established and/or enhanced many companies' reputations as concerned and socially conscious institutions contributing to the community and national efforts to reduce traffic congestion, environment pollution, and energy consumption.

... Continental Oil, Aerospace, Cenex, Texas Instruments, and others, which started vanpooling primarily to conserve energy and to improve and enhance their community and public relations, have enjoyed valuable and positive publicity both locally and nationally.

... The 3M Company did not start vanpooling with public relations benefits in mind. But the company has benefited tremendously by the extensive publicity and recognition (of its pioneering leadership in this field) by the local community, the business community, and the government.

... The value of these vanpooling public relations benefits cannot be measured in dollars, but it is believed that what vanpooling has achieved for these firms could not be accomplished by annual investments of equivalent funds in improving community and public relations.

4. Company Benefits from Improvements in Relations with the Surrounding
Community.

This consideration is generally related to the above-mentioned public

relations benefits, but it has specific implications justifying separate documentation.

Some companies have experienced tensions in their relations with surrounding communities because of overflow employee parking on nearby residential streets and/or traffic congestion caused by employee vehicles during rush hours.

Many vanpooling companies which previously experienced such problems reported definite improvement in their relations with surrounding communities. These companies include Corning Glass, Hoffman-LaRoche, General Mills, and Ralph M. Parsons Company.

5. Company Benefits Due to The Expansion of Potential Labor Market

A number of companies do not have easily accessible or convenient mass transit facilities available to their employees. Employees are often deterred in accepting jobs with these companies because of the heavy cost or lack of ready access of transportation to work. For these companies, vanpooling programs have provided a broader labor market by:

- ... Opening employment to those who previously lacked necessary transportation.
- ... Attracting a number of skilled people to the work site through:
 - . Savings of after tax dollars in commuting costs and often travel time.
 - . Convenience and comfort of "chauffeured" transportation.

The Ralph M. Parsons Company and General Mills cited specific tangible benefits in this area which derived directly from their vanpooling programs. Other companies, including 3M, Hoffman-LaRoche, and Cenex, indicated noticeable benefits of greater company attractiveness in their labor market areas. All the above companies have also benefited from the reduced turnover of their current labor force.

Thus, vanpooling offers substantial benefits to employers such as: saving investment funds in land and parking facilities; improving employee relations by providing a service of great economic value; increasing employee morale, punctuality, and productivity; reducing employee absenteeism and tardiness; broadening the potential employee market by making more remote areas accessible to the work site; reducing traffic congestion at rush hours; and incurring valuable public relations advantages by enhancing the company's reputation in the community and in the country. Further, as earlier noted, vanpooling helps prepare a company for potential gasoline shortages which could affect employees transport to work.

B. Concerns Regarding Vanpool Implementation

1. Feasibility of Vanpools - Do They Work?

Vanpools do work. The fact that they are practical, operable, and financially self-sustaining is supported by the experience of at least 40 U.S. corporations which to date have implemented vanpool programs successfully.

The first pilot project was launched in 1973; in the short time since then, employee interest and participation has grown substantially. To accommodate this rising interest, virtually all these companies have expanded or plan to expand their vanpool operations. Success has not been limited by geographic characteristics, by industrial function, nor by the diversity of objectives which the respective companies have sought to achieve. In fact, it is the very flexibility of the vanpool concept that has rendered it applicable to a wide variety of corporate situations.

Examples of successful programs abound:

- ... The 3M Company now operates over 80 vans, carrying over 800 passengers. Yet 400 more people are on the waiting list for additional vans!
- ... Cenex, a Minnesota farm cooperative, has 21 vans, with 160 passengers.
- ... Conoco, in Texas, operates 37 vans in four states, and is planning to expand the number to 66.
- ... General Mills, in Minneapolis, carries 195 passengers in 17 vans.

- ... New Jersey's Hoffman-LaRoche moves over 200 passengers in 20 vans.
- ... Aerospace Corporation of Los Angeles now has 17 vans, with over 150 employees participating.
- ... Some other companies with ongoing vanpools include Prudential Insurance Company, Texas Instruments, Chrysler Corporation, Nabisco, Corning Glass Works, Honeywell Corporation, Montgomery Ward, Commercial Credit, Control Data, Aerospace Corporation, ARCO, Polaroid, Sperry Flight Systems, etc.

Companies with existing programs are so enthusiastic about the results achieved that they willingly tend to provide technical assistance to other companies by making available information on the establishment and functioning of their vanpool operation. Employee interest has increased dramatically, indicating that successful programs have sown the seeds of their own expansion.

Even a heightened interest in carpooling has developed as a direct result of vanpool activities. In many cases, carpools have been formed in anticipation of converting them to vanpools when vans become available.

In short, vanpooling works, and the benefits accruing to the company, the employee, and to the community transcend even the individual corporate needs for which the concept was implemented initially. (See Section III)

2. The Financial Commitment Required To Initiate And Sustain The Program - Is A Major Investment Necessary?

Primary among management concerns are the costs of initiating and sustaining a vanpool program. Basic to a consideration of these costs is the underlying fact that a vanpool system, while not always completely self-supporting, is nonetheless capable of recovering most of its costs, and form the basis for determining a fare structure which is pro-rated according to passenger usage.

Methods of calculating expense rates may vary according to company intent, accounting procedures, and geographic locations. For example, most firms do not include in the fixed cost schedule the administrative expenses borne by the company, nor the imputed interest on capital which could have been utilized elsewhere. Then too, depreciation may be calculated on the basis of purchase price alone or by subtracting anticipated trade in value of the van. Then too, investment tax credits may alter cost structure.

Almost all documentation of vanpooling experience indicates that it is potentially self-amortizing. For example:

... The Aerospace Company's program called for the initial leasing of 11 vans. In the first three months, these vehicles logged a total of 31,300 miles, and showed a modest profit of \$233 on gross fare revenues of \$4,860. By the end of six months, the operation showed a profit of \$325 on gross fares of \$16,517. (The decline in the profit rate was attributable to a fall off in ridership over the summer vacation months, as Aerospace does

not require passengers to pay for rides not taken. The point to be made here, however, is that even under summer riding conditions, the operation broke-even.) Aerospace estimates its break-even ridership at 80% of capacity. Actual subscriptions exceed that number.

- ... General Mills and Texas Instruments have both elected to purchase their vans, and expect their respective operations to pay out fully within four years. Meanwhile, fare structure has broken-even with the cost of financing the program.
- ... Other companies operating on a break-even basis include Chrysler, 3M, Conoco, Polaroid, Prudential, and Sperry Flight Systems.

Administrative expenses, plus the opportunity cost of the capital involved in a purchase arrangement, are generally the only costs assumed by the company. These relatively modest costs should be weighed against the possible financial benefits to the firm. Such savings might accrue by eliminating the necessity to construct increased parking facilities, the elimination of some parking maintenance costs, and even freeing up current parking space for building expansion. Company use of the van during working hours can also be a low-cost method for intra-company communication and mail delivery. The operational mileage charge to the company can be credited to the vanpool account to reduce vanpool administrative costs.

In brief, vanpools can be made substantially self-sustaining, and a major capital investment is not required. Initial outlays on outright purchases are recovered over a maximum of a four-year period, and leasing expenses

are recovered on a pay-as-you-go basis. Operating expenses are borne by the individual vanpool as incurred. The financial responsibility to the sponsoring company lies only in the administrative costs, and these are offset by the many benefits accruing to the firm.

3. Concerns About Vanpool Administration

Vanpool administration is not a complicated affair. Nor does it presume excessively on management's time. Once the initial effort is made, the company assumes only a supervisory role. It should be noted that many companies with extensive carpooling activities have already done much of the groundwork required (employee matching, routing, etc.), and conversion to vanpooling can be implemented easily.

Once a viable program is established, the administrative responsibility of the company is minimal, as major operational and bookkeeping duties are delegated to the individual driver/coordinators. It should be stressed that the most successful programs are those that have the most enthusiastic endorsement of management; thus, the greater the initial effort expended in setting up an efficient and well-organized system, the less time and attention is required to supervise the program once it is under way.

Simplicity and flexibility are key watchwords to vanpooling. Requirements for implementing a program involve things virtually all major corporations are already set up to do, and management can capitalize on whatever resources are available to it. For example, if there are extensive in-house data processing operations, vanpool routing can be expedited by

input of employee demographic data. Leased computer time, of course, is readily accessible. If a company already operates a fleet of vehicles, van maintenance can be facilitated. If a company has extensive and effective employee communication machinery, publicity and promotion are easier.

To implement the program, groundwork must be laid with employee surveys, van route planning, publicity, and demonstration. The most important step at this stage is to select driver/coordinators since they will ultimately assume the responsibility for the management of each individual pool of riders.

Vans must be purchased, local regulations must be investigated, and a bookkeeping system must be set up whereby income, expenses, and vanpool experience can be recorded. (See Exhibits VIII A-I.) During the implementation stage, it is likely that a multi-department effort will be required, but once the program is under way one department within the company (most often Personnel or Transportation), and usually one part-time person should assume the administrative/supervisory role.

Once established, the vanpool program is primarily in the hands of its participants. The driver/coordinator is responsible for maintaining the vehicle, facilitating communications among passengers, handling all the record keeping, and often collecting the fares. The most streamlined programs are those in which maximum authority and responsibility are delegated to the driver/coordinator.

The company's responsibility at this point is directed toward updating passenger information, collecting individual van records for bookkeeping purposes, maintaining compliance with state and local regulations, promoting the program among employees, assigning new vanpools, and general supervision and planning.

- ... At 3M, which operates the largest program with over 80 vans, administration takes less than 50% of the time of the transportation administrator, plus a small amount of back-up time from a secretarial assistant.
- ... Conoco has a program of 37 vans, and is expanding. The company estimates that administration requires one-third of the time of a program supervisor plus secretarial time, of two hours a month.
- ... At Hughes Tool, the vanpool supervisor spends 1 hour per day, and his secretary 2 hours per month.
- ... Hoffman-LaRoche's program involves 20 vans. The Manager of Personnel Services, estimates that 5% of his time is spent on vanpool activities, plus one day per month of his secretary's effort.
- ... Aerospace notes that very little company time is devoted to administration ... only a few hours a month. In the initial phases, considerably more time was spent, but little effort is now required, since each vanpool coordinator runs his operations smoothly with minimal central supervision.

The preceding corporate experience shows that vanpools are easily managed, and present no unforeseen administrative burden to the company. This is the case in virtually all programs, no matter how extensive the vanpooling operations.

4. Employee Participation and Support of the Program

Companies considering the establishment of a vanpool program are often concerned about the extent to which employees will participate. Experience indicates that active employee participation is a direct function of management's enthusiastic support and promotion of the project. This involves the education of employees as to what vanpooling is, communication of its many benefits, and the use of incentives to elicit employee response. A detailed description of a program to sell vanpooling to employees appears in Section IV.

Companies which have met with rapid vanpool success have repeatedly pointed to their initial efforts at active solicitation as having done much to set the tone for employee enthusiasm and subsequent expansion of the program.

Many have determined passenger attitudes toward vanpooling by periodic surveys. At General Mills, one such survey taken prior to expansion of the vanpooling project probed the basis for employee participation. The reasons for commitment to vanpooling almost matched the ranking of initial employee concerns prior to vanpool implementation:

Convenience	79%
Low Cost	48%
Reliability	36%
Other	11%

The General Mills program of education, publicity, incentives, and implementation overcame employee apprehension, so that the employees' major concerns evolved into reasons for their sustained participation.

Existing evidence shows that if management backs vanpooling, employees will participate. Once an employee starts vanpooling, he or she is likely to stay with it, even if the price of gas declines to comparatively low levels.

III. PROCEDURAL STEPS FOR IMPLEMENTING A VANPOOL PROGRAM

SCOPE AND PURPOSE OF THIS SECTION

This section of the Vanpool Implementation Manual is intended to cover the steps necessary for actually implementing a Vanpooling Program.

The procedures and considerations outlined here have played important roles in successful vanpool programs already in existence, and reflect careful research and observation.

It is particularly important for the executive who is to be responsible for running the vanpool program to perceive the importance and the inter-relationship of the following subject areas. This section can provide a comprehensive view of what vanpooling involves. Included are:

- . Preliminary considerations
- . Cost parameters
- . Level of administrative effort required
- . Legal/regulatory/insurance considerations
- . Operational procedures

Experience has shown that the successful implementation of a vanpool program need not be a highly complex or expensive operation. While this section is targeted most specifically to the executive who is contemplating the overall responsibility for vanpool implementation and operation, it is not intended to transform this person into a transportation expert. It simply stresses a capacity for sound administration and management. Vanpooling requires very little of an executive's time and attention. Consideration of the guidelines

suggested in this section will help avoid the frustrations that can complicate an inadequately planned vanpool program.

A. Identifying the Particular Purposes of a Company Vanpool Program

While Vanpooling offers a solution to a number of company needs, it is likely that there will be one key area of major importance to an individual firm.

To determine this, the broadbased needs which vanpooling can answer for a company and its employees should be detailed. (These are discussed in the previous section of this document.)

The data in Section II of this manual should help determine the applicability of facts and case histories to the individual situation. Those benefits which can be identified as most relevant to a particular company's needs will become apparent. Most requirements include:

- . Alleviation of traffic congestion
- . Provision of more parking spaces for employees
- . Provision of space for capital expansion
- . Compensation for lack of public transportation for employees
- . Demonstration to the community of the company's involvements in energy conservation and pollution control
- . Preparation for future emergency in which energy sources for employees' transportation again become scarce or overly expensive

One of the above will undoubtedly be a more critical reason for adopting a vanpooling program than the others. This reason, then, becomes the company's major purpose in initiating vanpools.

After a company has established its primary purpose/reason for vanpool implementation, it should list as subordinate purposes those additional company needs which can also be addressed by vanpooling. Once a company has agreed upon the major reason for adopting a Vanpool program, it can marshal a spirit of cooperative effort to accomplish the purpose for which the Vanpool program has been adopted.

The procedural guidelines proposed here reflect real-life, practical concerns and experience of companies which have met with considerable success.

B. Estimating the Cost to Initiate and Maintain the Program

In determining the cost of implementation, an estimate must be made of the initial cost of van acquisition, the operating costs of the program, and the administrative costs of maintaining the program. Balanced against this would be the anticipated revenue of the employee fare structure.

Determination of the fares is generally based on the lease or purchase costs of the vehicle which are depreciated over a three or four year period with an assumed resale value at the end of that period. Insurance costs are also added, as well as projected operating costs -- gasoline, maintenance, etc. Then, fares are calculated by dividing fixed plus operating costs by 240 days per year (in most cases) and then again by round trip mileage per day. Per mile operating cost will vary for each pool depending on the daily round trip distance.

Exhibit I (see next pages) contains detailed examples of the financial outlay per van of some typical programs. The key ingredient in such cost formulae inevitably relates to buying vs. leasing. Capital outlays for buying must be measured against the interest charges and other costs of leasing. Added to this are the costs of administrative and supervisory support.

A Maryland Transportation Department Study demonstrates that with the exception of the van's resale value, the difference between lease and purchase cost is minimal. Assuming a list price of \$6,300 for a van, a lease arrangement would probably cost \$7,619 over 50 months. Purchase over 48 months without downpayment would come to \$7,670, and a \$1,000 downpayment would whittle the cost to \$7,452, also over 48 months.

. Company-owned vans. Outlay of capital on purchased vans plus one-time charges such as freight, tires, taxes, etc., are the fixed costs.

1. Aerospace Corporation has estimated these charges at \$145 per month per van.
2. General Mills breaks the figure down to \$145.50 per month per van.
3. Hughes Tool Company calculates fixed expenses at \$147 per month per van.
4. Conoco determines fixed costs to be \$95 per month per van but includes in its amortization calculations the trade-in value of the van.

Leased vans. Leases can be open- or close-ended (i.e., price of vehicle is guaranteed at the end of the lease), with or without maintenance, insurance, and licenses, and with or without option to buy at the end of the lease. Lease rates vary with the financial risk the lessor is expected to assume. Where the lessee is willing to assume all the risk, lease rates are almost identical to automobile finance charges. A decision to lease will depend on a) availability of an interested, aggressive lessor; b) company cash position; c) tax options, (e.g., use of investment tax credit); and d) ability to dispose of vehicles at the end of their useful lives.

TABLE IV
COMPARATIVE LEASE AND PURCHASE ACQUISITION COSTS

<u>Lease Costs</u>	<u>Monthly Payments</u>	<u>Total Payments</u>
Assumptions:	\$169.91 (mos. 1-12)	\$2,039.64
\$6,300 Purchase Price	158.48 (mos. 13-24)	1,901.76
7-1/2% prime interest rate	147.30 (mos. 25-36)	1,767.60
50 month payment schedule	136.43 (mos. 37-50)	1,910.02
		<u>\$7,619.02</u>

Purchase Costs

Assumptions:	Purchase Price	\$6,300.00
\$6,300 purchase price	Down Payment	1,000.00
\$1,000 down payment	Amount to be financed @ 10%	5,300.00
10% interest	Total Interest Amount	1,152.35
48 month payment schedule	Total Principle and Interest	6,452.35
	Total Deferred Price	<u>7,452.35</u>
	Monthly Payments ^a	\$155.26

Purchase Costs

Assumptions:	Purchase Price	\$6,300.00
\$6,300 Purchase Price	Amount to be financed @ 10%	6,300.00
10% interest	Total Interest Amount	1,369.78
48 month payment schedule	Total Principle and Interest	7,669.78
	Total Deferred Price	<u>7,669.78</u>
	Monthly Payments	\$159.79

^aAbsorbs costs of initial down payment.

Courtesy: Maryland Department of Transportation

LEASE COST

Lease cost is based on the total cost of the vehicle.....\$ 8,479.38
 divided by the number of lease months..... 48 months
 And an appreciation of 1.5% per month and a prime interest rate of 7½%

Monthly lease cost for 40 miles round trip.....\$ 171.00

FLEET ADMINISTRATION COST

Cost paid to Crocker McAlister for administration of
 maintenance program..... 6.00

INSURANCE COST..... 105.00

ADMINISTRATION COST

Costs incurred by Commuter Transportation Services, Inc. for
 administration of Van Pool Program..... 25.00

Monthly fixed costs (based on 40 miles) 307.00

OPERATING COSTS

	\$ per mile
Gasoline.....\$	0.05
Lube, minor maintenance.....\$	0.01
Tires, brakes, battery.....\$	0.01
Miscellaneous.....\$	<u>0.01</u>
Total Operating Cost.....\$	0.08

Total monthly operating cost is determined by the number of
 miles involved x 260 working days x .08¢ per mile
 divided by 12 months = monthly operating costs.

Operating costs for a 40 mile round trip..... \$ 70.00

INDIVIDUAL FARE

Individual fare is determined by divided by total monthly cost
 of the vehicle by eight (the number of passengers in each
 vehicle).....-..... \$ 47.00

Courtesy: Commuter Transportation Services, Inc.

COMMUTER VAN COST CALCULATIONS

I. Fixed Costs

Cost of Vehicle		\$6800.00
Less Cost of Tires (which are included in operating costs)		<u>200.00</u>
Costs for Depreciation Purposes		\$6600.00
1. Depreciation over 48 months		137.50/month
2. Insurance @ \$480/year		40.00/month
3. One-time fixed costs		
Sales Tax	\$272.00	
Class B Driver's License for 2 drivers	<u>21.00</u>	
Annual fixed costs		
License and title fees @ \$30.25 x 4 =	<u>\$121.00</u>	
Total	\$414.00	<u>8.62/month</u>
4. Cost/month for 48 months		186.12/month
5. Estimated value of vehicle after 48 months is \$1800 or		37.50/month
6. Monthly income fixed cost to be received by user income		148.62/month 1783.44/year
7. Yearly fixed cost used for fare calculation purposes		\$1800.00/year or \$ 150.00/month

II. Operating Costs

Gasoline (\$.54/gallon @ 9 miles/gallon)	.060
Oil change, lubrication and filter every 3,000 miles @ \$12	.004
Other maintenance:	
1st servicing - 12,000 miles (annual mileage - 12,000 miles)	.008
Tires @ \$50/tire x 4 = \$200.00/year	.017
Total operating costs equal	<u>.089</u>

Use \$.09/mile for operating costs.

Courtesy: 3M Company

EXHIBIT I D.

FIXED COST OF VANS

	<u>1976 Van</u>	<u>1974 Van</u>
Capital Cost	\$7,200	\$5,400
Less depreciation (2% per month over 4 years)	<u>6,912</u>	<u>5,184</u>
Net book value	\$ 288	\$ 216
Resale value (after 4 years - 32% of purchase price)	<u>2,304</u>	<u>1,728</u>
PROFIT	\$2,016	\$1,512

Annual Costs

Depreciation	\$1,800	\$1,296
Insurance (\$160-liability; \$200-reserve for collision)	360	360
Licensing (3 Class B Drivers' Licenses = \$32.00 Vehicle license and title fee = \$58.00)	<u>90</u>	<u>90</u>
TOTAL ANNUAL FIXED COST	\$2,250	\$1,746
LESS PROFIT	<u>504</u>	<u>378</u>
NET ANNUAL FIXED COST	\$1,746	\$1.368
- - - - -	- - - - -	- - - - -
MONTHLY FIXED COST	\$ 145.50	\$114.00
FOR FARE CALCULATION PURPOSES	\$ 140.00*	\$114.00*

OPERATING COSTS

	<u>Estimated At Start Of Program (per mile)</u>	<u>Actual (Over 22 Months) (per mile)</u>
Gasoline @ 54¢/gallon, 9 miles/gallon Actual MPG averages 10.2	6.7¢	5.9¢
Oil	.9¢	.1¢
Other Maintenance		1.7¢
Tires - Regular	1.3¢	.8¢
Tires - Snow	.5¢	
Wash & Wax	<u> </u>	<u>.4¢</u>
TOTAL OPERATING COST	9.4¢/mile	8.9¢/mile

Courtesy: General Mills

EXHIBIT B -VANPOOL COST COMPARISONS

COSTS	AEROSPACE CORP.	LOS ANGELES CITY	3M COMPANY
<u>Fixed Costs</u>			
Vehicle Cost* (\$)	8738	7000	6680
Less residual	<u>-2300</u>	<u>-1000</u>	<u>-1000</u>
Net Cost	6438	6000	5680
Base (years)	4	6	6
Cost per year	1609.50	1000	947
Insurance	674	646	480
License	<u>84</u>	<u>-</u>	<u>71</u>
Total Cost/Year	2367.50	1646	1498
Total Cost/Month	197.29	137.17	124.83
<u>Operating Costs (\$/mi.)</u>			
Gasoline	0.05	0.045	0.05
Lube, minor maintenance	0.01		0.015
Tires, brakes, batteries	0.01	0.06	0.01
Miscellaneous	<u>0.01</u>	<u></u>	<u>0.01</u>
Total Operating Cost	0.08	0.105	0.085

* Adjusted to mid-1975 prices

Courtesy: Commuter Transportation Services, Inc.

EXHIBIT I E.

HUGHES-VAN COMMUTER PROGRAM
Estimated Costs

ORIGINAL EQUIPMENT

Assume the aggregate cost per vehicle at \$6400.00 each, an economic life of 4 years and a salvage value (Trade-in) of \$1600.00.

<u>INVESTMENT</u>	<u>TOTAL COST</u>	<u>MONTHLY COST</u>
Cost of vehicle and options	\$6400 00	
Less Trade-in Value	<u>1600.00</u>	
	4800 00	
Depreciable costs		\$100.00
 <u>ONE TIME VEHICLE COSTS</u>		
Title, license @\$40year	\$ 160.00	
Fire Extinguisher, First Aid Kit, signs	100.00	
Liability Insurance @\$600 year	<u>2000.00</u>	
Total One Time Vehicle Costs	2260.00	\$47.00
	<hr/>	<hr/>
TOTAL AMORTIZATION	\$7060.00	\$147.00

Courtesy: Hughes Tool Corporation

VANPOOL COST AND FARES EXAMPLES*

<u>Fixed Costs</u>	<u>General Mills¹</u>	<u>3M²</u>	<u>Chrysler³</u>	<u>Cenex⁴</u>
Cost of vehicle	\$6937	\$4891	\$5000	--
Depreciation	(6659)	(4873)	--	--
Book value	228	18	--	--
Salvage value	2134	1800	--	--
Net gain upon sale	1857	1782	--	--
Depreciation (48 months)	\$1665	\$1188	\$ --	\$ --
Leasing cost	--	--	2106	1920
Insurance	360	480	--	465
Other	--	--	154	--
License and title fees	59	150	--	--
Class B license	33	--	--	--
Administrative expenses	--	--	255	--
Annual fixed cost	2116	1818	2515	--
Recovery of salvage value	(464)	(450)	--	--
Adjusted fixed cost - annual	1652	1368	2515	2385
Monthly fixed cost	116	117	210	160
<u>Operating Costs/mile</u>				
Gasoline	\$.060	\$.060	\$.075	\$ --
Oil and Lube	.004	.0024	.005	--
Other maintenance	.026	.020	.020	--
Operating cost/mile	.090	.085	.100	.085
<u>Annual Fares Per Passenger</u>				
5 mile round trip	\$167.27	\$195.00	\$293.00	\$176.40
20 mile round trip	205.00	237.00	335.00	231.84
35 mile round trip	243.00	276.00	377.00	264.60
75 mile round trip	344.00	384.00	489.00	350.28

1 General Mills based on most recent vehicle cost, 9 passengers per van.

2 3M based on most recent price, 8 passengers per van.

3 Chrysler based on 9 passengers per van.

4 Cenex based on 10 passengers per van.

* The data for this chart was obtained from Shared Ride Services, 7-29-75, by Clarence Shallbetter and Gary Herzberg, Public Service Options.

Courtesy: Valley Forward Association, Phoenix, Arizona

Most companies estimate eight to ten paying passengers as the breakeven point in computing vanpool fares. As an incentive to maintaining maximum participation and as an added attraction to the driver/coordinator, the fares beyond the break-even point in many cases have been given to the driver/coordinator as additional compensation. Exhibit II (see next page) are various calculation of passenger fare structures which cover expenses.

It is up to the company to establish how high the passenger fare should go. A generally realistic passenger fare structure will cover fixed and operating costs but not necessarily complete administrative costs. However, as has been pointed out, these administrative costs tend to be relatively low. Some companies, such as Chrysler Corporation, have included these costs in the calculation of the fare structure. Most have elected to assume these costs as a concrete demonstration of management commitment to the program.

FARE CALCULATION

1. Monthly mileage = daily round-trip mileage x 21 days (average number of working days per month).
2. Fixed cost per mile = \$134.00 (monthly fixed cost + monthly mileage).
3. Operating cost per mile = \$.09.
4. Total cost per mile = #2 + #3.
5. Total cost per month = total cost per mile x monthly mileage.
6. Cost per person per month = total cost per month + 9 passengers.
7. Cost per person per day = #6 + 21 working days.

3M

SAMPLE INVOICE

COMMUTE-A-VAN INVOICE		Billing for Month of:		Amount Due by the 7th of Month is:	
Form 12221-PWO				\$	
Pool No.	Pool Area	Passenger Name			Employee No.
Pool Coordinator (Print)		Date		Passenger Street Address	
		Ctl.	Main Acct.	Sub Acct.	Project Number
		1	0299	921	

METHOD OF PAYMENT:

Issue your check payable to MINNESOTA MINING AND MANUFACTURING COMPANY.

ST. PAUL — Mail your check with White copy of invoice to CASHIER - 42-5C; or pay directly to the Cashier in Building 220 or 224.

BRANCH — Give your check to the Branch Cashier.

COPIES: WHITE — Attach to Payment
CANARY — Passenger

Courtesy: 3M Company

VAN POOL PROGRAM
Estimated Costs

DIRECT OPERATING EXPENSES - Lube, Wash and Miscellaneous

Assume: Lubrication, oil change & filter @ 4,000 miles	\$15.00
Wash at \$2.00 each for 26 annually	52.00
Transmission fluid change @ 35,000 miles	20.00
Rear end fluid change @ 50,000 miles	20.00
Miscellaneous and unforeseen per 10,000 miles	5.00

<u>Daily Round Trip Miles</u>	<u>Total Miles (4-years)</u>	<u>Total Costs (4-years)</u>	<u>Monthly Costs</u>
20	20,160	\$313	\$6.52
30	30,240	366	7.62
40	40,320	389	8.10
50	50,400	471	9.81
60	60,480	524	10.92
70	70,560	570	11.87
80	80,640	629	13.10
90	90,720	681	14.19
100	100,800	724	15.08

HUGHES-VAN COMMUTER PROGRAM
Estimated Costs

DIRECT OPERATING EXPENSES - Fuel

Assume a pump price on gasoline at 55¢ per gallon, miles per gallon at 10, and a 252 work day year.

<u>ROUND TRIP MILES</u>	<u>ANNUAL MILES</u>	<u>GALLONS GAS</u>	<u>ANNUAL COST</u>	<u>MONTHLY COST</u>
20	5040	504	\$ 277.20	\$ 23.10
30	7560	756	415.80	34.65
40	10080	1008	554.40	46.20
50	12600	1260	693.00	57.75
60	15120	1512	831.60	69.30
70	17640	1764	970.20	80.85
80	20160	2016	1108.80	92.40
90	22680	2268	1247.40	103.95
100	25200	2520	1386.00	115.50

<u>Daily Round Trip Miles</u>	<u>Total Miles (4 years)</u>	<u>Total Costs (4 years)</u>	<u>Monthly Costs</u>
20	20,160	\$ 260.00	\$ 5.41
30	30,240	260.00	5.41
40	40,320	260.00	5.41
50	50,400	520.00	10.83
60	60,480	520.00	10.83
70	70,560	520.00	10.83
80	80,640	780.00	16.25
90	90,720	780.00	16.25
100	100,800	780.00	16.25

PROPOSED VARIABLE OPERATING FARE STRUCTURE

	30 mile rt. and under	40 mile rt. and under	50 mile rt. and under	60 mile rt. and under	70 mile rt. and under	80 mile rt. and under	90 mile rt. and under
Lease Cost	\$ 169	\$ 171	\$ 172	\$ 175	\$ 176	\$ 178	\$ 180
Fleet Administration Cost	6	6	6	6	6	6	6
Insurance Cost	105	105	105	105	105	105	105
Administration Cost *	25	25	25	25	25	25	25
Monthly Fixed Costs	305	307	308	311	312	314	316
Operating Costs	52	70	87	104	122	140	156
Monthly Total	\$ 357	\$ 377	\$ 395	\$ 415	\$ 434	\$ 454	\$ 472
Individual Fare	\$ 45	\$ 47	\$ 49	\$ 52	\$ 54	\$ 57	\$ 59

Route figured from driver's residence. Routing for all pick up or van pool members to destination point and return.

All van pool members will pay same fee with exception of driver.

* \$1.00 a month of administration cost will be put into a contingency fund to be utilized when the van is not operating at full capacity.

Formula for Determining

Operating Costs

Number of miles round trip
x 260 working days x .08¢
per mile divided by 12
months = monthly operating
costs.

EXHIBIT II E.

Courtesy: Commuter Transportation Services Inc.

TABLE I

ESTIMATED COSTS OF COMMUTING BY VAN,
BY LENGTH OF WORK TRIP

Round Trip Commuting Distance In Miles	<u>Passengers Pay</u>		
	<u>Annual Costs</u>	<u>Monthly Costs</u>	<u>Daily Costs</u>
20	\$264	\$22	\$1.10
30	343	29	1.40
40	398	33	1.60
50	464	39	1.90

Source: Appendix Table II-C

C. Selecting the Personnel to Run the Program

First and foremost, it is essential that one executive at your company be designated to be the executive in charge of the vanpool program. Ideally, if you are reading this section carefully, you may well be that individual. As stated previously, there is no one department from which executives who have run successful vanpool programs have come. Remembering that transportation expertise is not essential and that administrative expertise, creativity, and enthusiasm for vanpooling are, this individual could now be in any one of a number of areas of the company. The following list of functional areas does, however, suggest the kind of departments from which executives in charge of vanpool programs have come:

- . Chief executive's office
- . Engineering
- . Transportation
- . Insurance
- . Legal
- . Office Administration
- . Public Relations
- . Personnel
- . Controller's office

What is even more critical about examining this list is that it provides an important "checklist" during the time when a vanpool program is being organized. The reason is that this list covers the various departments who logically have an interest in the structure/operation of your vanpool program, as well as its ultimate degree of success. It is essential to seek the advice, support, and some degree of involvement from representatives of each of these departments.

In short, the executive in charge of the vanpool program ... regardless of his or her own background ... must insure that the concerns of these other departments are reflected in the structure of the vanpool operation, and that the personnel from these areas have each made their proper contribution.

Once these functional inputs have been made available to, a management individual, with the proper secretarial/administrative support, will be easily able to monitor the vanpool program efficiently. And obviously, the level of secretarial/administrative/office assistance is moderate.

D. Promoting the Vanpool Concept to Employees

As detailed, the vanpooling concept is to most employees a very new concept. As such, it requires the fullest and most complete type of explanation in order to thoroughly familiarize employees as to its practicality, convenience, and economy.

Even among employees already participating in carpools, the vanpool idea is sufficiently different to require full explanation.

Information to employees within the company should carry the full endorsement of the chief executive officer of the company and all other required top management. The importance of Management support must be emphasized sufficiently in establishing key priorities for successful vanpool programs.

Quite simply, where there is top management support and contact, a vanpool program should flourish -- with all the attendant benefit to the company and its employees. When this support and interest are absent or faintly perceptible, then the typical vanpool program will not succeed.

An activity such as vanpooling is a new habit mode. In most cases, the employee cannot immediately perceive the benefits that can accrue directly to himself/herself; and more indirectly those benefits which can accrue to the company.

Management approval is critical in convincing employees that participation in vanpooling can be a worthwhile and professional activity which the company looks favorably upon.

Such an initial endorsement may go a long way in convincing the potential employee and indicating company approval. Such endorsement can mean the difference between halfhearted enlistment and wholehearted company participation.

Further, top management endorsement can provide the necessary approval to assure the complete support of all necessary service departments -- including Recruiting, Personnel, Transportation, and others.

The following are some suggested elements for information to sell vanpooling to employees:

-- Initial memorandum/questionnaire

Prior to the initial survey, a memorandum should be prepared for the purpose of introducing the subject of vanpooling to all employees. It should be endorsed and/or signed by the chief executive officer or his counterpart at the particular company facility. It should give a full explanation of what vanpooling is all about and whom in the company the employee should see to inquire as to more information re. vanpooling. This initial memorandum should have attached a questionnaire requesting information as to the employees and his/her ride-to-work habits. The memorandum

should be directed to either the entire workforce to elicit interest or it can be directed to a specific group of employees who have been pre-screened on the basis of a check of personnel records to determine employee residential location clusters.

-- Posters

Posters encouraging the vanpooling idea and having "tear-off pads" for sign-up should be posted in key employee traffic areas, such as the company cafeteria to allow maximum exposure during the initial period of employee sign-up.

-- Employee Posters/Paycheck Stuffers

A simplified explanation of the vanpool idea in the form of a 4-page folder could be utilized by the company in a separate mailing or reproduced as a paycheck stuffer to further promote the idea among employees.

-- Company Newspaper Announcements

The company newspaper can be a vital medium in communicating the value of vanpooling to the employee. Newspaper ad mats can be placed in the company newspaper at the inception of the program and throughout to maintain interest.

-- Loudspeaker Announcements

To further promote the vanpool idea, announcements explaining the

program could be introduced over the company loudspeaker system.

A number of successful vanpool companies have offered incentives to stimulate employee participation that have been extremely helpful:

- 3M offers special recognition and citations, and a free demonstration ride period.
- Conoco awards participants introductory "free rides" of 1-4 weeks. It has also arranged with the highway department for special lanes and reduced tolls for vans. A vanpool "Newsletter" is published to stimulate interest.
- Cenex has encouraged carpoolers to try vans free of charge on a 3-week trial basis.

All of the above materials can be adapted to particular company needs. In addition, these suggested materials and the vanpooling idea itself may well provide additional opportunities for promotion of vanpooling within the company that have not been suggested here. It is important that each company promote the vanpooling idea in a manner that is consistent with the tonality in which the company is used to speaking to its employees.

Incentives can be the key element in beginning the employee on a habit he/she will maintain. Because as shown -- vanpooling trial almost invariably results in staying with it.

E. Organizing the Vanpool Groups

A basic requirement for a successful vanpool program organization is the pinpointing of potential pool members and driver/coordinators, and "matching" them to form a pool group. This data re. potential riders and drivers and their residential proximity can be collected in many ways. The key point is to insure that certain essential elements are included, such as home location, work location, and work hours or "shift" times.

This information can then be sorted so that potential pool groups are identified.

Use of Existing Files

If a company is large and has an employee computerized data bank that can be sorted by zip code, work shift, and work site location, this may be sufficient where the zip code areas are very small, the commuting distances are very long, or the personnel department can further categorize the data into smaller residential groupings.

Special Surveys

A second approach for grouping of employees is through a survey especially adapted for pooling purposes. In addition to generating the basic origin -- destination -- work time data, the survey can be used to provide additional information that may be helpful in identifying potential drivers/coordinators and specifying the extent of employee interest.

Information on existing carpools can be helpful since they can form the nucleus for the expansion of vanpools. The surveys also perform a major function of stimulating discussion and employee interest. Ideally, to capitalize on this momentum, the vans should be started within 3 - 6 weeks of the time the surveys are collected. The surveys will vary widely but a sample is included in Exhibit IIIa and IIIb.

Map Selection

The most difficult part of any survey procedure is determining a good method of locating and referring home location. Several techniques are available, including: a) zip code analysis, b) maps with residential "grid" overlays, or c) a simple list of major residential areas or possible "pick-up" points. Any system will work well if it is understandable to the executives using the technique, as well as to the employees responding.

One very excellent approach is the selection of a standard commercial map with grids of approximately 1 mile square for locating individuals that live within 15 miles of the work site. The size of the map will be determined primarily by what is readily available rather than any exact formula. Areas outside of the map are can be identified by gathering places where people could gather at "pick-up" points, such as major municipal buildings, rural communities, or shopping centers.

Each of these remote areas should be given a separate and distinct identification number. The extent to which these gathering places are categorized will depend upon the distance that people commute, but in most cases will approach 50 to 60 miles from the work site.

Since the economics of vanpool operation are based on trips of 15 miles or greater, a "vanpool only" program may want to concentrate on identifying areas between 15 and 60 miles from the work site.

The 5 - 15 mile trips will be of special interest to carpoolers and will be a welcome spin-off if the data is collected.

F. Selecting a Pool Driver/Coordinator

After an area has been selected, all employees in that area who have indicated an interest in becoming drivers/coordinators should be interviewed.

A committee within the company should be set up to select driver/coordinators. It should be noted here that there is no more vital function in the vanpool program than that of the driver/coordinator. The driver/coordinator inevitably not only becomes the driver but a pivotal force in terms of maintaining the enthusiasm of the van riders, the overall attitude of the pool, and the efficiency with which it is run.

In addition to the overall "strategic" responsibility of helping to develop and maintain the maximum level of van ridership on his route, there are a number of key responsibilities which must be delegated to the vanpool driver/coordinator. It is essential that these responsibilities be clearly defined by the executive in charge of the vanpool operation. Conversely, it is critical for the vanpool driver/coordinator to understand them clearly. An important aspect of the formalization of the driver/coordinator function is represented by the driver/coordinator agreements, which each driver/coordinator will be asked to read and sign. (See Exhibit Va & b.)

Based on our review of this area, with successful vanpool companies, we recommend that the following specific areas be specified as the pool coordinator's responsibilities:

1. Driving the van to and from the company's work site, and picking up/discharging the passengers on schedule.

2. Arranging for the servicing and maintaining of the van as needed.
3. Keeping the level of van occupancy at or above the generally established minimum of 8 paying passengers (as detailed in Section III.C.)
4. Working to train sufficient back-up drivers to absolutely insure daily operation of the van.
5. Providing adequate overnight parking of the van that will insure its reliability in the event of severe weather.
6. Collecting and dispensing fares to the appropriate department of your company, unless your company chooses to have the riders pay their fares directly to the company.
7. Keeping formal, written records of the vanpool's operations.

In order to reward the driver/coordinator for assuming his responsibilities, a special effort should be made to motivate him with additional benefits, including the following:

- ... Free ride.
- ... Monetary incentive by allowing him to keep the fares of the 9th, 10th, and 11th passengers, which can potentially total about \$100 (if the van is running at full capacity).
- ... Status and special recognition within the company.
- ... Personal use of the van after working hours, on a mileage cost basis.
- ... Option for buying the van, when it is retired from the fleet.

In Exhibit IV, there is included a sample check list for selection of vanpool driver/coordinators. Also included as Exhibits are pool coordinator agreements which have been established by companies with already-existing vanpooling programs. It is imperative in initiating the program that a vanpool coordinator agreement be developed for the company and signed by each appropriate driver.

Remembering that the role of vanpool driver/coordinator should not interfere with this employee's basic functions, the paperwork burdens on this individual should be kept to a minimum. The forms shown in the exhibits have been used by successful vanpool companies, and are representative of the proper scope of the administrative responsibilities of the driver/coordinator. Exhibit VIa is a list of riders. Exhibit VIb is a sample expense voucher. Exhibit VIc is a sample invoice. Of course, these forms may be modified to suit your needs.

Provisions should also be made for one rider in each pool to be designated as a back-up driver. This person should meet the same basic qualifications and reliability standards as the regular driver/coordinator. The function of this back-up driver would be to guarantee the operation of the van in the event that the regular driver/coordinator is ill. They also provide an excellent source of future, primary driver/coordinators.

G. Vehicle Acquisition

The major decisions to be made in the area of vehicle acquisition concern:

- . Type of van
- . Equipment options
- . Financing arrangements (purchase vs. lease)

... Type of Vehicle Vehicle selection involves meeting safety requirements and deciding the number and kinds of convenience items that the riders will be willing to pay for in their fare structure. If the vehicle cost is covered by 8 riders and the vehicle is depreciated over a 4 year period the cost must be covered by 384 months of individual fares (8 passengers x 48 months.) Higher occupancy rates naturally reduce individual fares; however, estimates should be made on a conservative basis. At 8 passengers per van, each additional \$1,000 in vehicle cost will be reflected in a monthly fare increment of \$2.60 per passenger, or \$.12 per day. In evaluating purchases of comfort/convenience options, decisions should be made on the basis of whether or not consequent fare structures remain significantly below current transportation mode costs so as to be certain to elicit maximum employee participation.

- . Basic Unit. Vans are becoming more and more familiar on the roads and are easily recognized by their size and shape. They are bigger than limousines, smaller than pick-up trucks, and carry from 12 to 15 passengers. The

vehicles are built on 1/2, 3/4, and 1 ton truck chassis. The 12 passenger unit is available in either a 3/4 or 1 ton chassis. The 15 passenger is only available in the 1 ton chassis. In general the following specifications are suggested as minimum requirements:

- 12 passenger deluxe van with custom interior, carpeting, etc.
- 350-360 cubic inch engine
- Front and rear air conditioning and heating
- Tinted glass all around
- 3 speed automatic transmission
- Power steering and power brakes
- Radio with rear seat speakers
- 8.75 x 16.5 8 ply tires or equivalent
- Outside low mount mirrors

... Equipment options

. Safety items. It is essential that all vans be equipped with

1. Seat belts
2. Fire extinguisher
3. First Aid Kit

. Comfort and convenience items.

1. Front and rear heater and air conditioning units are necessary to passenger comfort. Each manufacturer has a rear unit complement with separate heat exchanger and blower to provide for additional capacity.
2. Seating will vary depending upon the requirements of the group. The standard seats are least expensive and

allow the full 12 or 15 passenger complement, although 15 passenger seat design has less leg room. Where more comfort is desired the vehicle may be equipped with special aircraft-type seats, but this will reduce the vehicle's capacity and add to cost.

3. Upholstery should be selected to match the occupational situation of the predominant number of riders. Cloth-vinyl seats are cooler and colorful but they are easily soiled when the van is used by blue collar workers who do not have an opportunity to change clothes before commuting. In general, vans for blue-collar employees should have rubber mats and vinyl seats, while white-collar vans should feature fabric seats and carpeted floors.
4. Sound deadening material is beneficial in reducing the noise level emanating from outside the vehicle. Some customized vans can be soundproofed to such an extent that conversation is restricted to two adjacent seats. Most vans, however, allow for easy conversation between driver and rear seat passengers.
5. Sliding side doors are convenient in extremely tight parking areas, but are more difficult to operate and are prone to maintenance difficulty.

The key point to remember in purchasing optional features is that vans should be equipped to meet the specific needs of the commuter and, as far as it can be determined, their desire to pay for the options

... Financing arrangements. There are three methods by which companies can acquire vans, or the use of vans: a) outright purchase; b) lease; c) third party ownership. Choice of method will depend on the company's overall investment focus and its accounting philosophy. In a review of 33 companies with fully operational vanpooling programs as of year end 1975, it was found that 16 had elected to lease, 12 had purchased the vans, and 5 fell into special categories including Chrysler and Winnebago, which built their own vehicles. (Detailed cost breakdowns appear in Section III B.)

There are a few existing vanpool programs which are operated by independent, private companies. There are even arrangements of a type in which various participants contribute elements of their own expertise. One such arrangement exists in the Los Angeles area among ARCO, the Crocker Bank and a third party operator, Commuter Computer. ARCO (for whose employees the vanpool was established) promoted, advertised and implemented the program. Crocker (some of whose employees participate as passengers) purchased the vehicles and leased them through Commuter Computer, which now administers the program. The arrangement has been successful and other companies have joined the group.

To date, most third party agents have been financial institutions which have acted in a funding capacity. Third party operations

are few and far between at the moment; however, this situation can be expected to change as potential operators become aware of the new market opportunities, and gain the willingness to incur the cost of doing the developmental work necessary to establish vanpool programs.

As dealer leasing firms begin to be attracted to this market they will become equipped to provide a full range of services.

Ultimately, third party organizations will include automobile leasing firms, taxi or bus companies, car rental agencies, and computer firms which can provide employee matching expertise.

H. Route Selection

Successful functioning of a vanpool program can be enhanced by the establishment of efficient routing. Basic to a good routing system are considerations of time, cost, passenger compatibility and the domestic location of the driver/coordinator.

... Time. Minimizing the time required to complete the commuter trip can be accomplished by:

- . Providing reserved parking spots near the plant entrance so that employees can load and unload quickly, and exit the lot before other employees can walk to their cars.
- . Using exclusive lanes to avoid bottlenecks.
- . Selecting driving routes to minimize time and distance in transit.
- . Establishing a passenger mix so as to decrease pick-up and delivery time.

... Cost. Cost of riding is influenced by the length of the route. A 5 mile/day increase in route length will increase monthly costs by approximately \$10.30 per van. A balance should be sought between time and distance minimization.

. A utility ratio has been devised by 3M to define the limits on route deviation:

$$U = \frac{\text{Pick Up Time (min)}}{\text{Line Haul Time (min)}}$$

Generally, this rate should not exceed 1.

... Passenger compatibility. Under certain conditions it might be considered more effective to lengthen the route so as to assure that compatible individuals are pooled in the same van.

... Domestic location of driver/coordinator. Route selection can often begin with the driver and be developed as necessary to obtain the required number of riders. Once a general grouping has been established, the driver should be given the opportunity to "fine tune" the route based on his own special needs and those of the riders.

I. Labor and Union Considerations

Labor union involvement will be dependent upon local conditions. Pooling programs allow an excellent opportunity for company-union cooperation which benefits both groups without incurring cost on either side. In one of the most successful programs to date, a steward of a professional union was the major force behind vanpool implementation. The company has since reassigned him to promote the program company-wide at all locations. The key is to find a committed individual who can gain the trust of the employees and management.

J. Establishing Insurance Coverage

It is extremely difficult to specify the amount of insurance necessary for "adequate" coverage. This will depend upon whether the employees are covered under worker's compensation or the company's medical program, the income level and family obligation of the riders, average load factors, and local settlement practices. Currently policies range from \$300,000 to \$10,000,000. It would be best to solicit counsel from a competent insurance agent or advisor.

Since vanpool programs are so new, most insurance agents are not sure how to classify and rate vanpool programs. Until the problem is clarified, several approaches should be taken to obtain reasonable cost insurance.

- ... Develop a vigorous program of driver selection including annual physical, accident free driving record, stable and reliable employment history, and holder of a valid chauffeur's license.
- ... Find an agent who will "sell" the program to an insurance company. This is necessary since most insurance companies assume the "worst possible circumstance" when considering a new business that is not well-defined. The agent's role is to find a classification that is closest to describing the "exposure" experienced by the vanpool program and then explain that the vanpool program has better drivers, safer vehicles, and thus "lower exposure" than the existing classification so that the program can be sold to the insurance company at a lower premium.
- ... Discuss coverage with the company's current insurance carrier with an aim toward possibly including the vans under the corporation's fleet policy. This practice has been followed by a number of corporations with vanpooling programs.

Vanpool insurance is new to the insurance companies. In absence of additional information, they assume unsafe vehicles, irresponsible driver, and 12 - 15 heads of families exposed to accidents 24 hours a day. The burden of proof is on the driver and company to prove that the vanpool program uses safer vehicles, has better-than-average drivers, operates a limited period each day, and therefore should be in a low risk category.

The Insurance industry is, however, studying this entire subject of specific insurance for vanpools and is increasingly aware of the importance of this area.

K. Ascertaining Regulatory Compliance

Vanpooling is a new regulatory issue and must be faced as such. Traditionally, vehicles carrying more than 6 to 8 passengers "for hire" have been regulated by Transit Authorities at the local level, Public Service Commissions at the State level, and the ICC at the National level. During 1975-1976, seven states have changed state laws to exempt vanpool programs from state regulation. On December 22, 1975, Congress passed the Energy Policy and Conservation Act which required that all states have viable carpool and vanpool programs to be eligible for funding under the transportation section of that Act. The Federal Highway Act passed in 1976 provided permanent funding for vanpool programs. Consequently, other states will probably exempt vanpool programs during the next year.

Even if a state does not exempt vanpool programs from state regulation requirements, it should be relatively easy for a company to obtain operating authority for the program until legislation is changed. The problem with submitting to the regulatory bodies is that it unduly increases the cost of

insurance due to the increased common carrier liability; it becomes too difficult to change routes, schedules and fares: and the time required to work within the regulatory procedure creates an undue burden on part-time operators. Many states recognize this and authorize lower class permits or temporary permits until these problems can be resolved.

Each company implementing a vanpool program should:

- . Contact the city or state transit authority (whichever has jurisdiction) to present the program and seek permission to operate.
- . Contact the state Public Service Commission to seek a waiver or permit.
- . Write to the Interstate Commerce Commission requesting a waiver or permit if involved in interstate travel.

If any difficulties are encountered, contact existing vanpool operators for suggestions. The difficulties at this point are more a lack of knowledge on the part of the regulatory bodies than actual public policy.

L. Determining Licensing Requirements

The major licensing consideration is whether or not the vehicle is "for hire". If a permit must be obtained, then the vehicle will probably have to be registered, licensed and insured as a "for hire" vehicle. If a waiver is received then it may qualify as a "not for hire" vehicle. Each state has different laws and rules and must be checked individually. Generally speaking, the "not for hire" non-regulated, private vehicle costs less and is easiest to promote in a successful vanpool program,

On the other hand, the more exclusive the licensing of the driver and the

more rigorous the inspection and maintenance of the vehicle, the lower the cost of insurance and the more acceptable the program.

IV. EMPLOYEE BENEFITS OF VANPOOLING

A. Financial Benefits

The financial benefits to employees from vanpool participation are probably the single most potent incentive for persuading employees to join the program. In most of the successful vanpool companies, this incentive has been identified as the most powerful stimulus for joining the pool.

Employees who ride in a van pay a fare calculated to cover (in combination with the fares of the other participants) both the fixed and operating costs of the van. For all practical purposes the fare constitutes the only substantive expense of getting to and from work for the vanpool rider. This fare is almost always less than the costs of operating a car.

A specific example is that of 3M where the fares typically range from \$25 to \$40 per month. (Earlier in this document, the procedure for fare calculation was detailed.) This fare range represents dramatic savings over the employee's monthly cost of operating his or her own car. The degree of savings will vary, of course, depending on the size of the car, length of trip, etc.

Exhibit III A (see next page) details the monthly cost comparison of a single auto commuter trip as opposed to the cost of participation in a vanpool. Individual costs on a 30 mile route come to \$60.66 per month which compares to passenger fares of \$22 per month for the same mileage, resulting in a savings of just under \$39 per month. As route distances

AVERAGE MONTHLY DRIVING COSTS

VS

VAN POOL FARESAverage Incremental Automobile Driving Costs Per Month

<u>Miles Per Day</u>	<u>Fuel</u>	<u>Lube Oil</u>	<u>Tires</u>	<u>Tune Up</u>	<u>Other</u>	<u>Park</u>	<u>Total</u>	<u>Fare</u>	<u>More (Less)</u>
20	\$21.00	\$0.79	\$2.52	\$1.92	\$0.88	\$20.00	\$ 47.11	\$20.00	(\$27.11)
30	31.50	1.18	3.78	2.89	1.31	20.00	60.66	22.00	(38.66)
40	42.00	1.58	5.04	3.85	1.75	20.00	74.22	24.00	(50.22)
50	52.50	1.99	6.30	4.81	2.19	20.00	87.79	26.00	(61.79)
60	63.00	2.36	7.56	5.78	2.63	20.00	101.33	28.00	(73.33)
70	73.50	2.76	8.82	6.74	3.06	20.00	114.88	30.00	(84.88)

Assumptions

1. 21 Work day month (includes 10 holidays per year)
2. 12 miles per gallon @ 60¢ per gallon
3. Lubrication and oil change every 8,000 miles @ \$10.00 each
4. Replace tires at 25,000 miles @ \$150.00 per set
5. Tuneup every 12,000 miles @ \$55.00 each
6. Miscellaneous maintenance (Other) @ \$25.00 per 12,000 miles
7. Parking

increase, the differential between individual driving costs and passenger fares expands dramatically, so that on a 60 mile trip, the savings become \$73 per month, and on a 70 mile route the savings exceed \$84 per month.

General Mills has annualized the cost savings in Exhibit III B (see next page). On a 20 mile trip passenger minimum savings range between \$18.90 and \$123.48 annually. This savings range rises to \$140.18 - \$323.19 on a 35 mile route.

B. Reduced Wear on the Employee/Vanpooler's Personal Car

The enormous savings potential available to employees through vanpool participation derive from two basic areas:

- . "Out-of-pocket" savings based on reduced monthly commutation costs.
- . Savings associated with the "Second Car" needed to drive to work.

An important aspect of the "Second Car" benefits is the fact that vanpool participation will radically reduce the wear on the employee's second car. For most "two car families", one of the basic reasons for the necessity of two vehicles is that one must be used every day to get to work. This puts significant mileage on this vehicle, and usually accounts for the bulk of the family's total driving mileage.

Besides the basic wear induced by the obvious demands of mileage, there is another factor that tends to put exceptional strain on the "ride to work car". This is the fact that, normally, the employee's car must be

used regardless of:

- . Improper mechanical functioning
- . Severe weather

If there is a mechanical problem with a car such as low tire pressure, bad engine timing, poor starting, etc., the urgency of getting to work usually causes the employee to use the improperly functioning vehicle anyway. Needed repairs are postponed. Thus, needed maintenance is frequently left until the weekend, or until the mechanical problem has escalated into an emergency.

Of course, if an employee is a member of a vanpool, this kind of pressure and abuse on his or her second car is eliminated. The uses of the second car tend to be "elective", and usage during periods of mechanical difficulty can be postponed. Thus, wear and tear on the vehicle can be reduced substantially.

The other aspect of vanpool participation that can save wear on the second car is reduced exposure to the hazards of severe weather. When the employee's second car is the means of getting to and from work, all weather conditions must be encountered. If the employee is a vanpool member, the second car is not likely to venture out in very bad weather; it is restricted to recreational uses.

C. Potential Elimination of the Need for a Second Car

In addition to reducing wear on the second car, vanpooling offers the potential for completely eliminating the need for the vehicle altogether

(as mentioned in Part 1 "Financial Benefits"). To this extent, normal savings in monthly personal car operating costs, the lower van fare, and the eliminated upkeep on a second car must be perceived as a possible incentive.

In most cases, the employee is paying off an auto loan to cover the cost of the second car. If the sole or primary reason for the ownership of the second car is transportation to work, regular vanpool participation can allow the employee to sell the second car. Therefore, all of the employee's monthly payments associated with vehicle ownership (loans, insurance, etc.) can be saved. This sum will usually be well in excess of the savings of monthly car operating costs over the vanpool fare. This is, of course, a substantial employee benefit.

To underscore these opportunities to eliminate/reduce usage of the second car, refer to the comments of 3M employees included in Appendix Exhibit D.

D. Convenience

Vanpools not only match many of the conveniences of the personal car, but offer additional attractive features:

- ... Vanpoolers generally get door-to-door pick-up and delivery on a predetermined schedule agreed upon by vanpool members.
- ... Vanpoolers do not have to be concerned with driving in heavy traffic or in bad weather conditions.

- ... Vanpoolers are spared the trouble of long walks (after parking) to the main building, as they are let out at the entrance door. These post-parking walks are very trying in bad and dangerous weather conditions.
- ... If the personal car breaks down, an employee has to borrow his wife's or a friend's car. Such a need does not arise with vanpooling, as a back-up van or other employer service would be available in emergencies.
- ... Riders can enjoy the feeling of coming to work fresh, and relaxed, without having been subjected to the tensions and aggravation of driving in traffic.
- ... When equipped with air conditioning, reclining seats, reading lights, radios, and other extras, vans offer the opportunity of riding to work first class.

E. Travel Time Savings

The time spent in picking up fellow passengers may be offset by saving in travel time through:

- ... Roadway priorities often accorded to vanpools/carpools, such as special lanes.
- ... Reduced traffic congestion at rush hours, especially at the company entrance/exit lanes.
- ... Elimination of the time involved in walking after parking the car.

F. Elimination of Parking Concerns

Vanpooling employees' parking concerns become a thing of the past, because:

- ... Vanpools eliminate all parking-related problems and worries.
- ... Vanpools are accorded the convenience of special (privileged) parking areas close to the office building or the plant.
- ... Where possible, vans receive preferred entrances/exits into parking lots.

G. Constructive Use of Commuting Time

Travelling time now could be used for:

- ... Working or reading newspaper,
- ... Planning the day,
- ... Recreational games or talking to fellow passengers,
- ... Getting to know fellow workers,
- ... Listening to the radio, or
- ... Just relaxation and rest.

H. Vanpoolers - A Status Group Within The Company

Vanpoolers could be accorded special recognition within the company through:

- ... Special contests and prizes.

- ... Recognition in company newsletters.
- ... Discount tickets to shows and sporting events.
- ... Specially marked parking areas, such as "For Silver Spring Vanpool Only", etc.

I. An Appeal to Social Conscience And Patriotism

The vanpooler's contribution to important national problems:

- ... Need to save fuel.
- ... Need to decrease our dependence on foreign oil and consequently reduce our vulnerability and bolster national security.
- ... Need to save flight of dollars and jobs to foreign lands.
- ... Need to reduce traffic congestion.
- ... Need to reduce air pollution and improve our home and work environment.

J. Provisions For Mid-Day Travel Needs

Employee concerns about their mid-day travel needs could be met by:

- ... Making vans or company fleet cars available (on a mileage cost basis) for vanpoolers for lunchtime errands and other needs, such as shopping and doctor's appointments.

... Available shuttle bus (or van) service to shopping centers.

For these reasons and many others, companies find that once becoming vanpoolers, most employees stay with the vanpooling program. Even the skeptical initiates are favorably impressed and most become loyal vanpool regulars in a very short time. To sum up, it is a program which can insure loyal and continuing employee participation.

To sell vanpooling to employees, employers must communicate accurate and documented information on the benefits of vanpools. When employees understand these benefits, and see management's commitment to vanpooling, a substantial number of them will participate. The economic justifications for vanpooling are compelling enough, but documentation suggests that the reasons for its widespread success supersede mere financial motivations. Employees like it. They find it comfortable and convenient. They are willing to pay for it. (See 3M employee comments - Appendix Exhibit X D.) Their morale, efficiency, and sense of company identification are increased by it. To this extent and more, the company benefits. Its image is enhanced. And the nation benefits from the effort of corporate America.

V. WHERE TO SEEK ADMINISTRATIVE AND TECHNICAL ASSISTANCE

The intention of this document ... Vanpool Implementation Manual ... is to provide a relatively complete guide for establishing a successful program. There is no way, however, that it can solve every single problem and special situation that may arise. Undoubtedly, the executive in charge of your vanpool program will have specific questions, or will desire clarification on many aspects of vanpooling.

APPENDIX

ESTIMATED ANNUAL AUTO COSTS FOR 20, 35 & 110 MILES ROUND TRIP

<u>Model</u>	<u>Annual Fixed Cost</u>	<u>Operating Cost</u>	<u>20 Miles</u>		<u>35 Miles</u>		<u>110 Miles</u>	
			<u>Operating</u>	<u>Total</u>	<u>Operating</u>	<u>Total</u>	<u>Operating</u>	<u>Total</u>
Sub-compact	\$ 919.80	3.875¢/mile	\$195.30	\$1,115.10	\$341.78	\$1,261.58	\$1,074.15	\$1,993.95
Compact	\$1,032.95	4.675¢/mile	\$235.62	\$1,268.57	\$412.34	\$1,445.29	\$1,295.91	\$2,328.86
Intermediate	\$1,244.65	5.650¢/mile	\$284.76	\$1,529.41	\$498.33	\$1,742.98	\$1,566.18	\$2,810.83
Standard	\$1,387.00	5.950¢/mile	\$299.88	\$1,686.88	\$524.79	\$1,911.79	\$1,649.34	\$3,036.34

Derived from "Your Driving Costs", 1974 Edition, American Automobile Association, Falls Church, Virginia.

ESTIMATED COST SAVINGS TO PASSENGERS IN GENERAL MILLS COMMUTER VANS

<u>Round Trip Length</u>	<u>Annual Van Fare</u>	<u>Annual Auto Operating Cost</u>	<u>Annual Auto Total Cost</u>	<u>Minimum Annual Savings *</u>	<u>Maximum Annual Savings **</u>
20 Miles	\$176.40	\$ 195.30-\$ 299.88	\$1,115.10-\$1,686.88	\$ 18.90-\$ 123.48	\$ 938.70-\$1,510.48
35 Miles	\$201.60	\$ 341.78-\$ 524.79	\$1,261.58-\$1,911.79	\$140.18-\$ 323.19	\$1,059.98-\$1,710.19
110 Miles	\$415.80	\$1,074.15-\$1,649.34	\$1,993.95-\$3,036.34	\$658.35-\$1,233.54	\$1,578.15-\$2,620.54

* If former work trip car is retained.

** If former work trip car is sold.

ESTIMATED COST SAVINGS AND INCOME FOR DRIVERS IN GENERAL MILLS COMMUTER VAN PROGRAM

<u>Round Trip Length</u>	<u>Profit 10-11th Fares</u>	<u>Free Fare</u>	<u>Total Auto Savings</u>	<u>Total Savings and Income</u>
20 Miles	\$352.80	\$176.40	\$ 938.70-\$1,510.48	\$1,467.90-\$2,039.68
35 Miles	\$403.20	\$201.60	\$1,059.98-\$1,710.19	\$1,664.78-\$2,314.99
110 Miles	\$831.60	\$415.80	\$1,578.15-\$2,620.54	\$2,825.55-\$3,867.94

Courtesy: General Mills, Inc.

1	2	3
0	3	3

Deck

Questionnaire

4	5	6	7

Number

- For Official Use
Only

- | 10 | 11 | 12 | 13 | 14 |
|----|----|----|----|----|
| | | | | |

City _____ State _____ Zip Code _____

- | 15 | 16 | 17 |
|----|----|----|
| | | |

- | | |
|----|----|
| 18 | 19 |
| | |

5. I'm interested in becoming a: (Circle one only)

- 1 – Pool Coordinator
2 – Back-up Driver
3 – Passenger

6. I normally get to work by: (Circle one only)

- 1 – Driving car alone
- 2 – Driving car with passengers
- 3 – Taking turn in driving for car pool
- 4 – Riding in car pool
- 5 – Being dropped off at work
- 6 – Riding bus

7. I need a car during working hours: (Circle one only)

- 1 - Seldom
2 - Frequently

8. My job would be classified as: (Circle one only)

- 1 - Office
2 - Supervisor
3 - Management
4 - Laboratory
5 - Production

- | 20 | 21 |
|----|----|
| | |

- | | |
|----|----|
| 22 | 23 |
| | |

- | | |
|----|----|
| 24 | 25 |
| | |

- | | |
|----|----|
| 26 | 27 |
| | |

Must be returned by January 26, 1973

Courtesy: 3M Company

1. Name _____

Address _____
(Street, not post office box) (Suburb)

Business Extension _____ Mailing Location _____

2. Please check one (1):

- _____ I am certain I wish to participate under the conditions described in this memo.
_____ I believe I want to participate, but need more information before making a positive decision.
_____ I wish to be put on a "reserve" list as willing to participate only part time or as a substitute.

3. Please check one (1):

- _____ I intend to participate year round; both summer and winter.
_____ I wish to participate only during the winter.
_____ I wish to participate only during the summer.

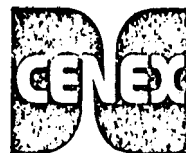
4. I wish to participate as a: _____ Pool Coordinator.
_____ Back-up Driver.
_____ Passenger.

5. I now commute to work by: _____ Driving alone.
_____ Carpool.
_____ Dropped off.

RETURN TO KAY DESHLER - CORPORATE TRANSPORTATION - 55 WEST

Courtesy: General Mills

FARMERS UNION CENTRAL EXCHANGE, INC.



Where the customer is the company

May 18, 1973

Mailing Address: Box "G", St. Paul, Minn. 55165

TO: Cenex Employees of the Concord Street Complex

FROM: John Arp - Public Relations Division

Gasoline shortages are upon us. Throughout the United States more and more people are coming to the full realization that news reports about an energy crisis in the United States aren't just scare tactics but facts.

CENEX has had all of the cooperatives it serves throughout the ten state area on an allocation basis for most refined products since late last fall. We don't foresee much of an improvement in the situation for at least three years -- maybe longer.

Due to the shortage situation, we are looking at several different ideas such as car pools, Commute-A-Van, etc. to not only help relieve the shortage but to ease the parking situation and traffic congestion in the home office area.

Only with your cooperation can we institute a program that may be very beneficial to those who are interested in participating. Would you please complete the attached questionnaire and return to the Public Relations Division as soon as possible. We would appreciate your completing the form, even if you would not be interested in a program of this type. All information will be helpful.

Thanks in advance for your cooperation. If you have any questions at all, please feel free to contact me.

A handwritten signature in cursive script that reads "John W. Arp". The signature is written in dark ink and is positioned above the typed name.

John W. Arp

JWA:lrr

Attachment

Courtesy: Cenex

Return to: John Arp - 115 - Public Relations

1. Name _____
 (last) (first) (middle initial)

2. My home address is:

 Street or F.F.D. No.

 (city) (state) (zip code)

3. I would be interested in participating in pool number:
 (Circle one only)

- | | |
|--------------------------|-----------------------------|
| 1. Cottage Grove-Newport | 5. St. Paul |
| 2. Hastings | 6. South St. Paul |
| 3. West St. Paul | 7. Burnsville-Mendota Hgts. |
| 4. Inver Grove Heights | 8. Other _____ |
| 9. None | (location) |

4. I would be interested in being a: (Circle one only)

1. Driver 2. Back-up driver 3. Passenger 4. None

5. I normally get to work by: (circle one only)

1. Driving car alone
 2. Driving car with passengers
 3. Taking turns in driving for car pool
 4. Riding in car pool
 5. Being dropped off at work
 6. Riding bus
 7. Other _____

6. I need a car during working hours: (Circle one only)

1. Frequently 2. Seldom 3. Never

7. My working hours are: (Circle one only)

1. Much the same every day 2. Varied occasionally
 3. Varied frequently

8. My job would be classified as: (Circle one only)

1. Clerical 2. Supervisory 3. Management 4. Administrative
 5. Other (specify) _____

application

[Grid] No Carbon Required paper

Last Name: _____ First Name: _____
 Name: _____

Home Address:

Number, Street, (Apt. No. if Applicable)					

City												Zip Code			

Home County Code (Check only one) ☐ Los Angeles ☐ Orange ☐ Riverside ☐ San Bernardino ☐ Ventura

[illegible]

Number and Street										Phone Number			
Work Address													

City										Zip Code			

Normal Work Hours:	Begin Work	Hour	Minutes	Check One	Leave Work	Hour	Minutes	Check One
				a.m.				a.m.
				p.m.				p.m.
	Example. Show 8:00 a.m. as	0	8	a.m.		0	4	a.m.
		0	0	p.m.	X	and		4:30 p.m. as
		0	0	p.m.		0	3	p.m.

Phone Number — Home, Work, or Other (Forms without a phone number cannot be processed.)

If home phone, check here ☐ (Circle your Area Code) 213 714 805

Office Use Only

Phone Number _____ Ext. _____ if any _____

[illegible]

Bldg., Room, or Mail Stop

Employer Identification (Supplied by Employer)

☐ Interested in becoming a ☐ Van Pool Coordinator/Driver ☐ Back-Up Driver ☐ Passenger
☐ Usually get to work by ☐ Driving car alone ☐ Driving car with passengers ☐ Taking turn in driving for car pool ☐ Riding in car pool
☐ Being dropped off at work ☐ Riding bus
 How much travel does your job require? ☐ 1-3 Days a Month ☐ 3-5 Days a Month ☐ Over 5 Days a Month
 Your job would be classified as ☐ Office ☐ Supervisor ☐ Management ☐ Laboratory ☐ Production

To be completed if you are applying as a Driver or Back-Up Driver

3. Is your driving record? List any chargeable accidents or moving violations during the past 3 years - this will be confirmed by the Department of Transportation.

Have you ever been experienced in automobile repair? ☐ Yes ☐ No If yes, to what extent? _____

What are your reasons for wanting to drive a van? _____

Indicate the parking space for vehicle ☐ Garage ☐ Carport ☐ Driveway ☐ On-Street Parking ☐ Other _____

California operator's license number.

--	--	--	--	--	--

I understand that Commuter Computer Transportation Services, Inc. is providing transportation services on a non-profit public service basis and I hereby release Commuter Computer Transportation Services, Inc. from all liability in regard to this service. I also authorize you to contact my employer to verify my address.

Signature _____ Date _____

Courtesy: Commuter Transportation Services Inc

COOPERATIVE AGREEMENT FOR COMMUTE-A-VAN PROGRAM

The Commute-A-Van Program shall be in effect beginning on the date this Agreement is signed by Minnesota Mining and Manufacturing Company, hereinafter called 3M, and continuing thereafter until terminated by either party giving the other party a written termination notice. Said termination shall be effective thirty (30) days after receipt by the other party of the termination notice. The Pool Coordinator shall be the primary driver of the van pool during the term of this Agreement.

It is agreed that the following are the Pool Coordinator's responsibilities for operation of his Commute-A-Van:

1. Maintain required state driver's license for driving a van.
2. Drive the van to and from a 3M installation and pick up and discharge the passengers.
3. Keep the pool at or above the minimum of eight (8) paying passengers.
4. Arrange for service and maintenance of the van and clean the van as needed.
5. Train sufficient backup drivers to insure daily operations of the van pool.
6. Supply a place for overnight parking of the vehicle in a garage or with a place to plug in an engine heater.
7. Keep a record of the van's pool operations which record shall be kept in a manner reasonably satisfactory to 3M.

3M agrees to supply the Pool Coordinator with a 12-passenger van, assistance in forming and maintaining a minimum of eight (8) passengers in the van pool, and any other assistance reasonably required for the functioning of the van pool.

3M also agrees that the Pool Coordinator may retain any funds received from passengers in excess of the required minimum of eight (8) passengers and that he may use the vehicle during off hours at a rental rate of _____ per mile to be based on the actual costs incurred by 3M including, but not necessarily limited to gas, oil, maintenance and insurance. 3M also agrees that the Pool Coordinator may make the vehicle available for use by the backup driver, as an incentive to the backup driver, at the above rate and under the same terms as applicable to the Coordinator as set forth herein. Backup driver must maintain required state driver's license for driving a van. 3M reserves the sole right to decide if the off-hour use of the vehicle is proper and does not become excessive as to mileage.

It is agreed that the following regulations apply to the operation of the vehicle:

Courtesy: 3M Company

1. Operation of the unit is permitted only by the Coordinator and his alternate. Operation may be granted to the spouse of either of these two persons if properly licensed (Class "B" license in Minnesota). Only under emergency conditions would any other person be authorized to operate the vehicle (any 3M employee that is a member of the pool assigned to one unit may be authorized to operate the unit for pickup and delivery of passengers to and from work if he is selected by the Coordinator).
2. The vehicle is to carry no passengers to and from 3M installations other than 3M employees.
3. In the case of personal use, the carrying of passengers other than 3M employees and immediate members of the employee driver's household is permissible as long as it is not on a regular basis. For example, use of the van to carry a church group every week is not allowed.
4. The vehicle is not to be used for a trip beyond a one-hundred (100) mile radius of the employee driver's home without specific advance approval from Office Administration.
5. The vehicle is not to be used to carry passengers or freight for hire, for ride sharing or any other purpose involving pay for transportation, other than the specific purpose of the Commute-A-Van Program.
6. Use of the vehicle to pull trailers is not allowed. No trailer hitches, temporary or permanent, are to be attached to the unit.
7. The vehicle is not to be used for any purpose requiring the removal of any seats.
8. The vehicle is to be driven only on hard surfaced public streets and highways and other normal access roads and driveways, but is not to be driven off normal roads, on frozen lakes and rivers, and in any other manner that would expose the vehicle to unsafe conditions.
9. The vehicle is not to be driven over bridges posted for a 3 ton maximum weight or less.
10. The Pool Coordinator would be responsible for promptly reporting any accident involving a bodily injury or property damage. Such reporting is to be in accordance with the procedures outlined in the Auto Accident Information Kit which is to be in the glove compartment of the unit at all times.
 - a. Such reporting is to also include injury to a passenger of the unit even though no other third party was involved. (This would be such cases as a person falling inside the unit or injuring himself while entering or alighting from the unit.)

- b. The Pool Coordinator will be responsible to complete and file state motor vehicle bureau report as well as the 3M Company automobile accident report form (Form No. 7099-C).
- 11, Any traffic violations while driving the van are the responsibility of the driver. Loss of license will result in removal as Pool Coordinator or backup driver. The Coordinator and backup driver will report any traffic violations to Office Administration.
- 12, The Pool Coordinator is responsible for reporting the extra income received from any passengers over the eight minimum on his State and Federal Tax returns.

MINNESOTA MINING AND MANUFACTURING
COMPANY

BY _____

DATE _____

POOL COORDINATOR/BACKUP DRIVER

DATE _____

PROSPECTIVE PASSENGERS IN CHRYSLER COMMUTER VAN PROGRAM

VAN POOL ADMINISTRATOR

PERSONNEL SERVICES

**RE: CHRYSLER COMMUTER VAN PROGRAM
MEMORANDUM OF UNDERSTANDING**

Chrysler is pleased to announce that it is organizing a van pool program, on a pilot basis, to enable you and your fellow employees to get to work and back in a way that will be more efficient and economical than driving your own cars. We hope there will be sufficient interest in this program to expand it and make it a permanent service.

If you and a sufficient number of fellow employees living near enough to you to form a convenient and efficient van pool elect to participate in this program, Chrysler will attempt to provide a commuter van which will:

- Pick you up for transportation to work and deliver you to your home or other mutually agreeable location after work, on a regular schedule to be determined by the driver/coordinator.
- Be parked at a convenient location at the plant or office where you work.
- Continue to operate in the event the van or the driver/coordinator become inoperative; a back-up vehicle and a back-up driver will be provided for this purpose.
- Continue to operate during a 60-day grace period if and when the number of passengers has fallen below the minimum load; in this event it is expected that the driver/coordinator and the passengers will be able to recruit the additional passenger(s) necessary to meet minimum load before the 60 days has expired.

If you elect to participate you will be expected to:

- Pay each month's commuter fare to the plant cashier in advance or authorize payroll deduction where available; for this you receive a guaranteed reserved seat on the commuter van. (Note: Prior to the first payment you will receive an invoice showing the amount you are to pay each month.)
- Notify the driver/coordinator in advance whenever you cannot meet the van's scheduled pick-up time; it is your responsibility to be on time for pick-up.

Courtesy: Chrysler Corporation

- 2 -

- Arrange other means to get to and from work if you cannot meet the van schedule on a particular day.
- Understand that the van must maintain a schedule and that it cannot wait more than three (3) minutes for a passenger pick-up.
- Notify the driver/coordinator in advance when you are on sick leave or vacation. (Note: You may arrange for a substitute passenger to take your reserved seat, if he lives on or near the regular van route.)
- Understand that there is no duplication of insurance coverage in the event of personal injury.
- Notify Chrysler and the driver/coordinator at least 15 days in advance if you elect to withdraw from the commuter van pool; this notice is not required if your working hours or your location change so as to make your participation impossible.

If you wish to participate in this program under the terms set forth above, please so indicate by signing and dating this memo and returning it to your Personnel Services Office.

VAN POOL ADMINISTRATOR
PERSONNEL SERVICES OFFICE

ACCEPTED:

SIGNATURE OF EMPLOYEE

19

Courtesy: Chrysler Corporation

CRITERIA FOR VANPOOL DRIVER/COORDINATOR

1. Interest and enthusiasm for the program should be very high.
2. The candidate should reside in appropriate geographical proximity in relation to potential passengers. (Note the procedures described in Section III F.)
3. The candidate should have not only a positive reference from his supervisor, but the EIC should insure by talking with the candidate's supervisor that his duties as vanpool driver/coordinator will not interfere with his basic job responsibilities.
4. The candidate should have an excellent driving record. This can be obtained from your State Department of Motor Vehicles.
5. The candidate should have proper facilities for keeping the van at home. A garage would be very desirable, especially if there is severe weather in your area.
6. The candidate must have a record of being particularly punctual, as well as being a generally reliable employee.
7. Enough mechanical aptitude should be possessed by the candidate, to attend to emergency maintenance, such as tire changing, etc.
8. If the licensing/regulatory laws in your state require a chauffeur's license, you should insure that the candidate meets the necessary requirements.

Obviously, your company may choose to modify these criteria somewhat, but the experience of successful vanpool companies has proven the above list to be rather inclusive of all key requirements.

Courtesy: General Mills

POOL COORDINATORS' AGREEMENT

page 1 of

I, _____, accept the responsibilities of pool coordinator in the Commuter Van Program, which include:

1. Obtaining a Class B drivers' license, which is required for operating a bus. (Minnesota classifies any vehicle designed to carry more than 10 passengers as a bus.)
2. Submitting to an initial and annual physical examination to determine that I meet company standards for operation of motor vehicles on company business.
3. Driving the van to and from GMI, picking up at designated pick-up points GMI employees who are paying passengers, and discharging them at the employees' entrance of their respective buildings in accordance with routes prescribed by the Corporate Transportation Department.
4. Maintaining ridership of at least nine paying passengers (not to exceed a maximum of eleven such passengers).
5. Training sufficient back-up drivers to insure a continuity of daily service.
6. Providing adequate parking facilities for the van at my home, which includes facilities with an electrical outlet to activate the van's headbolt heater.
7. Arranging for maintenance of the van at the ASC (Automotive Service Center) in accordance with the schedule prescribed in the vehicle maintenance manual.
8. Arranging transportation for passengers to and from GMI in the event the van is not operable due to mechanical failures or other similar emergencies.
9. Billing passengers monthly at approved rates and keeping all prescribed expense and performance records.

In return for the performance of my services as described above, I will receive:

1. A free ride to and from work daily.
2. Personal use of the van at the rate of 7 cents per mile.
3. Fares from the tenth and/or eleventh paying passenger(s) as personal remuneration.

Courtesy: General Mills

I will also comply with the following procedures:

1. Pay to GMI a maximum of \$100 deductible in case of any and each accident during my personal use of the van in which damage to the van is sustained.
2. Paying passengers will be GMI employees.
3. Accessories, including appearance items, or additional equipment will not be added, installed or removed without prior approval from the Corporate Transportation Department.
4. All repairs, except in emergency situations, must be approved by the Supervisor of the Commuter Van Program.
5. I will not use the van for-hire.
6. I will obtain permission from the Corporate Transportation Department before going on any single trip more than 100 miles distance from my home.
7. Driving the van is restricted to myself and my spouse except in emergencies, or in situations approved in advance by the Supervisor of the Commuter Van Program.
8. Vans will not be taken or operated outside the continental limits of the United States.
9. Groups other than commuting, paying GMI employees and my immediate family will not be transported in the vans without the express permission of the Supervisor of the Commuter Van Program.
10. I will make the van available for commuting purposes each working day, except in case of mechanical failure, Acts of God, or other contingencies beyond my control.
11. I will give a minimum of two weeks notice in the event I wish to resign as pool coordinator.

I agree that failure to comply with the above requirements will result in termination of my position as pool coordinator.

Date _____ Signed _____

Courtesy: General Mills

**CHRYSLER COMMUTER VAN PROGRAM
OPERATING AGREEMENT**

This Agreement between the Driver/Coordinator whose signature appears below and Chrysler Corporation (hereinafter called "Chrysler") shall become effective on the date it is accepted by Chrysler, as evidenced by the signature of its authorized representative in the space provided below for this purpose.

For the purpose of forming and operating a van pool with a minimum of nine (9) passengers, Chrysler agrees to furnish the use of a 12-passenger van, to assist in forming and maintaining the van pool and to render such other reasonable assistance as may be required for the functioning of the van pool. The Driver/Coordinator will be the primary driver of the van during the term of this Agreement.

The Driver/Coordinator agrees to be responsible for the following in connection with the operation of the van assigned to him:

1. Maintain a valid state driver's license (and/or chauffeurs's license, if required) for operating a van.
2. Drive the van to and from his Chrysler location and pick up and deliver the other Chrysler employees who pay to ride with him.
3. Keep the passenger pool for the van at or above the minimum of nine (9) paying passengers.

4. Arrange for service and fuel for the van and clean the vehicle inside and out as needed.
5. Train a back-up driver to insure daily operation of the van.
6. Supply a secure place for "at home" parking of the van, preferably in a locked garage.
7. Keep a record, satisfactory to Chrysler, of the operation, expense and income of the van.

Chrysler agrees to reimburse the Driver/Coordinator for his out-of-pocket expenses in the operation of the van to and from work along the prescribed route and to pay over to the Driver/Coordinator any fares received from passengers in excess of the required minimum of nine (9). Chrysler will report to appropriate taxing authorities any amounts paid to the Driver/Coordinator for passengers in excess of nine (9), and it will be the responsibility of the Driver/Coordinator to include such amounts on his individual tax returns.

The Driver/Coordinator will be permitted to use the van during off hours. Chrysler also agrees that the Driver/Coordinator may, as an inducement to the person who agrees (as provided below) to serve as back-up driver, make the vehicle available for use by the back-up driver at the same rate and under the same terms as applicable to the Driver/Coordinator, as set forth herein. The back-up driver also must maintain the required state driver's license for operating a van, and loss of his license will result in his automatic removal as back-up driver.

Chrysler reserves the sole right to decide if the off-hour use of the vehicle is proper and does not become excessive as to type of use or mileage.

It is agreed that the following regulations apply to the operation of the van:

1. Operation of the unit is permitted only by the Driver/Coordinator and back-up driver and by the spouse of either of them, if properly licensed. Only under emergency conditions will any other person be permitted to operate the vehicle. In this connection, in the absence of both the Driver/Coordinator and the back-up driver, any Chrysler employee that is a member of the van pool may operate the van for pickup and delivery of passengers to and from work if he is authorized to do so by the Driver/Coordinator and is properly licensed.
2. The vehicle is to carry no passengers to and from Chrysler facilities, other than Chrysler employees.
3. In the case of personal use, the carrying of passengers other than Chrysler employees and members of the immediate household of either the Driver/Coordinator or the back-up driver is permissible as long as it is not on a regular basis.
4. The vehicle is not to be used for a trip beyond a one-hundred (100) mile radius of the Driver/Coordinator's home without specific advance written approval from Chrysler.
5. The vehicle is not to be used to carry passengers or freight for hire, for ride sharing or any other purpose involving pay for transportation, other than the specific purpose of the Chrysler Commuter Van Program.

Courtesy: Chrysler Corporation

6. Use of the vehicle to pull trailers is not allowed. No trailer hitches, temporary or permanent, are to be attached to the unit.
7. The vehicle is to be driven only on hard surfaced public streets and highways and other normal access roads and driveways, and is not to be driven off normal roads, on frozen lakes and rivers, or in any other manner that would expose the vehicle to unsafe conditions.
8. The vehicle is not to be driven over bridges posted for a maximum weight of 3 tons or less.
9. The Driver/Coordinator is responsible for promptly reporting any accident involving bodily injury or property damage. Such reporting is to be in accordance with the procedures outlined in the Auto Accident Information Kit, which is to be in the glove compartment of the unit at all times.
 - a. Such reporting is also to include injury to a passenger in the van even though no other party is involved. (This would include such cases as a person falling inside the vehicle or injuring himself while entering or alighting from the vehicle.)
 - b. The Driver/Coordinator will be responsible for completing and filing the appropriate state motor vehicle bureau accident report as well as the Chrysler automobile accident report (Form _____).
10. Any traffic violations involving the van are the responsibility of the driver. The Driver/Coordinator and back-up driver are to report promptly any traffic violations to Chrysler.

This Agreement may be terminated by either party on thirty (30) days written notice delivered to the other party in person, by telegram or by mail. In addition, it will terminate automatically on (a) termination of the Driver/Coordinator's employment with Chrysler, (b) loss by the Driver/Coordinator of the required state driver's license or (c) breach by the Driver/Coordinator of the terms of this Agreement.

DRIVER/COORDINATOR

Accepted:

CHRYSLER CORPORATION

BY _____

DATE _____

AGREEMENT TO SERVE AS BACK-UP DRIVER

I have received a copy of the above Operating Agreement, have read it and agree to be bound by its terms in serving as back-up driver to the above Driver/Coordinator. I understand that breach of such terms will result in automatic termination of my right to serve as back-up driver.

	<u>Signature</u>	<u>Commencement Date</u>	<u>Termination Date</u>
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____


**COMMUTE-A-VAN
BI-WEEKLY REPORT**

UNIT NO. _____ / 989

DRIVER _____

BACKUP DRIVER _____

NUMBER OF RIDERS FOR PERIOD (INCLUDING DRIVER) _____

REPORT SUBMITTED BY _____

FOR PERIOD: FROM _____ / _____ / 7 TO _____ / _____ / 7
MONTH/DAY/YEAR MONTH/DAY/YEAR

ODOMETER READING	
ENDING	
BEGINNING	
TOTAL MILES	

Route Miles _____ X working days _____

Personal Mileage (611143) (Attach Check) _____

DEPARTMENT	MILEAGE	DOLLARS

Total Departmental Mileage (611135) _____

Total Mileage (Boxes 1, 2 & 3) _____

		DOLLARS
Expenses:	Gas (_____ Gal.) (611127)	
(A detailed expense report must be attached with all receipts and charge slips.)	Maintenance (611207)	
	Miscellaneous (611303)	
	Operating Repairs (61140X)	
	Tires (611506)	
	Accident (611805)	
Total Expenses		

DOLLARS

		DOLLARS
DEDUCTIONS:		
CASH PURCHASES		
PERSONAL MILES REFUND		
CHARGE PURCHASES		
TOTAL DEDUCTIONS		
NET AMOUNT		

DOLLARS

Cash Received By _____ Date _____

BALANCE DUE EMPLOYEE

BALANCE DUE COMPANY

EXHIBIT J

DETAILED EXPENSE REPORT FOR CENEX COMMUTE-A-VANS

EXHIBIT VIII B.

UNIT NO. _____ / 989 _____ REPORT SUBMITTED BY _____
 FOR PERIOD: FROM _____ / 7 / _____ TO _____ / 7 / _____
MONTH/DAY/YEAR MONTH/DAY/YEAR

EXPENSE CATEGORY	EXPENSE CODE	CASH DOLLARS	CHARGE DOLLARS	TOTAL DOLLARS
Gas (Gallons)	611127			
Maintenance				
Oil _____ Quarts	611215			
Lube	611223			
Alignment	611231			
Tune-up	61124X			
Filter - Oil - Air	611258			
Transmission	611266			
Shocks	611274			
Schedule Code	611290			
Total Expenses	611207			
Miscellaneous				
Towing	611311			
Service Calls	61132X			
Washes	611338			
Anti-Freeze	611346			
Battery	611354			
Lamps	611362			
Tolls & Parking	611370			
Total Expense	611303			
Operating Repairs				
Transmission	611418			
Motor	611426			
Drive Train	611434			
Ball Joints	611442			
Brakes	611450			
Radiator	611469			
Air Conditioning	611477			
Total Expenses	61140X			
Tires				
Replacement	611514			
Mounting	611522			
Balancing	611530			
Rotating	611549			
Total Expenses	611506			
Accident	611805			

Courtesy: Cenex

EXHIBIT J

Trip Report

1971

Driver: _____ Unit # _____

Stops		- 1 - Odometer Reading	- 2 - Odometer Reading
Start (Base)		.	.
Stop	1	.	.
	2	.	.
	3	.	.
	4	.	.
	5	.	.
	6	.	.
	7	.	.
	8	.	.
	9	.	.
	10	.	.
	11	.	.
	12	.	.
Total Miles		In .	Out .

Signed _____

Return to:
535 - Harold Schabel

COMMUTER VAN PROGRAM

EXHIBIT VII

EXPENSE AND REVENUE MONTHLY REPORT

ANT LOCATION NAME AND NUMBER	POOL NO.	MEMO WORK ORDER NO.	PERIOD ENDING	APPROVED BY	DATE
MONTHLY FARE	DRIVER/COORDINATOR (print)	DRIVER/COORDINATOR (Signature)	BADGE NO.	HOME ADDRESS	

MONTHLY BILLING TO PASSENGERS FOR			OFFICIAL USE	BEGINNING MILEAGE	ENDING MILEAGE	BUSINESS ⁽¹⁾ MILEAGE
PERIOD FROM _____ TO _____						
NAME OF PASSENGER	BADGE NO.	AMOUNT		VEHICLE OPERATING EXPENSE (ITEMIZE) ⁽²⁾		
				AMOUNT		
Total Passenger Revenue		\$	TOTAL OPERATING EXPENSE \$			
Minimum Monthly Charge for Van		\$	LESS: BUSINESS MILES @ \$.11/MILE			
Amount Over Minimum Due Driver		\$	NET EXPENSE DUE DRIVER/COORDINATOR \$			
			ADD: EXCESS REVENUE DUE			
			TOTAL DUE DRIVER/COORDINATOR \$			

NOTE: (1) Mileage used on company business, if any.
 (2) Attach all paid receipts and applicable expense vouchers

EXHIBIT VIII

3M Commute-A-Van Expense Voucher		Pool No	Main Code	Sub Account	Project No	Period Ending	Approved by (Print & sign)		Date
Pool Area	Monthly Rate	Pool Coordinator (print)			Pool Coordinator Signature		Date	Home Address	
Monthly Billing of Passenger for _____ to _____					Employee No.	Department No		Bldg. - Floor	
Name	Employee No.	Amount	Official Use	Beginning Mileage	Ending Mileage	Personal Mileage	Business Mileage		
1.									
2.									
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									
11.									
12.									
Total Passenger Revenue					Total Operating Expenses				
Minimum Monthly Charge					Less: Personal miles at \$ 0.77/mile				
Amount over Minimum Due Pool Coordinator					Business miles at \$ 0.10/mile				
					Total				
					Net Expense Due Coordinator				
					Add: Excess Revenue Due Coordinator				
					Total Amount Due Coordinator				

NOTE: Attach all receipts & copies of all applicable expense voucher

Figure 5

EXHIBIT VIII F.

COMMUTER VAN PROGRAM

EXHIBIT VIII G.

MONTHLY BILLING

Month of _____ 1976

589900 7120 (Area No.)
 (2 Digits) Van Area _____

Passenger's name _____

Passenger's address _____

Pool Coordinator's signature _____

To be completed by
Corporate Transportation

Date Paid _____

Amount Paid \$ _____

Date _____

Make checks payable to General Mills, Inc. Please send your check and this billing form to Kay Deshler - Corporate Transportation, 55 West on or before the 6th of this month. General Mills is not responsible for cash sent through the mail ... Cash must be delivered to Corporate Transportation in person.

(Half sheet of paper is used)

Figure 6

COMMUTE-A-VAN INVOICE

Form 12221 PWO

Billing for Month of	Amount Due by the 7th of Month is
	\$

Pool No.	Pool Area	Passenger Name	Employee No.							
Pool Coordinator (Print)	Date	Passenger Street Address								
		<table border="1"> <tr> <td>Ctl.</td> <td>Main Acct.</td> <td>Sub Acct.</td> <td>Project Number</td> </tr> <tr> <td>1</td> <td>0299</td> <td>921</td> <td></td> </tr> </table>	Ctl.	Main Acct.	Sub Acct.	Project Number	1	0299	921	
Ctl.	Main Acct.	Sub Acct.	Project Number							
1	0299	921								

METHOD OF PAYMENT:

Issue your check payable to MINNESOTA MINING AND MANUFACTURING COMPANY.

ST. PAUL — Mail your check with White copy of invoice to CASHIER - 42-5C; or pay directly to the Cashier in Building 220 or 224

BRANCH — Give your check to the Branch Cashier.

COPIES: WHITE — Attach to Payment

CANARY — Passenger

3m Action 200 Pa

3M COMMUTE-A-VAN EXPENSE VOUCHER <small>FORM 48-4</small>		Pool Coordinator (print)		Emp		Pool Area		Pool No		Pr	
Home Address (City, State, Zip)		Pool Coordinator Signature		Date		Dept. No		Bldg		Floor	
						Extension		Approved By (print & sign)		Date	
										Start Daily Pool Miles	

Passenger Billing for Month of _____			Monthly Rate		Beginning Mileage		Ending Mileage		Total Miles		Personal Miles		Business Miles		Pool Miles	
Name			Employee No.		Amount		Expenses for Month of _____									
							Gas		Gas		Oil		Other		Explanation	
1.																
2.																
3.																
4.																
5.																
6.																
7.																
8.																
9.																
10.																
11.																
12.																
Total Fares Billed																
Adjustments																
Total Revenue							\$		\$		\$		\$			

Van Pooling Use Only										Gas		
Item	Empl. No. 1-6	Type Pymt. 8-9	C C 10	P C 11	Dept. 12-15	Sub. 16-18	Project Number 19-28	Addition to 48-54	Dr.	Net Pay 48-54	Cr.	Gross 29-35
Excess Revenue		03	A	1	0299	700	60					
Gas		03	A	1	0299	700	01					
Oil		03	A	1	0299	700	10					
Maintenance		03	A	1	0299	700	20					
		03	A	1	0299	700						
Pers. Miles x .08		03	A	1	0299	700	62					
Bus. Miles x .125		03	A	1	0299	700	56					
Amt. Paid 3M		03	A	1	0299	700	55					

Gas		
Oil		
Other		
Total		
Less Pers. Miles x .08		
Less Bus. Miles x .125		
Total		
Amt. Due Company (Attach Check)		
Amt. Due Driver		

F. List Passengers

Once the pool coordinator has been chosen, he/she and the van project administrator should put together a list of the passengers on the most direct route. Following is an example of such a list, with the pick-up times added, that 3M uses. At this time fares should also be established. If the employees live close together, as in the case of 3M, it will have to be computed individuals according to the distance they live from work.

3M COMMUTE-A-VAN PROGRAM - POOL #20 - EAST ST. PAUL

DRIVER & POOL COORDINATOR - John K. Howard - 1467 Angus Street
St. Paul, Minn. 55590
Home Phone 999-6785 - Work 466-7856
Acct. Receivable - Bldg. 224-6C

BACKUP DRIVER - Peter Jones - 1876 Dawson Drive
St. Paul, Minn. 55590
Home Phone 999-4534 - Work 466-7666
Payroll - Bldg. 224-2N

Stop #	Name	Address	Emp. #	Phones	Approx. P.U.T.
1.	Mary Smith	2078 Mayview St.	17756	999-2345 7865	6:46
2.	Jane Jansen	1976 Willow Dr.	98765	999-5690 3333	6:50
3.	Peter Jones	1876 Dawson Dr.	76555	999-4534 7666	6:54
4.	Kathe Ply	1999 Dawson Dr.	88866	999-3421 9990	6:56
5.	Bob Carlson	2057 Cincent Lane	66640	999-1776 5647	7:00
6.	Betty Folsom	1676 Oak St.	65744	978-0435 7788	7:02
7.	Jim Crawford	1998 Oak St.	09415	978-8743 8800	7:04
8.	Mary Peters	2096 Maple Dr.	65433	978-7899 4566	7:07
9.	Sheryl Grayson	1899 George St.	78944	978-4444 8213	7:10
10.	Carl Anderson	2097 Ames St.	32144	969-7855 2133	7:12
11.	Patty Burns	2997 Fifth Ave.	66672	969-8882 5433	7:15

Total Miles One Way - Eleven (11) - Arrive 3M Space #666

Home Departure Time: When all riders are aboard or 4:40 p.m.

With this schedule I am initiating a "Departure Seating Arrangement" which will make exiting from the van safe and orderly.

FRONT OF VAN

John Peter
Sheryl Carl Patty
Betty Jim Mary
Mary Jane Kathe Bob

After front row seats have emptied,
please feel free to occupy them.

INTRA-COMPANY CORRESPONDENCE

To All Employees At _____ area

From Kay Deshler At Corp. Transp. - 55 West

Date 9/2/75

Subject COMMUTER VAN

The Commuter Van Program at GMI has now been in operation over 1½ years and has become a very popular way of commuting to work. In addition to great energy savings, passengers cite low cost, reliability and convenience as the major advantages of the program. Pick-up time ranges from 5 to 20 minutes, depending on the route and the passengers location on the route.

The program expands as sufficient interest is indicated in new areas to organize more vans. Some interest has been indicated in your area, but we need more interested people to enable us to organize a van for that area. If you would be interested in commuting by van or would like to learn more about a van for your area, please complete the information below and return this form to Kay Deshler - 55 West as soon as possible.

KD/lr

1. Name _____

Home Address _____
(Street) (City) (Zip Code)
Mailing Location _____ Business Phone _____

2. Please check one:

☐ I am definitely interested in participating in a commuter van at the price I have indicated below.☐ I believe I wish to participate, but need more information before making decision.Would you attend an informational meeting for your area in the near future? ☐☐ I wish to be put on a "reserve list", as I would like to participate only part-time or as a substitute.3. Would you be willing to pay between \$____ and \$____/day on a monthly basis?
Yes ☐ No ☐ If not, what is the maximum you are willing to pay? \$____/d.4. I would like to participate as a: ☐ Pool coordinator (principal driver)
☐ Back-up driver
☐ Full time passenger
☐ Substitute or part-time passenger5. Comments _____

Courtesy: General Mills

5. I have been participating in the Commuter Van Program since: _____
(Month) (Year)

6. During the average week, I ride the van: _____ Every Day
_____ Four Days
_____ Three Days or Less

7. I joined the van because of the: _____ Low Cost
_____ Convenience
_____ Reliability
_____ Other (Identify) _____

I am picked up in the morning at: _____ Home
_____ Collection Point

8. My former method of travel to and from work was most frequently (check only one):

_____ Driving alone
_____ Driving with one passenger
_____ Alternate driving in a carpool
_____ Riding in a carpool
_____ Riding the bus
_____ Being dropped off at work
_____ I joined the van immediately upon beginning my job at GMI

9. I am saving \$_____ per year on automobile insurance by riding in the van.

10. I live in a _____ Single family dwelling
_____ Duplex or double bungalow
_____ Apartment

11. Number of cars in household: _____

Have you sold a car since you began to participate in the van program? _____

Have you delayed purchase of a car by participating in the van program? _____

12. COMMENTS ABOUT THE COMMUTER VAN PROGRAM:

(Please share your ideas for improving the program, your likes and dislikes, changes in your life due to your participation in the program, i.e., cost, savings from putting off getting a second car or from driving your car fewer miles.)

February 1976

EXHIBIT X B.

COMMUTER VAN SURVEY #3

Dear Commuter Van Participant:

We would appreciate your answers to the following questions and your candid comments about the Commuter Van Program. The information will be used to help us evaluate and improve the program.

If you wish to remain anonymous, do not complete question #1, but please be sure to include your van area number.

Please return the completed questionnaire by February 13, 1976 to: KAY DESHLER - CORPORATE TRANSPORTATION, 55 WEST.

Thank you.

KD/lis

1. I participate in Commuter Van # _____

61 - Brooklyn Park	70 - Maple Grove
62 - Mound	71 - Monticello
63 - Southwest Minneapolis	72 - Brooklyn Center/Crystal
64 - East Plymouth/New Hope	73 - South Minneapolis
65 - West Plymouth	74 - Richfield/Edina
66 - Howard Lake	56 - Coon Rapids/Anoka
67 - Annandale	58 - Robbinsdale/Golden Valley
68 - New Hope	59 - Osseo
69 - Elk River	81 - Hopkins

2. Name: _____
(Last) (First) (Middle Initial)

Home Address: _____
(Street or RFD# - Not Post Office Box)

(City) (Zip Code)

3. Work Location: MGO _____ 55 West _____ Shelard _____

Business Extension: _____

Job Classification: _____ Office

Supervisor
Management

4. I am a: _____ Pool Coordinator _____ Regular Passenger
_____ Back-up Driver _____ Part time or Substitute Passenger.

Courtesy: General Mills

DRIVER EVALUATION

Pool Coordinator's name _____

Commuter van area _____ Area # _____

Your name _____

Please rate your Pool Coordinator on the following scale:

1 - Excellent 2 - Very Good 3 - Good 4 - Fair 5 - Poor

_____ Reliability

_____ Consideration for passengers

_____ Driving ability

_____ Communication with passengers

Your comments about both your pool coordinator and back up drivers:

(This is your chance to complement your drivers for a job well done and/or discuss some areas that need improvement. All comments are confidential. Specific names and comments will not be mentioned in discussion of evaluation with drivers.)

Comments about the program in general:

Thank you for taking the time to fill this out. Please return promptly to Kay Deshler,
Corporate Transportation - 55 West.

Courtesy: General Mills

SELECTED RIDER COMMENTS FROM THE RIDERSHIP SURVEY

I enjoy traveling to work without having the burden of driving in commuter traffic. I've made new acquaintances. I arrive at work more punctually since joining the van; I think I have cut my own transportation costs. The van is a good deal!

I like the program very much, enjoy the opportunity to ride with friends from work.

I think the program is great. Having no car, the Commute-A-Van is the only realistic means of transportation. It's economical, ecological and fun. No way in the world could I read the paper and concentrate on my driving.

It is great! Like it very much — for me it is the best of both (I drive 1/4 time), ride to work 3/4 of the time and yet have a car available for company business.

Much more relaxed. Parking closer to building and being picked up at door. Have let our son use our second car while he is at the University.

I feel very fortunate to be a C-A-V passenger, not having to worry about winter driving, traffic, etc. I also appreciate the prompt service of being picked up and dropped off at my door mornings and afternoons, and the reasonable charge.

I like it! The extra 1½ hour every day is worth it to me (the driver). I also enjoy driving. Being able to get gas, oil changes, etc., here at 3M is great! I have a good bunch of riders, they call me when not going to be there and are rarely, if ever, late.

Very efficient drivers. Compatible group in van, well satisfied.

It has been a satisfactory arrangement, in my opinion, we have an excellent, dependable driver and thus are extremely fortunate. He is prompt, courteous and quiet. Thank you for implementing the program. To date we have made no changes in our transportation habits, etc. within our household.

I am extremely pleased with this program and recommend it highly. At first, there were a few minor problems, but once they were talked over and solved, it's been perfect.

I did not sell my second car, but I cut the mileage.

All in all, I am satisfied — more economical, more dependable.

Long hours, get up at six a.m. not home til 6 p.m., also miss having more independence.

This plan has been a tremendous benefit to myself and family. Financially, it has

(Continued)

made getting to work possible. I have sold one car. Please keep up the program and I would encourage expansion.

I feel it is a good program. It is time people started being concerned about other people; this is a start, saving energy, etc.

I am pleased with the van system. In poor weather, those of us who are in the van are the only ones who arrived on time and came to work when other cars failed, etc. Now that I'm a widow, I feel I must get to work so I am very grateful.

I miss having my car to stop and do errands on the way home, but the convenience of the van is worth that inconvenience.

I like everything about our C-A-V program, the convenience, the camaraderie with fellow passengers, but most of all, I appreciate the peace of mind this program affords me.

The ability to use the van to go to meetings is a big asset to me. My only car is much more available to my wife.

Commute-A-Van has been convenient, but I also travel on an average of twice a month out of town; has been a relatively smooth operation.

Our driver very conscientious and disgustingly punctual.

I like this van so much! It is a congenial, well mixed bunch of people. I would hate to see it broken up. I trust my drivers and have found that getting to and from work is now a pleasure, not a chore!

Like parking in the ramp. Like getting to work a little earlier. Have to get up about ½ hour earlier to get on van.

I think the program is great! No complaints. I hope it continues.

Excellent program! We've got one car, and my wife really appreciates access to it now. I appreciate the economics of riding in the van as well.

Car insurance is lower now.

This program has been very worthwhile because it means I do not have to drive which has helped very much in my situation. We only have one car which my husband has to use every day. I guess the only thing I might dislike is that I am on the road about 2 hours a day extra which I realize cannot be helped.

This program is excellent. I was planning to buy a second car but because of van program a second car is not needed. In addition to obvious benefits of not driving, I

(Continued)

am learning more about different 3M departments, exchanging information and ideas with participants of this program.

I appreciate being able to avoid winter driving — leaving it to our very capable van driver. Thought at first I would like to be a Pool Coordinator or backup driver but now find I'm enjoying being a passenger too much! Some disadvantage in not having a car at noon for errands, etc.

Good program, sold second car, better 3M communications via exposure to various corporation discussions and staff not previously enjoyed.

With the van service, I arrive home from work earlier and it is much more restful. I do not have to worry about traffic and I can relax coming to work and going home.

I believe this program to be one of the most innovative ideas for coping with the fuel shortage put forth by any industrial organization and I'm proud that 3M either created the idea or is at least one of the leaders in promoting it. I hope it is successful and continues to prosper.

There are many advantages such as, eliminate need of 2nd car, lower insurance rates, punctuality. My biggest disadvantage or complaint is having to pay for riding for the days I'm out of town on business for 3M.

I had some doubts at first, but now would find it difficult to get along without the van. The extra car on weekends is convenient and the added income helps. My passengers are always prompt and we have developed some new friendships. Although we all live in same area, we didn't meet until pool.

Has reduced my gas usage and mileage on my own car. Required to hold to a tighter schedule on pick-ups. There is a certain amount of confinement with the use of the van.

I love it. The whole program hinges largely on a good pool coordinator and I think ours does an excellent job.

I have liked the concept since the day it was announced. For a large number of employees I believe the advantages far outweigh the disadvantages. I believe it will take continuing PR work to make more employees realize this.

Best thing since indoor bathtubs. My personal car gets driven much less. My wife now has a car at home all the time. I feel I've purchased a second car plus chauffeur both for only \$22 a month.

I have driven to 3M for 10 years so it is just so nice to be able to sit back and relax. Everyone is very friendly.

Fantastic! Abandoned ideas of getting a second car.

Courtesy: 3M Company

(Continued)

As of right now, I don't intend on using the van as my permanent means of getting to work because the car I own doesn't cost me very much to run.

Great service to employees.

Eliminated cost of owning and operating a car. Sold my best car and get by good with 10 year old car. More comfortable, relaxing, and cheaper than driving.

When I started as a driver last April, I was a bit apprehensive about committing myself to picking up 8-11 people every day. But now, after a year of it, all apprehension is gone and I am very happy with the program. The new gas fill-up program is just great. I think that rear seat speakers should be installed in all the vans because now the people in back cannot hear the radio.

Like riding van very much. It's convenient — more so than riding in personal car as there are no parking problems, no worries as to winter driving, etc. Both driver and backup driver are always on time and good safe drivers. Since riding van, we have given up idea of purchasing a new car as old one serves us well enough since we don't use it as much. Second car has been turned over to one of our children for use at college.

It's great and we feel we are helping the gas shortage and pollution control.

Only inconvenience is increased riding time (1 hr./day).

Sold 2nd car. More time to and from work but it's worth it. More things for than against it. Have to plan ahead more for personal things.

I do find that I spend more time on the road than I did before. To avoid this, I suggest people in one van all be from the same building and have their homes fairly close together. I have been on a van for one year now and plan to continue to ride.

It's an extra half hour out of my personal time. Radio can be highly offensive. I can't really claim to like it, but it has to be the proper route from both a personal and social point of view.

I am very happy to be able to ride in a van. I could not afford to drive alone.

Enjoy being Pool Coordinator. Sold second car. I like it very much.

I like the door-to-door service the van provides. The passengers are all friendly which makes for a pleasing ride. We are seriously thinking of selling our second car and our insurance dropped since I don't drive to work.

I don't have any particular dislikes, although it does get a little crowded riding for 60 miles when the van is full. I enjoy the relaxation and recreation, ie — the only chance I get to play chess. Overall I am very satisfied and haven't had any second thoughts about joining the van.

Courtesy: 3M Company

MAY 1975 SURVEY RESULTS
OF COMMUTER VAN PARTICIPANTS

	<u>NUMBER</u>	<u>PERCENT</u>
Type of participants:		
Office	93	78%
Supervisor	12	10%
Management	14	12%
Average weekly participation:		
Every day	87	60%
Four days	24	19%
Three days or less	16	12%
Participants picked up at:		
Home	96	81%
Collection point	23	19%
Reasons for joining the program:		
Convenience	103	79%
Low cost	62	48%
Reliability	47	36%
Other	15	11%
Former mode of travel to work:		
Drove alone	57	46%
Drove with one passenger	8	7%
Alternated driving in a carpool	19	15%
Rode only in a carpool	25	20%
Bus	2	2%
Dropped off at work	11	9%
None - Joined van immediately upon start of job	3	3%
Type of residence:		
Single family	86	75%
Duplex	8	7%
Apartment	21	18%
Number of cars in the household: (Average 1.71)		
0	5	4%
1	44	39%
2	50	44%
3	10	9%
4	4	4%
Number of cars sold since the start of program:	13	
Savings on auto insurance:		
Average \$22.00/year -- Range \$0-\$150/year		

Courtesy: General Mills