

# **A Study of Local Regulation of Outdoor Advertising in 222 U.S. Jurisdictions**

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## EXECUTIVE SUMMARY

This Study examined the type and extent of land use regulation of outdoor advertising for 222 cities in the 46 states that do not impose a statewide ban on commercial outdoor advertising.<sup>1</sup> This Study found that regulation rather than prohibition remains the predominant approach for local control of outdoor advertising signs. 71.6% of the 222 cities provide some mechanism that allows new outdoor advertising signs to be constructed. These mechanisms include allowing new construction either: (1) “as-of-right” in specified areas provided that other locational, dimensional, and operational criteria are met; (2) as a conditionally-permitted use provided that locational, dimensional, operational, and discretionary criteria are met; or (3) conditioned on the removal of one or more legal non-conforming signs, provided that other locational, dimensional, and operational criteria are met.

The most significant change found since the previous Study in 2010 is the treatment of digital signs. In 2010, relatively few of the 216 cities in that Study explicitly addressed digital signs. In contrast, many more of the 222 codes in the 2014 Study now explicitly regulate outdoor advertising signs in digital format and it is apparent from the current Study that the availability of digital technology is having a profound effect on how cities regulate outdoor advertising. This is exhibited by the significant increase in the number of cities that now explicitly allow construction of new digital signs in return for the removal of one or more legal non-conforming signs. In addition, some cities are contracting to allow digital signs on city-owned property, even when digital signs are prohibited elsewhere, in order to gain revenue for the city. Both of these trends are discussed in detail in Part IV of the Study.

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<sup>1</sup> All states except Alaska, Hawaii, Maine and Vermont.

## **I. Description of Study**

This study was conducted between January 15, 2014 and December 10, 2014. I constructed a study list of 222 cities utilizing the 2012 population estimate figures from the U.S. Census Bureau. The group of 222 cities was selected by: (1) identifying all cities in these 46 states with a population of 150,000 or greater;<sup>2</sup> (2) for those states that did not have at least five cities of that size, adding up to five cities with a population less than 150,000 but greater than 100,000; and (3) for states that had no cities with a population greater than 100,000, adding the two cities in that state with the largest populations.

After downloading from the Internet the code(s) addressing land use regulation of outdoor advertising, I determined the type and extent of land use regulation or outdoor advertising for each jurisdiction. In all instances where ambiguities or omission in the official governmental publication(s) made it difficult to determine the type and extent of land use regulation outdoor advertising from the documents alone, my Research Assistant or I contacted the jurisdiction by telephone and spoke with an appropriate official prior to making the determination.

## **II. Regulation of Outdoor Advertising Signs**

### **A. Overview**

All 222 cities in the Study regulate the “physical” aspects of outdoor advertising by imposing some form of restriction on the location, size, height, illumination, etc. of outdoor advertising signs [hereinafter “signs”]. In the great majority of cities, these regulations are found in the jurisdiction’s zoning or land development code. In a smaller number of cities, the regulations are found in a separate sign code that is distinct from the zoning or land development code.

As a general matter, the Study cities’ regulation of the location, size, height, illumination, etc. of signs is best described as a continuum; *i.e.*, in most cases there are very slight differences at each interval between the most restrictive and least restrictive jurisdictions on a particular regulatory issue. Below, I have identified the most common types of sign regulations and indicated the range of the regulatory continuum for each type.

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<sup>2</sup> Based on the U.S. Census Bureau’s American Fact Finder 2012 Population Estimates for Places Over 50,000 Population.

## **B. Regulation of Sign Locations**

All of the Study cities regulate the zoning districts where new signs may be constructed or relocated and/or existing signs are allowed to remain. The most common form of regulation permits the construction of new signs in one or more non-residential districts while prohibiting their construction in residential districts and other specified districts. It is also common for cities to prohibit new signs in some portion(s) of zoning districts in which they are otherwise permitted. Among the more common terms for such areas are: “sub-area,” “overlay district,” or “scenic corridor.”

Location regulations also restrict the sites (*i.e.*, lots or structures) where signs may be located within the zoning districts where they are permitted. These provisions normally state minimal distances that must be maintained between a site containing a sign and specified land uses or natural features, *e.g.*, parks, residential districts or structures, scenic districts, specified roadways, rivers, lakes, etc.

Locational regulations also specify where sign structures may be located on a lot or structure. Such regulations typically require setbacks from property lines and/or streets and prohibit signs in the public right-of-way or in “visibility triangles” at traffic intersections. More restrictive regulations may also prohibit signs painted on building walls or placed on the roofs of buildings. Another common form of restrictive regulation is to allow signs only on vacant lots; *i.e.*, lots that have no other structures, including other types of signs, such as an on-premise sign.

Locational regulations also may impose horizontal and/or vertical “spacing” or “separation” requirements. For example, requiring that sign structures be spaced at least 500 (or 600 or 1,200, etc.) feet from each other<sup>3</sup> or prohibiting signs that are “stacked” one on top of another or placed together horizontally “end-to-end” or “side-by-side.”

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<sup>3</sup> Such spacing requirements frequently distinguish regulatory treatment based on whether the signs are on the same or opposite sides of the street. For example, sign “A” must be distanced at least 1,000 ft. from sign “B” on the same side of the street, but need only be distanced 500 ft. from sign “C” on the opposite side of the street.

### **C. Dimensional, Structural and Operational Regulations**

All of the Study cities that allow the construction of new signs or the maintenance of legal nonconforming signs impose one or more of the following regulations on sign structures, dimensions or operations.

1. Restrictions on the area, height, or width of the sign structure, including regulation or prohibition of “stacked” or “end-to-end” or “side-by-side” signs, or specifying a permissible maximum angle for “V-type” signs.
2. Restrictions on the number and/or type of support columns.
3. Regulation of the appearance of structural components (e.g., support columns, ladders, walkways, bracing, ends, etc.) as regards screening, landscaping, color, etc.
4. Regulation of means, direction, and intensity of illumination.
5. Regulation of color or reflectivity of a sign’s structural components.
6. Restriction or regulation of “flashing, blinking or animated” and “tri-vision” signs.
7. Regulation of the directional orientation of the sign-face towards either the street frontage or specified roadways.
8. Regulation of “embellishments,” “extensions,” or “cut-outs” (temporary size extensions).
9. Requirements for maintenance and/or landscaping of the base of the sign structure.

### **D. Comparative Evaluation of Maximum Permitted Size of New Signs**

Aside from prohibition on new construction (see III below), the regulatory mechanism that is most suitable for comparative evaluation based solely on the text of the regulation is the maximum permitted size of the new signs. 84 of the 222 Study cities (37.8%) permit new construction “as-of-right.”<sup>4</sup> While the maximum permitted size of

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<sup>4</sup> New construction is permitted “as-of-right” if a permit to construct a new sign is issued when an applicant meets prescribed objective standards for locational and other regulatory criteria and the permit is not conditioned on the removal of any existing sign(s).

new signs in these cities varies significantly, from a low of 150 sq. ft. to a high of 1,200 sq. ft., 58.3% (49 of 84) permit a maximum size of at least 672 sq. ft. and 83.3% (73 of 84) permit a maximum size of at least 300 sq. ft.<sup>5</sup>

**1. Examination of 49 cities permitting a maximum size of at least 672 sq. ft.**

- a. 55.1% of the cities (27 of 49) have adopted 672 sq. ft. as the maximum size, with the remaining 44.9% (22 of 49) allowing signs over 672 sq. ft.
- b. 28.6% of the cities (14 of 49) permit signs of at least 750 sq. ft.
- c. The 48 cities were geographically dispersed throughout the United States.

**2. Examination of 24 cities permitting a maximum size of at least 300 sq. ft. but less than 672 sq. ft.**

- a. 58.3% of the cities (14 of 24) permitted a maximum size over 300 sq. ft., with 11 of those 14 (78.6%) permitting a maximum size between 400 and 600 sq. ft.
- b. 41.7% of these cities (10 of 24) permitted a maximum size of exactly 300 sq. ft.
- c. As with the 49 cities permitting maximum sizes of at least 672 sq. ft., the 24 cities permitting a maximum size of at least 300 sq. ft., but less than 672 sq. ft., were geographically dispersed throughout the United States.

**3. Only 13.1% of the cities (11 of 84) that allow new signs “as-of-right” limit sign size to less than 300 sq. ft.**

### **III. Prohibition on New Construction and Regulation of Nonconforming Signs**

As previously stated, the various locational, dimensional, structural and operational regulations for outdoor advertising enacted by the Study cities are best described as occupying a continuum. Significant distinctions among the Study cities do appear, however, when we consider the combined effect of a jurisdiction’s regulation of new sign construction and legal non-conforming signs.<sup>6</sup> Below, I have identified the most

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<sup>5</sup> These correspond to industry standards for a “painted bulletin” (672 sq. ft.) and “30 sheet” poster (300 sq. ft.)

<sup>6</sup> A “legal non-conforming sign” is a sign that, when erected, was in conformity with all applicable regulations, but is not in conformity with regulations that were subsequently enacted.

common approaches to regulating new sign construction and legal nonconforming signs. In each case, these approaches are ordered from least to most restrictive.

### **A. Regulation of New Sign Construction**

- 1. New Construction Permitted “As-of-Right”:** A permit to construct a new sign will be issued so long as an applicant meets prescribed objective standards for locational and other regulatory criteria.
- 2. New Construction Conditionally Permitted:** A permit to construct a new sign is made subject to a discretionary decision that an applicant has met both objective and subjective standards for locational and other regulatory criteria.
- 3. New Construction Must Meet “Cap and Replace” Requirements:** In addition to meeting all applicable locational and other regulatory criteria, the construction of new signs is permitted only if one or more existing signs are removed or “relocated” for each new sign to be constructed.
- 4. New Construction Prohibited:** Construction of new signs is totally prohibited.

### **B. Regulation of Legal Non-Conforming Signs**

#### **1. Note on Protection of Legal Non-conforming Signs Under the Highway Beautification Act**

The federal Highway Beautification Act of 1965 (23 USC §131), as amended in 1978, requires that just compensation be paid to the owner of any outdoor advertising sign within the jurisdiction of the Act that is ordered to be removed.<sup>7</sup> The primary effect of the Act’s compensation provision is to preclude local jurisdictions from using an “amortization” provision – requiring that a legal non-conforming sign be removed after a specified period

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<sup>7</sup> 23 USC §131(g) provides: Just compensation shall be paid upon the removal of any outdoor advertising sign, display, or device lawfully erected under State law and not permitted under subsection (c) of this section, whether or not removed pursuant to or because of this section. The Federal share of such compensation shall be 75 per centum. Such compensation shall be paid for the following: (A) The taking from the owner of such sign, display, or device of all right, title, leasehold, and interest in such sign, display, or device; and (B) The taking from the owner of the real property on which the sign, display, or device is located, of the right to erect and maintain such signs, displays, and devices thereon. NOTE: Congress has failed to appropriate funds for the 75% federal share for the past three decades.

of time – as a substitute for just compensation measured as the economic value of the sign to the owner. The Act’s protection against uncompensated removal does not extend to situations where a sign is destroyed, abandoned or discontinued. While a discussion of the just compensation provision of the Act is beyond the scope of this Study, it is important to note that many cities’ sign regulations do not differentiate between outdoor advertising signs and on-premise signs as regards regulatory treatment of legal non-conforming signs. This can lead to confusion when a local government seeks to apply a general requirement allowing for sign removal by amortization to an outdoor advertising sign protected by the just compensation provisions of the Act.

- 2. Legal Non-Conforming Signs Permitted to Remain or Relocate:** This is the approach to regulation of legal non-conforming signs seen in the majority of sign codes. Legal non-conforming signs are permitted to remain, but may not be rebuilt if “damaged” beyond a certain percentage or “destroyed” and must be removed if “abandoned.”<sup>8</sup> The Rules implementing the just compensation provision of the Highway Beautification Act also utilize this approach. A significant recent change has been the significant increase in the number of cities that permit the relocation of legal non-conforming signs through provisions that permit the construction of a new digital sign at a conforming location in return for the removal of one or more non-conforming signs. This issue will be in discussed in detail at --- of this Study.
- 3. Legal Non-Conforming Signs “Amortized”:** Legal non-conforming signs must be removed after a specified “amortization” period, which may range up to twenty years, with the most common periods falling between five and fifteen years. Such amortization provisions may either be for specified districts (e.g., non-conforming signs in residential districts) or apply citywide. As noted previously, such provisions are not enforceable against legal non-

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<sup>8</sup> Typical provisions require that a sign be removed if the sign structure is totally destroyed or suffers damage equal to 50% or more of the replacement cost of the sign structure or if the sign face is found to be abandoned because it remains blank for a period of time, which may range from 90 days to one year or more.



conforming outdoor advertising signs that are within the jurisdiction of the federal Highway Beautification act.

### **C. Comparative Evaluation of Regulation vs. Prohibition of New Sign Construction in Study Cities**

1. 102 of the 222 cities (51.8%) permit the construction of new signs either “as-of-right” or as a “conditional use” in one or more zoning district, with 84 of the 222 cities (38.8%) permitting their construction “as-of-right”. Thus, over half of the Study cities allow new signs to be constructed, so long as applicable locational and other regulatory criteria are met, without any requirement that existing signs be removed or relocated.
2. 63 of the 222 cities (28.4%) have adopted some version of a “Cap & Replace” ordinance that conditions the construction of new signs on the removal or relocation of one or more existing signs. These cities represent all population groupings, ranging from cities having a population over 1,000,000<sup>9</sup> down to cities with a population just under 60,000.<sup>10</sup> Many of these ordinances are targeted specifically at allowing the construction of a new digital sign based on the removal of one, and more usually more the one, legal non-conforming signs.
3. 63 of the 222 cities (28.4%) totally prohibit the construction of new signs. While California accounts for 15.8% of the 222 cities in the Survey, just over 30% of the cities that totally prohibit new signs are in California.

## **IV. Regulation of Digital Signs**

### **A. Overview**

The single most significant change in regulation of signs between the 2010 Study and the current Study is the treatment of digital signs. In 2010, relatively few of the codes in that database of 216 cities explicitly addressed digital signs in the context of regulating outdoor advertising. For example, while many of those codes contained explicit

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<sup>9</sup> Philadelphia and San Antonio

<sup>10</sup> Cheyenne, WY.

provisions regulating “electronic message centers” (EMCs), these often appeared outside of those code sections dealing with outdoor advertising signs and it was often difficult to determine from statutory language alone whether outdoor advertising signs in digital format would or would not be permitted.

In contrast, many more of the 222 codes in the 2014 Study now explicitly regulate outdoor advertising signs in digital format and it is apparent from the current Study that the availability of digital technology is having a profound effect on how cities regulate outdoor advertising. This is exhibited by the significant increase in the number of cities that now explicitly allow construction of new digital signs in return for the removal of one or more legal non-conforming signs. In addition, some cities are contracting to allow digital signs on city-owned property, even when digital signs are prohibited elsewhere, in order to gain revenue for the city. Both of these trends are discussed in detail below following a description of how cities are regulating the location and operation of digital signs.

## **B. Regulation of Location and Operation of Digital Signs**

### **1. Location, Distancing and Spacing**

Regulation of the location, distancing and spacing of digital signs differs only in amount, not in kind, from regulation of those same factors for static signs. Thus, the bullet points below reflect much of the previous discussion in Part II B of this Study.

- All of the cities that have explicit regulations for digital signs regulate the zoning districts where new or relocated digital signs may be constructed and/or existing signs are allowed to remain. The most common form of regulation permits the construction of new or relocated signs in one or more non-residential districts while prohibiting their construction in residential districts and other specified districts. It is also common for cities to prohibit new or relocated signs in some portion(s) of zoning districts in which they are otherwise permitted. Among the more common terms for such areas are: “sub-area,” “overlay district,” or “scenic corridor.”
- Location regulations also restrict the sites (*i.e.*, lots or structures) where digital signs may be located within the zoning districts where they are permitted.

These provisions normally state minimal distances that must be maintained between a site containing a digital sign and specified land uses or natural features, *e.g.*, parks, residential districts or structures, scenic districts, specified roadways, rivers, lakes, etc.

- Locational regulations also specify where digital sign structures may be located on a lot or structure. Such regulations typically require setbacks from property lines and/or streets and prohibit signs in the public right-of-way or in “visibility triangles” at traffic intersections. More restrictive regulations may also prohibit signs placed on the roofs of buildings. Another common form of restrictive regulation is to allow signs only on vacant lots; *i.e.*, lots that have no other structures, including other types of signs, such as an on-premise sign.
- Locational regulations also typically impose horizontal and/or vertical “spacing” or “separation” requirements. For example, requiring that sign structures be spaced at least 500 (or 600 or 1,200, etc.) feet from each other<sup>11</sup> or prohibiting signs that are “stacked” one on top of another or placed together horizontally “end-to-end” or “side-by-side.”

## **2. Regulation of Duration/Illumination and Other Operational Characteristics**

This is where regulation of digital signs differs significantly from regulation of illuminated static signs. All cities that regulate digital signs regulate: the duration during which the image on the display must remain static; the brightness of the display; whether a display may exhibit video or animation; whether light intensity must remain constant during a display/message so as not to give the appearance of flashing or blinking; whether scrolling of text or pictures is permitted.

The most common regulatory approach requires: (1) an 8-second minimum duration for a digital image with an instantaneous change of image; (2)

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<sup>11</sup> Such spacing requirements frequently distinguish regulatory treatment based on whether the signs are on the same or opposite sides of the street. For example, sign “A” must be distanced at least 1,000 ft. from sign “B” on the same side of the street, but need only be distanced 500 ft. from sign “C” on the opposite side of the street.

maximum brightness of 5,000-7,500 nits during daylight hours and 300-500 nits at night, with automatic dimming control to reduce brightness during daylight hours if skies darken; (3) that in case of malfunction, the digital sign either freeze the image displayed or display a blank and dark screen; and (4) prohibitions on video/animation, scrolling, and on changes in light intensity that would give the appearance of flashing or blinking.

## **C. Relocation or Conversion of Static Signs to Digital**

### **1. Overview**

As stated earlier, the most significant change in sign regulation since the 2010 Study is the significant increase in the number of cities that now allow construction of a new digital sign – or the conversion of a static sign to digital format -- when one or more legal non-conforming signs are removed. Below, I will describe these regulations in general terms and then provide examples of specific regulatory schemes.

### **2. Typical Regulatory Scheme**

All of the codes that allow construction of new digital signs based on the removal of existing legal non-conforming signs follow the same general pattern:

- The ratio of signs removed to signs constructed ranges from 1:1 to 24:1, but the majority are from 2:1 to 4:1.
- The ratio may be expressed in terms of signs, sign sizes (junior/poster/bulletin), faces, structures, square feet, or some combination of one or more of these.
- Many codes differentiate these ratios to achieve policy goals. For example, a code may require more illuminated signs be removed or more non-illuminated signs depending on what objective it seeks to achieve
- Many codes prioritize or incentivize locations for removal and/or relocation. Such codes will either require that signs be removed first from residential areas – or other designated areas – before they can be removed from other areas, or a code will incentivize their removal from such areas

by requiring a smaller ratio when removing signs from those areas than when removing signs from other areas; for example: a 2:1 ratio for signs removed from designated areas vs. a 3:1 ratio for signs removed from non-designated areas.

- Some cities cap the total number of conversions/relocations permitted for digital signs either citywide or in specific areas.
- Some cities require conditional use approval of conversion/relocation or even approval by the local legislative body.
- Several cities have banking or credit provisions for removed signs and these may be transferable.

### **3. Examples of Regulatory Schemes**

Appendix I contains examples of regulatory schemes from four cities -- El Paso, Texas, Grand Rapids, Michigan, St. Paul, Minnesota, and Tampa, Florida -- that illustrate the variety of regulatory approaches found in the Study for cap and replace ordinances targeted at allowing construction of new digital signs conditioned on the removal of one or more legal non-conforming signs.

## **D. Programs Allowing Digital Signs on City-Owned Property**

### **1. Overview**

A second significant change from the 2010 Survey in relation to digital signs is the emergence of negotiated agreements between cities and sign companies to allow construction of new digital signs on city-owned property in exchange for revenue-sharing arrangements. Such agreements are likely to become increasingly attractive to cities as they continue to face funding challenges due to decreasing state financial support and voter resistance to increases in property and/or income taxes.

## **2. Examples of Programs Allowing Digital Signs on City-Owned Property**

Appendix J contains examples of programs allowing digital signs on city-owned property from four cities: Chicago, Illinois; Sacramento, California; and Stockton, California.

## Appendix A

### ALPHABETICAL LIST OF STUDY JURISDICTIONS (N=222)

Source: U.S. Census Bureau American Fact Finder 2012 Population Estimates  
for Places Over 50,000 Population

1. Akron, Ohio
2. Albuquerque, New Mexico
3. Allentown, Pennsylvania
4. Amarillo, Texas
5. Anaheim, California
6. Ann Arbor, Michigan
7. Arlington, Texas
8. Arlington, Virginia
9. Athens-Clarke Cty, Georgia
10. Atlanta, Georgia
11. Augusta-Richmond Cty, Georgia
12. Aurora, Colorado
13. Aurora, Illinois
14. Austin, Texas
15. Bakersfield, California
16. Baltimore, Maryland
17. Baton Rouge, Louisiana
18. Bellevue, Washington
19. Billings, Montana
20. Birmingham, Alabama
21. Bismarck, North Dakota
22. Boise, Idaho
23. Boston, Massachusetts
24. Bridgeport, Connecticut
25. Broken Arrow, Oklahoma (new)
26. Brownsville, Texas
27. Buffalo, New York
28. Cambridge, Massachusetts
29. Cape Coral, Florida
30. Casper, Wyoming
31. Cedar Rapids, Iowa
32. Chandler, Arizona
33. Charleston, South Carolina
34. Charleston, West Virginia
35. Charlotte, North Carolina
36. Chattanooga, Tennessee
37. Chesapeake, Virginia
38. Cheyenne, Wyoming
39. Chicago, Illinois
40. Chula Vista, California
41. Cincinnati, Ohio
42. Clarksville, Tennessee
43. Cleveland, Ohio
44. Colorado Springs, Colorado
45. Columbia, Missouri
46. Columbia, South Carolina
47. Columbus, Georgia
48. Columbus, Ohio
49. Corona, California
50. Corpus Christi, Texas
51. Dallas, Texas
52. Davenport, Iowa
53. Denver, Colorado
54. Des Moines, Iowa
55. Detroit, Michigan
56. Dover, Delaware
57. Durham, North Carolina
58. El Paso, Texas
59. Elizabeth, New Jersey
60. Elk Grove, California (new)
61. Erie, Pennsylvania
62. Eugene, Oregon
63. Evansville, Indiana
64. Fargo, North Dakota
65. Fayetteville, Arkansas
66. Fayetteville, North Carolina (new)
67. Fontana, California
68. Fort Collins, Colorado
69. Fort Lauderdale, Florida
70. Fort Smith, Arkansas
71. Fort Wayne, Indiana
72. Fort Worth, Texas
73. Frederick, Maryland (new)
74. Fremont, California
75. Fresno, California
76. Garden Grove, California
77. Garland, Texas
78. Gilbert, Arizona
79. Glendale, Arizona
80. Glendale, California
81. Grand Prairie, Texas
82. Grand Rapids, Michigan
83. Green Bay, Wisconsin
84. Greensboro, North Carolina

85. Gresham, Oregon
86. Gulfport, Mississippi
87. Hartford, Connecticut
88. Henderson, Nevada
89. Hialeah, Florida
90. Houston, Texas
91. Huntington, West Virginia
92. Huntington Beach, California
93. Huntsville, Alabama
94. Independence, Missouri
95. Indianapolis, Indiana
96. Irvine, California
97. Irving, Texas
98. Jackson, Mississippi
99. Jacksonville, Florida
100. Jersey City, Jersey
101. Joliet, Illinois
102. Kansas City, Kansas
103. Kansas City, Missouri
104. Knoxville, Tennessee
105. Lafayette, Louisiana
106. Lakewood, Colorado
107. *Lancaster, California (new)*
108. Laredo, Texas
109. Las Cruces, New Mexico
110. Las Vegas, Nevada
111. Lexington-Fayette, Kentucky
112. Lincoln, Nebraska
113. Little Rock, Arkansas
114. Long Beach, California
115. Los Angeles, California
116. Louisville-Jefferson, Kentucky
117. Lowell, Massachusetts
118. Lubbock, Texas
119. Madison, Wisconsin
120. Manchester, New Hampshire
121. Memphis, Tennessee
122. Mesa, Arizona
123. Miami, Florida
124. Milwaukee, Wisconsin
125. Minneapolis, Minnesota
126. Missoula, Montana
127. Mobile, Alabama
128. Modesto, California
129. Montgomery, Alabama
130. Moreno Valley, California
131. Nampa, Idaho
132. Naperville, Illinois
133. Nashua, New Hampshire
134. Nashville, Tennessee
135. New Haven, Connecticut
136. New Orleans, Louisiana
137. New York, New York
138. Newark, New Jersey
139. Newport News, Virginia
140. Norfolk, Virginia
141. Norman, Oklahoma
142. North Las Vegas, Nevada
143. Oakland, California
144. Oceanside, California
145. Oklahoma City, Oklahoma
146. Olathe, Kansas
147. Omaha, Nebraska
148. Ontario, California
149. Orlando, Florida
150. Overland Park, Kansas
151. Oxnard, California
152. Palmdale, California (new)
153. Pasadena, California (new)
154. Paterson, New Jersey
155. Pembroke Pines, Florida (new)
156. Peoria, Arizona
157. Philadelphia, Pennsylvania
158. Phoenix, Arizona
159. Pittsburgh, Pennsylvania
160. Pomona, California
161. Portland, Oregon
162. Port St. Lucie, Florida
163. Providence, Rhode Island
164. Provo, Utah
165. Raleigh, North Carolina
166. Rancho Cucamonga, California
167. Rapid City, South Dakota
168. Reno, Nevada
169. Richmond, Virginia
170. Riverside, California
171. Rochester, Minnesota
172. Rochester, New York
173. Rockford, Illinois
174. Sacramento, California
175. Salem, Oregon
176. Salinas, California (new)



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| 177. Salt Lake City, Utah       | 200. St. Petersburg, Florida       |
| 178. San Antonio, Texas         | 201. Syracuse, New York            |
| 179. San Bernardino, California | 202. Tacoma, Washington            |
| 180. San Diego, California      | 203. Tallahassee, Florida          |
| 181. San Francisco, California  | 204. Tampa, Florida                |
| 182. San Jose, California       | 205. Tempe, Arizona                |
| 183. Santa Ana, California      | 206. Toledo, Ohio                  |
| 184. Santa Clarita, California  | 207. Topeka, Kansas                |
| 185. Santa Rosa, California     | 208. Tucson, Arizona               |
| 186. Savannah, Georgia          | 209. Tulsa, Arizona                |
| 187. Scottsdale, Arizona        | 210. Vancouver, Washington         |
| 188. Seattle, Washington        | 211. Virginia Beach, Virginia      |
| 189. Shreveport, Louisiana      | 212. Warren, Michigan              |
| 190. Sioux Falls, South Dakota  | 213. Warwick, Rhode Island         |
| 191. South Bend, Indiana        | 214. Washington D.C.               |
| 192. Spokane, Washington        | 215. Waterbury, Connecticut        |
| 193. Springfield, Massachusetts | 216. West Jordan, Utah             |
| 194. Springfield, Missouri      | 217. West Valley City, Utah        |
| 195. Stamford, Connecticut      | 218. Wichita, Kansas               |
| 196. Sterling Heights, Michigan | 219. Wilmington, Delaware          |
| 197. Stockton, California       | 220. Winston-Salem, North Carolina |
| 198. St. Louis, Missouri        | 221. Worcester, Massachusetts      |
| 199. St. Paul, Minnesota        | 222. Yonkers, New York             |

## APPENDIX B

### STUDY CITIES LISTED BY POPULATION

**Sources: U.S. Census Bureau American Fact Finder 2012 Population Estimates for Places Over 50,000 Population and American Fact Finder 2012 Population Estimates for All Places**

<u>Over Two Million: 4 Cities</u>		<u>Over One Million: 5 Cities</u>	
1. New York, NY	8,363,697	5. Philadelphia, PA	1,547,607
2. Los Angeles, CA	3,857,799	6. Phoenix, AZ	1,488,750
3. Chicago, IL	2,714,856	7. San Antonio, TX	1,382,951
4. Houston, TX	2,160,821	8. San Diego, CA	1,338,348
		9. Dallas, TX	1,241,162
 <u>500,000 – 1,000,000: 25 Cities</u>			
10. San Jose, CA	982,765	15. Columbus, OH	809,798
11. Austin, TX	842,952	16. Fort Worth, TX	777,992
12. Jacksonville, FL	836,507	17. Charlotte, NC	775,202
13. Indianapolis, IN	834,852	18. Detroit, MI	701,475
14. San Francisco, CA	825,863	19. El Paso, TX	672,538

20. Memphis, TN	655,155	60. Pittsburgh, PA	306,211
21. Boston, MA,	636,479	61. Lexington/Fayette, KY	305,489
22. Seattle, WA	634,535	<u>200,000 – 300,000: 49 Cities</u>	
23. Denver, CO	634,265		
24. Washington, DC	632,323	62. Stockton, CA	297,984
25. Nashville-Davidson, TN	624,496	63. Cincinnati, OH	296,550
26. Baltimore, MD	621,342	64. St. Paul, MN	290,770
27. Louisville/Jefferson, KY	605,110	65. Toledo, OH	284,102
28. Portland, OR	603,106	66. Newark, NJ	277,727
29. Oklahoma City, OK	599,199	67. Greensboro, NC	277,080
30. Milwaukee, WI	598,916	68. Plano, TX	272,068
31. Las Vegas, NV	596,424	69. Henderson, NV	265,679
32. Albuquerque, NM	555,417	70. Lincoln, NE	265,404
33. Tucson, AZ	524,295	71. Buffalo, NY	259,384
34. Fresno, CA	505,882	72. Fort Wayne, IN	254,555
		73. Jersey City, NJ	254,441
<u>400,000 – 500,000: 11 Cities</u>		74. Chula Vista, CA	252,422
		75. Orlando, FL	249,562
35. Sacramento, CA	475,516	76. St. Petersburg, FL	246,541
36. Long Beach, CA	467,892	77. Norfolk, VA	245,782
37. Kansas City, MO	464,310	78. Chandler, AZ	245,628
38. Mesa, AZ	452,084	79. Laredo, TX	244,731
39. Virginia Beach, VA	447,021	80. Madison, WI	240,323
40. Atlanta, GA	443,775	81. Durham, NC	239,358
41. Colorado Springs, CO	431,834	82. Lubbock, TX	236,065
42. Raleigh, NC	423,179	83. Winston-Salem, NC	234,349
43. Omaha, NE	421,570	84. Garland, TX	233,564
44. Miami, FL	413,892	85. Glendale, AZ	232,143
45. Oakland, CA	400,740	86. Hialeah, FL	231,941
		87. Reno, NV	231,027
<u>300,000 – 400,000: 16 Cities</u>		88. Baton Rouge, LA	230,058
		89. Irvine, CA	229,985
46. Tulsa, OK	393,987	90. Chesapeake, VA	228,417
47. Minneapolis, MN	392,880	91. Irving, TX	225,427
48. Cleveland, OH	390,928	92. Scottsdale, AZ	223,514
49. Wichita, KS	385,577	93. North Las Vegas, NV	223,491
50. Arlington, TX	375,600	94. Fremont, CA	221,986
51. New Orleans, LA	369,250	95. Gilbert town, AZ	221,140
52. Bakersfield, CA	358,597	96. San Bernardino, CA	213,295
53. Tampa, FL	347,645	97. Boise, ID	212,303
54. Anaheim, CA	343,248	98. Birmingham, AL	212,038
55. Aurora, CO	339,030	99. Rochester, NY	210,532
56. Santa Ana, CA	330,920	100. Richmond, VA	210,309
57. St. Louis, MO	318,172	101. Spokane, WA	209,525
58. Riverside, CA	313,673	102. Arlington City, VA	207,682
59. Corpus Christi, TX	312,195	103. Des Moines, IA	206,688

104. Montgomery, AL	205,293	131. Santa Clarita, CA	179,013
105. Modesto, CA	203,547	132. Overland Park, KA	178,919
106. Fayetteville, NC	202,103	133. Providence, RI	178,432
107. Tacoma, WA	202,010	134. Jackson, MS	175,447
108. Shreveport, LA	201,867	135. Garden Grove, CA	174,389
109. Fontana, CA	201,812	136. Oceanside, CA	171,293
110. Oxnard, CA	201,555	137. Chattanooga, TN	171,279

150,000 – 200,000: 50 Cities

111. Aurora, IL	199,932	141. Port St. Lucie, FL	168,716
112. Moreno Valley, CA	199,952	142. Ontario, CA	167,211
113. Akron, OH	198,549	143. Tempe, AZ	166,842
114. Yonkers, NY	198,449	144. Vancouver, WA	165,489
115. Columbus, GA	198,413	145. Springfield, MO	162,191
116. Augusta-Richmond, GA	197,872	146. Cape Coral, FL	161,248
117. Little Rock, AR	196,537	147. Pembroke Pines, FL	160,306
118. Amarillo, TX	195,250	148. Sioux Falls, SD	159,908
119. Mobile, AL	194,822	149. Peoria, AZ	159,789
120. Huntington Beach, CA	194,708	150. Lancaster, CA	159,055
121. Glendale, CA	194,478	151. Elk Grove, CA	159,038
122. Grand Rapids, MI	190,411	152. Corona, CA	158,391
123. Salt Lake City, UT	189,314	153. Eugene, OR	157,986
124. Tallahassee, FL	186,971	154. Salem, OR	157,429
125. Huntsville, AL	183,739	155. Palmdale, CA	155,650
126. Worcester, MA	182,669	156. Salinas, CA	154,484
127. Knoxville, TN	182,200	157. Springfield, MA	153,552
128. Grand Prairie, TX	181,824	158. Pasadena, CA	152,272
129. Newport News, VA	180,726	159. Rockford, IL	150,843
130. Brownsville, TX	180,097	160. Pomona, CA	150,812

100,000 – 150,000: 45 Cities

161. Fort Collins, CO	148,612	174. New Haven, CT	130,741
162. Joliet, IL	148,268	175. Sterling Heights, MI	130,410
163. Kansas City, KS	147,268	176. Olathe, KS	130,045
164. Bridgeport CT	146,425	177. Cedar Rapids, IA	128,119
165. Lakewood, CO	145,516	178. Topeka, KS	127,939
166. Paterson, NJ	145,219	179. Elizabeth, NJ	126,458
167. Syracuse, NY	144,170	180. Bellevue, WA	126,439
168. Naperville, IL	143,684	181. Charleston, SC	125,583
169. Clarksville, TN	142,519	182. Stamford, CT	125,109
170. Savannah, GA	142,022	183. Hartford, CT	124,893
171. Warren, MI	134,141	184. Lafayette, LA	122,761
172. West Valley City, UT	132,434	185. Evansville, IN	120,235
173. Columbia, SC	131,686	186. Athens/Clarke, GA	118,999

187. Allentown, PA	118,974		
188. Independence, MO	117,270	<u>50,000 – 100,000:</u>	<u>13 Cities</u>
189. Ann Arbor, MI	116,121		
190. Provo, UT	115,919	208. Fort Smith, AR	87,443
191. Norman, Oklahoma	115,562	209. Nashua, NH	86,933
192. Columbia, MO	113,225	210. Nampa, ID	83,930
193. Manchester, NH	110,209	211. Warwick, RI	81,873
194. Waterbury, CT	109,915	212. Wilmington, DE	71,292
195. Fargo, ND	109,779	213. Gulfport, MS	70,113
196. Rochester, MN	108,992	214. Rapid City, SD	69,854
197. Gresham, OR	108,956	215. Missoula, MT	68,394
198. Lowell, MA	108,522	216. Frederick, MD	66,382
199. West Jordan, UT	108,383	217. Bismarck, ND	64,751
200. Billings, MT	103,994	218. Cheyenne, WY	61,537
201. Cambridge, MA	106,471	219. Casper, WY	57,813
202. Green Bay, WI	104,868	220. Charleston WV	51,018
203. Broken Arrow, OK	102,019		
204. Davenport, IA	101,363	<u>Under 50,000:</u>	<u>2 Cities</u>
205. Las Cruces, NM	101,047		
206. Erie, PA	101,047	221. Huntington, WV	49,160
207. South Bend, IN	100,800	222. Dover, DE	37,089

### APPENDIX C

#### STATES WITH MORE THAN FIVE STUDY CITIES

California	35 (31 in 2010)	Arizona	09
Texas	16	North Carolina	06
Florida	11 (10 in 2010)	Virginia	06

### APPENDIX D

#### ALPHABETICAL LIST OF STUDY CITIES THAT CONDITION NEW SIGN CONSTRUCTION ON REMOVAL OF ONE OR MORE EXISTING SIGNS

1. Athens, GA	11. Colorado Springs, CO	21. Fresno, CA
2. Albuquerque, NM	12. Columbia, SC	22. Garden Grove, CA
3. Billings, MT	13. Columbus, GA	23. Glendale, AZ
4. Birmingham, AL	14. Dallas, TX	24. Grand Prairie, TX
5. Boise, ID	15. El Paso, TX	25. Grand Rapids, MI
6. Brownsville, TX	16. Fontana, CA	26. Green Bay, WI
7. Cedar Rapids, IA	17. Fort Smith, AR	27. Gulfport, MS
8. Cheyenne, WY	18. Fort Wayne, IN	28. Hialeah, FL
9. Cincinnati, OH	19. Fort Worth, TX	29. Irving, TX
10. Cleveland, Oh	20. Fremont, CA	30. Jackson, MS

- |                     |                        |                          |
|---------------------|------------------------|--------------------------|
| 31. Lafayette, LA   | 42. Philadelphia, PA   | 53. Savannah, GA         |
| 32. Lancaster, CA   | 43. Reno, NV           | 54. Seattle, WA          |
| 33. Lincoln, NE     | 44. Rochester, MN      | 55. Springfield, MA      |
| 34. Little Rock, AR | 45. Rockford, IL       | 56. St. Paul, MN         |
| 35. Los Angeles, CA | 46. Sacramento, CA     | 57. Stockton, CA         |
| 36. Mobile, AL      | 47. Salt Lake City, UT | 58. Tacoma, WA           |
| 37. Nampa, ID       | 48. San Antonio, TX    | 59. Tallahassee, FL      |
| 38. New Orleans, LA | 49. San Bernardino, CA | 60. Tampa, FL            |
| 39. Omaha, NE       | 50. San Francisco, CA  | 61. Tempe, AZ            |
| 40. Orlando, FL     | 51. San Jose, CA       | 62. West Jordan, UT      |
| 41. Peoria, IL      | 52. Santa Clarita, CA  | 63. West Valley City, UT |

### **APPENDIX E**

#### **ALPHABETICAL LIST OF STUDY CITIES THAT REQUIRE CONDITIONAL USE APPROVAL FOR CONSTRUCTION OF A NEW SIGN**

- |                   |                                      |                    |
|-------------------|--------------------------------------|--------------------|
| 1. Akron, OH      | 8. Lowell, MA                        | 14. Pomona, CA     |
| 2. Boston, MA     | 9. Newark, NJ                        | 15. Rapid City, SD |
| 3. Chesapeake, VA | 10. Norfolk, VA                      | 16. Wichita, KS    |
| 4. Elizabeth, NJ  | 11. Overland Park, KS                | 17. Wilmington, DE |
| 5. Joliet, IL     | 12. Oxnard, CA                       | 18. Worcester, MA  |
| 6. Las Vegas, NV  | 13. Palmdale, CA (for<br>relocation) |                    |
| 7. Long Beach, CA |                                      |                    |

### **APPENDIX F**

#### **ALPHABETICAL LIST OF STUDY CITIES THAT TOTALLY PROHIBIT NEW SIGN NEW SIGN CONSTRUCTION**

- |                     |                          |                         |
|---------------------|--------------------------|-------------------------|
| 1. Anaheim, CA      | 16. Fayetteville, AR     | 31. Manchester, NH      |
| 2. Arlington, VA    | 17. Ft. Collins, CO      | 32. Mesa, AZ            |
| 3. Austin, TX       | 18. Ft. Lauderdale, FL   | 33. Miami, FL           |
| 4. Baltimore, MD    | 19. Frederick, MD        | 34. Missoula, MT        |
| 5. Bellevue, WA     | 20. Garland, TX          | 35. Modesto, CA         |
| 6. Broken Arrow, OK | 21. Gilbert, AZ          | 36. Moreno Valley, CA   |
| 7. Cambridge, MA    | 22. Glendale, CA         | 37. Naperville, IL      |
| 8. Cape Coral, FL   | 23. Gresham, OR          | 38. North Las Vegas, NV |
| 9. Charleston, SC   | 24. Houston, TX          | 39. Oakland, CA         |
| 10. Chula Vista, CA | 25. Huntington Beach, CA | 40. Oceanside, CA       |
| 11. Clarksville, TN | 26. Irvine, CA           | 41. Olathe, KS          |
| 12. Corona, CA      | 27. Jacksonville, FL     | 42. Ontario, CA         |
| 13. Dover, DE       | 28. Knoxville, TN        | 43. Pasadena, CA        |
| 14. Durham, NC      | 29. Lakewood, CO         | 44. Pembroke Pines, FL  |
| 15. Elk Grove, CA   | 30. Madison, WI          | 45. Plano, TX           |

- |                          |                    |                        |
|--------------------------|--------------------|------------------------|
| 46. Pomona, CA           | 52. Salinas, CA    | 58. Vancouver, WA      |
| 47. Port St. Lucie, FL   | 53. San Diego, CA  | 59. Virginia Beach, VA |
| 48. Providence, RI       | 54. Santa Rosa, CA | 60. Warwick, RI        |
| 49. Provo, UT            | 55. Scottsdale, AZ | 61. Washington, D.C.   |
| 50. Rancho Cucamonga, CA | 56. Spokane, WA    | 62. Waterbury, CT      |
| 51. Riverside, CA        | 57. Stamford, CT   | 63. Yonkers, NY        |

**APPENDIX G**

**SUMMARY OF MAXIMUM PERMISSIBLE SIGN SIZES IN 84 CITIES  
ALLOWING NEW CONSTRUCTION AS-OF-RIGHT**

<b>Size (sq. ft.)</b>	<b>Number of Cities</b>	<b>Size (sq. ft.)</b>	<b>Number of Cities</b>
1,200:	02	600:	02
1,000:	01	500:	01
<b>3 cities allow max. size of 1,000-1,200 s.f.</b>		450:	02
		400:	06
<b>Size (sq. ft.)</b>	<b>Number of Cities</b>	380:	01
925:	01	378:	01
900:	03	320:	01
820:	01	300:	10
800:	01	<b>24 cities allow max. size of 300-600 s.f.</b>	
750:	08	<b>Subtotal: 73 cities allow max. size of at least 300 s.f.</b>	
<b>14 cities allow max. size of 750-925 s.f.</b>		<b>Size (sq. ft.)</b>	<b>Number of Cities</b>
<b>Size (sq. ft.)</b>	<b>Number of Cities</b>	288:	02
700:	02	250:	01
675:	03	236:	01
672:	27	200:	04
<b>32 cities allow max. size of 672-700 s.f.</b>		150:	03
<b>Subtotal: 49 cities allow max. size of at least 672 s.f.</b>		<b>11 cities allow max. size less than 300 s.f.</b>	

## APPENDIX H

### MAXIMUM PERMISSIBLE SIZES FOR OUTDOOR ADVERTISING SIGNS IN 84 CITIES THAT ALLOW NEW CONSTRUCTION “AS-OF- RIGHT”

<u>City/State</u>	<u>Maximum Sign Area (sq. ft.)</u>
1. Allentown, Pennsylvania	672
2. Amarillo, Texas	900
3. Ann Arbor, Michigan	200 (350 in 2010)
4. Arlington, Texas	672
5. Atlanta, Georgia	672
6. Augusta, Georgia	672
7. Aurora, Colorado	200
8. Aurora, Illinois	300
9. Bakersfield, California	300
10. Baton Rouge, Louisiana	672
11. Bismarck, North Dakota	800
12. Bridgeport, Connecticut	900
13. Buffalo, New York	675
14. Casper, Wyoming	500 (700 in 2010)
15. Chandler, Arizona	320
16. Charleston, West Virginia	672
17. Charlotte, North Carolina	380
18. Chattanooga, Tennessee	675
19. Chicago, Illinois	1,000 <sup>1</sup>
20. Cleveland, Ohio	820
21. Columbia, Missouri	288
22. Columbus, Ohio	672
23. Corpus Christi, Texas	672
24. Davenport, Iowa	672
25. Denver, Colorado (overlay only)	672
26. Des Moines, Iowa	672
27. Detroit, Michigan	672
28. Elizabeth, New Jersey	300 <sup>m</sup>
29. Erie, Pennsylvania	672
30. Eugene, Oregon	200
31. Evansville, Indiana	700
32. Fargo, North Dakota	672 (1,200 in 2010)
33. Fayetteville, North Carolina	400

<sup>1</sup> Up to 1,200 s.f. for signs included in City Digital Network Agreement.

<sup>m</sup> Over 300 s.f. possible with conditional use approval.

<u>City/State</u>	<u>Maximum Sign Area (sq. ft.)</u>
34. Greensboro, North Carolina	450
35. Gresham, Oregon	250
36. Hartford, Connecticut	750
37. Henderson, NV	672
38. Huntington, West Virginia	672
39. Huntsville, Alabama	400
40. Independence, Missouri	750
41. Indianapolis, Indiana	672 (720 in 2010)
42. Jersey City, New Jersey	600
43. Kansas City, Kansas	925
44. Kansas City, Missouri	300
45. Laredo, Texas	672
46. Las Cruces, New Mexico	400
47. Lexington-Fayette Urban County, Kentucky	400
48. Louisville, Kentucky	750
49. Lubbock, Texas	750
50. Memphis, Tennessee	672
51. Milwaukee, Wisconsin	750
52. Minneapolis, Minnesota	672 <sup>n</sup>
53. Mobile, Alabama	300
54. Montgomery, Alabama	1,200
55. Nashua, New Hampshire	150
56. Nashville, Tennessee	675
57. New Haven, Connecticut	900
58. New York, New York	750
59. Newport News, Virginia	300
60. Norman, Oklahoma	672
61. Oklahoma City, Oklahoma	672
62. Phoenix, Arizona	672
63. Pittsburgh, Pennsylvania	750
64. Portland, Oregon	200
65. Raleigh, North Carolina	150
66. Richmond, Virginia	700
67. Rochester, New York	236
68. Salem, Oregon	300
69. Santa Ana, California	300
70. Shreveport, Louisiana	672

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<sup>n</sup> Max size in Opportunity Billboard District. Max size of 300 s.f. in General Billboard District.



<u>City/State</u>	<u>Maximum Sign Area (sq. ft.)</u>
71. Sioux Falls, South Dakota	288 (672 in 2010) <sup>o</sup>
72. South Bend, Indiana	672 <sup>p</sup>
73. Springfield, Missouri	600 (400 in 2010)
74. St. Louis, Missouri	1,200
75. St. Petersburg Florida	672
76. Sterling Heights, Michigan	150
77. Syracuse, New York	450
78. Toledo, Ohio	400
79. Topeka, Kansas	750
80. Tucson, Arizona	378
81. Tulsa, Oklahoma	300
82. Warren, Michigan	400
83. West Jordan, Utah	300
84. Winston-Salem, North Carolina	672

## APPENDIX I

### EXAMPLES OF CAP & REPLACE ORDINANCES TARGETED AT ALLOWING DIGITAL SIGNS CONDITIONED ON REMOVAL OF LEGAL NON-CONFORMING SIGNS

#### El Paso, Texas Relocation for Static and Changeable Electronic Variable Message (CEVM) Signs

From and after the effective date of this ordinance, no new billboards may be constructed, erected, installed or modified within the corporate limits of the city, or within its extraterritorial jurisdiction, and no building permit shall be issued for the construction, erection, or modification of a new billboard or an existing billboard in the city and the city's extraterritorial jurisdiction, except as authorized by this article.

#### Static billboards or non-CEVM billboards.

Construction of new static billboard or non-CEVM billboards are prohibited unless the owner or applicant complies with the following provisions and shall only be constructed in C-2, C-3, C4, MI, M2, and M3 districts:

- a. Non-transit corridors. In order to construct one new static non-CEVM billboard, the applicant must demolish and permanently remove at least one legally permitted and erected existing billboard structure of the same size.

<sup>o</sup> 672 s.f. now available as a conditional use.

<sup>p</sup> Available via replacement in one area.

b. Transit corridors. Interstate Highway 10, Alameda Avenue, Dyer Street, Mesa Street, and Montana Avenue are defined as transit corridors for the purposes of this chapter. In order to construct one new static non-CEVM billboard, the applicant must demolish and permanently remove at least two legally permitted and erected existing billboard structures of the same size from any of the five transit corridors.

c. The applicant requesting the permit for a new static non-CEVM billboard shall identify the locations and total display face area of the existing billboard sign structures to be demolished, and obtain a demolition permit for each billboard sign structure to be removed prior to issuance of the permit for the new billboard. Each of the billboard structures identified to be demolished must be demolished and the entire structure completely removed prior to the construction and operation of the new static billboard.

d. The application for the replacement permit for the new static non-CEVM billboard sign shall be submitted to the planning division within nine months of the issuance of the demolition permit(s) for the removed billboard(s). If an application permit is not submitted within that time, then the replacement permit shall not be issued for the removed billboards signs and no credit shall be given for the removal of such billboard(s).

e. The size of the new static non-CEVM billboard shall be the same as the size of those billboard structures removed, except that the following shall be allowed:

1. One bulletin billboard structure shall be permitted for two existing legally permitted and erected poster billboard structures removed,
2. One poster billboard structure shall be permitted for four existing legally permitted and erected junior billboard structures removed,
3. One bulletin billboard structure shall be permitted for eight existing legally permitted and erected junior billboard structures removed;

f. If the new billboard structure is double-faced, then all structures removed shall be double-faced.

g. The new static non-CEVM billboard sign must comply with all of the provisions of this chapter and the City Code, including but not limited to electrical, plumbing, grading, etc.

#### CEVM billboards.

From and after the effective date of this ordinance, no new CEVM billboards may be constructed, erected, installed or modified within the corporate limits of the city, or within its extraterritorial jurisdiction, and no building permit shall be issued for the construction, erection, or modification of a new CEVM billboard or an existing billboard in the city and the city's extraterritorial jurisdiction, except as authorized by this article.

Construction of new CEVM billboards is prohibited unless the owner or applicant complies with all of the following provisions and shall only be constructed in C-3, C-4, M-1, M-2, and M-3 districts:

a. For every one square foot of CEVM billboard display area converted from a static billboard, at least five square feet of static display area must be permanently and completely removed. Of the signs removed to fund this conversion exchange, at least one billboard shall be of a like size as the CEVM display installed or erected.

b. For a period of one hundred eighty days from the date this ordinance is adopted [February 19, 2013], existing static signs may be converted to CEVM signs provided that the following criteria are met:

(1) Except for setback requirements specified in Section 20.18.230, all other requirements, to include the conversion rate, of the sign code are to be complied with.

(2) If a static sign is converted to a CEVM sign and does not comply with the provisions of Section 20.18.230, the converted sign shall be considered legal nonconforming and shall comply with all of the following conditions:

a. The display face shall face away at a forty-five degree angle from any R-F, R-1, R-2, R-2A, R-3, R-3A, R-4, R-5, P-RI, P-RII, RMH, PMD, A-1, A-2, A-3, A-4, A-M, A-3/O, A-O, R-MU, G-MU, I-MU, or SmartCode Zone.

b. A buffer (interstate highway, streets classified as major arterials, or a C-4 commercial district or manufacturing district) existing between the converted sign and any R-F, R-1, R-2, R-2A, R-3, R-3A, R-4, R-5, P-RI, P-RII, RMH, PMD, A-1, A-2, A-3, A-4, A-M, A-3/O, A-O, R-MU, G-MU, I-MU, or SmartCode Zone (a buffer of a minor arterial may be allowed provided that there is a setback of four hundred twenty feet from the sign and the above districts).

c. The applicant requesting the permit for a new CEVM billboard shall identify the locations and total display face area of the existing static billboard sign structures to be removed or existing demolition credits to be utilized, and obtain a demolition permit for each static billboard sign structure to be removed prior to issuance of the permit for the new CEVM billboard. Each of the static billboard structures identified to be removed must be demolished and the entire structure completely removed to grade level prior to the construction or installation of the new CEVM billboard, including the support structure, electrical connections, catwalk (if any), and special grading and post holes completely covered.

d. The new CEVM billboard sign must comply with all of the provisions of this chapter and the City Code, including but not limited to electrical, structural, and grading requirements.

### **Grand Rapids, Michigan Billboard Exchange Program.**

Purpose. The purpose of the Billboard Exchange Program is to reduce the overall number of non-conforming off-premises signs within the City, facilitate redevelopment, and reduce visual clutter in residential and neighborhood commercial areas by providing incentives for the voluntary removal of non-conforming off-premises signs.

It is recognized that off-premises signs serve a valuable purpose in the community by providing an advertising venue for local businesses and institutions but that a proliferation of such signage may contribute to a sense of visual clutter and blight. Such off-premises signs can also deter the redevelopment of a parcel or limit the redevelopment potential of a site due to extended lease periods for non-conforming off-premise signs. It is in the best interest of the City to advance the economic welfare of the community by facilitating new investment and land development in accordance with the Master Plan and to remove any potential barriers that may hinder redevelopment opportunities within residential areas and neighborhood business districts.

The regulations in this section identify certain high traffic volume corridors and locations within the City where the continuation of existing non-conforming off- premises signs is appropriate. In exchange for the voluntary removal of non- conforming off-premises advertising signs, various types of physical upgrades may be permitted to existing non-conforming off-premises signs and support structures in the designated Upgrade Eligibility Zone.

Removal Credits. All existing non-conforming off-premises signs in the City, except those located in the MCN-C, MON-C, or SD-IT Zone Districts, are eligible for voluntary removal credits to be applied toward physical upgrades of eligible off- premises signs as defined in Section 5.15.03.H.3. Credits shall be based on the size of the sign and the number of sign faces. Additional credits are available for certain sign or location characteristics. No removal credits shall be awarded for sign faces to be removed or replaced by an eligible upgrade.

See Table 5.15.03.H.2.a. below for a description of how the voluntary removal credits shall be calculated.

Table 5.15.03.H.2.a. Off-Premises Sign Voluntary Removal Credits			
Sign Type/Location	Size of Sign Face	Base Credit	Bonus Credit
“Poster” Billboard	< 14’ x 48’	1	
“Bulletin” Billboard	= 14’ x 48’	2	
Property for Redevelopment (Subject to Director Approval)			Base Credit x 2.0
Example: The removal of an off-premises poster-size sign with two faces located on property to be used for redevelopment (with Director Approval) would be awarded 4 credits (2 faces x 1 credit per face x 2 bonus credits = 4 credits).			

Whole numbers shall only apply to credits to be used. Unused bonus credits may be held in a “bank” for future use. The Planning Department shall document credits used and credits held for future use.

Redevelopment bonus credits shall be awarded as determined by the Planning Director. The Planning Director shall determine that removal of a nonconforming off-premises sign is desired to facilitate a development project on a parcel that, due to a lease period or other constraint, the property owner is unable to negotiate the voluntary removal of the sign.

Upgrade Eligibility. Off-premises signs and support structures located in the Upgrade Eligibility Zone and that are not roof-mounted or wall mounted may be upgraded. The Upgrade Eligibility Zone consists of existing off-premises signs and support structures in any zone district that are oriented in such a manner that motorists traveling on an interstate highway or expressway are the intended audience. All off-premises signs and support structures included in the Upgrade Eligibility Zone are listed in the Upgrade Eligibility Zone Table, dated July 9, 2009, and as amended from time to time, prepared by the Planning Department.

Permitted Upgrades. Eligible off-premises signs may be upgraded, subject to the following requirements.

All regulations pertaining to measurement, area, number of sign faces, placement, illumination, prohibited operation, location on public property, the Highway Advertising act, and permitting that are applicable to new off-premise advertising signs as permitted in the SD-IT Zone District shall be in effect for signs upgraded in accordance with these provisions. No signs located on City property or within the City right-of-way may be upgraded.

Nonconforming rights to sign height are transferrable between an old and new structure on the same site within the Upgrade Zone. An additional five (5) feet may be permitted as allowed by Table 5.15.03.H.4.e.

Credits may be combined from more than one off-premises sign location to permit a sign upgrade. Credits are transferable among off-premises sign owners.

In no case shall a proposed sign upgrade be permitted in a location that would impede future development, as determined by the Planning Director. This determination shall be based on the likelihood of future redevelopment within the next ten years, based on knowledge of approved and proposed projects, building permits, and development trends.

See Table 5.15.03.H.4.e. below for a description of how the credits may be used.

Table 5.15.03.H.4.e. Upgrade Components	Number Removal Credits Required
Sign Face Enlargement (from poster size to bulletin size)	3
Additional Poster Sign Face (maximum of two)	2
Additional Bulletin Sign Face (maximum of two)	6
Relocation on Same Lot (subject to Director approval)	2
Height Increase (as permitted by Section 5.15.03.H.4.b.)	2
New Support Structure	3
Other Structure Improvement (as determined by the Planning Director)	2

#### Application and Review Procedures.

An application shall be filed pursuant to Section 5.12.10. Director Review Procedures.

In addition to application materials required pursuant to Sections 5.12.07.A. and 5.12.08.C, a detailed inventory of billboards to be removed and billboards to be upgraded shall be submitted. The inventory shall include the location, a property survey, photos of the structure and all sign faces, the number of sign faces on the structure, height and any other pertinent information for each billboard to be removed or upgraded. An itemized list of requested physical upgrades shall be provided for each billboard to be upgraded.

If all sign faces are removed from a support structure and used as voluntary removal credits as part of the Billboard Exchange Program, the support structure shall be demolished prior to issuance of a building permit for a permitted upgrade.

### **St. Paul, Minnesota Conversion to Billboard with Dynamic Display.**

(a) *Intent and purpose.* Studies show that there is a correlation between driver distraction and accidents. Signs with dynamic displays can be a cause of driver distraction. Along highways, signs with dynamic displays tend to distract drivers if they are waiting to see the next change, especially if it is a continuation of the message or if the transition uses special effects. Signs with lettering that is too small to read at a glance also cause driver distraction; whereas, typical time and temperature signs, which can be read at a glance, are not a significant distraction. This section allows for the conversion of illuminated billboards to billboards with dynamic displays subject to standards that maintain highway safety.

Dynamic display technologies can greatly expand the advertising capacity and graphic flexibility of billboards. However, [section 64.420](#) prohibits any new advertising signs in the city in order to protect and improve views, aesthetics, community pride and investment, and the visibility of local businesses. One purpose of this chapter is to reduce the number of billboards in the city. The provisions of the present section seek to offer benefits both to the public and to billboard owners. This section allows increased advertising through the addition of dynamic display technologies on existing billboards along certain freeways in exchange for voluntary reductions in the number of billboards in the city.

(b) Except in a B4 or B5 zoning district, a legally nonconforming, illuminated billboard may be converted to a billboard with a dynamic display if the following conditions are met:

- (1) The billboard is located within three hundred thirty (330) feet of I-94 or I-35E north of I-94 and is designed to be read from the highway.
- (2) The billboard is at least one (1) mile measured along the freeway from any other billboard with a dynamic display designed to be read by drivers heading in the same direction on the highway.
- (3) Only one (1) sign face on a billboard structure is converted.
- (4) The billboard is not in the visual field of any residence, regardless of municipal boundaries, that is in a residential or TN traditional neighborhood zoning district and has windows which are facing and from which the dynamic display is directly visible. "Visual field" means the cone-shaped area in front of a billboard, drawn on a map, that extends perpendicular from the center of the sign face for one thousand (1,000) feet with a vertex angle of seventy-five (75) degrees and also includes peripheral triangles on both sides of the cone, which are delineated by extending the line of the sign face two hundred (200) feet in each direction from its center, and from these two (2) points connecting to the two (2) outer points of the cone.

- (5) The owner of the billboard shall apply for and receive a sign permit for the conversion from the city.
- (6) As part of the permit application, the applicant shall agree in writing to remove permanently other existing billboards in the city; for each square foot of dynamic display space being created, six (6) square feet of illuminated billboard faces, or eight (8) square feet of non-illuminated faces shall be removed. Billboards that the applicant owns or controls in residential zoning districts or any other locations designated for billboard removal by resolution of the city council must be taken down before billboards taken down in other areas of the city will be counted toward this removal requirement. Billboards may be counted toward the removal if they have been or will be removed between one (1) year prior to the application and two (2) months following the issuance of the permit. The removals must include the complete removal of the billboard structures including the foundations of any freestanding billboards.

Prior to approval of the sign permit, the applicant must agree in writing that the city may remove the billboards if the applicant has not done so before the new electronic message sign is put into operation, and the applicant must submit a cash deposit or letter of credit acceptable to the city to pay the city's cost for that removal. The applicant must also agree in writing that the removal of the billboards is done voluntarily and the applicant has no right, under any law, to compensation from any governmental unit for the removed signs.

When a billboard is permanently removed (including the sign or display surface and all elements of the sign structure) for purposes of dynamic display conversion under this section or when a billboard is permanently removed for any other reason, and the owner of the removed billboard surrenders in writing any state and local permits previously issued for the removed billboard, no new sign and/or sign structure permit will be issued for the real property on which the removed billboard was located.

- (7) If the removed signs are ones for which a state permit is required, the applicant and owners must surrender such permits to the state. The billboard with a dynamic display may not be put into operation until proof is provided to the city that such state permits have been surrendered.



(c) In addition to the other regulations in this chapter, a billboard with a dynamic display shall conform to the following operational standards:

- (1) All alpha-numeric copy must be at least fifteen (15) inches high.
- (2) The images and messages displayed must be static, and the transition from one static display to another must be direct and immediate without any special effects. Each image and message displayed must be complete in itself, and may not continue on the subsequent one. Each image and message must remain constant for at least twelve (12) seconds before changing to the next one.

### **Tampa, Florida Upgrades to Electronic Billboard Signs Program**

Upgrades to electronic billboard signs. Nonconforming billboard signs and variance signs may be upgraded by the sign owner to an electronic billboard sign upon approval of a permit in accordance with section 27-289.5 of the Code. For each electronic billboard sign for which a sign permit is sought by the sign owner, the sign owner or the sign owner's agent, must submit a sign permit application demonstrating that each of the following conditions of approval have been met:

- (1) Exchange rate.
  - a. A minimum of ten (10) sign faces of nonconforming billboard signs or variance signs must be permanently removed in exchange for each single sign face on an electronic billboard sign ("electronic billboard sign face") for which a sign permit is sought and approved by the city. In addition, the combined square footage of sign face area removed shall total at least ten (10) times the square footage of the electronic billboard sign face for which the permit is sought.
  - b. The ten (10) sign faces used as trade-in exchange as provided in subsection a. above shall comply with the following additional criteria:
    - i. A minimum of four (4) sign faces (totaling at least four (4) times the square footage of the electronic billboard sign face) of nonconforming billboard signs or variance signs used as trade-in exchange must be from "billboard signs in place" at the time of the sign permit application and from a different location than the nonconforming billboard sign or variance sign to be upgraded. Banked credits (as defined in an approved settlement agreement) shall not be considered as billboard signs in place at the time of the sign permit application.
    - ii. No more than six (6) sign faces (totaling at least six (6) times the square footage of the electronic billboard sign face) of nonconforming billboard signs or variance signs to be removed may be satisfied by the removal of signs in place at the time of the sign permit application or through the use of any banked credits. A minimum of one (1)

banked credit utilized for this subsection must have been accrued by the removal of a sign with a minimum of three hundred (300) square feet of sign face area.

iii. For a period of five (5) years beginning on the date of the issuance of the permit for the construction of the new electronic billboard sign, the owner of the electronic billboard sign may not construct a new sign face on the same roadway as the sign faces that are removed and used as trade-in exchange unless such sign face is located more than two thousand five hundred (2,500) feet from any of the sign faces that are removed and used for such trade-in exchange.

c. Notwithstanding anything to the contrary in subsection a. above, as an alternative to the exchange rate described above, a sign owner may permanently remove one (1) electronic billboard sign face in exchange for a new electronic billboard sign face at another location for which a sign permit is sought

## **APPENDIX J**

### **EXAMPLES OF PROGRAMS ALLOWING DIGITAL SIGNS ON CITY-OWNED PROPERTY**

#### **Chicago, Illinois**

17-12-1200 City digital signs.

17-12-1201-A Regulations and Standards. The following regulations shall apply to city digital signs, which, except as regulated hereby, are exempt signs under Section 17-12-0506.

1. Number, Area And Height Standards. The provisions of Section 17-12-1003 shall not apply to city digital signs. The maximum height of a city digital sign shall be 100 feet, measured from the lowest point of the ground directly below the city digital sign structure to the highest point on the sign or sign structure.
2. Dynamic Image Display Signs. The sign face of a city digital sign may not exceed 1,200 square feet.
3. Flashing Signs. City digital signs must not be wall signs, awning signs, flashing signs, high-rise building signs, marquee signs or video display signs.
4. Separation from R and DR Districts. Subject to Section 17-12-0904, city digital signs are prohibited within 125 feet of any R and DR district, provided, however, that such separation requirement may be reduced by 25% if (a) the city digital sign is not operated from 12:00 A.M. to 5:00 A.M., except for emergency purposes, and (b) either (i) the sign face is not visible from the front yard of residences in the abutting R or DR district, or (ii) the sign face is angled to primarily face an expressway or toll

road, as designated by the Chicago Department of Transportation. For purposes of testing such proximity restriction, property that is zoned as an R or DR district but which consists of land or public way owned by the city or a federal, state, local or other unit of government, in whole or in part, and which is not improved with any residential buildings, shall not be regarded as an R or DR district for purpose of such proximity restriction.

5. Separation from Residential Buildings in D Districts. City digital signs are prohibited entirely within 100 feet of a residential building located in a D district.
6. Separation from Waterways. City digital signs are prohibited within 100 feet of a waterway described in Section 17-12-1006-C.
7. Separation from Public Parks. City digital signs are prohibited within 100 feet of a public park of two acres or more (other than a linear park that is more than one mile in length and is primarily located within the public way, as to which no proximity restriction shall apply) if the sign face is legible from the subject park.
8. Lakefront Protection District. City digital signs are prohibited within the boundaries of the Lake Michigan and Chicago Lakefront Protection District.
9. Separation from Designated Major Streets and Roads. City digital signs are prohibited within the following boundaries:
  - (a) within 500 feet of Lake Shore Drive;
  - (b) Michigan Avenue, between Oak Street on the north and Roosevelt Road on the south.

For purposes of clarity, the proximity restriction in Section 17-12-1006-F. 1 (b) applicable to expressways or toll roads, as designated by the Chicago Department of Transportation, shall not apply to city digital signs, and the separation between sign requirements set forth in Section 17-12-1006-F.2 shall not apply to city digital signs, except as to signs described in Section 17-12-1201-A(10).

10. Separation from Other Off-Premises Signs. City digital signs shall be subject to the separation requirement in Section 17-12-1006-H, provided, however, that such separation requirement shall only apply to off-premises signs lawfully established with and operated pursuant to a current and valid permit, including, without limitation, the correct ownership information, the payment of all fees and other amounts due the city, and the operation of the sign within the limitations (e.g., size, height, type of sign) included in the approved permit for such signs, or otherwise applicable.
11. Flashing and Video Display Elements. City digital signs may not contain flashing elements or video displays.

12. Overlay Districts. City digital signs are prohibited in overlay districts established pursuant to Chapter 17-7.
13. Special Sign Districts. City digital signs are prohibited in special sign districts established pursuant to Section 17-12-1100.
14. Planned Developments and Planned Manufacturing Developments. City digital signs may be located on land or public way owned by the City and located within planned developments, so long as the underlying zoning for such planned development is not predominantly residential, and, notwithstanding Section 17-6-0403-F, on land or public way owned by the city and located within a planned manufacturing district.

### **Sacramento, California**

#### 15.148.965 Digital billboards on city land.

- A. Relocation Agreements. Notwithstanding anything to the contrary in this chapter (including Section 15.148.640) or in any ordinance not codified in this chapter (including Ordinance No. 2007-079), the city council may approve relocation agreements under Section 15.148.815 that authorize the construction and operation of digital billboards on city-owned property adjacent to a freeway, subject to the common provisions in subsection C of this section and the following additional provisions:
  1. Notwithstanding subsection (F)(3) of Section 15.148.815, the city-owned property may be located in any commercial zoning district or industrial zoning district.
  2. Notwithstanding any provision to the contrary in Section 15.148.815, an existing off-site sign that is removed and relocated under a relocation agreement that authorizes the construction and operation of a digital billboard may be either a legal conforming sign or a legal nonconforming sign.
- B. Funding Agreements. Notwithstanding anything to the contrary in this chapter (including Section 15.148.640) or in any ordinance not codified in this chapter (including Ordinance No. 2007-079), the city council may approve agreements that authorize the construction of digital billboards on city-owned property adjacent to a freeway, subject to the common provisions in subsection C of this section and the following additional provisions:
  1. The agreement may authorize the construction and operation of up to six digital billboards.
  2. The owner of the digital billboard or billboards authorized by the agreement (or an affiliate of the owner) must agree, among other things, to the following:
    - a. To fund at least forty (40) percent of the costs to design and construct a city-

owned indoor arena or outdoor stadium that is capable of hosting professional major-league sports and has permanent seating for at least fifteen thousand (15,000) persons.

- b. At no cost to the city, to remove the digital billboard or billboards from the city-owned property at the expiration of the agreement's term, which may not exceed thirty-five (35) years, and to restore the property to its pre-agreement condition.
3. No more than six digital billboards may be authorized for each city-owned facility to which contributions are made under subsection (B)(2)(a) of this section.
  4. The city council must find that the agreement will confer a substantial public benefit to the city and to the general public, identifying the benefit with reasonable specificity. In addition, the city council must find that each digital billboard identified in the agreement:
    - a. Complies with the purpose and requirements of this section and this chapter;
    - b. Is compatible with the uses and structures on the city-owned property and in the surrounding area, including parks, trails, and other public facilities and amenities;
    - c. Will not interfere with on-site access, circulation, or visibility;
    - d. Will not create a traffic or safety hazard;
    - e. Will not result in any undue or significant increase in visual clutter in the area surrounding the city-owned property.
  5. The city-owned property must be located in a commercial zoning district or an industrial zoning district.
- C. Common Provisions. All digital billboards authorized by this section are subject to the following provisions:
1. Each digital-display face must be oriented primarily for viewing from the adjacent freeway.
  2. Notwithstanding any provision to the contrary in this chapter, the maximum height of a digital-billboard structure, measured from grade to the top of the digital-display face, is eighty-five (85) feet; and the overall maximum height, measured from grade to the top of the billboard structure, is ninety (90) feet.
  3. Notwithstanding any provision to the contrary in this chapter, the maximum area of each digital-display face is seven hundred (700) square feet, and a digital billboard may have either one or two digital-display faces.
  4. A digital billboard may display only a series of still images, each of which is

displayed for at least eight seconds. The still images may not move or present the appearance of motion and may not use flashing, scintillating, blinking, or traveling lights or any other means not providing constant illumination. Transition or blank screen time between one still image and the next may not exceed one second.

5. The owner of the digital billboard must comply with all applicable federal, state, or local laws, including the Highway Beautification Act of 1965 (23 United States Code Section 131), the Outdoor Advertising Act (California Business and Professions Code Section 5200 et seq.), and this chapter, when constructing, operating, improving, maintaining, repairing, and removing the digital billboard.
6. The city must comply with the California Environmental Quality Act before approving an agreement that authorizes a digital billboard. (Ord. 2014-0017 § 3)

### **Stockton, California Cap and Replace Code**

1. The Cap. The total number of all off-premises signs shall never exceed 306 signs, further said cap shall be reduced by the number of signs removed pursuant to relocation agreement(s) for digital/electronic/moving displays/signs.
2. Static Signs. The only zoning districts where static off-premises signs are allowed to be erected and maintained are the IL and IG zoning districts, unless the City and the sign company have entered into a relocation agreement. Pursuant to the relocation agreement, and subject to the cap and subject to all the other standards of this section, a static off-premises sign may be relocated to the CD, CG, or CL zoning districts based on a sign face square footage replacement ratio of three (3) to one (1). This means that for every new static sign allowed, existing signs equal to three (3) times the sign face square footage of the new sign shall be removed.
3. Digital/Electronic/Moving Displays/Signs. The total number of digital/electronic/moving off-premises displays/signs shall be as established by City Council resolution but shall never exceed 12 signs (one (1) double-faced sign installation at six (6) locations). Digital/electronic/moving off-premises displays/signs are allowed to be erected and maintained only on City-owned or controlled property in the IL, IG, CD, CG, or PF zoning districts subject to the City and the sign company entering into a relocation agreement. Pursuant to the relocation agreement, and subject to the cap and subject to all the other standards of this section, a digital/electronic/moving off-premises display/sign may be relocated to City-owned or controlled property in the above noted zoning districts based on a minimum sign face square footage replacement ratio of nine (9) to one (1). This means that for every new digital/electronic/moving display/sign allowed, existing signs equal to or greater than nine (9) times the sign face square footage of the new sign shall be removed.