

Andelsbilklub -- AutozumTeilen -- AutoCom -- Autodeled -- AUTOparat -- Auto-Share -- Auto-taxi -- Autotaxis -- Autoteilen -- Autovermietung -- Bilföreningar -- Bilkooperative -- Bilklub -- Bilpool -- Block cars -- Buurt Auto Service -- Caisse Commune -- CampusCar -- CarLink -- car sharing -- carsharing -- Car-Share -- CHOICE -- City Car Club -- City CarShare -- COgOCar -- CommunAuto -- Community Cars -- Co-Op Auto Network -- Cooperative Auto Network (CAN) -- Crayon -- Dancing Rabbit -- Delebilen -- Delebilklub -- Easydrive -- GemeinschaftsAuto -- Green Car -- HaBil -- Huur-op-Maat -- ICVS -- Motor Pool Co-operative -- Neighborhood Cars -- NTUC Car Co-Op -- Ökomobil -- Pay-As-You-Drive -- People's Car -- Praxitele -- Procotip -- PubliCar -- Selbstfahrergemeinschaft -- Self-drive taxis -- Shared car -- (ultra) Short term car rental -- STAR (Short-Term Auto Rental) -- Station Car -- StatAuto -- Stadtauto -- Stadtcar -- Stadtmobil -- Station Cars -- TeilAuto -- U-Drive Taxi -- Vivallabil -- Witkar -- ZipCar -- ... and more!

CarSharing 2000

Some Questions & a Few Reflections on the Future of Carsharing

EcoPlan and The Commons

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Carshare in . . .

Aachen * Aarau * Aarhus * Adiswil * Adligenswil * Aesch * Affoltern a.A. * Allschwil * Alpnach * Altdorf * Altstätten * Amriswil * Amsterdam Zuid * Andelfingen * Andermatt * Appenzell * Arbon * Amstadt * Arth-Goldau * Baretswil * Boblingen * Bulach * Baar * Bad Homburg * Bad Ragaz * Bad Sackingen * Bad Schwartau * Bad Vilbel * Baden * Basel * Bassersdorf * Bauma * Bayreuth * Bellinzona * Belp * Bergdietikon * Bergen * Bergisch Gladbach * Bergsjöns * Berikon * Berlin * Bermgarten * Bern * Beromunster * Biberach * Biel * Bielefeld * Binningen * Birsfelden * Bochum * Bolligen * Bonn * Bonstetten * Bordeaux * Bottmingen * Boulder * Braunschweig * Bremen * Bremerhaven * Bremgarten * Brig * Brønshøj * Brugg * Brugg Weiermatt * Bubikon * Buchholz * Buchs * Buochs * Burgdorf * Colbe * Calgary * Carouge * Castrop-Rauxel * Celle * Checirc;ne-Bourg * Cham * Chur * Coburg * Copenhagen * Corburg * Cottbus * Cranfield * Dubendorf * Dudingens * Duren * Durnten * Dusseldorf * Dachau * Darmstadt * Davos * Degerheim * Den Haag * Dessau * Dielsdorf * Dietikon * Domat/Ems * Dordrecht * Dornach-Arlesheim * Dortmund * Dossenheim * Dresden * Duisburg * Ebikon * Ebnat-Kappel * Ecublens * Edinburgh * Effretikon * Eglisau * Einsiedeln * Elgg * Elmshorn * Emmen * Emmenbrücke * Enzingen * Eppstein * Erfurt * Erlangen * Erstfeld * Esbjerg * Essen * Esslingen * Esslingen * Ettlingen * Eutin * Fallanden * Furth * Farum * Faulensee * Fellbach * Filderstadt * Flawil * Florence * Fort Collins * Frankfurt/M * Frauenfeld * Freising * Frenkendorf * Fribourg * Frick * Frutigen * Gegrave;neve * Gottingen * Garching * Gauting * Gebenstorf * Gelsenkirchen * Gelterkinden * Gevelsberg * Gieszlig;en * Gipf-Oberfrick * Giswil * Goldach * Gossau SG * Göttingen * Grafelfing * Grut * Grabs * Grenchen * Greven * Gstaad * Guelph * Huckelhoven * Haarlem * Hagen * Halberstadt * Halle * Hamburg * Hameln * Hanau * Hannover * Hannover * Hausen am Albis * Hedingen * Heerbrugg * Heidelberg * Heidenheim * Heimenschwand * Helsinki * Herbrechtingen * Herdecke * Herisau * Herning * Herrliberg-Feldmeile * Herzogenbuchsee * Heuchelheim * Hildesheim * Hinwil * Hisingen * Hitzkirch * Hochdorf * Hofheim * Holzwickede * Hombrechtikon * Horgen * Horw * Ilanz * Illnau * Ingolstadt * Interlaken * Iserlohn * Ittigen * Jena * Jona * Köln * Koniz * Kusnacht * Kussnacht * Kalmar * Karlsruhe * Karlstads * Kassel * Kempten * Kiel * Kingston * Kirchheim/Teck * Kitch.Waterloo * Klosters * Kloten * Koblenz * Konolfingen * Konstanz * Kreuzlingen * Kriens * Lorrach * Lubeck * Ludenscheid * Luneburg * La Chaux-de Fonds * Laatzens * Lachen * Landquart * Landshut * Langen * Langenfeld * Langenhagen * Langenthal * Langnau * Laufen * Lausanne * Lausen * Lehrte * Leipzig * Lenzburg * Leverkusen * Lichtensteig * Liestal * Ligerz/Twann * Lillenthal * Littau * Locarno * Ludwigsburg * Ludwigshafen * Lugano * Luzern * Lyss * Mannedorf * Mohlin * Monchaltorf * Mulheim/Ruhr * München * Münchenbuchsee * Munchsteinach * Munsingen * Munster * Magdeburg * Magden * Mainz * Majornas * Mannheim * Marburg * Marl * Meggen * Meilen * Memmingen * Merseburg * Mettmensstetten * Minden * Montreal * Montreux * Muri * Muri-Gumligen * Muttenz * Nanikon * Nürnberg * Nagold * Neckargmund * Neuchacirc;tel * Neuhausen * Neuss * Nidau * Niederhasli * Niederlenz * Nussbaumen * Nyon * Oberdorf/Stans * Oberhausen * Oberkirch * Oberursel * Oberuster * Oberwil * Obfelden * Odense * Offenbach * Oldenburg * Olten * Opfikon * Oslo * Ottawa * Osnarbruck * Ossingen * Ostermundigen * Ostfildern * Overijssel * Oxford * Pansdorf * Paris * Passau * Petit-Lancy * Pfaffikon * Pforzheim * Pfullingen * Plannegg * Plochingen * Portland * Potsdam * Pratteln * Preetz * Puchheim * Pully * Quebec City * Rumlang * Ruschlikon * Russelsheim * Ruti * Rafz * Rannebergens * Rapperswil * Ratzeburg * Ravensburg * Rebstein * Refrath * Regensburg * Regensdorf * Reichenbach * Reinach * Renens * Reussbühl * Reutlingen * Rheinfelden * Rhein-Neckar * Richterswil * Riehen * Rodovre * Roggwil * Romanshorn * Rombach * Rorschach * Rostock * Rostock * Rothenburg * Rotkreuz * Rottenburg * Rotterdam * Rudolfstetten * Ruswil * Suszlig;en * Saarbrücken * Sachsels * Saint-Quentin * Samedan * San-Francisco * Sargans * Sarnen * Schofflisdorf * Schöffland * Schönenwerd * Schupfen * Schaffhausen * Schattdorf * Schiedam * Schiers * Schlieren * Schliern * Schopfheim * Schwabisch Hall * Schwarzenburg * Schwerin * Schwerzenbach * Schwetzingen * Schwyz * Seattle * Seeheim-Jugendheim * Seelze * Sempach * Siegen * Sindelfingen * Singapore * Sion * Sissach * Soest * Solothurn * Speyer * Spiez * Stafa * St. Gallen * Stade * Stans * Stansstad * Starrkirch-Will * Steffisburg * Steinbach a.Ts. * Steinen * Steinhausen * Stockholms * Stuttgart * Suhr * Sundbybergs * Sursee * Tübingen * Thalwil * Therwil * Thun * Thusis * Tornesch * Toronto * Trubach * Traverse City * Trimbach * Tübingen * Turbenthal-Wila * Turgi * Ulm * Umkirch * Unna * Urdorf * Uster * Utrecht * Uznach * Uzwill * Valby * Vancouver * Växjö * Veltheim * Venezia * Vevey * Victoria * Vienna * Viernheim * Vinter-viken * Volketswil * Wadenswil * Würzburg * Wabern * Waiblingen * Wald * Wallisellen * Waltrop * Washington, DC * Wattenscheid * Wattwil * Weinfeldens * Weingarten * Weinheim * Wettensberg * Wetter * Wettingen * Wetzikon * Wetzlar * Wiesbaden * Wiesendangen * Wiesloch * Will * Willisau * Winterthur * Witten * Wittenbach * Wittenberg * Witzenshausen * Wolfenbüttel * Wolhusen * Worb * Worms * Wunsdorf * Yverdon * Zürich * Zofingen * Zollikoberg * Zollikofen * Zuchwil * Zug * Zürich * Zweisimmen

A word of introduction:

For several decades there has been in transport circles some marginal discussion about the concept of people sharing cars -- as opposed to the familiar owner/driver model which dominated virtually all of the last century. Over the years there has also been a certain amount of experimentation and examples of people in specific places actually doing it in a variety of manners and with a considerable range of degrees of success. But by and large these developments have attracted little interest from the mainstream transport or policy experts.

But suddenly it's the Year 2000, a new century is on us, and, as we all know, past patterns do not always hold on forever, particular in a climate of change. Never mind the extremely rapid changes that we have been seeing in recent years in terms of people, our mobility choices, the environments in which we move around in our daily lives, and the exploding universe of technologies that make all this movement possible, including in new ways that few of us have ever even dreamed about in the past.

Have you ever, for example, thought about what it means to own your own car in a city? I am not thinking about anything as elaborate as traffic congestion, air pollution, accidents or the like, but simply what it means to someone like you or me, the owner/drivers of this world, in the daily run of things. Typically for instance, we are saddled with a big chunk of machinery that sits out there on the street and that we use barely an hour a day, less than five percent of the time, while costing us something on the order of anywhere from ten percent to up to a third of our hard earned net income. Doesn't that sound to you like something that might be a candidate for a bit of imaginative re-engineering... if we have a choice that is?

Well, as it turns out, now there may now be a choice, for some of us at least and some of the time. It's called "carsharing", a transportation arrangement that directly addresses this anomalous situation and does indeed, for the first time, promise some interesting alternatives. And although the basic concept will not be familiar to many people, our goal in these few pages is to provide a readable first introduction to this for your consideration and at the same time give you some handy leads to further information and details, just in case it captures your interest. This presentation takes the form of a few questions, selected on the basis that these are among those most often posed to us when people ask about the concept and the reasons why we think it is an idea for its time.

As is appropriate to our age, all this is being prepared and presented as a multi-media exercise. Thus, you can either get and read this in print form, or alternatively you can access it along with the full **CarShare 2000** report freely on the World Wide Web (at www.ecoplan.org/carshare), and from there you can link directly to a number of interesting sources, useful background documents and actual projects, which should help to advance this interesting concept. You may as well know about it, since an awful lot of people are going to be doing it. Including probably you.

Eric Britton
The World CarShare Consortium
EcoPlan and The Commons, Paris
January 19, 2000

Thank you. I do have a few questions about carsharing:

1. What is it?
2. How does it work?
3. Sounds reasonable enough, but does it really work?
4. And where does it work? Please be specific!
5. Why would anyone ever want to do it?
6. Is it good for the environment?
7. What's in it for cities?
8. Will new technology have any sort of effect on this?
9. Any other surprises we should be aware of?
10. Who are the people who are making it work?
11. Any particular recommendations?
12. Now... where might I go for more?

“The difficulty lies, not in the new ideas, but in escaping the old ones, which ramify, for those brought up as most of us have been, into every corner of our minds.”

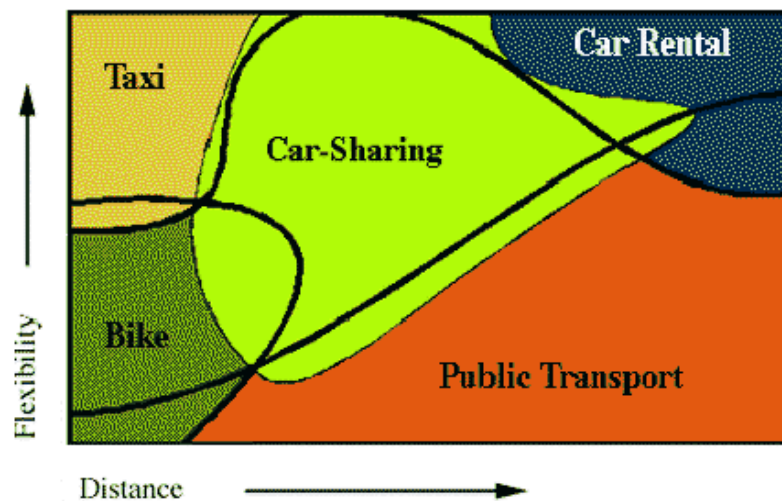
- John Maynard Keynes

1. What is carsharing?

Car sharing is an alternative system of car ownership, access and use. If you are a car-sharer in the year 2000 in any of the 490 locations listed on the inside cover page here, you no longer need to own that nice car you happen to be driving ... you just use it.

Sound like a normal rental car? Well almost. Only that with carsharing things are organized so that you have convenient access to a vehicle whenever you happen to want it (might be a different size or type depending on your immediate needs). The whole thing pivots on the concept of being able to get a vehicle quickly, when you need it – without each time having to go over to some place to get it, take the time needed to fill out all those papers, tell them how long you intend to keep it, etc. “Instant rental car” may be a better expression for it.

Here roughly is how carsharing fits in with the other near-by modes in the new transport configuration:



Source: The first time I saw this graphic was in 1973 in a pioneering study by the Urban Institute. This adaptation comes from the [Bremen Web site](#).

There is some potential ambiguity about the term, so we must be careful to distinguish it from **ride**-sharing: car pooling (often in some places confusingly referred to also as 'car sharing'), organized hitch-hiking, vanpools, and similar projects where the vehicle may be shared at some time but where the main ownership and control (driving) arrangements remain essentially unchanged.

Carsharing, got right, however is not a free-standing concept. That is in fact its particular genius. It is a sub-system and part of a much greater whole, and really should be approached and understood as such. And what is this greater whole? Well, for the first time, with the addition of carsharing (the “missing link” as we have called it), cities can provide themselves with an integrated, full function, multi-modal transportation system that offers a real alternative to the private car. This is the real bottom line of carsharing from the overall public interest perspective, and we shall be going into that shortly.

2. How does it work?

Carsharing is above all a local phenomenon. At least it has been until now. And this means that since it is practiced in hundreds of places and in many different ways, it is hardly surprising it that there are many different definitions offered as to how it works.

Here is one rather good explanation that you can find on the Web site of Carsharing Portland at www.carsharing-pdx.com/.

Car sharing is an alternative to individual car ownership for people who don't need to drive every day. It is based on joint access to a fleet of vehicles, located throughout neighborhoods, close to your home or work. You pay for the hours and miles you drive. Insurance, gasoline and maintenance are included in the rates. When you want to use a car, you simply make a phone call to reserve a car for immediate or future use. To use the car, simply walk or bike to the location, typically 3 to 5 blocks away, use your access key and drive away. At the end of your trip, return the car, lock it up and you're done. You pay only for what you use.

But if you are considering a carshare project for your city or neighborhood -- what is perhaps most important is to bear in mind that there are many ways of going about it, and that until now at least no dominant pattern or best way has emerged as the standard delivery package. Indeed, given the fact that these projects are responses to such a wide variety of needs and operational circumstances, it is likely that variation and not standardization will continue to be among their dominant characteristics. **Each project is going to be destined to find its own way, depending on the details of its working environment.**

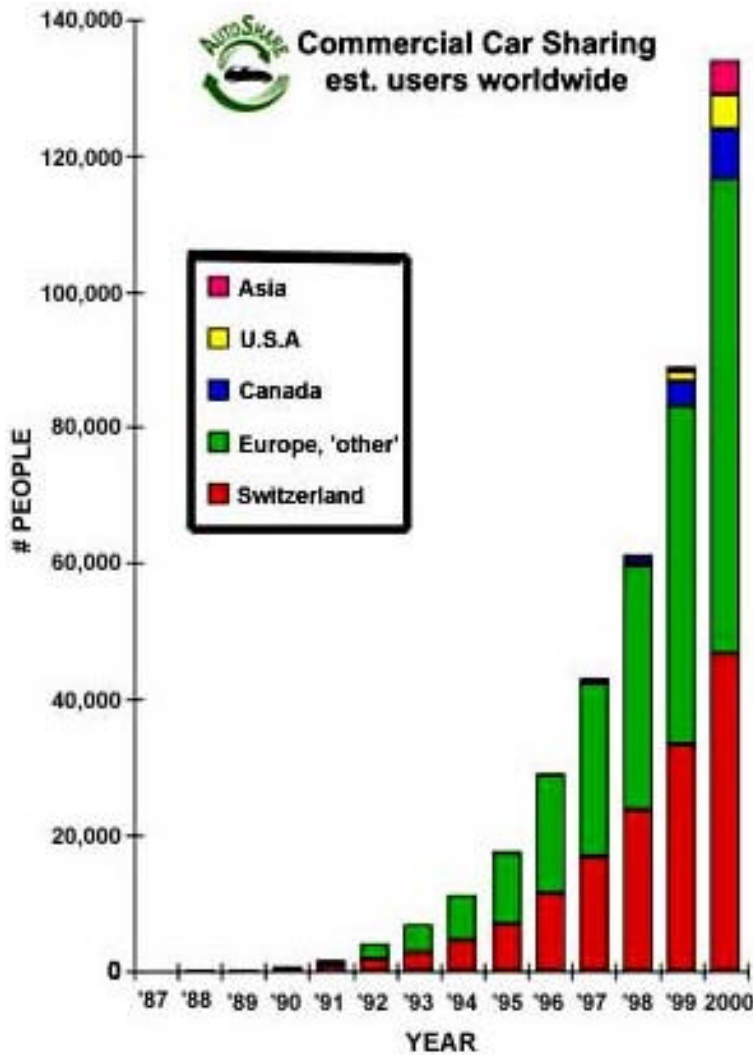
Here are some of the main sources of variation and personalization that we can spot from the services already underway:

- Basic objectives (public service in general, service of some known target group, demonstration project, for-profit local group, corporate project, franchise, etc.)
- Size of target area and of target group to be served
- Organization, services offered, prices, payment, etc.
- Number, kinds and qualities of vehicles
- Level and quality of service
- Technological sophistication (in the vehicles, supporting information system, operational infrastructure, etc.)
- Links with other parts of the region's transport system
- Degrees of local support, including local government

- **Multimedia:** As good a way as any to get a feel for the range of these variations and possibilities is to spend a few minutes with the World Car-share Inventory at www.ecoplan.org/carshare.
- For a neat Web demonstration of how carsharing works in one instance, try the Bremen Car Free Cities site at www.bremen.de/info/agenda21/carfree/how.html.
- For more on organization, try the Meijkamp paper in the full Carshare 2000 report which you can freely access at <http://www.egroups.com/docvault/carsharing/>

3. Sounds reasonable, but does it really work?

Fair question. There are in transportation and sustainable development circles a lot of talk of fine sounding, right-minded concepts that will doubtless never see the light of day. Carsharing though is not one of those. It's real. It's here today. It works.



Source: www.autoshare.com.

Carsharing is a relatively recent phenomenon, if we judge it in terms of on-the-street working operations that people actually use every day in some numbers. Ten years ago there weren't very many people carsharing anywhere in the world. Today? Today there are literally hundreds of going carshare operations, thousands of vehicles being used, and tens, soon hundreds of thousands of people who walk down to the corner and climb aboard each day. In a phrase: it's not just one more pretty theory.

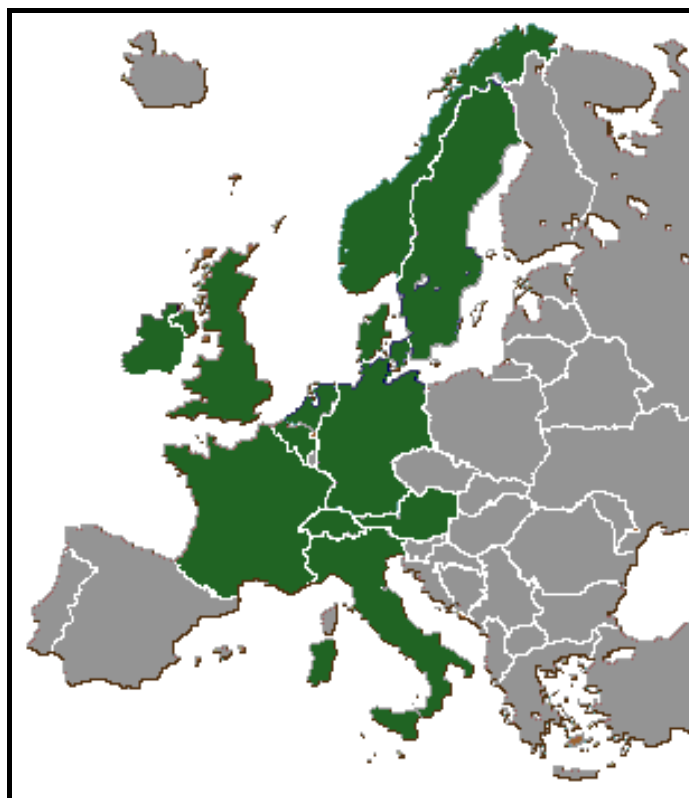
If you look at what is going on, you will quickly spot several outstanding characteristics of these projects. The first is that a handful of countries in Europe have taken the lead over the last decade. The second is the great diversity of the various operations: whether in terms of size, ambition level, motivation of the organizers, basic organization, technologies, institutional sophistication, competence and, of course, their success. A third notable point is the very strong and successful development push of late, after many years of barely marginal existence. As a result car sharing in these opening years of the new century is an option that is worth taking seriously

What is perhaps most interesting about all this activity is not only that it give every appearance of working and doing a useful job for individuals, groups and neighborhoods who have decided to try it, but that it is fast growing and fast changing. Also, it is virtually all paid for by the people who use it and enjoy the benefits, and not the poor taxpayer. A rather agreeable pattern change for the transport sector, wouldn't you say?

As you can well imagine, this is not an arrangement which will do the job for all people all of the time. But experience is now demonstrating, experience in literally hundreds of places, that with proper organization, carsharing can be a very satisfactory transport arrangement for some people, in some places, some of the time. And that, by the way, is precisely how you build a sustainable transportation system: piece by careful piece.

4. Where do people carshare?

Well, as you will see if you consult the [World CarShare Inventory](http://ecoplan.org/carshare) at <http://ecoplan.org/carshare>, there is some nascent activity beginning to build up in North America, one project in Singapore, and interest beginning to rumble in Japan. But the hard core of carsharing as a reality of daily life thus far is mainly a European phenomenon. But there too there's a pattern, as you can spot from the following map.



Source: From ecs at www.carshring.org. Mildly updated by EcoPlan

The latest additions to the European carshare map are Belgium, where they are just launching start-ups in four cities and a national support program, and Italy, where several are in the process of being studied. France and Britain continue to lag the leaders but recently have picked up a bit of steam, though still the mainline cultures and institutions there remain generally resistant to these ways of doing things, or even thinking about them. But **the main activity belt is still the one that runs straight north from Switzerland and Austria and on through Scandinavia.** All you have to do is check out that list of several hundred active carshare cities that appears on the inside of the cover page here, and you will immediately spot the nationality origins of all those names.

Multimedia: The World Carshare site at www.ecoplan.org/carshare has an Inventory link which provides direct access to several hundred carshare operations that are currently active in more than a dozen countries all over the world. It also links directly to several dynamic maps showing carshare operations in various parts of Europe, including very detailed ones on Germany and Switzerland.

5. Why would anyone ever want to share a car?

In the original small spontaneous neighborhood projects back in the seventies and eighties, people joined carshare clubs because they knew each other, shared values, because it seemed like a good sustainable thing to do, and because it appeared to be convenient enough and could save them some money. Many of the early practitioners came to it as a personal commitment to a better environment. But as carsharing has begun to take hold for a larger public, the reasons for doing it have shifted a bit.

Today it seems that **people are deciding to convert to carsharing above all because it saves them money and hassles**. Most of the calculations show (bearing in mind that there are major variations from person to person and place to place) that carsharing becomes an economically attractive alternative for people who live in built-up areas, who do not necessarily need a car every day (because they have other ways of meeting most of their daily access requirements, including public transport, walking, biking, ride sharing or even using technology to remove some of their previous travel requirements as per videoconferencing, telework, et al, and who normally drive their cars less than some minimum number of kilometers in the year. (One of the most commonly cited figures is 10,000 kms or less.)

The car-sharer is also freed of a number of more or less small nuisances, such as the constant struggle to find parking in most urban areas if you do not happen to have off-street parking, the costs, losses of time and sheer inconvenience that are associated with maintaining and repairing your own vehicle, the cost and trouble of parking for parking tickets for those times when you did not manage to find a proper parking slot, and numerous other small inconveniences that car owners duly and daily suffer, almost always without even being aware of it.

There is also the matter of its flexibility. You can try it for a while, and if it doesn't do the job you just stop. Unlike buying a new car, you are not locked into your choice.

One study for example (*Energy 2000*, Switzerland, 1998) reports that in Switzerland :

People who give up their car as a result of joining a carsharing scheme reduce their degree of car travel by around 6,700 kilometers (approx. 72%) per annum. This is partly compensated in that they travel more by motorbike (+ 1,300 kilometers p.a.), bicycle (+ 800 kilometers p.a.) and, above all, by public transport (+ 2,000 kilometers p.a.). In all, the average distance traveled by those who give up their car decreases by 2,700 kilometers per annum. After joining a carsharing scheme, the mobility behavior of former car owners is remarkably similar to that of people who do not have access to a car. So while the mobility behavior of carsharing customers and people without access to a car is very similar, it differs greatly from that of car owners. This is referred to as reciprocal mobility behavior.

Here is one perhaps unexpected wrinkle in the profile of car-sharer that is worth noting. It constitutes what we would refer to as **"post-modern" behavior**. Thus, if the modern man is/was in many way defined by his car (see Bernard Shaw's hilarious *début de siècle* play *Man and Superman* for a great take on that), the post-modern person just couldn't care less and only wants to get around. (And of course if you know that, you then have a pretty good idea as to where it is likely to work. And where quite possibly not.)

Multimedia: Oregon Public radio did some interviews with actual users on the advantages of carsharing as the experience it, which you can listen to (RealMedia needed) at <http://www.npr.org/ramfiles/980804.atc.15.ra>.

6. Is carsharing good for the environment?

This is a loaded question actually, but as it happens the analysis shows that carsharing is very good for the environment indeed! The early edge of carshare activism had a strong, personal environmental commitment. But in order to understand its full environmental potential, it is important that to look not only at the shared vehicles; rather we need to consider the impact of that larger whole of which they are but one useful part.

So how does this work? Well as we have seen, anyone who uses a shared car when they need that particular kind of transit for a specific transport task, is far more likely to use either public or non-motorized transport for most of their other daily trips. Thus, by shifting some portion of their travel to these other, more environmentally benign modes the environmental load of their mobility is proportionality reduced. This can lead immediately to lower aggregate fuel consumption, fewer air emissions, cleaner air, and perhaps even less noise and certainly less solid and liquid waste. And in the longer run to fewer cars and proportional resource savings.

The trick is in tying the whole thing together, so that you have the full function alternative system. Here is how Mobility CarSharing in Switzerland goes about linking up all these modes:

“Mobility CarSharing is your link to public transportation. As Mobility cars are available in all of Switzerland, the mobility cycle of plane, tram, bus, train and carsharing is closed. Combined mobility has become reality. As a result, more and more transport partners consider carsharing as an integral part of their mobility package for regular customers, and include carsharing in their offer.”

Carsharing also works to save valuable urban space. For example in one "typical" configuration that aims at something on the order of a one-car-to-10-households service ratio, this could free up to perhaps as many as ten or so parking slots. If we bear in mind the enormous economic and social value of prime urban real estate, and the wonderful ways in which we could put it to use for more important things, this space saving potential has to be among its most important assets. Also by freeing up street space, it can help the remaining traffic move more smoothly, with all the benefits that brings with it.

How much are these savings to the public sector and environmental benefits worth if one were to try to express them in money terms? Well, we have not as yet seen anything that looks solid in this respect, but the benefits of removing a single car from a crowded urban environment have to be on the order or hundreds of dollars per year each, and almost certainly more. As to the advantages of saving 7 to 10 square meters of prime public space each time you remove it from the car support system, the annual rental value in many cities will run to the thousands of Euros or dollars per year. For the purposes of efficient communications, let us say for now simply: a great deal!

At a time of much talk about sustainability and transportation, and precious little effective action, carsharing offers a real option that one can put to work immediately and without huge public expense. And that, by the way, is why the **Carsharing 2000** report is subtitled, “A Hammer for Sustainable Development”.

Multimedia: Once again the Bremen Car Free Cities site offers several neat Web demonstrations of the impacts of carsharing on the environment. The first offers a dynamic table of impact calculations at <http://www.bremen.de/info/agenda21/carfree/urban.html> . And the second , a thought-provoking “Urban Game” , “Green Parks and not Car Parks”, which you can find at www.bremen.de/info/agenda21/carfree/greengame.html

7. What's in it for cities?

One of the main beneficiaries of the switch to carsharing will be our cities, though until now it has proven somewhere between difficult and impossible to make this case. Both the transport experts and local government have proven quite resistant to these ideas. The first cracks in the dike of resistance were in Zurich and Berlin, followed by a number of other cities in Germany and Switzerland, with some in the Netherlands right on their trail. One wonders why this is proving such a hard sell to the public sector since the advantages appear to be so overwhelming. Might it be that indeed "The difficulty lies, not in the new ideas, but in escaping the old ones ...?"

Here is our considered Year 2000 view on this. If you happen to be a mayor or elected local official in a city that corresponds with the rough profile that is appropriate for carsharing (clustered settlement patterns, with decent to excellent public and non-motorized transport provision), you really should be giving this concept your careful consideration. Hand this summary, the full report, the Bremen CD-ROM, the World CarShare Web site over to your executive assistant and have her sort it out for you.

Why? Well, first of all **your city will benefit from those potential environmental improvements**, and of course those savings on costly parking spaces. And with fewer cars out on the street, there will be potential **savings for the building and maintenance of your road system**. Moreover, these services put cars at the disposal of people who may not be able to afford one of their own, but who still from time to time need one (social justice). Further, there is the synergistic support for your public transport, since your car-sharers are going to be using it most of the time. Likewise **carsharing provides more "customers" for the most sustainable transport modes**, walking and biking.

Can carsharing make it without the active and intelligent support of local government? At best only with great difficulty and considerably less vitality and growth than could otherwise be the case. So if indeed carsharing is an important tool for cities, as we think it is, the politicians and civil servants who are paid to run them must realize their importance and get ready to support them. As you might expect, the kind and quality of support needed to make carsharing work is quite different from the more traditional role between local government and the transportation system. Experience has shown that what is needed is not great clots of taxpayer moneys to build and fund the whole thing, and then run it each year at a loss, but rather an attentive and capable local administration that is ready to come in and provide a wide range of "softer" support functions. This is of course going to be a new and unfamiliar working environment for many elected officials and administrators, but it is one that will later serve them well when it comes dealing with other areas of city life that are under stress and which also are going to need entirely new governance and entrepreneurial approaches.

The first task for the administration is to learn how to get out of the way of the spirit of enterprise that is needed to make these things work, and then to figure out how to support it. Examples of good ways in which you can help include such things as communications assistance in making services better known and accepted in the community, assisting them in making their way through the welter of laws and restrictions which make any form of innovation devilishly difficult, actively encouraging others transporters to link to them, giving a hand in obtaining good central parking access, and encouraging city employees to use it for themselves. **And of course, Madame Mayor, using it yourself.** Every day! Believe me, Your Honor, that's just about the most important single thing you can do to make carsharing work in your city and give it a really sustainable transport system.

8. Does new technology have a role in this?

Until very recently most carshare projects have been extremely conservative in their use of technology. This was brought about by several factors, one being the fact that most were set up as rather informal low cost operations and targeted for a specific known local user group. So no problem if the car was just any old car, the reservation system based on POTS (plain old telephone service), the keys were kept in a metal box next to the parking space, and all user logs manually maintained. And if this strikes you as a bit primitive, the fact is that it has worked in the past and there are still places where people find it quite satisfactory today. Simplicity does have its virtues.

But at the leading edge of carshare practice, the technology component is now moving along quite swiftly, as might well be expected given the extent to which information and communications technologies are transforming many areas of society and the economy, including among the most impacted the transportation sector. And **what is carsharing anyway, if not above all a puzzle of information and logistics, which is exactly the sort of job that all these technologies do best.**

Here are some of the areas in which these new technologies can be expected to shape and influence both the basic functioning and the economic viability and quality of service associated with carsharing operations.

- The vehicles and their special environmental and performance 'envelopes'
- General information and marketing
- Overall project management
- Reservation systems (including kiosks, automated telephone and Internet-based)
- Interfaces with other cooperating transportation systems and carriers
- Interfaces with Advance Traveler Information Systems (where they exist)
- Vehicle location (both when parked and when moving)
- Vehicle access (getting to the car, unlocking it, using it, then locking it)
- Vehicle condition (monitoring and maintenance assistance)
- Trip logging and billing
- Dynamic mapping and on-board travel information
- Emergency services

If we observe what is going on at the leading projects that are fast expanding in terms of membership, vehicle parc and overall functionality, it can be seen that this process is already well engaged. The idea is to make each service as seamless and easy to use as possible. And it is the technology that is permitting this to happen.

Next big step on the technology front? With no doubt, the marriage of carsharing and mobile communications, for example the use of WAP phones as the main interface between the user and the carshare system. After all, though a full sized PC box hooked into a carsharing system with a high quality management interface can be ideal in many respect for the user, how much handier it would be to have all this capability in your pocket for information, access and use as and when you need it. **So look at that mobile phone in our pocket, and think Moore's Law.** Moore's Law. That's where we're going, and that's just about how fast we're going to get there.

9. Any other surprises we should be aware of?

Well yes, there are one or two other things that you may want to keep in your sights. One of these is a whole matter of the vehicles themselves. If you think about it, a shared car is going to be operating in a working environment that is radically different from that of the standard road machine that automobile manufacturers make most of their money on today. Since just about all of these vehicles are going to be used for shorter trips in densely settled areas, it will clearly be in the public interest that they are small and clean. And given that they are destined for collective public use, it will be important that they are more than normally robust. But this is only the beginning.

On average a shared car can be expected to be used much more intensely than a privately owned vehicle, perhaps as much as a full magnitude more. This suggests to us a very different design, engineering, and eventually technology profile. Similarly with the economics of ownership. If these vehicles are to be amortized over a period of one or two years as opposed to the usual average, this too will have its impacts. Other important economic differences include those associated with the fact that the vehicles will be purchased by the donors rather than individuals, and this physical clustering in turn will have potential impacts on how maintenance is handled.

Taken altogether this suggests to us a new and quite different product profile... a brave new world for anyone out there in the industrial world who is willing to seize it. Until now of course this has not been attractive because of the small numbers of vehicles involved. But as we have seen, this is already in the process of changing.

Another surprise in store is likely to be the manner in which the service will be delivered, and who delivers it. Already we are seeing the leading edge of the car rental firms beginning to move in on the market, but who is to say that once they have figured it out, it will not be the automotive manufacturers themselves who move into the breach. Or the petrol companies with all that wealth of service points dotted all over the map. After all, is not this yet one more instance in which more money can doubtless be made in delivering services that people want, as opposed to products that they may not quite know how to deal with. At least in a densely settled urban environment.

There is yet one more wrinkle in the situation which is important to spell out. Making an unfamiliar business concept such as carsharing work is an extremely demanding task. The last thing that the organizers need is to have yet another set of constraints and problems, which is exactly what you get if you attempt to graft an uncharted new technology experiment or demonstration to such a nascent business enterprise. This is not to say that a carsharing operation cannot accommodate new technology or serve as a first rate, high visibility site for demonstrating it. What it does mean is that the core business should not be put at risk by the economic, technical, and reliability vagaries that are so often associated with the technology.

Finally, let us go on record here as saying that we very much hope that a substantial part of this market will be eventually occupied by what we like to think of as "public entrepreneurs". These are the generational descendants of all of those individual citizens and groups who have worked hard to bring the services online until now, in many cases without public support or understanding. What a pity it would be, now that all the hard conceptual development is in hand and all are beginning to understand finally what it is that needs to be done to make these services work, that the fruits of all of this good public interest activity would be denied to those who have worked hardest for it.

10. Who are the people who are making this work?

Let me start by saying that the people behind this transportation revolution are not what you might call basically passive personalities. They are to a man active and entrepreneurial, eclectic, practical minded, capable, energetic, prudent, plain speaking, team players, generally quite good at communications, and exceptionally resilient in the face of adversity. Because they have their hands full with operations, they do not spend an inordinate amount of time in doing research or going to conferences, but when they do set out to study something it is almost always oriented toward bettering their understanding of car-sharing so that they and others will be able to move ahead in practical ways on a deeply felt common agenda.

And to a man, they are, in fact, not all men. To the contrary, women are extremely well represented in the carsharing field, to considerably greater extent than in other areas of transportation policy and practice. Moreover, women are taking first rank leadership positions in many operations, a refreshing change for anyone who has been working with transport people over the years. It is my theory that because of the high participation of women, the carsharing movement is considerably more inclusive, more thoughtful and considerably more flexible than much of what we have seen in the transport sector in the past.

A few years back Protagoras was supposed to have said "Man is a measure of all things", to which Plato and others reposted that the measure must instead be something nonhuman and unchanging. Progress over these last years in the carsharing field would, to my mind, seem to support Protagoras, since the success of these enterprises has depended almost entirely on their ability to measure and accommodate people and their needs in the life.

In addition to those involved in organizing operations and in trying to make them work, there have been several handfuls of researchers who have contributed to our understanding of what carsharing is and what it might become. These researchers have a somewhat unusual profile. In almost all cases they apparently decided to spend time in looking at carsharing because there seems to be something about the very principle of sharing things that appeal to them. This led them to take a rather positive approach to their topic, including with the responsibility of informing all those directly involved and concerned public institutions as to how these projects could be strengthened in the future. On the other hand, this is not gotten away of their objectivity. As a result of their imaginative and useful inputs over the last few years, we now know a lot more about how to get full value out of carsharing.

To conclude, if I were to be asked to use a single adjective to describe all those who have been involved in advancing the carshare agenda in various places around the world, I would have to choose the word "unreasonable". George Bernard Shaw put it like this:

The reasonable man adapts himself to the world; the unreasonable one persists in trying to adapt the world to himself. Therefore, all progress depends on the unreasonable man.

Yes that seems about right. These **are basically unreasonable people**.

11. Recommendations

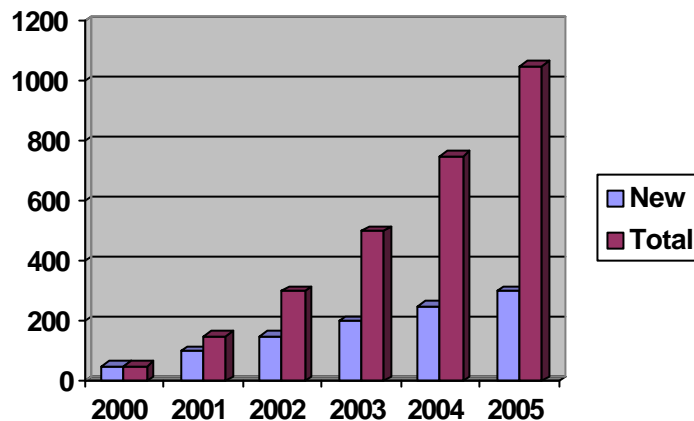
Building on these last several years of international consultation, communications and work on these issues via the @World CarShare Consortium, all the effort and exchanges that have gone into producing the present report, and above all the accumulated knowledge of the group and the experience of more than 400 projects in more than a dozen countries that has been tapped for these purposes, here are our considered recommendations for action for the Year 2000 and beyond.¹

Recommendation 1. Global Objective:

Get together to set a concrete, ambitious, measurable goal, and then meet it.

Here is a target that we advance: two hundred new projects each year for the next five years. That's about one new project every other day. So we better get to work.

TARGET: 1000 new carshare projects between now and 2005.



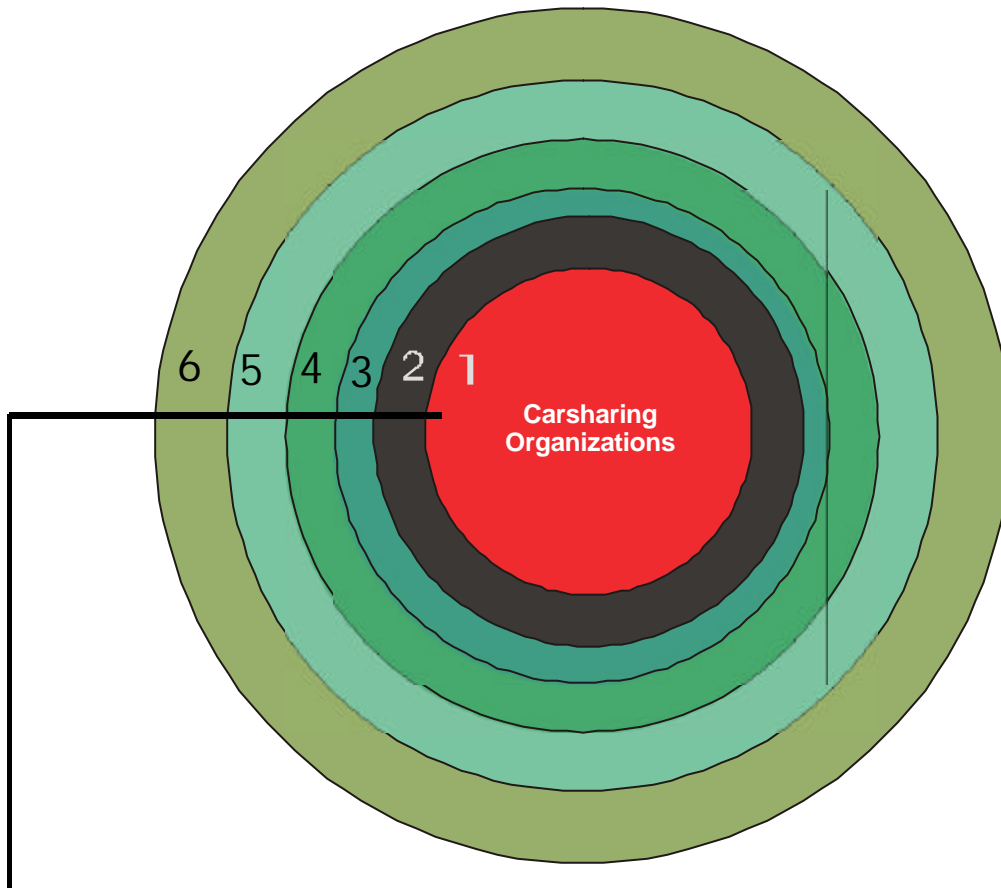
Who is it that will set this objective, and then meet it? Well, all those of us who care about these things and believe firmly that carsharing is good for people, good for cities and good for the environment.

The next question of course is how do we intend to do this? The answer: by organizing. Let us continue.

¹ These recommendations are not simply those of a single author. They have been presented in earlier versions to several recent international meetings attended by some of the leading figures in the field and critically dissected and revised to take into account this criticism and additional information. Likewise, they have been put out for review and comment on the @World CarShare Consortium, and been subsequently revised to take into account the resulting feedback and guidance from the group. All that said, however, it must be said that as they stand here they represent the considered views and responsibility of the author alone, who cannot decently saddle all these otherwise kind and knowledgeable people with either the detail of the recommendations or the language in which he chooses to present them.

Recommendation 2. Fill out the strategic frame for implementation and support

The reality of the innovations in this class is that they are above all locally driven. Thus and not surprisingly, the most important sources of aid and support are those which are local and otherwise close at hand though (smart use of electronics can help for the rest though!). The following diagram attempts to give an idea of how these various levels of competence and authority can be orchestrated to work in tandem for a common set of goals.



- Level 1 – The carshare organizations and their principals
- Level 2 – The users of the systems
- Level 3 – Local government/Task Forces
- Level 4 – Transporters and their partners (also in Task Forces)
- Level 5 – Regional and national groupings (support groups)
- Level 6 – International organizations and consortia

The implementation challenge lies in first of all being aware of the fact that for these projects to flower as they should, we must find ways to mobilize and work with all of these levels of society. Some suggestions regarding the four latter categories in this regard follow, on the understanding that the organizers of carshare services are now well aware of the tools and priorities when it comes to making their own enterprises work as they must. They are the real experts, so it is hardly for us to make any recommendations to them.

Recommendation 3. City and Regional Task Forces to Support Local Start-Ups

The closer the level of government and the support groups are to the actual carshare project or start-up, the more critical they are for the ultimate success of the operation. As we have seen, carsharing projects badly need a broad base of local support. By and large however anything like organized local support groups have in the past been either ad hoc and slow to form up, or, more often, altogether absent. More than one worthy project has failed because local government has not stepped in and done its part.

Until now this void has occurred in most places simply because there has been insufficient information available either as to how to organize to get a strong project up and on line, or what needs to be done locally by all concerned to ensure that the projects are good ones and that the final results are in the common interest. However with the considerable body of materials and expertise that has been developed through the international collaborative efforts of the last few years, these barriers of ignorance no longer need to exist (see section 12 below for more on this).

We therefore strongly recommend that broad-based local task forces be organized to stimulate, serve and assist new, more and better carsharing projects. These local support groups will also find it to their advantage to make best use of the available means to exchange information and expertise locally and internationally, as close as possible to a real time basis. Here are some of the issues to which they can usefully give their attention.

- Among the actors who need to be brought to the table for these exchanges are: public transport operators, taxis, rental cars, rail companies, parking operations, and others in the transport sector who may make good partners for the kinds of multi-modal collaboration that lies at the heart of a successful carsharing enterprise and a well functioning alternative local transportation system.
- Employers, commercial centers, larger leisure and sports complexes, and other major activity nodes in areas where parking is a problem could also find it useful to follow and eventually to consider some form of pilot or even full scale participation in a carshare implementation project.
- Other related private sector actors who might also be usefully brought to the table could include energy firms, the owners of gasoline/petrol distribution/service stations, package delivery firms, and pretty much any other group or agency in either public or private sector who might have some spare urban real estate that could be used to support such operations.
- We would hope that institutional support can be found to encourage more and better public/private partnerships in this area, including considerations of the scope for interaction and cooperation with automobile manufactures and car rental firms.
- Closely related concepts such as the new “mobility centers” that are getting increasing attention in Europe must be closely linked to any efforts aimed at developing more and better carsharing

These city teams can in turn link to the various regional, national and international support capabilities that are quickly springing up and are in place precisely to supply this sort of support and guidance. All of the means are now in place, they can be had in minutes by anyone with a modem, they are entirely free, and they are ready to be put to work.

Recommendation 4. Create National & Regional Carshare Task Forces

The local task force teams can greatly benefit from broader support. We recommend creation and extension of a world wide web of national and regional “Carshare Task Forces” or support groups. These groups can build on the excellent international communications and knowledge building frameworks that already exist (and which once again are identified in Section 12 below and its immediate extensions).

This process is already well underway. Not only have active regional and national carshare consortia already emerged in Germany, Switzerland and Austria, with the Netherlands reportedly not far behind, but we can also point to the three” forums that have been set up for Scandinavian, French and German language groups under the World CarShare Consortium at <http://www.ecoplan.org/carshare>.

Good as this is the fact is that more of these tasks forces, and they can be very informal and still get a great deal done, are needed. It is important that these network capabilities are able to operate and **provide counsel and materials in the language of each place**. Car-sharing projects are local projects. All involved live and work in the language of that place. So the materials that they have to work with should be in the form that they need it most. Thus we would like to see similarly organized support groups able to work in Spanish, Italian and Portuguese. Likewise we would like to see structured carshare networks set up to link individual carsharing operations in Canada, and even in the US. It would be useful too if the concerned government agencies could begin to make use of the capabilities and experience of these linked expert communities.

Since there is as yet no clear “best practice model” for such task force organization and composition, it is suggested that these various national and regional teams will do well to make efficient use of the best existing means of communications and information (and expertise) exchange among them -- thus learning from each other as they go along. If the communications lines are kept fully open, this process of open and vigorous cross-learning should quickly lead to some very good models and approaches to organization and support at these levels.

21st century communications technologies lend themselves exceptionally well to this task. In addition, there are a number of programs and means for such coordinating exchanges already available, most of which are identified in the preceding pages or via the World Carshare Web site and its extensions.

Recommendation 5. Directly bring in & involve universities & technical schools

It would be extremely helpful if the range of concerned specialized university and technical faculties could consider how their students and programs might begin to provide more of the kinds of hands-on expertise and active support that is needed for “bottom-up” projects such as these. **Carsharing is not an abstract thesis concept; it is one that should involve the student and teaching staff and give application and meaning to their professional and personal development.**

We have in fact already seen in recent years a handful of cases where young researchers and faculty members started out to find out what was going on in the sector or a given project, and then proceeded to get directly involved in making them work. This is a pattern which one would like to see repeated on many occasions.

Recommendation 6. Increase the level of involvement of the European Union

The European Union, and in particular DG XI (Environment) of the European Commission, have emerged among the most important international champions of carsharing (for example, the CD ROM for which this summary is serving as an introduction was in part financed by the Commission). All this is good and has been useful in getting things started, however we should now like to see them increase their level of involvement in making these projects and programs work by, say, at least a factor of ten. It is unlikely that the total value of the Commission's support of carsharing to date exceed the price of a single lane of a hundred meter strip of urban highway, and yet the potential benefits to the communities involved are now known to be considerable indeed.

The level of involvement of the Commission, as among the only international or national groups in Europe or elsewhere who has seized the importance of these approaches needs to be lined up better with the importance of these opportunities.

It is thus our recommendation that the Commission not only increase substantially its level of creative involvement in this field, but we would also like to see them do a better job of orchestrating the capabilities and resources of the many separate units within the house, each of which has a role to play in this respect. Among these EC units we should note the importance of those responsible for transportation, environment, energy, communications, and new technology development programs, all of whom can do much to advance the carshare agenda across Europe. That said, it would certainly be highly useful if the means could be found to better coordinate the many highly dispersed activities and capabilities of the Commission and other European agencies which relate to matters which are central to the success of carshare projects.

We would expect to see carshare schemes and support built in to EU wide programs of RD&D, especially those covered by the 5th Framework Programme and applied to intelligent and sustainable cities. It would further if this support does NOT take the form of the usual passive research, but that it be directly linked to the projects, processes and approaches which are set out in these pages. Carsharing does not need more research to advance. It needs strong projects, striking demonstrations of the principle involved, and commitment to spreading the approach quickly and usefully.

The Commission could also do much to step up discussions between the carsharing community and the private sector, including of course the vehicle manufacturers, car rental firms, and the other major suppliers of equipment and services to the sector. Likewise, it would be useful to see what could be done to create a public discourse with the insurance industry, on the grounds that insurance continues to be one of the most significant problems faced by carshare organizers.

Finally, we would like to see the Commission and other European agencies give more attention to supporting non-commercial carshare projects and developments, including those all or largely in the volunteer sector. It is important for the future that these more informal projects not be left out in the cold in a wave of enthusiasm of concepts that are based entirely on market forces. It is our firm belief that the volunteer and informal sector have much to offer, including to those citizens and groups who like to do things for themselves.

Recommendation 7. Step Up OECD EST Program

The Environment Directorate of the Organization for Economic Cooperation & Development (OECD) has for close to a decade been active in the search for Environmentally Sustainable Transportation (EST) policies and measures (see www.oecd.org/env/ccst/est/). Originally their efforts were oriented to researching and trying to gain a broader understanding of the whole broader issue of the transport sector and its sustainability – or rather its most vivid unsustainability – leading them to a situation of privileged information an insight as to all the things that are not working in the right direction within the sector.

Reaching beyond traditional research and conferences, they have in the last year set out with their national partners on a search for identifying and supporting do-able innovative concepts like carsharing, which they are calling “Sustainability Triggers.” Their goal: to put before policy makers and other concerned actors in the sector specific measures, policies and activities that can help break the impasse of frankly unsustainable transport systems which is the sad plight of most cities in the year 2000.

The OECD’s EST program and its national partners (who include a number of those national transport and environment ministries whom we now need to activate and bring into the picture) are well placed to help in the push to put the reality of carsharing in all its potential, richness, and variety, in front of government at many different levels. Their support until now of the @World Carshare Consortium has been invaluable.

We encourage them in these efforts and hope that they will continue and expand their support of this concept as well as other concrete measures that can be brought on line at relatively low cost and reasonably quickly, and thereby advance the sustainability agenda. (Examples of similar “trigger” approaches include such things as Environmental Labels for transport projects and technologies, SurfaceMetro systems which use high density low emissions buses on separate rights of way and state of the art electronics to make better use of the street network while providing transit that is faster, cleaner, more equitable and far cheaper to the community than an automobile based system that simply is not working, etc.)

Recommendation 8. New Strategies for Meetings and Conferences

After years of neglect, other groups and organizations across Europe and elsewhere are now finally beginning to gear up to take a more active role. For example, there are more than a dozen meetings, conferences or workshops slated to be held on our topic in the first months of 2000. Here are our recommendations to the organizers of those meetings and the projects and follow-up efforts that they may eventually engender:

- Do not isolate yourselves. Place your meeting and activities right into the mainstream of ongoing international cooperation and exchanges.
- Make your intentions widely known. There are a lot of smart and knowledgeable people out there who are ready to help any worthy venture in this area. Announce the events on the Web sites that deal with these matters, including not only the handful of carshare sites that are serving as turntables for this information and other activities, but also some of the best more general sites and discussion lists (go to @Access on the Web site at <http://www.ecoplan.org/access> for more suggestions here).

- Create a first class interactive Web site for each meeting that will help open up both your conference and program to useful inputs as well as to make its contents, proposed projects and findings available to a world that needs more help and information in this important area – and if you don't have time, taste or resources to do that, make use of one or more of those that are already available.
- Make full use of the multimedia and print material that are now available, and make sure that everyone who comes to your meeting or project has copies well in advance (easy to do since they are all free and readily available).

Recommendation 9. And Our Part in All This?

Although it's often done, we have never thought it either particularly fair or effective when it comes to books or reports such as this, that the author ends by telling the world what to do, with the presumption that she or he has already done their part, and can then scurry back to the garden of ivory tower. So, since we have made our recommendations for the rest of the world, here in closing is what we are prepared to do for our part to advance the carsharing and sustainable transportation agenda:

- Maintain and enhance the @World Carshare web site
- Expand it to permit more interactivity and more multi media as the technology advances (which of course is not only sure but close to blindingly fact)
- Use the site and its accumulated competence as a means for coming to the aid of any given carshare project that may be running into problems. Specifically this would involve using our networking capabilities to orchestrate where possible an international expert response in order to draw to the attention to the local authorities and others who may be in a position to help that project, that there is an informed international consensus which has found that these are important activities and that they are well worthy of strong local support.
- Translation and adaptations – including development of national Carshare Manuals or Guidelines which build on and incorporate all of parts of this work as useful
- Work on the transportation and environment agencies to try to encourage this new thinking – including finding the usually younger people there and involving them in a form of cross-cutting work for which they are often better equipped by education, habit and values than their older colleagues.

* * *

After all? There are one thousand new projects that we need to get underway and barely five years to do it. That means we shall have to find a way to put our heads together to get one new start-up every other day. Sound like a tough job? That's why we need a hammer.

12. Now... where can I go for more?

Are you now ready to go on to learn more about all this? From a public policy perspective? Or are you interested in setting up a new operation in your community? Or helping to support one already underway? If so, you will find here a comprehensive carshare information toolkit. It has four sets of characteristics which you can verify for yourself but which we think are worthy of note. First, it offers you the world's best sources of information and perspective on our topic. Second, it's all easy to get to as long as you have a modem. Third, it costs nothing. And finally, all of it has been created by people who have gotten together to share their time, materials and knowledge in order to make it freely available for you and anyone who wishes to advance not only the carshare agenda, but really the much more important one behind it – sustainable transportation, sustainable cities, and sustainable lives

- **Carsharing in Europe -- CD-ROM**
The comprehensive CD-ROM can be had freely from the Bremen Initiative (Contact Kerstin Badenhop at kerstin.badenhop@ecolo-bremen.de)
- **Carsharing 2000: A Hammer for Sustainable Development**
This international group report prepared by The Commons was first published by the Journal of World Transport Policy and Practice. The latest edition is freely available in electronic form at the Consortium Web site. It can be obtained in a print version freely through the German Environment Agency, by contacting Dr. Hedwig Verron at hedwig.verron@uba.de.
- **@World CarShare Consortium on the Web**
This cooperative web site of The Commons can be accessed at <http://ecoplan.org/carshare>. The site leads directly to the best information available on the topic, as well as having direct links to just about all existing known carshare projects in the world.
- **CarFreeCities Network**
The Network at www.agenda21.bremen.de/carfree acts as a platform for more than 60 European municipalities for the exchange of experience, information and good practice. The network covers the topic "practical alternatives to the car" and focuses on ways in which car dependency can be reduced by providing services in different ways, and by different approaches to urban development. The Network is supported by DG XI of the European Commission.
- **european car sharing**
ecs groups 40 participating carsharing organizations who operate shared cars for about 36,000 members in over 300 towns in Denmark, Germany, the Netherlands, Norway, Sweden, and Switzerland. One of its main goals is to give participants access to carsharing vehicles in all associated towns in Europe. Visit them at <http://www.carsharing.org>
- **The Carsharing Network**
Canada's informal contribution to international networking on our subject can be reached at www.carsharing.net. They maintain a library and a resource guide and are developing an inventory which identifies a number of carsharing organization by name and size.
- **OECD Environmentally Sustainable Transport Program**
Maintains a Web site at <http://www.oecd.org/env/ccst/est/> on strategic environmental issues that help point up the importance of carsharing and other near term transport innovations that can help us move toward sustainability. Co-sponsored along with the German Environment Agency (FAW) the first two print editions of the CS2000 report, and are taking an active role in bringing carsharing into the international policy arena.

Try carsharing this year in . . .

Aachen * Aarau * Aarhus * Adiswil * Adligenswil * Aesch * Affoltern a.A. * Allschwil * Alpnach * Altdorf * Altstätten * Amriswil * Amsterdam Zuid * Andelfingen * Andermatt * Appenzell * Arbon * Arnstadt * Arth-Goldau * Baretswil * Boblingen * Bulach * Baar * Bad Homburg * Bad Ragaz * Bad Sackingen * Bad Schwartau * Bad Vilbel * Baden * Basel * Bassersdorf * Bauma * Bayreuth * Bellinzona * Belp * Bergdietikon * Bergen * Bergisch Gladbach * Bergsjöns * Berikon * Berlin * Bermgarten * Bern * Beromunster * Biberach * Biel * Bielefeld * Binningen * Birsfelden * Bochum * Bolligen * Bonn * Bonstetten * Bordesholm * Bottmingen * Boulder * Braunschweig * Bremen * Bremerhaven * Bremgarten * Brig * Brønshøj * Brugg * Brugg Weiermatt * Bubikon * Buchholz * Buchs * Buochs * Burgdorf * Colbe * Calgary * Carouge * Castrop-Rauxel * Celle * Checirc;ne-Bourg * Cham * Chur * Coburg * Copenhagen * Corburg * Cottbus * Cranfield * Dubendorf * Dudingens * Duren * Durnten * Dusseldorf * Dachau * Darmstadt * Davos * Degersheim * Den Haag * Dessau * Dielsdorf * Dietikon * Domat/Ems * Dordrecht * Dornach-Arlesheim * Dortmund * Dossenheim * Dresden * Duisburg * Ebikon * Ebnat-Kappel * Ecublens * Edinburgh * Effretikon * Eglisau * Einsiedeln * Elgg * Elmshorn * Emmen * Emmenbrücke * Enzingen * Eppstein * Erfurt * Erlangen * Erstfeld * Esbjerg * Essen * Esslingen * Esslingen * Ettlingen * Eutin * Fallanden * Furth * Farum * Faulensee * Fellbach * Filderstadt * Flawil * Florence * Fort Collins * Frankfurt/M * Frauenfeld * Freising * Frenkendorf * Fribourg * Frick * Frutigen * Gegrave;neve * Gottingen * Garching * Gauting * Gebenstorf * Gelsenkirchen * Gelterkinden * Gevelsberg * Gieszig;en * Gipf-Oberfrick * Giswil * Goldach * Gossau SG * Göttingen * Grafelfing * Grut * Grabs * Grenchen * Greven * Gstaad * Guelph * Huckelhoven * Haarlem * Hagen * Halberstadt * Halle * Hamburg * Hameln * Hanau * Hannover * Hannover * Hausen am Albis * Hedingen * Heerbrugg * Heidelberg * Heidenheim * Heimenschwand * Helsinki * Herbrechtingen * Herdecke * Herisau * Herning * Herrliberg-Feldmeile * Herzogenbuchsee * Heuchelheim * Hildesheim * Hinwil * Hisingens * Hitzkirch * Hochdorf * Hofheim * Holzwickede * Hombrechtikon * Horgen * Horw * Ilanz * Illnau * Ingolstadt * Interlaken * Iserlohn * Ittigen * Jena * Jona * Köln * Koniz * Kusnacht * Kussnacht * Kalmar * Karlsruhe * Karlstads * Kassel * Kempten * Kiel * Kingston * Kirchheim/Teck * Kitch.Waterloo * Klosters * Klotten * Koblenz * Konolfingen * Konstanz * Kreuzlingen * Kriens * Lorrach * Lubeck * Ludenscheid * Luneburg * La Chaux-de Fonds * Laatzen * Lachen * Landquart * Landshut * Langen * Langenfeld * Langenhagen * Langenthal * Langnau * Laufen * Lausanne * Lausen * Lehrte * Leipzig * Lenzburg * Leverkusen * Lichtensteig * Liestal * Ligerz/Twann * Lilienthal * Littau * Locarno * Ludwigsburg * Ludwigshafen * Lugano * Luzern * Lyss * Mannedorf * Mohlin * Monchaltorf * Mulheim/Ruhr * München * Münchenbuchsee * Munchsteinach * Munsingen * Munster * Magdeburg * Magden * Mainz * Majornas * Mannheim * Marburg * Marl * Meggen * Meilen * Memmingen * Merseburg * Mettmensstetten * Minden * Montreal * Montreux * Muri * Muri-Gumligen * Muttentz * Nanikon * Nürnberg * Nagold * Neckargmund * Neuchacirc;tel * Neuhausen * Neuss * Nidau * Niederhasli * Niederlenz * Nussbaumen * Nyon * Oberdorf/Stans * Oberhausen * Oberkirch * Oberursel * Oberuster * Oberwil * Obfelden * Odense * Offenbach * Oldenburg * Olten * Opfikon * OsloOttawa * Osnabrück * Ossingen * Ostermündigen * Ostfildern * Ottawa * Overijssel * Oxford * Pansdorf * Paris * Passau * Petit-Lancy * Pfaffikon * Pforzheim * Pfullingen * Plannegg * Plochingen * Portland * Potsdam * Pratteln * Preetz * Puchheim * Pully * Quebec City * Rumlang * Ruschlikon * Russelsheim * Ruti * Rafz * Rannebergens * Rapperswil * Ratzeburg * Ravensburg * Rebstein * Refrath * Regensburg * Regensdorf * Reichenbach * Reinach * Renens * Reussbühl * Reutlingen * Rheinfelden * Rhein-Neckar * Richterswil * Riehen * Rodovre * Roggwil * Romanshorn * Rombach * Rorschach * Rostock * Rostock * Rothenburg * Rotkreuz * Rottenburg * Rotterdam * Rudolfstetten * Ruswil * Suszig;en * Saarbrücken * Sachseln * Saint-Quentin * Samedan * San-Francisco * Sargans * Sarnen * Schofflisdorf * Schoffland * Schönenwerd * Schupfen * Schaffhausen * Schattdorf * Schiedam * Schiers * Schlieren * Schliern * Schopfheim * Schwabisch Hall * Schwarzenburg * Schwerin * Schwerzenbach * Schwetzingen * Schwyz * Seattle * Seeheim-Jugenheim * Seelze * Sempach * Siegen * Sindelfingen * Singapore * Sion * Sissach * Soest * Solothurn * Speyer * Spiez * Stafa * St. Gallen * Stade * Stans * Stansstad * Starrkirch-Will * Steffisburg * Steinbach a.Ts. * Steinen * Steinhausen * Stockholms * Stuttgart * Suhr * Sundbybergs * Sursee * Tübingen * Thalwil * Therwil * Thun * Thisis * Tornesch * Toronto * Trubach * Traverse City * Trimbach * Tübingen * Turbenthal-Wila * Turgi * Ulm * Umkirch * Unna * Urdorf * Uster * Utrecht * Uznach * Uzwil * Valby * Vancouver * Växjö * Veltheim * Venezia * Vevey * Victoria * Vienna * Viernheim * Vinterviken * Volketswil * Wadenswil * Wurzburg * Wabern * Waiblingen * Wald * Wallisellen * Waltrop * Washington, DC * Wattenscheid * Wattwil * Weinfeldern * Weingarten * Weinheim * Wettensberg * Wetter * Wettingen * Wetzikon * Wetzlar * Wiesbaden * Wiesendangen * Wiesloch * Will * Willisau * Winterthur * Witten * Wittenbach * Wittenberg * Witzenhausen * Wolfenbüttel * Wolhusen * Worb * Worms * Wunsdorf * Yverdon * Zurich * Zofingen * Zollikoberberg * Zollikofen * Zuchwil * Zug * Zurich * Zweisimmen