



Staff Report

PLANNING DIVISION

DEPARTMENT of COMMUNITY and NEIGHBORHOODS

To: Salt Lake City Planning Commission
From: Katilynn Harris, Principal Planner, katilynn.harris@slcgov.com, 801-678-0590
Date: March 27, 2024
Re: PLNPCM2023-00669, Electronic Signs Text Amendment

Text Amendment

PROPERTY ADDRESS: Citywide
MASTER PLAN: [Plan Salt Lake](#)
ZONING DISTRICT: All

REQUEST:

The Salt Lake City Council has initiated a petition to amend the zoning ordinance to create standards regulating electronic sign faces, currently referred to as electronic changeable copy. The proposed standards will include regulations like brightness controls, display hours, and zones where these signs are not permitted. The ordinance currently does not include standards specifically regulating electronic sign faces for on premise signs.

RECOMMENDATION:

That the Planning Commission forward a recommendation to City Council to approve the proposed text amendment.

ATTACHMENTS:

- A. [ATTACHMENT A: Proposed Text Amendment](#)
- B. [ATTACHMENT B: Zoning Text Amendment Standards](#)
- C. [ATTACHMENT C: Public Process & Comment](#)

PROJECT DESCRIPTION

BACKGROUND:

On July 18, 2023, the City Council initiated this petition through legislative intent directing staff to provide recommendations on best practices for concerns such as brightness, dwell and twirl times, animation, etc. and ensure those related standards comply with state and federal law.

Currently in the sign ordinance, electronic sign faces are defined as electronic changeable copy. These types of sign faces utilize digital technology to display text and images that are controlled remotely. The most common examples within the city are gas station price signs, signs for multi-tenant buildings, and public information signs but any sign face using a digital display to convey information is considered

electronic changeable copy. These electronic sign faces are permitted on any sign type (e.g. flat sign, monument sign, pole sign, etc.) allowed in the various zoning districts. As such, electronic sign faces are subject to the general standards that regulate all sign faces in the ordinance. The only regulation specific to electronic sign faces in the ordinance as it exists today is that any text or image on the display must be fully readable within 3 seconds. Sign faces that take longer than 3 seconds to be legible are considered animated signs and are not permitted under the existing code.

Due to their digital nature, electronic sign faces impact their immediate surroundings in different ways than traditional sign faces. They are capable of not only generating substantially more light pollution, but also creating visual clutter and distraction that can negatively impact the appearance of the city. There are currently no standards in the zoning ordinance that limit these potential impacts. The proposed text amendment creates standards related to brightness, animation, and other aspects unique to electronic sign faces that should address these concerns.



Multi-tenant electronic sign face at Trolley Square on the corner of 400 S & 700 E

The proposed text amendment will only affect on-premise signs. It will not impact billboards which are regulated by 21A.46.160. Billboards already have standards regulating brightness and animation. The proposed standards will create similar regulations for on-premise signs.

PROPOSED CHANGES:

The term “electronic changeable copy” currently in use in the ordinance is an outdated term. The proposed text amendment replaces this term with the industry standard “electronic message center” to provide clarity to those using the sign ordinance.

An electronic message center (EMC) is a type of digital display used to convey information, advertisements, or messages electronically. These displays typically utilize LED (Light Emitting Diode) or LCD (Liquid Crystal Display) technology to showcase dynamic content such as text and images. They also have the capability of displaying animations and video if not regulated.

In addition to updating the term to electronic message center, the proposed text amendment will create standards that regulate these types of sign faces. Currently, an electronic sign face is allowed on any permitted sign type and must be readable within 3 seconds. The proposed standards will address potential impacts specific to these types of sign faces.

The first standards relate to the impact electronic sign faces can have on the visual environment within the city. All text and images displayed on the digital screens shall be static. The only dynamic movements permitted are during the transition between subsequent messages or images. Dwell time is the minimum amount of time an image or text must remain on the display before transitioning to the next message. The proposed dwell time is a minimum of 8 seconds. Twirl time is the maximum

amount of time it takes to transition between displays. The proposed twirl time is a maximum of .25 seconds.

The next standards are related to the impacts associated with light pollution. The brightness of any electronic sign face shall not exceed 0.3 foot-candle. Foot-candle is a measurement of light intensity from a specific distance. This type of measurement takes into account the ambient lighting surrounding the sign as well as the size of the sign face. Each electronic sign face shall be equipped with an automatic dimmer that can adjust the brightness of the sign face as the lighting conditions around it change to ensure the sign always stays below the maximum brightness level. In the event of a malfunction with the display technology, the sign face must revert to a black screen rather than a white screen. Additionally, businesses with an electronic sign that are closed between midnight and 6:00 AM will be required to turn off their electronic sign faces during those hours. Businesses that are open during that period will be able to keep their signs on during business hours.

The proposed text amendment also prohibits electronic sign faces in certain locations. These types of sign faces shall not be permitted in single- and two-family zoning districts. They also are prohibited within specific areas in the Northwest Quadrant overlay district to reduce the impact of these sign face types on wildlife.

Art that is displayed on electronic screens is a relatively new aspect the zoning ordinance needs to be equipped to handle. While the city does not regulate public art, art that utilizes these types of display screens have similar concerns related to brightness and animation. Therefore art displayed using electronic screens will need to comply with the motion and brightness standards applicable to electronic sign faces.

APPROVAL PROCESS AND COMMISSION AUTHORITY

The proposal is for a zoning text amendment. The Planning Commission is a recommending body for zoning text amendments per [21A.50.050.A](#). The commission can consider forwarding the proposal to the city council for adoption as is, with modification to any aspect of the proposal provided the modification complies with applicable state and federal laws or recommend that the proposal not be adopted.

If considering modifications, the commission can provide clear direction to the planning staff regarding the changes and ask that the changes be made prior to sending the proposal to the council for consideration, provide staff with exact wording (or deletions) that are desired, or table the matter with clear direction to staff to make specific changes that will be reviewed by the commission at a later date.

KEY CONSIDERATIONS

The key considerations listed below were identified through the analysis of the project:

1. How the proposal helps implement city goals and policies identified in Plan Salt Lake.
2. Impact to the city and the best practices to mitigate those impacts.
3. Compliance with state code.

Consideration 1: Implementation of city goals and policies identified in Plan Salt Lake

One of the overarching guiding principles in Plan Salt Lake for the government is “a local government that is collaborative, responsive, and transparent.” One of the goals to accomplish that vision is to address existing barriers to understanding and implementing code regulations. The proposed zoning

text amendment aligns with this goal in Plan Salt Lake by updating definitions to include modern language and clearly delineating the standards that regulate electronic sign faces.

This amendment also adheres to the principles of collaboration, responsiveness, and transparency outlined in Plan Salt Lake as the petition was initiated largely in a response to concerns raised by citizens over the lack of standards regulating electronic sign faces for on-premise signs.

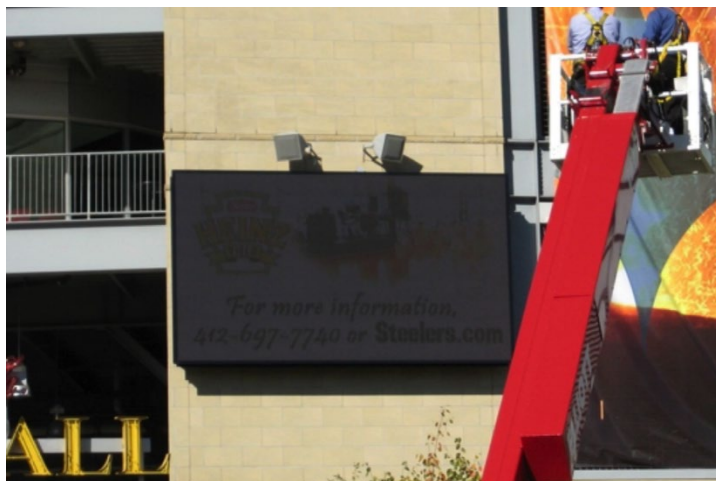
Consideration 2: Impact to the city and best practices

As discussed previously, the current sign ordinance does not have standards specifically regulating on-premise electronic sign faces even though they are permitted citywide. The proposed text amendment should reduce the impact these types of sign faces have on their surroundings by limiting how bright they can be, where in the city they are permitted, and prohibiting animation on the displays.

Brightness

One of the greatest potential impacts to the city concerns the amount of light electronic sign faces are capable of producing. The proposed standards seek to solve this impact with a brightness maximum to prevent nuisance to adjacent uses and reduce the impact of excessive light on pedestrians and drivers.

There are basically two ways to measure light. One is to measure the amount of light put off by a light source. This way of measuring light does not account for ambient lighting conditions. See the adjacent image for an example of a brightness standard that utilizes this type of measurement. Since the standard does not consider ambient lighting conditions, the sign becomes illegible during bright sunlight.



Example of the effects of a brightness standard that measures the amount of light put off by the electronic sign. This sign is not found in SLC.

The other way of measuring light is by measuring how bright the light appears to the human eye. This means of measurement takes ambient lighting conditions into consideration. Just like a cell phone, the brightness of an electronic sign face should be relative to the lighting conditions around it. The brighter the conditions around the sign, the brighter the display must be to be legible. The proposed brightness standard utilizes this type of measurement. The exact measurement number, 0.3 footcandles, is recommended by the [International Sign Association](#) and is the same standard found in the billboards section of the sign ordinance.

To ensure the sign face is not too bright or dim for the various lighting conditions throughout the day, an automatic dimmer will be required for all electronic sign faces. This will help to maintain the balance between legibility and excessive light pollution.

Hazard Potential

Another potential impact associated specifically with electronic sign faces is their potential to be a distraction to drivers. Two studies by Texas A&M University and the Federal Highway Administration suggest that electronic sign faces are minimally distracting.

[Texas A&M University](#) conducted a statistical analysis of crashes on roads adjacent to an electronic sign face by comparing the number of crashes on a road 2 years before and two years after the installation of the sign. Their analysis showed no statistically significant impact which suggests the installation of an electronic sign face had little to no impact on the safety of the adjacent road.

The [Federal Highway Administration](#) (FHWA) conducted a test that involved tracking the eye glance rates of drivers with cameras installed in the vehicle. These cameras measured the length of the glance rate as well as determining what the driver was glancing at, e.g. the radio, cell phone, the built environment, signs, etc. The drivers were not informed of the true purpose of the test so as to not influence their behavior. The FHWA considers any glance away from the road that is longer than 2 seconds to be dangerous. The test showed that electronic sign faces produced a glance rate of less than 1 second with the longest being 1.3 seconds. This suggests that electronic sign faces are no more distracting to drivers than any traditional sign face.

Based on these studies, staff finds that electronic sign faces do not constitute a public hazard when regulated.

While the above studies suggest that electronic sign faces are no more hazardous than traditional sign faces, it is unclear whether the signs studied included full motion video or animations. By their nature, animations and full motion video displays have the potential to be substantially more distracting than a static message or image as they require longer glance times to fully comprehend the message being displayed. As such, the proposed dwell and twirl time standards in combination with the requirement that all displayed images must be static further seek to reduce the potential hazards created by animations and rapidly changing messages. These standards are the same as those regulating electronic billboards.

Additionally, these standards aim to further the purposes of the sign ordinance listed in [21A.46.010](#); more specifically to encourage sign design that are integrated with and harmonious to the buildings and sites the signs occupy and to preserve and enhance the appearance of the city. Animations and video display create visual clutter that could negatively impact the appearance of most of the city.

There are a few sign overlay districts that create specific allowances for electronic sign faces that are not permitted in areas outside the overlays. Electronic sign faces on specific types of signs within these overlays are allowed to display full motion video and animation. These include the Delta Center and Smith Ballpark overlays, as well as the proposed Salt Palace overlay which is currently under consideration by the city council. These allowances are specific to those areas and were approved by the city council. As such, they will be retained as part of this text amendment.

Consistency

The current sign ordinance is inconsistent as the billboard standards found in [21A.46.160](#) include regulations for electronic signs while on-premise signs have no such standards even though the same type of technology is permitted. This created confusion for property and business owners attempting to apply the sign ordinance to their proposed signs. The proposed text amendment aims to treat all electronic sign faces the same, regardless of if they are on or off premise; this includes art screens. The proposed standards for on-premise electronic sign faces are consistent with the existing regulations for off-premise electronic signs; i.e. brightness, dwell time, twirl time, and motion.

The proposal to update the existing term, “electronic changeable copy,” to the new term, “electronic message center,” also seeks to keep the ordinance up to date and consistent with the industry standard. As “electronic message center” is a commonly used definition for electronic sign faces, it should reduce confusion and requests for interpretations thus making the ordinance more user friendly.

Consideration 3: Compliance with state code

State code 72-7-505 (1)(d) states: “A changeable message sign is permitted if the interval between message changes is not more frequent than at least eight seconds and the actual message rotation process is accomplished in three seconds or less.” The proposed dwell and twirl times, 8 seconds and 0.25 seconds respectively, are consistent with these requirements.

STAFF RECOMMENDATION

The Planning Division is recommending that the Planning Commission forward a motion to the City Council to adopt the proposed changes. The proposed regulations will help address the impacts of on-premise electronic sign faces which are largely unregulated under the current zoning ordinance and also keep standards consistent for all screens regardless of sign type.

NEXT STEPS

The recommendation of the planning commission will be sent to the City Council who has the final approval authority for all city code amendments. The City Council will hold a briefing and additional public hearing on the proposed changes. The City Council may make modifications to the proposal and approve or decline to approve the proposed changes.

If ultimately approved by the City Council, the changes would be incorporated into the City Zoning code and development would be required to follow the new regulations.

ATTACHMENT A: Proposed Text Amendment

Note: underlined text is new proposed language; text with strikethrough is proposed to be deleted. All other text is existing with no proposed change.

21A.46.020: DEFINITIONS:

ANIMATED SIGN: A sign, excluding an electronic message center changeable copy, which involves motion or rotation of any part by mechanical or artificial means or which displays flashing or intermittent lights.

DWELL TIME: The length of time that text, images, or graphics are legible on an electronic message center.

~~ELECTRONIC CHANGEABLE COPY: The copy of a sign containing an electronically generated message such as a public service, time, temperature and date, or a message center or reader board, where different copy changes of a public service or commercial nature are shown on the same lamp bank or message facility. The term "electronic changeable copy" shall not be defined as a type of "animated sign" if the message displayed is fully readable within three (3) seconds. Electronic changeable copy shall be considered, for the intents of this chapter, a sign face type rather than a sign type.~~

ELECTRONIC MESSAGE CENTER (EMC): A portion of an on-premise sign face that is capable of displaying words, symbols, figures, graphics, or images that can be electronically changed by remote or automatic means.

TWIRL TIME: The time it takes for text, images, or graphics on an electronic message center to change to different text, images, or graphics.

21A.46.070.W

W. Unless otherwise exempt, all electronic message centers shall be operated pursuant to the following standards:

1. Motion: Text, images, or graphics displayed on an electronic message center must be static. Transition effects such as wipes, fades, or other special effects are permitted provided they comply with twirl time regulations.
2. Dwell and Twirl time: Text, images, or graphics on an electronic message center shall not change more than once every eight (8) seconds. Twirl time between subsequent static text, images, or graphics shall not exceed one-fourth (0.25) second.
3. Brightness: No electronic message center shall exceed a brightness level of three-tenths (0.3) foot-candle as measured at a pre-set distance. The measurement distance shall be determined based on the area of the electronic message center using the following formula: the square root of (the electronic message center area times 100). Fractions shall be rounded to the nearest foot.

Example: If a monument sign features a 50 square foot electronic message center, the measurement distance shall be calculated as follows:

$$50 \times 100 = 5,000$$

$$\sqrt{5,000} = 71 \text{ feet.}$$

The brightness level will be measured at 71 feet away from the electronic message center.

4. Display: An electronic message center shall be used for the identification of the on-premise use. Text, images, or graphics advertising off-premise uses are not permitted.
5. Display hours: An electronic message center shall not be illuminated or lit between the hours of twelve o'clock (12:00) midnight and six o'clock (6:00) A.M, except when:
 - a. A business is open to the public during these hours; and
 - b. The illumination of the associated electronic message center is limited to business hours.
6. Location: An electronic message center is not permitted in single- or two-family zoning districts. Additionally, an electronic message center is not permitted in the Eco-Industrial Buffer Area or the Natural Area of the Northwest Quadrant Overlay District (see 21A.34.140.C and D).
7. Controls:
 - a. Each electronic message center shall be equipped with an automatic dimmer control or light sensing device that automatically adjusts the brightness of the sign as ambient light conditions change.
 - b. Each electronic message center shall contain a default mechanism that will cause the sign face to revert immediately to a black screen if the sign face malfunctions.
8. Prior to approval of any permit to operate an electronic message center, the applicant shall certify that the sign face has been tested and complies with the motion, dwell time, brightness, and other requirements herein.

21A.46.110.A.3.b

- b. Sports Arena Located on the Block Between South Temple and 100 South Between 300 and 400 West Streets:

STANDARDS FOR THE SPORTS ARENA LOCATED ON THE BLOCK BETWEEN SOUTH TEMPLE AND 100 SOUTH BETWEEN 300 AND 400 WEST STREETS

Types of Signs Permitted⁷	Maximum Area per Sign Face	Maximum Height of Freestanding Signs¹	Minimum Setback²	Number of Signs Permitted per Sign Type
Awning/canopy signs	5 square feet per linear foot of canopy length (sign area only)	Shall not be located above the second floor level of the building for both awning and canopy signs	May extend 6 feet from face of building but not within 2 feet from back of curb	1 per first floor window/door, may be combined with adjacent doors/windows
Flat sign (general building orientation)	5 square feet per linear	See note 1	n/a	1 per building face

	foot of building face			
Flat sign (storefront orientation)	Flat sign (storefront orientation)	See note 1	n/a	3 per business storefront
Flat sign display, electronic <u>message center</u> ³ changeable copy ³	No larger than 1,400 square feet per sign	See note 1	n/a	5 per city block
Freestanding sign, electronic <u>message center</u> ⁴ changeable copy ⁴	Not more than 1,600 square feet per sign, which may be located in a continuous round display	45 feet	n/a	2 per city block
Monument sign	3 square feet per linear foot of street frontage	20 feet	None	5 per street frontage
Private directional sign ⁵	100 square feet	20 feet	No setback	No limit
Roof surface sign	30,000 square feet ⁶	n/a	n/a	1 per roof surface
Special event light pole sign	10 square feet	20 feet	n/a	2 per light pole
Special event sign	Sign may cover up to 60% of total building face ⁷	May not exceed the height of building	n/a	1 per street frontage
Window sign	90% of total frontage window area (interior or exterior) for sports arena events, not to exceed 6 months in duration for each calendar year unless otherwise allowed by the zoning administrator.	No Limit	n/a	No Limit

Notes:

1. For height limits on building signs, see Subsection 21A.46.070.J of this chapter.
2. Public property lease and insurance required for projection over property line.
3. Flat sign, electronic message center ~~changeable copy~~ may display static or rotating messages or operate as outdoor television monitors.
4. An advertising face on a freestanding sign with an electronic message center ~~changeable copy~~ that is not oriented to a public street may be operated to allow full motion video display. Displays oriented to a public street must not allow animation, may change no more frequently than every 8 seconds and must complete each transition within 1 second.

5. Private directional sign may include an electronic message center changeable copy within the sign area.
6. To be located on the horizontal plane of a roof surface, primarily viewable from planes and surrounding buildings located above the arena.
7. Advertising or corporate logos are limited to on premises advertising of sports arena events and sponsors only.

21A.46.120.E.4.b

- b. Standards for the Ballpark Located on the Southeast Corner of 1300 South and West Temple: Flat signs, construction signs, political signs, real estate signs, new development signs, window signs, public safety signs, and nameplates shall comply with the table for standards for the PL, PL-2 and I Districts

Types of Signs Permitted	Maximum Area per Sign Face	Maximum Height of Freestanding Signs¹	Minimum Setback²	Number of Signs Permitted
Awning signs	1 square foot per linear foot of awning	See note 1	May extend 6 feet from face of building, 2 feet from back of curb face ⁵	1 per first floor door/window and not to extend beyond 1 foot on each side of the door or window width
Monument signs ^{3,4}	60 square feet of total sign face area including a base. The base shall be 25% of the sign height	8 feet	10 feet	1 per building frontage
Pole signs (triangle frame structure)	180 square feet per gross sign face. 540 square feet for the structure	30 feet	No sign projection over the property line	1 pole sign which allows 4 sign panels per sign face, 1 of which may contain <u>an electronic message center⁴ changeable copy⁴</u> and 1 logo sign (12 total signs for the triangular pole sign)
Private direction signs ³	8 square feet of total sign face area including a base. The base shall be 25% of the sign height	4 feet	2 feet behind property lines	2 per driveway approach and as necessary for pedestrian direction

Notes:

1. For limits on the height of building signs, see Subsection 21A.46.070.J of this chapter.
2. Not applicable to temporary signs mounted as flat signs.
3. Modified from the standards for the PL, PL-2 and I Districts and required for the Ballpark Overlay District.
4. ~~An electronic message center changeable copy~~ shall only be permitted on arterial street frontages. Electronic ~~message center changeable copy~~ panels shall not exceed 50 square feet.
5. Public property lease and insurance required for projection over property line.

21A.37.050

H. Exterior Lighting: All exterior lighting shall be shielded and directed down to prevent light trespass onto adjacent properties. Exterior lighting shall not strobe, flash or flicker. Electronically displayed art shall comply with the motion and brightness standards for electronic message centers in 21A.46.070.W.

ATTACHMENT B: Zoning Text Amendment Standards

ZONING TEXT AMENDMENTS

21A.50.050: A decision to amend the text of this title or the zoning map by general amendment is a matter committed to the legislative discretion of the city council and is not controlled by any one standard. In making a decision to amend the zoning map, the City Council should consider the following:

1. Whether a proposed text amendment is consistent with the purposes, goals, objectives, and policies of the city as stated through its various adopted planning documents;

Plan Salt Lake

As discussed in Consideration 1, Plan Salt Lake calls a local government that is collaborative, responsive, and transparent by address existing barriers to understanding and implementing code regulations. The proposed text amendment is designed to provide consistency electronic sign faces so they are subject to the same standards related to electronic capabilities in both on and off premise contexts.

2. Whether a proposed text amendment furthers the specific purpose statements of the zoning ordinance.

21A.02.030 Purpose and Intent: Two of the listed purposes and intents in this section are to classify land uses and protect the environment. The proposed electronic message center definition creates a better distinction between sign types and their sign faces while the standards regulating EMCs protect the surrounding environments from the potential adverse effects of these signs.

21A.46.010 Purpose Statement: The regulations of the signs chapter are intended, in part, to preserve and improve the appearance of the city as a place in which to live and to work and to allow each individual business to clearly identify itself and the nature of its business. The proposed standards for electronic message centers will further the intent of the signs chapter by improving the appearance of the city while still allowing for advances in sign technology.

21A.50.010 Purpose Statement: The purpose of this chapter is to provide standards and procedures for making amendments to the text of this title and to the zoning map. This amendment process is not intended to relieve particular hardships nor to confer special privileges or rights upon any person, but only to make adjustments necessary in light of changed conditions or changes in public policy.

This proposal is consistent with the general purpose of making changes in light of changed conditions related to advances in sign technology.

3. Whether a proposed text amendment is consistent with the purposes and provisions of any applicable overlay zoning districts which may impose additional standards;

This factor is not applicable to the proposal.

4. The extent to which a proposed text amendment implements best current, professional practices of urban planning and design.

The best regulations are those that are clear and understandable to those who will be required to adhere to them. The proposed text amendment clarifies the standards regulating electronic message centers thus promoting the best practice of clear and simple regulations. The proposed regulations are based on best practices as promoted by the International Sign Association and the sign industry as a whole.

ATTACHMENT C: Public Process & Comment

Public Notice, Meetings, Comments

The following is a list of public meetings that have been held, and other public input opportunities, related to the proposed project since the applications were submitted:

- January 25, 2024– Every registered recognized organization was sent the 45-day required notice for recognized community organizations.
 - February 12, 2024 – Staff attended a Sugarhouse Community Council meeting to explain the new standards.
- January 25, 2024 – March 27, 2024 – The project was posted to the Online Open House webpage.
- March 2024 – Staff emailed the proposed standards to interested parties and sign companies.

Notice of the public hearing for the proposal included:

- March 17, 2023
 - Public hearing notice mailed.
 - Public notice posted on City and State websites

Public Input:

Staff has not received comments from the recognized organizations or general public at the time of publication.