Statutory Authorization: 20 V.S.A. §2904 (Accessibility Standards); 23 V.S.A. Chapter 19 (Enforcement), 24 V.S.A. §§1861-1874 (Lots/Meters), §1971 (Ordinances), §2291(General Powers), §4414(4), §4416
Type: NONREGULATORY & REGULATORY / **Related Topic Areas:** Bicycle & Pedestrian Facilities; Facilities Management; Roads & Highways; Land Use & Development Regulations; Public Transportation; Transportation Demand Management; Zoning Regulations

Parking

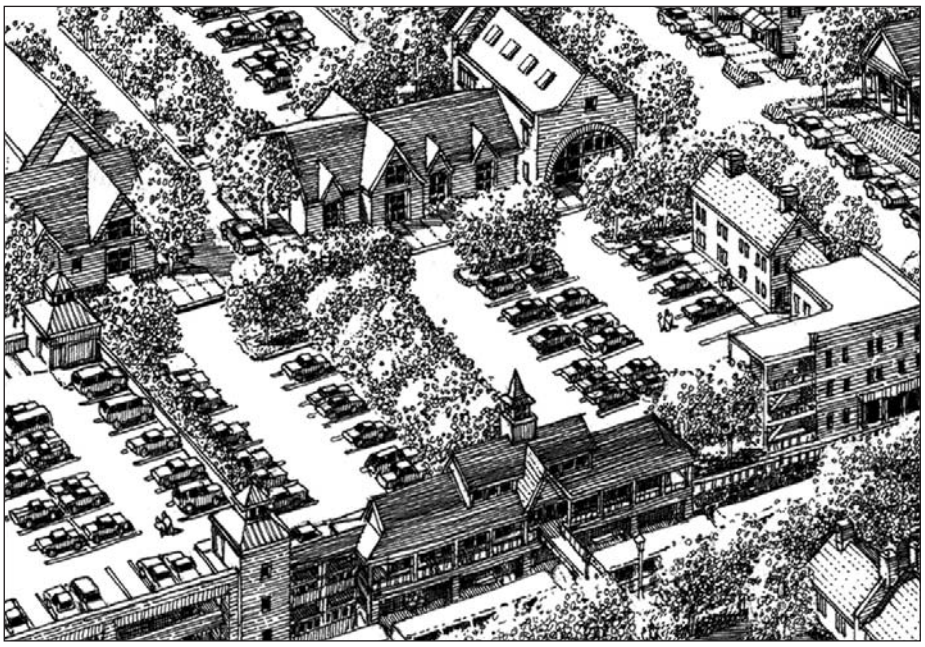
20

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.

Traditional approaches to regulating parking lead to vast expanses of parking which in turn separate land uses, reduce densities, impair walkability, and create obstacles to providing transit and pedestrian friendly communities. From a developer's perspective, inflated parking ratios reduce the development potential of a site, requiring more land to be used for parking as opposed to a higher and better use, and adding significant costs to development projects. In fact, some development projects many not be financially feasible under current local parking policies.

Excerpted from *Driving Urban Environments: Smart Growth Parking Best Practices*. Maryland Governor's Office of Smart Growth (www.smartgrowth.state.md.us).



One obstacle to building at traditional densities is finding enough parking space to accommodate modern residential and commercial tenants. Shared parking facilities, careful management of existing parking, and good design can make the most of available space. Central lots or parking garages near town centers and public transit can encourage people to leave their cars behind and walk to their destinations, reducing the need for more parking.

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.

Generic parking standards no longer serve many communities well and are not appropriate for the development of Vermont's downtowns, villages, and growth centers. There are also environmental consequences, including the degradation of air and water quality from concentrated auto emissions and increased stormwater runoff.

Long-accepted parking standards are being reevaluated to better address community and environmental impacts and to better accommodate desired patterns of development. Current thinking asserts that, at minimum, generic parking standards should be abandoned in favor of context-sensitive parking requirements and better parking management.

Vermont municipalities have broad authority under several state statutes to:

- conduct parking studies,
- enact ordinances that regulate parking within public rights-of-way,

- 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.

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).

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.

- *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 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.

Parking Standards

24 V.S.A. §4414(4)

A municipality may adopt provisions setting forth standards for permitted and required facilities for off-street parking and loading which may vary by district and by uses within each district. These bylaws may also include provisions covering the location, size, design, access, landscaping, and screening of those facilities. In determining the number and size of parking spaces required under these regulations, the appropriate municipal panel may take into account the existence or availability of employer "transit pass" and rideshare programs, public transit routes, and public parking spaces in the vicinity of development.

Suburban Parking Characteristics	Village/Downtown Parking Characteristics
Based on assumption that everyone drives	Mix of pedestrian, transit, and vehicle traffic
Separate off-street parking for each building or use	Centralized, shared, and on-street parking
Free private parking	Paid, metered public and private parking
Surface parking	Surface and garage parking
Auto-oriented streetscape	Pedestrian-oriented streetscape
Large paved areas hinder pedestrian movement	Connecting walkways to final destinations
Excess parking to accommodate peak demand	Managed parking in relation to mixed demand

- *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.

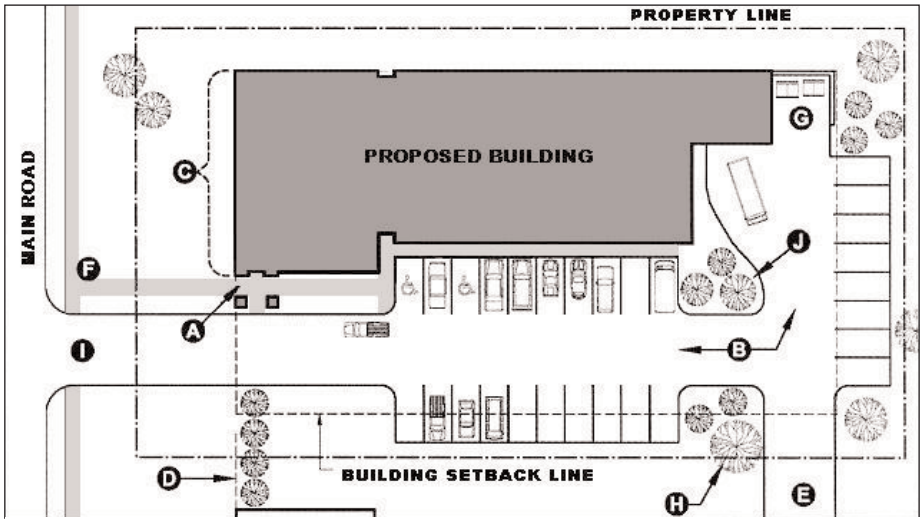
Where densities and land values are high enough (for example, in downtown business districts) it may be reasonable to require underground parking, beneath buildings, or the construction of parking decks or multistory parking garages. Parking structures minimize the parking footprint, but they can add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



This illustration from the *Bennington Design Standards* for the town's commercial district points out the following site planning features related to parking. B: Parking should be placed at rear or side of the lot and screened from view. E: Link with adjacent parking lots or provide shared parking. Connected parking lots provide secondary access and can ease congestion on the main road. J: Landscaped islands should be consolidated into useful areas, not just narrow strips of grass or plantings. *Bennington Planned Commercial District Design Standards*, Bailliere Consulting, East Greenbush, NY.

tive, more permeable paving materials, the incorporation of vegetated bioretention areas, and, in certain cases, more highly engineered stormwater collection and treatment facilities. Maximum lot coverage requirements, which generally apply to building footprints, parking areas, and other impervious surfaces, are often used to limit the total impervious area on a lot.

Parking Management Programs

Comprehensive parking management programs integrate a variety of methods to manage parking supply and demand within particular areas of a community. In addition to parking standards and regulations addressed above, these may also include:

- the designation of parking management districts in which parking supply and rates are designed to meet the parking needs of a particular area of the community;
- the construction of satellite park-and-ride facilities served by public transit services (the Vermont Agency of Transportation administers a competitive grant program that funds municipal park-and-ride facilities);
- the construction of centrally located public parking lots and garages;
- sign or "wayfinding" systems to help vehicles and pedestrians navigate between streets, parking areas, and destinations;
- "Fee in lieu" programs that allow for the payment of fees in lieu of providing on-site parking. The fees are then used to help finance centrally located municipal facilities;
- parking fee structures that promote short-term parking and turnover in downtown retail districts and long-term parking in more peripheral locations;
- residential parking permits that reserve on-street parking for neighborhood residents, especially in areas frequented by downtown commuters or shoppers; and
- Transportation Demand Management (TDM) programs negotiated with local employers that reduce parking demand by adjusting work shifts or by supporting employee carpooling and ridesharing, the use of public transit, and cycling or walking to work. (See topic paper, TDM, for more information.)

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.