The parking requirements found in zoning codes frequently result in an oversupply of parking spaces. This consumes land that could be put to more productive use and promotes a sprawling pattern of development. Paved parking surfaces also decrease the amount of permeable surface in a watershed which makes stormwater management more of a challenge. The following alternative parking strategies promote a balance between various forms of transportation and reduce the environmental impact of paved surfaces.

- Incorporate Green Parking
- Take Advantage of Shared Parking Opportunities
- Reduce Excessive Parking

**Incorporate Green Parking**

Green parking can greatly mitigate many of the negative impacts of parking lots, including slower groundwater recharge, high rates of stormwater runoff and non-point source pollution. Green parking techniques can be applied to new projects and redevelopments. The [Heifer International Green Parking Lot Case Study](#) is an example of a successful green parking lot. Several smaller green parking lots were constructed and channeled water into a vegetated collection system for treatment and reuse.

**Take Advantage of Shared Parking Opportunities**

In dense business and residential areas with a large supply of parking, property owners can reduce the number of parking spaces needed for new development by sharing their facilities with surrounding owners. This strategy can be implemented rather simply with written agreements between owners or can become part of a larger, more formal initiative adopted into local plans and ordinances. With the use of [Shared Parking Agreements](#), neighboring businesses benefit from lowered initial development costs and reduced operation and maintenance costs. The most successful agreements meet the users’ peak demand at different times of the day or week. For example, sports facilities that are primarily active at night and on weekends might share parking spaces with commercial buildings which are more active on week days.

Left: Specifically-sloped vegetated strips. Photo provided by EPA Green Parking Lot Resource Guide.

Above: Schematic of shared parking concept. Below: Parking garages can accommodate different users at different times of day and week. Images provided by [EPA Smart Growth Implementation Assistance](#).
Reduce Excessive Parking
Many formulas commonly used to calculate parking dramatically overestimate the number of spots needed, resulting in valuable land being consumed for a use that yields very little return. This can be resolved by implementing parking maximums or allowing developers to request a Parking Reduction Permit to lower the number of spaces required. In residential areas, narrower residential streets are a frequently used design solution to avoid an oversupply of parking. Reducing the width of residential streets also has environmental benefits. By lowering the percentage of paved area in the watershed, a community will ultimately reduce the volume of stormwater runoff.

Narrow residential streets are one technique used to avoid an oversupply of parking.

<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>POLICIES • TOOLS • TECHNIQUES</th>
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| Incorporate Green Parking | Green Parking Guide  
Techniques for green parking  
A tool for green parking site design, including minimum parking ratios |
| Take Advantage of Shared Parking Opportunities | Shared parking is relatively simple to implement  
Techniques for shared parking  
A shared parking tool with step-by-step manuals |
| Reduce Excessive Parking | Employ better site design for narrower residential streets  
Narrow residential streets provide stormwater management benefits  
City of Glendale CA Request for Parking Reduction Permit |

*For a complete list of tools and resources, please see the “Tools & Resources Index” section of the Smart Growth and Sustainability Toolbox.

Above: Two-lane residential street with dual parking. Photo provided by How We Drive.  
Below: Vision of a two-lane redesign in Denver, CO. Photo provided by EPA.