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Pooling together: why the vanpool works in the US and the Netherlands

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A vanpool is a group of 7-15 people who commute together on a regular basis in what is called in the USA a van – but what we would call a minibus. The vanpool concept is predicated on the voluntary driver, and expenses are shared among the group. Largely as a result, vanpools

are widely regarded in the USA as being the most cost-effective transportation demand management measures for employers to support. Currently there are more than 10,000 vanpools in the USA, which are operated by private operators, employers and public agencies. In

addition, vanpools are beginning to be developed in the Netherlands.

However, as yet they are almost unknown in the UK. The purpose of this article is to identify why this is the case by looking at vanpools in the United States and the Netherlands.

In the US vanpools eliminate around 7,000 vehicles from the roads each day. Over one year each vanpool group can save 30,300 litres of petrol and reduce air pollutants by 4.9 tonnes.

THE US EXPERIENCE

Vanpooling began in 1977 when the Chrysler Corporation developed a system using its own vans to transport employees to its assembly facilities. At around the same time, electronics firm 3M introduced a similar operation at its Minneapolis/St Paul site. There are now more than 10,000 vanpools in the USA, and over 100,000 vanpoolers. While the number of people taking up vanpooling had remained fairly static in the three or four years up until now, the numbers are now increasing once again. This resurgence is due to so-called commuter choice legislation, which enables employers to give \$US100 (£64) tax free transit allowance to employees for public transport or vanpools. There is also a benefit to the employer (see later). In the UK there is no similar tax incentive.

King County Metro is the largest public vanpool operator in the USA. In 2001 697 vanpools were in operation, with employer members of the vanpool programme including a number of major companies like Boeing, Microsoft, AT&T, Philips Oral Health Care and the University of Washington.

Nearly three million passenger trips were undertaken by King County Metro vanpools in 2001, with an average occupancy of 8.6 and an average round trip of 92.8km. Figures published in a King County Metro Fact Sheet state that vanpools eliminate around 7,000 vehicles from the road network each day. The report adds that over a year one vanpool group saves about 30,300 litres of petrol, reduces air pollutants by 4.9 tonnes and removes more than 168,000 vehicle kilometres, or around 20,800km per commuter. Overall in the Puget Sound area (Greater Seattle), vanpooling has achieved a 2% market share of the overall commuter market, a figure which rises to 7% for commuters who travel more than 32km each way.

Vanpooling first started in Washington State in 1979 when the City of Seattle began operating 21 vans to provide an alternative to fixed route transit to serve commuters who do not have access to transit or have longer distance commutes. This was made possible by the Ridesharing Act, enacted on



7th June by the Washington State Legislature, largely in response to the fuel crisis. This provided a sales tax exemption for the vanpool vehicles, established liability insurance as 'ordinary standard of care' for the volunteer driver, and allowed the use of Government vehicles for the purposes of ridesharing. It also defined vanpooling as 'a group of not more than 15 persons commuting from home to work or school'. The vanpool operation was then transferred to King County Metro in 1984 with 130 vans. The passing of the 1992 Air Quality Commute Trip Reduction Act, changed the minimum size of a vanpool from seven people to five. This resulted in the mini van portion of the fleet growing to almost 400, or 60% of the fleet by 2000. Finally, the Taxpayer Relief Act of 1997 and the 1998 Transportation Equity Act for the 21st Century provided for increasing the non-taxable vanpool commuting benefit ceiling to \$US100 (£64) a month from 1st January 2002, with the resumption of increases indexed to inflation. Employer subsidy aids in vanpool participation while Washington State Commute Trip Reduction legislation combined with the commuter check tax incentives encourage employers to subsidise vanpools. Local benefits to vanpools include discounted fares and priority access on the region's ferries – used by 11% of public vanpools and 60% of private vanpools.

The vanpool programme provides vans, staff support, maintenance, fuel, and insurance to groups of between five

and 15 people who commute together. The Department of Licensing conducts background checks to eliminate drivers with bad driving records, while bookkeeper credit checks eliminate persons with a bad credit history. Driver orientation classes provide safety training.

One volunteer from the group drives the van and travels for free while the rest of the group pay a monthly fee based on the number of vanpoolers and the round trip mileage of the commute. Although the average monthly fee is \$US58 (£37), the average 'out of pocket' monthly fee is \$US37 (£24) as 79% of employers now provide a direct or transit partnership fare subsidy to vanpool employees, including 15% of employers who subsidise vanpool fares 100%. A guaranteed ride home is available to every vanpooler who needs emergency transportation during work hours. Each group has one primary driver and at least one back up. In 2000 there were just over 2,500 registered drivers.

Since 1997 companies have also been allowed to use the vans during the day for business purposes, ie providing transport for employees to get to meetings, and allowing shuttle-type access to an employer campus or between sites. Commuter groups that make their vehicles available receive a special subsidy. Other schemes such as the Shared Use Programme, which enables qualifying social service organisations to lease the vans, and the Job Seeker programme, which provides transportation for welfare reform clients to job training and employment also make use of vanpool vehicles outside of commuter hours.

The annual operating costs in 2000 were \$US2.6m (£1.7m), which were covered by income from the passenger fees, grants, sale of vans (which are sold after five years use) and the self insurance reserve. These sources also contributed to 45% of the \$US1.5m (£1m) administration costs – the remainder is covered by public subsidy.

King County Metro also works with the Washington State Ridesharing Organisation (WRSO) and the Washington State Department of Transport (WSDOT) to assist and encourage independent vanpooling.

In addition to King County Metro, five other public transport operators run vanpools. Specifically, Community Transit operates 239 vanpools, Pierce Transit (148), Kitsap Transit (92), Intercity Transit (51), and Island Transit (30), while it is estimated that there are another 200 or so informal vanpools operating on a regular basis.

As a consequence the Puget Sound region has the highest number of vanpools per capita (4.5 vans/10,000) in the USA. Experience shows that vanpools work best when employees working for the same company live relatively near each other in suitable clusters, but more than 25km from their workplace. Ideally, they should also all start and finish work at the same time. Interestingly this lack of flexibility is the biggest reason why staff choose not to vanpool, although those that do are very positive.

GOING DUTCH: TRANSFERRING VANPOOLING TO THE NETHERLANDS

While there had been a few Dutch company-arranged vanpool schemes, and one other leasing company tried but failed to start up a successful vanpool operation, vanpooling did not really begin to develop in the Netherlands until the arrival of US vanpool provider VPSI four years ago. Vanpooling Services Incorporated (VPSI) is a private company and operates about 3,000 vanpools, making it the largest vanpool operator in the USA and therefore the world. VPSI emerged from the Chrysler rideshare experiment of the 1970s as a Chrysler subsidiary to provide vanpooling services to companies, and is now part of

the Budget Group. VPSI is particularly active in Southern California, Texas, Atlanta, and the Bay Area (greater San Francisco), with one programme at Chevron Texaco in California and Houston having over 200 vans and one at Kennedy Space Centre at Melbourne, Florida having 400-500 vans.

As of summer 2001, VPSI's Dutch subsidiary Vipre, (acquired from Philips) operates 80-85 vanpools with 600-650 vanpoolers, making it the largest vanpool provider in Europe. Vipre has offices in Amsterdam, Rotterdam and Eindhoven and sees itself as a facilitator of mobility for companies, drawing up and implementing mobility management strategies (travel plans).

Vipre services three companies in Rotterdam, two in Amsterdam, one in the south, one in Groningen, and one in Leeuwarden. On average, vanpools consist of around seven people.

Shell was the first Vipre client to adopt the concept towards the end of 1998, and now has 13 vanpools of around 75 staff. The vanpools were established as a way of transporting its staff to the industrial complex as public transport is very poor around the site. Two people from neighbouring oil company Atofina also use the Shell vanpools (Atofina has five vanpools itself). However, in general it is very difficult to organise 'inter-company' vanpools, even on business parks. Aircraft manufacturer Fokker's Hoogerheide site in the south of the country has the largest vanpool network of 53 vans in total for around 450 employees – a third of the workforce. Parking requirements were reduced nine-fold. The Dutch Mint started 2-3 vanpools when it moved from The Hague to Haarlem, as there was no suitable public transport available for early morning shift workers.

Vipre leases vans for four years from a lease company. For flexibility, the vans are all of the same type. Interested companies can then lease either for one year or four years, while shorter month by month user agreements are likely to come on stream soon to further reduce barriers to entry. Those that opt for four years benefit from a discounted rate and are able to customise their vans as they wish.

Vipre organises insurance, maintenance, and repairs for the van, and ensures backup for staff that have an emergency during the day or need to work late. It also organises the collection of subsidy available to companies under the Subsidy for Company Transportation rules, which many local authorities have offered for many years. For example, in Rotterdam, companies providing vanpools that do more than a minimum level of mileage a year are granted a subsidy of three Euro cents a passenger kilometre. This is especially attractive, because companies can only usually claim if their vanpools do a minimum number of passenger kilometres. As Vipre is able to collect this on behalf of its member companies, even the smallest vanpool gets some money back.

In the Netherlands, vanpools have a maximum of nine members. In principle the vanpool has a recognised driver and a reserve driver, but in practice they are encouraged to 'live their own life'. The aim is to make the vanpool as close to a car environment (and therefore as comfortable as possible), but with the added benefit that people can read or just relax instead of driving. Vanpools usually also have reserved parking places close to the company entrance. Typically, fuel is paid for on a vanpool smart card. Vanpools have an element of team building too. In some vanpools, companies give the nominated driver a fee for the extra responsibility, getting up earlier, administration etc.

The price for companies hiring a van is roughly the same as it would be for it to give eight to nine employees their maximum car commuting allowance each month, although it is somewhat dependent on the vehicle kilometres travelled.

As commuting is a tax-deductible expense in the Nether-



In the Netherlands, Vipe organises insurance and maintenance for its fleet of vanpools and provides backup for staff during and after work hours.

lands, the tax issue for vanpooling has been less of a difficulty than it was in pre-Transportation Equity Act USA (or still would be in the UK). But the tax situation on incidental private use of the van is problematic, and because vanpooling is not defined legislatively as they are in the USA, vanpools are thus subject to taxes discouraging large car use (eg liable to 40% luxury tax). As a result, despite the tax relief and the fact that vanpools are often eligible for local subsidy under the Subsidy for Company Transportation rules mentioned earlier, providing vanpools still cost companies money.

Meanwhile to enhance the appeal of vanpools further, Vipe is seeking permission for vanpools to use bus lanes. In principle the Dutch Ministry of Transport has agreed, and a trial is currently being conducted in the Port Area of Rotterdam. However, this concession requires that each van be fitted with a transponder so that it can trigger the traffic lights so as not to slow buses. As transponders are not cheap, discussions are continuing.

AND SO TO THE UK?

Vanpools are theoretically a very attractive way for companies and/or local authorities to provide employees with an alternative to driving their own car – and at first glance would seem ideally suited to being a key element in many an employer travel plan. This is particularly important given the emphasis placed on employer travel plans by the Government, which sees them as a quick, cheap, simple, painless and effective means of reducing travel demand. Moreover, one key barrier to companies adopting travel plans is the lack of a feasible alternative to the car for many employees – a barrier the vanpool has managed to alleviate in many US cases as we have seen.

For companies, vanpools reduce the need for parking facilities, are viewed as an employee benefit, enlarge the labour pool and enhance punctuality, while local authorities benefit from reduced traffic congestion and improved air quality. Vanpools also offer an innovative and flexible way of improving regional mobility without significant operational cost, making the mode ideal for meeting the increased demand in hard-to-serve suburban markets. Finally, vanpools are popular with employees because they are designed to be as close to a car as possible in terms of comfort and reliability, while

trading off a reduction in flexibility for less cost and less driving hassle.

As yet though, vanpools have not been widely implemented in Europe, and hardly at all in the UK. This is due to a range of factors. Not least among these is that the commercial benefits to employers of vanpooling are reduced. This is primarily because in Europe a special driving licence is required to drive a van carrying more than eight passengers, compared with a limit of 14 passengers in the USA. As a consequence, VPSI's US operations, average occupancy is 11.5 per van, compared to around seven in the Netherlands. Compounding

this, the tax position at the moment in Britain means that employer-supported vanpools for commuting would be taxed as a benefit-in-kind by the Inland Revenue. Additionally, in the UK the main driver of a vanpool would be considered, for tax purposes, to have been allocated a company car and therefore would have to pay tax on the capital and any fuel benefits received. Other problems are connected with insurance. Although the accident record of vanpools is good, insurance companies have so far been unwilling to take on the risk. Finally, if vanpools were ever to develop in the UK then the public and policy makers would need to be educated as to what they are – in general, the public is still ignorant of the concept.

Such a list of essentially institutional barriers is certainly formidable. Even if these were overcome though, which could certainly be possible if the US model were followed, it is likely that a socio-geographical one would remain to prevent the take up of vanpools in all but a relatively few cases. This is because vanpools work best when employees working for the same company live relatively near each other in suitable clusters, but more than 25km from their workplace. Such situations are commonplace in the USA, but in the UK the majority of people live within 15km of work. It also seems to be far more difficult in the UK to find people living in the same general area (or 'cluster') and working in the same place.

Instead, the idea of lift sharing in smaller vehicles would seem more likely to succeed in the UK context – a point realised by Vipe, which markets its product as 'drive share' rather than vanpool, and offers companies the choice of any vehicle from a Ford Fiesta up to Tornado Transit.

In conclusion, the growth in vanpooling in parts of the USA was very much encouraged by regulations requiring companies to better manage their transport demand, which in turn were supported by fiscal incentives and a growth in neighbourhoods that are 'hard-to-serve' by conventional public transport. It is worth noting that despite these favourable conditions in parts of the USA, vanpools very much remain a fairly small niche market.

Nevertheless, the institutional barriers that currently stifle the development of vanpools, also prevent the growth of other alternatives such as drive share, liftshare, or carpool schemes, and perhaps even community transport and dial-a-ride projects. However, as suburbanisation continues apace and journey to work distances steadily increase, it is likely that circumstances could change enough for vanpools to become rather more feasible in an increasing number of cases. Finally, there could well be scope for the King County model to supplement public transport, particularly in areas not currently well served by conventional public transport should vanpool barriers be removed.

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