Overview

Parking was a local issue long before the advent of the automobile: livery stables, roadside hitching posts, and back-lot carriage barns were common downtown features before cars arrived on the scene. These have since been supplanted by parking lots, meters, and garages—and vast expanses of pavement that have come to symbolize modern car culture. Acres of parking now dominate commercial strips, and huge garages fronting new homes are seen in many residential neighborhoods. Motorists have come to expect free, readily accessible front-door parking—even though this comes at a high price to landowners and developers and to the community at large. Poorly designed parking areas create an unpleasant pedestrian environment, detract from the vitality of downtowns and village centers, and create stormwater pollution problems.

Parking regulations often reinforce reliance on the automobile and transform local landscapes by requiring excessive amounts of off-street parking. Municipalities typically adopt generic parking standards; for example, standards issued by the Institute of Transportation Engineers (ITE) are based on near-peak parking demand generated by single uses in lower density, suburban settings. These standards do not take into account the many local variables that affect parking supply and demand, including the overall density and mix of development, the availability of nearby parking and public transit, and the potential for walking and biking.

Excerpted from Driving Urban Environments: Smart Growth Parking Best Practices. Maryland Governor’s Office of Smart Growth (www.smartgrowth.state.md.us).
• adopt parking standards under zoning and site plan regulations, and
• institute parking management programs.

A combination of strategies is generally required to balance parking supply and demand within different areas of a community.

**Parking Studies and Plans**

There is a common perception, especially among downtown businesses and drivers looking for storefront spaces, that there is not enough parking, even though spaces may be available on a side street just a short distance away. Parking studies are useful to document the amount of parking available in relation to the type and density of development in different areas of a community and variations in the demand for parking at different times during the day or week. These studies identify whether additional parking is needed or existing parking needs to be better managed.

Parking studies can be conducted in-house, using simple manual counts, or through the use of sophisticated models that estimate parking demand based on such factors as existing and future development, traffic circulation patterns, parking availability and costs, shared parking options, transit availability, pedestrian and bicycle accessibility, and vehicle ownership patterns.

Transportation planners with expertise in this area are often called on to help local boards. Technical and funding assistance or referrals may be available through your regional planning commission.

**Parking Ordinances**

Parking ordinances adopted by the legislative body regulate parking along public streets and in public parking lots and structures. Ordinances typically include parking limitations by location, zone, block, or street segment and may also have provisions for:

• metered and paid parking in downtown areas,
• residential parking permits,
• fire lanes and commercial loading zones,
• municipal park and ride lots,
• bicycle parking,
• signs, and
• winter parking bans for snow removal especially in Vermont.

Parking ordinances often are incorporated under local traffic ordinances and also include provisions for administration and enforcement. The Vermont League of Cities and Towns offers a model parking ordinance for local adaptation and use.

**Parking Standards**

Parking standards regulate the number, type, area, size, and location of parking spaces needed to meet the demand for parking generated by new development. Standards for off-street parking—originally intended to prevent overflow parking on neighboring lots and streets—have been included in most zoning bylaws dating from the 1970s on.

As noted above, municipalities commonly adopt nationally accepted standards that require a minimum number of on-site parking spaces by type of use or by gross square footage. For example, 2 spaces per residential unit and 4.5 spaces per 1,000 square feet of gross leasable retail space are common standards.

National retailers may apply their own parking standards to new development, based on peak parking needs, which often exceed these minimum requirements.

Generic national standards, when applied communitywide, especially within a Vermont context, often result in an overabundance of parking in some locations, such as commercial strips. The standards can also limit development or redevelopment opportunities in other locations where off-site parking requirements can’t be met, such as central business districts.

While generic standards may be suited for application in some suburban settings, they are not a good fit for higher-density and mixed-use areas, including downtown and village centers where land is in limited supply and could be put to better use.

**Revised Standards.** Options for revising standards, which should be based on information obtained from local parking studies, include:

• **Districts.** Standards vary by parking zones or districts, based on the density and types of use within each district, the availability of on-street and centralized parking, public transit services, etc.

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**Principals for Making Parking Decisions**

**Example: Montpelier**

1. There should be sufficient short- and long-term parking to meet existing and projected infill demands. It should not take more than 10 minutes to access long-term space.
2. New development must provide sufficient parking or a viable strategy for meeting its parking demand.
3. Parking must be accessible, i.e., either physically close enough to walk to within a reasonable amount of time or accessible via a transit system (bus).
4. Parking should be most expensive in the core of the downtown and least expensive in the periphery of the downtown.
5. The City should own all downtown parking used by the public.

**Goals**

- Parking should feel and be safe and attractive—this requires a continual investment.
- Parking should be responsive to users—a “wayfinding” system should be developed for the City.
- Parking should be adequate—short-term parking should be located near retail areas and long-term parking should be on the periphery of the downtown, served by good paths and transit.

Source: “Report of the Montpelier Parking Committee to the City Council” (May 2001).
- **Maximum Standards.** Maximum, as well as minimum, off-site parking standards are set to prevent excess parking.
- **On-street Parking.** On-street parking is required in residential, commercial and mixed-use districts, through related street or road design standards.
- **Downtown Parking.** Off-street parking requirements in downtown and village centers are reduced or eliminated—for example, in favor of central park-and-walk or satellite park-and-ride programs.
- **Reductions/waivers.** Parking reductions or waivers are allowed:
  - where centralized parking, on-street parking, or transit serves are available;
  - for multiunit senior and affordable housing, and for accessory dwellings;
  - in exchange for managed open space, which could be used for temporary overflow parking or, if necessary, be converted to permanent parking in the event that there is a demonstrated need for more spaces; and
  - in exchange for employer-sponsored transit, carpooling, and rideshare programs.

<table>
<thead>
<tr>
<th>Suburban Parking Characteristics</th>
<th>Village/Downtown Parking Characteristics</th>
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</thead>
<tbody>
<tr>
<td>Based on assumption that everyone drives</td>
<td>Mix of pedestrian, transit, and vehicle traffic</td>
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<tr>
<td>Separate off-street parking for each building or use</td>
<td>Centralized, shared, and on-street parking</td>
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<tr>
<td>Free private parking</td>
<td>Paid, metered public and private parking</td>
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<tr>
<td>Surface parking</td>
<td>Surface and garage parking</td>
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<tr>
<td>Auto-oriented streetscape</td>
<td>Pedestrian-oriented streetscape</td>
</tr>
<tr>
<td>Large paved areas hinder pedestrian movement</td>
<td>Connecting walkways to final destinations</td>
</tr>
<tr>
<td>Excess parking to accommodate peak demand</td>
<td>Managed parking in relation to mixed demand</td>
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- **Shared parking.** Shared parking arrangements are allowed for mixed-use areas, especially where parking demand varies during the day for different types of use. For example, parking spaces used by office workers during the day could be used by restaurant and theater-goers at night and religious groups on weekends. Shared parking provisions typically include formulas, tables, or shared parking study requirements, which help determine the amount of parking needed for the planned mix of uses.

Where densities and land values are high enough (for example, in downtown business districts) it may be reasonable to require underground parking, beneath buildings, or the construction of parking decks or multistory parking garages. Parking structures minimize the parking footprint, but they can add significantly to development costs.

Parking regulations usually include basic dimensional or geometric standards—a common minimum space standard is 9 feet by 18 feet—but may vary to accommodate motorcycles, compact cars, handicapped vehicles, and larger sports utility vehicles or busses. Overall parking area dimensions, including access, aisle, and stall dimensions, typically vary with the angle of parking, which may range from 0 degrees (paralleling the curb) to 90 degrees (head on). Parking regulations may also include standards for commercial and recreational vehicle parking, loading docks, and snow storage areas.

A minimum number of spaces that meet federal and state accessibility (ADA) requirements, including accessible car and van spaces, must also be provided, even if not specified in local regulations. Regulations may also include standards for public transit (for example, bus shelters) and bicycle racks or storage lockers for cyclists.

**Site Design and Layout.** Municipalities are using other available tools—most commonly site plan review—to also regulate parking location and design. For example, many municipalities now require that commercial parking areas be located to the side or rear of buildings and landscaped or screened from view of the street to promote a pedestrian-oriented streetscape and to protect the functional and visual character of a neighborhood.

**Green Parking.** Green parking requirements, designed to minimize stormwater runoff from impervious surfaces, are increasingly found in local parking and stormwater management regulations. In addition to reducing overall parking requirements, these may require the use of alterna-
Considerations

The unintended consequences of parking regulation are all around us, suggesting that more care needs to be taken in developing standards and programs that are community, and district specific. Key considerations include:

- the accuracy of projected parking demand;
- the safety of motorists and pedestrians;
- the effect that proposed standards will have on both the pattern and cost of development; and
- the capacity of the community to develop and maintain public parking facilities, manage parking programs, and administer and enforce parking regulations.

Municipalities at minimum should consider reducing or allowing exceptions under commonly accepted standards to avoid excessive parking and basic site design standards to ensure that parking does not dominate the local landscape.

Municipal Parking Lots
24 V.S.A. §§1861–§1874

State law allows municipalities, subject to voter approval, to purchase, own, lease, use and operate public parking lots financed, if necessary, through anticipated parking revenues. Parking revenues must be kept separate and may only be used for:

- parking lot purchase, including debt service;
- meter and equipment installation and repair;
- collecting and handling coin deposits;
- traffic control;
- lot policing, lighting and maintenance.

Parking rates are set by the legislative body, and may vary for different areas. State statutes require an annual reporting of all parking revenues. They also prohibit advertising of any kind on parking meters.