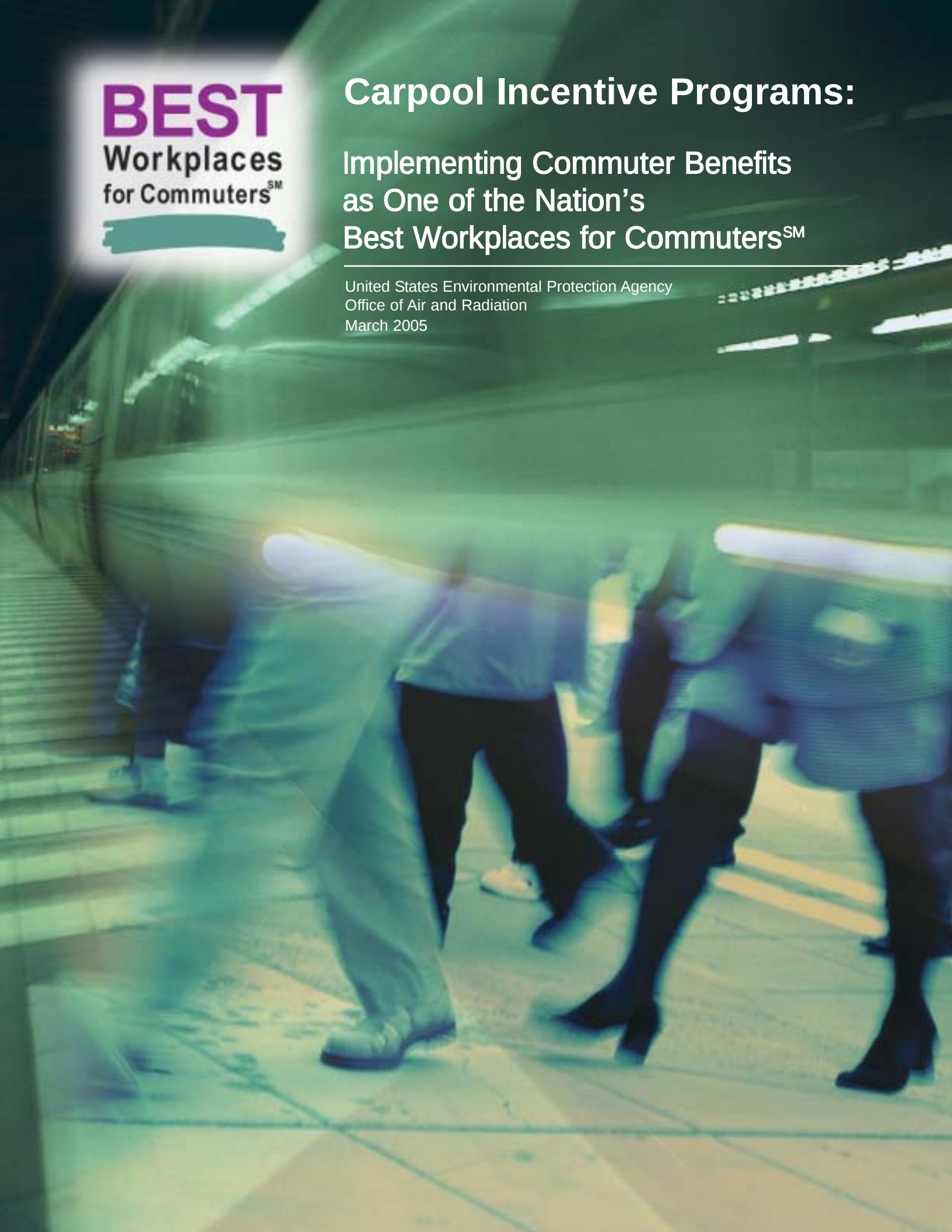




Carpool Incentive Programs: Implementing Commuter Benefits as One of the Nation's Best Workplaces for CommutersSM

United States Environmental Protection Agency
Office of Air and Radiation
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- ▶ Carpools consist of two or more persons driving together in a privately owned vehicle. At a workplace, employees may choose to carpool without any assistance or involvement from the employer; however, carpool incentive programs are a way for employers to encourage employees to carpool.
- ▶ Carpool incentive programs may incorporate a variety of means to encourage employees to carpool. Possible incentives include reduced cost or free parking, preferred parking, or reward programs (such as prize drawings).
- ▶ Employers can help employees form carpools through rideshare matching, which helps potential carpoolers locate others nearby with similar schedules. Regional rideshare organizations in most areas allow interested employees to register directly for no cost. Employers can direct their employees to these free services.
- ▶ Employee benefits from carpooling include cost sharing, less wear and tear on vehicles, time savings in regions with high-occupancy vehicle (HOV) lanes, and the ability to talk, eat, sleep, or read while commuting. The primary employer advantage is the need for fewer parking spaces; other advantages include less employee stress and improved productivity.
- ▶ Programs to encourage carpooling, such as rideshare matching services, preferred parking for carpools, reduced parking costs for carpools, and commute awards programs qualify as additional commuter benefits under Best Workplaces for CommutersSM.

This document is one in a series of briefing papers designed to help employers implement commuter benefits to achieve the Best Workplaces for CommutersSM designation.

The U.S. Environmental Protection Agency (EPA) and the U.S. Department of Transportation (DOT) have established a voluntary *National Standard of Excellence* for employer-provided commuter benefits. Commuter benefits help American workers get to and from work in ways that cut air pollution and global warming pollution, improve public health, improve employee recruiting and retention, improve employee job satisfaction, and reduce expenses and taxes for employers and employees. Employers that meet the program-established *National Standard of Excellence* are recognized as Best Workplaces for CommutersSM and agree to:

- ▶ Centralize commute options information so that it is easy for employees to access and use.
- ▶ Promote the availability of commuter benefits to employees.
- ▶ Provide access to an emergency ride home (ERH) program.
- ▶ Provide one or more of the following primary commuter benefits:
 - ✓ Transit subsidy of at least \$30 per month.
 - ✓ Vanpool subsidy of at least \$30 per month.
 - ✓ Cash in lieu of free parking worth at least \$30 per month.
 - ✓ Telework program that reduces commute trips by at least 6 percent.
 - ✓ Other option proposed by employer and agreed to by EPA. These services must reduce the rate at which employees drive to work alone and be perceived by employees as a significant workplace benefit.
- ▶ Provide three or more of the following additional commuter benefits:
 - ✓ Active membership in a Transportation Management Association (TMA) or participation in a voluntary regional air quality management program (e.g., Spare the Air, Air Awareness, SEQL, Clean Air Coalition) or another employer-based commuter program.
 - ✓ Active membership in a local ozone awareness program, in which you agree to notify employees of expected poor air quality and suggest ways that they might minimize polluting behaviors.
 - ✓ Ridesharing or carpool matching, either in-house or through a local or regional agency.
 - ✓ Pre-tax transit benefits.
 - ✓ Pre-tax vanpool benefits.
 - ✓ Parking cash out less than \$30 per month or less than 75 percent of the actual parking benefit.
 - ✓ Shuttles from transit stations, either employer-provided or through a local TMA or similar service provider.
 - ✓ Provision of intelligent (i.e., real-time) commuting information.
 - ✓ Preferred parking for carpools and vanpools.
 - ✓ Reduced parking costs for carpools and vanpools.
 - ✓ Employer-run vanpools or subscription bus programs.
 - ✓ Employer-assisted vanpools.
 - ✓ Employer-provided membership in a carsharing program (visit <www.carsharing.net> to learn more).
 - ✓ Secure bicycle parking, showers, and lockers.
 - ✓ Electric bicycle recharging stations.
 - ✓ Employee commuting awards programs.
 - ✓ Compressed work schedules.
 - ✓ Telework (less than 6 percent of commute trips on a monthly basis).
 - ✓ Lunchtime shuttle.
 - ✓ Proximate commute (where employees work at locations closer to their homes).
 - ✓ Incentives to encourage employees to live closer to work.
 - ✓ Incentives to encourage employees to use alternative transportation (e.g., additional vacation time).
 - ✓ On-site amenities (e.g., convenience mart, dry cleaning, etc.).
 - ✓ Concierge services.
 - ✓ Other options proposed by employers.
- ▶ In addition, employers commit to ensuring that within 18 months of applying, at least 14 percent of commute trips are taken using a mode other than driving alone.

Disclaimer

EPA provides this briefing as a service to employers participating in the Best Workplaces for CommutersSM. Information about private service providers is intended for informational purposes and does not imply endorsement by EPA or the federal government.

The information presented here does not constitute official tax guidance or a ruling by the U.S. government. Taxpayers are urged to consult with the Internal Revenue Service of the U.S. Department of Treasury or a tax professional for specific guidance related to the federal tax law.

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Carpool Incentive Programs: A Summary

A carpool is a group of two or more persons who commute together in a privately owned vehicle. Employees can and do, of course, carpool without any involvement from their employer. The focus of this paper is carpool incentive programs, in which employers actively encourage carpooling by and usually among their employees.

Carpooling benefits both employer and employee, so many companies are interested in increasing carpooling. Companies can choose among numerous ways to encourage carpooling, including reduced cost or free carpool parking, preferred parking, rideshare matching (to identify persons leaving near each other), and financial incentives. Regional rideshare organizations can assist employees in locating potential carpool partners. This relieves the employer of having to match potential ridesharers.

Employer Benefits

Employers enjoy several benefits from offering carpool programs.

Reduced Need for Parking

Many employers offer carpool incentive programs to reduce parking demand. Carpooling helps get employees to work without a car, especially where transit is not available. Employers can save a substantial amount of money in reducing the number of parking spaces required; one study estimates that annual per-space costs vary between \$360 and \$2,000.¹

Increased Productivity and Morale

Employees who carpool have less commute-related stress, and therefore improved morale and productivity. In regions with carpool lanes, carpoolers can avoid congestion, its delays, and the congestion-induced unpredictability that interferes with scheduling.

Tax Considerations

Tax provisions that allow carpool parking costs to be taken as a tax-free fringe benefit offer potential financial savings for both employers and employees.²

Parking benefits may be provided tax-free to employees up to \$200 per month. Tax benefits accrue to businesses and employees whether the employer pays for the benefits or the employee pays for it through a pre-tax salary deduction. If parking costs are less than \$200, parking benefits can only equal the actual cost of parking. However, any employee who drives to work is eligible for these benefits, not just carpoolers. For more detailed information on how pre-tax programs work see the briefing paper *Commuter Tax Benefits*.

Employee Benefits

Employees enjoy several benefits from carpooling:

- ▶ **Reduced costs.** Carpoolers save on gas, depreciation, and general wear and tear on their vehicles.
- ▶ **Increased personal time.** Carpool passengers can read, sleep, or converse with other carpoolers, instead of driving.
- ▶ **In regions with carpool lanes, reduced commute time and costs.** These lanes provide not only speed, but often more important, reliability, by bypassing congestion. Toll routes and bridges often give carpool discounts, and even when they do not, the cost is split.
- ▶ **Decreased stress.** Many drivers find solo commutes in heavy traffic stressful. Carpooling lets them arrive at work fresh and productive.

When Carpool Incentive Programs Make Sense

Although any employer can encourage carpooling, carpooling is more likely to be successful in certain cases. These include the following:

Regions with HOV Lanes

Some metropolitan regions have extensive carpool lane networks. Carpool lanes—commonly known as high-occupancy vehicle (HOV) lanes—are reserved for vehicles with more than one occupant. HOV lanes can save drivers substantial time over congested regular lanes. In some areas, where carpool lanes are used at toll areas, drivers and passengers enjoy not only timesavings but financial savings as well.

Carpool programs are likely to be more successful where car-

¹ Victoria Transport Policy Institute, *Online TDM Encyclopedia*, available at www.vtpi.org/tdm. Costs are based on land, construction, and operations costs for suburban and urban locations, and for surface, structured, and underground parking.

² Employers should review with their tax advisor the tax implications for themselves and their employees.

pool lanes exist, because they reward commuters with time and sometimes money. Depending on the length of the commute and the amount of congestion bypassed, using the HOV lanes may save 15 to 30 minutes each way.

Employers with Limited Parking

Many employers with carpool incentive programs have implemented them because of parking shortages. Encouraging carpooling among employees can effectively reduce parking demand while still meeting employees' transportation needs. In extreme cases, employers may impose mandatory carpooling.

Employers with Large Numbers of Employees

Regional rideshare organizations will match employees from different employers. But the more employees at the same site, the more likely a convenient match can be found. In particular, universities and hospitals often have hundreds or even thousands of personnel in a relatively compact setting, and many have very successful carpool incentive programs.

Employers in Urban Settings

Even a small employer can find potential carpooling partners for employees, perhaps through a ridesharing organization, if it is located in a downtown or other urban setting. Carpooling depends on having either a single destination or close destinations, so the higher density the employment setting, the more likely a carpool program is to succeed.

Implementation Issues and Costs

An employer considering a carpool incentive program should consider the following issues.

Rideshare Matching

One of the most important needs in setting up a carpool program is matching potential carpool partners. Outside some obvious situations (a married couple who both work for the same employer), potential carpoolers may not know anybody with whom to carpool.

Many regions have rideshare programs for which the main function is to match potential car- and vanpoolers with rideshare partners. See Appendix A for a list of regional rideshare programs.

Some rideshare matching organizations have moved to online

rideshare matching. For example, the Greater Redmond Transportation Management Association, in the Seattle region, uses a software product called Ridequest.com. Users can log in and receive an instant list of potential ridesharers (both car- and vanpool) showing their locations on a map. Users can then immediately send e-mails to people on the list.

Preferred Parking

One workplace incentive for carpoolers is preferred parking. Spaces can be designated for either individual carpools or rideshares in general. To be effective, designated spaces should be those that are most desirable: near building entrances, covered, and/or attended.

Although designated preferred parking areas are most effective where parking demand meets or exceeds supply, even employees with abundant parking enjoy parking closer to the building.

Reduced Cost Parking

Where employers charge for parking, reducing the parking cost for carpools encourages carpooling. Although carpools will effectively receive reduced cost parking in any case because the cost will be shared, employers may wish to reduce costs even further, or allow carpools to park free.

Employee Schedules

A lack of matching schedules among employees can be a major barrier to carpooling. Employees who carpool together must generally arrive and depart at the same time, or the carpool will prove inconvenient. (An exception could be if an employee carpools one way and takes transit the other way.) Senior management can encourage carpooling by requesting that supervisors take carpoolers' needs into account. This includes predictable schedules and infrequent requests to work overtime. If employees cannot be sure they will be off work at a predictable time every day, they will be much less likely to carpool.

Potential for Fraud

Employers with carpool programs report that employees sometimes commit carpool fraud. There are several sources of potential fraud, including registration of carpool partners who do not actually carpool, self-reporting of carpool trips when the driver actually drove alone, and color photocopying of carpool passes or tags. Unless parking areas have attended stations, it might be difficult to know if employees who say they carpool are actually carpooling. Some measures that employers can take to prevent fraud are annual re-registration of car-

poolers, checking carpool registrations against lists of employees who have left, and implementing carpool parking in gated or attended parking areas only. Generally, however, employers do not report that such fraud is a substantial problem.

Other Incentives

In areas where parking is free and plentiful, employers can encourage carpooling through prize drawings or other rewards. Prize amounts could range from \$10 to \$25 to \$500 depending on the size of the company and budget. Other commuter rewards could include discounts at local merchants or free merchandise (travel mugs, T-shirts, and other inexpensive items). One program in southern California has coupon books for local restaurants and entertainment specially made to distribute to ridesharers.

Guide to Implementation

An employer goes through several steps to implement a carpool incentive program. Although these vary from employer to employer, the main ones are outlined below.

1) Determine the potential for carpooling

The first step an employer takes should be to determine whether carpooling will fit employee locations and schedules. The Association for Commuter Transportation (ACT) recommends that employers conduct a Commute Mode Survey to determine employees' current transportation patterns and interest in carpooling. The survey should ask about employees' interest in carpooling, their residential location (the ACT sample survey asks for the zip code) as well as whether their schedules are regular enough to permit them to carpool.

For employees who currently drive alone to work, the survey should ask what incentives would encourage them to carpool. ACT also points out that more employees will respond positively to the idea of carpooling than will actually carpool. See ACT's Transportation Demand Tool Kit for a description of their Commute Mode Survey. The Tool Kit can be ordered at <www.actweb.org>.

Also, in deciding whether to implement a carpooling program, employers should consider enforcement issues. It is easier to enforce carpool regulations in areas with gated or attended parking.

2) Determine possible carpooling incentives

If the employee survey reveals sufficient interest and potential among employees, an employer should next determine what incentives should be used to encourage carpooling. As discussed above in Implementation Issues and Costs, incentives can include reduced cost or free parking, preferred parking, and prizes or discounts. Incentives should be based on particular circumstances at the location; for example, an employer located in a downtown location with expensive parking might give reduced cost or free parking as an incentive, while a suburban employer might rely on prize drawing to motivate carpoolers. In addition, employers with paid parking may use parking tax benefits (see Tax Considerations, above).

If an employer is considering implementing paid parking in response to a parking shortage, it might work well to implement a carpooling incentive program at the same time. For example, previously free parking might remain free to carpoolers, but cost \$50 per month for those driving alone. This allows employees to retain the ability to park free, if they carpool.

Acknowledging that carpoolers may occasionally need to drive alone to run errands or attend to other personal business during the day, some employers allow registered carpoolers to drive alone from time to time without incurring a penalty.

3) Investigate rideshare options

Many regions have rideshare organizations that help potential car- and vanpoolers locate rideshare partners. These services are usually either nonprofit agencies or publicly funded, and matching services are generally free to riders. Unlike many Transportation Management Associations (TMA), where employers must become members before their employees can take advantage of their services, rideshare organizations seldom require employers to become involved.

Using a rideshare organization relieves the employer of having to match potential carpoolers. Because of the complexity of matching potential carpoolers and maintaining a database of persons interested in carpooling, there are specialized software programs available (see the list at <www.nctr.usf.edu/clearinghouse/ridematching.htm>). Unless the employer is relatively large and there is no regional rideshare service available, it is probably easiest to encourage employees to find carpool partners through a rideshare organization. A list of rideshare organizations can be found in Appendix A.

Employers may wish to contact the rideshare organization to learn more about its operations, so that they can have

answers to employees' questions about how rideshare matching works, and to reassure employees that their personal information will not be used for other purposes. Because many rideshare organizations have online registration, a company with an internal Web site may wish to provide a direct link. Employers can also discuss with a rideshare organization whether they wish have their employees matched only with employees at the same employer, or with employees at other nearby employers.

4) Determine registration and eligibility requirements

Employees generally have to register with the employer to qualify for carpool incentives. The human resources department or employee transportation coordinator should determine procedures, and what information an employee must submit. To prevent fraud, most employers ask employees to re-register once per year. Registration can be done by written form or online at a company web site.

If there are designated spaces for carpoolers, an employer should probably issue some type of identification for those vehicles. Employers generally use hangtags (tags that hang from the rear view mirror) for this purpose, as decals cannot be moved easily from vehicle to vehicle.

An employer may want to consider whether all employees will be eligible to register as carpoolers, or only certain categories. For example, an employer with multiple worksites may allow only employees at certain worksites to register as carpoolers. Some employers who have high numbers of temporary workers or teleworkers allow only employees who work on-site a certain number of hours per week to register.

Some employers differentiate between carpools by employee status and number of passengers. Emory University, for example, has three categories of carpools based on these criteria. (See Employer Case Studies.) This allows employers to give higher incentives to full-time employees and larger carpools.

5) Announce and implement the carpooling program

Once incentives have been determined, employers should take the necessary steps to implement the carpooling program. Depending on the nature of the program, steps may include the following:

- ▶ Designating and marking carpool spaces in parking areas.
- ▶ Introducing or changing parking fees.
- ▶ Implementing a system for carpoolers to register.

- ▶ Obtaining and distributing hangtags or other vehicle identification.
- ▶ Writing a carpool policy that covers eligibility, incentives, and penalties for non-compliance.

Once guidelines and policies are in place, the employer should make a formal announcement and encourage employees to register as carpools. The employer should use whatever means of internal publicity it normally uses to communicate changes in benefits policies to its employees. These may include the following:

- ▶ Company orientation for new employees.
- ▶ Advertisements in places seen frequently by employees (cafeteria, garage, elevators, etc).
- ▶ Distribution of program brochures.
- ▶ Company newsletters.
- ▶ Voicemail or e-mail broadcast.
- ▶ Special promotional days (example: a "Pool Day" to encourage car/vanpooling).
- ▶ Awards or prize drawings to recognize employees using transit or carpools.
- ▶ Inserts to paychecks.
- ▶ Company Web site or intranet.
- ▶ "Kick-off" event (which could include representatives from rideshare organization).

6) Monitor and maintain carpool incentive program

Once implemented, carpool incentive programs should be monitored and changed as circumstances require. Recommendations for ongoing monitoring include:

- ▶ Annual re-registration of carpoolers to prevent fraud and checking carpoolers' names against employment records to ensure that all registered employees are still working at the worksite claimed.
- ▶ Enforcement of preferred parking and ensuring that there is sufficient preferred parking for all registered carpoolers.
- ▶ Frequent updates to the rideshare list, if maintained by the employer.

- ▶ Continued marketing of the incentive program. Carpooling is not a “one-time purchase,” but requires continued promotion for maximum participation.

Employer Questions and Answers

An employer's human resources administrator or business manager, among others, might ask the following common questions when considering a parking cash out program:

How difficult and costly is it to administer the program?

It depends on the scope of the program, the number of employees, and the type of incentive. A registration-based program updated annually would not take much staff time; however, maintaining a rideshare database for a large company might be very time-intensive. The cost of financial incentives would be based on current parking costs (i.e., if the incentive involves reduced cost or free parking for carpools, the company would forego some revenue) or the size of prizes or awards.

Does the employer decide who pays for gas and insurance, or how frequently each carpooler has to drive?

Generally cost sharing and driving duties are left up to the discretion of the carpoolers. Different arrangements work for different carpools; for example, some carpoolers may always need their car during the day, so they are responsible for all the driving, while other carpools rotate drivers. Some carpools are composed of family members, so cost sharing is not a major issue. The employer should make clear in the carpool guidelines that carpoolers must reach their own arrangements, and that the employer is not responsible for resolving disputes. Guidelines should also urge employees to review their car insurance policies to ensure that they are adequately covered.

Nike has a carpool program with written guidelines; these guidelines are provided in Appendix B as a potential model.

Are there safety concerns in encouraging my employees to share rides with strangers? Are rideshare partners screened?

According to a Transportation Consultant at RIDES for Bay Area Commuters, a San Francisco area rideshare organization that has been operating since 1977, rideshare matches are not screened. Registrants are provided with the neighborhood and phone number of potential rideshare partners. RIDES encourages potential rideshare matches to speak on the

phone and/or meet in person to establish both rideshare compatibility and to ensure that they feel comfortable with each other. RIDES informs registrants that they have not screened applicants with a disclaimer on the registration form. However, they have not learned of any problems between ridesharers more serious than smoker/non-smoker, differing tastes in music, or fragrance tolerance.

How often must somebody carpool before they become eligible for benefits?

Some employers request that only people who carpool two or more days per week register, but benefits to employer and employee increase with frequency, and many employers feel that higher frequencies are worth higher benefits.

Employer Case Studies

Employers around the country have implemented carpool incentive programs. The following cases describe several employer programs.

Ithaca, New York—Cornell University

In 1990, Cornell University Commuter and Parking Services was investigating its projected need to build as many as 2,500 additional parking spaces to keep up with increasing demand. Instead, the university decided to create incentives to get people out of their single-occupancy vehicles. Cornell has a total campus population of 30,000, including approximately 9,000 faculty and staff, and only 10,000 parking spaces. Cornell determined that based on their nearly universal need to commute, the faculty and staff were the biggest burden on the university's parking system and made them the initial focus of the program.

The university raised its parking fees to create a disincentive to driving to campus alone. This change resulted in more carpools, with 600 fewer cars being driven to campus each day. Currently, Cornell has approximately 1,370 people participating in 625 carpools. The average occupancy is 2.2 people per car. Participants benefit from the program by sharing the cost of the parking permit, which is heavily subsidized by the university, among the group. In addition, if certain conditions are met, carpools are given a cash rebate each year. (www.parking.cornell.edu/tms3_rideshare.html)

Cornell recognizes the need for people to occasionally bring their own cars to campus. Each individual in a registered carpool receives up to two books of 10 one-day parking permits per year. Individuals who have child-care or other similar responsibilities have the option of obtaining additional books.

Cornell helps to avoid abuse of its carpool program by making each of its commuter benefits programs mutually exclusive from the rest. It is impossible for an employee to sign up both for a carpool and a transit pass—and neither can hold an individual parking permit. These benefits are only available to benefits-eligible faculty and staff and are funded by the university through its employee benefits pool.

When Commuter and Parking Services originally set up this program 15 years ago, they were able to convince the university that, in the long run, it would be far less expensive to provide these benefits than it would be to keep up with the demand for parking. Cornell estimates its net cost savings, after the first 10 years of the program, were approximately \$36 million. The university continues to spend some money on parking, but those expenditures only maintain the number of existing spaces on campus.

The overall result of all of Cornell's commuter benefits programs combined is approximately 2,400 fewer cars coming to campus each day. In addition, in the last 15 years, Cornell estimates that these programs have reduced commuter miles by 10 million each year, which results in numerous benefits in terms of air quality and traffic congestion.

Atlanta, Georgia—Emory University

Emory University, with approximately 12,000 students and 14,000 faculty and staff, is located on just beyond the city limits of Atlanta in unincorporated DeKalb County. Emory's carpool program is administered by the Department of Community Services, which includes the Office of Alternative Transportation. The university contains a major hospital and clinic.

Emory provides incentives to carpoolers in the form of reduced parking rates and in most cases reserved spaces. Emory recognizes three categories of carpools, which are based on the number of full-time employees registered in the carpool. (See table below.) All carpools must register with the

Parking Office to receive hangtags for the rear view mirror. Both university and hospital/clinic employees are eligible to participate in carpool programs. Students are also eligible to carpool by sharing their hangtag but are not eligible for reserved parking spaces.

Annual parking rates range from under \$100 (for hospital and clinic employees) to \$1,000 for 24-hour reserved faculty spaces. Most university employees pay \$256 per year. Reserved spaces are reserved exclusively for individual vehicles; there are no "carpool only" parking areas in the lots (i.e., carpools with non-reserved spaces compete for spaces with solo drivers).

All carpool participants also receive a "Value Pass" hangtag to be used in cases where they need to occasionally drive to work alone. The Value Pass allows 24 entries per year; additional passes may be purchased for \$36.

Emory advises potential carpoolers to register with the regional 1-87RIDEFIND service, a rideshare organization run by the Atlanta Regional Commission.

Emory's program has been in place approximately 10 years. It was begun to alleviate parking congestion on the main campus (employees at other locations do not have carpool incentives). There are currently 473 carpoolers registered in 208 carpools for an average vehicle occupancy of 2.27 persons.

The program is publicized through commuter fairs, employee orientation and other events put on by the Clifton Corridor Transportation Management Association (CCTMA). In addition, the program is promoted as part of larger events such as Staff Day. There is also an e-mail listserv with 11,000 participants. CCTMA also provides incentives such as Starbucks cards and gas cards to carpoolers.

According to Wanda Teichert, Program Development Coordinator with the Alternative Transportation Office, there are recurring but mostly minor problems with attempted cheating. She mentioned that the best safeguard is a gated parking lot; the hangtags issued to carpoolers are barcoded to allow entry. She said that another problem is invalid registrations (generally persons who work at other facilities). To help prevent this, they require all carpools to re-register annually, so they can check carpoolers' names against current employment records. Several people caught cheating have been banned from the carpool program. Emory has in the past terminated employees for transit benefits program fraud, but so far that has not occurred in the carpool program.

**Carpool Incentive Program
Requirements at Emory University**

Number/Type of Employees	Carpool Category	Parking Cost	Reserved Space?
2PT	1	\$100/year	No
1FT 1PT			
2FT	2	\$100/year	Yes
2FT 1PT			
3FT*	3	Free	Yes
3FT 1PT			

*applies to all carpool groups of 3 or more, including vanpools.

Beaverton, Oregon—Nike

Nike, a sports and fitness company headquartered in suburban Portland, has an extensive commuting program that includes two types of carpooling incentives. Carpools have reserved parking areas until 10 AM, and carpoolers are eligible, along with all other non-single occupant vehicle commuters, for monthly and quarterly prize drawings.

According to Linda Bainbridge, Nike's Employee Transportation Coordinator, carpoolers previously received "Nike Bucks," vouchers that could be used to purchase food, merchandise, or other onsite services, every time they arrived in a carpool at the main campus. However, this program proved to be too expensive, so in 1998 it was replaced with the prize drawings. Under the Nike Bucks program, Nike spent approximately \$250,000 a year on commuter incentives; currently, they spend \$15,000. Prizes are gift certificates ranging in value from \$20 to \$100 for the employee store or local retailers.

Carpoolers do not register with the company in advance. Rather, carpoolers receive a hangtag from the security guard at the main gate to place in their car for the day that allows them to park in the reserved carpool areas. The Nike campus consists 16 buildings, and there are approximately 30 to 40 spaces reserved for carpools scattered throughout the campus at different buildings.

An application that allows participants to register their commute trips online was developed in-house. This application includes a carpool matchlist that participants can choose to be added to if they want. This application also allows Ms. Bainbridge to track participation rates, conduct prize drawings, send out reminder emails and track the environmental impact of the program. Information about setting up a carpool is available on the internal Web site.

Because there is no pre-registration, Ms. Bainbridge tracks participation through registration for prize drawings. Anyone who does not drive alone to work during a given week is eligible to register for the prize drawings. When they register online for the prize drawing, commuters list the number of times they used a particular transportation mode during the week. These figures form the basis for reporting mode splits under Oregon's trip reduction mandate. Ms. Bainbridge said that in an average week there are 400 trips made by carpool, meaning that at least 800 people carpooled. The campus has 4,200 employees; there are another 2,000 employees in the metropolitan area. Although employees at any facility can register for the prize-drawing if they carpool, only one other facility has reserved parking.

An internal Web site provides a wealth of information for carpoolers as well as all commuters. The latest addition to the Web site is a Just For Fun page. Included on this page is a question of the month to stimulate conversation among carpool partners. Responses to the question are posted on the website. The goal is to add some fun to the daily commute.

Services that Support Implementation

Rideshare Organizations

Many regions have rideshare organizations whose primary function is to maintain databases of potential carpoolers. Because of both the difficulty of keeping this type of database updated, and the fact that many employers do not have sufficiently high numbers of employees to make many carpool matches, a regional rideshare service is an excellent way to find carpool partners for employees. Appendix A lists major regional programs.

Parking Cash Out

Parking cash out is an arrangement in which an employer offers employees cash in lieu of a parking space. One study of parking cash out (Shoup, 1997) showed that carpooling at eight companies increased from 14 to 23 percent when parking cash out was implemented. Unless other incentives are implemented, it is difficult to convince employees not to drive alone when parking is free and plentiful.

Emergency Ride Home Programs

A barrier preventing some employees from carpooling is the fear that they will not be able to get home quickly in the event of an emergency, such as picking up a sick child from school, or working unscheduled overtime. Emergency ride home (ERH) programs provide commuters who regularly carpool, vanpool, bike, walk, or take transit to work with a reliable ride home when an unexpected emergency arises. ERH programs are designed to rescue commuters who are worried about how they'll get home in the event of an emergency. Knowing there is a ride home in an emergency gives many people the security to carpool. ERH programs may be established by individual employers. Usually the employer will pay for a taxi or rental car home in the case that an employee who is a carpool passenger has to leave in the middle of the day, or the carpool driver is for some reason unavailable. Some MPOs and local governments have also established regional or countywide ERH programs for employees that register for the program. ERH tends to be a

low-cost way to encourage carpool use, especially if a company only fills in coverage for areas not covered under a broader regional program. For example, a regional transit agency may provide an emergency ride home for monthly passholders, so a company would have to provide ERH only for carpoolers. Provision of ERH is a requirement of participation in Best Workplaces for CommutersSM. See the separate ERH briefing paper for further information.

Park-and-Ride Lots

For potential carpool partners who do not live in immediate proximity to each other, a park-and-ride lot may be a good meeting place. The availability of park-and-ride lots may encourage carpool drivers who would otherwise be inconvenienced by picking up and dropping off passengers at their homes.

Associations and Contacts

This section provides information on contacts that EPA and regional, state, and local governments might wish to utilize for expertise in understanding, promoting, or providing technical information on carpool incentive programs.

Information Clearinghouses

Association for Commuter Transportation
1401 Peachtree Street, Suite 440
Atlanta, GA 30309
Tel: 678-916-4940
Fax: 678-244-4151
Act@act-hq.com
www.ACTweb.org

The Association for Commuter Transportation (ACT) is a membership organization that promotes commuter choice and transportation demand management. It sponsors annual conferences on commuting, and publishes educational materials for employers.

National Transportation Demand Management
(TDM) and Telework Clearinghouse
National Center for Transit Research
University of South Florida
4202 E. Fowler Avenue
CUT100
Tampa, FL 33620-5375
Tel: 813-974-3120
www.nctr.usf.edu/clearinghouse

The National TDM and Telework Clearinghouse is a compendium of research and information on transportation demand management (TDM). TDM refers to a set of programs and policies designed to make the best use of existing transportation resources without additional infrastructure investment. Much of the Clearinghouse information is available electronically. The web site contains information for employers interested in establishing trip reduction programs.

Rideshare Organizations

As discussed above, there are rideshare organizations in many regions. If an area is not listed in Appendix A, the MPO for the region may offer more assistance on locating rideshare programs. The appropriate MPO can be located through the Association for Metropolitan Planning Organizations (202-457-0710 x19); a list of MPOs with Web pages is available at <www.ampg.org/mposnet_old.html>.

Best Workplaces for CommutersSM

For more information on Best Workplaces for CommutersSM, contact the BWC information request line at (888) 856-3131, or visit <www.bwc.gov>.

Emissions and Transportation Benefits

Carpooling reduces travel and emissions compared to driving alone. Employees get to work with fewer separate vehicle trips, thereby reducing traffic congestion and air pollution.

Nationally, about 12 percent of employees commuted to work in carpools, according to the Journey to Work survey in the 2000 census; these are the most recent national figures available.

Companies that implement programs to support ridesharing can expect increases in the portion of employees who choose to carpool. According to EPA's Commuter Model, which draws relationships from actual case studies of employer-based programs, companies that implement in-house carpool matching services along with carpool information activities, and a part-time transportation coordinator, can expect about a four to ten percent increase in the number of employees carpooling. Employers that also provide preferential parking for carpoolers, flexible work schedules (to accommodate carpools), and a full-time transportation coordinator might expect an increase of up to 20 percent in the number of employees carpooling. Employers who institute financial incentives for carpooling (such as greatly reduced parking rates) may find even greater increases in the number of carpoolers.

References and Publications

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Odekirk, L. 2001. Personal communication. Telephone conversations between Linda Odekirk, Employee Transportation Coordinator, Nike, and Liisa Ecola, ICF Consulting, April 6, 2001.

Shoup, D. 1997. *Evaluating the Effects of Parking Cash Out: Eight Case Studies*, Sacramento: California Environmental Protection Agency.

Teichert, W. 2001. Personal communication. Telephone conversation between Wanda Teichert, Program Development Coordinator, Alternative Transportation Office, Emory University, and Liisa Ecola of ICF Consulting, April 4, 2001.

Appendix A: Commuter Rideshare Programs

The table below lists some of the third-party commuter rideshare programs in the country. Employers located in areas not listed below should contact the MPO for their region to determine if others exist.

Location	Sponsoring Agency	Type of Agency	Contact Info	Web Site
Atlanta, GA	Commuter Connections	Rideshare sponsored by Atlanta Regional Commission	87-RIDEFIND	www.commuteconnections.com
Albany, NY	Capital District Commuter Register	Rideshare	518-458-2164	www.commuter-register.org
Augusta, ME	Go Augusta	Rideshare	800-280-RIDE	www.goaugusta.org
Birmingham, AL	CommuteSmart Rideshare	Rideshare	800-826-RIDE	www.commutesmartrideshare.com
Contra Costa County, CA	Contra Costa County Commute Alternative Network	Public consortium	510-215-3035	www.traks.org/incentive/guarantee/incentive.html
Denver, CO	Ride Arrangers	Rideshare sponsored by Denver Regional Council of Governments	303-455-1000	www.drcog.org/ridearrangers/
Detroit, MI	Southeast Michigan Council of Governments	Council of Governments	313-961-4266	www.semcog.org/index.html
Houston, TX	METROVan	Rideshare	713-224-RIDE	www.hou-metro.harris.tx.us/METVAN.HTM

Location	Sponsoring Agency	Type of Agency	Contact Info	Web Site
Kansas City, MO	Mid-America Regional Council	Rideshare	816/842-RIDE	rideshare.marc.org
Las Vegas, NV	Regional Transportation Commission	MPO	702-228-RIDE	www.catride.com/catmatch/
Long Island, NY	Long Island RideSharing	Rideshare	631-737-CARS	www.737cars.com
Miami, FL	South Florida Commuter Services	Rideshare	800-234-RIDE	www.commuterservices.com/sf/
Minneapolis/St. Paul, MN	Metro Council	MPO/Transit Agency	651-602-1602	www.metrocommuterservices.org/index.asp
Morris County, NJ	TransOptions	Rideshare	973-267-7600	www.transoptions.org
Nashville, TN	Regional Transportation Authority	MPO/Transit Agency	615-862-8833	www.rta-ride.org/ridehome/ridepolicy.htm
New Hampshire	New Hampshire DOT	State Department of Transportation	800-462-8707	www.state.nh.us/dot/rideshare
New Haven, CT	Rideworks	Rideshare	800-ALL-RIDE	www.rideworks.com
New York, NY	Commuter Link	Rideshare	718-886-1343	www.commuterlink.com
Phoenix, AZ	Valley Metro	Transit Agency	602-262-7242	www.valleymetro.maricopa.gov
Portland, ME	RideShare	Rideshare	800-280-RIDE	www.ridesharemaine.org
Rhode Island	Rhode Island Public Transit Authority	Transit Agency	888-88-RIPTA	www.ripta.com

Location	Sponsoring Agency	Type of Agency	Contact Info	Web Site
San Diego, CA	San Diego Commute	Rideshare sponsored by San Diego Association of Governments	800-COMMUTE	www.sdcommute.com/van_pool.html
San Francisco Bay Area, CA	RIDES for Bay Area Commuters	Rideshare	800-755-POOL	www.rides.org
San Mateo County, CA	Peninsula Traffic Congestion Relief Alliance	Public/non-profit Joint Powers Association	650-994-7924	www.commute.org
Seattle, WA	Metro Rideshare Operations	County	206-625-4500	transit.metrokc.gov/van-car/vancar.html
Stamford, CT	Metropool	Rideshare	800-346-3743	www.metropool.com
Tallahassee, FL	Commuter Services of North Florida	Rideshare	973-267-7600	tmi.cob.fsu.edu/commute/
Tampa, FL	Bay Area Commuter Services	Rideshare	813.282.8200	www.tampabayrideshare.org
Vermont	Vermont Public Transit Authority	Transit Agency	800-685-RIDE	www.vpta.net
Vermont and New Hampshire	Upper Valley Rideshare	Rideshare	802-295-1824	www.uppervalleyrideshare.com//uvrs.grh.html
Washington, DC	Commuter Connections	MPO	800-745-RIDE	www.mwcog.org/commuter
Windsor, CT	The RideShare Company	Rideshare	800-972-3279	www.rideshare.com

Appendix B: Sample Carpooling Guidelines

The following guidelines are provided by Linda Bainbridge, Employee Transportation Coordinator for Nike.

Guidelines for Carpooling

It is important for prospective carpoolers to meet under comfortable conditions to determine the feasibility of ridesharing. As you make contact with potential rideshare partners, suggest a meeting on common ground to discuss compatibility. Invite several people to the meeting. If all the schedulers and pickup points do not mesh, perhaps more than one pool is a possibility.

When a compatible group is formed, the following should be discussed and all members should agree to:

- ▶ Select the route or routes the carpool will take to and from work and designate pickup points which may be at each member's home or at a common meeting point such as a park-and-ride lot.
- ▶ Determine the morning arrival and afternoon departure times based on compatible work schedules. Allow extra time for the occasional traffic tie-up or other unforeseen events.
- ▶ Choose the departure locations at work where carpool members will gather for the drive home.
- ▶ Determine who is going to drive. Will some or all of the carpool members share driving responsibilities by alternating on a daily, weekly, or monthly basis? Or will they select a designated driver?
- ▶ Calculate commuting costs to determine the amount non-drivers will pay to cover the expenses of the driver(s). This normally can be determined by multiplying the daily round-trip miles by the drivers cost per mile and dividing the total by the number of carpool members. Some carpools simply cover gas expenses. Set regular payment dates.
- ▶ Determine which days of the week each person will carpool. While many carpools are five days a week, many other carpools operate quite well on a part time basis. To accommodate individual needs some full time carpools include a part time member(s). Be creative.
- ▶ Create communication lines between pool members so that an agreed upon alternative plan can be rapidly imple-

mented in case of illness or other problems. Make certain that all members of the pool have exchanged phone numbers. Also appoint a Carpool Captain responsible for maintaining these communications.

Once these logistical details have been arranged, it is important that a frank and friendly discussion take place regarding the "rules of the road." By establishing these understandings ahead of time, a carpool is far less likely to experience social friction. Issues to be covered and recommended rules to establish include the following:

- ▶ The first rule is to agree to have rules.
- ▶ Agree to be on time. Depending on the length of the commute, most carpools allow two to five minutes for a late passenger, but some reach an understanding not to wait.
- ▶ Detours for personal errands, such a picking up a carton of milk on the way home, should be avoided.
- ▶ Establish a smoking policy. Smoking should not be allowed unless everyone in the carpool is a smoker or everyone agrees that smoking is acceptable.
- ▶ Take a vote about the radio. On or off? Music or news? Classical, top 40, rock, progressive rock, country, or whatever?
- ▶ Agree on do's and don'ts concerning personal habits, such as reading, talking, and eating in the car.
- ▶ Driver responsibilities include keeping the vehicle clean, in good working condition, and adequately fueled for the round-trip commute. Naturally he or she is also responsible for driving safely and for maintaining adequate auto insurance.

Once these initial arrangements have been made, the carpool should be ready for a trial period.

Make sure all the members of the fledgling carpool agree to give it time to work. A four-week shakedown cruise is normally necessary to get it all running smoothly.

Ordering

This publication may be ordered from the National Service Center for Environmental Publications (NSCEP) at:

U.S. Environmental Protection Agency
NSCEP
P.O. Box 42419
Cincinnati, OH 45242-2419
Phone: (800) 490-9198, Fax: (513) 489-8695

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For More Information

This guidance document and other information about Best Workplaces for CommutersSM, are available at <www.bwc.gov> or by calling the BWC information request line at (888) 856-3131.

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