



MID - COAST

REGIONAL PLANNING COMMISSION

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Compilation of Pedestrian and Bicycle Land Use Ordinance Provisions

Many communities in our region do not adequately regulate for the provision of safe pedestrian and bicycle facilities and land uses. Each of the provisions in this compilation should be reviewed and compared with your municipality's existing ordinances. Some of these provisions may be appropriate for your community and could be integrated into existing land use/zoning, site plan review and subdivision ordinances.

Walkways, sidewalks, bike paths and bike facilities promote health, reduce dependence on automobiles, and provide for increased recreational opportunities. Through the comprehensive planning process, citizens can identify and prioritize their community's pedestrian and bicycle needs. To augment this effort with more detailed inventory, analysis and recommendations, some communities also draft a municipal pedestrian and bicycle plan. Please contact us for more information and assistance with planning and with ordinance provisions.

Ordinance Purposes

The purposes of these ordinance provisions are to:

- Create a safe, attractive, pedestrian-friendly environment where the risk of pedestrian injuries or fatalities is minimized through the application of appropriate development standards; and where residents of all ages have increased opportunities to interact with neighbors.
- Enhance adequate pedestrian and bicycle standards for the review of development plans.
- Ensure that each approved development accommodates the safe and convenient movement of vehicles, bicycles, pedestrians, and transit throughout the proposed development, and to and from surrounding areas; create a healthful built environment in which individuals have opportunities to incorporate physical activity, such as walking, into their daily routine.
- Implement the municipal pedestrian and bicycle plan and/or the municipal comprehensive plan.

Pedestrian Facilities and Land Uses

New development, new roads, or municipally defined substantial renovations and rehabilitations of buildings or roads shall provide safe and convenient facilities for pedestrians that are reasonably free from hazards and adequately separated from vehicular traffic and shall provide a reasonable and direct route of travel between destinations.

- **Curb Cuts and Ramps:** Curb cuts and ramps shall be placed at safe locations including intersections, and midblock if such placement would promote enhanced convenience for the physically disabled, bicyclists, and people pushing strollers or carts. The location and design of curb cuts and ramps shall meet the requirements of the [*applicable building code*] and the Americans With Disabilities Act, and shall avoid crossing or directing traffic through loading areas, drive-in lanes, and solid waste storage and collection areas.
- **Lighting:** Pedestrian facilities shall be designed with security considerations including street lighting. To provide clear visibility of pedestrians approaching intersection crosswalks at night, the approaches and all street corners should be well illuminated. All intersection lighting should illuminate the crossing and waiting areas and/or create backlighting to make the pedestrian silhouette clearly visible on the approach.
- **New and Reconstructed Roads:** Pedestrian facilities shall be provided (where warranted) on any new or reconstructed roads in accordance with the American Association of State Highway and Transportation Officials (AASHTO) guidelines¹.
- **Separation of Pedestrians and Motor Vehicle Uses:** To the maximum extent feasible, site plans for proposed developments shall separate movement of pedestrians from movement of vehicles and bicycles, and protect bicyclists from conflicts with vehicles. Where complete separation of movement of pedestrians from movement of vehicles and bicycles is not possible, the site plan shall minimize potential hazards by using special paving, grade separations, pavement marking, signs, striping, bollards, median refuge areas, traffic calming features, landscaping, lighting, or other means to clearly delineate pedestrian areas for both day and night use.
- **Shared Uses:** Where pedestrians and bicyclists share walkways, the pedestrian/bicycle system shall be designed to be wide enough to accommodate anticipated pedestrian and bicycle traffic volumes as well as provide sufficient space for those with physical disabilities. A shared bicycle/walkway shall have a minimum width of 8 feet (with 10 to 12 feet preferable) and shall comply with the American Association of State Highway and Transportation Officials (AASHTO) guidelines, as contained in AASHTO's Guide for Development of Bicycle Facilities, which are adopted by reference and which shall be on permanent file in the municipal planning department. The design of the walkway/sidewalk shall meet the requirements of the Americans with Disabilities Act standards.

Pedestrian Walkways (includes Sidewalks and Paths) and Pedestrian Access:

- **Circulation:** Pedestrian access points at property edges and to adjacent lots shall be coordinated with existing development to provide pedestrian circulation between developments.
- **Configuration:** Walkways shall provide pedestrian access through parking lots from street sidewalks to building entries. Walkways shall be located and aligned to directly and continuously connect areas or points of pedestrian origin and destination, and shall not be located and aligned solely based on the outline of a parking lot configuration unless such a configuration allows for direct pedestrian access.
- **Crossing Vehicular Driveways and Entrances:** Where the primary pedestrian access to the site crosses drive aisles or internal roadways, the pedestrian crossing shall emphasize and place priority on pedestrian access and safety. The material and layout shall be continuous as the pedestrian access crosses the driveway, with a break in continuity of the driveway paving and not in the pedestrian access way.
- **Crosswalks:** Intersections of sidewalks with streets shall be designed with clearly defined edges. Crosswalks shall be well lit and clearly marked with contrasting paving materials at the edges or with striping.
- **Easements and Right-of-Ways:** A 20-foot wide bicycle/pedestrian easement shall be provided to connect cul-de-sacs (dead end roads), or to pass through blocks in excess of 660 feet. Where needed for purposes of traffic safety or access to nearby schools, playgrounds, public parks, trails, shopping facilities, or other community facilities, new developments may be required to dedicate a public right of way for bicycles and pedestrians, not less than 20 feet in width. For purposes of this provision, nearby is defined as within 0.25 mile.
- **Entrances:** A walkway shall be provided between all new building entrances and to all streets adjacent to the development site, except for single-family detached residential units. The walkway shall provide a direct connection to existing public right-of-way and public walkways or transit stops. All non-residential buildings set back 100 feet or more from the public right-of-way shall provide for direct pedestrian access from the building to buildings on adjacent lots. Entrances used for loading and unloading freight are not subject to this standard.
- **Installation:** Walkways shall be installed in accordance with the municipal pedestrian and bicycle plan and/or the municipal comprehensive plan. Minimum width of all walkways shall be five feet with a five-foot planting strip (or 10 foot-wide sidewalks in designated high volume business districts) unless prohibited by documented environmental constraints.
- **Large Buildings:** A walkway shall be provided immediately adjacent to the exterior wall of a new building greater than 100 feet in length when the wall is located next to a street or parking lot. A pedestrian path shall also be provided along the entire length of the wall when the public entrance is located in that area. Exceptions to this standard include if the edge of the building is within 20 feet of a public walkway and the building entrance is connected to the public walkway by an on-site pedestrian facility; and/or, if the edge of the building is bordered by

a perimeter of landscaping that does not exceed 30 feet in width and an on-site pedestrian facility is constructed at the edge of the landscaped area.

- Lighting: Pedestrian scale lighting fixtures no greater than 15 feet in height shall be provided along all walkways to provide ample lighting during nighttime hours when street lighting fixtures are deemed insufficient to adequately illuminate adjacent walkways.
- Maintenance: As appropriate, the walkways within a development shall be maintained by the property-owners or homeowners association. The municipality shall maintain walkways along municipal roads or roads for which the municipality is responsible for maintenance. The municipality shall define winter maintenance responsibilities and provide notice of such responsibilities in the customary manner.
- Multi-Family Developments: Within multi-family residential development with three or more units, on-site pedestrian facilities shall be constructed with access: (A). From every unit to all other units within the residential development. (B). From every unit to all laundry, recreation and other community facilities in the residential development. (C). From every building located within 40 feet of a public or private street to the street right-of way line.
- Treatments and Surfaces: The entirety of the on-site pedestrian walkway system shall be marked and defined using pavement treatments, signs, striping, lighting, median refuge areas, and landscaping, as appropriate, and in consideration of those with physical disabilities. All on-site pedestrian walkways located in vehicle use areas shall be distinguished from driving surfaces by durable, low maintenance smooth surface materials to enhance pedestrian safety and comfort, as well as the attractiveness of the walkways.
- Widths: Walkways serving low volume residential uses shall be at least three feet in width. Where sidewalks are less than five feet in width, passing spaces sufficiently wide enough for wheelchair users to pass one another, or to turn around, shall be provided at intervals of 200 feet. Walkways serving mixed uses (commercial, civic, and residential) and higher volume residential uses (more than 20 residential units) shall be at least five feet in width.

Bicycle Facilities and Land Uses

Bicycle Lanes:

- **Circulation:** Bicycle circulation shall be accommodated on roadways and/or on dedicated bicycle lanes, paths or routes. Where feasible, any existing bicycle routes shall be preserved and enhanced. Facilities for bicycle travel may include off-street bicycle paths (generally shared with pedestrians and other non-motorized users) and separate, striped, 4-foot bicycle lanes on streets. If a bicycle lane is combined with a lane for parking, the combined width shall be 14 feet.
- **New and Reconstructed Roads:** Bicycle lanes shall be provided on new or reconstructed roadways in accordance with the municipal pedestrian and bicycle plan and/or the municipal comprehensive plan. Restriping of roadways shall be considered when the roadway is scheduled for resurfacing allowing for a safe, dedicated space for bicycle travel. Where an existing route for bicyclists is present, it shall be maintained. Moreover, project records must support and document why bike facilities were not included—if they were not. If the right-of-way is constrained, reducing motor vehicle travel lane width to 10 or 11 feet, resulting in a traffic calming effect, or providing separate bicycle paths shall be considered.

Municipally Designated Bicycle Route:

Installation of a municipally designated bicycle route may be required within residential developments that meet the following conditions:

- Low vehicle volumes.
- Not a transit or truck route.
- Roadway is parallel to a major arterial or a high-traffic collector street (within approximately 0.25 mile).
- Roadway is reasonably continuous.
- Very little commercial frontage.

The municipality may require the following treatments on a residential or local street that has been designated as a bicycle route to provide a safe and convenient circulation system for bicycles:

- Forced right-turns along a designated bicycle route or other locations to discourage nonlocal motor vehicle traffic from using the roadway in question. A sign shall be placed at intersections indicating that cars must turn right, but bicyclists may proceed straight.
- STOP signs are positioned so that the designated bicycle route has the right of way in appropriate locations.
- Traffic calming measures, such as traffic circles or semi-diverters, in selected locations to ensure that motor vehicles do not divert to the designated bicycle route.

- Traffic control devices so that bicyclists on designated bicycle route can easily cross major streets and arterials.

Bicycle Parking Facilities and Uses shall meet the following standards:

- **Bicycle Parking Spaces:** A minimum number of bicycle parking spaces as set forth in municipal ordinance shall be provided on site. In making the determination, the municipality shall consider when appropriate, the number of dwelling units or lodging rooms, the number of students, the number of employees, and the number of motor vehicle parking spaces. (Typically: Parking lots or garages must provide not less than one bicycle parking space for every ten motor vehicle parking spaces, one bicycle parking space per residential unit, and for schools: one bicycle parking space for every ten students and staff).
- **Connection to Community Bikeway System:** Where the municipality has established an on-street or off-street bikeway that adjoins or abuts a site, the internal on-site bicycle system for the use shall connect to it.
- **Design:** Bicycle parking facilities shall be designed to allow the bicycle frame and both wheels to be securely locked to the parking structure with the bicyclist's own locking device. The structure shall be of permanent construction such as heavy gauge tubular steel with angle bars permanently attached to the pavement. Each required bicycle parking space shall be accessible without removing another bicycle. Bicycle parking facilities shall be at least two feet in width and six feet in length, with additional back-out or maneuvering space of at least five feet.
- **Location:** Bicycle parking facilities including racks shall be located within 50 feet of building entrances. They shall not be located to impede pedestrian or automobile traffic flow or to cause damage to plant material from bicycle traffic. Bicycle parking may be located on the public sidewalk or within the public right-of-way where this still leaves a minimum of five feet between the parked bicycle(s) and building entrance(s) and does not conflict with pedestrian accessibility. Bicycle parking may be located inside a building on a floor that has an outdoor entrance open for use.
- **Public Facilities:** The municipality and other affected agencies shall provide bicycle-parking facilities at public facilities such as schools, town/city hall, transit stations, park-and-ride lots, recreation facilities, and libraries in accordance with ordinance standards.
- **Signage:** Where bicycle-parking facilities are not visible from public right(s)-of-way, sign(s) shall be provided to direct bicyclists to the parking.

Public Transit Access

- New Development Near Transit Shelters/Bus Stops: All new commercial, office, and industrial buildings on parcels within 600 feet of an existing or planned transit route, as designated by the transit operator, shall provide an entrance of the facade of a building nearest to and facing a designated transit street or route.
- Transit Improvements: Bus stops, pullouts, shelters, and on-street parking restrictions shall be provided at the time of development of new subdivisions of 20 lots or more, when such improvements are appropriate.
- Transit Routes: Where public transit service is available or planned, convenient access to transit stops shall be provided.
- Transit Shelters/Bus Stops: Where transit shelters are provided, they shall be placed in highly visible locations that promote security through surveillance, and shall be well illuminated.

Further Reading

Complete Streets Coalition:

<http://www.completestreets.org/index.html>

Congress for the New Urbanism Building Walkable Communities:

<http://www.cnu.org/node/2546>

Maine DOT Bicycle and Pedestrian Planning:

<http://www.maine.gov/mdot/opt/bicycle-transportation.php>

Maine Safe Routes to Schools:

<http://www.maine.gov/mdot/opt/srts.php>

National Pedestrian and Bicyclist Information Center:

www.walkinginfo.org

US DOT Bicycle and Pedestrian Policy Guidance:

www.fhwa.dot.gov/environment/bikeped/Design.htm

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ⁱ The *American Association of Highway and Transportation Officials* (AASHTO) provides guidelines for State Departments of Transportation. The AASHTO 1999 *Guide for the Development of Bicycle Facilities* includes the following policy guidance:

“All highways, except those where cyclists are legally prohibited, should be designed and constructed under the assumption that they will be used by cyclists. Therefore, bicycles should be considered in all phases of transportation planning, new roadway design, roadway reconstruction, and capacity improvements and highway projects.”

AASHTO produces the national Pedestrian Design Guidelines, and their *Policy on the Geometric Design of Highways and Streets*, [*The Green Book*] contains the following statement about including pedestrians in the design of highways:

“Pedestrians are a part of every roadway environment and attention must be paid to their presence in urban and rural areas...Because of the demands of vehicular traffic in congested urban areas, it is often extremely difficult to make adequate provisions for pedestrians. Yet this must be done, because pedestrians are the lifeblood of our urban areas, especially in the downtown and other retail shopping areas.”