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1. 해외사례 자료

A. 로스앤젤레스 '표지판 조례 (Sign Ordinance)' 개정안 브로슈어

LOS ANGELES DEPARTMENT OF CITY PLANNING

The **New** Comprehensive Sign Ordinance

Recommended by the City Planning Commission on March 26, 2009

A balanced vision for Los Angeles.

This packet provides a summary of the new sign ordinance that is currently pending review by the Los Angeles City Council.

What does the ordinance do?

- 1 Reduces visual clutter caused by permissive sign laws, through an approximate 40% reduction in the amount of signage allowed on a lot
- 2 Protects our visual environment by prohibiting billboards, digital signs, roof signs and supergraphics throughout most of the city
- 3 Allows these prohibited sign types only in areas planned for exceptional commercial intensity (sign districts)
- 4 Gives the city more traction in court through specific, objective standards
- 5 Strengthens enforcement through tough new penalties to deter illegal signage

Many Los Angeles streets are cluttered with signs.

The ordinance accomplishes the above objectives through a 3-tiered approach, as described on the following pages.

tier 1: baseline standards

The baseline standards would apply to the vast majority of the city, except for certain larger developments, and areas planned for exceptional commercial intensity.

Prohibited signs: off-site signs, digital signs, and roof signs
Effectively prohibited signs: supergraphics (jumbo wall signs)

Photo by LA Eye of Building & Living

- The above are the most visually intensive sign types, that are incompatible with the lower intensity commercial development that makes up most of the city.
- Research has shown that large, bright signs, especially those with changing images, can distract drivers and cause accidents.
- Off-site signs (that advertise products or services sold off-site) tend to draw attention away from the smaller on-site signs of local businesses.
- Limiting total sign area and prohibiting window coverage are the best ways to control and prevent supergraphics and jumbo signs of any kind (including future sign display methods not yet developed).



Digital billboard

Clutter reduction:

Sign clutter needs to be reduced, to improve our streetscapes and help local businesses that are getting lost in a mishmash of competing signage. The ordinance will accomplish this in two ways:

- Reducing the total sign area for on-site signs
- Reducing the size and number of on-site signs

Removal of ban on murals:

The ordinance removes the 2002 ban, and allows murals as wall signs. Further allowances for larger murals are in development under a separate ordinance.



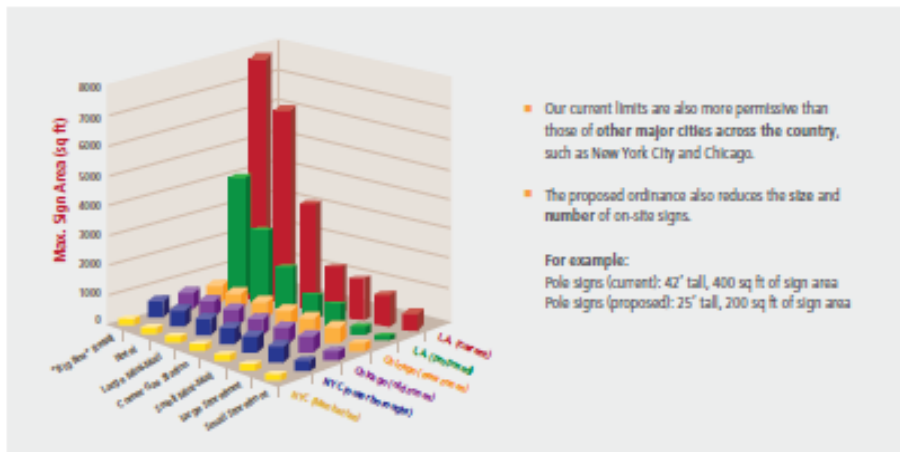
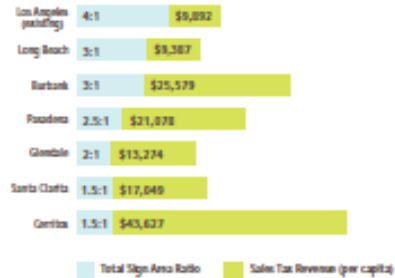
Supergraphic

Reducing Sign Clutter: Good for streetscapes, good for local business



- The new ordinance includes a total sign area ratio of approximately 2.5:1, which allows: 1 square foot of signage for each linear foot of street frontage, plus 1.5 square feet of signage for each linear foot of building frontage.
- 2.5:1 is a mid-range limit, compared with neighboring cities.
- Our current sign laws are very permissive. We allow more signage than Corritos, Santa Clarita, Glendale, Pasadena, Burbank, Long Beach, Santa Monica, and West Hollywood.

- Businesses in our neighboring cities do not suffer for having better controlled signage. In fact, sales tax revenues are generally higher in these cities, which have been recognized as among the most "business-friendly" in the region.



- Our current limits are also more permissive than those of other major cities across the country, such as New York City and Chicago.
- The proposed ordinance also reduces the size and number of on-site signs.

For example:
 Pole signs (current): 42' tall, 400 sq ft of sign area
 Pole signs (proposed): 25' tall, 200 sq ft of sign area

What does 2.5:1 look like?

The drawings below represent what the proposed 2.5:1 sign area ratio would look like on actual sites in Los Angeles. The proposed ratio allows for signage that is ample but not oversized.

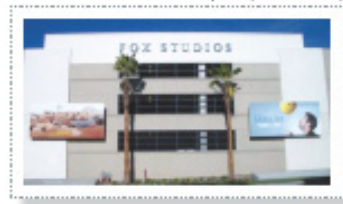


tier 2: sign programs

The new ordinance creates Sign Programs, a discretionary review to consider slightly larger amounts of signage for certain large or unique developments, such as shopping centers, museums or movie studios.

- Can allow signage up to the current baseline (approximately 4:1 sign area ratio)
- Can allow larger pole signs, up to a maximum of 50 feet in height
- Available for sites with at least 5 acres and 100,000 sq ft of non-residential floor area
- A public hearing is required, with notification to owners and occupants within a 500-foot radius
- Specific findings require a design theme, and compatibility with the surrounding neighborhood
- Findings also require that signs do not create traffic hazards, light pollution, or other negative environmental effects

Photo by Bob Wills (Fox Studios/PRC Studio)

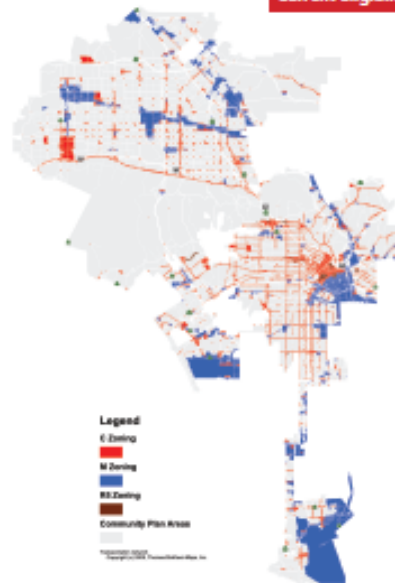


tier 3: sign districts

The new ordinance tightens the requirements for Sign Districts, which can allow sign types otherwise prohibited citywide, in certain areas planned for exceptional commercial intensity.

- Can allow off-site signs, digital signs, supergraphics and roof signs
- Eligible areas are those planned for the most intense commercial uses — regional center, regional commercial, or downtown center land use
- For each square foot of new prohibited signage, more than one square foot of existing off-site signage must be removed from the surrounding area
- Minimum size of 5,000 linear feet of street frontage or 15 acres, whichever is smaller

Current Eligibility

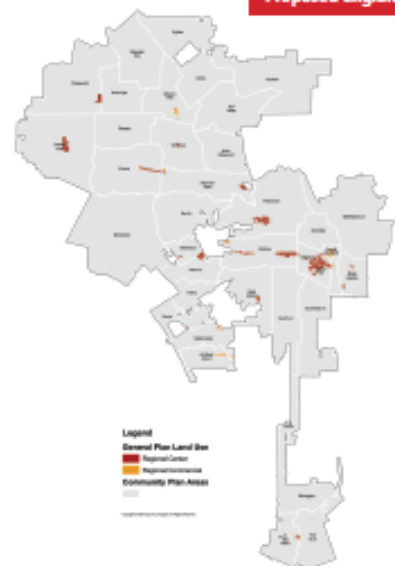


Sign Districts: Stricter, More Objective Criteria

Currently, Sign Districts can be established virtually anywhere in the city, in any commercial or industrial zone (see map on top right). This type of broad granting of exceptions (termed by one judge as “willy-nilly”) has gotten the City into legal hot water.

Under the new sign ordinance, eligibility is restricted based on objective land use criteria. Sign Districts would be allowed only in areas where community-based long range plans have called for the most commercially intense land uses. This would represent about a 90% reduction in eligibility for Sign Districts citywide (see map on bottom right).

Proposed Eligibility



New Enforcement Tools

A vital component of any effective sign ordinance is good enforcement. This ordinance includes tough penalties, similar to those used effectively in New York City, to curtail illegal signage.

Penalties vary with the size of the sign and the number of repeat violations:

Sign Area of Sign In Violation	Civil Penalty Per Day of Violation		
	First Violation	Second Violation	Third and all Subsequent Violations
Less than 150 square feet	\$2,000	\$4,000	\$8,000
150 to less than 300 square feet	\$4,000	\$8,000	\$16,000
300 to less than 450 square feet	\$6,000	\$12,000	\$24,000
450 to less than 600 square feet	\$8,000	\$16,000	\$32,000
600 to less than 750 square feet	\$10,000	\$20,000	\$40,000
750 or more square feet	\$12,000	\$24,000	\$48,000

For each violation, a penalty can be assessed against both the property owner and the sign owner.

The ordinance also allows a right of private action whereby owners and occupants of real property within 500 feet of an illegal sign can pursue civil action against the parties responsible for the sign.

Parties that are delinquent in paying penalties and correcting violations can be referred to a collection agency. In addition, the City can place a property lien against the site where the illegal sign is located.

Finally, there is a new cost recovery provision that allows the City to recoup costs of enforcement, including costs of removal of illegal signs. ■

For further information on the new proposed sign ordinance, please contact:
 Alan Bell at (213) 978-1322
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 or e-mail
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**Current and Proposed Sign Regulations:
Sign Districts, Baseline Provisions, and Individual Sign Types**

Sign Districts

Provision	Current Regulation	Proposed Regulation
Zoning / land use	Any C or M zone, R5 zones in regional centers / regional commercial / high intensity commercial areas, or redevelopment areas	Limited to C, PF, or R5 zones in areas designated as regional centers, regional commercial areas & the downtown center
Sign types allowable	Any	Any
Size	Minimum 1 block or 3 acres, whichever is smaller	Minimum 5,000 feet of street frontage or 15 acres, whichever is smaller
Sign reduction	Optional; no reduction ratio specified	Mandatory sign reduction. For every square foot of new off-site or digital signage, more than one square foot of legally existing off-site signage must be removed from the surrounding area.
Findings to establish a Sign District	General findings, not specific to signage. Also, a requirement that Sign Districts must enhance the character of the district, by regulating sign location, number, size, illumination, design, etc.	Findings include that Sign Districts must have a unique design theme or character, cannot create traffic hazards or light pollution, and must further the design goals of the Framework Element. Enhanced findings are more specific and legally defensible.
Neighborhood protection	No specific provisions	Cannot abut single-family residential zones
Relief from Sign District regulations	No limit	Maximum 20% deviation for height, location and sign area requests

Baseline Citywide Provisions

Provision	Current Regulation	Proposed Regulation
Off-Site Signs	Prohibited, except in Sign Districts, Specific Plans, Development Agreements, and Relocation Agreements.	Prohibited, except in Sign Districts.
Digital Signs	Not specifically regulated.	Prohibited, except in Sign Districts.
Roof Signs	Allowed with strict limits: only on sloping roofs; cannot extend above roofline.	Prohibited, except in Sign Districts.
Supergraphics	Prohibited, except in Sign Districts, Specific Plans, Development Agreements, and Relocation Agreements.	Regulated as wall signs. Effectively prohibited by 2.5:1 sign area ratio and prohibition from covering windows.
Mural Signs	Prohibited, except in Sign Districts, Specific Plans, Development Agreements, and Relocation Agreements.	Allowed as wall signs. Larger murals to be allowed under a separate ordinance.
Total Sign Area	Approx. 4:1 (4 or more sq ft of signage per foot of street frontage)	Approx. 2.5:1 (1 sq ft of signage per foot of street frontage + 1.5 sq ft per foot of building frontage)
Civil Penalties	No provisions specific to signs.	Penalties vary from \$2,000 to \$48,000 per day, depending on size of sign and number of violations.
Relief Mechanisms	Variance; deviation unlimited.	Sign Modification for up to 20% deviation. Sign Program for large sites (5 acres, 100,000 sq ft), up to current baseline.

Individual Sign Types

Provision	Current Regulation	Proposed Regulation
Wall Signs	Can't be higher than roofline.	Can't be higher than roofline. Can't cover windows, doors or vents.
Pole Signs	42 ft max height; 400 sq ft of sign area.	25 ft max height; 200 sq ft of sign area.
Monument Signs	8 ft max height; 75 sq ft of sign area	8 ft max height; 60 sq ft of sign area
Projecting Signs	no height limit; 300 sq ft of sign area	no height limit; 50 sq ft of sign area
High-Rise Signs	Allowed; sign area proportional to building height & width.	Allowed; sign area proportional to building height & width; limits to prevent oversized signage.
Illuminated Architectural Canopy Signs	Allowed; no limits	Allowed; 50 sq ft of sign area

B. 홍콩 옥외조명 설치를 위한 실무 가이드라인

Guidelines on Industry Best Practices for External Lighting Installations

The guidelines below suggest some best practices on external lighting installations that Government departments and the private sector should observe.

Introduction

1. External lighting in Hong Kong exist in many different forms and some typical examples include signs (either internally illuminated or externally illuminated), lighting for facades and features, lighting outside buildings (including those for shops), lighting for sports fields and playgrounds, external video structures (e.g. video walls, display panel).
2. The guidelines in this document aim to outline some general good practices on design, installation and operation of external lighting for the reference of lighting designers, contractors, owners and users with a view to minimizing the adverse impacts arising from external lighting.
3. The guidelines are not intended to cover road lighting maintained by Highways Departments (HyD), which should comply with the Public Lighting Design Manual issued by HyD.
4. For easy reference, the guidelines are grouped under the following sub-headings: operating hours for lighting, automatic controls for lighting, light pollution control measures, energy efficiency measures, lighting project design planning, glare prevention to road users, and advertising signs.
5. The good practices stipulated in this document are not exhaustive. Relevant professionals, such as experienced practitioners and consultants in the lighting field, should be consulted for further advice if necessary.

Operating hours for lighting

6. Limiting the use of external lighting after a specified time at night could reduce the possibility of light pollution and energy consumption and in turn foster a good living environment for

everyone. It is advisable to :

- (a) Switch off the external lighting when not needed or after business hours.
- (b) Switch off the external lighting after certain time at night (say, after 11pm as recommended by International Commission on Illumination (CIE))⁴¹.
- (c) Maintain only essential lighting (e.g. lighting for safety and security) at the acceptable level as required.
- (d) Feature lighting serve to enhance a particular feature/building/structure may be subject to even more stringent control as to their lit time.

Automatic controls for lighting

- 7. Automatic controls could help reduce adverse impacts of external lighting by optimizing the use of the external lighting. Examples of such measures include :
 - (a) Incorporate automatic control (e.g. timer switch) to switch off the external lighting when not needed or after business hours, or when concerned premises are not in use, or after certain time at night (say, 11p.m. as recommended by CIE).
 - (b) Incorporate automatic control (e.g. photo-sensor for maximizing daylight utilization) to switch on the external lighting only when necessary.
 - (c) Incorporate occupancy sensor control (e.g. motion sensor or passive infrared sensor) to switch on the external lighting from off or dimmed state where applicable.

Light pollution control measures

- 8. Measures to reduce light pollution impacts (e.g. light overspill, light trespass, glare and sky glow) arising from external lighting include :

⁴¹ International Commission on Illumination (CIE), an international professional body on light and lighting, suggests curfew at 11:00p.m., unless otherwise specified, after which stricter requirement for control of obtrusive light will apply.

- (a) Avoid over-illumination of signs, facades, shop fronts, video walls and facilities with lighting. Over-illumination will increase possibility of light pollution.
- (b) Position and aim the lighting properly to avoid overspill of light to outside the area being lit up.
- (c) For lighting up vertical structures (e.g. signs & façade), direct the beam to the structures and avoid overspill of light.
- (d) Use lighting with appropriate shields, baffles, louvers and cut-off features to prevent light overspill to nearby residence and into the sky, and glare from the light source. Where necessary, consider to use luminaires with appropriate cut-off classification. To avoid imposing additional wind load which will affect the structure of the existing lighting columns and foundation, please consult relevant professionals in the design of shields, baffles, louvers, etc. for retrofit works.
- (e) Switch off the lighting when it is not operationally required or dim down the lighting when a high illumination level is not essential (e.g. after business hours and where the lighting devices are not for security purposes).
- (f) Avoid using video walls or signs with flickering, colour changing or movement effect in cases where the video walls or signs are facing directly at residents (e.g. when the lighting device and residential premises are on the opposite sides of a road or street). Where unavoidable, reduce the period of operation and/or the flickering rate.
- (g) For signs with LEDs, use suitable type of LEDs (e.g. LEDs with baffles, louvres or optic diffusers to control light distribution) to reduce sign luminance and light overspill and to prevent glare from direct view of the light source.
- (h) Avoid directing light at glass curtain wall, shiny shop front display panel, or light colour fabric materials (e.g. used in shade structures in parks, amphitheatres or piazzas) etc. to prevent light overspill and nuisances caused by reflection of light.

Energy efficiency measures

9. Measures to enhance energy conservation and energy efficiency of external lighting include :
- (a) Avoid over-illumination of signs, facades, shop fronts and facilities with lighting. Over-illumination will consume more lighting energy.
 - (b) Use more energy efficient lighting equipment, e.g. T5 fluorescent light, compact fluorescent lamp (CFL), ceramic metal halide (CMH) lamp, metal halide lamp, LED, and electronic ballast.
 - (c) Dim down lighting as applicable and switch off lighting when it is not needed (e.g. after business hours) by automatic or manual control.
 - (d) Incorporate sectional controls such that the sections of lighting not operationally required are switched off or dimmed down as appropriate.
 - (e) Clean up the external lighting (as part of regular maintenance) to reduce lumen depreciation due to dusts and wastes on the lighting. Adequate provision for easy access and/or appropriate facilities should be allowed to facilitate regular cleaning of external lighting.

Lighting project design planning

10. Good design planning for an external lighting project could help prevent occurrence of adverse impacts from the lighting installations. Design and planning measures include :
- (a) Assess the impacts of external lighting as part of the lighting design development process before firming up the lighting design for installation. Some aspects to be considered may include critical or sensitive locations that the lighting may affect, ambient brightness condition, orientation and positioning of external lighting, types of external lighting, lighting energy consumption, and importance of lighting pollution impacts.
 - (b) Review whether the external lighting will have the possibility of

shining outside the area it intends to light up, affecting neighbourhood or the sky. If so, refine the lighting design, consider re-positioning the lightings and adjusting the aiming angles, and choose luminaires with suitable light distribution characteristics (e.g. light pattern, beam spread, cut-off angle) or light control devices (e.g. shields and baffles) as appropriate.

- (c) For floodlighting, ensure the beam angle of the lighting from the vertical is not excessive and the lighting is fitted with shields and cut-off features to control glare, and if possible, use lower intensity lamps to reduce glare from the light source.
- (d) Whenever there is residence nearby, use lighting with appropriate shields, baffles, louvers and cut-off features to prevent light overspill, and glare from the light source. Where necessary, consider using luminaires with appropriate cut-off classification.
- (e) For sports lighting, use luminaires with double asymmetric beams as appropriate so that the front glazing is kept nearly parallel to the surface being lit to minimize overspill light. The light output should be adjustable to different illumination levels to meet different purposes (e.g. training/competitions). For floodlighting provision, adverse effects to nearby residents due to light nuisance such as glare should be thoroughly assessed before the installation of the lighting and suitable measures should be taken to minimise the impact to a level acceptable to nearby residents. Consideration should be given to take into account the physical environment of the facilities to be provided with floodlighting with a view to reducing the light nuisance as well as to provide suitable light-breaker to reduce the glare if necessary. Special care should also be taken to avoid over-concentrating the floodlights on a few lighting towers/columns which could cause light nuisance or glare problems to nearby residents.

Prevention of glare to road users

11. Glare from external lighting may affect road users resulting in safety concerns. Measures to reduce such glare impact include :
 - (a) Ensure the external lighting is appropriately positioned, aimed or shielded so that illumination of nearby roads will not be

adversely affected.

- (b) Ensure appropriate type of lighting is used (e.g. lighting with suitable light distribution pattern, or appropriate cut-off classification) to reduce glare impact on road users.

Advertising signs

- 12. Advertising signs should also comply with the advice and guidance on safety, health and related issues stipulated in the *Practice Notes for Authorized Persons and Registered Structural Engineers APP-126* and the *Guide on Erection & Maintenance of Advertising Signs* issued by Buildings Department.

Environment Bureau
Environmental Protection Department
Electrical and Mechanical Services Department
January 2012

2. 자문회의록

일시 | 2012년 8월 17일

자문위원 | 박기준(케이디에이 그룹 대표소장), 김미라(아이안 소장)

서울시 | 이명기(도시빛정책팀장)

- 미디어파사드의 개념 재정립 필요
 - 미디어파사드는 미디어아트의 일환
- 미디어파사드에 대한 강력한 규제 필요
 - 서울에서 미디어파사드는 빛공해 요소로 전략
 - 아시아의 역동적인 이미지에 부합하는 미디어파사드를 활성화하기 위해서는 적절한 zoning 등 관련제도 구축 필요
- 콘텐츠의 중요성 인식
 - 예술작가의 책임감 강화
 - 예술작가에 대한 검증체계 구축
 - 관련분야의 네트워크 구축