

CAR SHARING | STATE LAWS AND LEGISLATION

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Car Sharing

Car sharing is a free market approach to mobility that can offer important mobility options for those who do not need or want to own a car, but who may need to use one for a few hours to grocery shop or visit a relative.

Car sharing is distinct from ridesourcing in that members are actually driving a vehicle themselves rather than being picked up and driven as is the case with services such as Uber and Lyft.

Typically, car sharing is a membership-based service that provides members of a car-sharing organization access to an insured vehicle; gas and free dedicated parking may be included. Four main car sharing models exist: roundtrip, one-way station-based, one-way floating and peer-to-peer (P2P). There is some overlap among the four.

Car Sharing Definitions*

- **Roundtrip car sharing**—Car sharing that allows members hourly access to shared vehicles from a dedicated “home” location that must be returned to that same location at the end of the trip. Examples of such services include Zipcar.
- **One-way station-based**—Car sharing, in which vehicles are returned to a dedicated or reserved parking location. Zipcar offers such service.
- **One-way free floating**—Car sharing involves vehicles that do not have to be returned to a specific parking lot but rather parked anywhere within a certain zone. Examples of such services include Car2Go and Zipcar.
- **Peer-to-Peer (P2P) Car sharing**—The sharing of privately-owned vehicles in which companies broker transactions among car owners and renters by providing the organizational resources needed to make the exchange possible (i.e., online platform, customer support, driver and motor vehicle safety certification, auto insurance and technology). Examples of such services include Turo and Getaround.

* These definitions incorporate language from the [Transportation Sustainability Research Center at the University of California – Berkeley](#)

Car Sharing Research

According to the [Transportation Sustainability Research Center](#) (TSRC), as of July 2015, in the United States there were 22 roundtrip car-sharing operators in 51 cities, such as Zipcar, with about 1.17 million members. One way car-sharing operators, such as Car2Go, had about 311,000 members in the U.S. The number of peer-to-peer (P2P) car-sharing members is unknown.

Car sharing has been a transportation service in North America since the 1980’s. Research has focused on better understanding car-sharing’s impact on the overall transportation system and other dynamics such as vehicle ownership and carbon emissions.

[According to AAA](#), the average annual cost to own and operate a car is \$8,698. Car sharing has the potential to significantly reduce individual transportation costs; a 2008 Transportation Sustainability Research Center study found monthly transportation savings [ranging from \\$154 to \\$435](#) for round trip car-sharing members in the United States. Roundtrip and one-way car sharing membership did [decline by 4 percent](#) in the U.S. between 2014 and 2015. TSRC believes the decline may in part be due to the loss of two carsharing operators in the U.S. and increased competition from ridesourcing services and bikesharing. High taxation rates may also play a role in this decline. (see Car sharing Taxation chapter for more details).

Some skeptics of car sharing and ridesourcing argue that such services are decimating public transit use and not decreasing auto usage. More research in more settings is needed to have a fuller picture of how these complex interrelations and decisions impact travel patterns, mobility and individual and governmental transportation costs. Below is a quick analysis of current research for round trip, one-way and peer-to-peer car sharing respectively.

Round Trip Car Sharing Research

Reduced traffic congestion may be another benefit of round trip car sharing. One 2008 study found the average car-sharing member’s vehicle miles travelled (VMT) [declined between 27 and 44 percent on average](#), although that varies widely by individual and locale. A 2016 Transportation Sustainability Research Center [study of Car2Go members](#) in Calgary, San Diego, Seattle, Vancouver B.C. and Washington D.C. estimated a 6 to 16 percent decrease in VMT and a 4 to 18 percent decrease in greenhouse gas emissions among members in those five cities. The survey found that in most instances members increased the amount by which they walked for transportation, while taxis were used less

frequently. However the impact on other modes such as rail, bus, bicycle and ridesharing services such as Uber and Lyft was more disparate depending on the city and not favorable to generalization.

Round trip car-sharing members may also increase how often they bike, walk and ride public transit. Studies have calculated that each round trip car-sharing vehicle leads to the removal of [9 to 13 vehicles from the road](#) because car-sharing members sell their vehicles or delay purchase of a vehicle. The round trip car-sharing vehicles used are on average 10 percent more fuel efficient than the vehicle they replaced. Thus, it's not surprising that research has found [round trip car-sharing reduces greenhouse gas emissions 34 to 41 percent per household](#) because some car-sharing households reduce their emissions reductions significantly. Others use more fuel-efficient vehicles in car-sharing programs enabling a "shared vehicle, low-mileage lifestyle."

One-way Car Sharing Research

In North America, one way car sharing comprises [27.4 percent of the continent's car-sharing members](#). Research on one-way car sharing has been relatively sparse to this point and [further research](#) is needed to better understand its transportation and environmental impacts. However, a 2016 [Transportation Sustainability Research Center study](#) of Car2go operations in five North American cities sheds light on the effects of one way car sharing. The research found a majority of Car2go members surveyed "Use public transit less frequently; walk more frequently; use taxis less frequently; and have a range of impacts on other modes," although these shifts varied depending on the city. The research also points to decreases in vehicle miles traveled (11 percent) and greenhouse gas emissions (10 percent) associated with Car2go membership. The research also estimated that between Car2go members selling their vehicles and putting off planned vehicle purchases, "Each Car2go vehicle removed between 7 to 11 vehicles from the road of the five cities studied (on average)."

Peer-to-Peer Car Sharing Research

An off-shoot of the car-sharing concept, personal or peer-to-peer (P2P) car sharing, allows a vehicle owner to rent his or her car when it is not in use. P2P agreements typically include gas, insurance and the ability to drive a certain number of miles per day. A renter must refill whatever gas is used, but otherwise pays an hourly rental fee set by the owner. People who want to rent a car can surf a P2P website to find cars available at differing locations, sizes and prices. P2P systems offer the advantage of operating anywhere a willing car owner lives, if a personal car-sharing system is available to facilitate the transaction. One such system, Turo, takes about 25 percent of the rental fee but charges no member fee. A 2015 study by the NYU Stern School of Business [indicates](#) that "peer-to-peer markets improve consumer welfare" by providing more choices and helping individuals reduce costs related with car-ownership. The P2P model may have particular value in rural or suburban settings given its flexibility and not being as dependent on a large number of vehicles to scale up the system. However, P2P's impact on VMT, transportation choice and car-ownership is not well-explored or understood at this point in time and requires further research.

State Support and Regulation of Car Sharing

A handful of states have enacted legislation regarding car sharing that includes: Incentives to use car sharing, addressing car-sharing taxation, electrification of car sharing fleets and creating a regulatory framework for peer-to-peer car sharing.

State Incentives to Use Car Sharing

- Washington law offers tax credits to employers that give employees who use car sharing and other transportation options financial incentives of up to \$60 per employee per year. \$2.75 million is allocated per fiscal year for these credits. Oregon previously offered tax incentives to employers to offer car sharing memberships, but that program has since been discontinued.
- States have also taken steps to encourage co-location of car sharing with housing and transit. In 2011, the California Legislature linked car sharing to larger land use policy goals with Senate Bill 310, which created the Transit Priority Program (TPP). The intent of the program is to reduce vehicle miles traveled by promoting development that supports transit use. TPP development projects are eligible for reduced permitting costs, expedited review, and increased density and height allowances. The law requires that a TPP project must provide for car sharing onsite or nearby, if such a program is available in the city or county; the developer must provide one car-sharing vehicle for the first 20 units, and one for every 50 units thereafter.
- Many cities have agreements with car-sharing organizations regarding access to public city-owned parking spaces; these agreements often include a per vehicle fee to park at city parking spots. These fees are typically charged quarterly or annually, and enable cities to recoup lost parking revenue and account for city administrative costs. The customers then have access to pre-paid permitted parking at metered or timed parking spots, often with any time limits greater than one hour waived. In some cases, there may be access to dedicated parking spots for a certain car-sharing organization's members for car-sharing vehicles. A few states have enabled such agreements between governments and car-sharing organizations.

- Wisconsin enacted legislation in 2015 defining car sharing and authorizing the state and localities to allow parking of car-sharing vehicles in time-limited zones, such as those with signs denoting hour limits or parking meters, without regard to the time limits posted. The law also authorizes the state or a locality to craft agreements with a car-sharing organization for such parking and the establishment of fees and requirements.
- California law authorizes a municipality to “designate certain streets or portions of streets for the exclusive parking privilege of motor vehicles participating in a car-sharing or ride-sharing program.” The vehicle must be assigned a permit by the local authority. The California legislature also authorized \$2.5 million to expand a car-sharing organization in the Bay Area using Safe Routes to Transit funds that are used to improve safe, easy connections to transit stops.
- In Oregon, the state DOT has partnered with Amtrak Cascades, a popular 467-mile train route linking Pacific Northwest communities, and Zipcar, a car-sharing organization, to locate Zipcar vehicles near Amtrak stations in Portland, Eugene and Salem respectively. This partnership aims to provide seamless transportation options when train passengers disembark from their train.
- Several public transit agencies have partnerships with car-sharing organizations, largely focused on locating car-sharing vehicles at or near transit stations to create “mobility hubs” that extend first and last-mile transportation service. Examples include Dallas Area Rapid Transit, Los Angeles County Metropolitan Transportation Authority, Metropolitan Atlanta Rapid Transit Authority, Massachusetts Bay Transportation Authority and Tri-County Metropolitan Transportation District of Oregon.

Car Sharing for State-Owned Fleets

In **Massachusetts**, the Massachusetts Department of Transportation has entered into a pilot program with Zipcar to implement car sharing for state employees. The program utilizes Zipcar technology installed in state-owned vehicles enabling pooled vehicles to be shared efficiently across a wide range of employees with easy online or mobile reservations and access to vehicles with the tap of a fleet sharing card. The pilot launched in January 2016 and there are currently 17 vehicles installed with Zipcar technology. The agreement also includes provisions for employees to access the Zipcar fleet when state-owned vehicles might be unavailable.

Car Sharing Taxation

In some states and municipalities, short-term car sharing is taxed at very high rates, in part because shared vehicles are categorized as rental cars and are taxed at a daily rate even though the vehicle may be used only for 15 minutes or an hour. Car sharing organizations are typically membership-based and utilized by local residents who do not need or want to own a car, while car rental taxes typically are geared towards visitors.

A few state legislatures have taken action to more clearly distinguish car sharing from car rentals and tax car sharing at lesser rates or based on the actual amount of time the vehicle is being used. **Colorado** exempts car sharing from the daily car rental fee; the Colorado law (Colorado Revised Statutes § 43-4-804) notes that vehicle-sharing, “Reduces the number of vehicle miles traveled on the highways of the state by encouraging the use of transit and reducing the number of trips made in privately owned vehicles and thereby benefits the state by reducing traffic congestion, greenhouse gas emissions, and the amount of wear and tear on the highways.”

In response to calls for tax equity in **Hawaii**, the legislature enacted Senate Bill 2731 in 2014. This bill created parity with the rental car taxation framework, setting the car-sharing tax rate at 25 cents per half-hour for use of less than six hours, up to a maximum of \$3, as that is the current daily Hawaii rental car tax.

In **Florida**, the legislature [reduced the tax](#) for car sharing from \$2 per use to \$1, provided it is for less than 24 hours.

In **Minnesota**, certain non-profit car sharing is [exempt from some](#), but not all, of the rental car fees.

In **Massachusetts**, the Department of Revenue previously assessed a convention center surcharge of \$10 for each car rental. The state [revised the charge](#) in 2005 so that members of eligible car-sharing organization pay the charge only for the first rental each year. **New Jersey** has considered, but not enacted, legislation the past few sessions to completely eliminate the car rental tax for car sharing, or to pro-rate the tax based on hour increments.

High tax rates continue to persist in many municipalities for car sharing. A [2016 DePaul University report](#) notes that “Nearly a quarter of the country’s 40 largest cities impose retail taxes that increase the costs of a one-hour car-share by more than 30 percent. Many impose \$2-\$4 per transaction fees, which were originally created to generate revenue from conventional car rentals.” At the municipal level, car sharing taxation varies widely. Portland, Ore. entirely exempts car-sharing fleets from taxation, while a one hour car sharing reservation would be taxed at 10 percent in Dallas, 22 percent in Minneapolis and 62 percent in Fresno, Calif., respectively.

Car Sharing Electrification

One area of increased interest and activity is the electrification of car-sharing fleets to help meet environmental and energy goals. **California** and **New York** have provided support for such efforts.

Two recently enacted **California** bills sought to simultaneously increase mobility and address environmental issues such as air pollution in low-income communities by creating more energy and environmental friendly transportation choices. Passed in 2014, Senate Bill 1275 required the state's Air Resources Board to establish equity programs such as electric vehicle (EV) car-sharing programs in disadvantaged communities. **California**, which has a first-in-the-nation cap and trade program that charges emitters for their greenhouse gas emissions, also enacted SB 535 in 2012, requiring a certain amount of cap and trade revenue to provide funding for projects in disadvantaged communities. In response, the Air Resources Board created the [Car Sharing and Mobility Options Pilot Project](#). Grants are awarded to increase the availability of low emission vehicles for disadvantaged populations. Most notably, the city of Los Angeles [was awarded \\$1.6 million](#) to add 100 electric car-sharing vehicles and 110 public EV charging stations in disadvantaged communities near downtown L.A. The San Diego Association of Governments was granted \$300,000 to expand an EV car-sharing system to two neighborhoods ranked in the top ten percent most disadvantaged in the city. In **New York**, the State Energy Research and Development Authority (NYSERDA) and the New York State Department of Transportation (NYSDOT) have collaborated to reduce carbon-dioxide emissions by funding projects that include car sharing. Buffalo CarShare, which is now owned by Zipcar, was awarded \$250,000 to incorporate electric vehicles into its operation.

The **Illinois** legislature enacted HB 2903 in 2011, making car-sharing organizations eligible for Illinois Environmental Protection Agency grants for the purchase of new electric vehicles. Grants, up to 25 percent of a project's total cost, were available for car-sharing organizations to purchase electric vehicles, however no grants were awarded for the purchase of car-sharing EVs.

Industry response to these policy initiatives has been mixed, with some operators experiencing challenges operating an electric vehicle car-sharing fleet. In a car-sharing model which vehicles are highly utilized by a wide base of members, often with back-to-back usage of the vehicles, the charge time required for an electric vehicle to reach full charge may not be sufficient in between usage. The lack of ubiquitous charging infrastructure and range anxiety by car-sharing members are cited as two additional concerns.

Peer-to-Peer (P2P) Car Sharing

Legislatures in **California**, **Oregon** and **Washington** have enacted laws to help increase P2P car sharing and clarify how it works. The laws create insurance standards and a regulatory framework for personal car-sharing programs in the three states. Senator Barbara Bailey, co-sponsor of the **Washington** legislation, said she was intrigued that P2P can be economical for both the vehicle renter and the owner. "Some of my constituents want a car, but they don't need a car 100 percent of the time," she says.

The [California](#), [Oregon](#) and [Washington](#) laws closely mirror each other. Each state's law requires the vehicle owner to be part of a personal car-sharing program, defined as a business that facilitates sharing private passenger motor vehicles for noncommercial use. Each state requires the insurance coverage offered by the personal car-sharing program to be at least three times the minimum requirement for a private vehicle.

To address rental car agency concerns that P2P could be a form of competition, each law clarifies that the annual revenue generated by an individual who participates in a P2P program cannot exceed the annual expenses of operating a vehicle, including maintenance, fuel, depreciation, insurance and any costs associated with P2P participation. Susan Shaheen of the Transportation Sustainability Research Center at UC Berkeley notes that, "Vehicle owners that share their autos in states lacking personal car-sharing legislation risk non-renewal of primary insurance policies, as well as premium spikes resulting from increased use."

New York has recently considered, but has not enacted legislation to create a regulatory framework for personal car sharing.

Conclusion

As car sharing continues to grow as a mobility option for Americans, it is likely states and localities will consider further measures to formally incorporate car sharing into their overall transportation systems. Areas perhaps ripe for further legislative study and action include car-sharing taxation, electrification of car-sharing fleets and establishing more formal connections with transit systems. If P2P car-sharing systems continue to proliferate, states may continue to establish regulatory frameworks for their use.