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downtown alentown development and urban design plan

APPENDIX: ZONING RECOMMENDATIONS



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Allentown Downtown Urban Design & Development Plan

Zoning Recommendations

Code Structure & Districts

The following pages include recommendations for how changes can be made to the current City of Allentown Zoning Ordinance in order to implement the vision of the Downtown Allentown Development and Urban Design Plan ("the plan"). It describes how new districts can be mapped based on the existing built context of character areas identified in the plan, and discusses the mechanics of integrating new districts into the existing code.

The outlook for zoning is a bit different from a visioning master plan. Master plans are intended to define the future build out of an area with ideal, but realistic scenarios. Zoning must implement the new vision, steering clear of a status quo; however, must consider what is currently in place and is generally written for the nearer term than a master plan. In Allentown's case, the historic character of the downtown also adds future value and should be heavily considered in the zoning.

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Mapping New Districts

There are currently three base districts and three overlays districts applied downtown. The B-2 district covers the majority of the area, defining all of the different contexts in the downtown with one zoning district.

To guide the development of each area more specifically, new base

districts are recommended. These base districts can then respond to the existing and desired character for each area by defining appropriate building forms and mix of a land uses. The preliminary districts outlined in this map illustrate how a variety of new districts can work to implement the master plan.



Downtown Urban Design & Development Plan City of Allentown, Pennsylvania

Preliminary Districts

SHOP FRONTAGE

Main street character with ground-story storefront building facade required. Vertical mixed use with active retail/service use on ground-story and residential or commercial use on upper stories. Minimum 3 stories in height.





Key Characteristics

- Storefront windows and multiple entrances along primary streets
- Built up to the sidewalk or outdoor seating/eating areas
- Ground story at grade with the sidewalk
- Active pedestrian-oriented uses on ground floor
- Human scale facade divisions

GENERAL A FRONTAGE

Mix of office, commercial, institutional and residential uses on larger sites, generally about 4 or more stories in height with lot width no less than 50 feet. Building entrances may have stoops or storefronts, but storefronts are not required.

GENERAL B FRONTAGE

Smaller-scale mix of office, commercial, and residential uses, including small apartment buildings. Building entrances may have stoops or storefronts, but storefronts are not required.

EDGE FRONTAGE

Predominantly residential uses, including stacked flat buildings and rowhouses. Generally 2.5 to 3.5 stories in height.











- Orientation to the primary street
- Minimum glass levels on all stories facing streets and parks
- May have landscape area between ground story and sidewalk area.
- Ground floor may be elevated above grade.
- Consider whether ground story residential uses are appropriate
- Similar requirements as General A
- Human scale facade divisions (narrower, smaller scaled than General A)
- Height limitations, may include step-backs to fit within existing historic character/scale
- Permits a wide mix of uses on the ground floor
- Similar to General B
- Allows ground story residential uses
- Considers transitions to adjacent residential uses

Mapping Frontage Types

An alternative way of mapping regulations for downtown buildings is to color code the street frontage. This method allows provision of different sets of requirements when the building or parcel touches different streets. The value of this method is evident in the adjacent aerial image, which illustrates that some parcels along Hamilton have frontages on Court and Maple Streets. The rear of these parcels could be required to provide residential uses and more residentially detailed facade facing the existing rowhouses across Court and Maple. Additionally, for larger parcels occupying a full block, separate regulations can be written for each street face.



Example of districts applied along street frontages instead of entire properties: parcels with more than one street frontage may have different frontage districts applied, allowing each part of a property to contribute appropriately to the desired streetscape



Example of two-frontage parcels facing Court Street, Hamilton Street, and Maple Street: orange arrows indicate the direction that buildings face today

Addressing the Overlay Districts

Keep the Historic Building Demolition Overlay District

The historic building demolition overlay is an administrative process applicable in many neighborhoods and parts of the downtown. This process for preventing the demolition of historic buildings should be continued for the downtown and the overlay retained.

Modify the Hamilton Street Overlay District

The Hamilton Street Overlay serves to preserve the historic characteristics of buildings along Hamilton Street. This overlay mainly addresses renovation and preservation of the historic buildings along Hamilton Street, although it does address new infill development guidelines for more sensitivity to the historic context. The overlay could be maintained to ensure renovations are true to the style and character of the building. New regulatory language could be written for base districts regarding contextual design, and the language included in this overlay removed .

Supersede the TND Overlay District

With new districts and building form requirements in place (outlined in the following section), the TND overlay in the downtown would be redundant. The overlay contains useful regulations for retention of traditional character in the downtown, but it is not comprehensive nor specific enough for the variety of context areas within the downtown. Translating the regulations of this overlay to the base district will also simplify the development process.

Front yard size through setback averaging (and allowable encroachments) can be addressed using build-to regulations (as described in the following pages) instead, or the use of setback averaging could be continued specific to each district. Commercial uses in the residential areas seems to be more specific to the neighborhoods of Allentown and not the downtown.

Additionally, many of the design guidelines included in the TND Overlay should be part of the regulatory requirements for all development within the code area, as applied through the new base districts.

Guidelines concerning roof line, horizontal and vertical expression lines, window amounts and placement, and minimum two-story building heights could all be mandatory regulatory requirements, as discussed in the Design Requirements section (on the following pages). One requirement that should be reconsidered is the provision for maintaining the appearance of a two-story building where only a onestory building is feasible. While the dormers could be an appropriate design solution in such cases, the use of false second story windows or parapets should be avoided.

Allentown Downtown Urban Design & Development Plan

Zoning Recommendations

Design Requirements

The following pages make preliminary recommendations for the content of new districts to be inserted into the City of Allentown Zoning Ordinance in order to implement the vision of the Downtown Allentown Development and Urban Design Plan ("the plan").

Using the structure proposed for creating a set of context-based districts, these pages recommend a sampling of key building form and site design guidelines that should be included in the district regulations. These are requirements that can be easily written and administered as mandatory provisions for all new development within the project study area. Other requirements necessary for implementation will be necessary.

The most direct way to implement the plan vision is to adopt clear requirements that can be administered by city staff as part of a by-right development process.

FORM-BASED OR HYBRID ZONING CODES

One zoning strategy for regulations that emphasize the design of buildings and how they frame the street is the use of a form-based or hybrid codes. Form-based codes are written specific to each geographic location, ideally walkable districts and neighborhoods within a larger area. These types of codes use diagrams and tables to illustrate how requirements apply, making them a useful way to implement urban design regulations. They also provide more predictability for property owners, investors, and developers because most design requirements are clear and mandatory, and can be administered by zoning staff rather than through discretionary processes where boards are interpreting more general guidelines.

A few key elements of form-based codes that could be useful in implementing the plan include the following.

- Use of building or frontage types as a regulating mechanism that describes the architectural form and massing of permitted structures. These building or frontage types are usually applied by districts on a regulating map.
- Architectural requirements for detailing of facades that contribute to the a unified streetscape. These requirements often address design and quantity of windows, doors, and architectural expression lines, but do not go as far as defining the required style of the building.
- Requirements for active uses and storefront buildings on ground floors along key activity corridors and public spaces.

Embedding form-based requirements for new downtown districts within the city's existing conventional zoning code would result in a hybrid zoning code.



| ß | MINIMUM HEIGHT | 3 stories | 2 stories | 1 stories | 1 stories |
|---|---|---------------------------------|---------------------------------|------------------|------------------|
| | MAXIMUM HEIGHT | 8 stories (refer to note a) | 5 stories | 4 stories | 3 stories |
| G | PRIMARY GROUND STORY FLOOR TO FLOOR HEIGHT | 15' to 24' (refer to note b) | 15' to 24' (refer to note b) | 12' to 16' | 14' to 18' |
| 0 | ALL OTHER STORIES FLOOR TO FLOOR HEIGHT | 9'to 14' | 9'to 14'' | 9' to 14' | 9' to 14' |
| 0 | FRONT GROUND STORY ELEVATION | | Within 12" of adjac | ent street sidew | alk average grad |

(3) Facade & Cap Articulation. Refer to 36-339(h) through 36-339(l) for explanation of facade r∈ 36-340 for explanation of cap requirements, and 36-350 for additional design requirements.

| 0 | MINIMUM GROUND STORY FENESTRATION | 70% | 60% | 65% | 65% | |
|---|---------------------------------------|---|-----------------------|--------------------------------------|----------------|--|
| K | MINIMUM REQUIRED | 20% on street facades; 12% on rear and side facad | | | | |
| 0 | ENTRANCE LOCATION & NUMBER | Principal entrance required on primary facade; entrances required a every 70' of building facade | | | | |
| M | ENTRANCE REQUIREMENTS | Recessed between 3' and 8' from the portion of the front facade c | | | | |
| | HORIZONTAL STREET FACADE DIVISIONS | Required with | in 3' of the top of t | the ground story, t below the cap | he bottom of a | |

Sample storefront building type spread from a form-based code. Note the detailed regulatory requirements and accompanying diagrams showing how the regulations apply.

Build-to Zone v. Setback

Building setback lines regulate building placement by providing a minimum distance that a building may be placed to a property line. In the base B-2 district (which applies to most of the study area), the minimum setback is 0 feet—allowing buildings to be located at the back of the sidewalk —with no maximum setback. The TND Overlay requires front setback averaging. This works well for existing historic structures, but when the vision for a street face is different from the existing structures, a build-to zone can define the desired effect.

A build-to zone indicates a zone or area in which the facade of a building must be located. The use of a build-to zone allows control



BUILD-TO ZONES ALONG FRONTAGE LINE



SETBACK LINES ALONG FRONTAGE LINE

Build-to Zone vs Setback Line

over building placement, while the range provides some flexibility. This method provides more predictability in building placement. For downtown, a typical build-to zone depth of about 5 or 10 feet would be appropriate, with more specific calibrations based on street design and building context. Further, corners (the intersection of the front and corner side build-to zones) should be occupied by a building. Site triangles in urban locations should be avoided -- holding the corner with the building reduces the scale of the intersection.



Above: The image looks north on 6th Street toward Hickory Street, showing a 70foot building setback (on the left side of the street) across from buildings with no setback (on the right side).

Below: A block north of Hickory Street on 6th Street shows no setback on both sides.





Examples of appropriate retail street facades, with minimum 65 percent transparency



Examples of appropriate non-retail street facades, with minimum 20 percent transparency



Street facade requirements for the base of the building are intended to address the scale and transparency of the facade. These design requirements increase pedestrian comfort, interest, and safety.

Potential Regulations

- 1. **Primary Active Use Frontage Requirements.** Storefronts are required along primary active streets and portions of secondary streets. Refer to the map of locations where required storefronts for required locations.
- 2. **Fenestration.** Storefront glass is required for a minimum of 65 percent, as measured between 2 and 8 feet.
- 3. **Entrances.** Entrances into the building are required at a minimum of every 60 feet of frontage. Entrances at the corner count for both street faces.
- 4. **Blank Facade.** On the ground story, blank walls (containing no windows) greater than 15 feet in length are not permitted.
- 5. **Ground Floor Vertical Divisions.** The ground story facade shall be divided with vertical shadow lines a minimum of 60 feet on center. Shadow lines include a recess or protrusion a minimum of 2 inches in depth and 8 inches in width.
- 6. **Horizontal Divisions.** The ground story shall be separated from upper stories with a shadow line along a minimum of 75 percent of the facade.



Examples of inappropriate street facades



Upper-Story Windows

Requirements for the quantity and arrangement of upper-story windows can provide a rhythm along the streetscape. The images on this page show facades from existing traditional main street buildings in Downtown Allentown. These facades show different arrangements of windows, and provide a baseline for the appropriate overall amount of transparency that could be required of new buildings: a minimum of 20 percent.



Upper Stories are approximately 32 percent windows



Upper Stories are approximately 21 percent windows



Upper Stories are approximately 20 percent windows





Appropriate grade transitions for retail frontages: stepping of interior elevations, knee walls, and storefront windows follows sidewalk grade

Grade Transitions

Given the slopes in many parts of the downtown area, building design must accommodate grade changes along the sidewalk without creating tall, out-of-scale blank walls. Large, unarticulated building facades signal to pedestrians that an area is not intended for walking, reducing activity in the area and creating dead zones.

Potential Regulations for Retail Frontages:

- 1. Grade transitions at the building scale along the sidewalk should be designed to maximize active pedestrian-scale frontages between waist and eye level while minimizing blank walls.
- 2. When possible, the interior floor configuration should step to match the exterior grade.
- 3. If it is necessary for the interior floor to remain constant along the grade, changes can be accommodated by a storefront window display space.
- 4. Knee wall shall not exceed 30 inches in height except along a maximum 15 foot section of frontage.
- 5. If grade change is more than 12 feet along a single block face, entrance requirements may be increased to one entrance per 80 feet of building frontage.



Appropriate grade transition for non-retail frontage: building steps with sidewalk and windows

Potential Grade Transition Regulations for Residential and other Non-Retail Frontages:

- 1. Grade transitions at the building scale along the sidewalk should be designed to minimize blank walls.
- 2. When possible, the interior floor configuration should step to match the exterior grade.
- 3. Multiple front entrances along the street activating each segment of building section at each grade.
- 4. Transition zones between the sidewalk and building facade of porches, terraces, and landscape areas can assist with grade changes.
- 5. If it is necessary for the interior floor to remain constant along the grade, changes can be accommodated by terraced planters and retaining walls.
- 6. Retaining walls shall not exceed 30 inches in height except along a maximum 15 foot section of frontage.
- 7. When the elevation of the first floor is more than 3 feet above grade, windows should be provided into the basement or lower floor elevations.





Appropriate transitions: landscape areas and stoop assist with transition zone



Inappropriate transition: Sidewalk adjoins blank wall along facade



Potential new development with and without step-back (7th Street at Turner, looking south; from preliminary Downtown Allentown Urban Design & Development Plan)



Step-back corridors (from preliminary Downtown Allentown Urban Design & Development Plan)

Step-backs

While a consistent streetwall is critical to providing a friendly sidewalk environment, many tall towers that ascend straight upward from broad bases can make streets feel like deep canyon floors. Stepping towers back and tapering their form can temper this effect by allowing more light and sky to reach the street as well as more views from within towers.

Potential Regulations:

These regulations require noting specific locations on either a separate map within this set of regulations or on the zoning map. Street information is located in the plan.

- 1. Step-backs are required along the street face of the building (*see diagram*).
- 2. Tier 1 step-backs shall be required per street designations as follows.
 - a. Designated Primary Mixed-Use Streets: Minimum 15 foot deep step-back of facade 65 to 70 feet above grade.
 - b. Designated Secondary Mixed-Use Streets: Minimum 15 foot deep step-back of facade 55 to 60 feet above grade.
 - c. Designated Neighborhood Transition Turner Street: Height is limited to 4 stories or 45 feet above grade within build-to zone (*or at front setback line*). Maximum height increases at a 45 degree angle from the build-to zone (*or front setback line*) away from the street; *see diagram*.
 - d. Designated Neighborhood Transition Walnut Street: Height is limited to 70 feet above grade within build-to zone (*or at front setback line*). Minimum 5 foot deep step-back is required at 3rd or 4th floor.
- 3. Tier 2 step-backs are required as follows.
 - a. Neighborhood Transition (Walnut Street): A minimum 15 foot deep facade step-back shall be provided 65 to 70 feet above grade.
 - b. All other streets: A minimum 5 foot deep facade step-back **is encouraged** between 80 and 150 feet above grade.

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Facade Materials

Building material requirements are a type of regulation that may be less clear-cut. The potential regulations provided below prohibit those materials that, in general, do not contribute to high-quality, welldesigned, and lasting buildings.

Potential Regulations:

- 1. High quality, durable, finish materials are required as the primary facade material.
 - a. The following are acceptable primary facade materials: stone; brick; glass; cement-based stucco; wood lap siding and shingles; fiber cement siding or shingles (such as HardiePlank, HardieShingle, or HardiePanel vertical siding or similar); architectural metal panels
 - b. Exposed concrete, synthetic stucco, unfinished wood, concrete masonry units (CMU), glass block, and vinyl are not permitted as a primary facade material.
- 2. Secondary materials are limited to trim, details, and accent areas that combine to less than 20 percent of the facade surface.
 - a. All primary materials may serve as secondary materials.
 - b. Additional secondary materials include fiber cement and wood; metal for beams, lintels, trim, and ornamentation; burnished, glazed, or honed concrete masonry units (CMU) or block for trim and details, but not surfaces; split-face, honed, or glazed concrete masonry units with a height less than 4.5 inches for surfaces less than 10 percent of the facade surface; cast stone concrete elements; and vinyl for trim and details.
 - c. Synthetic stucco or exterior insulation and finishing systems (EIFS), such as Dryvit, are permitted as a secondary material on upper floor facades only.



Examples of appropriate materials, including glass and brick



Examples of inappropriate materials, including concrete block and synthetic stucco.

Signs **Sign Types**

The current sign regulations for B-2 permit wall, awning, projecting, and freestanding signs, in addition to sandwich board signs on the public sidewalk with an encroachment permit. In B-2, the height of freestanding signs is limited to 8' and a maximum area of 50 square feet, indicating these would likely be monument-type signs and not pole-mounted signs.

Freestanding signs should be clearly defined within the downtown. They should only be permitted at locations that have a fairly significant setback and should be limited in height to below eye level of the pedestrian. Small-scale pole-mounted signs can work well for small offices, but should be limited in height and pole size. Monument signs should be further limited to specific uses, such as civic or institutional uses.

Plastic-faced, internally lit box signs also should be prohibited or significantly limited. These types of signs are most often wall signs, but can also be freestanding signs and projecting signs. Regulations can allow internally lit separate alphanumeric characters or figures.

The regulations set parameters for electronic message boards (EMBs) (or electronically changing message signs, per the code) in Section 1319.03 R. Specific stadium signs, off-premises signs, and entertainment venues (limited to a very specific location in the downtown) have limitations on EMBs, but otherwise appear to not be permitted as a sign type. This is consistent with our recommendation. Many cities prohibit EMBs, but often permit them for specific civic and entertainment uses where events change on a regular basis and require announcement.

Organization of Sign Regulations

For clarity in the sign regulations, defining sign types, setting specific regulations for each, and illustrating each type with drawings or images is helpful. Then each type can then be permitted, prohibited, or permitted with development conditions within each district, similar to uses. See illustrations to the right.

(i) Projecting Sign

maximum

projection

- Description. A projecting sign is attached to and projects from a building face or hangs from a support structure attached to the building face. Sign faces are typically perpendicular to the building face, but may be at an angle greater than 45 degrees from the facade. The sign may be vertically or horizontally oriented. Refer to Figure 36-479-7.
- (2) General Requirements. Projecting signs shall be developed according to the standards in Figure 36-479-6.
- (3) Computation. The area of a projecting sign is equal to the area of one of the sign's faces, as illustrated in Figure 36-479-8.

| PROJECTING SIGN REQUIREMENTS | | | | | |
|-------------------------------------|--|--|--|--|--|
| ermitted rontage Types | Shopfront, General, Workshop/Warehouse | | | | |
| ign Area | 40 sq ft maximum per face; refer to Figure 36-479-2 for maximum per frontage | | | | |
| leight | 12 ft maximum sign length, 8 ft minimum clearance to walk required | | | | |
| ocation on the suilding or Site | Permitted on all facades; sign and structural supports shall not extend above the eave or parapet | | | | |
| lacement on the suilding or Site | Shall not project closer than 6 ft from back of curb | | | | |
|)uantity | 1 per building per street frontage; 1 per building per parking lot frontage; 1 additional projecting sign permitted per tenant maximum 4 sq ft. | | | | |
| nternal lumination | Permitted for individual letters and logos | | | | |
| faterials | Solid wood, metal, masonry & neon glass; Plastic & synthetics permitted only as separate alphanumeric characters or logos | | | | |

FIGURE 36-479-6 Projecting Sign Requirements





Sample sign type regulations, illustrated with specific dimensions and parameters for the type.

| | PERMITTED SIGN TYPES BY FRONTAGE TYPE | | | | | |
|--|---------------------------------------|---------|------------------------|-------------------------|--|--|
| = PERMITTED= PROHIBITED | SHOPFRONT | GENERAL | APARTMENT/ ROWHOUSE | TOWNHOUSE/ YARDHOUSE | | |
| SIGN TYPES | | | | | | |
| WALL SIGN | • | • | 0 | 0 | | |
| PROJECTING SIGN | • | • | | | | |
| AWNING SIGN | • | • | • | | | |
| CANOPY-MOUNTED SIGN | • | • | • | | | |
| WINDOW SIGN | • | • | | | | |
| MONUMENT SIGN | | ٠ | ٠ | 0 | | |
| PED-SCALE POLE-MOUNTED SIGN | | • | • | | | |

Sample table of permitted, defined sign types by district or frontage type.

Parking

The goal for parking in any downtown zoning should be to encourage the use of existing spaces and allow for a reasonable amount of new parking when those existing spaces will not fulfill the need.

Potential Off-Street Parking Regulations

Currently, the B-2 zoning covering the majority of the downtown does not require any off-street parking spaces for non-residential spaces and 50 percent of the required spaces per dwelling unit (.75 spaces per unit). These requirements are an excellent start towards reducing the utilization of valuable space and development dollars in the downtown for parking.

In the interim, we recommend the continuation of these requirements with the following changes. To encourage use of available parking, we recommend adding a maximum amount of off-street parking amount for both non-residential and residential uses. Additionally, the amount of parking that could be located on another parcel should be increased. Currently, Section 1321.01 I.1. allows only 50 percent of the parking to occur on another parcel. With the 400 foot walking distance limitation, this could be increased to 100 percent of spaces.

As the parking authority gains management of more parking in the downtown, and the need for additional off-street spaces is reduced, the residential requirement could also be removed. In this situation, parking maximums should be applied.

Potential Bicycle Parking Regulations

Specific bicycle parking requirements, especially for residential uses should also be added. These requirements should not be tied to vehicular parking, but appropriate parking should be required by use. For residential uses, these should include at least one protected space per bedroom. Larger scaled non-residential developments should also be required to provide spaces for employees and visitors, though streetscape will likely provide most of the visitor spaces and should be counted towards fulfilling the requirement.

Administration

The potential regulations discussed in this document are intended to be clearly stated, highly objective, easily administered standards. The goal is to reduce the negotiation process and make development as easy as possible in the City. The intent is to retain the current process of administrative development approvals.

Design deviations or exceptions could be allowed with separate review and recommendation by the Planning Commission. Deviations could be written fairly specifically, for items that known exceptions will be desired. Or, exceptions could be written more broadly to allow significant variation from the written requirements. Broader exceptions could also be sent to the City Council for review.