

Vanpool and Buspool Workshop Material

Definitions

Carpools generally consist of two to four people who commute together and rely on a volunteer driver. They tend to be informal arrangements with little to no management or institutional support. Where there is organization or institution support, it is frequently limited to ride-matching and some program promotion.

Vanpools generally consist of 5 to 15 people who commute together and rely on a volunteer driver. They are different from carpools in that they tend to serve more people and require a higher degree of management and involvement from partnering institutions. Successful programs generally serve commuters who do not require their cars during the day, rarely work overtime, and travel relatively long distances.

Buspools are similar to vanpools except that they rely on professional drivers or volunteer drivers with a commercial license.

Attributes of Successful Programs

Most vanpool programs do best where:

- One-way trip lengths exceed 20 miles;
- Work schedules are fixed and regular;
- Employer size is sufficient to allow matching of 5 to 15 people from the same area.
- Additional time to use the vanpool does not outweigh its benefits. A vanpool or buspool typically can add 10 to 12 minutes additional commuting time (picking up or waiting for other riders). If additional time is too long, the program loses its attractiveness considerably and will struggle to survive.
- Public transit is inadequate.

Organizational Strategies Vanpool

Employer Sponsored Vanpool: The employer purchases or leases the vehicle. Volunteer driver rides for free. Other riders pay a monthly fee (usually). Volunteer driver may be allowed to use the vehicle for personal reasons for a specified amount and usually on a mileage reimbursement basis. Fees are based on operating costs (if leased) and capital depreciation (if vehicle is purchased).

Public Transit or Other Non-profit Sponsored Vanpool: A third-party such as a transit agency or non-profit also enters into an agreement with a driver. Riders are charged a fee to recover vehicle cost, maintenance, fuel, and insurance and program administration costs. Employers may help employees pay for part of the cost of their fares. Public transit agencies may subsidize part of the program with its funding stream. Public transit sponsored programs can recover all operating costs and, in some cases, generate positive cash-flow. Agency leases the vehicle and markets the service.

Third Party (For Profit) Vanpool: Similar to public transit or other non-profit sponsored provider the transit agency contracts with a private van provider to administer the program.

Organizational Strategies Buspool

Conditions for success are similar to a vanpool except that it typically requires about three times a vanpool's travel demand because of higher administration costs. Consequently, the popularity of vanpools exceeds buspools and there are approximately 10 more vanpools riders over buspool riders nationwide. However, if establishing a buspool, the vehicle could be used to provide other trips during the day.

Employer or Employee Sponsored Buspool: Is similar to vanpool except a professional driver is employed. The program may be organized by employer or employees who contract for service.

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Public Transit Sponsored Buspool: Is similar to vanpool except a professional driver is employed and the program is managed by a public transit entity. Buspool vehicles and/or operation, including drivers, are often contracted for or chartered from private bus companies, even when managed by the local transit provider. Where buspooling is feasible, these services frequently change into express routes that are open to any rider.

Organizational Strategies Vanpool

The following discussion expands on issues relating to organizing vanpools. Table I.1 lists 17 components that must be addressed in developing and operating a vanpool program. Responsibilities for these items vary with the five different optional frameworks. For example, the owner of the van could be the transit agency, a third party, an employer, or a driver depending upon which framework is considered.

Table I.1: Vanpool Components

Administration	Fare Structure
Ride Matching	Employee Access
Vehicle Purchase or Lease	Employee Promotion
Insurance	Employer Subsidies
Maintenance	Timeliness
Collect Money	Log Book and Recordkeeping
Driver Training (& Certification)	Reports
Driver Incentives	Contract
Emergency Ride Home Policy	Rider Rules of the Road

Five Frameworks

Vanpools can be organized using five basic frameworks that differ by the number of parties involved, the risk to each party, areas of assigned responsibility, and benefits/drawbacks. No matter who operates the vanpool or buspool program, employers are *key* to the program's implementation and success. Should RTAG wish to pursue a vanpool program, a list of targeted employers or groups of employers to be the initial focus of a vanpool program will need to be

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developed. Employers may be selected because of size or circumstances (some have evening shifts that operate when transit service is unavailable), are located in areas that have no regular transit service or have expressed an interest in vanpooling. The following is a list of the frameworks and a discussion of the advantages and disadvantages of each approach.

- **Transit Agency, Third Party, Employer, Driver, Rider** – Transit agency would provide some administration and marketing; the third-party vanpool operator would be responsible for all other aspects of operations.
- **Transit Agency, Employer, Driver, Rider** – Transit agency develops, establishes and operates its own vanpool program
- **Employer, Driver, Rider** – Transit agency assists employers in establishing their own company vanpools and solicits interest and provides matching and administrative services.
- **Third Party, Driver, Rider** – Transit agency enters into a partnership with others to establish and operate a vanpool program for a group of employers. This arrangement could be managed through a Transportation Management Organization (TMO).
- **Driver, Rider** – Transit agency assists individuals in establishing their own vanpool and would solicit interest and provide matching and administrative services.

OPTION 1: Transit Agency Contracts with a Vanpool Operator

If a Transit agency opts to contract for service with a vanpool operator, it lessens its responsibility for the execution of the program. Vanpool operators can either be a private firm, such as Vanpool Services Incorporated (VPSI) or Enterprise or a public, non-profit TMO, established under the auspices of the transit agency. The transit agency will initially be responsible for issuing a Request for Proposals (RFP) from qualified vanpool operators.

The vanpool operator, once selected, generally assumes much of the responsibility for the implementation and administration of the program. In addition to administration, its duties usually include matching riders with one another, procuring vehicles and insurance, checking

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drivers' backgrounds, and providing alternative means of transport in the event of an emergency. The employer shares responsibility for ensuring employee access to the program, promoting its use, and administering a tax-deductible incentive to employees. (Under federal law, the first \$105 provided to an employee each month for vanpooling is not considered taxable income and no employer income taxes are paid.)

In some arrangements, a vanpool operator has less of a role than what is commonly practiced and the employer assumes much more of the responsibility. For example, the employer may be responsible for providing insurance, vehicle maintenance, and the vehicle itself. The assignment of responsibilities depends upon the capacity of the vanpool operator and should be clearly defined in the contract.

Drivers and riders in this scenario have the fewest responsibilities. Commonly, drivers collect fees from other riders, although the vanpool operator or employer can perform this function. Drivers are also responsible for cleaning and fueling the van, maintaining the vehicle log, creating reports, and of course, being punctual. Riders simply must pay their fees and obey the "rules of the road".

Advantages/Disadvantages

A key advantage of contracting to a private company is the ability to lower program costs through Capital Costs of Contracting.

By contracting with a third-party vanpool operator, a transit agency greatly minimizes its risks associated with the operation of a vanpool. The transit agency will have little to do with the establishment of vanpool operations and nothing to do with its day-to-day administration. Moreover, if the vanpool is not successful, the transit agency will not be held directly responsible. This operational framework is beneficial in smaller markets, such as Amarillo, where it is difficult to market enough vanpools to take advantage of efficiencies that occur with larger numbers.

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The downside of this approach is the lack of control that the transit agency will be able to exercise over the program. If the vanpool operator is not capable of performing credibly, the contracting party may be unable to intervene in its operations unless remedies are specified in the pre-contract with the operator. Otherwise, the transit agency must wait until the end of the contract to re-solicit proposals for a new operator.

OPTION 2: Transit Agency Establishes and Operates its Own Vanpool Program

In this scenario, the transit agency assumes most of the responsibility for the vanpool program. It is charged with administering the program, matching riders with drivers, purchasing vehicles and insurance, ensuring vehicles are maintained, collecting money, and performing background checks. Individual employers may perform or assist with some of these major functions, including providing the standard \$100 non-taxable subsidy to employees, and promoting and facilitating access to the vanpool program. The obligations of drivers and riders would remain entirely unchanged in this instance.

Advantages/Disadvantages

By developing and operating its own vanpool, the transit agency can control the quality and consistency of service. If the program is successful, positive public relations would be generated for the transit agency.

Alternatively, with this option the transit agency places itself in the highest risk situation possible among all five scenarios. The transit agency would be singularly responsible for all legal, financial, and political risks involved in such an enterprise. Therefore, any successes and conversely any failures would be readily attributable to the transit agency. Furthermore, higher administration costs associated with operating a vanpool program could tax the transit agency's ability to perform its primary function, which it to provide basic and demand response/transit services.

OPTION 3: Transit Agency Assists Employers in Establishing Company Vanpools

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With Option 3, the transit agency again possesses a limited role in the development and implementation of a vanpool program. The transit agency might be involved in the provision of matching riders with drivers and promotional materials for employers and employees, but neither is likely. Each employer that chooses to participate in a vanpool program would handle its own day-to-day administration.

In addition to daily administration, the employer also provides all of the critical functions previously discussed, e.g. procuring a vehicle and insurance, checking the background of potential drivers, promoting and providing adequate access to a program, etc. Duties pertaining to drivers and riders remain unchanged in this case.

Advantages/Disadvantages

The primary advantage for the transit agency in such a relationship is that if the program fails, it incurs little financial, legal, or political risk. Additionally, because there are fewer stakeholders involved, coordination and implementation for the transit agency is simpler.

A disadvantage to this approach is the inability of private companies to access federal funding to support the program (e.g. JARC). Second, because each vanpool program would be individualized to each employer instead of a group of employers, matching the available pool of drivers and riders may be hampered. (This is assuming that enough employers are clustered together and that shift times can be coordinated.) Third, this option might also limit the market of interested employers, as many will not want to implement a program themselves but would prefer to participate in a larger program administered by another party.

OPTION 4: Transit Agency Enters into a Partnership to Establish and Operate a Vanpool Program

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Upon entering into a partnership with a third party (a TMO or possibly a private company), the transit agency's involvement in a vanpool program will probably be somewhat limited. The transit agency would solicit RFPs from qualified operators and may provide support for matching drivers and riders, but otherwise would allow its partner to handle the bulk of daily operations. However, the transit agency would likely assist in the development of and even participate in a TMO. The TMO, if selected over a private operator, along with participating employers are responsible for all of the tasks critical to the successful operation of a vanpool program. Drivers and riders are responsible for their usual, ascribed tasks.

Advantages/Disadvantages

Forming a partnership with a third party, either a private operator or a TMO, allows the transit agency to limit its liabilities. In this scenario, the transit agency only provides administrative support and allows the operating entity to assume most of the financial, legal, and political risk. Also, if the third party is a private entity, the transit agency may be able to recoup some costs through Capital Cost of Contracting.

The primary disadvantage of this arrangement is that if a TMO were created with a transit agency's involvement, it would be duplicating some of its effort to provide public transportation. Moreover, even though the transit agency would not be directly responsible for operations, it would be seen as more closely associated with the program than if it contracted with a third-party operator to administer a program (Option 1). This could be problematic for the transit agency if the program does not perform as expected.

OPTION 5: Transit Agency Assists Individuals in Establishing Their Own Vanpool

Option 5 requires the least amount of involvement by a transit agency. The transit agency would provide individuals interested in vanpooling with lists of other potential drivers and riders, similar to carpools. The transit agency might also furnish promotional materials, develop a "do it yourself" kit, and even provide example controls and forms. Drivers on the other hand will be responsible for nearly every facet of the service. Purchasing or leasing the vehicle, securing

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insurance, administration, matching, collecting money, etc. would all be the sole responsibility of drivers. Riders in this scenario would only be liable for paying fees and adhering to whatever contract they enter into with the driver.

Advantages/Disadvantages

The risks for a transit agency adopting this approach to the provision of vanpool services are very low; the success or failure is almost completely dependent upon drivers and riders. However, this approach has a low probability of success. Furthermore, because no agency is involved, participants are not eligible for any federal subsidies.

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To summarize, Table I2: Vanpool Risk Assessment outlines the risk exposure in the management of a vanpool.

Table I2: Vanpool Risk Assessment

OPTION	Transit Agency Risks	Financial	Legal Risk	Exposure Risk
1	TA, THIRD PARTY, EMPLOYER, DRIVER, RIDER	Low	Low	Low
2	TA, EMPLOYER, DRIVER, RIDER	High	High	High
3	EMPLOYER, DRIVER, RIDER	Low	Low	Low
4	THIRD PARTY, DRIVER, RIDER	Low	Low	Low
5	DRIVER, RIDER	Low	Low	Low

Table I3: Vanpool Rate of Success outlines the likelihood and ease of implementing a typical vanpool program.

Table I3: Vanpool Rate of Success

OPTION	Success	Longevity Program	Ease to Implement Program	Success Rate Program
1	TA, THIRD PARTY, EMPLOYER, DRIVER, RIDER	High	Easy	High
2	TA, EMPLOYER, DRIVER, RIDER	Moderate	Difficult	Moderate
3	EMPLOYER, DRIVER, RIDER	Low	Difficult ⁽¹⁾ Easy	Low
4	THIRD PARTY, DRIVER, RIDER	Moderate	Difficult ⁽¹⁾ Easy	Moderate
5	DRIVER, RIDER	Low	Difficult Easy ⁽¹⁾	Low

⁽¹⁾ Depends on extent of transit agency involvement

Benefits

Riders

- Low cost and less wear and tear on personal vehicle.

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- More time to relax, rest, and socialize with friends.

Employers

- Federal tax code allows tax-free transportation fringe benefits up to \$105 per month per employee to cover transit or vanpool expenses. Providing commuter tax benefits can save payroll taxes for employer since the value of the benefit is considered a tax-free fringe benefit and not wage or salary compensation (and therefore payroll taxes do not apply). In other words, giving an employee \$105 in vanpool salary compensation is less expensive than raising salary by \$105.
- Employers are able to recruit from a bigger geographic area since people are willing to work farther from home if they know they do not have to drive every day.
- Vanpool riders tend to be on-time more than other employees because peer pressure keeps everyone on schedule.

Community

- The average car makes about a pound of pollution for every 29 miles. That means, for each 100-mile round-trip commute that is converted into a vanpool trip, about three pounds of pollution a day or nearly 850 pounds a year is eliminated.

Type of Vehicle

Vehicles used to support vanpool programs should be the right size for the number of riders estimated to use the service. Many programs rely on 12 passenger vans. However, 12 to 15 passenger vans are at a higher risk of rollover, especially with highway driving, and are more difficult/costly to insure. Recommended vehicle types may include a 20 passenger mini bus or 8 passenger minivan (depending on the interest of people in the program). The estimated cost of a 12 passenger van suitable for the project is \$25,000 to \$30,000 (for propane). By contrast, the estimated monthly cost of a lease for a 12 passenger van is \$1,400.

Operating Costs

After purchasing the vehicles, additional costs will include gas, insurance, maintenance, and administration. Perhaps the most expensive is the insurance. Many organizations are deterred

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from providing vanpool services because of the exorbitant costs of insuring vehicles. Determining factors include mileage, type of vehicle, driver experience, destination type, set schedule versus dial-a-ride, type of passenger, and radius of the area. Since vanpools in rural areas drive extensively and carry people, the insurance rate can exceed that of urban programs or other type of commercial insurance. Below is Table I4: Barebones Estimate of Vanpool Operations Costs, a working estimate of what it may cost to put a vanpool together in the Childress area.

Bare-bones Estimate of Van Pool Operations Costs

Capital and Fixed Costs

	Lease	Purchase
Vehicle	\$ 1,400 monthly*	\$ 637 monthly (\$30,000; 10%, 5 yrs)
Insurance**	\$ - annually	\$ 2,000 annually
Tires/Oil	\$ - annually	\$ 2,400 annually
Preventative Maintenance		\$ 2,000
Total Annual	\$ 16,800	\$ 14,044

*Quote from Enterprise at the non-corporate rate.

**Quote made given a number of assumptions about driving distances and conditions

Fuel

Distance	40 miles one way
MPG	12
Cost/Gallon	\$ 2.89
Fuel per Trip	\$ 9.63 Cost of fuel per day
Trips/Month	42 21 work days; out and in bound trip
	\$ 404.46 monthly
	\$ 4,853.52 annually

Administration

Hours for Admin Monthly	40 hrs (marketing, billing, other)
Admin Salary	\$ 10
Benefits, etc.	1.5
Annual Admin Cost	\$ 7,200 annually

Materials \$ 300.00 annually

	Lease	Purchase	SOV Cost
Total	\$ 21,953.52	\$ 19,197.52	
Riders	7	7	40 miles one way
Cost per Rider	\$ 3,136.22 Annually	\$ 2,742.50 Annually	20 MPG
	\$ 261.35 Monthly	\$ 228.54 Monthly	
	\$ 12.45 Daily	\$ 10.88 Daily	\$ 11.56 Daily (fuel only)
	\$ 6.22 One way	\$ 5.44 One way	\$ 5.78 One way