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September 1979

U.S. Department of Energy  
Assistant Secretary for  
Conservation and Solar Applications  
Transportation Programs

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G . . . . . An Update**

September 1979

Prepared By

Lew Pratsch

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**U.S. Department of Energy  
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## ACKNOWLEDGMENTS

The initial edition of this publication, Vanpooling: A Summary and Description of Existing Vanpool Programs, January 1976, was prepared by Mr. Ira Forstater and Mr. Ed Twomey of the Environmental Protection Agency (EPA). The second edition, Vanpooling . . . .An Update, was a joint effort of the Department of Energy (DOE) and EPA. The authors were Lew Pratsch and Ruby Starling, DOE, and Robert Gray, EPA.

We would like to thank the many individuals who provided information on their vanpool programs. Due to space limitations, we are sorry that it was not possible to include a summary on each vanpool program as in the first report. This was brought about by the substantial growth in vanpool programs from 33 to over 300.



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## P R E F A C E

In April 1973, the 3M Company of St. Paul, Minnesota initiated the first employer sponsored commuter van program in the United States. Since that time and often following 3M's example, over 300 employers have sponsored vanpool programs. In addition, two other significant types of vanpool programs are operating: the third-party approach, where vans are provided and vanpools organized by other than the employer or employee; and the owned and operated approach, where a commuter provides the van and organizes the vanpool.

During this period, many excellent publications have been printed dealing with the development, operation, programs, and benefits of vanpooling. Yet the rapid expansion of the van concept has left many of the descriptions of specific programs outdated. It was with this information gap in mind that the Office of Transportation Programs, Department of Energy decided to conduct a survey of commuter van programs.

The Department of Energy is currently providing grant funds to states to implement energy conservation plans under the provisions of Title III of the Energy Policy and Conservation Act of 1975. In order to be eligible for these funds, each plan must include five specific program activities, some of which relate to transportation. The promotion of mass transit and ridesharing is one of the areas specified as a required energy conservation measure.

Under the Clean Air Act, as amended August 1977, State and local governments are revising their State Implementation Plans to include all reasonably available control measures needed to attain air quality standards by 1982, or in some cases, by 1987. Lead local agencies have been designated in each area, and the Environmental Protection Agency, in cooperation with the Department of Transportation, has published transportation-air quality planning guidelines, as well as information documents; and is also providing planning funds to these lead agencies to support the analysis, adoption and implementation of transportation measures, including ridesharing. All areas with serious air quality problems are required to consider vanpooling programs for inclusion in a package of comprehensive measures needed to attain air quality standards.

The purpose of this booklet is twofold: (1) to present in one source the current data on a cross-section of vanpool programs; and (2) to allow prospective vanpool sponsors to analyze and compare the various approaches used by those programs already in operation. The key characteristic of vanpool programs is that each is a unique adaptation to a particular situation. A knowledge of these possible variations should prove helpful to an employer planning to embark on a vanpool project.

Above all, it is hoped that this publication will further the exchange of information among vanpooling companies, prospective vanpooling sponsors, and all levels of government that is so vital to the successful expansion

of the commuter van concept. To that purpose, each summary description of a program contains a contact name and phone number so that interested persons can obtain more specific information. The best advocates and sellers of the vanpool concept are frequently the very persons who are actually running the programs. In most cases, these people are more than willing to share their time and expertise with interested individuals or corporations.

The material contained herein is the result of information gathered from 1975 to 1978, and updated in 1979. The rapid growth of vanpooling renders a project such as this partly outdated almost as soon as it is completed. However, this report can continue to serve prospective vanpoolers as a source of information on programs already under way--programs which will have answered many of the questions a prospective vanpooler is likely to raise and which will have also solved many of the problems that a perspective vanpooler is likely to encounter.

## I N T R O D U C T I O N

### 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 and the average vanpool travels 50 miles to and from work each day, saving a total of 5,000 gallons of gasoline each year per van.

Vanpools are organized on a permanent basis by major employers for their employees, by third parties and by individuals on a cost-sharing fare plan. Vanpools eliminate the costs to the community of providing for paid drivers, purchasing expensive equipment, and maintaining operations (which usually must be subsidized by taxpayers).

The primary advantage of vanpools over carpools is the added convenience of relaxing while being "chauffeured" to and from work for approximately \$35 per month. A survey of vanpool users, half former carpools and half former drivers traveling alone, found that 82 percent considered vanpooling more convenient than their previous mode. As a transportation means, vanpooling comes very close to the commuter's dream of personalized door-to-door transit at low cost.

Following is a cross-section of the three vanpool strategies found to be the most effective:

- A. Employer Sponsored Vanpools -- Typically, the employer purchases the vans, assists in the formation of the vanpools and recovers vanpool capital and operating expenses through rider fares of \$35 to \$55 per month. This approach is the most widely practiced of the organized vanpool approaches and for a large company is relatively easy to initiate. Insurance is often readily available as companies usually include the vans under their fleet policies.
  1. The 3M Company in St. Paul, Minnesota, started a six van pilot program in April 1973, before the oil embargo and now has 130 vans in service. Increased vanpool and carpool activity at the 3M Company headquarters has resulted in fewer commuter vehicles arriving each day even though employment increased during the period.
  2. The Tennessee Valley Authority (TVA) in Knoxville, Tennessee, now has a total of 399 vanpools in operation in 21 cities. At Knoxville (3,200 employees) employees driving alone to work dropped from 65 percent to 18 percent as a result of increased use of carpools, vanpools, and buspools. At another site about one-half of the employees are in vanpools. The TVA credit unions financed the vans since Federal agencies are not yet allowed to acquire vans for vanpools.

3. The Continental Oil Company (CONOCO) in Houston, Texas currently has a total of 189 vans operating in ten states. When the vanpool program was launched in March 1975, in Houston, 25 percent of the employees carpooled, but today 38 percent are carpooling and 25 percent are vanpooling.
  4. The Prudential Insurance Company in Newark, New Jersey, established a vanpool program to enable employees to maintain their jobs when Prudential moved from the city to a suburban location. By the middle of 1979, 202 vanpools were operating at eighteen sites throughout the Nation.
- B. Third-Party Sponsored Vanpools -- Third-party operators, some for profit and some for nonprofit, emerged in 1976. Developing a third-party program is more difficult to establish than employer-sponsored programs. This is due to regulatory constraints on "third-party" entry into the transportation market and the reluctance of insurance companies to insure them. Third-party operations have emerged only in states which have recently deregulated vanpools.
1. Commuter Computer Vanpool, Inc., in Los Angeles, California, represents a unique combination of both the private and public sectors. With management and marketing assistance of the Atlantic Richfield Company (ARCO) and the financing from Crocker National Bank, 137 vanpools are now in operation.
  2. RIDES for Bay Area Commuters, Inc. is a non-profit corporation and third-party sponsor of vanpooling, formed by the California Department of Transportation with joint funding from the State Energy Commission and the Metropolitan Transportation Commission. A leasing company was selected through competitive bidding and provides management and administrative services for a nominal charge per month per van. RIDES guarantees that the lease will be paid on any and all fleet vans even if some vanpools default or disband. Vans are specified by RIDES and the leasing company provides them under an open-end lease of 50 months. Insurance for the vans is provided by the leasing company but RIDES retains the right on behalf of the company to obtain a better coverage if it is available. Promotional material, marketing techniques and forms are being standardized to provide companies and interested employees with complete information which will assist them in developing and operating successful vanpools.
- C. Individually Owned and Operated Vanpools -- No attempt has been made to determine the number of individually owned vanpools throughout the Nation. However, indications are that they are more numerous than all the vanpools in organized vanpool programs. One in Washington, D.C. has been operating for over 10 years.

In many respects, they are easier to form than formally organized vanpools. Insurance is available at the same rates as automobiles driven the same distance and number of days. They are often viewed as a "big carpool" by the regulatory authorities. Financing can be accomplished just like a new car. In fact, the van is replacing the station wagon as a family vehicle. The major disadvantages are that owner-operated vanpools have difficulty establishing a rider base due to a lack of viable matching services. Some regulatory commissions will not allow the driver to make a profit, thus destroying the incentive of some individuals to run a vanpool.

1. On the Shirley Highway bus and carpool lanes, I-395 in suburban Washington, D.C., over 100 individually owned and operated vanpools pass each "rush hour." It is estimated that there are over 200 individually owned and operated vanpools in this metropolitan area.
2. At the Social Security Administration in Baltimore, a new approach to assisting in the formation of individually owned vanpools was begun in November 1976. By December 1977, 16 vanpools were operating.
3. At the military industrial complex in Norfolk, Virginia area over 60 individually owned and operated vanpools are known to be in operation.
4. Knoxville Commuter Pool (KCP) has developed a new approach which is essentially that of a transportation broker where all modes of service are brought together. After considerable pioneering in vanpooling, Knoxville has focused on promoting driver owned and operated vanpools. To provide fleet benefits as well as other assistance in starting and operating a vanpool program, a new organization, Knox Area Vanpool Association (KAVA) was formed.

#### 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:

1. At the 3M Company in St. Paul, Minnesota 1,000 (or 14.3 percent) of 7,000 employees were engaged in carpooling in 1970. Today, 130 vans are in operation with over 1,300 participants, representing 12.6 percent of the current labor force of 9,500. In addition, 1,500 3M employees are now in carpools.

2. At CONOCO in Houston, Texas, about 25 percent of the 1,200 employees were carpooling in March 1973 when 10 vanpools were initiated. Today, 67 vans are in operation.
3. Although precise figures for other companies are not available, Cenex, General Mills, Aerospace, Hoffmann-LaRoche, and other companies have found that vanpool programs have not diminished the level or growth of their employees' carpooling activity.

#### Vanpools Impact on Public Transit

A common question about vanpools is, "Will vanpools draw commuters from public transit?" The answer is generally, no. The average vanpool trip is 25 miles one way and the average transit commuter travels 9 miles one way. In fact, the market best served by vanpools, essentially the 27 percent of commuters traveling in excess of 10 miles to work, consume 69 percent of commuter vehicle miles of travel. While approximately 93 percent of the vanpools serve suburban or rural employment locations, only 5 percent serve Central Business Districts (CBD) locations. The remaining 2 percent of sponsors indicated both CBD and suburban work locations.

#### Vanpool Growth

Essentially, the number of vanpools have doubled in each of the last 5 years since the oil embargo; there are now approximately 375 sites nationwide. The list includes companies like Corning Glass Works, General Mills, Hoffmann-LaRoche, Chrysler, Montgomery Ward, Southern New England Telephone, and Hewlett-Packard. These programs now have nearly 4,400 vans serving over 45,000 commuters. The energy savings is over 22 million gallons of gasoline per year. The reduction in air pollutants is estimated at 8,000 tons each year. These figures do not include the estimated 3,000-5,000 individually owned-operated vanpools believed to be in existence in the United States.

#### VANPOOL GROWTH

	<u>Number of Sponsors</u>	<u>Number of Sites</u>	<u>Number of Vanpools</u>
April 1973	1		6
April 1974	15		125
April 1975	25		240
April 1976	56		643
April 1977	86		1,100
February 1978	122	163	1,986
April 1979*	308	372	4,382

\* Includes best information available; however, in some instances reflects data beyond April 1979.

## How Do Vanpools Work?

While third-party vanpool programs vary considerably in their operation, a typical employer-sponsored vanpool program works on the basis of the following five major elements:

1. Preliminary Planning -- Major planning steps include:
  - o dissemination of information on the benefits of vanpools to employees,
  - o identification of employee resident location through distribution of a simple questionnaire,
  - o analysis of the level of employee interest through a simple survey, often taken at the same time residential location information is obtained,
  - o establishment of the initial number of vanpools, for each area, on the basis of available participants.
  
2. Development of Administrative Procedures and Details -- At most sites, 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 employer use of vans during working hours, reduction in employee absenteeism and tardiness, greater employee loyalty, greater employee accessibility to 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 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. Development of Operating Procedures and Details -- The vanpool driver/coordinator receives free commuter transportation, personal use of the van during nonbusiness hours at a minimal charge, all passenger fares above the break-even minimum, and is responsible for the following operating procedures:

- o obtaining special driver's license where necessary,
  - o training backup drivers and getting necessary licenses,
  - o maintaining minimum ridership (with the administrator's help),
  - o keeping records of van operations and log sheets of riders for each day,
  - o servicing, maintaining, and cleaning the van as necessary, and all pertinent accounting,
  - o collecting fares (where this function is delegated),
  - o getting group agreement on schedules and related arrangements which are satisfactory for each vanpool.
4. Ordering of Vans -- In a typical program, vans are purchased or leased by the employer, and operated on a nonprofit 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 4 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 percent of all employees who have participated in vanpools intend to stay with them.

#### Employer/Employee Benefits in Vanpooling

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; 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 through contributing to community and national efforts to reduce energy consumption and environmental pollution.



Major companies have observed that vanpooling has greatly improved company loyalty and identification among their employees. This attitude stems from the awareness of the benefits accrued from such a service, These include:

- o Estimated annual gasoline savings of \$500 in commuting costs for employees who previously drove alone in a standard-sized automobile, making a daily 20-mile round trip to work, and even greater savings on longer trips.
- o Additional savings of \$1,000 a year or more if the employee disposed of his or her second car.
- o Allowing long-distance commuters to continue to commute despite rising cost of commuting.
- o Guaranteed door-to-door all-weather service.
- o Comfortable and relaxed chauffeured commuting.
- o Opportunity to meet fellow employees and to develop new friendships and interests.
- o Elimination of long trying walks during bad weather conditions, after parking.
- o Reduced traffic congestion at company site.
- o Various company incentives to encourage vanpooling, such as preferred parking, initial free rides for regular vanpoolers and special recognition within the company.

Companies with existing programs are so enthusiastic about the results achieved that they are willing to provide technical assistance to others concerning the establishment and operation of their vanpool programs.

#### Costs of Vanpool Program

The cost of initiating and sustaining a vanpool program is one of the primary concerns of management. While a vanpool system is not always self-supporting, it is capable of recovering most of its costs. Methods of calculating expense rates vary according to company intent, accounting procedures and geographic locations.

For example, most firms do not include in the fixed cost schedule the administrative experience borne by the company, nor the imputed interest on capital which could have been utilized elsewhere. Depreciation may be calculated on the basis of purchase price alone or by subtracting anticipated trade-in value of the van. Almost all documentation of vanpooling experience indicates that it is potentially self-amortizing.

Legislation passed by the 95th Congress provides for an investment credit for certain commuter vehicles. With the enactment of the Energy Tax Act of 1978, employers who provide a van or bus to transport their employees to and from work will be eligible for the full 10 percent investment tax credit in 3 years. The van or bus must have at least a 3-year useful life; be acquired after the date of enactment; and be placed in service by the employer before January 1, 1986. The commuter highway vehicle must have a seating capacity of at least eight adults, not including the driver; at least one half of the adult seating capacity must be occupied, not including the driver; and at least 80 percent of the mileage must be used for commuting.

Administrative expenses, plus the capital involved in a purchase agreement, 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 must 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.

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/coordinator. It should be stressed that the most successful programs are those that have the most enthusiastic endorsement of management. 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.

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. 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 effective 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.

Companies considering the establishment of a vanpool program are often concerned about the extent to which employees will participate. Active employee participation is a direct function of management's 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 incentive to elicit employee response. Existing evidence shows that if management backs vanpooling, employees will participate. Once an employee starts vanpooling, he or she is likely to continue in the program.



STATE-BY-STATE  
SUMMARY  
OF  
EXISTING VANPOOL PROGRAMS

VANPOOLS

TOP TEN STATES

1.	California	740
2.	Texas	665
3.	New Jersey	620
4.	Tennessee	402
5.	Minnesota	250
6.	Michigan	192
7.	Connecticut	183
8.	Maryland	158
9.	Virginia	141
10.	Washington	98

## VANPOOL STATE TOTALS

	<u>Number of Sponsors</u>	<u>Number of Sites</u>	<u>Number of Vans</u>
Alabama	3	7	56
Arizona	4	4	23
Arkansas	1	1	1
California	27	33	740
Colorado	12	13	67
Connecticut	18	19	183
District of Columbia	1	1	12
Florida	3	3	14
Georgia	2	2	17
Hawaii	1	1	16
Idaho	1	1	8
Illinois	12	13	81
Indiana	3	3	9
Iowa	3	3	41
Kansas	1	1	2
Kentucky	5	7	51
Louisiana	3	7	46
Maryland	9	9	158
Massachusetts	9	9	64
Michigan	7	7	192
Minnesota	17	19	250
Mississippi	1	1	3
Missouri	5	6	38
Montana	2	2	2
Nebraska	2	2	10
New Hampshire	3	3	4
New Jersey	46	61	620
New Mexico	7	7	10
New York	6	6	37
North Carolina	4	4	5
North Dakota	1	1	12
Ohio	2	2	26
Oklahoma	4	4	46
Oregon	2	2	22
Pennsylvania	12	14	83
Rhode Island	3	3	5
South Carolina	2	2	5
Tennessee	6	18	402
Texas	32	45	665
Utah	1	1	10
Vermont	1	1	6
Virginia	5	5	141
Washington	8	8	98
West Virginia	1	1	1
Wisconsin	4	4	26
Wyoming	1	1	3
Canada	<u>5</u>	<u>5</u>	<u>71</u>
TOTAL	308	372	4,382

STATUS OF U.S. VANPOOL PROGRAMS

<u>Company/Organization</u>	<u>Date Started</u>	<u>Number of Vans</u>
<u>ALABAMA</u>		
Tennessee Valley Authority, Hollywood (See Knoxville Headquarters listing)		9
Tennessee Valley Authority, Decatur (See Knoxville Headquarters listing)		13
Tennessee Valley Authority, Stevenson (See Knoxville Headquarters listing)		7
Tennessee Valley Authority, Muscle Shoals (See Knoxville Headquarters listing)		21
Tennessee Valley Authority, Tuscumbia (See Knoxville Headquarters listing)		3
Triana Industries, Triana	78	1
<u>ARIZONA</u>		
Speery Flight Systems, Phoenix	74	11
Motorola, Scottsdale	78	3
Century Insurance, Scottsdale	78	2
Honeywell Information Systems Division, Phoenix	78	4
<u>ARKANSAS</u>		
Arkansas Power and Light, Little Rock	79	1
<u>CALIFORNIA</u>		
Southern California Commuter Bus, Huntington Beach	72	4
Ampex Corporation, Redwood City	74	2
Ralph M. Parsons Company, Pasadena	74	35
Douglas Oil, Costa Mesa (See Houston CONOCO Headquarters listing)		1
Aerospace Corporation, El Segundo	75	19
Caltrans Vanpool Project, Sacramento	75	17
Caltrans Vanpool Project, Los Angeles (See Sacramento Headquarters listing)		6
Caltrans Vanpool Project, San Francisco (See Sacramento Headquarters listing)		8
Prudential Insurance Company of America, Los Angeles (See Newark Headquarters listing)		30
Golden Gate Bridge, San Rafael	75	56
University of California, San Francisco	75	20
C. F. Braun & Company, Los Angeles	75	28
Pinetree Transportation Company, Long Beach	75	110
Commuter Computer, Los Angeles	76	137
City of Los Angeles, Los Angeles	76	1
Fluor Corporation, Irvine	76	46



Hewlett Packard, Palo Alto	76	20
SRI International, Menlo Park	76	1
University of California, San Diego - La Jolla	77	3
University of California, Berkeley		25
Conservation Industries Commuter Vans, San Diego	78	10
Ampex Corporation, El Segundo	78	1
Department of Motor Vehicles, Sacramento	78	1
Great Western Savings, Beverly Hills	78	4
Sierra Conservation Center, Jamestown	78	2
California State Prison, San Quentin	78	1
California Correctional Institution, Tehachapi	78	1
RIDES for Bay Area Commuters, Inc., San Francisco	78	70
Riverside Transit Agency, Riverside	78	11
University of California, Livermore	78	45
CONOCO (Refinery), Paramount	79	3
(See Houston Headquarters listing)		
Pacific Gas and Electric, Geyserville	79	12
Fireman's Fund Insurance Company, San Rafael	79	9

#### COLORADO

Statitrol, Lakewood	76	2
CONOCO, Denver		
(See Houston Headquarters listing)		8
Johns-Manville Corporation, Denver	76	1
CONOCO (Refinery), Denver		3
(See Houston Headquarters listing)		
Allstate Insurance Company, Englewood	78	6
Bell Telephone Laboratory, Denver		1
(See Holmdel Headquarters listing)		
Adolph Coors, Golden	78	12
Mountain Bell, Denver	78	15
Rockwell International, Golden	78	10
Denver Water Board, Denver	78	1
Colorado Department of Highways, Denver	78	2
Colorado Division of Wildlife, Denver	79	5
Gulf Oil, Denver		1
(See Houston Headquarters listing)		

#### CONNECTICUT

American Can Company, Greenwich	74	5
CONOCO, Stamford		2
(See Houston Headquarters listing)		
Southern N. E. Bell Telephone, New Haven	76	18
General Dynamics Corporation, Groton	77	45
Aetna Life & Casualty Company, Hartford	77	35
Northeast Utilities Service Company, Hartford	77	25
Yale University, New Haven	77	4
Connecticut General Life Insurance, Hartford	78	14
Connecticut Department of Transportation, Wethersfield	78	20
Pitney Bowes, Stamford	78	9

Traveler's Insurance, Hartford	78	4
Southbury School, Southbury	78	2
Daytop, Inc., Shelton	78	1
Olin Corporation, New Haven	78	2
Olin Corporation, Stamford	78	1
Aetna Insurance, Hartford	78	1
Xerox Corporation, Stamford	79	6
Perkin-Elmer, Norwalk	79	10
CBT, Hartford	79	2

#### DISTRICT OF COLUMBIA

Department of Transportation, Washington, D.C.	77	12
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#### FLORIDA

Prudential Insurance Company of America, Jacksonville (See Newark Headquarters listing)		6
Cast Vanpool, Lake Buena Vista	79	2
Walt Disney World, Lake Buena Vista	79	6

#### GEORGIA

Modnar, Atlanta	73	12
Gulf Oil Travel Card Center, Atlanta (See Houston Headquarters listing)	78	5

#### HAWAII

Vango, Hawaii, Honolulu	77	16
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#### IDAHO

Valley Commuteride, Boise	78	8
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#### ILLINOIS

Montgomery Ward, Chicago	74	14
Zenith Radio Corporation, Chicago	76	6
Allstate Insurance, Northbrook	77	14
McMaster Carr Supply Company, Chicago	77	8
G. D. Searle & Company, Skokie	78	5
G. D. Searle & Company, Chicago	78	2
Household Finance Corporation, Prospect Heights	78	5
Motorola, Inc., Schaumburg	78	6
Brown and Root, Oak Brook	78	2
Union Oil, Schaumburg	78	3
Signode Corporation, Northbrook	78	10
3M Company, Bedford Park (See St. Paul Headquarters listing)	78	2
Bell Telephone Laboratory, Indian Hill (See Holmdel Headquarters listing)	78	4

INDIANA

Lincoln National Life Insurance Co., Fort Wayne	78	1
Inland Steel Company, East Chicago	78	2
Prudential Life Insurance Company (See Newark Headquarters listing)	78	6

IOWA

Winnebago Industries, Forest City	74	30
John Deere Dubuque Works, Dubuque	78	7
University of Iowa, Iowa City	78	4

KANSAS

Hallmark Cards, Inc., Lawrence (See Kansas City Headquarters listing)	78	2
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KENTUCKY

Action NOW, Inc., Louisville	78	6
South East Coal Company, Irving	78	8
Elm Hill Meats, Inc., Lexington	78	1
Commonwealth of Kentucky, Frankfort	78	19
Tennessee Valley Authority, Golden Pond (See Knoxville Headquarters listing)		4
Tennessee Valley Authority, Drakesboro (See Knoxville Headquarters listing)		9
Tennessee Valley Authority, Paducah (See Knoxville Headquarters listing)		4

LOUISIANA

CONOCO, Lafayette (See Houston Headquarters listing)		1
CONOCO, Lake Charles (See Houston Headquarters listing)		2
State Times-Morning Advocate, Baton Rouge	77	2
CONOCO (Refinery), Westlake (See Houston Headquarters listing)	79	18
CONOCO (Chemicals Plant), Westlake (See Houston Headquarters listing)	79	15
CONOCO (VCM Plant), Westlake	79	2
Gulf Oil Corporation, New Orleans (See Houston Headquarters listing)		6

MARYLAND

Commercial Credit Equipment Company, Baltimore	76	12
Baltimore County Government, Towson	76	4
Social Security Administration, Baltimore	76	13
Peterson, Howell and Heather, Baltimore	76	1

Vango, Inc., Linthicum	77	107
Aberdeen Proving Ground, Aberdeen	78	5
National Security Agency, Fort Meade	78	1
Golden Pride Poultry, Stockton	78	14
Hutzler Brothers, Baltimore	79	1

#### MASSACHUSETTS

Prudential Insurance Company of America, Boston (See Newark Headquarters listing)		8
New England Mutual Life Insurance Company, Boston	75	1
Polaroid, Needham Heights	75	30
Eckel Industries, Ayer	76	1
Massachusetts General Life, Newton Lower Falls	76	1
Digital Equipment Corporation, Maynard	77	17
Alan M. Voorhees, Boston	78	1
Codex Corporation, Mansfield	78	4
Hanscom AFB, Bedford	78	1

#### MICHIGAN

Chrysler Corporation, Detroit (Total nationwide 140)	74	105
State of Michigan - State Employee Vanpool Program, Lansing	77	48
Detroit Edison Company, Detroit	77	11
Michigan Bell Telephone Company, Southfield	78	8
Steelcase, Inc., Grand Rapids	78	12
University of Michigan, Ann Arbor	79	7
Herman Miller, Inc., Zeeland	79	1

#### MINNESOTA

3M Company, St. Paul (Total nationwide 130)	73	115
3M Company, New Ulm (See St. Paul Headquarters listing)		2
Cenex, South St. Paul (Total nationwide 18)	73	17
General Mills, Inc., Minneapolis	74	22
Medtronics, Minneapolis	74	1
Prudential Insurance Company of America, Minneapolis (See Newark Headquarters listing)		9
Richfield Bank and Trust, Minneapolis	75	2
Minnesota Mutual Life Insurance Company, St. Paul	76	1
Grain Terminal Association, St. Paul	76	1
National Car Rental Systems, Inc., Bloomington	76	3
Minnesota State Employees Vanpool Program, St. Paul	76	14
Cargill, Minneapolis	77	10
Commuter Services Share-A-Ride Program, Minneapolis	78	30
Abigail-Morrison Garment Company, St. Paul	78	3
D. B. Rosen Blaas, Inc., Fergus Falls	78	2
First Bank System, Minneapolis	78	3

Dakota County Vo Tech, Rosemount	78	9
Northern States Power, St. Paul	78	2
3M Company, Hutchinson	79	4
(See St. Paul Headquarters listing)		

MISSISSIPPI

CONOCO, Aberdeen		1
(See Houston Headquarters listing)		

MISSOURI

Hallmark Cards, Inc., Kansas City	77	25
(Total nationwide 30)		
City of Kansas City, Kansas City	78	3
Washington University School of Medicine, St. Louis	78	3
Butler Manufacturing Company, Kansas City	78	3
McDonald-Douglas Corporation, St. Louis	78	1
Hallmark Cards, Inc., Liberty		3
(See Kansas City Headquarters listing)		

MONTANA

Cenex, Laurel		1
(See South St. Paul Headquarters listing)		
Hoerner Waldorf, Missoula	78	1

NEBRASKA

Offutt Van Pool Inc., Omaha	77	9
Protective Fire & Casualty Insurance Co., Lincoln	78	1

NEW HAMPSHIRE

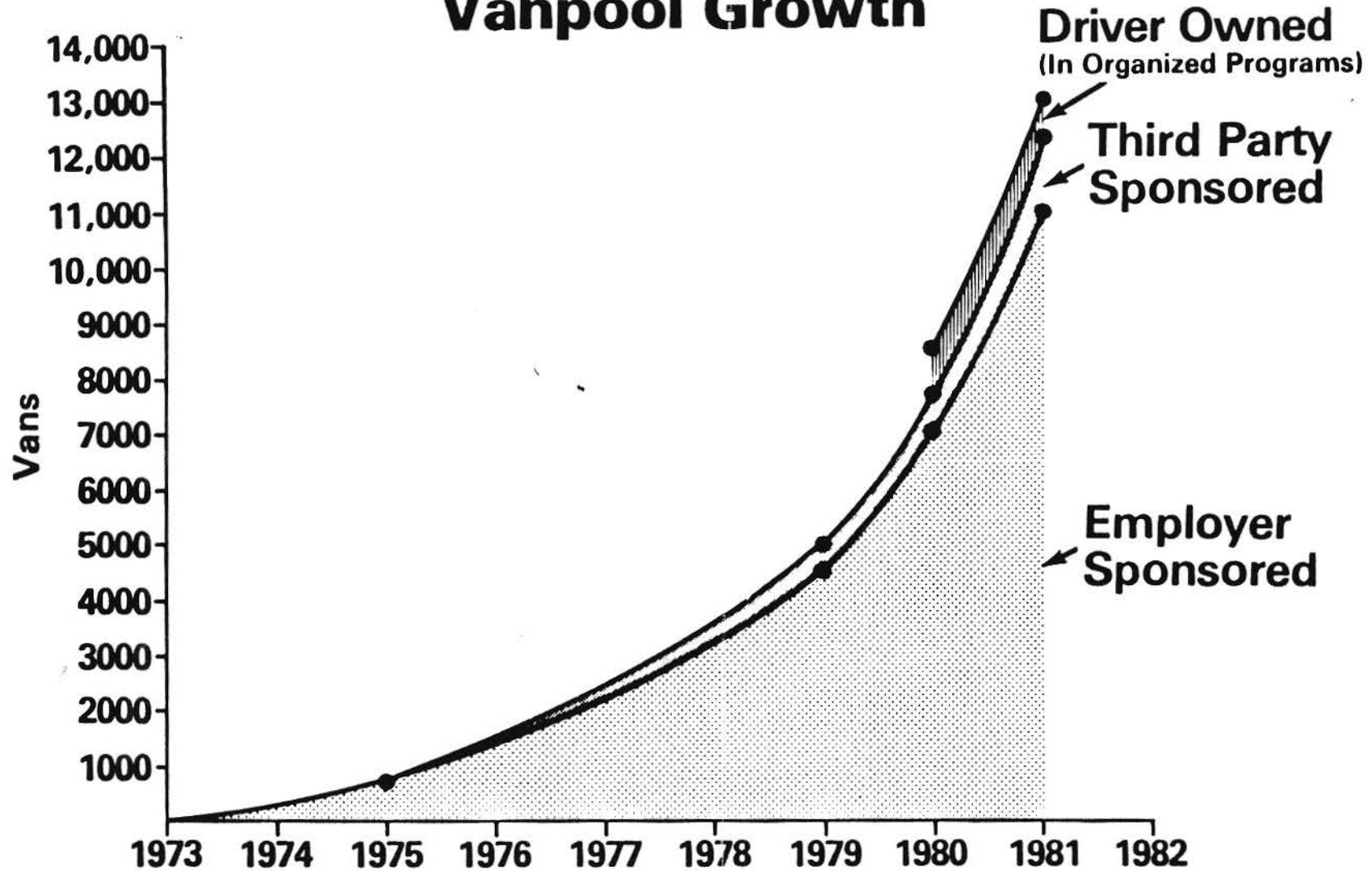
Digital Equipment Corporation, Merrimack		2
(See Maynard Headquarters listing)		
Kingston-Warren Corporation, Newfields	78	1
Manchester Manufacturing Company, Colebrook	78	1

NEW JERSEY

Hoffmann-LaRoche Pharmaceuticals, Nutley	74	63
Fablok Mills, Murray Hill	75	5
Prudential Insurance Company of America, Newark	75	4
(Total nationwide 202)		
Prudential Insurance Company of America, South Plainfield (See Newark Headquarters listing)		15
A.T. & T. Longlines, Bedminster	75	89
Nabisco, Hanover	75	1
Schering Corporation, Kenilworth	75	40
Sandoz, Inc., East Hanover	75	8
Bell Telephone Laboratory, Holmdel	76	8
(Total nationwide 33)		
Educational Testing Service, Princeton	76	5

Laminating Corporation of America, Belle Meade	76	5
Allied Chemical Company, Morris Plains	77	14
Beckton-Dickinson, Rutherford	77	3
Boy Scouts of America, Newark	77	1
New Jersey Bell Telephone Company, East Orange	78	13
County of Morris, Morristown	78	10
A. T. & T. Longlines, Basking Ridge	78	10
(See Bedminister Headquarters listing)		
Ortho Pharmaceutical Corporation, Raritan	78	5
Western Electric, Kearney	78	1
Middlesex County, New Brunswick	78	4
Golden Towers Chinese Restaurant, Cedar Grove	78	3
Sports Arena Employees Local 137, Cherry Hill	78	1
Exxon Research & Engineering Company, Florham Park	78	53
Prentiss Hall, Englewood	78	10
Siemens Corporation, South Iselin	78	2
Ciba-Geigy Corporation, Summit	79	6
Meadowlands Chamber of Commerce, Secaucus	79	4
Pan Am, Rockleigh	79	10
Crum & Forster Insurance Company, Morristown	79	10
Mattel, Inc., South Plainfield	79	40
J & J Baby Products Division, North Brunswick	79	5
BASF Wyandate Company, Parsippany	79	1
Rovner's Department Store, Bridgeton	79	1
FMC Corporation, Princeton	79	2
Warner Lambert Company, Morris Plains	79	4
Van Pool, Inc., Cinnaminson	79	16
E. R. Squibb, New Brunswick	79	5
Johnson and Johnson, Chicopee	79	1
Johnson and Johnson, Surgicose	79	1
Johnson and Johnson, Ethicon	79	1
U. S. Metals, Carteret	79	1
Monroe Calculator Company, Morris Plains	79	3
3M Company, West Caldwell	79	1
Bell Labs, Murray Hill	79	8
(See Holmdel Headquarters listing)		
McGraw Hill, Hightstown	79	10
Lipton Tea Company, Englewood Cliffs	79	1
Frank Briscoe Company, Atlantic City	79	1
Inventeprises, Inc.	79	2
Ideal Toy, Newark	79	3
Sealand Service, Elizabeth	79	2
Campbell Soup Company, Camden	79	6
U.S. Fire Insurance Company, Parsippany	79	1
Bell Telephone Laboratory, Whippany	79	7
(See Holmdel Headquarters listing)		
Bell Telephone Laboratory, Piscataway	79	5
(See Holmdel Headquarters listing)		
Prudential Insurance Company of America, Roseland	79	12
(See Newark Headquarters listing)		

# Vanpool Growth



Data compiled in April of each year

VANPOOLS

STATE TOTALS

APRIL 1981

VANPOOLS  
TOP TEN STATES  
APRIL 1981

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1. Texas	2,249
2. California	2,010
3. New Jersey	1,339
4. Minnesota	711
5. Connecticut	605
6. Virginia	597
7. Tennessee	548
8. Pennsylvania	483
9. Michigan	438
10. Washington	325

STATE	Number of Sponsors	Number of Sites	Number of Vans
Alabama	4	8	113
Arizona	10	12	46
Arkansas	11	11	65
California	67	81	2,010
Colorado	23	25	271
Connecticut	25	43	605
District of Columbia	4	4	105
Florida	12	14	204
Georgia	11	11	216
Hawaii	1	1	16
Idaho	1	1	15
Illinois	33	38	240
Indiana	7	7	25
Iowa	4	4	73
Kansas	6	7	65
Kentucky	6	8	97
Louisiana	10	15	229
Maryland	9	9	301
Massachusetts	14	14	230
Michigan	21	21	438
Minnesota	23	31	711
Mississippi	5	5	51
Missouri	13	14	263
Montana	2	2	2
Nebraska	3	3	16
New Hampshire	4	4	18
New Jersey	112	127	1,339
New Mexico	11	11	56
New York	24	26	187
North Carolina	24	24	126
North Dakota	2	2	13
Ohio	20	20	119
Oklahoma	8	8	121
Oregon	2	2	28
Pennsylvania	62	77	483
Rhode Island	4	4	40
South Carolina	4	4	9
South Dakota	2	2	7
Tennessee	9	27	548
Texas	120	140	2,249
Utah	3	3	31
Vermont	3	3	84
Virginia	16	16	597
Washington	15	16	325
West Virginia	1	1	1
Wisconsin	15	15	108
Wyoming	3	3	19
Total United States	789	924	12,915
Canada	11	11	85
TOTAL	800	935	13,000



Prudential Insurance Company of America, New Providence	79	7
(See Newark Headquarters listing)		
Prudential Insurance Company of America, Florham Park	79	2
(See Newark Headquarters listing)		
Prudential Insurance Company of America, Millville	79	11
(See Newark Headquarters listing)		
Prudential Insurance Company of America, Holmdel	79	14
(See Newark Headquarters listing)		
Prudential Insurance Company of America, Woodbridge	79	28
(See Newark Headquarters listing)		
Prudential Insurance Company of America, Willowbrook	79	4
(See Newark Headquarters listing)		
Prudential Insurance Company of America, Parsippany	79	9
(See Newark Headquarters listing)		
Prudential Insurance Company of America, Huntington	79	2
(See Newark Headquarters listing)		

#### NEW MEXICO

Data Employees Commuter Association, Albuquerque	75	2
Eastern New Mexico University, Portales	78	1
Westside Community Transport, Anthony	78	1
Community Transportation Cooperative, Anthony	78	1
Mesilla Park Van Corporation, Mesilla Park	78	1
White's City, Inc., White City	79	3
Alamo Vanpool Corporation, Alamogordo	79	1

#### NEW YORK

Corning Glass Works, Corning	74	17
Long Island Lighting, Mineola	78	1
Texaco, Inc., White Plains	78	9
Brookhaven National Laboratory, Upton	79	3
Grumman Aerospace Corporation, Bethpage	79	5
Orange and Rockland Utilities, Pearl River	79	2

#### NORTH CAROLINA

Burroughs Wellcome, Research Triangle Park	79	2
National Spinning Company, Inc., Washington	79	1
Square D Company, Asheville	79	1
Ferrington Community Pool, Raleigh	79	1

#### NORTH DAKOTA

Basin Electric Power Cooperative, Bismarck	77	12
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#### OHIO

The Toledo Hospital, Toledo	78	6
Procter and Gamble, Cincinnati	78	20

OKLAHOMA

CONOCO, Ponca City		40
(See Houston Headquarters listing)		
Westinghouse, Norman	78	1
Emanuel Baptist Church, Moor	79	2
Gulf Oil Corporation, Oklahoma City		3
(See Houston Headquarters listing)		

OREGON

Tektronex, Inc., Beaverton	76	20
Freightliner Corporation, Portland	78	2

PENNSYLVANIA

Gulf Research and Development, Pittsburgh	74	12
CONOCO, Pittsburgh		10
(See Houston Headquarters listing)		
CONOCO, Washington		1
(See Houston Headquarters listing)		
Prudential Insurance Company of America, Fort Washington		10
(See Newark Headquarters listing)		
Scott Paper, Philadelphia	75	2
General Electric, Philadelphia	76	6
Smith Kline Corporation, Philadelphia	77	18
University of Pennsylvania, Philadelphia	77	4
Eire Technological Products, State College	78	1
National Liberty Corporation, Frazer	78	3
Exide Corporation, Horsham	78	1
H. J. Heinz Company, Pittsburgh	79	2
Gulf Oil Corporation, Pittsburgh		6
(See Houston Headquarters listing)		
Gulf Oil Corporation, Philadelphia		7
(See Houston Headquarters listing)		

RHODE ISLAND

Allendale Insurance, Johnston	77	3
Old Stone Bank, Providence	77	1
Cyrstal Craft, Central Falls	78	1

SOUTH CAROLINA

South Carolina Department of Highway and Public Transportation, Columbia	78	1
Medical University of South Carolina, Charleston	78	4

TENNESSEE

Tennessee Valley Authority, Knoxville (Total nationwide 399)	74	71
Tennessee Valley Authority, Hartsville (See Knoxville Headquarters listing)		187
Tennessee Valley Authority, Norris (See Knoxville Headquarters listing)		6
Tennessee Valley Authority, Chattanooga (See Knoxville Headquarters listing)		15
Tennessee Valley Authority, Gallatin (See Knoxville Headquarters listing)		4
Tennessee Valley Authority, Soddy Daisy (See Knoxville Headquarters listing)		6
Tennessee Valley Authority, Spring City (See Knoxville Headquarters listing)		12
Tennessee Valley Authority, Surgoinsville (See Knoxville Headquarters listing)		19
Tennessee Valley Authority, Rogersville (See Knoxville Headquarters listing)		4
Tennessee Valley Authority, Cumberland City (See Knoxville Headquarters listing)		1
Tennessee Valley Authority, Kingston (See Knoxville Headquarters listing)		2
Tennessee Valley Authority, Elizabethton (See Knoxville Headquarters listing)		1
Tennessee Valley Authority, Pickwick (See Knoxville Headquarters listing)		1
Knoxville Commuter Pool, Knoxville	76	65
Tennessee Energy Authority	78	5
Union Carbide Corporation, Oak Ridge	78	1
Robertshaw Controls Company, Knoxville	78	1
Levi Strauss & Company, Powell	78	1

TEXAS

Texas Instruments, Dallas (Total nationwide 40)	74	16
CONOCO, Houston (Total nationwide 189)	75	67
CONOCO, Big Spring (See Houston Headquarters listing)		1
CONOCO, Carrizo Springs (See Houston Headquarters listing)		1
CONOCO, Falls City (See Houston Headquarters listing)		3
CONOCO, Midland (See Houston Headquarters listing)		3
CONOCO, Pecos (See Houston Headquarters listing)		1
CONOCO, Hamlin (See Houston Headquarters listing)		1

Prudential Insurance Company of America, Houston (See Newark Headquarters listing)	76	25
Hughes Tool, Houston	76	19
Brown & Root, Houston	76	45
Aramco Services, Houston	76	34
The Woodlands Commercial Development Corporation, The Woodlands	76	24
Gulf Oil Corporation, Houston (Downtown Headquarters) (Total nationwide 168)	77	82
Mobil Oil, Houston	77	25
Comet-Rice, Houston	77	1
Armco, Houston	77	5
Mason & Hanger - Silas Mason Company, Inc., Amarillo	77	31
Crum & Forster Insurance Companies, Dallas	77	9
United Service Automobile Association, San Antonio	77	80
National Supply Company, Houston	77	7
Sun Production Company, Dallas	77	6
Foley's Department Store, Houston	78	8
General Crude, Houston	78	6
Hermann Hospital, Houston	78	14
Mitchell Energy & Development, Woodlands	78	1
Texas Instruments, Stafford (See Dallas Headquarters listing)	78	21
Texas Medical Center, Houston	78	5
Schult Home Corporation, Navasota	78	1
TXT, Inc., Houston	78	1
Mobil Oil, Dallas	78	19
Dr. Pepper Bottling Company, Dallas	78	1
TRANSCO Gas Pipeline, Houston	79	8
Texas Instruments, Lewisville (See Dallas Headquarters listing)	79	2
First City National Bank, Houston	79	18
Texas Eastern Transmission Corporation	79	7
Michigan Wisconsin, Houston	79	3
Texas Instruments, Temple (See Dallas Headquarters listing)	79	1
Vought Corporation, Dallas	79	9
Department of Health, Education and Welfare, Dallas	79	3
Sun Gas Company, Dallas	79	8
Gulf Oil Corporation, Midland (See Houston Headquarters listing)		6
Gulf Oil Corporation, Orange (See Houston Headquarters listing)		3
Gulf Oil Corporation, Houston (suburban) (See Houston Headquarters listing)		28
Gulf Oil Corporation, Port Arthur (See Houston Headquarters listing)		6

UTAH

Reid Berkenshaw, Salt Lake City 79 10

VERMONT

Erving Paper Mills, Brattleboro 73 6

VIRGINIA

Alan M. Voorhees & Associates, McLean 74 1  
Reston Commuter Bus, Inc., Reston 74 3  
Tidewater Regional Transit, Norfolk 77 63  
Fredericksburg Commuter Association, Fredericksburg 78 2  
Portsmouth Naval Shipyard, Portsmouth 78 72

WASHINGTON

University of Washington, Seattle 76 11  
Recreational Equipment, Inc., Seattle 77 2  
Rainier National Bank, Seattle 77 8  
Intalco Aluminum, Ferndale 77 1  
Weyerhaeuser Company, Tacoma 78 27  
Seattle Commuter Pool, Seattle 78 21  
U.S. Department of Energy, Richland 79 25  
Gulf Oil Corporation, Fort Lewis 3  
(See Houston Headquarters listing)

WEST VIRGINIA

CONOCO, Morgantown 1  
(See Houston Headquarters listing)

WISCONSIN

Wisconsin Department of Administration, Madison 78 20  
Owen Ayres & Associates, Inc., Eau Claire 78 1  
Hillshire Farms, New London 79 4  
Francois Sales & Service, Belleville 79 1

WYOMING

CONOCO, Casper 3  
(See Houston Headquarters listing)

CANADA

Polisar, Ltd., Sarnia, Ontario	66	16
3M Company, London, Ontario	78	10
(See St. Paul Headquarters listing)		
Ministry of Transportation & Communications, Downsview, Ontario	79	3
Chrysler Corporation, Windsor, Ontario	79	35
(See Detroit Headquarters listing)		
Prince Edward Island, Provincial Government	79	3

VANPOOL PROGRAM  
SUMMARIES





AEROSPACE CORPORATION  
LOS ANGELES, CALIFORNIA

The joint ride-sharing program of the Aerospace Corporation and the Air Force's Space and Missile Systems Organization began in June 1972 with the introduction of a carpool matching service and a charter bus operation. Although the carpool program was quite successful, the organizations felt that the greater flexibility and efficiency of vans over bus and carpools warranted the introduction of a vanpool program. Initiated in April 1975, the program now includes a total of 19 vans.

According to the managers of the Aerospace/Samso Commute-A-Van Program, three significant features have been primarily responsible for its success: the van style, the method of procuring the vehicle, and the fare structure. In determining the type of van to be used, rider comfort was a major consideration. Consequently, those vans which were intended for use over longer routes were furnished with airplane-type reclining seats. According to the company, the additional ridership induced by this feature more than compensates for the additional cost of the seats and the reduced passenger capacity per van.

The vans are procured by the company through leasing, with the full cost assessed to the passengers. Fuel and maintenance service, partially provided by Aerospace facilities, is charged to each van on a per-mile basis. Finally, the program utilizes a commercial liability insurance policy costing \$46 per month per van in combination with a van program insurance pool which assesses each van \$10 per month.

Aerospace employs a unique fare system combining monthly and daily charges. Each regular rider is charged 1/3 of his share of the costs on a monthly basis. The remaining 2/3 is divided by 17 and is assessed daily. Through this procedure, each van breaks even if the riders miss, on the average, one day a week. Both the company and van riders are in agreement that this fare plan provides the greatest equity.

According to Aerospace/Samso, sincere management support for vanpooling is essential for the success of a van program. While vanpooling assures that prompt arrival of employees in the morning, it also guarantees their speedy departure at the end of the day. Management must find this situation compatible with the operations of the company, or be willing to reimburse employees requested to work overtime. Conscious decisions must be made concerning the size and scope of the program, the degree to which the company is willing to subsidize the vanpools, and the amount of publicity desired. The result, according to a company study, is a reduction in vehicle miles traveled of two million annually with energy savings of 130,000 gallons of gasoline.

For additional information on the Aerospace/Samso Commute-A-Van Program, contact Wayne Bowman, the Aerospace Corporation, Energy and Resources Division, Los Angeles, California 90009, (213) 648-7461.

ARAMCO SERVICES  
HOUSTON, TEXAS

Aramco Services initiated a vanpool program in March 1976 and currently has 34 vans in operation. It is anticipated that this service will be extended as the need arises.

The fare structure is similar to that of CONOCO in Houston, Texas. The fare is based on mileage traveled with the administrative costs being absorbed by the company. Furthermore, the parking costs of the van are absorbed by the company. The payment of the fares is handled through a direct payment each month to the driver by the passengers. As an incentive for the driver, he is permitted to use the van during off-hours if he supplies the gasoline.

The van is used primarily for commuting, however, business trips are permitted if the designated driver of the van is the actual driver on such trips. The normal commuting trips range between a minimum of 15 miles one way to a maximum of 47 miles one way. The van is insured under the general company umbrella policy.

There are several unique characteristics of this program. The van is obtained through a lease agreement with a standard term of between 30-36 months. However, at the termination of this lease period, the driver of the van has an option to buy the van at its depreciated value. It is felt that this arrangement is a significant factor in attracting drivers to the program. A further unique feature of the program is that the van does not provide door-to-door service. Rather, the passengers assemble at designated park-and-ride locations in order for the van to pick them up.

For additional information on Aramco Services vanpooling program, contact Ms. Kathi Townsend, Aramco Services, 1100 Milam, Suite 4104, Houston, Texas 77002, (713) 651-4024.

CALTRANS VANPOOL PROJECT  
SACRAMENTO, CALIFORNIA

In order to test the feasibility of vanpooling, the California Department of Transportation initiated a demonstration vanpool project in July 1975 with 3 leased vans. The program has expanded to 3 sites throughout the State with a total of 32 vanpools; all but the initial 3 vans were purchased by the State.

Drivers ride free to compensate for their coordination activities which include keeping a daily log of mileage and passengers, collecting passenger fares, and scheduling maintenance. The vans are available for State use during the day and drivers/participants are not permitted private use of the vehicles. All maintenance work, except service covered by warranty, is done in State equipment shops. The equipment shop pays all operating costs and bills the van account on a mileage fee basis to recover costs.

The State Insurance Office provides general and liability insurance coverage for the program through the State's master policy. The premiums are assessed pro rata to individual departments based upon vehicle inventory. The liability coverage is \$2 million and general coverage is \$50 million. The State Insurance Office also acquired property damage insurance to protect the lessor against damage to the original three leased vans.

Caltrans has been instrumental in the passage of State legislation related to ride-sharing. The first piece of legislation (AB 918, 1975) deregulated vanpools provided that the vanpool has a seating capacity of 15 passengers or less, and the driver is traveling from place of residence to place of employment. It also provided funding for statewide ride sharing programs. Bill AB 3267, 1976 permits the use of state-owned cars and vans on a full reimbursement basis, and Bill AB 4129, 1976 removes 10-12 passenger vans from the bus classification on safety regulations.

In August 1979, CALTRANS announced a new California Statewide Vanpool Master Contract with Vanpool Services, Inc., a subsidiary of Chrysler Corporation. CALTRANS, through the local areawide commuter ridesharing programs, will promote and organize vanpools and Vanpool Services, Inc. will furnish the vans and provide fleet management. Vanpool Services, Inc. is not requiring a CALTRANS guarantee or contingency fee for the vans in this program. CALTRANS will pay up to \$14,000 per year of \$28,000 for a maximum of two years for floor planning of the vans, i.e., paying the interest, etc. on vans waiting to be assigned to a vanpool, so that each new vanpool does not have to wait 1-3 months for delivery of a van from the factory. Before a van is placed in service, at least 12 passengers must agree to pay a fare and the vanpool driver can terminate his or her commitment with 90 days prior notice.

For further information concerning these vanpool programs, contact Jack Derby, California Department of Transportation, 1120 N Street, Sacramento, California 95814, (916) 445-3087.

CENEX  
ST. PAUL, MINNESOTA

In October 1973, Cenex (Farmers Union Central Exchange, Inc.) launched its Commute-A-Van program in response to the energy crisis. The program began with 2 vans, and has since expanded to include 17 vans that transport approximately 160 of the company's 620 St. Paul employees. A vanpooling program has also been initiated at Cenex's Laurel, Montana refinery consisting of one van in operation.

Vanpooling has released approximately 120 parking spaces in an already overburdened facility. In addition, the company has found the vans to be helpful in attracting employees to a relatively isolated area.

Each van operates separately. Fares are established individually by each group based on zones rather than port-to-port, and include the fixed and operating costs of the vans. Fares are collected on a daily basis, due to changes in participants' work assignments, vacations, etc. Both drivers and other company employees are permitted to use the vehicles on non-business days at a minimal cost.

Employees are equally enthusiastic about the program. Many have realized substantial savings over their previous mode of commuter travel. Also, the flexible mileage and passenger requirements are strongly appreciated. As a result of this enthusiasm, the company plans to expand vanpooling in accordance with employee demand.

For additional information on Cenex's Commute-A-Van program, contact Hal Schueble, Cenex, P. O. Box 43089, South St. Paul, Minnesota 55164, (612) 451-5468

CHRYSLER CORPORATION  
DETROIT, MICHIGAN

In response to rising fuel costs, increasing traffic congestion, and lack of parking space, Chrysler Corporation initiated a pilot vanpool program in mid-1974 at its Syracuse, New York plant. The company has expanded the program to include 140 vans at its Detroit, Michigan headquarters and Canada.

The van program is operated on a break-even basis, with fares calculated on the assumption of 9 paying passengers. As opposed to most other vanpool operations, Chrysler includes administrative expenses in its cost estimates. The fares per passenger range from \$24 to \$44 per month. The insurance is a self-insured policy for collision, liability is under the general corporate policy and physical damage coverage is under a policy which costs approximately \$20 per month per van.

Recognizing the important role played by the driver/coordinators in ensuring the success of the commuter van program, the company believes that they should be carefully selected. Drivers are required to have good driving and work records and obtain the recommendation of their supervisors. In return for their services in driving and maintaining the vans and keeping financial and passenger logs, the drivers ride free, retain the fares of the 10th and 11th paying passengers, and are permitted use of the vehicles during nonbusiness hours.

In addition, Chrysler believes that only with the full support of top management can a vanpool project achieve any degree of success. Promotion of vanpooling, therefore, includes departmental meetings, mailings to employees, display areas, and the encouragement by top officials. In order to further increase the attractiveness of vanpooling, Chrysler also provides the vans with preferred parking spaces.

According to the Chrysler Corporation, vanpooling offers employees convenient, reliable, low cost transportation while enabling the company to help improve the quality of life in the communities in which its plants are located. As a result, further expansion of the program is anticipated.

For additional information on the Chrysler Commuter Vanpooling Program, contact Tom McDonald or Herbert Wood, Chrysler Corporation, P. O. Box 1919, Detroit, Michigan 48231, (313) 956-5351.

COMMUTER COMPUTER  
LOS ANGELES, CALIFORNIA

Commuter Computer began its vanpool project in April 1976 with 20 leased vans. As of April 1979, the program has 137 vans in operation including both the 12-passenger vans and the 15-passenger vans as well as some 10-passenger maxi-vans with airline-type reclining seats, luxury interiors and individual stereo earphones.

The vanpool program is a multi-company effort utilizing the services of Commuter Computer, an area-wide carpool matching service and non-profit corporation, which represents a unique combination of the private and public sectors. Each of the businesses in downtown Los Angeles were contacted by a representative of Commuter Computer who explained the availability of the program and explored possibilities of fare incentives for employees on the part of participating firms.

An agreement to underwrite 100 percent financing of the first 20 vans for the pilot program was made through Crockerbank Lease plan. The administration of the maintenance program is handled by the lessor. This plan encompasses all aspects of fleet cost management, from the control of operating expenses, supervision, processing and payment of all bills to the reporting of all expenses on a per mile, per month and cumulative basis. The total cost is billed to the Vanpool Program at the end of each calendar month.

The fares range from \$58 for a 30-mile round trip to \$79 for a 100-mile round trip. Vans travel an average daily distance of 70 miles round trip for a fare of approximately \$70 per month. ARCO permits their vanpoolers to apply the cost of the free parking space they are entitled to towards the monthly vanpool fare, thus substantially reducing the monthly fare. As an incentive, each driver who maintains a full van for a month is awarded \$30.00. Insurance is carried through Travelers Insurance Company for a premium of \$104.00 per month per van.

Experience in this project, utilizing high cost luxury vans, indicates that such a vanpool operation would be more successful if luxury vans were optional and the standard 12-15 passenger van was the mainstay of the fleet.

For additional information concerning the Commuter Computer vanpool program contact Arthur Schreiber, President, Commuter Computer, Los Angeles, California 90012, (213) 380-RIDE.

CONTINENTAL OIL COMPANY (CONOCO)  
HOUSTON, TEXAS

The Continental Oil Company began its commuter van pilot project in March 1975, as a program to conserve energy resources. The program began with the purchase of three 12-passenger vans and now consists of 189 vans, transporting commuters over daily distances of between 20 and 70 miles. CONOCO has vanpools at 22 sites in 10 states, including a number of small employment sites. For example, at Carrizo Springs, Texas, a site has 10 of 14 employees in a vanpool and in Casper, Wyoming, 30 of 78 employees are vanpooling.

Pool coordinators for the program are chosen by a selection committee on the basis of driving and work records as well as attitude toward the program. Viewing the coordinators as the essential factor in ensuring the success of the van program, CONOCO has delegated them with major responsibility for the pool operation: driving the van, maintaining passenger levels above 8, keeping the vehicle clean and serviced, training back-up drivers, collecting fares, keeping vanpool records, and providing off-street parking for the van. In return, the drivers ride free, and have personal use of the van at a variable mileage charge depending on distance driven each month.

The CONOCO commuter van program is operated essentially on a break-even basis, although the company does absorb all administrative costs. CONOCO is phasing out the driver incentive of paying the driver the 10th, 11th and 12th fares in favor of reduced rider fare. If there are 10 riders, the total cost is divided by 10 rather than 8, thus reducing each rider's fare.

The vanpool program has met with the overwhelming approval of management and employees alike. According to a survey of the program, 93 percent of the participants have found vanpooling to be equal to or more convenient than their previous mode of travel to work. Thirty percent indicated that they plan to sell a car or not buy an additional one as a result of the program.

CONOCO has been a leading promoter of the vanpool concept among other employers, and has assisted many employers in starting a vanpool program. The company intends to continue expanding vanpooling both in Houston and at its other United States locations.

For additional information on the Continental Oil Company approach to vanpooling, contact William Fortune or Ms. Toni Nelson, Continental Oil Company, 5 Greenway Plaza East, Houston, Texas 77001 (713) 965-1484.

CORNING GLASS WORKS  
CORNING, NEW YORK

In an effort to conserve energy, reduce employee commuting costs, and to minimize parking space needs, the Corning Glass Works initiated its vanpool program in mid-1974 with the purchase of three 12-passenger vans. Since that time, the program has expanded to 17 vans.

Differing from other van programs, the drivers for Corning vanpools select their own passengers and establish the routes. However, the company has set a minimum of 10 passengers per vehicle, and 15 miles per route. A sliding rate scale is used to determine fares. The minimum rate is \$1.00 per day and the maximum is \$1.50 per day depending on mileage.

Fares are collected by means of payroll deduction, it being the opinion of the company that drivers should be free to concentrate on the operation of the van. In return for his services, the driver receives a free ride and is permitted to use the van for personal purposes at no charge.

Corning provides an additional incentive for employees to vanpool by offering preferred parking spaces. Both the management and its employees view the van program as a continuing success and the ridership figures support this viewpoint. For the minimum 15-mile one-way route, each rider saves approximately \$650 per year on vehicle operation and maintenance costs alone. Also, the company has found that each van frees approximately seven spaces in an overcrowded parking facility. To date, the program has experienced no regulatory restrictions.

For additional information on the Corning Glass Works vanpool experience, contact Dale Culberson, Corning Glass Works, Houghton Park A-3, P.O. Box 158, Corning, New York 14830, (607) 974-8773.



ERVING PAPER MILLS  
BRATTLEBORO, VERMONT

In 1972, when Erving Paper Mills opened a new plant in Brattleboro, Vermont, the company was faced with a situation in which 150 of the 300 Brattleboro employees were forced to commute a minimum of 25 miles from their residences near the old Erving, Massachusetts, facility. Thus, in order to reduce the cost of commuting for employees, prevent the loss of many highly skilled personnel, and help reduce the company's use of fuel and impact upon the environment, the company began to explore the possibility of instituting a vanpool program. It did so the following year with the purchase of 6 vans.

The operation of Erving Paper's van program is of special interest because the vehicles are used to serve the plant on a tri-shift basis. Most of the company's vans are used for two or three shifts each day, depending upon the residence and shift assignments of employees interested in pooling. Despite this heavy use of the vans, maintenance has presented little problem.

The average route is about 35 miles one way, with employees paying \$1.50 a day for the commuter van service.

The company is entirely satisfied with the program. Employees enjoy the convenience of the vanpools, and have consequently continued working for Erving Paper Mills despite the long commuting distance. An estimated 300 gallons of gasoline are saved each week as a result of the vanpooling. In addition, the company is pleased to have been the recipient of Industry magazine's 1974 "Ecologue Flag" for having made the most important contribution by a Massachusetts company to the improvement of the environment.

For additional information on the multi-shift van system of Erving Paper Mills, contact John Provost, Erving Paper Mills, Vernon Road, Brattleboro, Vermont 05301, (617) 544-2711, Extension 260.

GENERAL MILLS, INC.  
MINNEAPOLIS, MINNESOTA

Following 3M's example and concern about a severe lack of public transportation during a period of rising fuel prices, General Mills began its commuter van program on January 1, 1974. The initial purchase was 5 deluxe 12-passenger vans; within 3 months the fleet was expanded to 10 vans. General Mills now has 22 vans serving over 15 percent of the company's 1,800 employees.

General Mills considers the pool coordinators to be the key to the successful vanpool program. The company selects its coordinators according to interest in the program and past driving and work records. In addition, coordinators are required by Minnesota law to obtain a "Class B" chauffeur's license. Each coordinator is delegated the responsibility of driving and maintaining the van, keeping expense and performance records, and handling billing and scheduling matters. As an incentive for achieving maximum ridership, the pool coordinator is permitted to keep the fares from the 10th and 11th passengers as his profit, or use the money to reduce the fares of his riders.

In order to minimize operating costs and maximize van use, General Mills encourages the utilization of the vans throughout the day. Arrangements have been made to use a vehicle for shuttle service between buildings at the company's location. Free transportation is available to commuter van participants for medical appointments and emergencies, and income obtained from the business use of the vans furthers the reduction of commuter costs. Pool coordinators are permitted use of the vans during nonbusiness hours at a minimal cost of 10 cents per mile.

In the opinion of General Mills, vanpools are attractive to both the company and employees because of their reliability, flexibility, low cost, and convenience. Since 44 percent of the vanpool participants formerly drove to work alone, the program has significantly reduced traffic congestion near the office and has eliminated the need for approximately 100 parking spaces. The program has also provided the company with a broader labor market by opening employment to those who previously lacked the necessary transportation. Perhaps most important, vanpooling has had a marked positive effect upon employee morale and work efficiency, causing employees and company alike to view the program as an overwhelming success.

For additional information on the General Mills commuter van program, contact Becky Berthal, General Mills, Inc., P.O. Box 1113, Minneapolis, Minnesota 55426, (612) 540-7152.

GOLDEN GATE BRIDGE  
HIGHWAY AND TRANSPORTATION DISTRICT  
SAN FRANCISCO, CALIFORNIA

In September 1975, as part of its promotion of vanpooling among Bay Area companies, localities and individuals, the Golden Gate Bridge, Highway and Transportation District (GGB), organized a vanpool for its own employees, transporting an average of 9 passengers about 92 miles round trip per day.

In an effort to expand the use of vanpools among commuters traveling in the Golden Gate corridor, GGB initiated the Vanpool Demonstration Project in September 1977 with funding from the Urban Mass Transportation Administration (UMTA). Thirty-five vans were purchased under the UMTA grant--17 luxury 10-passenger vans with airline reclining seats and 18 deluxe 12-passenger vans. Even though the fare for the luxury van is \$10 more than the deluxe van, for an average 80-mile round trip, the luxury van has proven to be more popular with commuters.

Insurance costs are high. Coverage has been obtained through SAFECO and other companies appear now to be interested in providing insurance coverage. Rates originally ranged from \$1,187 to \$1,415 per year and were based on location of garaging, not distance of commute trip, and on the cost of the van. The first year premium, however, included startup costs and premiums have recently been reduced by about \$150.

Drivers are guaranteed 2 months' use of a van after which they are encouraged to purchase their own to continue existing vanpools. While the most effective marketing tool appears to be the vans themselves since the program name and office phone number are printed on the vehicle, a variety of techniques have been instigated, such as: distribution of project flyers once each quarter as vehicles pass through the Bridge Toll Gate; quarter page newspaper advertisements with return coupons; placement of vanpool information kiosks in public places; shopping center van displays; free demonstration rides; and issuing press releases on the formation of new groups. Vanpools pay no toll fees.

GGB is concentrating on full capacity use of the vans and plans to keep three in reserve for back-up purposes if needed. Opinions of participating riders and drivers have been very favorable towards the program. A slide presentation has been compiled incorporating results of taped interviews with individual commuters.

For additional information about the van program and promotional campaign of the Golden Gate Bridge, Highway and Transportation District, contact John Shellenberger, Box 9000 Presidio Station, Golden Gate, San Francisco, California 94129, (415) 457-3110.

GULF OIL CORPORATION  
HOUSTON, TEXAS

In the effort to promote energy conservation and to complement the company's carpooling matching program, the pilot phase of a company-wide vanpool program began in November 1977 with 22 vans at the Houston suburban Accounting Center. (A 2-van system has been successfully operating at Gulf's Research Center in Harmarville, Pennsylvania since 1974).

Following the overwhelming success of the pilot phase, the vanpool program was expanded to the downtown Houston complex, then to 12 company locations in several States and is still growing. From its inception, Gulf's program was constructed and presented as a voluntary and self-sustaining commuting alternative that would complement other available modes. While the company provides the administration, insurance, and backup vehicles, all vehicle leasing costs and operating expenses are recovered from the vanpool riders through monthly fares. Driver coordinators pay no fare and have personal use of the van at operating costs.

Drivers are screened for good driving record, dependability, medical approval to drive, and are trained in defensive driving. Proper orientation and preparation of a prospective vanpool gets a new group going smoothly and confidently.

Preventive maintenance is considered essential and each vehicle's prescribed 6,000 mile/6 month service is performed at an approved service facility. All bills for service, parking, lease, fuel, etc. are sent to the company for payment and processing. Drivers obtain fuel at retail outlets, using an assigned credit card. All expenses and revenues, as well as mileage, are tracked by individual vehicle and analyzed as to performance and cost-effectiveness.

A by-product of the vanpool promotion has been the formation of carpools in the areas with inadequate concentration for a van. The employee acceptance and commitment to the ride-share effort has been gratifying. Bolstered employee morale, civic and company pride, along with many other real yet intangible benefits are attributed to the vanpool program.

For additional information on Gulf's vanpool program, contact Mr. Ken Sawicki, Gulf Oil Corporation, P. O. Box 2001, Houston, Texas 77001, (713) 750-3498.

HOFFMANN-LAROCHE PHARMACEUTICALS  
NUTLEY, NEW JERSEY

A poor public transportation system and the onset of the energy crisis originally prompted Hoffmann-LaRoche to search for alternative methods of employee transport--including carpools, subscription buses, company bicycles, and walking. The vanpool program actually began with a brain-storming session resulting from a television report on the 3M vanpooling project. During spring 1974, the company initiated an aggressive promotional campaign. Presentations were made to employees during lunch and questionnaires were distributed.

The program became operational with the purchase of 3 vans in June 1974; there are now 59 vans serving 700 of the company's 6,000 employees. The vanpool program is operated on a cost-sharing basis, with fares for the various routes ranging between \$20 and \$33 per month. The driver's share of the costs is considered to be offset by his efforts in coordinating the pool, and each driver is permitted to use the van on weekends at a cost of 5 cents per mile. The New Jersey Public Utility Commission considers the vans to be passenger vehicles and not subject to regulation.

The 12-passenger vans are fully equipped and are leased with an option to buy. This method of securing vans appears especially well-suited for companies unwilling to make a large capital investment at one time or uncertain about the possible success of vanpooling at their location.

There is strong agreement at Hoffmann-LaRoche that vanpooling is at the company to stay. Both management and the employees are very enthusiastic about the program. The reduced costs and tension in commuting have contributed to a significant boost in employee morale. Traffic congestion in the plant vicinity has also been reduced. Hoffmann-LaRoche has even sponsored seminars to encourage other area companies to begin vanpooling.

For additional information on the Hoffmann-LaRoche commuter van program, contact Robert Wald, Hoffmann-LaRoche Pharmaceuticals, 340 Kingsland Street, Nutley, New Jersey 07110, (201) 235-3898.

KNOXVILLE COMMUTER POOL  
KNOXVILLE, TENNESSEE

The City of Knoxville Public Transportation Brokerage Service Project, Knoxville Commuter Pool (KCP), was a demonstration as well as research project co-sponsored by the Urban Mass Transportation Administration, Tennessee State Department of Transportation and the City of Knoxville. The University of Tennessee Transportation Center was responsible for the implementation of the project. The objective was to establish an operational organization that would promote the greatest possible utilization of transportation vehicles both public and private through the brokerage approach throughout the metropolitan area.

Acting in its broker capacity, KCP established a vanpool lease operation in order to promote the employee/owner operator concept. After June 1, 1977, KCP began offering its leased vans for sale to their respective drivers. Negotiations for approval of a 13C agreement with the local transit union, allowing KCP to sell its vanpool fleet to the drivers, began in June 1977 and was signed in September 1977. A new organization, known as the Knox Area Vanpool Association (KAVA), was formed offering all the benefits of a fleet operation to private vanpoolers. KAVA members are provided with free administrative services, including utilization of the computer matching system. They are required to have membership cards, prepare quarterly reports, stay active in the association, and display KAVA stickers on their vans.

Discounts ranging from 5 to 20 percent are given to KAVA members, upon presentation of their membership card, by approximately 40 businesses in the Knoxville metropolitan area on the purchase of tires, parts, maintenance and other services not only for their vans but for their personal vehicles.

Although owner-operators must arrange for their own service and maintenance, KAVA does provide a back-up vehicle for members at a fee which covers capital and operating costs for the van while in use. Currently, KAVA has only one back-up van which is not always sufficient to serve the entire fleet, especially during the summer months when many owners choose to take their vans on vacation. To overcome these peak demand periods, vans are leased from commercial dealers on a weekly or monthly basis.

Financial institutions are often reluctant to approve van purchase loans, because of the high cost when obtaining a new vehicle. In November 1977, KCP entered into a contract with the Tennessee Department of Transportation to administer a Vanpool Abort Program for the East Tennessee region. This Abort Agreement guarantees lending institutions 90 percent of the van purchase price if 100 percent financing is made available to the applicant.

KAVA has established minimum insurance specifications, and has an agreement that if an owner plans to abort, the banks and the credit unions will notify KAVA so an effort can be made to provide assistance to the member to keep his vanpool. Approximately 40 members have participated in the Abort Program guarantee.

Administrators of the KAVA program feel it is important for all involved parties to work together for the successful operation of a vanpool. Further, the recommendation has been made that to improve the progress and growth of vanpools, drivers should be allowed to earn a small amount of extra money because of the responsibility and effort involved. It is KCP's goal to build the KAVA vanpool fleet to approximately 300 by the end of 1979.

The Knoxville Commuter Pool program is effectively showing that there are many diverse public transportation needs but that riders desire service tailored to their specific needs. It has shown that there is no shortage of drivers, that demand exists and grows rapidly once consumers have confidence in the concept, that there is an abundance of vehicle capacity and willing entrepreneurs if institutional barriers can be eliminated. Also, the KCP program shows that it is more important to coordinate transportation services to meet individual travel rather than to coordinate the planning of a specific type of transportation system.

For additional information on the Knoxville Commuter Pool, contact John Beeson or Frank Davis, Transportation Center, University of Tennessee, Knoxville, Tennessee 37916, (615) 637-RIDE.

MASON & HANGER - SILAS MASON CO., INC.  
AMARILLO, TEXAS

The Pantex Vanpool Program began in July 1977 with one 15-passenger van serving a group of employees from Clarendon, Texas. During the first month, 6 more vanpools were formed and by the end of the year Pantex had 22 vans in operation; now there are 31.

The concept of owner-operator vans spread quickly throughout the plant. New rider groups were formed from contact with commuters who had expressed interest in ridesharing by completing a questionnaire or by telephone. The program was also reviewed in the company monthly bulletin. Grammar schools were used as the focal point to identify the origin of vanpools.

Financing of van purchases is essential for employee-operated vanpools. Initially, it was possible to negotiate with the Pantex credit union for interest rates 1/2 percent lower than new car rates and longer financing periods, but with the tight money market, interest rates now are at the regular new car loan rate--10 percent on 100 percent of cost for four years. Before a loan can be secured from the credit union, eight passengers must also sign the application form, in addition to the driver, indicating they will participate in the program. If the original owner decides he wants to abandon the vanpool, he has the option of keeping the van and reverting to a normal new car loan or selling the vehicle to another driver. The vans probably will not last four years due to heavy use, but it should be possible to trade them in for newer ones when the remaining principal on the loan is lower than the van's resale value.

Insurance is a key element of vanpooling operations. For Pantex employees, it was a problem in the beginning because almost every company declined them or wanted extremely high premiums. Fortunately, State Farm Insurance had regulations dating back to 1974 to insure vans as private passenger vehicles and, by demonstrating non-profit pooling operation (even when financing and maintenance are included), vanpoolers could qualify for lower rates and not fall into another regulatory category. In 1977, the insurance premium was \$300 per year; for the 1979 vans, it is \$360 per year. A few of the vans have similar coverage through Allstate, but the State Farm arrangement is so effective that it can be initiated virtually by a telephone call. The vanpoolers are not covered by disability insurance or workman's compensation because they are private arrangements similar to carpools.

The average Pantex vanpool travels 35 miles one way. The fare averages \$1.75 per day. The fare rate is established by the driver who identifies all of the costs and discusses them with the riders. The complete expense of the van and its operation is paid for by the vanpool if it averages 10 passengers per day. That is the main reason for encouraging a 15-passenger vehicle; then a daily average of 10 passengers is easily accomplished. Drivers ride free and are responsible for cleaning and washing the van. Two back-up drivers are designated for each van and in some cases, are given two days free transportation for each day it is necessary to drive.



The organization and operation of vanpools has resulted in the gain of 200 parking spaces at the plant. This situation has proved to be of great benefit to the company by not having to provide additional parking lots to accommodate extra plant employees recently hired at the plant. For each van in operation, Pantex indicates a yearly savings of approximately 8,000 gallons of fuel.

Additional information may be obtained by contacting Ms. Melynie Greaser, Vanpool Coordinator, Mason & Hanger - Silas Mason Co., P. O. Box 30020, Amarillo, Texas 79177, (806) 335-1851, Extension 2461.

## MICHIGAN EMPLOYEE VANPOOL PROGRAM

The State of Michigan Employee Vanpool Program was developed and is administered by the Michigan Department of State Highways and Transportation on behalf of all State employees. The first State Employee Vanpool Program (SEVP) vanpools began service in April 1977 and by the end of 1978 the number of vanpools had grown to 48. For 1979 the Michigan State Vanpool Program is focusing on assisting other State sites and other organizations in starting vanpool programs throughout the State.

In November 1976, the vanpooling concept was introduced to 15,000 Lansing area State employees, with the distribution of a survey form. The form explained the SEVP and outlined how interested employees could participate. Arrangements were made with the Department of Management and Budget to provide, on a priority basis, reserved parking spaces for vans.

Vehicle specifications were developed and a leasing company was selected, through competitive bidding, to provide the vehicles under a 48-month open-end lease. When the 48-month period has expired, the lease is picked up and the van is sold on the open market. The vans have a predetermined residual value of 15 percent which is virtually guaranteed (i.e., a \$10,000 new van should bring \$1,500 at auction after 48 months). If used vans sell for more, SEVP receives the difference; however, if they sell for less, SEVP must make up the difference.

SEVP drivers assume all maintenance responsibility for the vans, having only a financing arrangement with the leasing company. In most cases, the vehicles are taken to the original dealer for repairs and maintenance; however, the driver may make the decision where the van is taken which might be to a reputable mechanic in an area closer to home. A state credit card is provided for gasoline purchases and maintenance repairs.

Fares are designed to fully recover all capital and operating expenses. They are based on nine fares per van and are collected on a bi-weekly basis through payroll deduction. The driver receives free transportation to and from work, plus personal use of the van at 10¢ per mile. In September 1978, as an incentive to keep vans filled, a plan was initiated to give drivers 60 free miles for personal use every two weeks for each passenger added over the base of nine. The free mileage is not cumulative and either must be used or lost within the time period specified. A trip log indicating passengers' names must be completed and turned in every two weeks. If it exceeds nine, then the Finance Department knows that free mileage is due.

Insurance was a major concern. Numerous discussions were held with the Department of Management and Budget and representatives of the company that insures 13,000 other State vehicles. The insurance company agreed to insure the vans at the regular fleet rate at a cost of approximately

\$200 per year per van. The decision was made after review of the driver selection criteria and the proposed operating agreement with the driver.

By the end of 1978, SEVP had 45 vans in service, with 3 back-up vehicles, for a total of 48. There were 465 persons enrolled in the program, for an occupancy rate of 10.3 passengers per van. The average fare is \$1.75 per day and the average round trip is 64 miles.

The Department of State Highways and Transportation is available to assist organizations which may have an interest in vanpooling. An additional person has been hired to work on new initiatives and a vanpool task force has been set up in southeast Michigan for the Detroit area. SEVP coordinates its activities with the Capital Area Transportation Authority (CATA). Proposed vanpool locations are discussed with CATA to assure that directly competitive services are not initiated. Further, SEVP strongly encourages the development of vanpool expertise within Metropolitan Planning Organizations (MPO), and suggests that each area develop a work program to assist local employers in establishing ridesharing programs. Federal funding is available to MPO's for this purpose. Extensive vanpool promotional activities are also planned for other large urbanized areas in the State of Michigan, such as Grand Rapids and Flint.

Recently legislation deregulating vanpools from Public Service Commission regulations was passed. In addition, proposed legislation exempting vanpool programs from the gasoline tax has been introduced. For the purpose of this particular legislation, "vanpool program" is defined as 3 or more vans.

Additional information may be obtained by contacting Mr. James Roach, Manager, Mass Transportation Planning Section, Michigan Department of State Highways and Transportation, P.O. Box 30050, Lansing, Michigan 48909, (517) 373-1880.

3M COMPANY  
ST. PAUL, MINNESOTA

In April 1973, the 3M Company initiated the first company-sponsored vanpool program in the United States. Beginning with a pilot program of six 12-passenger vans, the Commuter-A-Van Program has grown as of July 1979 to include 130 vans serving 5 sites in 3 of the States and 1 site in Canada.

As a large suburban complex with a growing workforce, 3M was faced with the prospect of expending large sums to enlarge the capacity of its parking facilities. In addition, traffic congestion near the 3M Center had presented a severe problem for some time due to limited access routes. In an effort to resolve these difficulties, the company participated in an area-wide home-work travel survey in 1970. The result was the institution of a staggered hours ride-sharing project, including company-sponsored vanpools.

In April 1974 and again in August 1976, a complete questionnaire survey was made of the van program participants. The surveys revealed that almost 25 percent of the riders use the vehicles 4 days or less each week. However, the convenience of the van service and the many accompanying benefits (such as free preferential parking) has led over 97 percent of the participants to express their intention to continue using the van as a means of commuting.

In August 1978, an innovation to 3M's commuter program was instigated in the form of a joint demonstration project, Share-A-Van, between the 3M Company and the Minnesota Department of Transportation (DOT) for a one-year period with 2 vans. By hiring part time drivers at a nominal wage, two round trips are made by each van during each peak period. Drivers have use of the vans evenings and weekends. Approximately 60 passengers participate in the project for a \$13.00 monthly fare charge. It is estimated that the use of one van releases at least 20 parking spaces.

Due to the success of the demonstration project, the Minnesota DOT and 3M have agreed to continue and expand the Share-A-Van program; a number of vans are expected to be added in the near future. The Minnesota State Legislature has authorized special funding for para-transit activities and expects to expand the program. Large employers in the Twin Cities will be contacted and assisted by the Minnesota DOT in setting up Share-A-Van programs.

For additional information on the 3M Commute-A-Van Program, contact Robert D. Owens, 3M Company, 3M Center, St. Paul, Minnesota 55101, (612) 778-5190.

MODNAR  
ATLANTA, GEORGIA

Starting with the purchase of 1 van in January 1973, Modnar is now a public corporation, operating 12 vans in the Atlanta metropolitan area.

At present, Modnar offers daily commuter transportation from three suburban areas to the Atlanta business district. The corporation recognizes two classes of passengers -- regular and casual. Regular passengers have standing reservations and are charged a monthly fare of \$36.00 plus 60¢ per one-way mile. Also, on a reservation basis, weekly fares are available at the rate of one-fourth of the monthly fee. Casual riders are charged daily one-tenth of the regular monthly fare. Drivers of the vans ride free.

Established as a public service and with the intention of marketing vanpooling to area employers, Modnar does not operate as a profitmaking organization. Fares are calculated to finance half of the out-of-pocket costs of the van ride, and additional revenues result from the rental of vans to outside groups and the leasing of advertising space in the vans.

Modnar has applied for and received a certificate of public convenience and necessity to operate as a common carrier to the 9-county Atlanta area. Modnar is now authorized to run vanpools in nine counties but the trips must be greater than 10 miles one way and no pools can begin and end in a county which is served by the regular mass transit system. Modnar believes that this approach has the potential for yielding the highest van utility rate because it does not limit participation to the employees of a particular company. Thus, such a van program appears well-suited for areas containing a number of small companies in close proximity.

For additional information on Modnar and the common-carrier approach to vanpooling contact Dr. Stephen Dickerson, School of Mechanical Engineering, Georgia Institute of Technology, Atlanta, Georgia 30332, (404) 894-3255.

MONTGOMERY WARD  
CHICAGO, ILLINOIS

In October 1974, Montgomery Ward responded to the energy shortage with the initiation of its commuter vanpool program. The company began with six 12-passenger vans leased from their regular leasing company, and has since expanded the program to include 14 vans transporting approximately 150 Montgomery Ward employees.

Previous to beginning its vanpool program, the company requested clearance from the Federal, state and local commerce and transportation agencies. This process was time consuming--taking 6 months--but clearance has enabled the program to operate free of any legal or regulatory restrictions.

Montgomery Ward's vans travel over a variety of urban and suburban routes, ranging from 15 to 45 miles in length. Rider fares finance all costs except for administrative overhead, but the company anticipates that it may become necessary to include this in the fare calculations as the program expands. As in other van programs, the pool coordinator rides free, keeps the fares of the 9th and 11th passengers, and is permitted personal use of the van at a charge of 8 cents per mile.

One major concern of the company is maintenance. Currently, the fleet administrator is responsible for ensuring that the manufacturer's preventive maintenance suggestions are performed. The van drivers obtain service for minor mechanical difficulties. Increased expenses due to major maintenance problems are anticipated during the later years of the van's life, and with it higher fares.

Both the company and its employees are delighted with the operation of the van program thus far. In addition, the company estimates that each van removes four automobiles from the road. Consequently, vanpooling is viewed as beneficial for employees as well as the public at large.

For additional information on Montgomery Ward's vanpool experience contact John Hunt, One Montgomery Ward Plaza, General Distribution, 5-South, Chicago, Illinois 60671, (313) 467-3606.

RALPH M. PARSONS COMPANY  
PASADENA, CALIFORNIA

In early 1974, the Ralph M. Parsons Company moved from Los Angeles to its new headquarters in Pasadena. Although only 10 miles away from its previous location, the Pasadena site was not well served by the metropolitan bus system which so many employees had used for commuting. In order to alleviate this problem, the company began its vanpool program in March of that year.

Initiated with 3 leased 12-passenger vans, the program now includes 35 vehicles serving approximately 400 of the company's employees each day. A minimum one-way route of 25 miles was established early in the program in order to ensure that the vans were available to those employees who would most benefit from pooling. Current routes range from 30 to 88 miles in length. In return for the service, riders pay a fare ranging from \$39 to \$75, covering a 20-day period.

The pool coordinators are required by the state to obtain a Class 2 (chauffeur's) license. The drivers are responsible for the entire van operation, including the securing of the necessary number of passengers. In return, the coordinators ride free and are permitted the free personal use of the vehicles. In addition to the special licenses, vans are required to carry certain safety equipment and must have special mechanical adjustments performed on the vehicle.

The vans, which are parked at a service station, save Parsons about 300 parking spaces at its overburdened parking facilities. Furthermore, the company found the van program to be an important factor in attracting a number of highly skilled people to the plant. The participating employees fully appreciate saving costs in commuting, while being spared the daily anguish of driving through heavy Los Angeles freeway traffic. As a result, the company anticipates the continued expansion of its vanpool program.

For further information on the Ralph M. Parsons Company program, contact Gail Arnette, Ralph M. Parsons Company, 100 West Walnut, Pasadena, California 91124, (213) 440-3037.

POLISAR, LTD. COMMUTER VAN COOPERATIVES  
SARNIA, ONTARIO, CANADA

In 1966, the first commuter cooperative began operating at the Canadian company of Polisar, Ltd. Since that time, seven additional commuter cooperatives have been formed to expand the service to 16 vans carrying a total of 500 workers daily. It is the associations rather than Polisar which own the vehicles. The commuter associations are nonprofit and generally have one van which transports 30 to 35 members on three shifts. However, some of the commuter groups, such as the North End Commuters Association, have grown to include over 100 members using three vans.

Associations were initiated due to a scarcity of parking facilities at Polisar and concern about air pollution. In order to join a van association, employees are required to pay a minimum initiation fee, as well as join the Polisar Credit Union to allow for deductions of the van fares from their paychecks. Through their fees members become part owners of the van. The members also elect officers who administer the van program on a daily basis.

The vanpool program at Sarnia is unique in that the vans are utilized for three shifts per day. Because members' shifts may change quite frequently, there is no one permanent van driver. Instead, all members are required to drive when necessary, the particular drivers for the day being determined by who lives closest to the driver on the next shift. Each member has a plastic disc displaying his name and address, which he places on the appropriate peg of a board located in the van. Through this method the participants are able to indicate the next time they will be commuting. The route for a particular shift is therefore determined by the driver by putting the disc from the proper peg in location order. Members are then picked up at their doors and driven to a special parking place at Polisar. The van is left at the space for the shift getting off from work at that time. After dropping the new passengers off at their homes, the driver parks the vehicle in the driveway of the driver for the following shift, and walks home.

The commuter associations obtain vehicle maintenance in a number of different ways. While some groups have designated one person as being responsible for securing fuel and repairs, others have the vans fueled and serviced at regular intervals. Finally, some associations with relatively compact pickup areas have the vans dropped off at a local gas station upon completion of the homebound route. The station checks fuel and maintenance during the interim period, and the driver for the next shift picks up the vehicle there.



By using the van for three shifts, 7 days a week, the commuter cooperatives are able to minimize costs and members fees. As a result, the member in an average club of 30 to 35 participants pays a weekly fee of about \$3.00, with money left over at year's end being returned. The multi-shift method has worked well, and the associations reimburse members for expenses incurred because of any mixup. In all, van riders find the service to be both economical and convenient and are generally pleased with the program.

For additional information on the Sarnia commuter van cooperatives, contact Frank Hubbard, Polisar, Ltd., Sarnia, Ontario (519-337-8251), or Tom Deveraux, 1151 St. Laurent Drive, Sarnia, Ontario.

PRUDENTIAL INSURANCE COMPANY OF AMERICA  
NEWARK, NEW JERSEY

Introduced to the vanpooling concept by literature on the 3M experience, Prudential Insurance decided that such a program might be an excellent means for them to reduce fuel consumption and vehicle emissions. Thus, in July 1975, the company purchased the first van of its current 202 vehicle vanpool program, serving 18 sites in 8 States.

The company's 12-passenger vans provide door-to-door service for employees, transporting them the 25 to 35 miles to one of Prudential's satellite offices. The Prudential vanpool program is unique in that it involves "reverse" commuting, i.e., picking up employees in the City of Newark and taking them to suburban locations. Vanpooling is one of the benefits offered to new employees.

The vehicles, which are insured under a general fleet policy and self-insured for collision, are also used for general company business during the day. Like other van programs, Prudential operates on a break-even basis. However, the method fare calculation and collection used by the company is unique. At the end of each month, Prudential sends the van driver a bill based on "chargeable miles" (total van mileage minus company business use miles). The charge of 12 cents per mile, which must be paid by the driver within 5 days, finances all fixed and operating costs other than gasoline, which is purchased by the driver. It is the responsibility of the driver and passengers to determine the amount, method, and time of fare payment to the driver. Through this procedure, the company is able to leave such issues as fare payment during vacations to each pool group. This allows the fare system to achieve a degree of flexibility not permitted by the general fare collection procedure.

From its start, Prudential's vanpool program has received an extremely enthusiastic response. The riders' appreciation of the convenient commuter service and its corresponding effect on employee morale have impressed the program directors as well as non-pooling employees.

For additional information on the Prudential vanpool program, contact Ed Zazzarino, Prudential Insurance Company of America, Prudential Plaza, Newark, New Jersey 07101, (201) 877-7711.

RIDES FOR BAY AREA COMMUTERS  
SAN FRANCISCO, CALIFORNIA

With funding from the California Energy Commission (CEC) and the Metropolitan Transportation Commission (MTC), the California Department of Transportation (CALTRANS) started a new program for Bay Area Commuters (RIDES) in San Francisco. RIDES is being developed as a complete ridesharing brokerage service.

RIDES was incorporated as a private non-profit corporation in September 1977. The actual vanpool operation began in March 1978, and within a year had 70 vanpools operating with an average occupancy of 13.4 passengers. The start-up might have involved a larger number of vehicles but was limited by the fact that RIDES rapidly ran out of its first contingent of vans. An additional 33 vans were ordered, and experience indicates that an important factor to the success of the whole program is to have vans available when a group decides to form a commuting pool, rather than have them wait for two or three months for delivery of a van. RIDES expects to double the number of vanpools in 1979, as large employers encourage employee vanpooling, and luxury vans are offered.

A major component in the formation of RIDES involved the selection of a lease company and execution of a Master Agreement for lease of the vans. Selection was done by competitive bidding with three companies responding, and an agreement was signed in March 1978 with Van American Network, Inc. of Maryland, located in Washington, D.C.

The leasing company provides management and administrative services for a nominal charge of \$6/month per van. RIDES is required by Chrysler to maintain \$30,000 in a contingency and liability account, or \$500 per van whichever is greater, to guarantee that the lease will be paid on any and all fleet vans even if some vanpools default or disband. Specifically, the contract states that its purpose is to cover shortfalls in case residuals are set too high when vans phase out or otherwise terminate. Vans to be used are specified by RIDES and Van American provides them under an open-end lease of 50 months. When the 50-month period has expired, the lease is picked up and the van is sold on the open market. The vans have a predetermined residual value of 15 percent which is virtually guaranteed (i.e., a \$10,000 new van should bring \$1,500 at auction after 50 months). If used vans sell for more, RIDES receives the difference; however, if they sell for less, RIDES must make up the difference.

The basic van lease fee is established at the time the leasing company purchases it and is dependent upon the purchase price, financing and insurance rates, and estimated maintenance. A portion of the fee is deposited into an escrow account by the leasing company to cover van maintenance and repair costs which can be billed directly to the company by service facilities. Monthly and quarterly reports on individual vans containing maintenance expenses, gasoline used, mileage, etc. are compiled by the company. Periodically, RIDES sends the drivers reminders concerning oil changes and tune-ups.

Insurance for the vans is provided by the leasing company but RIDES retains the right on behalf of the company to obtain a better coverage if it is available. Responsible coverage for this private leasing arrangement is considered to be \$2,000,000 per vehicle accident. Primary medical coverage is on the first \$1,000,000 per person with excess coverage on the next \$1,000,000 but for a total of \$2,000,000. To date, no accidents have occurred.

A decision was made not to provide back-up vans for use if the primary ones break down, and so far none have been needed. Vanpoolers are expected to make arrangements for alternative transportation when vans are being serviced. However, back-up vans may be provided in the future when the fleet becomes larger. New vans are leasing for approximately 10 percent more than a year ago due to higher purchase prices, and financing rates which rose from 8 percent to 13 percent.

Due to a storage problem, when the first shipment of vans was received by the dealer for delivery to RIDES, permission was obtained from CALTRANS to park the vans along the roadway at the San Francisco-Oakland Bay Bridge toll plaza. Inexpensive decals containing the telephone number of RIDES were placed on each vehicle. Visibility of the vans by the many motorists using the bridge generated approximately 65 percent of the inquiries received from persons interested in forming or joining a vanpool.

Demonstrating luxury vans at employer presentations, workshops, and group meetings has been a particularly effective marketing technique. Permitting the establishment of vanpools at less than a full complement of riders has proven to be more helpful. The money spent on subsidizing a seat or two for a short time is a marketing expense that is very cost effective. Experience has shown that vanpools fill up rapidly once they are in operation.

RIDES is now working with several large employers in the Bay area, such as Lockheed, San Francisco Airport, Pacific Telephone, and Bank of America, who have expressed a desire to foster vanpooling activities among their employees.

For additional information the RIDES for Bay Area Commuters, Inc. program, contact Tobias Kaye, Executive Director, 100 Van Ness Avenue, San Francisco, California 94102, (415) 863-9588.

SPERRY FLIGHT SYSTEMS  
PHOENIX, ARIZONA

In response to the energy crisis in late 1973, Sperry Flight Systems began a search for a reliable and economical means of transporting employees to supplement their existing carpool program. Borrowing the idea of vanpooling from the 3M Company, the Sperry Sponsored Transit Program began in April 1974 with four 12-passenger vans and now has 14 at 3 Phoenix locations.

Operating on a break-even basis, fares are calculated to cover all costs of the program based upon a 9-passenger per van ridership. Each rider is required to pay for a full month (20 days), and is reimbursed for rides not taken if he or the driver fills his seat during the absence. Additionally, Sperry reimburses fares lost by a rider who has been requested to work overtime.

According to the Director of the Sperry Sponsored Transit Program, maintenance of the vans initially proved to be a problem. With each driver using different maintenance companies, Sperry had little control over the quality and costs of service. Additionally, pool coordinators found it necessary to take time off from work to obtain van maintenance because such service is unavailable in the Phoenix area during evenings or weekends. This situation was resolved, however, when Sperry signed an agreement with the company from which they lease their vehicles. The leasing company now arranges for the pick-up, repairs, and return of the vans. Sperry has found that such a procedure allows for more economical and efficient maintenance.

Through the operation of its van program, Sperry has found that vans are most economical when serving commuters living over 20 miles from the plant, with a waiting list of several people to ensure maximum ridership. Vanpools with one-way routes of less than 10 miles have not been successful because the financial and time costs of vanpooling at such distances is greater than that of driving alone or carpooling.

For additional information on the Sperry Sponsored Transit Program, contact Betty Dearling, Sperry Flight Systems, Mail System 101E, P. O. Box 21111, Phoenix, Arizona 85036, (602) 942-2311, extension 211.

TENNESSEE VALLEY AUTHORITY  
KNOXVILLE, TENNESSEE

In June 1974, in response to the energy crisis and traffic congestion in the Knoxville business district, the Tennessee Valley Authority (TVA) initiated a vanpool program in cooperation with the TVA Employees Credit Union. The program began with six 12-passenger vehicles and has since been expanded to a total of 399 vanpools at 21 sites in 3 states.

Initially begun as a demonstration project, the vanpool program has become an integral part of a comprehensive employee commuter transportation program that transports TVA workers to relatively isolated rural nuclear power plant construction sites, to congested central business districts in Knoxville and Chattanooga, and to outlying power production facilities. TVA has saved at least \$10 million by reducing the need for additional parking and highway facilities. The vanpool program has also reduced tardiness and absenteeism, increased employee morale and is credited with tripling minority employment on one major construction project.

The vanpool program is administered by three TVA Credit Unions, each having a Vanpool Project Committee. There are five members on each project committee--three appointed by TVA and two appointed by the respective credit union. The operation of the TVA program is particularly interesting due to legal restraints which prevent the agency from directly administering it. Federal Law (3) USC Section 638(a)(c) (2) forbids the utilization of Government-owned vehicles for transporting Government employees between their homes and place of employment. As a result, an agreement was drawn up between TVA and the TVA Employees Credit Union (a private agency) delegating the responsibility for leasing the vans and administering the program to the Credit Union.

The vans were originally leased from Hertz Rent-A-Car for a period of 2 years. To avoid downtown parking costs and to make full use of the vans, the credit union subleased the vans to several local Community Action Agencies between the hours of 8:30 A.M. to 4 P.M. Because of administrative and logistical problems, the subleasing arrangement had a nearly ruinous effect on the program. TVA soon realized that its policy of subleasing vans at operating cost was not a good financial decision, and terminated the agreement in January 1976. As the program expanded, the Knoxville Project Committee decided to purchase the vans instead of leasing them because of the significant monetary advantages of purchasing, such as fleet discounts and additional revenues from the resale of vans.

TVA operates a program to ease the transportation problems associated with construction of their Hartsville Nuclear Plant. Maximum traffic will occur during the middle 2-1/2 years of a 10-year construction period when there will be approximately 6,000 construction workers employed on the site. In August 1977, 49 percent of the 2,500 construction workers were traveling in vanpools and 5 percent in buses. Two years

later, 187 vans service the Hartsville plant.

The operating cost of each van is approximately 11¢ per mile. Fares are based on the round-trip mileage that each van travels ranging from \$14.25 to \$65.00 per month.

For additional information about the TVA vanpool program, contact Stanley Stokey, Tennessee Valley Authority, 301 West Cumberland Avenue, Knoxville, Tennessee 37902, (615) 632-4325, or FTS 856-4325.

TEXAS INSTRUMENTS, INC.  
DALLAS, TEXAS

As a result of Environmental Protection Agency transportation control regulations and a desire to conserve fuel and reduce pollution, Texas Instruments began its carpool program in March 1974. Part of a comprehensive ride-sharing effort by the company, the "Trans-I-Van" program is modeled after that of 3M. Initiated with the purchase of five 12-passenger vans, the program now operates 40 vehicles covering 4 sites within the State of Texas.

Texas Instruments publicizes its van program by word of mouth and through the use of a special poster displayed on company bulletin boards. With a 13,000 car lot, the company does not have a shortage of parking spaces. However, both carpools and vanpools do receive preferential parking.

Fares for the van program are established so that all fixed and operating costs will be financed at the end of 4 years. A consequence of this method of funding the program is that the company incurs a loss of new vans and a profit on old ones due to depreciation considerations. By evenly spreading the fixed costs of the van over a number of years, the fares are prevented from being artificially high during the first years of a pool.

Similar to most other van programs, drivers are required by the state to obtain chauffeur's licenses. In addition, Texas Instruments requires that a driver must have a good driving record, be a responsible individual, and be able to provide off-street parking for the van.

For additional information on Texas Instruments Trans-I-Van program, contact Emerson Miller, Texas Instruments, Mail Station 361, 13500 North Central Expressway, P.O. Box 225474, Dallas, Texas 75269, (214) 238-4879.



## UNIVERSITY OF CALIFORNIA

The University of California, San Francisco, instituted an employee vanpooling program in September 1975 with two 12-passenger vans. Since that time, the program has expanded to a total of 20 vans in operation.

The vans are used for commuting purposes and also are employed during the day as shuttle buses. The average commuting trip is 25 miles one way. The average fare is \$37 per month; however, each passenger's fare varies according to the distance traveled. As an incentive the driver of the van rides free but is not permitted private use of the van. Insurance is handled through the University of California umbrella insurance policy which costs a total of \$260 per van.

Additional University of California facilities located in Berkeley, San Diego and Livermore have a total of 73 vanpools in operation which are utilized by faculty members, staff and students. Each program is implemented on an individual basis.

For further information concerning the University of California (San Francisco) vanpooling program, contact James Wood, University of California, Business Services Offices, 1379 Third Avenue, San Francisco, California 94143, (415) 666-1511.



VANPOOL  
COST and FARE  
CALCULATION

# Vanpool Cost and Fare Calculation (1979)

	Sample	Your Van
<b>A Calculate the monthly fixed cost of a purchased vehicle</b>		
1	Cost of the Van Less salvage value (after 4 years) Equals depreciable value	\$10,000 <u>3,300</u> \$ 6,700 or \$140/month
2	Add other annual expenses License, registration, taxes Insurance Equals other fixed expenses	\$ 120 <u>+ 460</u> \$ 580 or <u>+\$ 48/month</u>
3	Monthly fixed cost (items 1 plus 2 above)	\$188 month
4	Add optional maintenance contract <b>Total monthly fixed cost</b>	<u>+\$ 45/month</u> <b>\$233/month</b>
<b>B Or calculate the monthly fixed cost of a leased vehicle</b>		
1	Start with your monthly leasing cost	\$240/month
2	Add maintenance contract (if not in lease)	+ \$ 45/month
3	Add insurance (if not in lease)	+ \$ 40/month
	<b>Total monthly fixed cost</b>	<b>\$325/month</b>
<b>C Calculate per mile operating costs for purchased and leased vehicles</b>		
1	Start with the cost of gasoline (80¢/gal ÷ 10 mi/gal) If you included a maintenance contract on A or B, gas is your only per mile cost. Otherwise:	\$0.080/mile
2	Add the cost of oil change, filter and lubrication	\$0.005/mile
3	Add other maintenance cost	\$0.025/mile
4	Tire costs over the life of the van	\$0.010/mile
	<b>Total operating cost/mile</b>	<b>\$0.12 /mile</b>
<b>D Calculate passenger fares</b>		
1	Start with each van's daily round trip distance	50 miles
2	Multiply this by your average number of workdays in a month	× 21 = 1,050 miles
3	Multiply this by your per mile operating cost from C	× \$0.12 = \$126/month
4	Add the van's monthly fixed cost from A or B	+ \$188 = \$314/month
5	Divide this cost by your breakeven number of passengers	÷ 9 = <b>\$35/month</b>

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