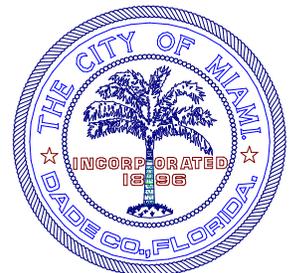


City of Miami Car Sharing Feasibility Study

Prepared by:
City of Miami
Office of Transportation
For the Miami-Dade Metropolitan Planning Organization

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For more information, please contact:

Lilia I. Medina, AICP, Assistant Transportation Coordinator
LiliaMedina@miamigov.com, 305-416-1080

Thomas J. Rodrigues, Transportation Planner
TRodrigues@miamigov.com, 305-416-1020

<http://www.miamigov.com>

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1. Introduction

Car sharing has the potential to transform transportation in Miami-Dade County (County). By creating partnerships and policies that facilitate the development of car sharing, the County can enhance the mobility options of its residents and visitors. A well-implemented car share program with parking locations in close proximity to mixed-use developments, Miami-Dade Transit (MDT) Metrobus and Metrorail stations will complement modal choices available to the County's riders and improve the quality the community's transportation network.

This report was prepared by the City of Miami's (City) Office of Transportation in response to a grant award from the Miami-Dade County Metropolitan Planning Organization's (MPO) Call for Ideas. It identifies the benefits of adopting car sharing in the County and weighs the costs to the community. The report is divided into three sections - the first introduces the concept of car sharing and reviews the



U Car Share vehicle parked at an on-street pod in Portland, Oregon. Photo by Dave Reid, from Flickr.com

academic literature. The second section presents case studies of cities with successful car sharing programs and identifies what factors have resulted in its success. Finally, the third section applies the lessons from the previous two sections to a case study of the City of Miami.

2. What is car sharing?

Car sharing is "a membership program intended to offer an alternative to car ownership under which persons or entities that become members are permitted to use vehicles from a fleet

on an hourly basis."¹ The concept should not be confused with traditional car renting – there are a number of key differences. Car sharing vehicles are parked at on-street sites or in accessible garages. This negates the need for the typical retail or airport-based facility. Car share members reserve vehicles from an online or telephone-based system, as early as several weeks or months in advance or as late as on-the-fly, while standing in front of the vehicle. Car sharing programs internalize the costs associated with vehicle ownership – rental rates include insurance, maintenance and fuel costs. In short, car sharing differs from traditional car rental systems in that it "changes the entire economics of driving, by converting fixed costs into usage fees."²

Car sharing has found success in many major North American markets, including Boston, New York, San Francisco, Vancouver, Atlanta, and Philadelphia. Car sharing operators have a presence in 19 of the United States' 25 largest metropolitan areas.³ The system appeals to users in part because it alleviates the need to acquire a vehicle. Surveys of car sharing members consistently find that a substantial percentage of users sell or put off the acquisition of a vehicle, and reduce the number of Vehicle Miles Traveled (VMT). Because the costs are directly related to the amount of usage, car share members tend to moderate the amount of trips they take. Spontaneous trips decrease (although they are certainly possible) most car share trips are reserved more than 24 hours in advance. Ultimately, car sharing provides the members with the convenience of vehicle access without the costs of ownership.



Unlocking a car share vehicle in Bilbao, Spain. Most car share companies use a technology that allows only the member currently reserving the car the ability to unlock the vehicle. Photo by Mikel Agirregabaria, from Flickr.com

Car sharing programs are expanding rapidly in the United States. Established in Cambridge, Massachusetts in 2000, Zipcar had over 560,000 members as of May 2011, making it the largest car share company in the world. The company has a presence in 28 states and provinces and over 230 college campuses. In August 2008, the company has established a foothold in the Greater Miami market through a partnership with the University of Miami. Today, Zipcar has 11 vehicles on the Coral Gables Campus and three cars available in Health District within the City of Miami. Connect by Hertz has also entered the car sharing market in Miami-Dade County with three vehicles at Florida International University's University Park campus.

Car Sharing: Getting Started

Car share members typically pay an application fee to join the program and then an annual fee. Zipcar charges \$25 to apply and \$50 per year. U Car Share charges a \$25 application fee but no annual fees; Hertz charges no annual and no application fee; WeCar charges a \$20 application fee and a \$50 annual fee. It is not uncommon for companies to waive application fees to attract members in new markets.

Upon joining a car share program, members are mailed a membership card, which is used for accessing vehicles. Car share companies have developed a technology that gives exclusive vehicle access to the reserving member for the duration of the reservation. To unlock the vehicle, members hold their membership cards over a sensor on the windshield until the doors unlock.

When a member needs a vehicle, she can enter the program's website and browse the selection of cars for one that fits her schedule. Completed reservations must include a start and end time. Members who return vehicles after their reservations expire are charged a late fee of about \$50. There is little tolerance for late vehicle returns as other members depend on a timely return for their own reservation.

Members only pay for the time they reserve the vehicle. Gas, insurance, roadside assistance, maintenance and lease payments are covered in the hourly rental fee. Mileage is generally capped, at approximately 180 miles per day.

3. Benefits of Car sharing

Studies have identified a variety of benefits derived from implementing car sharing programs. Benefits can be generally divided into two categories, economic and environmental. Much of the research conducted on car sharing programs is derived from surveys of program members. These surveys suggest that car share participants are economically pragmatic about their transportation choices. The leading reasons users cited for joining a car sharing program, according to a 2005 survey included “eliminated the hassles of owning a car,” “liked the car-sharing philosophy”, and “liked having another mobility option.”⁴

3.1 Economic

Car sharing enhances the mobility options of its members. The added dimension of access to a shared vehicle complements transportation choices – and provides members with a respite the unpredictable South Florida weather. It bears stressing, however, that car share members report increases in transit usage, walking and bicycling. In other words, car sharing does not act as a substitute these activities, but rather facilitates the lives of individuals who chose to walk and use public transportation.

Car share users reported they were more likely to sell or postpone the acquisition of a vehicle upon joining a car share program. The motivations can be compelling when calculating the cost of vehicle ownership. The American Automobile Association calculates car ownership to cost approximately \$8,588 for the year 2010⁵. This includes estimates for fuel, maintenance, insurance, finance charges and depreciation. When these variables are factored on a per-mile basis, and assuming an individual drives 15,000 per year, driving a private vehicle costs about 57 cents per mile. Comparatively, Zipcar charges \$8.00 per hour for the vehicles stationed at the University of Miami.

Car sharing is economically advantageous, for those driving under 6-10,000 miles per year. Individuals who drive less can expect to save money. But car sharing can still make sense for those who drive more than 6,000 miles a year. The program offers these groups the chance to sell a second vehicle since car sharing can often substitute a second vehicle and provides the member with substantial savings.

3.1.1 Job generator

Car sharing offers the potential for some job creation. In addition to a centralized operating center off-site or in another city, car share companies employ staff to administer the program in the vicinity of vehicle parking. Some car share companies estimate that they require approximately one employee for every 10-20 vehicles.

The anticipated increase in purchasing power will allow members to spend money on other commodities, which also has the potential to generate jobs throughout the community. In a study conducted by PhillyCarShare found that savings generated by membership in their car sharing program saved members an average of \$2,850, totaling an increase of \$13.2 million in purchasing power. The study concluded this was enough to support 150 new jobs.⁶

International Car Sharing

Car sharing has its roots in Switzerland and has expanded throughout Europe. Major car share operations can be found in the following locations:

- Austria – Denzeldrive
- Belgium – Cambio
- Finland – CityCarClub
- Paris – Connect by Hertz and Caisee-Commune
- Germany – Cambio
- Netherlands – Green Wheels
- Norway – Bilkollektivet
- Portugal – Mob Carsharing
- Spain – Avancar (owned in part by Zipcar)
- United Kingdom – Streetcar (now Zipcar), Connect by Hertz

Car sharing has also expanded to Asia and Oceania:

- Singapore – CarClub, Whizzcar
- Sydney – GoGet
- New Zealand – Cityhop

Locations were taken from <http://www.carsharing.net/where.html>

The list appears to be updated infrequently, and some of the linked websites are no longer active, possibly implying the program is no longer in operation.

3.1.2 Reducing dependence on private vehicles

Some research has been conducted on effects of car sharing on vehicle ownership. A 2009 survey of PhillyCarShare members found:

- 7% of respondents decided to not buy a vehicle because of car sharing
- 25% of respondents got rid of their vehicle as a result of their membership.⁷

A study conducted by the Washington DC Department of Transportation in December 2007 found a stronger correlation between car share membership and declining rates of vehicle ownership.

- 30% of survey respondents sold a vehicle as a result of their membership
- 61% postponed vehicle acquisition.

It is worth noting that the above numbers are not mutually exclusive – an individual might have sold a vehicle and consecutively decided to not acquire a new car.

Likewise, a 1998 survey found that 21% of respondents cited “eliminated the hassles of owning a car” as the primary reason for joining a car share program.

Car share members have reported that they take fewer car trips as a result of their membership. The costs of car sharing are variable – the heavier the usage, the higher the cost paid. Conversely, vehicle ownership deals with fixed costs. As a result, we are more likely to drive more when owning a vehicle.

Studies conducted in a series of car sharing communities found marked decreases in Vehicle Miles Traveled (VMT) as a result car sharing memberships.

- Austria – VMT reduced by 62% for car owners, but rose 118% for non-vehicle owners
- Netherlands – VMT reduction of 37% and 29% for owners and non-owners respectively
- Belgium – VMT reduction of 28%
- San Francisco – measured VMT reduction for the second year of a car sharing program by 53% (first-year car share members showed a net VMT increase)

- Philadelphia – 77% of survey respondents reported driving less since joining the program.⁸

In a few of the cases above, VMT actually *increased* for non vehicle owning members. This is a logical result of an individual having access to a car. However, in terms of absolute numbers, VMT decreased overall for car sharing members as the increase of VMT from non-vehicle owners still represented a net reduction in VMT for all car share members.

Overall, while the impacts may be relatively small, reductions in VMT on a household have the potential to increase purchasing power for that household as less of its income is dedicated to transportation costs. Furthermore, the impacts of reduced VMT on a community can have broader implications on traffic congestion, parking demands and emissions.

Studies estimate that the number of vehicles removed from city streets due to individuals choosing to join car sharing programs can be significant. Citing a Transit Cooperative Research Program (TCRP) study, Washington DC estimates that the 362 car share vehicles available in DC represent a reduction in private vehicle ownership of 5,394 vehicles – a ratio of 14.9 private cars replaced per car share vehicle. Although such findings are encouraging for reducing traffic on already congested city streets, further research is necessary to definitively determine the relationship between vehicle ownership and car sharing.

Studies of car share members indicate that savings are an important consideration when participating in the program. A survey of Portland, Oregon car share members suggests that members saved \$154 per month in transportation costs. Zipcar states that members report average savings of \$500 per month.⁹ These savings can be directed to other uses and be reinvested into local community.

3.2 Environmental

Car sharing members have reported that they drive less as a result of joining the program. Thus, car sharing is an effective way of reducing vehicle emissions.

Participants in car share programs have car sharing programs have the potential to reduce vehicle emissions. Surveys conducted with car share members found the majority cut back on the number of Vehicle Miles Traveled (VMT). Car share members are more acutely aware of the costs they incur by driving, as the per-hour rate includes all operating costs – gas, insurance, maintenance and vehicle cost.

4. Fleet Operations for Governments and Businesses

Some car share operators offer programs that are catered specifically to business and government entities. Car share companies offer a competitive alternative to traditional fleet systems. By participating in a car share program, County, municipal governments and businesses can offset costs of acquiring, maintaining and fueling their fleets. Fleet rates can be negotiated between the entities, and generally at a lower rate than those available for individual memberships.

Should the County or one of its municipalities contract a car share company to provide fleet services, they can negotiate for exclusive access to the car share vehicles during operating hours. New York City

has a similar agreement with Zipcar. At the end of the normal business day, the vehicles are accessible to the general car sharing membership during evenings and weekends. Such an agreement would further maximize the use of vehicles that otherwise are not used outside of operating hours. The County/municipality should conduct an analysis of fleet demands and usage. Items to consider for this form of fleet management would include determining where to locate the vehicles, as parking must be convenient for both County business operations and the membership base.

Fleet management program savings can be substantial. The City of Philadelphia has maintained a successful program at first with the local non-profit PhillyCarShare, but more recently with Zipcar. By embracing car sharing, Philadelphia eliminated 330 vehicles from the City’s fleet and saves \$1.8 million annually.¹⁰

Other major cities have similar partnerships with car share operators. Chicago recently contracted Zipcar to install the company’s FastFleet technology on municipal vehicles. In this, Chicago retains ownership of its fleet vehicles but equips them with the technology Zipcar developed for its fleets. City employees reserve municipal vehicles much in the same way as they would a Zipcar. This process improves fleet access to employees and improves cost allocation to departments. Washington DC has implemented a similar program and has estimated savings at \$1 million per year.¹¹

| Car Share Operators in the United States | | | | | |
|--|---------------|--------------|-------------------|---------------|--------------|
| Total Active Operators: 22 | | | | | |
| Non-Profit | | | For-Profit | | |
| 10 | | | 12 | | |
| Universities and colleges with car sharing partnerships: 305* | | | | | |
| Small | Medium | Large | Small | Medium | Large |
| 5 | 2 | 3 | 4 | 5 | 3** |

*Zipcar has cars at 225 schools, Hertz at 46, WeCar at 21 and U Car Share at 13. Local-based car share operations such as PhillyCarShare (Philadelphia), and iGo (Chicago) were not included in this count.

** With more than 8,000 vehicles and over 560,000 members, Zipcar has a presence in 17 of the 25 largest US Metropolitan

5. Attracts residents to Downtown

A car sharing program can help attract more residents to Miami's Downtown. The higher cost of living downtown can be alleviated by providing transportation alternatives to vehicle ownership. Car sharing can be more flexible than public transportation and cost-effective than vehicle ownership. An individual attracted to a more affordable downtown living experience can offset expensive housing by participating in car sharing. This scenario allows an individual or family to enjoy a downtown lifestyle without the obligation of vehicle ownership.

Miami's moderate winter climates attract a winter population from across the northern United States Canada and Europe. With the larger car sharing operations competing across the continent and in Europe, expansion into Miami not only opens a new market, but will allow pre-existing members from other cities to take advantage of car sharing during their visit.

6. Miami-Dade MPO Strategies Study

The Miami-Dade MPO is conducting a "Strategies for Integration of Sustainability and the Transportation System" study. The emphasis of the study is to accommodate future travel demand using demand management strategies. In the spring of 2011, the members of the Study Advisory Committee (SAC) were surveyed to identify initiatives that can improve transportation sustainability in the County. The respondents rated the Effectiveness, Ease of Implementation and Appropriateness of over 50 strategies on a 7 point scale, ranging from -3, unacceptable, to 3, excellent. Car sharing received a rating of .82, .32 and .50 for the respective categories, a ranking between Good and Fair.

7. Compliance with Miami-Dade's greenPrint

Car sharing meets several of the goals delineated in the County's client change plan, the Miami-Dade County greenPrint. Broadly speaking, the benefits of car sharing complement the following greenPrint goals:

- Use of less water and energy – "Reduce per-capita renewable energy use to 20% below 2007 baseline by 2015."

Fleet Composition

Car share operators provide members with a diverse assortment of passenger vehicles to meet members' needs. Car share operators provide an assortment of vehicles, ranging from small convertibles for social trips to pick-up trucks for Home Depot runs. Fuel efficient models are common as rental rates include fuel costs. Below are some of the vehicle models in car share fleets. This is not intended to be a comprehensive list but rather a sampling of fleet composition.

Connect by Hertz vehicles:

- Ford Escape
- Mazda 6
- Toyota Camry
- Toyota Prius
- Mini Cooper

Zipcar vehicles:

- Honda CR-V
- Honda Insight Hybrid
- Mazda 3
- Nissan Sentra
- Lexus CT 200h
- Ford Escape
- Scion xD

U Car Share Vehicles:

- Toyota Prius
- Ford Focus
- Ford Escape Hybrid
- Ford F150



- Use our land wisely, creating and connecting strong sustainable neighborhoods – “Create four transit-oriented developments on heavy rail and bus corridors.” Car sharing parking spaces, commonly referred to as pods, would be a fundamental contributor to the success of these developments. Car sharing pods located close to transportation hubs can also reduce parking needs.

- Provide more transportation options, reducing the time we spend in our cars – This goal is complementary to car sharing goals. As has been previously discussed, car sharing members drive less often than non-members and travel fewer miles by car. Usage of transit, cycling

and walking increases as a share of their modal choices.

- Build on our international reputation to become a green enterprise destination – Car sharing is recognized across the world as an environmentally sustainable and friendly alternative to vehicle ownership. The implementation of such a program in Greater Miami will bolster the County’s image as an environmentally progressive community.

Some Miami-Dade municipalities have implemented Climate Action plans with complementary goals. The City of Miami’s Climate Plan calls for vehicle emission reductions and fleet efficiency standards. Car sharing can play a fundamental role in ensuring these goals are met.

8. Conditions for ensuring program success

Car sharing operators have generally placed vehicles in mixed-use neighborhoods. This ensures the vehicles are used more intensively – companies tend to use the cars during business hours while individual and family use increases in the evenings. Because many individuals rely on car sharing as an alternative to vehicle ownership, car sharing companies generally look to expand in communities that have relatively developed pedestrian and public transportation infrastructure. Communities that have thriving car sharing operations tend to have the following characteristics:

- Larger proportion of 1-person household than community average;
- Lower rates of people who identify their means of commuting as driving alone to work;
- Higher percentages of residents who walk to work; and
- Lower vehicle ownership rates.
- Higher rates of telecommuting

9. Challenges for Car Sharing Programs

9.1 Regulatory

Are car share vehicles considered rental vehicles for tax purposes? If similar tax surcharges imposed on rental cars would apply to car sharing, this tax could impact car sharing viability, especially in a new market with a limited membership base. Florida's Administrative Code, Rule 12A-16.002 requires car rental companies to impose a surcharge of \$2.00 a day for vehicle rentals. It is unclear if car share operations are covered by this rule, as they are not excluded in the term "for hire passenger motor vehicle." Government institutions should consider amending ordinances to protect car sharing programs from undue taxation which could make the program financially unfeasible.

9.2 Visibility

Car share companies need to work closely with municipalities/county to ensure vehicles are placed in highly visible locations that will draw attention and induce usage. Cars parked out of sight in garages are not as accessible or as convenient as those placed on-street or lower levels of garages. Many ground-level lots and garages are not accessible 24-hours a day.

Visibility is especially important for early development in downtown Miami, where parking supply fluctuates from readily available during business hours to scarce after hours. The County and the City of Miami should anticipate greater demands on parking in the coming years as more people move to downtown. The Downtown Development Authority (DDA) released a report in March 2011 that found an 85% occupancy rate in the downtown. This figure represents a 31 percent increase since June 2009. As of May 2010, the DDA estimated the downtown's population at 70,000, an 80% increase from 2000. This trend is expected to continue, with a growth of 18 percent anticipated by 2014 to 85,000 residents.

10. Key Studies

10.1 Shaheen, 2009, 2010, 2010

Dr. Susan Shaheen, Research Director at University of California Berkeley's Transportation Sustainability Research Center, is the leading authority on car sharing practices. Widely cited in the car sharing literature, Shaheen has conducted numerous studies and surveys on car sharing programs, seeking to identify how they develop within a community, how governments relate to their presence and how the programs contribute to their communities. She writes comprehensive articles on the benefits and costs of implementing car sharing and has studied the progression of car sharing programs from relatively obscure and experimental programs to the mainstreaming of the practice through programs like Flexcar which was acquired by Zipcar in 2007.

In her 2009 retrospective report on Car Sharing in North America, Shaheen observes the progression from obscure to mainstream. "This [transition] includes increased competition, new market entrants, program consolidation, increased market diversification, capital investment, technological advancement, and greater interoperator collaboration. Ongoing growth and competition are forecast. Rising fuel costs and increased awareness of climate change likely will facilitate this expansion."¹²

In a 2010 paper, Shaheen identifies governmental support for car sharing into three broad categories: Carsharing as an Environmental Benefit; Carsharing as a Sustainable Business; and Carsharing as a Business. Governmental support varies, based on how local officials perceive the concept. Governmental support is minimal when local governments approach the concept as a business, moderate for a sustainable business and high for environmental benefit.

10.2 Adam Millard-Ball, 2005

In 2005, Adam Millard-Ball produced a seminal work on car sharing for the TCRP titled “Car-Sharing: Where and How it Succeeds.” The report is an exhaustive and comprehensive analysis of the concept of car sharing. His report addresses virtually every facet of program implementation, from the perspective of prospective operators and governments. The report identifies strategies local governments can use to ensure program success, explores different forms of subsidies and looks at the costs and benefits of implementing car sharing. However, because the study was released in 2005, the academic research it cites is relatively dated – most studies are based on European car share models and are based on the initial stages of car share implementation. Now that car sharing programs have mainstreamed with presences in most major North American markets, and with these expanding into international operations, a new authoritative study of car sharing program is needed. Such a study should analyze the impacts of a full-fledged car share program on member behavior – is car sharing effective at reducing VMT? Are vehicle ownership rates increasing or decreasing? The Washington DC study of Car share members suggests ownership rates of vehicles are lower than those cited in Millard-Ball study. Is this a trend, or anomalous to DC?

11. Best Practices

This section provides an overview of car share-governmental partnerships in several North American cities. These are generally early adopters of car sharing and most now have robust programs and large memberships. Other cities described here have ongoing agreements with the car share companies to provide fleet services.

11.1 Seattle, Washington

The City of Seattle embraced car sharing through a partnership with Flexcar, before it merged with Zipcar. In order to encourage the program’s success, Seattle agreed to pay for memberships and application fees for city employees. This mutually beneficial agreement provides city employees with a transportation alternative, while Flexcar began operations in the city with immediate access to a membership base of 11,000 city employees. This relationship continues today with Zipcar.

Seattle has also developed programs to ensure that car sharing is accessible to low-income families. Seattle used the Job Access & Reverse Commute (JARC) federal funding to subsidize car sharing for qualifying residents. Car sharing has the potential to be a fundamental asset to low-income residents. Transportation access and mobility are significant challenges for families with limited or no access to vehicles. Thus, access to car sharing vehicles has the potential to be a critical component of these individuals’ transportation alternatives.

Seattle car sharing has faced challenges in recent years. In 2007 Washington State decided that car share companies should not be exempt from paying the traditional car rental tax of 9.7%. Car rental companies alleged the previous exemption provided a competitive edge to the car share companies.



San Francisco's Non-Profit City CarShare plug-in Hybrid.
Photo by felixkramer, from flickr.com

11.2 San Francisco, California

San Francisco has embraced car sharing as a progressive solution to the city's fleet management costs. It is home to one of the first car share programs in the United States, the non-profit City CarShare commenced operations in 2001. San Francisco continues to lead sustainable transportation initiatives, it has commissioned a study of on-street parking management measures that is ongoing and has led a drive to introduce shared plug-in electric vehicles. Furthermore, San Francisco City and County supports the program by using car sharing vehicles for their government fleet

demands. As San Francisco retires older fleet vehicles and replaces them with car sharing, all employees are provided access to car share vehicles.

San Francisco amended its planning code, ordinance number 0286-10 in 2010 to encourage further expansion of car sharing. New residential developments are required to provide one car share spot for every 50-200 residential units. For non-accessory and non-residential parking facilities, one car share space must be provided for every 25-49 parking spots. Furthermore, the San Francisco Board of Supervisors may require property owners to pay for car sharing memberships for their residents if the building is found to encourage private-automobile use.

San Francisco's legislation can serve as a model for the City of Miami, as it provides definitions for car sharing, certified car-share organizations, establishes minimum environmental performance standards for car share operators and addresses the challenges of balancing parking demands with the realities of space scarcity. The legislation also identifies the planning department as the regulating agency.

As of July 2009, there were over 50,000 individuals registered with car sharing programs in the San Francisco metropolitan area, and over 1,100 car share vehicles. The City and County of San Francisco offers parking to car share companies at a 50% discount for off-street lots, and a minimal number of on-street spaces, which were approved on a one-time basis by the Board of Supervisors.

11.3 Philadelphia, Pennsylvania

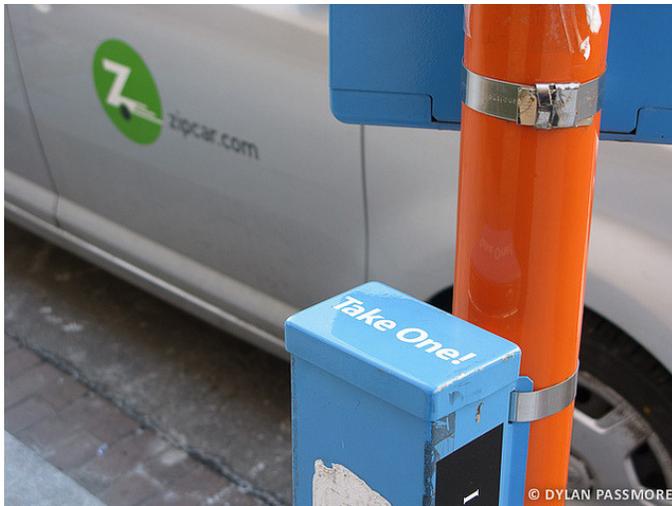
Philadelphia embraced car sharing relatively early. There are two major operators in the city – Zipcar, from the private sector and PhillyCarShare, a non-profit locally-based program. A partnership between PhillyCarShare and Philadelphia resulted in the city reducing its fleet by 400 vehicles through 2007. This

has resulted in savings of over \$1.8 million per year. The fleet services has resulted in better tracking of car usage by public employees, accurate cost allocation as each department is billed commensurate to their use of the vehicles and maximized the use of a resource as car share vehicles are also accessible by the public. Philadelphia has since ended the partnership with PhillyCarShare and entered a new one with Zipcar.



A PhillyCarShare vehicle parked in an off-street parking lot. Photo by glokbell, from flickr.com

More recently, in December 2010, Philadelphia installed vehicle sharing and tracking technology in 25 fleet vehicles. This partnership is made with Connect by Hertz Connect and is intended to reduce administrative costs and maximize use of vehicles. Unlike the Zipcar partnership, this arrangement is an extension of fleet management technology on city-owned vehicles. Thus, vehicles are reserved in the same fashion as car share vehicles, and costs are tracked through the car share operator's software. This method ensures a better usage of the city's existing fleet vehicles.



Washington DC car share sign post with literature box to educate the public. Photo by Dylan Passmore, from Flickr.com

11.4 Washington DC

Washington DC's Department of Transportation (DDOT) released a report in 2007 with an update on the progress of car sharing in DC. This report discusses the issues and challenges car sharing has confronted as well as costs and benefits to the residents of the District.

DC approved the first car sharing in 2001, which makes the city one of the earliest American cities to embrace the technology. Flexcar and Zipcar were two market entrants – Zipcar has since acquired Flexcar.

To ensure the needs of its residents were being met, DDOT collaborated with neighborhood groups, Advisory Neighborhood Commissions (ANCs) to determine appropriate locations for on-street parking. DDOT was "aware of concerns from residents that on-street parking was already in short supply [therefore,] no Residential Parking permit (RPP) spaces were designated as car sharing spaces. Additionally, DDOT tried to avoid assigning car sharing parking spaces to metered locations."¹³ DC

ultimately converted 41 metered spaces into car sharing locations and created 45 new spots that previously did not permit parking.

Costs to DDOT were approximately \$150,000, of which \$75,000 was foregone in parking revenue and an additional \$75,000 in signage and striping. However, following the merger between Flexcar and Zipcar, DDOT began exploring the possibility of charging Zipcar for the use of 86 parking spaces throughout the community. In 2011, DDOT released an Invitation to Bid for car share operators to bid on the 81 car share parking spaces throughout the city. Initial bid prices were set at what DDOT estimates the spots generate in metered revenue per year – approximately \$5 per day, and \$1,800 per year. The solicitation was released to recapture lost revenue and to increase competition between car sharing operators.

As a condition of granting on-street parking to car share operators, DDOT requires operators to locate car sharing vehicles in the District’s low-income neighborhoods. Based on this provision, there are a large number of vehicles available in lower-income neighborhoods. This is a good example of the type of role Miami-Dade County can take as a car share contractor. By ensuring vehicles are placed in disadvantaged communities and, following the example set by Seattle, ensuring low-income residents have access to vehicles (by facilitating the application process), the County can adapt the of car sharing to adapt to suit the needs of its residents.

Overall, DDOT considers car sharing in the District to be a success – there have been few complaints about vehicle parking locations (in part because of coordination with ANCs). Residential parking was not impacted, which also alleviates any potential concerns towards car sharing. As a testament to the success of car sharing in the District, in 2007, there were over 20,000 DC residents enjoying car sharing, a figure which is higher today.



Vancouver's Car2Go, a program operated by Daimler. Car2Go's Fleet is entirely comprised of two-seat Smarts. Photo by Stephen Rees, from flickr.com

11.5 Vancouver, British Columbia

There are three major car share operators in Vancouver – CAN with over 200 vehicles, Zipcar with over 100 vehicles, and Car2Go, a program started by the car manufacturer Daimler, with over 132 vehicles.

Car2Go is an innovative program, which is a 100% smart car fleet and one-way trips are permitted, provided the cars are parked within the operating zone. Vehicles may be driven beyond these boundaries, but must be returned to the operating zone.

Vancouver’s government established a partnership with CAN to meet the city’s fleet needs. The partnership guarantees access for official needs during regular business hours and are available to car share members on evenings and weekends. This partnership “helps facilitate the more rapid growth of car sharing in Vancouver and provides a more efficient fleet for city users.”¹⁴

Like San Francisco, Vancouver has enacted a parking relaxation regulation which allows new developments to substitute car sharing pods for required parking spaces. The regulation requires developers to provide at least six car share parking spaces for every 100 dwelling units in the city's downtown and two per 100 dwelling units elsewhere.

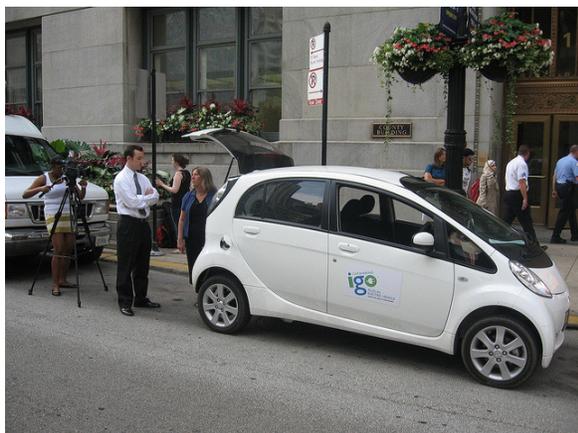
11.6 Salt Lake City, Utah

The Utah Transit Authority (UTA) issued a Request for Expressions of Interest in November 2008 for car share operators. This was undertaken in conjunction with Salt Lake City and the University of Utah. One of the key stipulations of this request was that the requestors would provide no financial subsidy to the operator. In exchange, the requestors have agreed to supply parking to the provider at no cost.

The Request for Expressions of Interest requests the provider to address security and Americans with Disabilities Act (ADA) concerns. It requires kill switches on vehicles to deter theft and for ADA compliance. The ADA compliance has been an issue for some localities – DDOT in Washington DC was sued, along with Zipcar and Flexcar over the lack of accessibility for persons with disabilities.

UTA's request has been met by the relatively new program called U Car Share, which is a subsidiary of the moving truck rental company U-Haul. Based out of Phoenix, Arizona, U Car Share has a presence at a number of colleges across the country. The only two non-university locations are in Portland, Maine and Salt Lake City.

UTA's relationship with U Car Share appears to be limited. UTA provides a link to the provider's website, but otherwise, there are no public displays of support online.



Chicago-based non-profit i-Go launched a plug-in electric vehicle in July 2010. Photo by Center for Neighborhood Technology, from flickr.com

11.7 Chicago, Illinois

Chicago, similar to Philadelphia is served by two car share operators, Zipcar, and locally-based non-profit i-Go. What is unique about Chicago's car share system is the partnership sustained between i-Go and the Chicago Transit Authority (CTA). Through this program, the two organizations have integrated the vehicle access card with CTA system. Therefore, a car share member can seamlessly transfer from a shared vehicle to the CTA train and bus network.

This system has allowed Chicago to "lead the way toward an integrated, multi-modal network of sustainable transportation that reduces car ownership, urban congestion, and greenhouse gases while creating an affordable, convenient, all-in-one option for commuters."¹⁵ Initially conceived as a pilot program, the system was opened to the general public in April 2010. Car share members pay a one-time \$15 charge for the card.

This partnership is a logical extension of the arrangement between CTA and i-Go, as there are multiple i-Go vehicles based at CTA stations. This relationship underscores the value of the connection between car sharing and transit. These programs are complementary, not competitors.

The relationship is likely facilitated by i-Go's designation as a non-profit company. As a startup, it received support from the City of Chicago and the United States Department of Transportation. The innovative approach is a sign that the success of a viable car sharing program is dependent on relationships with public entities and strong ties to public transportation system.

This model may be applicable to Miami-Dade Transit. Considering MDT recently adopted the EASY Card fare payment system, it would be a relatively easy transition to enable a card that allows for multiple uses. Such a relationship would be mutually beneficial to the organizations. Car share operators stand to capture some of the ridership on MDT's system while MDT will be in a position to encourage more Metrorail and Metrobus ridership from car share members.

11.8 Miami Beach, Florida

The City of Miami Beach developed and released Request for Proposal (RFP) number 42-07/08 in 2008 titled "Request for Proposals for a Concession Agreement of a Shared-Car Program for Residents and Visitors of the City of Miami Beach." This comprehensive RFP requires descriptions of provider's fleet, fee structure, timeline for project implementation, membership characteristics and usage patterns, proposed parking locations and other aspects of the car sharing program. Proposers were also required to describe usage and turnover patterns, identify the program's impact on VMT, pollution emissions and modal choices.

The RFP awards a maximum of 25 out of a total 100 points to a proposer to share the most amount of revenue with the City. Car share operators consider this a challenge, considering the large overhead costs of launching a car share program. Cities should consider car sharing as a long-term investment that improves mobility options for its citizens, reduces city overhead costs through fleet reduction programs and environmental and traffic management benefits from reduced private vehicle usage.

As of September 2011, Miami Beach was undergoing negotiations with a car share provider.

12. Car Sharing in the City of Miami

This section assesses the viability of implementing a car sharing operation in the City of Miami and also as a program in the City's government. It addresses the potential legal and financial hurdles that must be overcome in order to ensure a program's success and identifies strategies the city can undertake to facilitate car sharing. This section was completed by analyzing the city's ordinances, environmental policies, zoning regulations, and vehicle parking governance structure.

The City can take two approaches to car sharing:

- Car sharing for residents and visitors –The City contracts an operator, and assigns parking. The operator develops a membership from residents and businesses in the City.

- Car sharing for citizens and government fleet services - The City contracts the selected car share operator to provide fleet services to the City. City departments create business accounts with car share operator and use car share vehicles to conduct official City business. In this approach, the City is able to downsize its light-vehicle fleet, and reduce overhead costs for fuel, maintenance, insurance and vehicle acquisitions.

12.1 Financial Benefits

The City should not approach car sharing as an opportunity to generate a new revenue stream. Large overhead costs incurred by acquiring and maintaining fleets mean that car share operators are rarely in a position to split profits from their operations. Any profit sharing proposals would likely not cover the lost parking meter revenue. Car sharing is an opportunity for the City to reduce fleet management costs. Should the City decide to take the second approach and contract a car share operator for the provision of fleet services, it can downsize its fuel, fleet and maintenance costs. Major cities, including San Francisco, Philadelphia and New York have partnered with car share operators for government fleet operations. These partnerships have benefited both the operators and the government. The City reduces fleet expenses when vehicles are phased out, reduces maintenance, fuel and labor expenses. Conversely the car share operator gains a high profile client partnership, providing daytime service and maximizing vehicle usage.

Further analysis of this approach should be considered upon implementation of a car sharing program for the general public. A survey and pro-forma analysis of the City's fleet will identify vehicles that might be strong candidates for downsizing, as many city government trips are short quick trips, compatible with car sharing.

12.2 Enhancing the City of Miami Green Image

12.2.1 Compliance with the City Code

Section 22.5-2 of the City Code sets standards for fuel consumption reductions. "The intent of the green fleet ordinance is to reduce vehicle fuel consumption by 5% per year and reduce greenhouse gas emissions from the fleet by at least five percent per year to a total of at least 25% by 2015. The city could accomplish this goal by:

- Optimizing the fleet and operation by eliminating unnecessary vehicles
- Minimizing fuel usage by eliminating unnecessary or redundant trips, by increasing efficiency of routes and by minimizing idling.

Progress on these initiatives is reported to a Green Fleet Review Committee as prescribed in the City Code. In order to achieve these goals, the City could amend Section 22.5 to include language that encourages the use of car sharing. Car sharing depend on fuel efficient models for their fleets, an important consideration for environmental and financial concerns – as fuel costs are included in the operator's hourly rate, fuel efficiency is paramount to profitability.

12.3 Issues to Address

12.3.1 Loss of parking revenue

To initiate the program, the City is usually required to assign parking for car share pods at no cost to the operator. A new program can start modestly, with six to 10 vehicles deployed in close proximity, preferably within three to five city blocks. Operators prefer to place vehicles in pairs to ensure car availability. The City and operator must agree to locations before commencement of for up to 20 vehicles, projecting increased vehicle demand. These additional parking locations should be ready for the placement of car share vehicles in a short amount of time – no more than two weeks. The car share provider typically provides the City with the necessary on-street or garage signage to identify car share pods.

As the program evolves, the parking subsidy can be negotiated as the operator develops a strong membership base. In the initial stages, paying for parking spaces is not an economically viable alternative for most operators. Membership expansion and greater vehicle profitability are factors that can change the equation so that the operator is able to reimburse the City for at least some of the parking costs. However, charging for parking before the operator is able to establish a membership base could undermine the program's success.

12.3.2 Partner Organizations

In order to develop a successful car sharing program, it is recommended that the City of Miami and an eventual operator collaborate with relevant partner organizations in the community, including the Miami Parking Authority (MPA), and Downtown Development Authority (DDA).

In 2010, the MPA provided the City with \$7.5 million in generated revenue. The MPA administers 29,700 parking spaces, including 10 garages, 80 surface lots and about 10,400 on-street parking spaces. The MPA estimates six million vehicles park in their designated spaces each year.¹⁶

The MPA, City and a car share operator must collaborate closely to ensure that reserved car share parking spaces are actively patrolled to prevent violations when other vehicles occupy the car share space. Enforcement to prevent any conflict is crucial, particularly in the early stages of program. Because car sharing is dependent on members returning vehicles to their proper locations on a timely basis so as to not inconvenience other members, the enforcement of parking restrictions is paramount for program success.

In collaboration with the car share operator, the MPA will need to identify potential locations for car share pods. Car share companies depend on the marketing generated by vehicle visibility. Car share pods must not only be visible but also accessible 24 hours a day. This could present a challenge for a car sharing program in the City's Downtown, since many downtown lots and garages close overnight and on weekends.

The DDA serves as an economic advocate for Downtown Miami. As an independent public agency, the DDA is funded through a special levy tax on downtown properties. The DDA's services include market research and data collection, urban and transportation planning, capital improvement project

coordination and marketing and public relations. A partnership with the DDA will facilitate marketing and public awareness of car sharing. Furthermore, the DDA can help the City and operator partner with interested downtown businesses and residents while providing input on ideal vehicle locations.

12.3.3 Subsidies to operator?

Car sharing is a recent model as a business venture. In the early phases of program implementation in places such as Portland and San Francisco, government subsidies were sometimes necessary. These subsidies sometimes came in the form of a profit guarantee from the enacting municipal government, however, today, with more mature and financially stable car share companies, profit guarantees are no longer necessary. Costs are especially high for operators who are attempting to penetrate a new market – capital costs are incurred by purchasing new vehicles and preparing them for car share service, and negotiating, planning and coordinating with municipal entities incurs labor costs.

Due to their existing presence in the South Florida market, Zipcar and Connect by Hertz may be better positioned to implement car sharing in the City. These companies have personnel to maintain vehicles and administer the programs at their respective locations at the University of Miami and Florida International University.

The University of Miami Zipcar program is one of the fastest growing in the country. With a membership base in the Health District within the City, and in the City of Coral Gables, market expansion into Miami's Downtown, Brickell and Coconut Grove areas would be a logical extension for Zipcar.

12.3.4 Other direct and indirect levels of support

Both the City and County could enter into a working relationship with the car share operator in lieu of a cash subsidy. Such endorsements would generate guaranteed revenue for vehicles during business hours (when vehicles are generally available). Furthermore, such a policy would encourage City and County employees to use car share vehicles during non-business operators for personal use. With over 4,000 employees at the City and 32,000 at the County, this form of endorsement would validate the car sharing operation for official and non-official use could provide a substantial boost the initiative.

12.3.5 Disadvantage of Parking Vehicles Off-Street

Because garages generate less revenue than on-street parking, the City may lean towards implementing pods in garages or surface lots rather than taking the more profitable on-street spaces. However, the majority of the parking facilities administered by MPA do not have 24 hours access. Downtown Miami's population more than doubles during business hours, thus the demand for parking is far greater during the day than at night. It is preferable to provide on-street parking pods in most of Downtown to ensure that vehicles are available at all hours.

12.3.6 City of Miami Municipal Code

The following regulations need to be addressed prior to the implementation of car sharing in the City. The Code could potentially conflict with the needs of a car sharing program. They are listed below:

Transportation Control Measures, Chapter 14, Article 4, Section 14-182. This section requires Developments of Regional Impact (DRIs) to encourage the use of alternative transportation and sets

parking maximums. The City should consider including language supporting car sharing into this portion of the code. By requiring car share parking spaces within mixed-use developments, developers would have a powerful incentive to expand the program in Downtown.

Parking for certain purposes prohibited, Section 35-10, forbids the displaying of advertising on city streets (3) and forbids the parking of commercial vehicles on public rights of way in residential districts (5, b). These restrictions can be interpreted to apply to car share vehicles, which usually have large decals advertising themselves.

Parking when meter shows violation, Section 35-151 can become a potential issue for a car share operator. An agreement between operator and the City should result in the creation of reserved parking spaces for the exclusive use of car share vehicles.

Parking prohibited in certain spaces, Section 35-158 regulates illegally parked vehicles. The City should include language to restrict parking in car sharing pods and ensure active enforcement by the City of Miami Police Department and MPA. Car sharing is highly dependent on vehicles being parked at their pods and returned punctually so as to not inconvenience other users with subsequent reservations.

12.3.7 Compliance with the City's Comprehensive Neighborhood Plan (MCNP)

The City has codified Transportation Control Measures (TCM) in the MCNP under Policy TR-1.1.9. These TCMs require developments to implement measures that support the City's stated goals of reducing vehicular traffic Downtown. The TCMs recommend parking management, ride sharing, fare subsidy programs, and car sharing.

12.3.8 Administrative costs

As a part of the partnership with a car share operator, the City will need to dedicate personnel time to the program, particularly in the early stages of the initiative. The coordination of pod locations, responses to inquiries and marketing initiatives are all aspects of car sharing that will necessitate some City administration. Car share operators estimate the program administrator would need to dedicate approximately 3-6 hours per week in the early stages of the initiative, followed by approximately 2-3 hours per week once the program is established.

The City of Miami's Office of Transportation could serve as the liaison to the selected car share operator in collaboration with the Office of Sustainable Initiatives and the Miami Parking Authority.

12.3.9 Marketing

The City of Miami, Miami-Dade County and Miami Dade Transit and the DDA should collaborate with the selected car share operator on a marketing campaign to best guarantee the program's success. This could be done in a number of ways including:

- Promoting car sharing on each entity's respective website
- Integrating car sharing into the County's transportation network
- Introducing car sharing to the County's residents through pamphlets and Public Service Announcements

- Subsidizing car share memberships for City/County employees and or residents
- Partnering with the car share operator at City/County events for promotional purposes
- Partnering with the Office of the Mayor to inaugurate car share program

Car sharing should not be perceived as a traditional business enterprise. It delivers valuable social and environmental benefits to the community that arguably offset the costs incurred by the government. Car sharing enterprises have developed an image of economic practicality, environmental conscientiousness and community cooperation. By partnering with a car share operator, the City, County and MDT could align themselves with this vision. Thus, car sharing could be something that these three governmental entities actively embrace.

The City could be the first municipal government in the State of Florida to adopt a car share program, which will further improve its green image in the United States and abroad, in communities where car sharing is well-known and actively used. Furthermore, should the City partner with an operator who has a national and or international presence, it could attract visitors who are interested in visiting Miami but do not want to commit to renting a vehicle for the duration of their visit.

Finally, car sharing is a concept that aligns with several of the goals stated in the City's Climate Action Plan and the County's greenPrint plan. Car sharing is a relatively simple and cost-effective means of accomplishing the goals delineated in these plans. The City's Climate Action plan calls for targeted VMT reductions and fuel efficiency standards to be met in yearly increments. Car share operators generally use fuel efficient vehicles, including hybrids and plug-in electric cars as part of their fleets. They are motivated to use such vehicles not only for their positive environmental associations, but also because fuel costs are built-in to car sharing rental rates, therefore the operators have a strong motivation to ensure their fuel costs are as low as possible.

13. Conclusion

The potential for a car sharing program to succeed in Miami-Dade County and in the City of Miami is strong. Car share operators are interested in expanding to the South Florida market and generally require no profit guarantees from governmental entities. Parking subsidies and minor administrative costs are the biggest concessions the County and City could make to develop car sharing.

The presence of a car sharing program in the County and City can lead to future transportation innovations. San Francisco launched trial plug-in electric car share stations in the summer of 2010. This technology could be replicated in the County and City. In addition, other transportation alternatives can supplement car sharing. A proposed bike rental program will complement the objectives of car sharing and further enhance mobility options for the community. The City should also consider collaborating with the County, MDT and other municipalities on standardizing practices and policies to facilitate the growth of a car share program to suit anticipated demand.

In order to introduce car sharing to the City of Miami, the following issues must be addressed:

- What are the revenue implications for the City?
- What sort of procurement procedures should the City take, a Request for Proposal (RFP)? A request for bids solicitation would not be comprehensive enough to address the nuances of a car sharing solicitation
- Alternatively, should the City conduct a pilot program first?
- Identify startup and marketing promotion strategies for a successful program launch
- Collaborate with the MPA, DDA and other community and business organizations
- Identify balance between parking revenues and car share parking location needs

Finally, the chart below summarizes costs the City might incur and the benefits gained by introducing car sharing in Miami.

| Benefits | Costs |
|---|--|
| <ul style="list-style-type: none"> • Improved mobility options for residents and visitors • Cost savings for development • Reduced congestion • Reduced parking demand • Improved fuel efficiency in vehicles • Ease of implementation • Reduction of City fleet costs | <ul style="list-style-type: none"> • Potential for loss of parking revenue • Administrative support • Striping and signage installation • Parking monitoring and enforcement |

14. The Next Steps

The previous sections of this report present the case that car sharing has the potential to be successful in Miami-Dade County. This section evaluates the costs and benefits of adopting car sharing and proposes a phased plan for establishing car sharing.

14.1 Car Sharing Pilot Program

In order to effectively gauge the viability of car sharing in Miami, the City has a choice. It can initiate a competitive bid process through a Request for Proposals (RFP) or establish a temporary pilot program. The RFP process can be time intensive and would commit the City to a contract without any baseline data for car sharing success in Miami. Alternatively, the City could pursue a pilot program on a one to two year basis to better understand demand for the program.

Los Angeles is in the midst of a pilot program which has produced such positive results that the city has extended the program by an additional year. Initially focused on providing car share vehicles in close proximity to universities, the pilot program is now expanding to Hollywood, California to test a new community. A similar program in Miami will enable the City to monitor the program and gauge its effectiveness before committing to a long-term Request for Proposals (RFP) bid-contract. In fact, Hertz and Zipcar have implemented successful car share programs at Florida International University and the

University of Miami respectively, which has established a car share membership base in Miami-Dade County. A pilot program in Downtown Miami would effectively test the viability of car sharing here.

A pilot program would entail the following support from City and partner organizations.

- Administrative coordination (2-3 hours of administrative time per week) with Car share Operator and other Local Partners (MPA, Downtown Development Authority)
 - Car sharing marketing and educational programs
 - Parking violation enforcement
 - Car pod location selections
- Parking concessions (the Miami Parking Authority estimates they generate an average of \$1,089.95 per parking space per year)
 - Granting of parking spaces on-street, and in garages or lots

The following steps should be taken to ensure successful implementation of a pilot car sharing program in the City of Miami

Phase 1: Adopt Letter of Agreement (LOA) with selected operator

- Identify car sharing areas
 - City Hall/Coconut Grove
 - Riverside (City of Miami)
 - Brickell/Mary Brickell Village
 - Downtown Miami/Miami Dade College Wolfson Campus
 - Adrienne Arsht Center for the Performing Arts
- Partner with the City of Miami Capital Improvements Program to develop strategy for installing bicycle racks in proximity to car share pods
- Ensure car share program compliments City of Miami Bicycle Master Plan and Transportation Plan
- Partner with Sustainable Initiatives and DDA to coordinate marketing and public awareness campaign
- Meet with Miami Parking Authority (MPA) and identify viable parking spaces for car share vehicles

Phase 2: Select Operator and Convene Car Sharing Implementation Committee

- Initiate educational and marketing campaign (PSAs, billboards, booths at special events, etc. Identify funding source)
- Finalize car share pod locations
- Stripe parking spaces, install signage
- Develop enforcement policy with MPA

Phase 3: Evaluate Progress and Program Success

- Evaluate program monthly
- In conjunction with operator, identify changes in usage to address demand
- Identify problems and develop solutions (unauthorized parking, at designated car share spots, public awareness of program, etc)
- Evaluate viability of expanding program to other local and county governments and share experiences
- Present findings to City Manager, determine best course of action for further program development
- Develop RFP

14.1.1 Proposed Car Share Parking Locations

Based upon the research conducted in this report and knowledge of the area, the City presents the following locations as potential sites for car share parking for the proposed pilot program.

MPA College Station Garage (Garage 3)

190 NE 3rd Street, Miami, FL 33132

Located in the heart of downtown, this garage is located adjacent to a Metromover Station (College/Bayside stop), Miami-Dade College, and is within a block of several office buildings and high-rise apartments. Furthermore, this garage is one of two public garages in downtown that are op

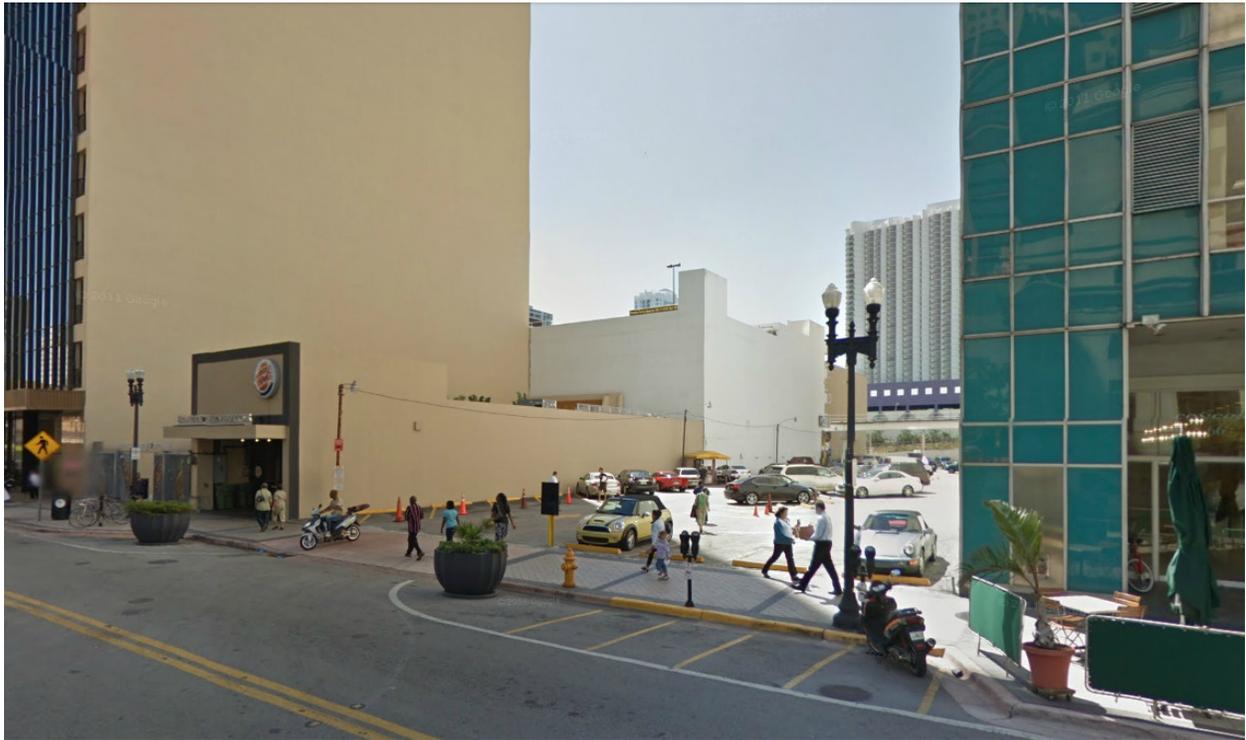
Adrienne Arsht Performing Arts Center

Biscayne Boulevard & NE 15th Street, Miami, FL 33132

This is a proposed on-street parking location for proximity to several hotels, the Miami International University of Art & Design, the Performing Arts Center, the Miami Herald Building, Miami-Dade County Public Schools and the Omni Metromover Station.

Flagler Street

56 SW 1st Street, Miami FL 33131



This public parking lot is centrally located opposite the County Courthouse, and one block from Government Center, the hub of Miami-Dade Transit’s Metromover and Metrorail systems. The area is also close to law offices, governmental buildings and numerous lunch spots. The area also has a developing residential community. The parking lot is also open 24 hours.

Miami City Hall and Coconut Grove

3500 Pan American Drive, Miami, FL 33133

Located on Dinner Key, in Coconut Grove, the Miami City Hall building faces a vibrant waterfront marina and entertainment center that attracts both visitors and residents. High rise apartments across the street will provide a larger potential membership base at this location.

Additional proposed on-street location near Coconut Grove’s Cocowalk shopping district at Grand Avenue & McFarlane Road.

14.2 Real Costs

There are minimal direct costs incurred during this pilot program. The City of Los Angeles’ Year End Status Report from September 2010 notes that staffing costs during the pilot “have been minimal to date,” but also observes that an expansion of the program requires “additional resources”¹⁷ that are presently not available. This report identifies three potential costs to the city – reduced parking revenue, striping and sign installations and administrative and staff time.

14.2.1 Loss of Parking Revenue

- The Miami Parking Authority (MPA) earned the following in 2010:
 - \$1,089.95 average per parking space;
 - \$1,164.72 per on-street parking space;
 - \$971.58 per garage space; and
 - \$1,120.72 per parking lot space

Analysis: In new car sharing markets, cities have typically provided parking as a subsidy to a car share operator at no cost. Although this represents a loss in parking revenues, studies estimate that each car share vehicle represents a reduction of 14 private vehicles on the roads, reducing parking demands and improving mobility options. Cities that charge for parking generally receive a pre-arranged flat rate reimbursement.

In 2011, Washington DC initiated a request for bids for its on-street car share parking spaces. Starting bids are set at what DC's Department of Transportation (DDOT) estimates these spots would generate in metered revenue. To date, DDOT has received bids from four proposers.¹⁸ The request for bids is ongoing and therefore the result of this relatively innovative process cannot yet be determined. However the method has generated controversy some controversy.¹⁹ The criticism stems from the fact that car share companies will be charged market rates for parking while DC residents are permitted to purchase on-street parking permits for \$15 per year. Detractors estimate that car share rates might increase by as much as \$200-400 per vehicle per month. In worst case scenarios, car share operators will be responsible for paying a parking rate that is 320 times higher than a residential parking permit rate. This price disadvantage potentially can increase the cost of car sharing, which would have the unintended consequence of discouraging the program's use.

For the purposes of comparison, monthly on-street parking permits in the City of Miami cost between \$35 and \$85 per month, surface lots cost between \$21.53 and \$86.14 per month and garage monthly permits cost between \$50 and \$155 per month. The City should refrain from initially charging an operator for the use of parking spaces in order to allow a membership base to develop. A flat monthly fee can be applied to an established program to recover the City's lost parking revenue.

14.2.2 Striping and sign installation

In order to prevent non car share vehicles from parking in car share parking, the County and car share operators must coordinate to place no parking signs at car share pods. Car share operators typically assume the cost of sign while the partnering governmental entity is responsible for sign installation and striping cost. The Capital Improvements Program (CIP) at the City of Miami estimates acquisition and installation of car share parking signs would cost approximately \$300 per sign and no more than \$100 for striping. However, because car share operators usually are responsible for sign acquisition, the partnering organization could expect to pay a considerably lower sum than a net \$400 per parking space. Furthermore, multiple parking spaces can be identified through signage at a lower ratio than 1:1. Further analysis is required to identify the costs of signage and striping although actual costs will be determined upon implementation.

14.2.3 Administrative and Staff time

Car share operators with city or county partnerships will need a car share liaison for the purposes of billing, addressing potential regulatory questions and to assist with promoting car sharing to residents and government employees. This time commitment is estimated at about 3-4 hours in the initial weeks of a program's inception by car share operators. As a program evolves the time commitment for a city or County liaison would be reduced to no more than 2-3 hours per week. Thus, a car share liaison would work an estimated 8-12 hours per month on car sharing administration tasks.

14.3 Subsidy

This feasibility study does not envision a scenario where a cash subsidy is necessary for car sharing to succeed in Miami-Dade County. However, as was discussed earlier in this conclusion, there are real costs to the County and interested municipalities. The provisioning of parking, administrative assistance and sign installation and potentially striping for car sharing pods.

Initial Costs

| | |
|---|------------------|
| Initial Administrative Time (3-4 hours per week, for first 2 months of program at \$20.00 per hour) | \$480 - \$640 |
| Sign Acquisition and Installation | \$300 |
| Striping | \$100 |
| Total Initial Costs, per space | \$400 |
| Total for 10/ 20 initial parking spaces | \$4,880/ \$9,040 |

Recurring Costs

| | |
|---|-----------------------|
| Continued Administrative Time (2-3 hours per week, estimate for one year at \$20.00 per hour) | \$2,080 - \$3,120 |
| Foregone Parking Revenue, per space per year | \$1089.95 |
| Total cost for one year with 10/ 20 parking spaces | \$12,979.50/ \$24,919 |

The above analysis represents the real costs to the City of Miami, based on parking rates, and rough estimates for signage and striping. Labor hours are based on estimates from car share operators. The above analysis suggests that a pilot program in the City of Miami with 10-20 vehicles would cost between \$15,779.50 and \$30,839. It is important to note that these are estimates. Further analysis should be conducted to identify actual costs and benefits. This analysis can be conducted through a pilot program, which can provide a wealth of knowledge that will guide the City and help determine where to prioritize vehicle placement and measure actual costs and benefits.

Endnotes

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- ¹ Revised Code of Washington 82.70.010(5)
 - ² Car Sharing: Where and How it Succeeds (2005) Millard-Ball, p ES-4.
 - ³ Missing from the list are Dallas, Houston, Detroit, Tampa Bay and Orlando. San Antonio is in the process of requesting bids from car share operators and is placing an emphasis on plug-in hybrids.
 - ⁴ Car Sharing: Where and How it Succeeds (2005) Millard-Ball, p 3-18.
 - ⁵ <http://www.aaaexchange.com/Assets/Files/201048935480.Driving%20Costs%202010.pdf>, accessed June 2011
 - ⁶ The Economic and Environmental Impact of PhillyCarShare in the Philadelphia Region, February 2010
 - ⁷ The Economic and Environmental Impact of PhillyCarShare in the Philadelphia Region, February 2010
 - ⁸ Car Sharing: Where and How it Succeeds (2005).
 - ⁹ <http://www.zipcar.com/is-it/>
 - ¹⁰ <http://www.mayorsinnovation.org/pdf/PhiladelphiaFleetManagement> accessed May 2011
 - ¹¹ <http://zipcar.mediaroom.com/index.php?s=43&item=216> accessed June 2011
 - ¹² North American Car Sharing (2009) Shaheen et al., p 35.
 - ¹³ District Department of Transportation Curbside Carsharing Evaluation, (2007) p 2.
 - ¹⁴ http://vancouver.ca/sustainability/sustain_fleets.htm, accessed May 2011
 - ¹⁵ <http://www.igocars.org/how/chicago-card-plus-i-go-card/>
 - ¹⁶ http://www.miamiparking.com/Libraries/Annual_Reports/Fiscal_2010_CAFR_Department_of_Off-Street_Parking.sflb.ashx
 - ¹⁷ <http://cityclerk.lacity.org/lacityclerkconnect/index.cfm?fa=ccfi.viewrecord&cfnumber=08-1798>
 - ¹⁸ http://dcist.com/2011/07/competition_for_car-sharing_spaces.php
 - ¹⁹ <http://streetsblog.net/2011/07/06/dcs-car-sharing-fee-a-case-study-in-bad-parking-policy/>

Appendices

A. Central Florida Department of Transportation reThink Your Commute – This website, created by the Florida Department of Transportation (FDOT) District 5, identifies strategies, including car sharing, for commuters to “reThink” their commutes. The website announces that car sharing is coming to Central Florida in 2012.

<http://www.rethinkyourcommute.com/carshare/>

B. San Francisco Car Share Requirements and Guidelines - Guidelines adopted by the San Francisco Board of Supervisors mandating developments provide parking for car share organizations. The code allows the Board of Supervisors to require property owner to pay annual membership costs to car share organizations if the property owner provides excessive parking.

<http://www.sf-planning.org/index.aspx?page=2347>

C. City of Miami Beach Request for Proposal (RFP) number 42-07/08 excerpt – The City of Miami Beach issued a RFP for a car share vendor in October 2008. Miami Beach requested providers include a proposal for revenue sharing with the City. Although revenue sharing can be difficult to achieve, the RFP is an interesting model for other South Florida communities, particularly Section II of the RFP – Scope of Services and Operator’s Minimum Requirements. The RFP is hosted on the carsharing.net

<http://www.carsharing.net/library/rfp/RFP42-07-08.pdf>

D. CarSharing.net - An information clearinghouse on car sharing. This page includes a table listing the locations of car sharing operations throughout the world.

<http://www.Carsharing.net>

E. Washington DC Department of Transportation (DDOT) Invitation for Bids: On-Street Parking Spaces for Car Sharing Vehicles – The DDOT released an invitation for bids in June 2011 for car share operators to bid on on-street parking. Winning bids will result in a two year contract. Starting bids are set at \$3,600 – the approximate amount DDOT estimates spaces generate every two years. Attachment A describes the standardized signage and striping that winning bidders must comply with.

http://www.dc.gov/DC/DDOT/Publication%20Files/About%20DDOT/News%20Room/2011/06/Solicitation_Exhibit-A_CarsharingSignageMarkings_DDOT_06-09-2011.pdf

F. City of Los Angeles Year End Status Report on the On-Street Carshare Pilot Program –Zipcar is in the midst of a pilot program to determine if the concept is viable in the City of Los Angeles. To date, the program has been sufficiently successful to merit an expansion into Hollywood.



FIND ME A MATCH!

EMPLOYER SERVICES

EMERGENCY RIDE HOME

PARTNERS & RESOURCES

TIPS & TESTIMONIALS



GET THE CAR – SKIP THE CAR PAYMENT

Let's face it – having a car to get where you need to go is convenient. It means not having to wait for a bus, find a carpool, or wear a helmet on a bike.

But it is also expensive. There's the cost of your car loan, insurance, maintenance, registration – the list seems to go on and on!

Imagine having the convenience of a car without the large monthly payments. Being able to jump in the car when you need it and only paying for the time that you use it. Not having to visit a mechanic. Not worrying about when you need to renew your registration. With Carsharing, this level of convenience and savings can be a reality.

SO WHAT IS IT EXACTLY?

Carsharing is like short-term car rental. You use specific Carsharing vehicles parked in specific places around your neighborhood for short periods of time. You pay only a small hourly fee for the time that you used the vehicle. This fee includes the cost of gas, insurance, maintenance, and other expenses.

Many Carsharing programs require that you purchase an annual membership. When you become a member, you create an online profile that allows you to reserve vehicles and set up your payment preferences through a web site.

Usually, you will receive an electronic card that is used to unlock the Carsharing vehicles. You can choose to receive a monthly invoice or to pay at the time that you reserve the vehicle.

When you need to use a vehicle, you would check the Carsharing web site for available cars. Reserve what you need for the time you need it, and then head to the parking location to jump in the car. When you're done, simply return the car to the same parking spot, lock it up, and go!

Carsharing Makes Sense

- Carsharing means you can get where you need to go on your schedule. It will allow you to get to places that the bus or train simply can't go.
- Owning a vehicle costs a lot of money! Americans spend an average of \$9,600 on auto ownership every year. For most of us, our cars sit in parking spaces all day long. Through Carsharing, you only pay when you are actually using the vehicle. Carsharing members can save about \$550 per month in place of auto ownership.
- By offering an alternative to personal car ownership, Carsharing programs also help the environment. Carsharing vehicles typically get great gas mileage, meaning less gas needed for each mile you need to go.
- Every Carsharing vehicle can replace about 20 vehicles! This means less cars on the road overall – which leads to less congestion and better air quality for all of us.
- Get the car that meets your needs. By offering a variety of vehicles, Carsharing allows you to use a pick-up truck when you need to pick up large items or a four-seater if a group of friends are heading to the game.
- Test drive the best! Carsharing vehicles are the latest models with the latest conveniences, from GPS to iPod docking stations.

I'M EXCITED – WHEN IS IT COMING TO MY NEIGHBORHOOD?

Carsharing is coming to your region in 2012. Carsharing vehicles will be located throughout the Downtown Orlando area at first, and as the system grows and more people use it, Carsharing vehicles can be placed in key locations – where people want them.

Let us know you're interested by [joining our e-mail list](#) so we can keep you informed. You can also learn more by checking out this [Carsharing web site](#).

Car-Share Requirements and Guidelines

TEXT FONT SIZE A⁺ A*



[Zoning Administrator Bulletin \(PDF\)](#)

[Ordinance to Amend Planning Code: Car-Share Controls](#)

[General Information](#)

[Car-Share Organization Certification Process](#)

[Car Share Space Inventory](#)

On November 2, 2010 the Board of Supervisors adopted Planning Code changes as initiated by the Planning Commission to would update zoning controls relating to car-sharing. At that hearing, the Supervisors embraced the legislative amendments to the Planning Code, under Board File No. 100829 "Planning Code – Car-Share Controls." The Mayor signed the new legislative changes on November 18th, 2010 and the legislation will be in effect starting December, 28, 2010.

New Planning Code Change Summary: Car-Share Controls

Code Change: 151.1, 163, 166

Case Number: Board File No. 10-0829

Initiated By: Planning Commission, June 10, 2010

Effective Date: December 18, 2010

The Way It Was:

The Planning Code required that a certain specified number of parking spaces be made available to certified car share organizations when parking is provided for residential uses in all districts and for nonresidential uses in certain districts.

The Way It Is Now:

Car-sharing requirements are applicable to both residential and non-residential uses in all zoning districts.

Car-share spaces are generally permitted in the same way that residential parking is permitted. Voluntary conversion of any residential or commercial space to a car-share space is allowed.

The Planning Commission can require developers or project owners to pay the annual membership costs to certified car-share organizations for residents of new development projects. The Planning Commission is authorized to impose this condition when approving projects that include parking above the number of spaces principally permitted and only when the Commission makes certain findings regarding the project's impact on transportation.

Link to signed legislation:

| Board File No. | Ordinance No. | Subject |
|----------------|-------------------------|--|
| 100829 | 0286-10 | Planning Code - Car-Share Controls |

General Information

Car-share spaces may only satisfy the requirements of Section 166 if they are made available and at no cost to certified car-share organizations. A "certified car-share organization" is any public or private entity that provides a membership-based car-share service to the public and manages, maintains and insures motor vehicles for shared use by individual and group members.

SECTION II -- SCOPE OF SERVICES

Implementation and Operating Plan which should describe in detail the following, but not limited to:

- The funding sources for the development, implementation and management/operation of the program
- Description of a fee structure
- A timeline for the implementation of the project
- The capacity and past experience of the Proposer to develop, implement and maintain the proposed use
- Shared-Car's fleet size, vehicle types, costs, maintenance and operations
- Membership characteristics and usage patterns
- Services provided
- Member screening and member management criteria
- Deposits, fees, billing, and accounting requirements
- Member use scheduling, including providing location and time options
- Locations of vehicles and parking arrangements
- Mobility partners and information
- Usage policies for members
- Vehicle and organization insurance

A business plan including information on revenue-sharing options and delineating the cost-benefit of implementing this program in the City of Miami Beach to which the receipts will be subjected to periodic audits by the City:

- Revenue-sharing information that outlines proposed contract terms and conditions. Each submittal must include a specific proposal for the proposed revenues to be shared with the City as compensation to the City for exclusive use. It should be noted by the Proposer that the City would receive a minimum guarantee and/or a percentage of gross revenues, whichever higher, prior to the Proposer commencing its services. If the proposal contemplates different uses for different portions of the project, then the term sheet must reflect the proposed terms and conditions for each portion.
 1. During the initial term, and any renewal term of the Agreement, the successful Proposer shall pay the City on a monthly basis, and within thirty (30) calendar days from the end of each month during the term herein, as negotiated a percentage of successful Proposer's gross receipts.
 2. In the event that the City, at its sole discretion, chooses to extend the term of this Agreement for the additional five (5) year renewal term, the renewal term year minimum guarantee shall be automatically increased, by five (5) percent from the previous year's minimum guarantee.
- If applicable, a preliminary **capital pro forma** showing the detailed sources and uses, as to the status of securing those funds should be included, and inclusion of a conditional financing commitment is strongly encouraged. Proposer **MUST** clearly indicate any public assistance to be requested.
- A preliminary **five-year operating pro forma** including assumptions underlying the income and expense projections. Clearly indicate the sources and amounts of revenues. The Proposer must also show the Cash-on-Cash Return and Internal Rate of Return and describe proposed distribution or utilization of net operating income.

The selected Proposer shall make its rental rates easily available for public review, for example, by posting

legible displays and providing information pamphlets, as well as, maintaining a website.

MINIMUM REQUIREMENTS / QUALIFICATIONS:

1. The Proposer must have a verifiable proven record of providing Shared-Car services and must have not fewer than three (3) years.
2. The Proposer must have sufficient financial stability to provide Shared-Car services throughout the term of the Agreement.

The Proposer shall provide the following information:

- Vehicle usage and turnover at designated Shared-Car spaces. If requested by the City, the Shared-car organization shall provide this information on a quarterly basis.
- The impact of the Shared-car organization's program on vehicle miles traveled, air pollution, transit, biking and walking.
- Financial information showing the Shared-car organization's current status in terms of profitability. If requested by the City, the Shared-car organization shall provide this information on a quarterly basis.

The Proposer submitting a response warrants that it:

- (1) Can carry out all the requirements set forth in this RFP and its own operational plans, and fulfill the associated financial commitments.
- (2) Has successfully developed and operated other Shared-car services concessions similar to those proposed.
- (3) Has supplied the information in the attached Questionnaire and Individual or Corporation Financial Information, as further evidence of capacity and readiness to provide the proposed services.

D. <http://www.carsharing.net>



CarSharing[★]net

Zipcar IPO news

News and Key Issues

What is Car Sharing?

Why it's great for cities

Where to find Car Sharing

Car Sharing Library

Industry Suppliers

About Us | Contact

June 2011



~ Automotive Ads ~

[Car Shipping](#)

[Insurance Leads](#)

[Cheap car insurance](#)

[The Buzz Car Insurance](#)

[Medicare Cost Reports](#)

[Used Cars for Sale](#)

[Car Finance](#)

[Car Insurance](#)

- [Auto Transport](#)
- [ford tractor parts](#)
- [Car Insurance](#)
- [Motorcycle Helmets](#)
- [myrtle beach vacations](#)
- [Car Insurance Comparison](#)
- [car accessories](#)
- [Garage Heater](#)

Car sharing is a revolution in personal transportation - urban mobility for the 21st century.

Carsharing is designed to replace car ownership for people who do not need to drive to work every day, and to significantly reduce congestion and greenhouse gas emissions. Carsharing is a service that provides 24/7 self-serve access to a network of vehicles stationed around your city (and increasingly, cities world-wide), which can be reserved by the hour or day via smart phones, Internet and call centres.

This amazing green business idea works because people save money, and lose the hassles of ownership, yet still have the benefits of access to a car when they need one.

Key tweets from **@CarSharing**

CSA carsharing RT @USATODAYmoney: Personal carsharing takes off as states ease insurance laws <http://usat.ly/kDQHKT>
yesterday · reply · retweet · favorite

CSA carsharing RT @VIA_Rail: #VIARail + #Communauto / #Vrtucar = #SDTuesday <http://ow.ly/5n7j1>
2 days ago · reply · retweet · favorite

CSA carsharing Congrats @Hourcar, winner of the Minnesota Cup's social entrepreneur division <http://t.co/CCJbXkk> via @scottmagnet @MinnesotaCup @stribblee
2 days ago · reply · retweet · favorite

CSA carsharing RT @SixtUK: RT @BMW: We launched #DriveNow in Munich - the new Car Sharing Service. <http://bit.ly/1OnQ8v>

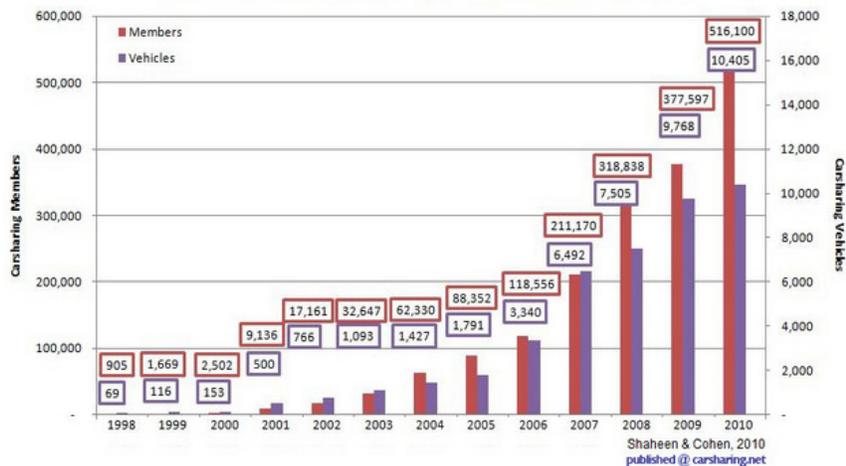
Join the conversation

Car Sharing pilot projects like [Witkar](#) began as early as the 1960's and 1970's, but modern car sharing programs launched in 1987 in [Switzerland](#) and later in 1988 in [Germany](#), and came to North America via [Quebec City](#) in 1994. [The first successful car share in the USA, Portland Oregon's CarSharing-PDX

As of January 1, 2011- based on data provided by [Susan Shaheen, University of California, Berkeley](#) - 27 U.S. carsharing programs claimed 518,520 members sharing 7,776 vehicles; and 85,439 members shared 2,342 vehicles among 17 carsharing organizations in Canada.

Carsharing membership has grown tremendously over the past 15 years - since it launched in North America in Quebec City in 1994 - and the industry has recently attracted significant commercial attention. Take a look at a decade of carsharing growth:

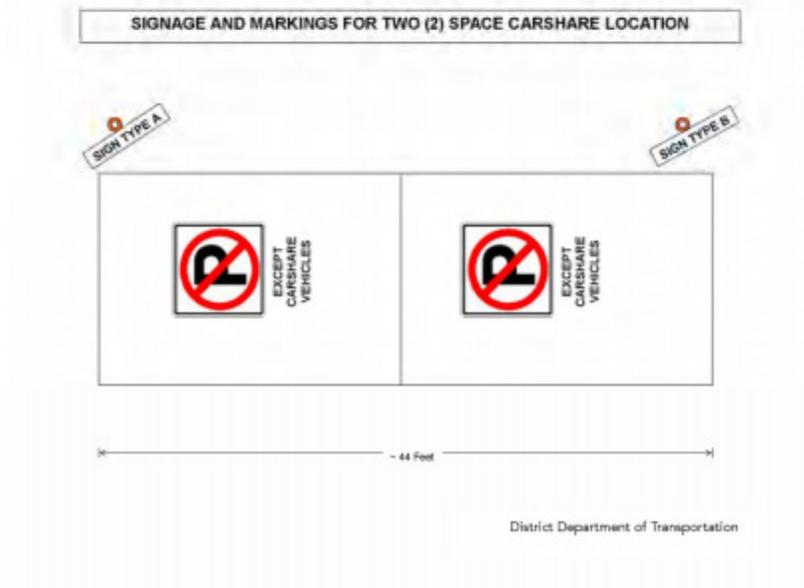
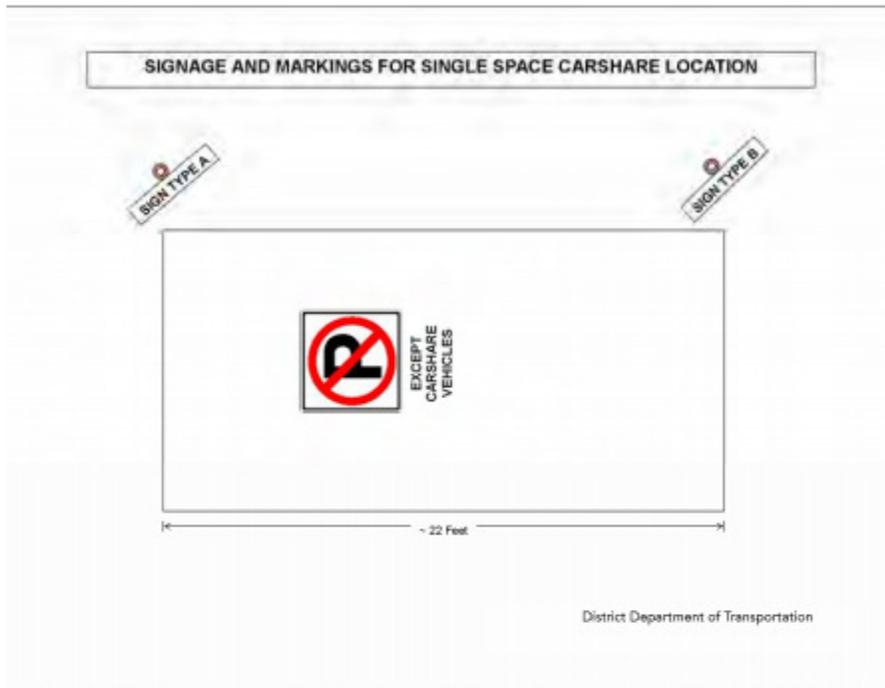
North American Carsharing Members and Vehicles



E.

http://www.dc.gov/DC/DDOT/Publication%20Files/About%20DDOT/News%20Room/2011/06/Solicitation_Exhibit-A_CarsharingSignageMarkings_DDOT_06-09-2011.pdf

The following images show how on-street locations shall be designated by the Contractor.



SIGN TYPE A



THE BOTTOM PORTION OF THE SIGN IS INTENDED TO HAVE THE CARSHARING COMPANY'S NAME. LOGOS ARE NOT ACCEPTED.

THE ENTIRE SIGN CAN BE AS ONE PLACARD.

BOTTOM OF SIGN MUST BE ABOUT 7 FEET FROM GROUND LEVEL.

ALL SIGNS MUST BE INSTALLED AT A 45 DEGREE ANGLE FACING TRAFFIC.
ALL SIGNS MUST BE MUTCD COMPLIANT FOR LETTERING AND SYMBOL SIZES AND DIMENSIONS. THE FONT USED IS HIGHWAY GOTHIC C.

F.

http://clkrep.lacity.org/onlinedocs/2008/08-1798_rpt_dot_9-1-10.pdf

FORM GEN.160 (Rev. 6-80)

CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

DATE: September 1, 2010

TO: The Honorable City Council
c/o City Clerk, Room 395, City Hall
Attention: Honorable Bill Rosendahl, Chair, Transportation Committee

FROM:  Rita L. Robinson, General Manager
Department of Transportation

**SUBJECT: YEAR END STATUS REPORT ON THE ON-STREET CARSHARE
PILOT PROGRAM, (CF 08-1798)**

RECOMMENDATIONS for Council action:

1. FIND that the On-street Carshare Pilot Program undertaken by the City of Los Angeles commencing September 14, 2009, has been sufficiently successful in the areas near USC and UCLA to warrant extending the pilot for an additional year to a new non-campus based pilot area in CD 13.
2. FIND that the pilot program has served as a successful extension of an existing "on-campus" Carshare program at USC and UCLA according to the survey data showing that more than 91% of the on-street Carshare program users are university students and faculty.
3. FIND that the limited scope of the pilot and the survey results substantiate concerns for the viability/success of this on-street Carshare model beyond the University setting and warrants extending the one year pilot Carshare program to on-street and/or off-street settings in CD 13 to determine the viability of the program prior to a citywide expansion.
4. FIND that the City Attorney's review of the Letter of Agreement between Zipcar, inc. and the City of Los Angeles confirms the legality of extending the Agreement for an additional year.
5. DIRECT the Los Angeles Department of Transportation (DOT) to work with the City's current Carshare partner for one additional year to utilize the spaces allotted, but unused, under the existing pilot program to establish Carshare spaces in Hollywood.
6. DIRECT DOT to provide an update to the Transportation Committee in 180 days on the status of the pilot program and to provide detailed recommendations, including on the issuance of a Request for Proposals.

BACKGROUND

On January 1, 2007, section 22507.1 of the California Vehicle Code became law. This section allowed cities and counties, by ordinance or resolution, to designate certain streets or portions of streets for the exclusive parking privilege of motor vehicles participating in a Carshare program. On October 31, 2007, the Los Angeles City Council instituted a carshare program. On April 24, 2009, the City Ordinance No 180602 became effective by adding a new Section 80.58.1 and amending Sections 80.76.2 and 89.60 of Chapter VII of the Los Angeles Municipal Code to:

- Authorize the designation of certain streets or portions of streets for the exclusive parking privilege of motor vehicles participating in a carshare program and,
- To authorize the issuance of permits that allow vehicles participating in a carshare vehicle program to park in the exclusively designated parking areas, and
- To authorize the removal of vehicles parked in violation of the restrictions posted pursuant to this ordinance.

In August 2009, DOT and Zipcar, Inc., signed a Letter of Agreement (LOA) that formalized the operation and responsibilities of each agency with regards to the pilot program. On September 14, 2009, the City of Los Angeles together with Zipcar, Inc., held a press conference to announce the City's participation in a one-year carshare pilot program. The program was implemented to determine the viability of an on-street Carshare program in the City of Los Angeles. On September 15, 2009, the program commenced in two limited areas near the USC and UCLA campuses which were areas in which Zipcar, Inc. had both existing programs and customer bases.

On January 27, 2010, DOT and Zipcar, Inc., provided the Transportation Committee with a status update regarding the program. On February 12, 2010, DOT staff provided the City Council a status update regarding the program success, implementation, operational aspects, as well as the following recommendations for additional steps to be taken:

ADDITIONAL EFFORTS

- Work with the Planning Department in incorporating car sharing in the City's Planning and Land-Use policies and development related mitigation requirements.
- Work with the Metropolitan Transportation Authority to initiate a program in conjunction with existing and future transit station operations.
- Investigate the use of public and private parking lots and structures to allow for the implementation of a more comprehensive and effective carshare program.
- Develop a broad base description for the carshare program and drafting the

- criteria and qualifications for future expansion of the program.
- Coordinate efforts with the City's Integrated Mobility Hub Program to maximize success as both programs are undertaken.

DISCUSSION

Under the LOA, Zipcar, Inc. could request spaces allowing for deployment of 20 vehicles per University for a total of 40 deployable vehicles. By mid-January, Zipcar, Inc. had a total deployment of 18 Carshare vehicles near the two Universities. Twenty two additional parking spaces can be allocated for Carshare use under the Agreement. The remaining number of parking spaces could be dedicated to exploring the viability of the program in currently underserved and densely parked areas of the City farther from Zipcar, Inc.'s existing university markets.

FINDINGS

At the January 27, 2010 Transportation Committee meeting, Zipcar, Inc. indicated all utilization expectations for a new market roll-out were being exceeded. Zipcar, Inc. attributed the higher than expected weekday-midday utilization to business users rather than university students and staff.

Utilization figures provided by Zipcar, Inc. (see the attached Zipcar report) reveal that for the time period January to July 2010, actual utilization ranged from a low of 40.76% to a high of 56.42%, which exceeded the planned usage expectations which ranged between 32.15% and 41.22%.

Despite the consistently strong utilization figures, user surveys, conducted in the last quarter of fiscal year 2009-2010, revealed that 91 percent of the users surveyed were affiliated with the universities, i.e. students or faculty, which underscored the reason for concern that further testing of the program in an untried market should be undertaken before the true success of this on-street program could be determined.

CHALLENGES

DOT's January 22, 2010 report revealed several challenges that faced the on-street Carshare program. A number of steps were taken by LADOT to assist Zipcar, inc., including an inventory of existing parking restrictions on streets near Carshare spaces, to overcome the challenges:

CITATIONS ISSUED TO CARSHARE VEHICLES

In the first several months of the pilot program, parking citations were issued to several Carshare vehicles because they were parked outside the designated Carshare spaces. Zipcar, Inc. attributed the issue primarily to a lack of enforcement in keeping the spaces clear of non-Carshare vehicles.

While more than 170 citations were issued to non-Carshare vehicles parked in the

restricted spaces and 35 vehicles were impounded during the first three months of the pilot, new enforcement protocols were implemented to increase impoundments from the restricted locations. The change in enforcement protocols have resulted in 384 citations being issued and 175 vehicles impounded between January 1, 2010 and July 31, 2010. The user survey revealed approximately 9% of the users had found a citation on a Carshare vehicle, which equates to approximately 24 citations. DOT believes that many of these were issued to the vehicles before enforcement efforts were modified.

CUSTOMER SURVEY

The joint customer survey revealed that approximately 30% of Carshare patrons found the home space filled by a non-Carshare vehicle upon returning vehicles. On March 5, 2010, DOT supplied Zipcar, Inc. a survey of the parking restrictions, for streets near every Carshare space enabling Zipcar personnel to provide guidance to the patron regarding alternate parking spaces where citation of the Carshare vehicles can be avoided. DOT Enforcement indicated that there are no current complaints about Carshare vehicles being parked outside the designated spaces.

The survey information also revealed that approximately 70% of the members joined because they did not have access to a car 24/7. The survey results also indicated that the group likely to comprise the constituency of that category was the graduate and undergraduate students which comprised approximately 82% of the responses. An additional 9% of the users were staff, and faculty.

FUTURE POLICY CONSIDERATIONS

While the Carshare program may prove to be a powerful tool to enhance the City's transportation demand management goals, it is not clear if the goals can be best served by entirely relying on an on-street program that lessens the limited supply of curbside parking. This program will consistently be a balancing act between having too many versus too few vehicles to ensure availability for use. There appears to be an inherent conflict between the City's desire to assure turn-over of parking spaces to maximize use and the needs of a successful rental operation to have a supply of vehicles available for use at all times. Parking is likely to become more congested in the areas where car sharing has a presence.

DOT was awarded grant funds to implement a pilot project to implement first and last mile mobility options at strategic locations in Downtown. In addition, DOT, in partnership with the City of Long Beach, was awarded grant funds in 2010 as part of the jobs access Reverse Commute Program to implement various Integrated Mobility Hubs throughout Downtown and Hollywood. The goals of the City's Carshare Program are consistent with those pursued under the above grant funded projects to enhance urban mobility, and to serve as an extension of the current transportation network for all users. Therefore, it is essential to coordinate these programs as an integrated Transportation Demand Management tool to address the City's long-term needs.

A more goal-oriented use of the carshare program to enhance and encourage transit

use by providing convenient carshare vehicles around rail and transit stations and other transportation facilities can maximize the benefits of the program. The availability of carshare vehicles in transit station areas can encourage the use of transit by those whose trip destinations are not conveniently located within the reach of the transit system. In addition, the transit station car share vehicles could be utilized on nights and weekends especially in Transit Oriented Districts.

FISCAL IMPACT STATEMENT

The costs associated with the staffing, design and implementation of dedicated Carshare parking spaces is born by the General Fund. There is no mechanism in place to recover these public resources. While staffing costs during the pilot program have been minimal to date, the expansion of the program will require additional resources which cannot be supplied at this time. The Division has been impacted by Mandatory Furloughs, work related injuries, and ERIP which has resulted in over 40% reduction in staffing

The Parking Permits Division, which has been tasked with the oversight of the Carshare Pilot, is staffed with resolution authority positions. The program was scheduled for elimination as part of the 2010-2011 Budget discussions. However, the program was continued for an additional year in the final budget. There are instructions for the City's Administrative Officer (CAO), the City's Legislative Analyst (CLA), and DOT to consider moving the Parking Permits Division under the Special Parking Revenue Fund (SPRF). It would be advisable to consider moving the Carshare program under SPRF, as well, in light of plans to expand citywide.

CITY ATTORNEY OPINION REGARDING NEED FOR FURTHER PILOT

A review of the Letter of Agreement between Zipcar, Inc. and the City of Los Angeles confirmed that the parties contemplated the possible need for the pilot program to continue an additional period of time and into additional areas in order for the City to determine the viability of the program and to enable the City to prepare and release a Request for Proposals based on that assessment.

NEXT STEPS:

Continue the Carshare Pilot Program for an additional 12 months in order to explore the viability in a non-University setting:

- Work with staff from Council District 13th to identify appropriate locations for dedication of parking space for Carsharing near Metro Rail Stations in Hollywood.
- Design and implement new Carshare parking spaces in Hollywood.
- Work with Zipcar Inc. to deploy new Carshare vehicles in Hollywood.
- Conduct a survey of Carshare users in the Hollywood area and assess the success of the expansion.

YH:tlm
S:\Prefparking\carshare\September_2010_report.doc

Attachments



DRAFT Operations and Performance Report – Los Angeles Car Sharing Pilot Program

Zipcar is pleased to submit an updated progress report on the Los Angeles-Zipcar neighborhood car sharing pilot program. To prepare for this report, Zipcar not only conducted a survey of its members participating in the University and City Pilot programs, we also examined operational and program management improvements. Below, we have segmented these findings into three broad areas for discussion.

1. The car sharing pilot program is strong.

Overwhelmingly, members in the program are strong users of alternate forms of transportation. In fact, 21% bike, 23% ride the bus and 27% walk as their primary mode of transportation. We believe it is fair to say that Zipcar enables them to continue this lifestyle by helping them meet their needs for personal transportation without having to buy a car. More than 45% have used Zipcar 2-4 times in the past three months; nearly 30% have used it between 5 and 11 times. We are pleased to report that 97% of respondents rated their experience with the reservation service as positive; 92% rated their experience with customer service as positive. Nearly 90% (87%) give a positive rating to the overall vehicle condition.

Perhaps most illustrative of the success of the neighborhood targeting approach is this statistic: significant 45% of people report living or working less than a block from a Zipcar location; 36.5% report being within one to three blocks. In fact, 25 percent report learning about the program from seeing the cars on campus or on streets in the neighborhood. We believe this is key to helping members (and prospective members) feel that car sharing is just as convenient (if not more convenient) than owning a car.

2. We have made continual progress, but still some room for improvement.

As we enter the second full year of the on-street program, we are making good progress on improving the operations and management of the program, not only for members, but also for the City of Los Angeles and for Zipcar. At the last program review, we noted significant issues with parking citations on Zipcar vehicles as well as non-Zipcars frequently parked in reserved locations.

To address these issues we have worked with parking enforcement to get our information in front of the officers at the daily meetings. We also increased outreach and training with our call center on what to tell members if cars are in our spots, based on guidance from LA DOT. The hotline number given to us by DOT has also been helpful in streamlining communication. As a result of this outreach, we've seen a decrease in citations, with only 9% of survey respondents stating that they have received a citation for parking a Zipcar in a designated spot. While 30% of respondents still report experiencing some difficulty in returning vehicles, we are confident that this number will continue to decrease as the program becomes more established in the neighborhoods.



3. Utilization is high and warrants expansion

Since the launch of the program, we have been impressed with membership growth as well as utilization. Since January, we've grown membership by 230% and utilization by 128%. We are currently at 136% of utilization goal, and nearing 100% capacity.

This good news is tempered by the findings of our survey: Only 78 percent gave a positive rating to their ability to get a car when they needed one, and only 68 percent gave a positive rating to ability to get a car where they needed one. These numbers indicate difficulty in securing a reservation, a direct result of strong, or too strong, demand. We believe increasing the number of vehicles and locations will address these access challenges, making the program more beneficial to more members.

Conclusion

We believe the pilot car sharing program has been a strong success to date, and is the reflection of the solid partnership between Zipcar and the City of Los Angeles. While there are still some logistical challenges, we believe those will continue to decrease in number and frequency, and can be addressed through additional communication and training. We believe there is sufficient demand in the current locations, as well as perhaps additional neighborhoods, to warrant expanding the program strategically and deliberately.

We look forward to continuing to work with the city on car sharing and on its longer-term vision for transportation and mobility.

2010 Utilization Actual vs. Plan (Percentage is based on a 24 hour utilization clock; 50% represents "full" utilization)

| Month | Actual | Plan | LA City Program Members/ Res. Members | # Cars |
|------------|--------|--------|--|--------|
| January | 43.76% | 32.15% | 140/482 | 15 |
| February | 40.76% | 35.47% | 170/515 | 18 |
| March | 50.03% | 35.99% | 198/591 | 18 |
| April | 44.15% | 38.46% | 227/634 | 18 |
| May | 55.49% | 38.51% | 263/654 | 18 |
| June | 52.77% | 40.97% | 300/482 | 18 |
| July (MTD) | 56.42% | 41.22% | 322/235 | 18 |