

## What is shared parking?



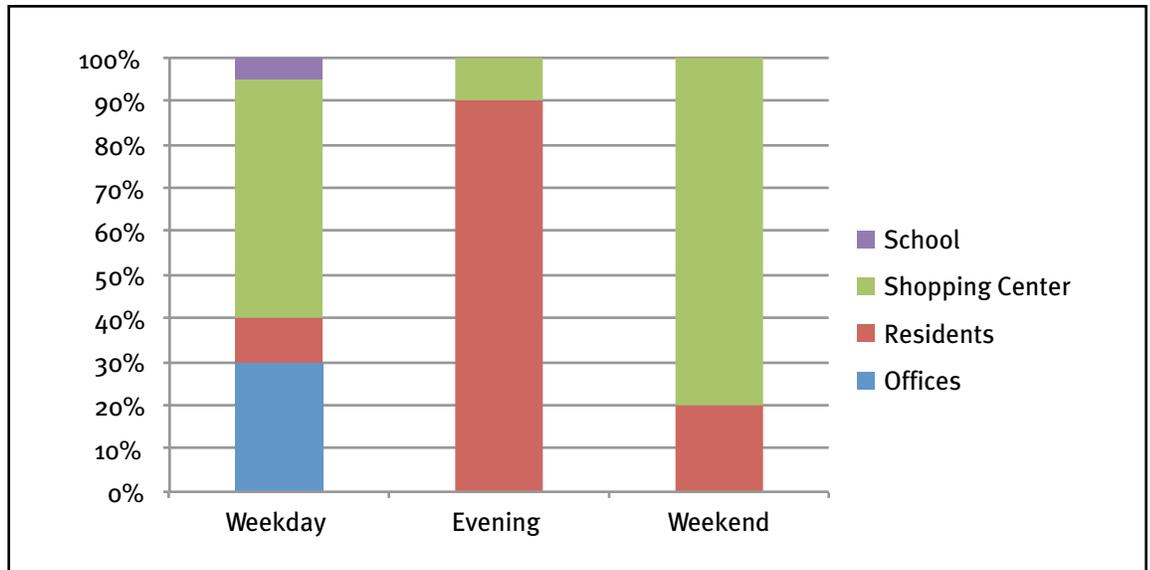
Parking demands, like other transport demand patterns, operate on a peak and off-peak schedule depending on related land use. Distinct but complementary patterns, such as “office parking” that is generally empty in the evenings and on weekends and “residential parking” that is generally fuller in the evenings, offer an opportunity for cities to better satisfy residents and commuters without increasing supply. Shared parking is a land use/development strategy that optimizes parking capacity by allowing complementary land uses to share spaces, rather than producing separate spaces for separate uses.

In effect, shared parking makes spaces publically accessible rather than reserved for a particular tenant or property owner. It may be privately constructed and operated, depending on a contractual agreement, but should remain within the government’s jurisdiction for long-term transport planning purposes.

Often, regulations require the creation of a predetermined amount of parking space for each type of land use. This results in an overabundance of parking, as far more spaces are created than are demanded at any given moment. The excess of parking induces more driving while also leaving many spaces underused. It further inhibits the possibility to design more compact developments and neighborhoods with active uses. Shared parking goes hand-in-glove with mixed use, compact development.

Shared parking unlocks the potential for higher development densities around transit and acts as a control mechanism against urban sprawl. By allowing adjacent property owners to share parking spaces, cities can accommodate essential parking demands like disabled parking, emergency vehicles and freight delivery while promoting travel by more sustainable modes with better land use integration. For example, parking developed for a cinema can be shared with office workers and nearby residents, since each use’s parking demands are heaviest at different hours.

Shared parking can reduce parking requirements by 20-40%, creating positive economic, social and environmental benefits.\* According to the Victoria Transport Policy Institute, 60-80 parking spaces can be shared among 100 employees in the North American context. The mixed-use Circle Centre in the city of Indianapolis was able to reduce the provision of parking by 53% from the standard regulations by using a shared parking approach. That also amounted to a savings of \$10,000 USD per space to the developers.



The table illustrates how 100 parking spaces in a mixed-use district can be distributed based on usage at different times.

## How does shared parking work?

For a city to reap the full benefits of a shared parking program, parking needs to be publically accessible with no private, reserved spaces. If all parking is publically accessible then it can be traded as a commodity. This also requires eliminating free parking. The government can act as an intermediary in helping the private sector identify how and where the spaces can be shared in existing neighborhoods, especially during the transition toward making all parking publically accessible. For expanding city districts, shared parking can exist for essential uses or as a regional-wide transition toward sustainable transport. Government might handle contracts for public parking to assure satisfying performance indicators such as occupancy rate, mode shift and funds raised for neighborhood improvement projects as street use and capacity issues change.

Parking provision and restriction is an important part of transport planning. To successfully implement shared parking, a review should be conducted that looks at local zoning ordinances, existing use of parking space use at varying times of the day, and the existing parking management strategy. The city should have an idea of the mode split it wants to support. Designing for shared parking is an iterative strategy, and should be revisited every few years. The process should shift the city away from trying to satisfy all parking demands by increasing parking supply. Shared parking is most effective when done in conjunction with promotion of public transport use, walking and cycling. Shared parking spaces must be conveniently located and easily accessible by all relevant users. In other words, it creates the possibility to shift away from planning merely for driving trips.

## \*What are the benefits?

Shared parking can alleviate traffic congestion, allow for increased density near transit and promote compact development. The main benefits of pursuing a shared parking strategy include:

- Efficient and optimized use of existing parking infrastructure
- Eliminate the burden on developers to build more parking
- Support for transit-oriented development

## Overcoming Barriers to Shared Parking

Outdated local ordinances can inhibit the possibility of applying shared parking to an area. To successfully implement new parking standards, it is necessary to mitigate any standing barriers to a shared parking initiative.

**1. Understand the actual parking demand in a neighborhood.**

- Feasibility studies and understanding community traffic patterns are essential to successful implementation
- A city planner, transportation expert and the community need to be involved
- Understand current parking supply versus what is being used
- Determine who is paying for current parking such as land owners, employers or users
- Evaluate the price of parking as a lever that can change parking demand

**2. Eliminate minimum parking standards.**

Minimum parking standards based on land uses lead to an over-supply of parking. To alleviate the waste of real estate, local governments can offer incentives and create directives to develop shared parking instead.

**3. Change zoning laws and encouraging shared parking arrangements.**

Zoning laws can be changed to allow or encourage shared parking in existing areas with clustered businesses and other activity where much of the parking is private. The transport authority or appropriate government entity can further provide shared parking brokerage services to educate parties on policies surrounding the initiative. Brokers can write up agreements between two agencies or companies that outline the rules and obligations of each party.

**4. Educate owners and tenants on bundled parking and the associated costs.**

- Many residents who rent or own homes or apartments are unaware of the costs associated with parking because it is often included in the price. It is the same with employees who might experience the effects of bundled parking in their lower salary—unbeknownst to them.
- By unbundling the price of parking, people will be more likely to choose other transportation options in lieu of driving.

**5. Promote public transport and walkability through coordinated investment.**

- Investment in sidewalks, cycling infrastructure, bus services and aesthetics of the area will improve overall access and reduce driving.
- Round-trip car-sharing programs will reduce car ownership and therefore parking demand.

## Implementing Shared Parking

Determine how much parking already exists in a district and analyze how the spaces are used at different times. The city can develop a shared parking forecast based on how much parking demand it is willing to satisfy across different time periods as part of its mode share goals, breaking the shared parking system down by weekday peaks, evening peaks and weekend peaks.

Shared parking can be advantageous for developers, businesses and governments, but takes time and careful investment. It is a process that requires constant review and a coordinating body that can be a broker and analyze how spaces continue to be used. Stockholm Parkering in Stockholm, Sweden is a parking authority that helps developers find available parking spaces in the surrounding district.

### Peak Parking Demand

Weekday Peaks	Evening Peaks	Weekend Peaks
Banks	Auditoriums	Religious institutions
Schools	Bars and dance halls	Parks
Distribution facilities	Residents	Shops
Factories	Meeting halls	
Medical clinics	Restaurants	
Offices	Cinemas	

This table is an example of peak parking demand for different land use types. Parking can be shared efficiently by land uses with different peaks. Source: Modified from the original version from Victoria Transport Policy Institute



Downtown Indianapolis is using a shared parking approach while pushing forward better cycling and walking amenities leading to a more compact, mixed-use city center. Source: JoeyBLS Photography on Flickr

## Case Studies

### Montgomery County, Maryland, USA

The County has several parking management districts that correspond with central business districts in several cities, such as Bethesda and Silver Spring, where a shared parking program is part of a long-term strategy to offer parking as a shared resource. The program enables financial lenders to consider shared parking if they are likely to withhold financing due to lack of parking in a development on-site plan. This has helped promote mixed-uses around transit.

### Ann Arbor, Michigan, USA

The city's Downtown Development Authority coordinates parking availability, location and price as part of the larger transport system that is essential to the urban core's vitality and growth. Revenue from public parking helps subsidize transit passes with priority spaces offered to car-sharing, vanpools and electric vehicles. Cost and lack of parking availability is cited as a top reason people shift to modes other than driving. The city makes an effort to keep walking and cycling infrastructure and transit mobility in top shape while helping to satisfy parking demands with existing public spaces.

### Beijing, China

In early 2011, the Beijing government started promoting shared parking by encouraging and guiding institutions in opening their parking lots to the public after work hours. By the end of 2011, 61 parking lots were sharing 8,946 spaces in 6 central districts. Most of these shared parking lots are open to residents in the surroundings between 6pm and 8am. In late 2013, the Beijing government approved another policy on shared parking where more details of the mechanism were explained. Charging for parking must be within the parameters permitted by the Parking Price Bureau and registration must be completed with the Industrial & Commercial Bureau.