



CAR SHARING AT A

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Denver tweaks its parking system with great results.

By Robert Ferrin

Launched earlier this year, Denver's car sharing program is a fee-based service that provides a shared vehicle fleet to members 24 hours per day, seven days per week, at unattended self-service locations. Car use is provided at minute-based, hourly, or per-mile rates that include fuel, insurance, and maintenance. The program is part of a multi-modal approach that provides mobility options to residents, employees, and visitors while helping solve the final mile issue, connecting transit with employment and activity centers when walking and cycling are not feasible. Car share supports Denver's goal of pursuing innovative and diverse mobility solutions to address growth and maximize the use of our existing transportation network.

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to encourage car sharing,

Policy

Two policy documents highlight the importance of car share in the overall transportation network. First, the Denver Zoning Code includes provisions to incentivize car share through off-street parking reductions. Second, Denver's Strategic Parking Plan, a comprehensive city-wide framework that helps articulate the city's approach to parking management, recommends implementing a car share program to encourage the use of multiple transportation modes to manage parking demand.

Denver Public Works began a multi-year pilot program with local car share operator eGo Car Share, to better understand the viability of on-street car sharing. The pilot demonstrated a higher demand for car share vehicles parked on-street versus off-street. Success of the pilot program and the aggressive expansion of car share programs in other cities drove the city's parking operations department to implement a new set of car share rules and regulations. This year-long effort resulted in the administration of a car share permit program that is open to all qualifying car share operators, independent of their operational characteristics.

With the Strategic Parking Plan as a foundation, parking operations organized a working group with representatives from the parking policy, operations, and enforcement divisions to create a comprehensive program to administer car share in the public right-of-way (ROW). The team set three program goals:

- Increase mobility options.
- Reduce parking demand.
- Reduce traffic congestion.

The overarching framework for car share policies focused on setting a regulatory environment for the private car share market to expand in Denver while ensuring the continued balanced needs of existing uses in the ROW. The policies were designed to attract multiple vendors to the market with the understanding that multiple vendors with varying operational structures would meet the program goals.

Dedicated Space Permits

The city's permit program rules and regulations enable qualifying car share operators to apply for two types of annual permits: dedicated space or vehicle area permits.



Signage was installed to clearly mark car share spaces.

Dedicated space permits have signage installed by the public works department that demarks each space with the car share company's logo. Operators are required to have their logos visible on the vehicles for both customer recognition and enforcement purposes.

Each vehicle is permitted by license plate, with permit-specific information that is available to the city's ROW enforcement team. Each dedicated space is signed as a tow-away zone to keep the spaces clear. Operators are required to maintain 75 percent of their total car share fleet off-street. This requirement ensures balance in the parking lane with other uses and provides car share opportunities in areas where on-street dedicated spaces are not feasible.

They must also purchase permits for on-street spaces and place a minimum of one vehicle in an opportunity area, defined as neighborhoods where at least 30 percent of the population lives in poverty and with low vehicle accessibility. Vehicles in opportunity areas are incentivized through a lower annual fee; downtown spaces are allocated at a cost of \$750 annually, non-downtown neighborhood spaces cost \$500, and opportunity area fees are \$250. The fee structure also disincentivizes the use of metered parking spaces for car share dedicated spaces. Operators must pay a higher fee if they choose to remove a meter. In most

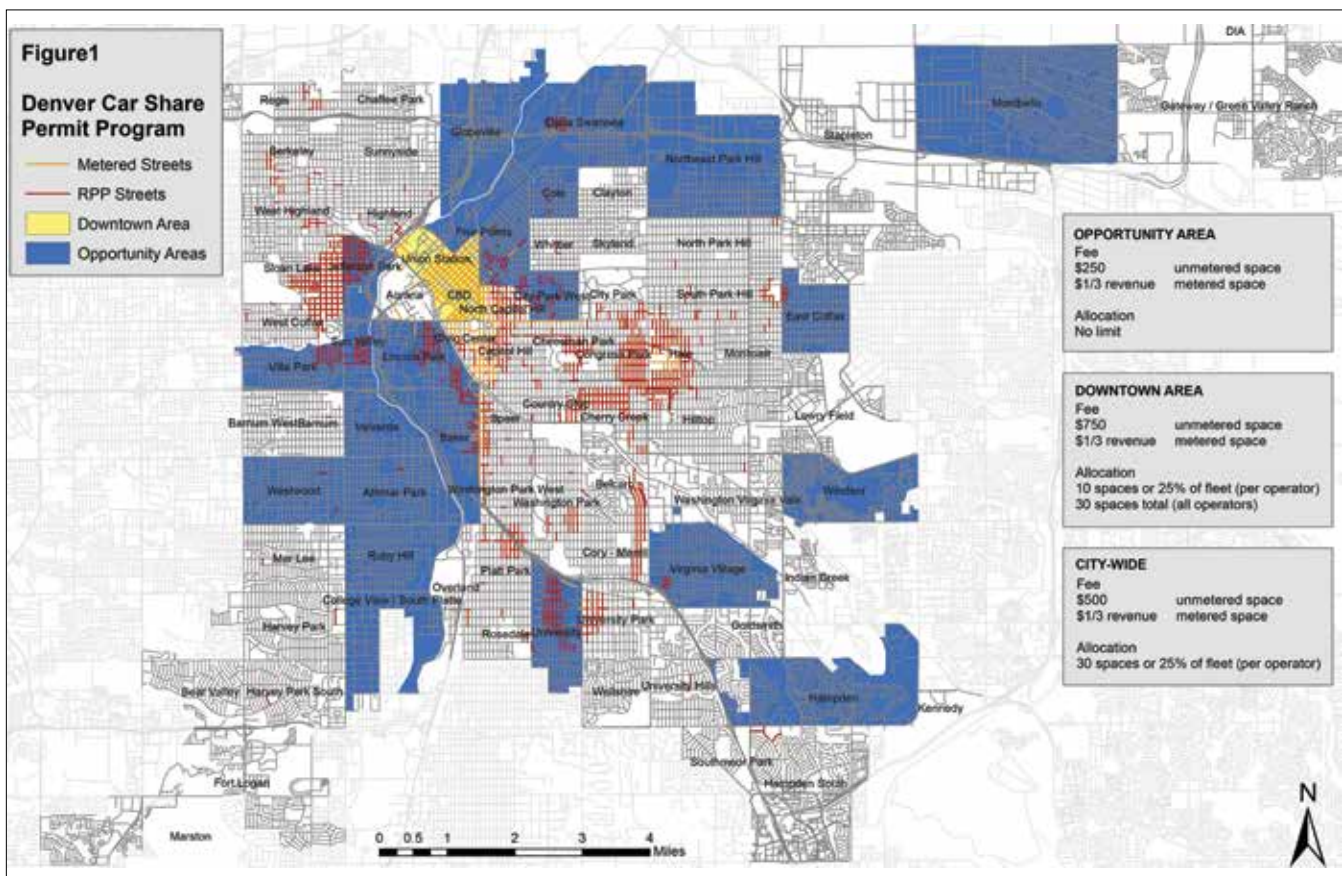
neighborhoods, this would more than double the fee for unmetered space.

To balance parking lane uses, maximum allocations were placed on a per-operator and per-geographic-area basis. Program policies state that up to 30 dedicated spaces can be allocated downtown, with operator maximums in place to ensure a diverse offering of services to customers. Each operator may have up to 30 total locations to ensure balance. Opportunity areas do not count against operator maximums, which is another way these policies encourage the placement of vehicles in low-income areas.

Vehicle Area Permits

By contrast, vehicle area permits are vehicle-specific. This exempts permitted vehicles from meter payment, residential permit parking restrictions, and time limits of two hours or more. Vehicle area permits enable one-way, point-to-point car sharing in Denver and can be an additional benefit to traditional car share operators.

The \$850 annual vehicle area permit fee was established based on the estimated idle time each vehicle would be parked at a parking meter. Enforcement agents can access the permit database via wireless handheld devices to enforce the permit program. Multiple sessions with ROW enforcement agents were scheduled prior



to the launch of the program and training occurs on a consistent basis to reinforce the exemptions the vehicle area permit provides. These two permit options allow traditional, round trip, one-way, and point-to-point operations to coexist under the same program.

Approvals

An initial review of the city code revealed that the public works manager had the authority to approve these rules and regulations given certain stipulations; this is consistent with other programs that regulate the ROW. These requirements included receiving public input over a 20-day period before holding a public meeting. The process was augmented by the project team attending numerous neighborhood and stakeholder meetings to gather input for the program policies. Input was also gathered from the car share operators themselves to ensure that policies not only supported the goals of the community, but also encouraged car share companies to establish operations in Denver.

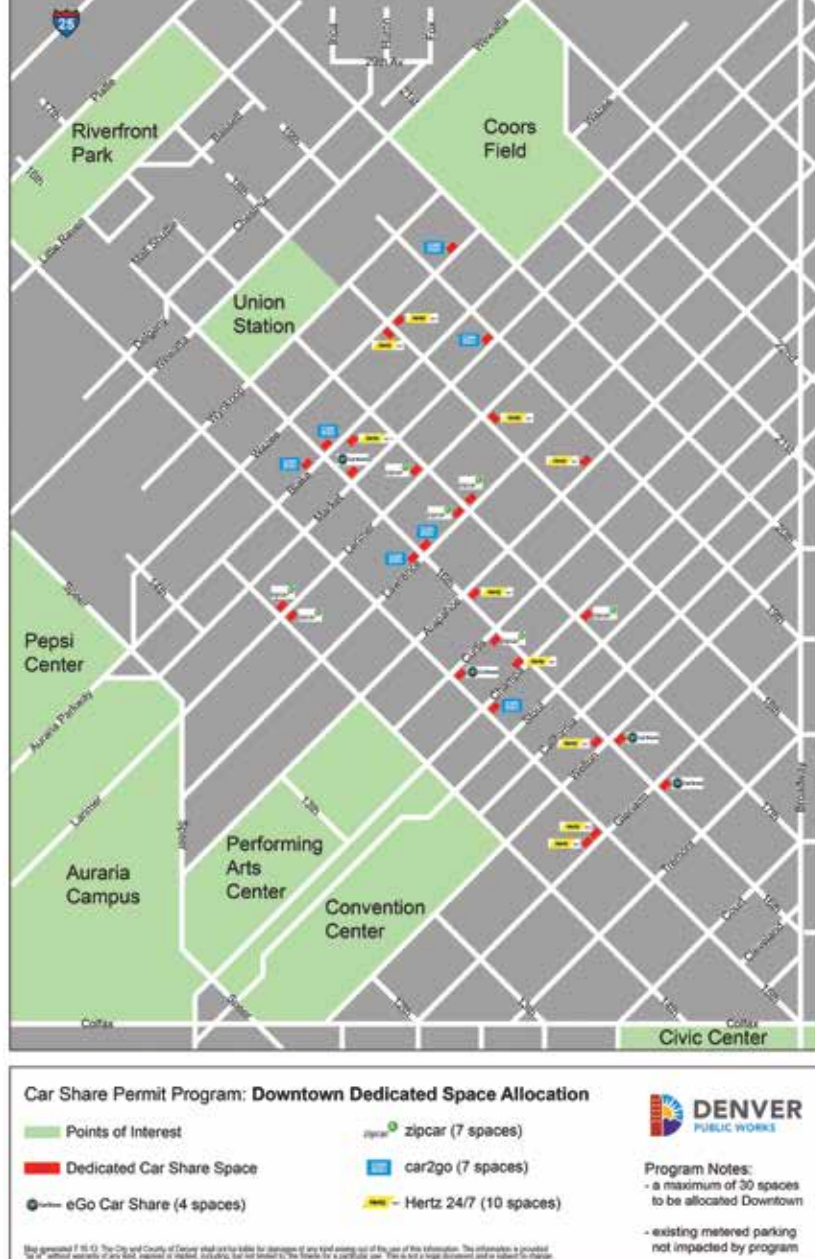
The stakeholder outreach process and public hearing garnered support from both the community and car share operators nationally. The rules and regulations were approved by public works in late May, laying the groundwork for operators to apply for both permit types.

Implementation

Following the approval process, operations, permitting, and enforcement teams worked diligently to confirm the application, citation adjudication, and permitting processes for car share operators. Operators responded immediately, with car2go launching a fleet of 300 vehicles in early June 2013, using the vehicle area permit.

For dedicated spaces, interested operators were provided with a map of predetermined locations for the downtown area, which is the highest demand area for car share. Denver Public Works thoroughly reviewed every downtown location that could accommodate car share vehicles without removing existing metered parking and while maximizing the current transportation network. Throughout downtown, existing no-parking areas at the corners of intersections were identified as viable spaces for car share vehicles. Because the specific profile of a vehicle is controlled in the permitting process and car share vehicles are typically small, cars could be placed in these undersized spaces while maintaining safe sight distance between vehicles and pedestrians.

Furthermore, as metered parking was unaffected and car share spaces are known to reduce overall parking demand, the city saw a net increase in parking inventory. Demand for these spaces exceeded availability, so a weighted lottery system was initially used to allocate



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28 of the 30 dedicated spaces to four operators: eGo Car Share, Zipcar, Hertz 24/7, and car2go. Signage provided by public works was installed in late July, and vehicles are now available for use by the community.

aspects of car share are crucial to garnering support for the program. Municipalities can look beyond permit fees when analyzing the financial implications of car share and focus on sales tax revenue generation, vehicle ownership fees, property taxes, and the jobs that are created by the ever-growing transportation industry.

Lessons Learned

The project team learned several lessons throughout the process, from rules and regulations formulation to implementation. Continued and focused citizen education on car share as a transportation mode and the intricacies of the rules and regulations was needed. Whether at public meetings or through media attention, the learning curve was steeper than first expected. Enforcement from a vehicle area and dedicated space permit perspective is challenging, as these permits provide exemptions from fundamental parking restrictions. Continued education to both enforcement teams and car share members is critical to the success of any comprehensive car share permit program.

Finally, sound financial information about the positive

Conclusions

Since approval in late May 2013, Denver's car share market has grown from approximately 60 to 500 vehicles, and from four to six operators. The private sector's investment in Denver through car share is well more than \$5 million and continues to grow with the addition of more vehicles, employees, and support services. The car share permit program is a great example of a uniquely Denver approach to a comprehensive framework for incorporating multiple car share operating types under one set of policies. It also exemplifies how public policy can enable and encourage private sector investment and assist in meeting the mobility goals of a community. **P**



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