



# Assessment of Building Projection Regulations

DCMR Title 12: Construction Code  
Chapter 32 - Encroachments



DC Office of Planning  
Friday, October 21, 2016



## **Review of DCMR Title 12: Construction Code, Chapter 32 – Encroachment**

Friday, October 21, 2016

In Spring 2016 the Department of Consumer and Regulatory Affairs requested that the Office of Planning review *DCMR 12: Construction Code, Chapter 32 –Encroachments* as part of their agencies 2015 update of the construction code. This report included an assessment of the District of Columbia’s projection regulations, their intent, and how they have evolved since 1872 as a basis for recommending changes to be considered as part of the 2015 update. Previous versions of the code reviewed and analyzed to inform this report include those published in 1872, 1878, 1882, 1887, 1889, 1892, 1897, 1902, and 1930; sections of the 1917 and 1941 code were also reviewed.

### Introduction

The national and international image of Washington, D.C., is closely associated with the National Mall and its iconic federal buildings and institutions. But beyond the mall where the residents of the city live, work, and shop are residential neighborhoods and commercial districts with an identity and character of their own. Washington’s limit on building heights and public parking – the landscaped area lining residential streets - are recognized as well-established traits associated with our city. Building projections are extensions of buildings into the sidewalk or areas designated as park land and regulated as part of *DCMR Title 12: Construction Code*. They are a third and underappreciated defining characteristic of Washington, DC, that creates a comfortable pedestrian scale distinct to the streets and avenues of the District of Columbia.

The construction code has consistently regulated building projections since 1872 and has left a remarkable imprint on Washington’s identity, one defined by bay windows, oriel windows, towers, show windows, and porches that extend over a property line or building line and into an area regulated as public space. Building projections define Washington like saw-toothed shaped skyscrapers define Manhattan, Victorian Brownstones define Boston, and colorful Queen Anne Style homes define San Francisco. Each of these

associations is the result of long-lasting building traditions that have given certain cities individual architectural characteristics.

Consistently regulated building projections perform a public benefit by creating interesting residential streets lined with varied facades and vibrant commercial districts with wide sidewalks and active storefronts. Sensitive and thoughtful revisions to the regulations that allow projections should only be made with a full understanding of their intent and purpose. Making changes to projection regulations without the benefit of this understanding risks adopting regulations that will detract from the safety and aesthetic qualities that define the District of Columbia.

#### Origins of Projection Regulations in Washington, DC

Municipal building codes were first adopted to protect the health, safety, and general welfare of the public and community. Washington's first building code was adopted with the foundation of the city in 1790 by George Washington when he established a set of eight guidelines and regulations to control materials, manner of building construction, and lot usage. Regulations concerned with aesthetics were similar to those for Philadelphia and were intended to complement the L'Enfant plan. Their implicit goal was to establish the capital as a substantial city. A requirement that all street-facing buildings be parallel to the line of the street was intended to define vantage points and view corridors to monumental buildings. A regulation related to inspecting "party" walls – shared walls between two buildings on adjacent properties – implied that unbroken facades of new homes were expected to line streets and avenues.

The 1790 building requirements prohibited building projections beyond the property line and into the street right-of-way, but this changed when areaways – below-grade projections open to the sky that let light and air into basements and cellars – were allowed in 1794. Other building projections were prohibited until 1845, when the Board of Aldermen and the Board of Common Council passed an act loosening restrictions. That act

allowed vaults, steps, colonnades, and open porches to project beyond the property line, regulated according to the width of the adjacent sidewalk.

Washington was one of many North American cities to adopt more robust building codes in response to the rapid growth driven by speculative building during the early 19<sup>th</sup> century that was characterized by dense neighborhoods. When a disaster happened, this unregulated construction contributed to high costs for property owners and businesses. For example, the year before the great Chicago fire of 1871, Lloyd's of London stopped writing policies in Chicago because of the haphazard manner in which construction was proceeding in that city. Other insurance companies had difficulty selling policies at the high rates they had to charge. Despite high premiums, many insurance companies suffered great losses when fires spread out of control and destroyed block after block of homes and businesses in Chicago and elsewhere.<sup>1</sup>

There was a growing awareness of the need for a more stringent building code soon after the Civil War. The National Board of Fire Underwriters, organized in 1866, realized that adjustment and standardization of rates were merely temporary solutions to a serious technical problem. This group emphasized safe building construction, control of fire hazards, and improvements in water supplies and fire departments. This advocacy was one factor that led to municipalities across the United States to adopt or update their building codes with more rigor than previously.<sup>2</sup>

Washington, DC, adopted its first comprehensive building code in 1872, marking a dramatic change in how the municipal government regulated new construction in the capital city. It authorized bay windows, allowed by legislative act in 1871, and projecting awnings. In 1878, the code was updated based on recommendations proposed by a committee that included towers and show windows as allowable projections.

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<sup>1</sup> Cote, Arthur E. and Grant, Casey C., Safety in the Built Environment, 1988. Chapter 3: Codes and Standards for the Built Environment. Pp. 1-51.

<sup>2</sup> Ibid.

This revised code also adopted the first of many increasingly specific regulations for projections, controlling how much they could extend into public space and under what conditions.

### A Projection Paradise

Building projections were an architectural form ideally suited to late-19<sup>th</sup>-century Washington. Pierre L'Enfant's 1793 plan for the capital city incorporated wide rights-of-way on an imperial scale that far exceeded what the District's transportation system warranted. The difficulty in maintaining such wide streets gave rise to the 1870 Parking Act, an act of Congress that allowed the District to set aside part of the right-of-way as park land. The systematic creation of "public parking" designated an area within the right-of-way to be predictably beyond the sidewalk and under the maintenance responsibility of the adjacent property owner.

The District's growing population and affluence drove the construction of homes and businesses, rapidly transforming large sections of the city into residential neighborhoods and commercial corridors. The number of residents expanded from 131,700 in 1870 to 278,718 in 1900.<sup>3</sup> These residents included Washington's own set of nouveaux riches, many coming to the District because they could not break into established social circles in other large American cities.<sup>4</sup> They brought with them the aspiration to live in fashionable homes designed in the Victorian styles. Building projections were characteristics of this style, one that incorporated eclectic ornamentation like turrets, bay windows, and other embellishments that eschewed flat planes and symmetry.

The alignment of a new building code with an expanding housing market and demand for fashionable homes created an urban form and architectural style recognized as distinct to Washington. In 1896, the *New York Daily Tribune* extolled the residential architecture of the city and specifically identified building projections

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<sup>3</sup> Data provided by "District of Columbia - Race and Hispanic Origin: 1800 to 1990" (PDF). United States Census Bureau. 2002-09-13. Retrieved 2008-07-29. Until 1890, the U.S. Census Bureau counted the City of Washington, Georgetown, and unincorporated Washington County as three separate areas. The data provided in this article from before 1890 is calculated as if the District of Columbia were a single municipality as it is today. To view the population data for each specific area prior to 1890 see: Gibson, Campbell (June 1998). "Population of the 100 Largest Cities and Other Urban Places in the United States: 1790 to 1990". United States Census Bureau. Retrieved 2008-07-29.

<sup>4</sup> Jacob, Kathryn Allamong, "Like Moths to a Candle: the Nouveaux Riches Flock to Washington, 1870-1900", Pps 79 to 96. Urban Odyssey, A Multicultural History of Washington DC. Francine Curro Cary. 1996.

as a defining characteristic encouraged by regulation. These projections were described as desirable embellishment that a homeowner, “cannot have in most large cities. [But here] he can with impunity carry projections from his house beyond the building line, constructing bay windows and porches with an indifference to his neighbor’s light that in New York would keep the lawyers busy every working day of the year.”<sup>5</sup> In 1909, Michael Heister observed in the *Washington Post* that, “Washington is ideally situated for the display of picturesque residences and imposing public structures and is annually becoming more and more a city in a forest with pleasing and harmonious architecture along its streets and avenues.”<sup>6</sup>

Projections were first defined as parts of buildings crossing a property line into the street right-of-way, but the definition would expand to include parts of buildings crossing over restriction lines adopted after 1900 to implement the District’s Highway Plan. Unregulated subdivision of property outside the L’Enfant Plan had resulted in a hodge-podge of uncoordinated streets that did not align with each other. The growth of the city prompting these subdivisions led to the District of Columbia Organic Act of 1871 that repealed the individual charters of the cities of Washington and Georgetown and established a new territorial government for the whole District of Columbia. Though Congress repealed the territorial government in 1874, the legislation was the first to create a single municipal government for the federal District and reflected growing concern of Congress for a much larger area. Congress recognized the problem of the uncoordinated subdivisions and ordered the Army Corps of Engineers to develop a street plan – the Highway Plan - for all of the District of Columbia that future subdivisions were required to follow. Streets created by this plan were to have a minimum width of 90 feet, but in order to reduce the amount of private property needed for dedicated roads the District allowed the establishment of building restriction lines on private property. The line defined an area restricted to

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<sup>5</sup> “Washington Houses – Beauties and Peculiarities of Some Homes in the National Capital”, R.C., *New-York Daily Tribune*, February 9, 1896, Pg. 23.

<sup>6</sup> “Architecture of the District”, Michael Heister, *The Washington Post*, October 7, 1909, Pg. A12.

development and that counted toward the width of the street.<sup>7</sup> Building projections could extend into this area the same way projections could extend over a property line into a street right-of-way.

### Protecting Public Infrastructure

Between 1871 and 1941, the District fine-tuned regulations as it better understood how projections impacted the public right-of-way. Since 1872 the code had included limits on how far projections could extend over a property line with a minimum distance that had to be maintained from the street curb. The code made clear these distances were adopted to protect public infrastructure, leave room for sidewalks, and allow for the public parking.

Minimum distances from the curb were first applied to underground vaults. Because vaults were below grade, covered, and did not restrict public use of the surface, they were allowed to extend further into public space than other types of projections. The 1872 code allowed vaults to project all the way to the curb, a generous provision that was replaced six years later with a requirement that they maintain a minimum four-foot distance from the back of the curb. This was eased in the 1882 code that generally maintained the four-foot distance but allowed their extension to the curb on business streets if they did not interfere with street lights, trees, and utility lines. The 1887 code stated more specifically that vaults needed to maintain three feet from street lights and four feet from trees. In 1889 limits for vaults on business streets remained the same, but the minimum distance vaults needed to maintain from the curb on all other streets was increased from four to six feet. By 1892 the code required a special permit for vaults and included an expanded minimum distance from the curb that varied depending on street width.

Above-grade projections and areaways initially had limits only on how far they could extend beyond the property line into public space; these limits were later supplemented with the minimum dimensions needed from the curb applied to all projections in 1892 – above-grade projections had to comply with the most

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<sup>7</sup> D.C. Code § 7-117 (1966) (original enactment May 31, 1900, 31 Stat. 248, ch. 599, § 2) (Appx at Tabs 3 & 4).

restrictive dimension. No above-grade projection limits were defined in the 1872 code, but by 1878 the code required that they maintain a clear and unobstructed path 12 feet from the curb in the cities of Washington and Georgetown. It further clarified that sidewalks on streets less than 80 feet in width should maintain as uniform a width as practical. The minimum clearance from the curb was reduced to 10 feet by 1887, but applied to all city streets regardless of width. By 1892 a sliding scale was introduced that required a greater distance from the curb for wider streets and included three categories: 1) projections on streets 90 feet or wider needed to maintain 12 feet distance from the curb; 2) more than 90 feet but less than 70 feet needed to maintain 10 feet; and, 3) streets 70 feet and less had to maintain 8 feet. This sliding scale fluctuated until limits for five street widths were adopted – the same used today. A new provision stating new projections could be further limited and not be considered by-right if it encroached into an established sidewalk was adopted in 1902.

Projection limits consistently took into consideration the public parking that was created throughout the city as part of the city's park system after 1870. Beginning in 1878 the projection regulations ensured that building projections did not overwhelm this area of public space set aside for landscaping. This was especially the case for areaways, below-grade projections that were related to the practical matter of getting light into basements or cellars and had no ornamental purpose.

Projection and parking regulations worked together and were used to great effect. Police regulations governing public space created a consistent, park-like appearance along city streets. They required continuous landscape areas by limiting paving, maintaining existing grades, and establishing constant heights for fences, retaining walls, and hedges. The uniform public parking framed the picturesque irregularity created by building projections. The wide streets and public parking were notable factors contributing to the successful use of Washington's building projections. Architecture critics of the day observed, "The same porches, bay windows



and stone steps which in a crowded city would prove unbearably inconvenient and sometimes inartistic fall naturally into the wide perspective which the spacious scale of Washington permits.”<sup>8</sup>

Each version of the code would add restrictions on projections with greater specificity. The number of commercial streets that allowed fewer types of projections increased from just Pennsylvania Avenue in 1878 to more than 55 in 1902. Bay windows were not allowed on streets narrower than 40 feet in 1892. A minimum street width of 60 feet was required for any type of projection other than steps, and no projection was allowed on streets planned to be widened by 1902. By 1930 the code included a list of streets where projections of any kind were prohibited.

### Creating the Picturesque City

From their inception, projection regulations focused on creating facade embellishments that were proportional to buildings, encouraged architectural variety, and created pedestrian-oriented commercial areas. Throughout the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, these regulations were tailored to create bay windows, towers, and oriels with picturesque qualities associated with Victorian architecture: advancing and receding of facades, breaks and variations of form, variety of massing and parts, and a visual richness emphasizing verticality.

### *Widths of Projections*

Regulations that achieved this picturesque aesthetic initially focused on bay windows, towers and oriels. Limits on the widths of bay windows and towers were adopted 1878 and were refined over time to ensure they were secondary to the primary building façade and proportional to the scale of the building. This code established a maximum bay or tower width of 14 feet and required a minimum distance equal to the length of three bricks be maintained between them (Figure 1). By 1882 the minimum width between projections had

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<sup>8</sup> “Washington Houses – Beauties and Peculiarities of Some Homes in the National Capital”, R.C., *New-York Daily Tribune*, February 9, 1896. Pg. 23.

evolved into a sliding scale based on the width of the building – facades over 20 feet wide were required to maintain three bricks in width between projections and those less than 20 feet were required to maintain two bricks in width. These requirements were abandoned in the 1892 code and replaced with a formula for determining bay window widths based on facade width - single projections on houses more than 24 feet wide could increase in width at a rate of 2 inches for each additional foot in width of the house and two or more projections on houses 24 feet or more in width could increase 6 inches for each additional foot in width of house.

The building code's method of limiting maximum width to maintain a vertical profile for bay windows continued into the 20<sup>th</sup> century, responding to the increasing size and scale of buildings. The 1917 code established a maximum width of any single projection to be two-thirds the total amount of all allowable projections. Maximum widths were associated with interior spaces in the 1930 code that defined bay windows as projections, "from rooms or hallways (that) form recesses not separated by partitions . . .".

Minimum widths for bay windows, as well as minimum widths for buildings that could obtain permits for certain projections, were established to ensure that bay windows maintained a proportional scale to building façades. A minimum width of 6 feet was included in the 1892 code and increased to 8 feet by 1902, the same year that a minimum 16 feet building width was required for any projection other than steps. By 1930 the minimum width had increased to 9 feet, although that code allowed oriels to be less than 8 feet in width.

### *Projection Types*

Variety of architectural embellishment was encouraged by allowing several types of distinct projections. The 1878 code was the first to specify the distinction between towers, show windows, and bay windows. Towers were, "any projection for ornamental door entrance or right-angle projection designed exclusively for ornamental windows or for buttresses." Show windows were limited to windows, "in which goods are displayed for sale." Bay windows were, "any projection other than a tower . . . or show window". Oriels were defined in

1887 as “a projection for a window above the first floor.” Distinct regulations evolved separately for each until 1930 when the same requirements applied to towers, oriels, and bay windows.

### *Bay Windows*

The building code ensured visual richness and variety in the design of bay windows by regulating how they connected with the building and height, as well as a proportional relationship between the projection and the building. The 1892 code differentiated between bay windows that extended from a building at a right angle that could project up to 4 feet from those that were not at a right angle, such as circular or hexagonal features, that could project up to 5 feet. It also required that bay windows less than 8 feet in width be limited to a total projection of 4 feet and that no right angle portion of the bay window could extend more than 3 feet from the façade. To take full advantage of the amount of projection code allowed, bay windows were required to have an articulation at the corner of that projection (Figure 2). The 1902 code extended the corner articulation requirement to oriels less than 10 feet in width. This code also included requirements that ensured more varied facades and roof lines by regulating height of bay windows and towers. Bay windows could not extend beyond the window sill the top story while towers were to extend above the roof line (Figure 3).

### *Towers*

Towers were regulated similarly to bay windows with few exceptions. Between 1878 and 1889 they were the only projection type that could include entrances and one of the three types allowed in commercial areas (the other being show windows and areaways). The distance they could project into public space and their height fluctuated. Towers could project out 6 to 12 inches less than bay windows until the 1887 code applied the same limits to both. Their height was unspecified in 1892, then required to be above the roof line in 1902. The 1902 code also clarified that towers extending to corners did not count toward the total projection allowed for each façade, but did count toward the width allowed for all projections. Their distinction was lost by 1930 when that code stated that towers needed to conform with the requirements for bay windows.

*Oriel Windows*

Oriel windows, bay windows above the ground floor, were first explicitly allowed in 1887 and generally followed the same regulations for bay windows with a few exceptions (Figure 4). In 1892 they were allowed on business streets and other streets less than 40 feet in width, but had to maintain a minimum 12 feet overhead clearance. The 1902 code included several changes for oriels: they were no longer allowed on business streets and the minimum street width where they could be constructed increased to 60 feet. That same year they were allowed over alleys 15 feet or more in width, but could not project more than 2 feet 6 inches and had to maintain 12 feet overhead clearance. By 1930 they were required to conform to the same limits for bay windows other than minimum width, were no longer allowed over alleys, and now precluded from commercial and industrial districts.

*Show Windows*

Show windows were consistently restricted to buildings or streets with a designated commercial use and their projection limits remained fairly consistent. In 1878 they were allowed on stores or businesses, unlimited in width other than 12 inches from the party line, could project up to 32 inches on street 90 feet or less and 36 inches on streets wider than 90 feet, and were one of only three types of projections allowed on Pennsylvania Avenue. Show windows were not allowed on designated commercial streets in 1882, but returned as an allowed projection in 1887. In 1892 show windows were limited to one-story in height and could project up to three feet on all streets with two exceptions: they were limited to two feet on streets 40 to 60 feet in width and prohibited on streets less than 40 feet in width. Their allowable height was extended to 18 feet by 1930 before show windows were no longer allowed sometime after 1941. As part of the 2008 construction code update, show windows were re-introduced as an allowed projection that must comply with width requirements for bay windows.

*Porches and Balconies*

Porches and balconies are two projections added to regulations around the turn of the 19<sup>th</sup> century. Regulations for porches were included in the 1892 code. They were prohibited on business streets, unlimited in height, and allowed to project into public space the same as bay windows. They could not be enclosed by solid walls and could be no more than five feet above the adjacent grade. From 1902 on they were allowed to be two-stories in height and their width depended on whether the porch was built with other projections. Porches were unlimited in width when the only other above-grade projection was steps. When built on homes with bay windows, oriel windows or towers, the width of the porch was counted toward the total width allowed for multiple projections.

Balconies did not appear as allowed projections until 1902 when they were permitted to project four feet on residential streets 70 feet or more and three feet on business streets or streets less than 70 feet wide. Their widths were “restricted as may be considered advisable in each case.” These limits remained relatively unchanged until some point after 1941 when, similar to porches, they were allowed to be unlimited in width unless built with other projections.

*Responding to Changes in Architecture and Commerce*

Projection regulations have maintained their basic shape, form, and intent since the 1870s, but specific requirements and the type of projections allowed have changed in response to architectural tastes and the changing needs of the commerce. No longer concerned with creating just a picturesque capital city, bases and water tables more in keeping with Beaux-Arts design principles were allowed projections in 1892. Pilasters were allowed in the 20<sup>th</sup> century as colonial revival and other formal styles became popular. By 1930, at the beginning of the modern era, requirements for bay windows were greatly simplified and regulated only width and amount of projection. As the scale of commerce and commercial activity expanded, so did the type of

projections allowed for commercial uses when loading platforms, scales, and marquees were allowed in the 1930 code.

#### Minimizing Impacts on Adjacent Property

A complicated and short-lived regulation attempted to minimize the impact of a projection on an adjacent property. This regulation determined the public space a projection could occupy by restricting it from going beyond an area determined by a line drawn at a 45 degree angle into public space that started at the corner of a property (Figure 5). This created bay windows with angled walls that allowed room for light and air to flow between projections built on neighboring properties (Figure 6). Accommodations were made for lots with “broken” or curbed building lines and the requirement did not apply to corner towers that did not impact adjacent buildings.

#### Special Corridors, Commercial Districts, and Residential Areas

Building projections have always been used to create a distinct character for different parts of the city. The code explicitly limited building projections on Pennsylvania Avenue west of the Capitol to towers, show windows, areaways, and colonnades. As the pre-eminent avenue in the city, Pennsylvania Avenue between the Capitol and Washington Circle was singled out specifically for allowing towers projecting up to 36” on all corners made by lettered streets. The impact of the regulations specific to the avenue can be seen by the design of the building at 633 Pennsylvania Avenue NW, at the corners of 7<sup>th</sup> and C streets (Figure 7). Show windows at the ground floor added to the pedestrian experience on the avenue and anchored the base of the building. The towers at the corners concentrated the architectural embellishment on the Pennsylvania Avenue, leaving a more restrained façade on the upper floors. As others towers were constructed along the avenue, the view towards the Capitol building became quite picturesque (Figure 8). In addition to Pennsylvania Avenue, the code identified two other locations along avenues where corner towers were allowed: 1) corners where avenues intersected avenues; and, 2) corners where “parked” streets intersected avenues.

Soon after 1878 the building code began to differentiate where projections were allowed based on the predominant uses emerging along certain corridors. In 1882 the code restricted building projections other than colonnades on sections of 7<sup>th</sup>, 9<sup>th</sup>, F, and D streets NW. These streets were in the center of the city; most had street cars and all had high concentrations of commercial activity. In 1887 sections of Pennsylvania Avenue NE and D Street NW were added to the list as commercial areas expanded. The type of projections allowed on those streets also expanded including corner towers, show windows, and areaways. That same year, colonnades were allowed on Pennsylvania Avenue only. By 1892, these streets were included on a longer list of “business streets” noted for having additional restrictions. The list of business streets continued to grow and by 1902 included 55 streets. The 1930 building code replaced the list of businesses streets with zoning classifications after the District of Columbia adopted its first zoning code in 1920. Restrictions that had applied to business streets now applied to properties zoned Commercial One and Commercial Two; the 1941 code applied these same restrictions to industrial zones.

The types of projections allowed on commercial streets were fewer than those allowed on residential streets and different kinds of projections related to commercial uses were added or removed over time. Commercial businesses and streets were defined by towers that emphasized corners and projections that created a strong ground floor: show windows, awnings, and colonnades. The notable exceptions are the allowance of oriel windows in the 1892 code and steps on business streets that projected up to 3’ in the 1902 code (Figure 9). In contrast, the type of projection allowed on residential buildings after bay windows were first allowed in 1871 proliferated throughout the late 19<sup>th</sup> and early 20<sup>th</sup> centuries: steps up to 12’, awnings, carriage steps, and towers in 1878; oriel windows and port cocheres in 1887; porches, bases, and water tables in 1892; balconies and marquees in 1902; and, pilasters in 1930.

The effect of these regulations created two very different characters for commercial and residential streets. Building projections on commercial streets emphasized the pedestrian experience at the ground floor with show windows predominantly of glass displaying merchandise and awnings providing shade and protection

from inclement weather (Figure 10). Upper floors on these building were embellished, but with ornamentation that maintained a flat façade. By comparison, projections on residential buildings created a more domestic scale (Figure 11). Steps, towers, bay windows, and oriels added visual interest to simple and grand homes. They were complemented by the public parking area that provided space for them to be fully viewed without appearing crowded by the sidewalk.

### Requests for Modifications

As the city developed with a wide range of street widths and property shapes, the District of Columbia needed flexibility to evaluate special situations on a case by case basis. While the 1917 the code stated that projection amounts listed were the maximum allowed and could be further restricted, it also allowed for modifications from requirements. That code specified buildings requesting a modification had to occupy the full front of a block and the request could not interfere with adjacent buildings. Approval of the District Commissioners could permit a modification if the requested projection met five criteria: was for a building embellishment; did not exceed the total amount of the projection allowed by regulation; did not have as the primary object the occupation of additional public space or changes to interior arrangements; did not impact the light and air of adjacent property; and, did not interfere with circulation on streets or sidewalks. Subsequent codes have maintained the general spirit of these criteria for considering modifications to the projection regulations.

### The Projection Code Today

The projection regulations in force today retain many of the requirements that evolved during the late-nineteenth and twentieth centuries with few additions but many edits. The most significant addition since 1941 is a provision for “foregone construction”, adopted in the 1970s to implement a plan to widen Pennsylvania Avenue between the Capitol and 15th Street NW prepared by the National Capital Planning Commission. This allowed projections up to 14 feet on upper floors to recoup square footage lost by pulling a building back from



the property line – in effect foregoing construction - along Pennsylvania Avenue. Minor edits over time have reduced the regulations clarity and eroded their original intent:

1. Elimination of maximum widths for bay windows, towers, and oriels have resulted in massive building projections that appear to be the primary façade of the building;
2. Permitting bay windows and other projections in commercial districts has diminished the contrast that differentiated commercial and residential areas;
3. Deletion of definitions of key terms obscured the purpose of certain projections; and,
4. A loss of understanding the aesthetic value of projections has led to approval of non-compliant permits or modification requests that are in direct conflict with the regulations’ intent.

The gradual erosion of regulations related to aesthetic goals happened over decades. As early as 1930, local architect Appleton P. Clark, Jr. lamented that the intent of projections as attractive architectural features had been forgotten. The privilege of extending a building projection into public space had, “turned into an effort to build over all of the government space possible”, without much thought to design or beauty. Today, revisions to the code can be repositioned to restore their original intent and continue the tradition of using building projections to shape Washington’s urban form.

### Recommendations

Based on this assessment of the projection regulations, the Office of Planning has three recommendations for updating the code as part of the 2015 update and future updates:

1. Improve clarity by including definitions of key terminology and diagrams that illustrate design principles.
2. Introduce a clearly defined process for reviewing modification requests that take into account impacts on the transportation system and architectural design.

3. Complete additional studies to determine how projection regulations can be used to: create distinct characters for commercial and residential areas; enhance the urban design and form of neighborhoods, streets, and buildings; and, further current District goals, initiatives, and priorities.

**Figures**

Figure 1. 1801-8th Street NW, constructed 1880, shows the effect of early requirements for maintaining three bricks between bay and tower projections.



Figure 2. Corner articulation created by complying with the requirement that bay windows projecting at a right angle not extend more than 3' into public space.



Figure 3. Bays and windows at varying heights that create a more interesting roof line.



Figure 4. Oriels are bay window projections that do not touch the ground and typically begin on an upper floor.



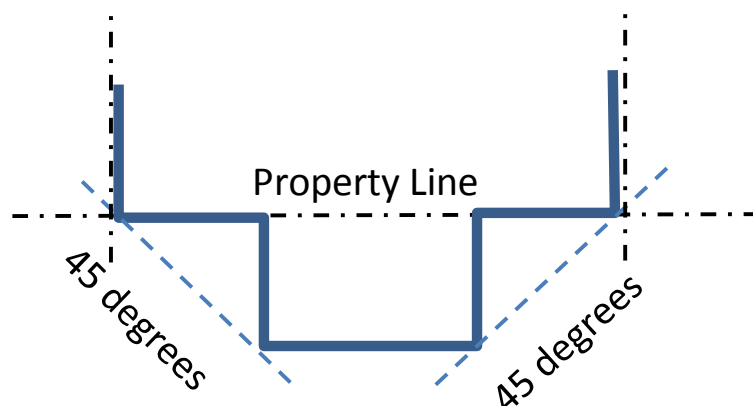


Figure 5. Method of calculating areas adjacent to facades that must be free of projections.



Figure 6. Bay window with angled sides that allow for light and air between adjacent projections.



Figure 7. 633 Pennsylvania Avenue NW on the left with corner towers at intersections of 7<sup>th</sup> Street and C Street.



Figure 8. Picturesque view of the capitol dome created by projecting towers on Pennsylvania Avenue, looking east from 15<sup>th</sup> Street NW.



Figure 9. The Sun Building at 1317 F Street NW, constructed in 1885 with oriel windows that were allowed in commercial areas for a limited time.



Figure 10. The commercial character of the 1300 block of F Street NW, defined by flat facades on upper floors and awnings and show windows enhancing the pedestrian experience at the sidewalk.





Figure 11. Shepherd's Row at Connecticut Avenue and K Street NW, showing the more articulated facades in residential areas complimented by the public parking.