
Residential Parking Benefit Districts

By Donald Shoup

When the music changes, so does the dance.

HAUSA PROVERB

Charging drivers for parking on a residential street may seem like charging children for playing in a public park. But if curb parking is free and all the spaces are occupied, drivers who want to park will circle the block hoping to see a car pulling out. This search for hard-to-find free parking congests traffic, pollutes the air, and wastes fuel. Free curb parking on a crowded street gives a small, temporary benefit to a few drivers who are lucky on a particular day, but it creates large social costs for everyone else every day.

If cities charge the right price for curb parking—the lowest price that will produce one or two open spaces on each block—no one will need to hunt for parking. All drivers will suddenly have great parking karma.

To create political support for right-priced curb parking in commercial areas, some cities have created Parking Benefit Districts that spend the meter revenue for public services on the metered streets. These cities offer each district a package that includes both priced parking and better public services such as clean sidewalks and free Wi-Fi. Everyone who visits, works in, or owns a business in a commercial district with a Parking Benefit District (PBD) can see their meter money at work. But will PBDs also work in residential neighborhoods?

RESIDENTIAL PARKING BENEFIT DISTRICTS

In residential neighborhoods, Parking *Benefit* Districts resemble conventional Parking *Permit* Districts (neighborhoods where a permit is required for on-street parking) but differ in three important ways. First, the number of permits in a PBD is limited to the number of curb spaces. Second, drivers pay market prices for the permits. Third, the permit revenue pays for neighborhood public services.

Consider a neighborhood where most residents either do not own a car or, if they do own a car, park it off-street. Only a small minority store a car on the street. In this case, the prospect of better public services—a cleaner and greener neighborhood—may persuade a majority of residents to support charging market prices for on-street parking.

Charging market prices for curb parking doesn't mean that only the rich will be able to park on the street. Because cities are segregated by income, the rich will compete mainly with each other for on-street parking and will drive up permit prices in their own neighborhoods. Higher prices for residential parking permits in richer neighborhoods will act like an income tax on motorists who park on the street.

UNIFORM PRICE AUCTIONS

How can cities set market prices for residential parking permits? A uniform-price auction, which is often used when many identical items are sold, is the simplest way to discover the market price for the limited number of residential parking permits. Limiting the number of permits to the number of available spaces is important. A district with more on-street parking permits than on-street parking spaces would be like a theater that sells more tickets than it has seats.

Consider how a uniform-price auction would work on a block with 20 on-street parking spaces reserved for residents. Any resident can bid for a permit. The bids are ranked in descending order and the highest 20 bidders receive permits. In a uniform-price auction, all the winning bidders then pay the same price: the lowest accepted bid. All successful bidders except the lowest bidder thus pay less than what they bid. A few curb spaces can also be reserved as metered parking for drivers without permits.

Auctioning permits to park on residential streets may at first feel as repugnant as auctioning kidneys to transplant recipients. But if the revenue pays to repave the streets, clean the sidewalks, plant street trees, and provide other public services, critics may change their minds. Few will pay for curb parking but everyone will benefit from

the public services. Because cities do not now charge for parking on residential streets, Parking Benefit Districts provide a new source of public revenue and won't take resources away from any other public program.

Residents who don't store a car on the street may begin to eye crowded curb spaces as a potential revenue source for public services and view free parking the way landlords view rent control. Free curb parking *is* like rent control for cars. Randomly giving free parking to a few drivers and nothing to people who cannot afford a car, or choose not to own one, is unfair.

At first glance, skeptics may think that auctions for parking permits will privatize public land, but the government owns the land, charges market prices for parking private cars on it, and spends the revenue to provide public services. PBDs thus resemble market socialism, not privatization.

Nevertheless, some critics may say market prices for parking will be too high for drivers to pay. There are four responses to this criticism. First, the price will be high only if drivers are willing to pay a high price for parking they previously got free. Second, with a uniform-price auction, all permit holders except the lowest successful bidder are willing to pay an even higher price than what they do pay for a permit. Third, if the price is high, more money will be available to pay for better public services. Fourth, any price lower than the market price will create a shortage of curb parking, which will lead to cruising that congests traffic and pollutes the air. These are good reasons to refute any claim that market prices for curb parking will be too high. If, for example, market-priced curb parking on a block can produce enough revenue to pay for free Wi-Fi and free transit passes for all residents, who would say the market price is too high?

Everyone wants to park free, but for a driver there's not much difference between free curb parking that's not available and market-priced curb parking that's not affordable. There is, however, a huge difference for cities. Free curb parking on a busy street increases traffic congestion and air pollution, while market-priced curb parking produces revenue to pay for public services.

Residential PBDs could be tried on one side of each block. They would earn only half as much revenue as charging for parking on both sides of the street, but they would give residents the choice between either free or paid parking. Residents could then directly compare the benefits of free parking that is hard to find and paid parking that is guaranteed. If the residents later decide to price both sides of the block, they would double the money available to pay for neighborhood public services.

RESIDENTIAL PARKING BENEFIT DISTRICTS IN MANHATTAN

Manhattan would be a good place to test the benefits of residential PBDs because only 22 percent of its households own a car (Table 51-1). Despite its low car ownership, Manhattan may generate more cruising in its residential neighborhoods than in any other city on Earth (*The High Cost of Free Parking*, 277–278 and 285–288).

Elected officials know the parking problem. New York City Council Member Mark Levine said in 2017, “As anyone who’s ever looked for a parking spot in Manhattan knows all too well, it is a brutal and time consuming process.” People who complain about parking naturally sees it from the view of drivers, but cruising for parking is also hard on everyone else. It slows all other traffic, including public transit and goods movement. It endangers cyclists and pedestrians, and it pollutes the air everyone breathes. By reducing cruising for parking, residential PBDs can improve life for almost everyone in the city.

Cities can treat their valuable on-street parking as a public endowment to finance public services, and the revenue will be impressive. Condominium parking spaces have been sold for up to \$1 million in Manhattan and \$300,000 in Brooklyn, so curb parking spaces should bring high prices at auction (*The High Cost of Free Parking*, 513–519).

Governments are good at making major public investments like highways and subways, but not so good at maintaining them (Figure 51-1). Revenue from on-street parking can pay to keep public infrastructure clean and in good repair.

In Manhattan, a large majority will benefit from the public services while a small minority will pay for on-street parking. Because the average income of households in Manhattan who own cars is 88 percent higher than that of carless households, charging for curb parking and spending the revenue for public services will redistribute income from richer to poorer families (Table 51-2).

Table 51-1 Automobile ownership in New York City

	New York City	Manhattan
Number of households	3,063,393	738,131
Number of households without a car	1,699,976	577,967
Number of households who own a car	1,363,417	160,164
Share of households who own a car	45%	22%

Source: 2008-2012 American Community Survey 5-Year Estimates



Figure 51-1 Subway station at West 4th Street in Manhattan

Source: Eric Goldwyn

Table 51-2 Average annual income per household in New York

City	New York City	Manhattan
All households	\$77,060	\$120,091
Households who own a car	\$96,472	\$191,389
Households without a car	\$61,836	\$101,554
Income ratio of owners/nonowners	156%	188%

Source: 2008-2012 American Community Survey, Public Use Microdata Sample

GUARANTEED EQUALITY

If richer neighborhoods have higher parking prices, they will earn more money to pay for public services. To avoid this inequality, cities can use what in public finance is called *power equalization*. Suppose the city's average permit revenue per curb space is \$2,000 a year. In this case, the city can spend \$1,000 a year per space for added public services in every PBD and spend the other \$1,000 a year for citywide public services. Neighborhoods that charge market prices for parking will receive equal revenue to improve their public services and all neighborhoods will benefit from the improved citywide public services.

With power equalization for parking-financed public services, neighborhoods that earn the most revenue will subsidize neighborhoods that earn the least revenue. This sharing arrangement retains the local incentive to install parking meters (every PBD gets revenue to pay for public services) but the revenue is distributed equally among all the metered neighborhoods (every PBD gets the same revenue per parking meter). Distributing meter revenue with power equalization seems fairer than the usual policy of installing parking meters in neighborhoods that have a parking problem and then spending all the revenue anywhere in the city.

TOTAL REVENUE

The total revenue PBDs can earn depends on the number of parking spaces in a city. San Francisco is the only American city that has conducted a complete census of its on-street spaces (San Francisco Municipal Transportation Agency 2014). San Francisco has 275,450 on-street spaces, or about one curb space for every three residents. Laid end-to-end, San Francisco's on-street parking spaces would stretch about 1,000 miles, which is longer than California's 840-mile coastline. If each on-street parking space is 160 square feet, San Francisco's on-street parking would cover about 1.6 square miles, the size of Golden Gate Park. The land value must be immense; since 90 percent of San Francisco's on-street parking is unmetered, the parking subsidy must be immense.

Although New York does not have an exact count, experts have estimated that the city has at least three million on-street parking spaces, about one curb space for every three residents. If laid end-to-end, these parking spaces would stretch almost halfway around the earth and would cover about 17 square miles of land, 13 times the size of Central Park. Because 97 percent of New York's on-street parking is unmetered, the parking subsidy must be astronomical. Land is expensive for housing but free for parking cars on the street in front of the housing.

If only half of New York's three million on-street spaces were in Parking Benefit Districts and they earned an average revenue of \$2,000 per space per year (only \$5.50 per day), the total revenue will amount to \$3 billion per year. Half could go to improve neighborhoods and the other half could pay for citywide public services, such as renovating the subway system. With power equalization for parking finance, this tsunami of money will flow from richer to poorer neighborhoods and from Manhattan to the outer boroughs. Planners and politicians can let money and public services persuade citizens to charge market prices for on-street parking in their neighborhoods.

LOCAL OPTION

Cities can offer neighborhoods the choice between free curbside parking or better public services. For example, if a block has 20 curbside spaces and each space can earn \$2,000 a year, free parking subsidizes drivers by \$40,000 a year ($\$2,000 \times 20$). If the city already charged market prices for curbside parking and earned an extra \$40,000 a year to pay for public services on a block where most residents don't park a car on the street, few would say the city should spend \$40,000 a year less for public services to subsidize hard-to-find parking for 20 cars.

PBD revenue can finance a wide array of public services in residential neighborhoods. Examples of the services already being provided by PBDs in business districts include nightly street and sidewalk cleaning; free public Wi-Fi for everyone in the district; and free transit passes for all workers in the district (Chapters 44-50). Providing these new public services financed by curbside parking will also create new jobs in the neighborhood. In contrast, free curbside parking doesn't employ anyone.

PBDs can also eliminate the need for on-street parkers to move their cars from one side of the street to the other on street-cleaning days. Permit revenue can pay for vacuum equipment to clean around and under parked cars so drivers won't have to move their cars for street cleaning and won't get tickets for street-cleaning violations.

PBDs are a bottom-up rather than a top-down policy because each neighborhood will decide whether to adopt one. Only the neighborhoods where a majority of the residents want a PBD will get one. Even the neighborhoods that choose not to have a PBD will benefit from the citywide services financed by neighborhoods with PBDs. This local democratic choice is impossible with most other transportation policies, such as whether to build rail transit or impose congestion tolls.

Any city can offer a pilot program to charge for on-street parking in a few densely populated neighborhoods with scarce curb parking and use the revenue to finance public services (*The High Cost of Free Parking*, 447–50). If residents don't like the results, the city can cancel the program. If residents do like the results, however, the city can offer this self-financing program in other neighborhoods.

TRANSITION POLICY

If a neighborhood already has a Residential Parking Permit District with free or cheap permits, residents will probably resist shifting to market-priced permits. Cities can solve this problem by allowing current permit holders to continue paying the old price for their permits but charge market prices for new permits. If the existing permits are “grandfathered” at the old low price, current residents will not be priced out of the neighborhood and market prices will phase in as old residents move out. The original residents will enjoy the new public services without paying more for parking.

Vancouver, British Columbia, intends to use this transition policy to introduce market prices for residential parking permits in the West End of the city. The transition to market prices should be fast because many households do not keep their parking permits for long. Only 20 percent of the permits in Vancouver remain active more than five years.

Protecting current residents to gain political support for a transition has good precedents. Rent control often applies to current residents but rents reset to market rates when properties turn over. This transition policy may seem more expedient than fair, but reforms must start from the status quo. As Supreme Court Justice Benjamin Cardozo wrote, “Justice is not to be taken by storm. She is to be wooed by slow advances.”

AFFORDABLE HOUSING

Parking Benefit Districts can increase the supply of affordable housing. Almost every proposal for new housing in an old neighborhood now comes bundled with a dispute over scarce curb parking. Current residents fear that new residents will compete for the free on-street parking and make their already difficult parking situation worse. As a result, cities require new housing to provide enough off-street parking to prevent crowding the on-street parking. Free curb parking is thus a tail that wags two dogs—transportation and housing.

If on-street parking is free, the only way to limit the number of cars parked on the street is to limit the number of new housing units and require them to have ample off-street parking. These parking requirements increase the cost and reduce the supply of housing. But if permits restrain the demand for parking to fit the available curb supply, new housing will not lead to overcrowded curbs. Cities can then remove their off-street parking requirements and allow developers to provide less parking and more housing. If a developer provides little or no off-street parking, the developer takes a risk, not the city or the neighborhood. Cities that use PBDs to manage on-street parking won't need to require off-street parking.

PBDs can further increase the supply of affordable housing by allowing homeowners to convert their garages into granny flats. Homeowners who convert their off-street parking garages into housing may be able to surrender their former curb cut and convert it into a new curb parking space, which will increase the on-street parking supply. Cities could encourage garage conversions by rewarding homeowners who surrender their curb cuts. For example, a city can offer a permanent free transit pass in exchange for closing a curb cut, and the cost would be financed by the curb parking revenue from the new parking space.



Figure 51-2 Garages converted into housing

Source: Donald Shoup

Figure 51-2 illustrates how second units can improve the urban design of residential façades when it replaces a garage door that formerly dominated the front of a house. (The entry door to the second unit can be in the side setback.)

By creating new affordable housing, garage conversions can reduce the demand for the existing affordable housing by increasing both the number of small units and their geographical availability. If reformed parking requirements allow it, garage apartments can create income-integrated communities not only in the sense of income diversity within a neighborhood but also of people with different incomes living on the same piece of property. The garage apartments will be what has been called naturally occurring affordable housing (NOAH): units that are affordable without being supported by public subsidies. Because the residents of the new garage apartments will not be competing for the existing supply of affordable housing, the benefits of the new NOAH units will trickle sideways and lower the rent of all other housing.

Most residents probably won't ask for a PBD because they want to increase the supply of affordable housing, but they may ask for a PBD because they want to improve their neighborhood. As a byproduct, removing off-street parking requirements will remove a major barrier to affordable housing.

EMPLOYMENT EFFECTS OF PARKING BENEFIT DISTRICTS

PBDs will increase public spending, but paying for parking will reduce private consumption. How will this affect local employment? Public services are produced locally but much of private consumption is imported from outside the region and the only local jobs created are for Amazon truck drivers. On balance, shifting spending from private consumption to public services will increase the demand for local labor (Shoup 2010, 230-31). We can import cell phones but can't import clean sidewalks, so shifting spending from new cell phones to cleaner sidewalks will increase local employment.

PBDs are not a make-work program, but politics are often more important than economics in public policy, and creating jobs is politically important. If spending for private consumption declines slightly, the resulting job losses may be invisible in an economy that creates and loses many jobs every month. In contrast, most of the jobs created by new public spending are easily seen, especially if they are for union members. Improving neighborhoods will benefit almost everyone in the city, but the jobs created by providing new public services are another benefit of Parking Benefit Districts.

TURNING PROBLEMS INTO OPPORTUNITIES

I have used New York City to suggest how PBDs can work in densely populated neighborhoods with scarce parking, but many other cities around the world are as dense as New York, and many older American cities have some very dense neighborhoods. Dense neighborhoods in any city can benefit from PBDs.

Policy is driven by politics, and diverse interests across the political spectrum can find things to like in a PBD. Liberals will see that it increases public services. Conservatives will see that it relies on market choices. Drivers will see that it guarantees curb parking and freedom from moving their cars for street cleaning. Residents will see that it improves their neighborhood. Environmentalists will see that it reduces energy consumption, air pollution, and carbon emissions. And elected officials will see that it depoliticizes parking, reduces traffic congestion, and pays for better public services without raising taxes.

Cities that manage their curb parking as valuable real estate can stop subsidizing cars, congestion, and carbon emissions. Instead, they will improve transportation, reduce the cost of housing, and provide better public services. Parking Benefit Districts with power equalization can fairly and efficiently manage public land used for private parking. They may turn out to be a politically popular way to improve cities, the economy, and the environment, one parking space at a time.

REFERENCES AND FURTHER READING

- Brown, Anne, Vinit Mukhija, and Donald Shoup. 2018. "Converting Garages into Housing," *Journal of Transportation and Economics*.
- City of Vancouver. 2017. "West End Parking Policy." <http://vancouver.ca/streets-transportation/west-end-parking-strategy.aspx>
- San Francisco Municipal Transportation Agency. 2014. "On-street Parking Census Data and Map." <http://sfpark.org/resources/parking-census-data-context-and-map-april-2014/>
- Shoup, Donald. 2010. "Putting Cities Back on Their Feet," *Journal of Urban Planning and Development*, Vol. 136, No. 3, September, pp. 225–233. <http://shoup.bol.ucla.edu/PuttingCitiesBackOnTheirFeet.pdf>
- Shoup, Donald. 2011. *The High Cost of Free Parking*, Chicago: Planners Press.
- Shoup, Donald Shoup, Quan Yuan, and Xin Jiang. 2017. "Charging for Parking to Finance Public Services," *Journal of Planning and Education Research*, Vol. 37, No. 2, June, pp. 136–149. <https://www.dropbox.com/s/lgrzggpz1r3myr2/ChargingForParkingToFinancePublicServices.pdf?dl=0>