

Urban Design Guidelines Table of Contents

(Draft with Notes)

CORE PRINCIPLES

CP-A: Protect pedestrians and bicyclists from the elements: *Compared to those in motor vehicles, pedestrians and cyclists are more vulnerable to wind, precipitation, and sun. To make walking and biking more safe, convenient, and enjoyable, projects should be designed to protect people from inclement conditions. As climate change escalates, days of extreme heat and other extreme weather events will increase. Protection from these elements will become even more critical to life-safety and livability in the coming years.*

GUIDELINE A1: Protect pedestrians and bicyclists from wind.

GUIDELINE A2: Protect pedestrians from precipitation.

- Provide suspended paving or structural soil for street trees.

GUIDELINE A3: Protect pedestrians and bicyclists from the sun and heat.

GUIDELINE A4: Design to mitigate heat island effect. (Zoomed out, not microclimate around ped bike environment but reducing region urban impact).

- Utilize high-albedo materials on roofs and walking surfaces.
- Include green roof(s) or vertical green.

CP-B: Protect pedestrians and bicyclists from motor vehicles: *Motor vehicles pose a physical threat to the health and safety of pedestrians and cyclists. The design of the public realm has the ability and responsibility to promote safe driver behavior and provide the appropriate barriers to protect pedestrians and cyclists from the perceived or real risk of physical harm.*

GUIDELINE B1: Locate curb cuts to minimize their impact on the streetscape and curb lane.

GUIDELINE B2: Provide driveway and intersection designs that clearly indicate that bicycles and pedestrians have the right of way.

- conditions include - Loading zones and drop-off areas should not conflict or encroach.
- Service areas, loading docks, and garage entries.

GUIDELINE B3: Minimize crossing distances.

GUIDELINE B4: Provide self-enforcing physical barriers between motor vehicles and bikes and peds.

- conditions include - Loading zones and drop-off areas should not conflict or encroach.

GUIDELINE B5: Slow motor vehicles to safe speeds using environmental design.

GUIDELINE B6: Provide lighting with high uniformity around intersections, curb cuts and areas of modal conflict.

CP-C: Activate and engage the sidewalk, and publicly accessible open spaces: *To make Austin more walkable, there must be functional reasons to be on the sidewalk, and sidewalks must be visually interesting and social- with high visual and physical connectivity from the sidewalk to active ground floor uses. This is about the public realm engaging the public realm*

GUIDELINE C1: Do Not Provide Drive-Thrus or auto-oriented uses.

GUIDELINE C2: Maximize the number of active ground floor uses.

- At least to different active uses per half-block
- Also applies to plazas, parks, courtyards, and other publicly accessible open spaces.

GUIDELINE C3: Provide a Mix of Building Uses that foster vibrancy and activity throughout the day and week.

GUIDELINE C4: Provide frequent and architecturally enhanced street-facing entrances–

- Also applies to plazas, parks, courtyards, and other publicly accessible open spaces.

GUIDELINE C5: Provide high levels of transparency and minimize blank walls along the sidewalk

- Service areas, loading docks.
- Also applies to plazas, parks, courtyards, and other publicly accessible open spaces.

GUIDELINE C6: Provide active ground floor uses near the sidewalk level.

- Service areas, loading docks, and garage entries.
- Provide most publicly active uses on the 1st and 2nd floors- set up a hierarchy of publicness
Public, shared public access uses (multi-tenant), public access uses (single tenant), personal services, private shared uses, private. Associates minimum level of publicness of active ground floor uses with street types designated by the Great Streets Masterplan.
- These uses must be directly accessible from the sidewalk, or plazas, courtyards, and other publicly accessible open spaces.

GUIDELINE C7: Provide indoor/outdoor uses

- (Use gradient of space info)
- Street Yard Fence and Wall Height
- Also applies to plazas, parks, courtyards, and other publicly accessible open spaces.
- Transitions (semipublic, semiprivate space transition from indoor use to public realm)

GUIDELINE C8: Hide parking, loading, mechanical. (Example: Locate all parking underground).

- Also applies to plazas, parks, courtyards, and other publicly accessible open spaces.

CP-D: Public Safety Through Environmental Design:

By promoting a vibrant street life and fostering a sense of community ownership over public spaces, projects can enhance both safety and comfort in the public realm. In addition to CP-C Activate and Engage the Sidewalk, projects must promote activity and natural observation of the public realm throughout the day.

GUIDELINE D1: Provide upper story Transparency.

- This applies to parking structures.
- *This is more about the appearance of windows and the perception of eyes on the street.*

GUIDELINE D2: Provide active Uses on upper floors overlook the street.

- This is about having actual people (users) behind the windows.

GUIDELINE D3: Provide upper level indoor/outdoor spaces, balconies, terraces.

GUIDELINE D4: Provide Pedestrian Scale Lighting.

GUIDELINE D5: Visual acuity in the public realm is maintained.

GUIDELINE D6: Demarcate private space from public space.

CP-E: Enhance the public realm and elevate the walking, biking, and transit user experience:

The experience of the non-motorist user both inside and out of a building should be prioritized. The pedestrian and cyclist's experience should receive at least as much consideration and investment as the experience of those accessing the site by motor vehicle. Special attention should be paid to the connectivity, convenience, and cohesion of the pedestrian and cyclist user experience. A big part of this is how the public realm/sidewalk environment is designed

GUIDELINE E1: Maximize connections for pedestrians and bicycles.

- This applies to sites of a certain size and site length in the Regulating Plans.
- South Lake Union has midblock cut through regulations.
 - Contiguous with public realm
 - Minimum % open to the sky
 - Min clear height, width

GUIDELINE E2: Provide a wide pedestrian clear zone.

- clear of obstructions including utility boxes and poles
- Point to NACTO standards (mostly for outside of DDB projects)

GUIDELINE E3: Provide a wide planting zone.

GUIDELINE E4: Provide gathering zones around all primary building entrances.

GUIDELINE E5: Use high-quality and pedestrian friendly materials at Street Level.

- wood vs metal at contact points
- scale of material

GUIDELINE E6: Long and short-term bike parking, showers, lockers – location, convenience, quality.

- Provide Multimodal Parking Options
- Direct access to the sidewalk, direct access to the elevator,

GUIDELINE E7: Provide Street furniture.

- benches
- water fountains

GUIDELINE E8: Enhance transit stops.

- tier 2 or 3
- Bench, shade, shelter, extra gathering space

GUIDELINE E9: Provide art in the public realm.

GUIDELINE E10: Provide publicly accessible restroom.

GUIDELINE E11: Provide convenient pedestrian and bike connections to parks, greenways, bikeways, and trails, and transit stops.

- Complement and connect to adjacent Open Spaces

CP-F: Design streetscapes and courtyards as outdoor rooms providing enclosure, human-scale, and a unique sense of place: *The public realm ...*

GUIDELINE F1: Provide human-scaled plazas, courtyards, and open spaces at ground level and directly accessible from the sidewalk.

- provide clarification that doesn't have to abut the sidewalk.
- Outdoor power in the streetscape for multifunctional spaces.

GUIDELINE F2: Design open spaces with intuitive navigation and clear site lines.

- Wayfinding

GUIDELINE F3: Build to the Street

- *except where providing streetfacing outdoor activity areas*

GUIDELINE F4: Create a sense of enclosure around the sidewalk.

- Provide a continuous canopy of shade trees between the sidewalk and roadbed.

GUIDELINE F5: Create Buildings with Human Scale.

CP-G: Maximize Sustainability and Engage with Natural Systems: *Buildings and Landscape design that relate to the local microclimate.*

GUIDELINE G1: Provide significant landscaped areas designed to promote ecosystem health.

- Employ layered plantings with multiple canopies.
- Provide diversity of plantings, including street trees
- Restore damaged habitats and ecosystems
- Showcase green stormwater infrastructure in building and site elements.
 - Rain gardens in street planting area
 - Daylight green infrastructure
 - Provide green infrastructure that also serves other functions.
 - Functional green?

GUIDELINE G2: Promote Access to Nature

- Provide educational or interpretive signage about green features.
- Mimic natural systems through biophilic building and site design.

GUIDELINE G3: Design for resiliency and climate response.

- Design to respond to extreme weather events (rain, heat, cold).
- Design to maintain continuous operations and/or return to typical operations quickly.
- For Commercial: Design to utilize the structure for public gathering, cooling/heating centers, information sharing, and resource sharing.
- For residential building: Design for shelter in place and have food and water storage and communication services on-site.

GUIDELINE G4: Provide Bird-Safe Design.

- Bird-safe glass, structural shading on the first 75' of building height (Resource: American bird conservancy- architecture and legislation).

GUIDELINE G5: Provide Adaptable Design.

- Design for adaptive reuse.

- Allow for future reuse, parking garages, etc.

GUIDELINE G6: Achieve Green Building Certification.

- Minimum AEGB 3 Star Rating

GUIDELINE G7: Salvage & Reuse Existing Buildings and Materials.

GUIDELINE G8: Minimize or eliminate automobile parking on-site. (INTENT: Reduce automobile use and promote means of auto-dependency)

- Examples: Do not provide any onsite parking.

CP-H: Provide designs inclusive of and welcoming to all ages, abilities, and identities: *Design that removes barriers experienced by vulnerable or historically underserved communities. Promote diversity, choices, flexibility, welcoming, and design that accommodates the needs of the differently abled, the elderly, and parents with strollers.*

GUIDELINE H1: Design the primary user experience as a universal user experience.

- Accommodate the needs of those who are differently abled, the elderly, and parents with strollers.
- all-abilities playgrounds
- comfortable spaces for seniors
- *avoid uneven paver surfaces and open grid pavers.*
- *provide seating with backs.*
- *provide seating at drop-off/pick-up/valet areas.*
- *Provide direct routes from the street and parking areas to primary entrances and amenities.*

GUIDELINE H2: Implement research-backed standards, guidelines, and design principles for vulnerable populations.

- Implement trauma informed design principles.
- Deaf-safe design standards
- Visual impairment

CP-I: Respond to the cultural, historical, environmental, and physical contexts of the site:

Design that serves immediate, local needs, promotes local materials, and reflects local traditions and cultural practices. Designs should respect, and reflect, their local conditions and site environmental features.

GUIDELINE I1: Respond to Context of Adjacent Buildings.

- Respond to Adjacent Buildings.
- Locate Buildings Relative to One Another.
- Contribute to Adjacent Skylines.
- Acknowledging Roofs can be Viewed from Adjacent Buildings.
- Respond to Adjacent Historic Character.
- Supplement adjacent building uses.

GUIDELINE I2: Promote Local Character.

- Facade Design
- Infrastructure Design
- Engage local artists for public artworks.
- Create space and programming for music and performing arts.
- Encourage local food offerings including food trucks.
- Engage local craftspeople, fabricators, and makers.

GUIDELINE I3: Respond to Daily and Seasonal Cycles of the Site.

- Use elements that celebrate the daily and seasonal solar path, lunar cycles, seasons, and geological time frames. This includes sun dials, foliage change, fossils and archaeological data, and historical timelines.

GUIDELINE I4: Respond to Existing Small Area Plans & Policies.

- Projects should enhance area plans for which the project resides.

GUIDELINE I5: Preserve existing building facades at street level.

- Highlight sense of place through preserving existing building facades that contribute to the specific local context, and/or design for disassembly and reuse. Examples include original ironworks, railings, bricks, interpretive, educational signage, and parking garages that can be adapted to other uses.

CP-J: Promote Architectural Design Excellence: *Thoughtful design that provides both beauty and function, while adding value to the surrounding community and responsive to human needs.*

GUIDELINE J1: Demonstrate Design Excellence in Low-Rise Buildings.

- Architectural concepts should be clear, compelling, and compatible with the overall site composition.
- Encourage 12' -0" min. ceiling height at the first floor.
- Express a spatial sequence or experience in the exterior material selection, structural organization, and massing hierarchy at street facing facades.
- Size architectural details and elements in proportion to the proposed building size.
- Sculpt building massing to harmonize with the rhythm of adjacent buildings to create a cohesive urban fabric.
- Express different volumetric facade elements based on internal building programming.
- Encourage frequency and scale of planes & depths of walls found in the surrounding context to inform the planar variations in new development Building facades should respect neighboring fenestration patterns through proportions, scales, and frequency.
- Texture facades with the use of deep reliefs, multilevel facade articulation, varying heights, and widths of facade elements
- Use dimensional changes such as a roof overhang, cornice, sunshades, or shaped parapet to provide a visual termination.
- Provide a cohesive expression or composition of neighborhood compatible components.
- Design roof forms to be cohesive and integral to the buildings overall form while complementing the rooflines of surrounding buildings.
- Architecturally screen roof top mechanical equipment from view.

GUIDELINE J2: Demonstrate Design Excellence in Mid-Rise Buildings.

- Architectural concepts should be clear, compelling, and compatible with the overall site composition.

- Minimize the impact of shadow and maximize access to sunlight, sky view, and privacy on adjacent properties.
- Encourage 12' -0" min. ceiling height at the first floor.
- Express a spatial sequence or experience in the exterior material selection, structural organization, and massing hierarchy at street facing facades. Size architectural details and elements in proportion to the proposed building size.
- Sculpt building massing to harmonize with the rhythm of adjacent buildings to create a cohesive urban fabric.
- Express different volumetric façade elements based on internal building programming.
- Encourage frequency and scale of planes & depths of walls found in the surrounding context to inform the planar variations in new development.
- Building facades should respect neighboring fenestration patterns through proportions, scales, and frequency.
- Texture facades with the use of deep reliefs, multilevel façade articulation, varying heights, and widths of façade elements
- Use dimensional changes such as a roof overhang, cornice, sunshades, or shaped parapet to provide a visual termination.
- Provide a cohesive expression or composition of neighborhood compatible components.
- Design roof forms to be cohesive and integral to the buildings overall form while complementing the rooflines of surrounding buildings.
- Architecturally screen roof top mechanical equipment from view.
- Provide projections that add interest to the public realm.
- Upper-level projections and canopies should allow for the growth of existing and planned street trees.

GUIDELINE J3: Demonstrate Design Excellence in High-Rise Buildings.

- Architectural concepts should be clear, compelling, and compatible with the overall site composition.
- Minimize the impact of shadow and maximize access to sunlight, sky view, and privacy on adjacent properties.
- The base portion of the building includes the lowest three levels.
- 12' -0" min. ceiling height at street level to accommodate commercial/retail uses.
- Ground level interfaces, including shopfronts, should provide thickness, depth and articulation and avoid long expanses of floor to ceiling glazing.
- Tower: Organize and articulate tall building towers to promote design excellence, innovation, and sustainability. Design balconies to maximize usability, comfort, and building performance, while minimizing negative impacts on the building mass, public realm, and natural environment.
- Crown: Design the top of tall buildings to make an appropriate contribution to the diversity, quality, and character of the city skyline.

END OF SECTION

CORE PRINCIPLE A-

Protect pedestrians and bicyclists from the elements.

Compared to those in motor vehicles, pedestrians and cyclists are more vulnerable to wind, precipitation, and sun. To make walking and biking more safe, convenient, and enjoyable, projects should be designed to protect people from inclement conditions. As climate change escalates, days of extreme heat and other extreme weather events will increase. Protection from these elements will become even more critical to life-safety and livability in the coming years.

- Consider pedestrian comfort and safety and provide adequate space, shade, and trees at transit stops in the development of site plans.
- Expand green infrastructure along the street for planters and landscaping to provide microclimate at the pedestrian scale.

GUIDELINES –

A1. Protect pedestrians and bicyclists from wind.

a. **Priority:** Tier 2

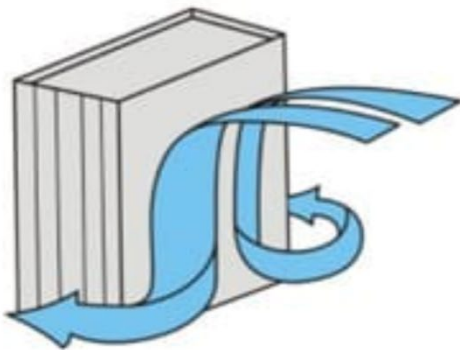
b. **Applicability:**

c. **Values:** Climate & Environment, Mobility & Connectivity, Design Excellence

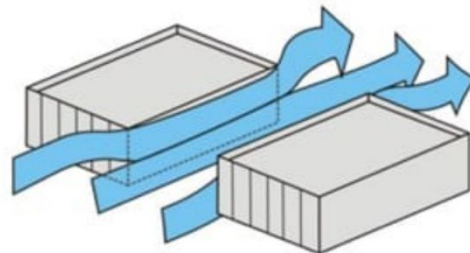
d. **Intent:**

Urban conditions including taller buildings and urban street walls, while desirable for their many benefits can also amplify wind causing uncomfortable and sometimes unsafe conditions on sidewalks and bikeways. With special attention to building and streetscape design, vertical and infrastructural development projects can be designed to mitigate these undesirable outcomes. Project designs disrupt, mitigate, or minimize the following wind conditions:

- Street canyon effect
- Dwindraught (or “downwash”) effect
- Wind “funneling” between buildings.
- Wind acceleration around building corners (or the “venturi effect”)



Downwash



Funneling

e. Conditions

f. Examples-

- Large canopies can be used where flat facades may create downdraughts that impact pedestrians and cyclists at ground level.



- **A Large Podium** can be used to interrupt a flat facade that may create downdraughts and protect pedestrians and cyclists at ground level.
- **Street trees**- decrease wind speeds from numerous wind effects by as much as a factor of two. A continuous canopy of street trees may be the only wind mitigation method required for low-rise buildings.
- Building corner geometry
- A cluster of buildings can offer shelter to one another and push the windy areas to the edge of the cluster.
- **Orienting the narrower side of a tall building to the prevailing wind** direction helps to reduce downdraught forming
<https://windtechconsult.com/20-seriously-effective-wind-mitigation-strategies-for-your-next-project/>
- **Avoid parallel towers:** <https://www.mdpi.com/1996-1073/13/11/2827>
- **Recessed or rounded corners**- help reduce the venturi effect whereby wind is amplified around a building corner.