
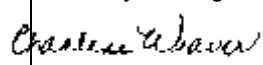


September 8, 2011		AGENDA ITEM		Item 43
<input checked="" type="checkbox"/> Ordinance		<input type="checkbox"/> Resolution		<input type="checkbox"/> Budget Resolution
<input checked="" type="checkbox"/> Other				
Department: Growth and Resource Management		File Number: VC-1312924707363-A		
Division: Planning and Development				
Subject: Ordinance 2011-25. First public hearing to amend chapter 72 regarding the regulation of electronic message center signs.				
Account Number(s): N/A				
Total Item Budget: N/A				
Staff Contact(s): Kelli McGee, Acting Director of Growth and Resource Management Phone: 386.822.5013 ext. 12000				
Summary/Highlights: In 2009, the county council directed staff to propose regulations for electronic message center (EMC) signs located within unincorporated areas. The existing code does not define or clearly regulate EMC signs. Staff held a public workshop of the draft ordinance on May 4, 2011, the results of which were discussed with county council at the June 16, 2011 meeting. The draft ordinance provided the following general criteria: <ul style="list-style-type: none"> • Definitions • Location • Size • Frequency rate of copy change • Brightness 				
Recommended Motion: Set a second public hearing for September 22, 2011 at 2:45 p.m.				
Kelli McGee1, Interim Director Growth and Resource Management <i>No Signature Present</i> Kelli McGee Director Planning and Development <i>No Signature Present</i>	OMB Approved as to Budget Requirements	Legal  Approved as to Form and Legality	Charlene Weaver County Manager's Office  Approved Agenda Item For: September 8, 2011	
Council Action:		Modification:		
<input type="checkbox"/> Approved as Recommended <input type="checkbox"/> Approved With Modifications <input type="checkbox"/> Disapproved <input type="checkbox"/> Continued Date:				

Summary/Highlights Continued:

• Compliance test

At the June 16, 2011 meeting, the county council directed staff to advertise the draft ordinance with two revisions that affect existing EMC signs, which are 1) compliance with dimming and illumination standards within one year, and 2) compliance with location and size standards within seven years. The revisions were made, with the exception that compliance with location and size standards be mandatory within ten years, based on controlling case law.

Staff held a second public workshop on August 1, 2011. Two members of the public attended and minor revisions were made to the ordinance based on their participation.

On August 9, 2011, the Planning and Land Development Regulation Commission (PLDRC) recommended forwarding the ordinance to county council for adoption, as being consistent with the comprehensive plan. Based on the PLDRC comments, staff revised the ordinance to clarify the appropriate zoning classifications for EMC signs. The ordinance was also amended to allow owners of recognized nonconforming lot widths to apply for a zoning variance from the standard. No one from the public spoke for or against the proposed ordinance.

The county council is required to conduct two public hearings on the proposed ordinance. The second public hearing will be scheduled on September 22, 2011, at a time certain and must be approved by a majority plus one vote to hold the hearing before 5:00 p.m.

Staff is requesting that a second public hearing be scheduled for September 22, 2011, with a time certain of 2:45 p.m.

Attachments:

1. Draft Ordinance 2011-25
2. PLDRC support documents
3. PLDRC minutes

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ORDINANCE 2011-25

AN ORDINANCE OF THE COUNTY COUNCIL OF VOLUSIA COUNTY, FLORIDA; AMENDING THE CODE OF ORDINANCES OF THE COUNTY OF VOLUSIA, BY AMENDING SECTION 72-67 DEFINITIONS, PROVIDING A DEFINITION FOR ELECTRONIC MESSAGE CENTERS, FOOT-CANDLE, ILLUMINANCE AND LUMEN; BY AMENDING SECTION 72-298 SIGN REGULATIONS, PROVIDING REGULATIONS FOR ELECTRONIC MESSAGE CENTERS; PROVIDING FOR SEVERABILITY; PROVIDING FOR CONFLICTING ORDINANCES; AND PROVIDING FOR AN EFFECTIVE DATE.

BE IT ORDAINED BY THE COUNTY COUNCIL OF VOLUSIA COUNTY, FLORIDA, AS FOLLOWS:

(Words in ~~strike-through~~ type are deletions; words in underscore type are additions.)

SECTION I: Chapter 72, article II, division II, section 72-67, of the Code of Ordinances, County of Volusia is amended to read as follows, with following terms to be placed alphabetically among the existing definitions:

Section 72-67. Definitions.

...

Electronic message centers are signs that utilize computer generated messages or some other electronic means of changing copy. These signs include displays using incandescent lamps, light emitting diodes, liquid crystal displays, changeable copy panels or synchronized rotating copy panels.

Foot-candle is a unit of measure of the intensity of light falling on a surface, equal to one lumen per square foot.

Illuminance is the luminous flux incident per unit area of a surface.

Lumen is a unit of luminous flux equal to the light emitted in a unit solid angle by a uniform point source of one candle intensity.

...

1 **SECTION II:** Chapter 72, article II, division 8, section 72-298, of the Code of
2 Ordinances, County of Volusia is amended to read as follows:

3 **Section 72-298. Sign Regulations.**

4 ...

5 (2) *Prohibited signs:* Except as otherwise provided in this article, the following signs
6 are prohibited in all zoning classifications established in division 7 of this article:

- 7 a. Signs erected on public property or public rights-of-way except those
8 placed on public transportation benches or shelters as approved through a
9 competitive selection process of the county.
- 10 b. Signs affixed to trees, shrubbery, vines, utility poles or beach sand dune
11 walkover structures.
- 12 c. Festoon and/or sandwich signs.
- 13 d. Off-premises signs which do not comply with the requirements of
14 subsection (9) of this section.
- 15 e. Temporary roof or temporary projecting signs.
- 16 f. Any sign that obstructs the sightline at private or public driveways as
17 determined by section 72-619.
- 18 g. Signs erected upon or in view of any highway which purport to be or are
19 an imitation of or resemble official traffic-control devices or railroad signs
20 or signals or which attempt to divert the movement of traffic or which hide
21 from view or interfere with the effectiveness of official traffic-control
22 devices or any railroad signs or signals. The zoning enforcement official
23 shall consult with the county traffic engineer and receive his
24 recommendations before making a determination as to whether or not such
25 sign is in violation of this article.
- 26 h. Revolving sign or signs which utilize intermittent or flashing illuminating
27 devices and which result in changing light intensity, brightness, or color,
28 or move or appear to move; ~~provided however, that electrically controlled~~
29 ~~message centers which automatically change shall be excluded from this~~
30 ~~prohibition.~~

1 i. Electronic message centers that do not comply with subsection 72-
2 298(8)b. 6. of this section.

3 i.j. Portable signs.

4 j.k. Signs affixed to or painted upon a retention wall.

5 ...
6 (8) *Application of regulations; P, B and I districts:*

7 ...
8 b. *Requirements by sign type:*

9 ...
10 6. Electronic message centers.

11 i An electronic message center shall only be located on
12 parcels zoned P, B-1, B-2, B-3, B-4, B-5, B-6, B-7, B-8, B-
13 9, I-1, I-2, I-3 I-4, or the following subcategories of PUD;
14 BPUD, IPUD, and MPUD as described in Chapter 72,
15 Division 7 of the Volusia County Code.

16 ii The conversion of any existing permitted sign to an
17 electronic message center or the installation of an electronic
18 message center on or within an existing permitted sign shall
19 require the approval of a new county sign permit pursuant
20 to the procedures described in subsection 72-298(13),
21 Volusia County Code.

22 iii The maximum sign area of the electronic portion of an
23 electronic message center shall not exceed 40% of the total
24 sign area allowed for ground signs, or 34 square feet,
25 whichever is less.

26 iv An electronic message center may only be constructed on a
27 parcel of land having a minimum of 100 feet of roadway
28 footage. Recognized existing non-conforming parcels may
29 seek a variance from this restriction, provided they meet the
30 variance criteria and requirements of Section 72-379(1)a.4.
31 of this code.

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- v An electronic message center must be set back at least 5 feet from the right-of-way, and shall be part of a ground mounted monument style sign no greater than 8 feet above grade. An electronic message center may not be installed on an existing permitted sign which is taller than 8 feet above grade.
- vi An electronic message center shall not be installed within 1,000 linear feet of a conforming single-family residence.
- vii An electronic message center with a sign face on two sides and no more than 4.5 feet of separation between faces shall be considered a single sign, and the total sign area shall be the area on a single face.
- viii The copy content of an electronic message center may change at intervals of no less than 8 seconds. The content image must remain stable; continuous scrolling or flashing of the image is prohibited.
- ix The copy content of any electronic message center shall not contain effects that are designed to resemble a traffic signal or emergency vehicle strobe lighting.
- x A malfunctioning electronic message center shall be programmed to turn off or otherwise display a blank screen. Electronic message centers must be equipped with software programming controls that automatically turn the sign off if the display is malfunctioning in any way.
- xi Exposed neon or fiber-optic tubing on electronic message centers is prohibited.
- xii If city gateway standards apply to any proposed electronic message center in accordance with the non-residential design standards of section 72-303, Volusia County Code, and the standards found in the code of the city at issue differ from those found in the Volusia County code, then

1 the most restrictive provision shall apply.

2 xiii Electronic message centers are prohibited within the sea
3 turtle lighting ordinance boundary area described in
4 Chapter 72, Division 12 of the Volusia County Code.

5 xiv Electronic message centers shall be equipped with a sensor
6 or other device that automatically determines the ambient
7 illumination and can be programmed to automatically dim
8 according to ambient light conditions, or that can be
9 adjusted to comply with the 0.3 foot-candle measurements.

10 xv For purposes of operating electronic message centers, the
11 difference between the off and solid message
12 measurements using the electronic measurement criteria
13 described herein shall not exceed 0.3 foot-candles. The
14 illuminance of an electronic message center shall be
15 measured with an illuminance meter set to measure foot-
16 candles accurate to at least two decimals. Illuminance shall
17 be measured with the electronic message center off, and
18 again with the electronic message displaying a white image
19 for full color-capable signs, or a solid message for single
20 color signs. All measurements shall be taken perpendicular
21 to the face of the electronic message center at a distance
22 determined by the total square footage of the sign as set
23 forth in the accompanying Electronic Message Center Sign
24 Area Versus Measurement Distance table below:

25
26 **Electronic Message Center Sign Area Versus Measurement Distance**

AREA OF SIGN SQUARE FEET	MEASUREMENT (DISTANCE IN FEET)
10	32
15	39
20	45
25	50
30	55
35	59

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xvi Existing nonconforming electronic message centers must be brought into compliance with the dimming and illumination provisions of this subsection (8)b.6. through the adjustment of existing hardware and/or software by October 1, 2012. Violations related to an electronic message center operator’s failure to abide by the dimming and illumination standards of this subsection (8)b.6. will result in the immediate initiation of code enforcement procedures by the county. The owner/operator of the electronic message center may offer reasonable evidence to the code enforcement board that the electronic message center in question cannot be dimmed or adjusted to the standards listed herein.

xvii Nonconforming electronic message centers that do not comply with the location and size requirements of this subsection (8)b.6. shall be subject to the removal requirements of subsection 15 herein, titled “Nonconforming signs.”

...

(15) Nonconforming signs:

All nonconforming signs other than electronic message centers shall only be made to conform with this article when structurally altered, or when said signs are destroyed or damaged by wind, fire, or other means to the extent of 60 percent or more of their replacement value. Existing nonconforming electronic message centers which cannot be brought into conformance with all requirements of this article through software or hardware adjustment shall be removed no later than October 1, 2021. Thereafter, all such nonconforming electronic message centers shall be deemed unlawful.

SECTION III: AUTHORIZING INCLUSION IN CODE - The provisions of this ordinance shall be included and incorporated into the Code of Ordinances of the County of Volusia, as additions or amendments thereto, and shall be appropriately renumbered to conform to the uniform numbering system of the code.

1 **SECTION IV: SEVERABILITY** - Should any word, phrase, sentence, subsection or
 2 section be held by a court of competent jurisdiction to be illegal, void, unenforceable, or
 3 unconstitutional, then that word, phrase, sentence, subsection or section so held shall be severed
 4 from this ordinance and all other words, phrases, sentences, subsections, or sections shall remain
 5 in full force and effect.

6 **SECTION V: CONFLICTING ORDINANCES** - All ordinances or part thereof, in
 7 conflict herewith are, to the extent of such conflict, repealed.

8 **SECTION VI: EFFECTIVE DATE** - A certified copy of this Ordinance shall be filed
 9 with the Department of State by the County Manager within ten (10) days after enactment by the
 10 County Council and this Ordinance shall take effect upon filing with the Department of State.

11

12 **ADOPTED BY THE COUNTY COUNCIL OF VOLUSIA COUNTY, FLORIDA,**
 13 **IN OPEN MEETING DULY ASSEMBLED IN THE COUNTY COUNCIL CHAMBERS**
 14 **AT THE THOMAS C. KELLY ADMINISTRATION CENTER, 123 WEST INDIANA**
 15 **AVENUE, DELAND, FLORIDA, THIS 22nd DAY OF SEPTEMBER A.D., 2011.**

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<p>ATTEST:</p> <hr/> James T. Dinneen, County Manager	<p>COUNTY COUNCIL COUNTY OF VOLUSIA, FLORIDA</p> <hr/> Frank T. Bruno, Jr., County Chair
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**GROWTH AND RESOURCE MANAGEMENT DEPARTMENT
PLANNING AND DEVELOPMENT SERVICES DIVISION
CURRENT PLANNING ACTIVITY**
123 W. Indiana Avenue, DeLand, FL 32720
(386) 736-5959

PUBLIC HEARING: August 9, 2011- Planning and Land Development Regulation Commission

SUBJECT: Ordinance No. 2011-XX. An ordinance amending Chapter 72 of the Volusia County Code of Ordinances, providing for a definition and regulation of electronic message center signs within unincorporated Volusia County.

STAFF: Becky Mendez, AICP, Senior Planning Manager

I. SUMMARY OF REQUEST

In 2009 the county council directed staff to propose regulations for electronic message center ("EMC") signs. The existing sign code does not define or clearly regulate EMC signs. After research and public input, staff drafted an ordinance which regulates the use of EMC signs. The proposed regulations will only apply to the unincorporated areas of Volusia County.

Staff held a public workshop with business representatives of the sign community on May 4, 2011. Revisions were made to the draft ordinance based on their comments and suggestions. The ordinance was presented to county council on June 16, 2011. Council requested that existing EMC signs comply with the dimming and brightness requirements within 1 year of adoption. Council also requested that existing EMC signs comply with the location and size requirements within 7 years. The ordinance has been revised to include these provisions. However, staff recommends allowing 10 years for existing signs to comply with the location and size provisions of the new ordinance. This recommendation is based on existing controlling case law provided by the legal department.

The second public workshop is scheduled for August 1, 2011. Staff will update the PLDRC on the results of that workshop.

Staff requests that the PLDRC find the EMC zoning code amendment consistent with the comprehensive plan and forward the amendment to county council for approval.

II. ATTACHMENTS

Draft Ordinance No. 2011-XX
EMC sign regulations for other jurisdictions
International Sign Association publication dated December 2010
August 1, 2011 workshop memo and invite list

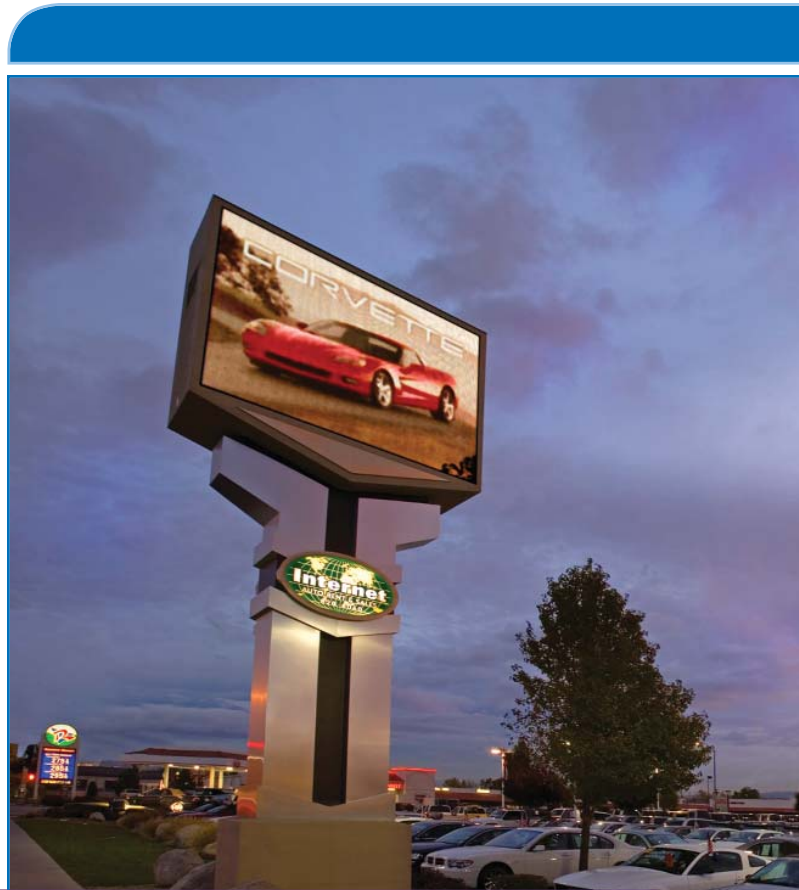
EMC Sign Regulations

Jurisdiction	Location standards	Maximum Size	Maximum Illumination	Copy Change	Misc.
Lee County	Industrial- Intensive Development- Interchange areas-	40% of ground sign or 34 sq ft, whichever is less	10 watts and dimmer switch set so that night time brightness does not exceed 75% of the daytime brightness	Once per 2 seconds	Sign serves tenants of multiple occupancy complex (10 or more)
City of Tampa	Arterial/Collector road only		Max 2 f.c. measured 25 feet from base of sign and directed away from residential uses	Once per 5 minutes	Replacement of an existing sign with an EMC shall be considered a structural alteration
City of Lakeland		Shall be part of the ground sign, not to exceed 20 sq ft.	No bulb to exceed 11 watts and no more than 5 f.c. measured at property line adjacent to residential district	Once in 5 seconds	Only white, non-exposed bulbs
City of Orlando		35% of major attraction sign		Once per hour	
Orange County			No bulb or lamp to exceed 30 watts and requires night dimming device		Flash, zoom, twinkle, sparkle modes prohibited
City of Peoria, IL	B-1 zoning exempt from these provisions		5,000 nits in daytime and 500 nits during nighttime. Must have automatic dimmer.	Once per 10 seconds	Animation modes prohibited. Image must remain static except during transition. Amortization.
Iowa City, IA	Commerical or public zoning classification and not within 100 feet of residential zoning	Only 1 ES per lot. Max. 40% of ground sign area.	No bulb or lamp to exceed 25 watts. Ambient light automatic dimmer required. Max 2 f.c. measured at property line adj to res.	Once per hour	Copy must be monochromatic and utilize dark background with only the image lit

EMC Sign Regulations

Jurisdiction	Location standards	Maximum Size	Maximum Illumination	Copy Change	Misc.
City of Daytona Beach, FL	Places of Assembly , higher learning sites, Major Sports district, Hospital/Medical district, govt uses.	8 ft max. 360 sq. ft. max. No more than 50% of sign.	5,000 nits in daytime and 500 nits during nighttime. Requires automatic dimmer.	Once per 60 seconds	Continuous scrolling, animation, flashing lights, or graphics are prohibited.
City of Port Orange, FL	Multi-tenant shopping centers	No more than 25% of the sign face.	No more than 0.5 fc measured at the adjacent right-of-way line. Not to exceed 2500 nits at night. Requires dimmer.	Once per 60 seconds	Shall not be dominant element of the sign. No scroll, blink, flicker, flash, or animate.
City of New Smyrna Beach, FL	B3 and B5 zoning only. Prohibited east of US 1.	600 ft distance separation.	No more than 0.3 fc measured 200 feet from the sign. Requires automatic dimmer.		
City of <u>DeBary</u> , FL, the City of <u>Orange City</u> , FL, and the City of <u>South Daytona</u> , FL			SD: existing nonconforming time/temp signs must reduce intensity by 50% between 9pm and 7 am.		Prohibited
City of Deltona, FL	Within 600 ft of I-4 for hotel or convention center uses.	80 ft max height and 685 sq ft max.			

Recommended
Brightness Levels
for On-Premise
Electronic
Message Centers
(EMC's)



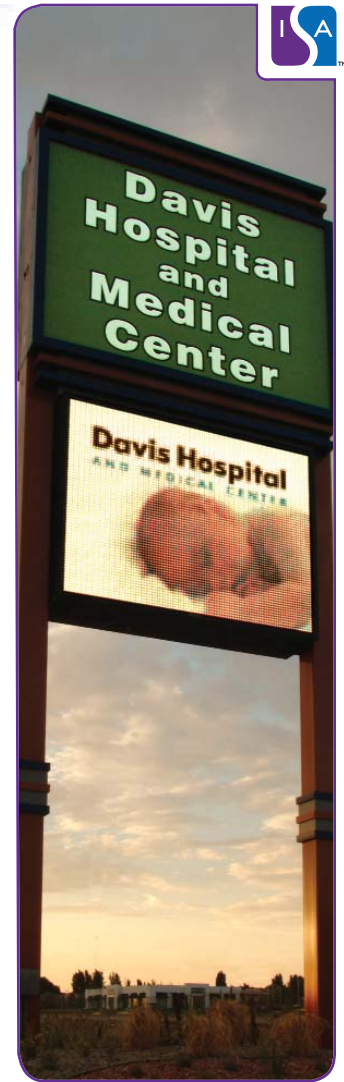
ISA INTERNATIONAL
SIGN ASSOCIATION

A COMPILATION SUMMARY WITH EXTRACTS FROM INDUSTRY REPORTS • DECEMBER 2010

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Introduction



Electronic Message Centers (EMC's)



One of the more interesting types of signage that is becoming increasingly popular is on-premise **electronic message centers**, or EMCs. You may have heard EMCs being referred to as changeable message displays or digital signs.

EMCs are *not* digital billboards, which advertise a good or service that is located away from where the sign is located. Rather, EMCs are digital signs that are located *on the premises* of the business, and that advertise goods and services that are provided at the location.



Digital billboard/off-premise sign advertising an automobile business away from where the sign is located



Electronic Message Center (EMC)/on-premise sign advertising an automobile business that is located at the place of business

There is often confusion regarding on and off-premise digital signs. However, EMCs and digital billboards have very distinct capabilities and purposes, each targets a specific audience and each has traditionally been treated under separate legal and regulatory regimes. For the purposes of this publication, *we are focusing solely and exclusively on EMCs.*

EMCs that are too bright can be offensive and ineffective. EMC brightness is an issue where sign users, the sign industry, and the planning community have a common goal: ensuring that EMCs are appropriately legible. We know the messages that these signs convey can be rendered unattractive and perhaps even unreadable if they are programmed too bright.

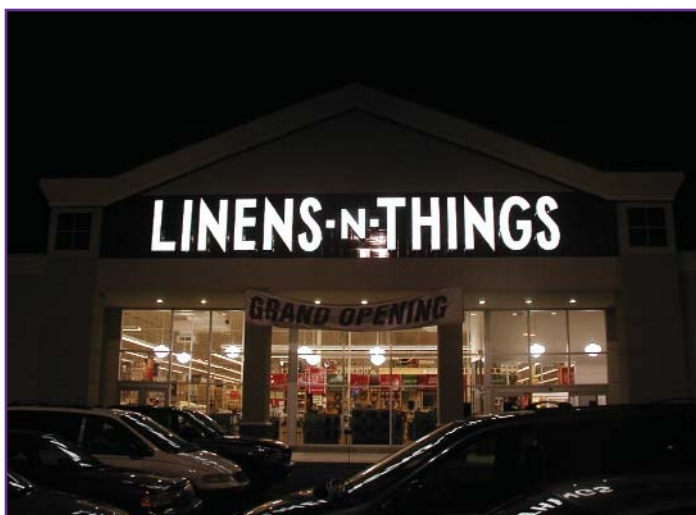


That's why many sign companies recommend to their customers that in order for these signs to be most effective, their brightness be set at such a level to be visible, readable and conspicuous.

In 2008, the International Sign Association (ISA) retained Dr. Ian Lewin of Lighting Sciences to help the industry develop scientifically-researched, understandable recommendations for EMC brightness. Dr. Lewin is a past chair of the Illuminating Engineering Society of North America (IES), and is greatly respected within the lighting field. His work for ISA was conducted with the input of experts within the sign industry. Dr. Lewin's full report can be found at www.signs.org.

As a result of this research, the recommended brightness level for on premise EMCs is 0.3 foot candles above ambient light conditions when measured at an appropriate distance. This is a lighting level that works in theory and in practice.

The research and the recommendations contained in this report pertain only to EMCs, not traditionally internally illuminated signs, such as these channel letter and neon signs below. EMC's use a different lighting technology than most of these types of signs, and as such the scientific approach differs.



You can rest assured that the information contained in this publication is relevant, appropriate and workable for determining EMC brightness levels.

We have provided six short steps to help guide the process and recommended statutory language. If you need further assistance, feel free to contact ISA at (703) 836-4012 to answer any of your EMC brightness questions.

EMCs and digital billboards have very distinct capabilities and purposes, each targets a specific audience and each has traditionally been treated under separate legal and regulatory regimes.

Executive Summary

ISA Electronic Message Display Brightness Recommendations



This summary has been developed to assist stakeholders concerned with development of brightness standards for large-format, electronic displays used for on-premise sign applications. This summary comprises:

- 1) *an overview of the importance of ensuring appropriate brightness,*
- 2) *technology utilized to ensure appropriate brightness,*
- 3) *recommended brightness standards, and*
- 4) *brightness measurement methodology.*

1. Overview of the importance of ensuring appropriate brightness.

Electronic displays that are too bright can be offensive and ineffective. There are significant advantages to ensuring that an electronic display is not overly bright. These advantages include:

- » Conservation of energy
- » Increased life expectancy of the electronic display components
- » Building goodwill with the community
- » Ensuring the legibility of the display

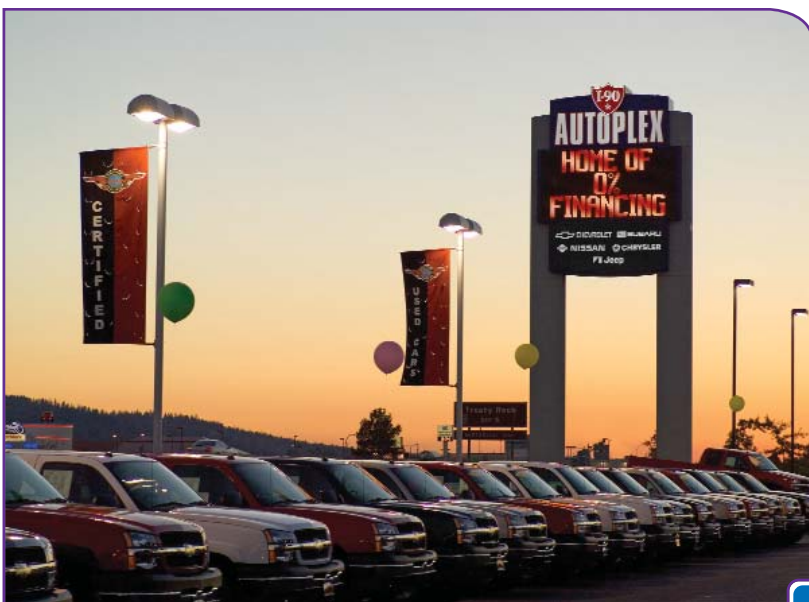
It is in the best interest of all stakeholders to ensure that electronic displays are sufficiently bright to ensure clear legibility, while at the same time avoiding a display that is overly bright.

2. Technology utilized to ensure appropriate brightness.

Most electronic displays are designed to produce sufficient brightness to ensure clear legibility during daylight hours. However, daytime brightness settings are usually inappropriate for nighttime viewing. The following general methods are used to dim an electronic display for appropriate nighttime viewing:

1. **Manual Dimming.** Using this method, the sign operator dims the display in response to changing ambient light conditions.
2. **Scheduled Dimming.** Sunset-sunrise tables allow an electronic display to be programmed to dim at the same time that the sun sets and rises. This method is generally acceptable, but is more effective when used as a backup to automatic dimming controls capability, such as photocell technology.
3. **Photocell Technology.** An electronic display that utilizes photocell technology can automatically dim as light conditions change. A photocell sensor alerts the display to adjust brightness according to ambient light conditions.

Most electronic displays are designed to produce sufficient brightness to ensure clear legibility during daylight hours. However, daytime brightness settings are usually inappropriate for nighttime viewing.



3. Recommended brightness standards.

ISA commissioned Dr. Ian Lewin of Lighting Sciences, Inc. to develop brightness criteria for on-premise electronic displays. Dr. Lewin is a leading lighting expert with over thirty years experience in the lighting industry.

Dr. Lewin recommended the development of brightness criteria based on the Illuminating Engineering Society's (IES) well-established standards pertaining to light trespass, IES Publication TM-11-00. The theory of light trespass is based on the concept of determining the amount of light that can spill over (or "trespass") into an adjacent area without being offensive.

As a result of his research, Dr. Lewin recommended two different brightness settings based on whether the EMC was located in an area of high or low ambient light. After field testing and utilizing Dr. Lewin's recommendations, it was determined that using the more conservative recommendation is appropriate in areas of both low and high ambient light. In order to simplify Dr. Lewin's recommendations, and to take a more reasonable approach to ensure that EMC's are sufficiently visible but not overly bright, it is recommended that EMC's not exceed 0.3 footcandles over ambient lighting conditions when measured at the recommended distance, based on the EMC size.

...it is recommended that EMC's not exceed 0.3 footcandles over ambient lighting conditions when measured at the recommended distance, based on the EMC size.

4. Brightness measurement methodology.

There are two generally accepted measures of brightness in the sign industry; illuminance and luminance. Illuminance, the preferred method, is a measure of the amount of light intercepting an object at a given distance from a light source and is measured in footcandles or its metric equivalent, lux. Illuminance can be measured with a footcandle meter (also know as a luxmeter), which are relatively inexpensive (\$100-1000) and commonly available. The footcandle meter should be accurate to two decimal points for accurate measurements. The second method, luminance, is an absolute measure of the amount of brightness that is being emitted from a light source and is usually measured in candelas per square meter, also known as "nits." Luminance can be measured by use of a "nit gun", which are expensive (~\$3,000) and difficult to procure. The preferred method of measurement is illuminance using a footcandle meter because a measure of luminance fails to account for ambient light conditions.



Recommended Legislative Language



1. **Electronic Message Center (EMC) Criteria:** The illumination of an EMC shall conform with the criteria set forth in this section.
 - A. **EMC Illumination Measurement Criteria:** The illuminance of an EMC shall be measured with an illuminance meter set to measure footcandles accurate to at least two decimals. Illuminance shall be measured with the EMC off, and again with the EMC displaying a white image for a full color-capable EMC, or a solid message for a single-color EMC. All measurements shall be taken perpendicular to the face of the EMC at the distance determined by the total square footage of the EMC as set forth in the accompanying Sign Area Versus Measurement Distance table.
 - B. **EMC Illumination Limits:** The difference between the off and solid-message measurements using the EMC Measurement Criteria shall not exceed 0.3 footcandles.
 - C. **Dimming Capabilities:** All permitted EMCs shall be equipped with a sensor or other device that automatically determines the ambient illumination and programmed to automatically dim according to ambient light conditions, or that can be adjusted to comply with the 0.3 footcandle measurements.
 - D. **Definition of EMC:** A sign that utilizes computer-generated messages or some other electronic means of changing copy. These signs include displays using incandescent lamps, LEDs, LCDs or a flipper matrix.



SIGN AREA VERSUS MEASUREMENT DISTANCE

AREA OF SIGN sq. ft.	MEASUREMENT Distance (ft.)
10	32
15	39
20	45
25	50
30	55
35	59
40	63
45	67
50	71
55	74
60	77
65	81
70	84
75	87
80	89
85	92
90	95
95	97
100	100
110	105
120	110
130	114
140	118
150	122
160	126
170	130
180	134
190	138
200	141
220	148
240	155
260	161
280	167
300	173

** For signs with an area in square feet other than those specifically listed in the table (i.e., 12 sq ft, 400 sq ft, etc), the measurement distance may be calculated with the following formula: Measurement Distance = $\sqrt{\text{Area of Sign Sq. Ft.} \times 100}$*

Six STEPS: EMC Brightness Levels

How to Measure the Brightness of an Electronic Message Center (EMC)

STEP 1

OBTAIN AN ILLUMINANCE METER.

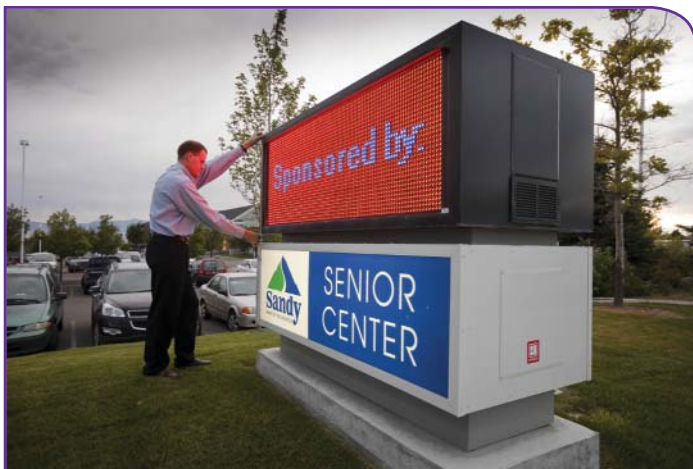
Purchase or otherwise procure an illuminance meter. Most city/county traffic departments have an illuminance meter, which are also referred to as lux or footcandle meters (lux is the metric measure of illuminance; footcandles is the English measure of illuminance). The illuminance meter must have the ability to provide a reading up to two decimal places and must be set to read footcandles. It is preferred to have an illuminance meter with a screw-mount that allows the sensor to be mounted on a tripod. A tripod ensures that the highly sensitive sensor is held perfectly still; otherwise it may be difficult to obtain an accurate reading.

If you do not have an illuminance meter, the Konica Minolta T-10 is a high quality illuminance meter that works well. However, other less expensive illuminance meters may also provide adequate results. The International Sign Association has no affiliation with Konica Minolta.

STEP 2

DETERMINE SQUARE FOOTAGE.

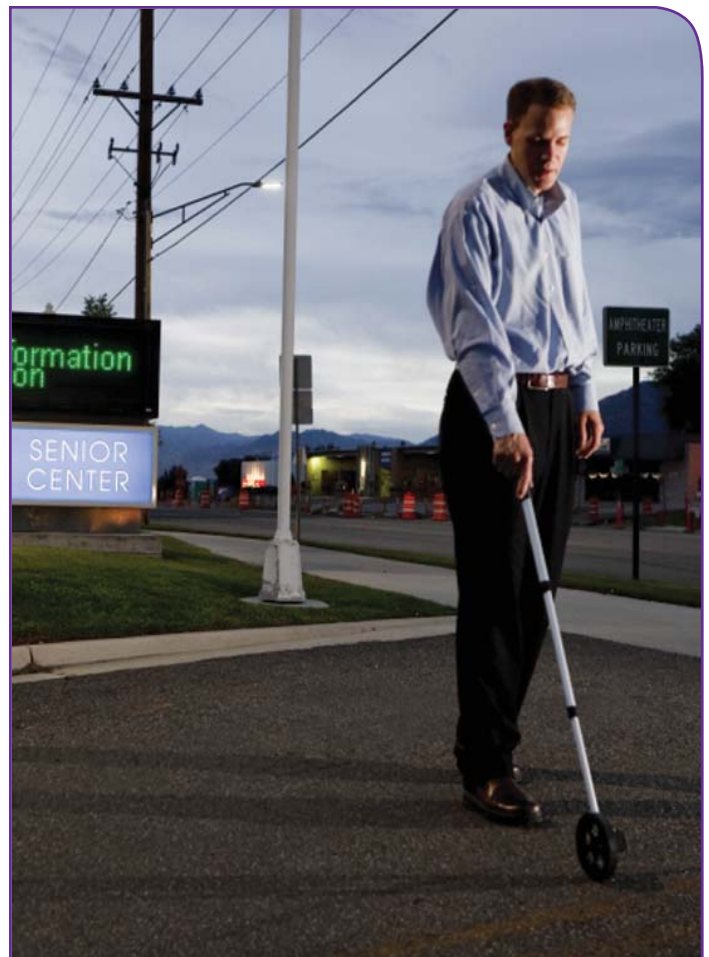
Determine the square footage of the face of the electronic message sign (EMC) by multiplying the height and width of the EMC. This information may be available in a permit application, or can be determined by physically measuring the height and width of the EMC. Do not include the sign face square footage attributable to any additional static signs associated with the EMC (if applicable).



STEP 3

DETERMINE THE MEASUREMENT DISTANCE.

Using the total square footage found in Step 2, look up the measurement distance in the table provided in the Recommended Legislative Language on page 6, to determine the distance to measure the brightness of the EMC. The distance should be measured perpendicular to the EMC sign face. The use of a measuring wheel is the most convenient way to measure the distance.



How to Measure the Brightness of an Electronic Message Center

STEP 4

PREPARE THE DISPLAY FOR TESTING.

Ensure that the EMC is programmed to alternate between a solid white (or in the case of a monochrome display – the solid color of the display) message and a blank message. You may wish to have a requirement that the sign owner cooperate with testing by programming the EMC for testing upon written notice.

STEP 5

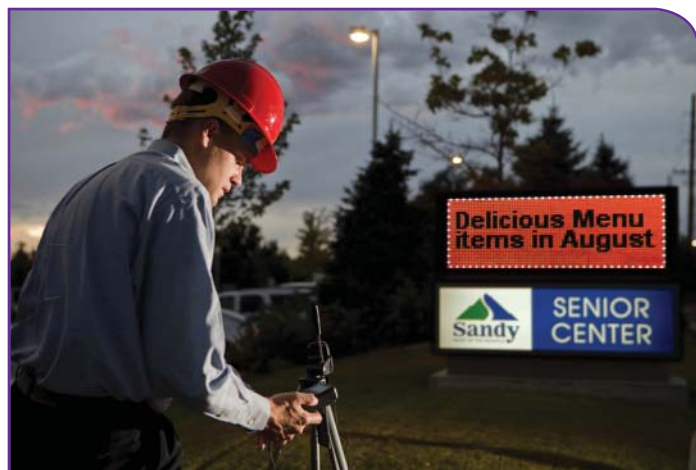
USE AN ILLUMINANCE METER TO MEASURE THE BRIGHTNESS OF THE EMC.

Mount the sensor of your illuminance meter to a tripod and orient the sensor directly towards the face of the EMC at the measurement distance determined in Step 2.



STEP 5 [CONTINUED]

Ensure that the illuminance meter is set to measure footcandles up to two decimal places. As the display alternates between a solid white message and an “off” message, note the range of values on the illuminance meter. If the difference between the readings is less than 0.3 footcandles, then the brightness of the display is in compliance. If not, the display will need to be adjusted to a lower brightness level using the manufacturer’s recommended procedures.



STEP 6

ENSURE THAT THE DISPLAY CAN ADJUST TO DIFFERENT AMBIENT CONDITIONS.

Inspect the sign to ensure that it incorporates a photocell or other technology to ensure that the display can adjust according to ambient lighting conditions.

As the display alternates between a solid white message and an “off” message, note the range of values on the illuminance meter. If the difference between the readings is less than 0.3 footcandles, then the brightness of the display is in compliance.



1001 N. FAIRFAX STREET, SUITE 301
ALEXANDRIA, VA 22314
703.836.6067 PH
703.836.8353 FAX
WWW.SIGNS.ORG




RECOMMENDED BRIGHTNESS LEVELS FOR ON-PREMISE ELECTRONIC MESSAGE CENTERS

MEMORANDUM



TO: County registered sign contractors
Executive directors of local chambers of commerce
Executive director, VCARD
Local land use attorneys
City planning directors and attorneys

FROM: Becky Mendez, AICP, Senior Planning Manager 

DATE: July 6, 2011

RE: Proposed changes to the county sign regulations relating to electronic message centers.

As a member of the business, legal and local government community, we want to advise you that Volusia County proposes an amendment to the county's regulations regarding Electronic Message Center (EMC) signs. A copy of the proposed ordinance is attached for your reference. County sign regulations apply only within the unincorporated area. A public workshop is scheduled to discuss the amendment, and all are invited to attend and provide comments. The public workshop will be held:

August 1, 2011
4:30 pm- 5:30 pm
TCK Administrative Building
Training room, first floor
123 W. Indiana Avenue
DeLand, FL 32724

Contact: Robin Todd at (386)736-5959 X2022 for more information, or submit written comments to rtodd@co.volusia.fl.us any time in advance of the meeting.

Company	First	Last	Address	City, State Zip Code	Return receipt received
A Superior Signs Inc.	Daniel E.	Shiman	3975 Forrestal Ave.	Orlando, FL 32806	X
AC Signs LLC	Alvaro	Chica	11609 S. Orange Blossom Trail	Orlando, FL 32837	
Action Signs & Graphics Inc.	Larry E.	Perry, Jr.	4176 S. US Hwy 441	Lake City, FL 32025	X
All About Signs Inc	Robert Arnold	Potwin	427 N Pine Street	Sebring, FL 33870-3232	X
All Exotic Inc DBA Media 1	Richard Nelson	Ream	150 National Place Suite 100	Longwood, FL 32750	X
Allen Indust Inc	David Wayne	Allen	11351 N 49th Street	Clearwater, FL 33762	X
Al's Sign Co.	John	Chapman	176 Carswell Avenue	Holly Hill, FL 32117	X
Ambo Design Inc.	Robert	Brown	171 W. Craig Avenue	Lake Helen, FL 32744	X
American Sign Company	Stephan F.	Ginn	6611 E 26th Court	Sarasota, FL 34233	X
Anchor Sign Inc.	David W.	Jackson	P.O. Box 22737	Charleston, SC 29413-2737	X
Animated Display Systems Inc	Scott David	Sparling	11866 Metro Parkway	Fort Meyers, FL 33912	returned
Art Sign Company Inc.	Charles	Katz	835 NW 6th Avenue	Ft Lauderdale, FL 33311	X
Art-Kraft Sign Co. Inc.	Donald H.	Reilly	2675 NE Kirby Circle	Palm Bay, FL 32905	X
Atlas Signs Of Lake Worth Inc	Jeffrey	Adinolfe	2290 Avenue L	Riviera Beach, FL 33418	X
B & C Signs Inc	Taneal R.	Cahill	2225 Guava Drive	Edgewater, FL 32141	
B & S Signs Inc.	Michael Irvin	Andrews	2764 S Collins Avenue	St. Augustine, FL 32084	X
Bach Sign Group Inc.	Robert Evans	Hilterbrick	2655 N Ocean Drive Suite 400	Singer Island, FL 33404	X
Brite Lite Service Company Inc.	Michael R.	Moore	3633 St. Augustine Road	Jacksonville, FL 32207-9205	X
Broadway Sign & Lighting LLC	Mark Allen	Hansen	1128 Beville Road Suite E	Daytona Beach, FL 32114	X
C & S Signs	John Carl	Colado	970 Shallowford Street	Altamonte Springs, FL 32701	X
Certified Signage Inc.	Lloyd	Cameron	517 Mason Avenue	Daytona Beach, FL 32117	X
Charles Wingo Signs	Charles S.	Wingo	P.O. Box 1172	Apopka, FL 32704	X
Clear Channel Outdoor Inc.	Edward F.	Lynch	2890 Harper Road	Melbourne, FL 32904	X
Clear View Signs Inc.	Robert D.	Crews	45211 Petree Road	Callahan, FL 32011	X
CNS Signs Inc.	Kenneth P.	Bringle	263 S Edgewood Avenue	Jacksonville, FL 32254	X
Coastal Sign Installation LLC.	Michael R.	Whitehurst	8725 66th Court	Pinellas Park, FL 33782	X
Coastline Wholesale Signs Co.	Nicholas Paul	Florio	424 Bellevue Avenue	Daytona Beach, FL 32127	
Coppen Enterprises Inc.	Walter Gary	Coppen	562 King Street	Jacksonville, FL 32204	returned
Cox Electric	Lawrence Thomas	Cox	1611 E Old Hillsborough Avenue	Seffner, FL 33584	X
Creative Signage Solutions Inc.	Matthew F.	Hennessy	3712 Crawfordville Road	Tallahassee, FL 32305	X
D & R Signs Inc	Darrell L.	King	P.O. Box 290656	Port Orange, FL 32129-0656	X
Davidson Sign Services Inc.	Richard Phillip	Davidson	1201-B Cedar Street	Safety Harbor, FL 34695	X
Denyse Signs/Woodgraphics Inc.	Russell Earl	Conine	4521 Industrial Access Road	Douglasville, GA 30134	X
Diamond's Electric Signs Inc.	Nicholas D.	Thayer	230 Power Court Suite150	Sanford, FL 32771	X
Dixie Neon Co. Inc.	Freddie	Hevia, III	3001 W Granada Street	Tampa, FL 33629	X
Dixie Signs Inc	Roger A.	Snyder	2930 Drane Field Road	Lakeland, FL 33811	X
Dolphin Signs	Chris	Kromp	5027 S. Ridgewood Avenue	Port Orange, FL 32127	X
Don Bell Signs LLC	John Quincy	Finley	365 Oak Place	Port Orange, FL 32127	X
Dowling Signs	Lenora L.	Dowling	2834 N Main Street	Gainesville, FL 32609	X
Dracon Systems Inc.	James A.	Draa	4317 Fortune Place	Melbourne, FL 32901	returned
Elite Images Advertising Consultants Inc	Richard J.	Banten, Jr.	86 Fred Avenue	Dunedin, FL 34698	X

Company	First	Last	Address	City, State Zip Code	Return receipt received
Entera Inc.	Larry P.	Presley	1200 E Bell Avenue	Panama City, FL 32401	X
Express Signs & Graphics Inc.	William L.	Blackwelder	603 Waverly Lane	Maitland, FL 32751	X
Fantastic Design Group LLC	Robert M.	Skelton	111 N Ridgewood Avenue	Edgewater, FL 32132	X
Florida Sign Company Inc.	Charles P.	Ogle	1101 29th Avenue	Bradenton, FL 34205	X
G S C Whittco LLC	Alan Wayne	Grimsley	604 N Volusia Avenue	Orange City, FL 32763	
Gainesville Neon and Sign Company	Robert William	Jammer	618 S Main Street	Gainesville, FL 32601	X
Gulf Coast Signs of Sarasota	Pamela S.	Holler	1713 Northgate Boulevard	Sarasota, FL 34234	X
Gulfstream Signs Inc.	Richard Micheal	Oldham	6951 Vickie Circle	W Melbourne, FL 32904	
Harbinger	Roger S.	Williams	5160 Sunbeam Road	Jacksonville, FL 32257	X
Heritage Signs Inc	Charles L.	Knight, Sr.	1001 Worthington Avenue	Green Cove Springs, FL 32043	X
International Sign & Design Corporation	William Hull	Griffin	10831 Canal Street	Largo, FL 33777	X
Interstate Sign & Light Corp	Timothy D.	Lage	1648 Brooksbend Drive	Wesley Chapel, FL 33543	X
Interstate Signcrafters Inc.	Jeffrey Martin	Petersen	130 Commerce Road	Boynton Beach, FL 33426	X
J Feldman Signs	Mark T.	Feldman	3911 SW 12th Court	Ft Lauderdale, FL 33312	X
J W Berry Signs Inc.	Jay O.	Berry	P.O. Box 491500	Leesburg, FL 34749	X
Jayco Signs Inc.	Gregory L.	Yoder	149-151 Atlantic Avenue	Maitland, FL 32751	X
Kemp Signs Inc.	Stephen Michael	Kemp	1767 Hill Avenue	West Palm Beach, FL 33407	X
Kenco Signs Awnings DIV Inc.	Raymond K.	Webb	1539 Garden Avenue	Holly Hill, FL 32117	X
Kenco2000 Inc.	Kenneth James	Webb	1539 Garden Avenue	Holly Hill, FL 32117	X
Kendal Signs	Kendal B.	Mullen	446 Gus Hipp Boulevard	Rockledge, FL 32955	X
Lanko Signs & Graphics	Lance Eric	Kotowski	2753 Algonquin Drive	Melbourne, FL 32935	X
Lott Sign Service Inc.	Stevin Wayn	Lott	4141 Mowrey Road	Wesley Chapel, FL 33543	X
Magee Sign Service Inc.	Karen J.	Magee	1604 E 18th Avenue Drive	Palmetto, FL 34221	X
McNeill Signs Inc	Jay Russell	McNeill	555 S Dixie Highway E	Pompano Beach, FL 33060	X
Melbourne Sign Company Inc.	Christopher	Meurett	638 Washburn Road	Melbourne, FL 32934-7322	returned
Morris Sign Company	Gary A.	Morris	1380 Saratoga Street	DeLand, FL 32720	X
North Florida Neon Inc.	Jerry Scott	Dickinson	6226 Wesconnett Boulevard	Jacksonville, FL 32244	X
NW Sign Industries of Florida Inc.	Ronals	Brodie	2416 Sand Lake Road	Orlando, FL 32809	X
Outdoor Images of Central Florida Inc.	David Hayden	Wood	4524 Curry Ford Road # 265	Orlando, FL 32806	
P J Sign Systems Inc.	Nicholas T.	Lyddane	614 Fern Avenue	Holly Hill, FL 32117	X
Panhandle Sign Systems	James M.	Hopmeir	5855 Stewart Street	Milton, FL 32570	
Perma Craft Signs	Carmen S.	Parrillo	1644 S. Ridgewood Avenue	South Daytona, FL 32119	X
Projecx Group Inc.	Donald M.	Smith	2021 Temple Drive	Winter Park, FL 32792	X
RJ Schor Inc.	Robert Jay	Schor	2150 NW 17th Street	Pompano Beach, FL 33069	X
Rogers Sign Corp	Robert F	Rogers	701 S Lemon Avenue	Brooksville, FL 34601	X
Sign A Rama	Michael J.	Santoro	3340 Ridgewood Avenue	Port Orange, FL 32129	X
Sign Design Of Florida Inc.	Richard Todd	Hayes	3602 Parkway Boulevard Suite 2	Leesburg, FL 34748	X
Sign Effex	Oren Keith	Dowdy	512 NW 6th Street	Winter Haven, FL 33881	X
Sign FX Inc.	Chad V.	Ward	495 Carswell Avenue Suite 130	Holly Hill, FL 32117	X
Sign O Saurus of Daytona, Inc.	Greg	Martin	2127 S. Ridgewood Avenue	South Daytona, FL 32119	X
SignAccess Inc	Warren Andrew	Mattingly	7205 Waelti Drive	Melbourne, FL 32940	X

Company	First	Last	Address	City, State Zip Code	Return receipt received
Signcraft Brothers Inc.	James Everette	Johnson	399 SW Deputy J Davis Lane	Lake City, FL 32024	X
Signs City of Central Florida Inc.	Steven C.	Douglas	6157 Cyril Avenue	Orlando, FL 32809	X
Signs on Time, Inc.	Clifford	Levy	1757 N. Nova Road, Suite 112	Holly Hill, FL 32117	X
Signstar	Daniel V.	Powell	7720 N US 301	Tampa, FL 33637	X
Southeastern Lighting Solutions Inc	John D	Meleski	374 Fentress Boulevard	Daytona Beach, FL 32114	X
Speedi Signs	Ronald Keith	Cornelius	421 Ridgewood Avenue	Holly Hill, FL 32117	X
Sumner Signs LLC	Jim	Sumner	538 N Dixie Freeway	New Smyrna Beach, FL 32168	X
Sunbelt Signs Inc.	Dean Vincent	Martin	3497 All American Boulevard	Orlando, FL 32810	X
Super Sign	Nissim	Amir	1116 Ridgewood Avenue	Holly Hill, FL 32117	returned
Taylor Sign & Design Inc.	Randall Alan	Taylor	4162 St. Augustine Road	Jacksonville, FL 32207	X
Thomas G Campbell Signs Inc.	Thomas G.	Campbell	55103 Mt Olive Street	Callahan, FL 32011	X
Thomas Sign & Awning Co Inc	Priscilla G	Thomas	4590 N 118th Avenue	Clearwater, FL 34622-5015	X
Townsend Signs Inc.	Alan Haroy	Townsend	303 Lincoln Avenue	Ormond Beach, FL 32174	X
Unified Associates Sign Service & Installation Inc	Charlie N	Deal	P.O. Box 3265	Plant City, FL 33563	
United Studios Corporation	Alan Wayne	Grimsley	2120 N CR 427	Longwood, FL 32750	
City of Daytona Beach	Planning	Department	P.O. Box 2451	Daytona Beach, FL 32115-2451	X
City of Daytona Beach	Marie Hartman,	Esq.	301 S. Ridgewood Ave., Suite 220	Daytona Beach, FL 32115	
City of Daytona Beach Shores	Planning	Department	2990 South Atlantic Avenue	Daytona Beach Shores, FL 32118	X
City of Daytona Beach Shores	Lonnie Groot, Esq.	Strenstrom, McIntosh, Colbert	1001 Heathrow Park Lane, Suite 4001	Lake Mary, FL 32746	X
City of DeBary	Planning	Department	16 Colomba Road	DeBary, FL 32713-3264	X
City of DeBary	Kurt Ardaman, Esq.	Fishback Dominick et al	1947 Lee Road	Winter Park, FL 32789	X
City of DeLand	Planning	Department	120 South Florida Avenue	DeLand, FL 32720-5422	X
City of DeLand	Darren J . Elkind, Esq.	Paul & Elkind	505 Deltona Blvd., Suite 106	Deltona, FL 32725	X
City of Deltona	Planning	Department	2345 Providence Blvd.	Deltona, FL 32725	X
City of Deltona	Gary J. Cooney,	City Attorney	2345 Providence Blvd.	Deltona, FL 32725	X
City of Edgewater	Planning	Department	P.O. Box 100	Edgewater, FL 32132-0100	X
City of Edgewater	Carolyn Ansay,	City Attorney	P.O. Box 100	Edgewater, FL 32132-0100	X
City of Holly Hill	Planning	Department	1065 Ridgewood Avenue	Holly Hill, FL 32117	X
City of Holly Hill	Scott Simpson, Esq.	Simpson, Korey, McKinnon	595 W. Granada Blvs., Suite A	Ormond Beach, FL 32174	X
City of Lake Helen	Planning	Department	P.O. Box 39	Lake Helen, FL 32744-0039	
City of Lake Helen	Lonnie Groot, Esq.	Strenstrom, McIntosh, Colbert	1001 Heathrow Park Lane, Suite 4001	Lake Mary, FL 32746	X
City of New Smyrna Beach	Planning	Department	210 Sams Avenue	New Smyrna Beach, FL 32168-9985	X
City of New Smyrna Beach	Frank B. Gummey, III	Esq.	210 Sams Avenue	New Smyrna Beach, FL 32168-9985	X
City of Oak Hill	Planning	Department	234 South U.S. Highway 1	Oak Hill, FL 32759	X
City of Oak Hill	Laura Goodearly,	Acting City Clerk	234 South U.S. Highway 1	Oak Hill, FL 32759	X
City of Orange City	Planning	Department	205 East Graves Avenue	Orange City, FL 32763	X
City of Orange City	Bill Reischmann,	Esq.	111 N. Orange Avenue, Suite 2000	Orlando, FL 32801	X
City of Ormond Beach	Planning	Department	P.O. Box 277	Ormond Beach, FL 32175	X
City of Ormond Beach	Randy Hayes,	Esq.	P.O. Box 277	Ormond Beach, FL 32175	X
Town of Pierson	Planning	Department	106 North Center Street	Pierson, FL 32180	X
Town of Pierson	Noah McKinnon, Esq.	Simpson, Korey, McKinnon	595 W. Granada Blvs., Suite A	Ormond Beach, FL 32174	X

Company	First	Last	Address	City, State Zip Code	Return receipt received
Town of Ponce Inlet	Planning	Department	4300 South Atlantic Avenue	Ponce Inlet, FL 32127	X
Town of Ponce Inlet	Virginia Cassady, Esq.	Shepard, Smith, Cassady, PA	2300 Maitland Center Parkway #100	Maitland, FL 32751	X
City of Port Orange	Planning	Department	1000 City Center Circle	Port Orange, FL 32119	X
City of Port Orange	Margaret Roberts,	Esq.	1000 City Center Circle	Port Orange, FL 32119	X
City of South Daytona	Community Development	Department	P.O. Box 214960	South Daytona Beach, FL 32121-4960	X
City of South Daytona	Scott Simpson, Esq.	Simpson, Korey, McKinnon	595 W. Granada Blvs., Suite A	Ormond Beach, FL 32174	X
VCARD	Dave	Castagnacci	P.O. Box 2475	Daytona Beach, FL 32115	
Volusia Council of Governments	Indigo Professional	Center	2570 W. ISB, Suite 120	Daytona Beach, FL 32114-8145	X
Volusia County Economic Development	Phil Ehlinger, Director	Daytona Beach Airport	700 Catalina Drive, Suite 115	Daytona Beach, FL 32114	X
Volusia County School Board	Saralee Morrissey, Director	Site Acquisition & Intergov. Coor.	3750 Olson Drive	Daytona Beach, FL 32124	X
The Chamber - Greater Daytona Beach/Halifax Area	Larry McKinney,	President	126 East Orange Avenue	Daytona Beach, FL 32115	X
Chamber of Commerce of West Volusia	Linda White,	President/CEO	520 North Volusia Avenue	Orange City, FL 32763	returned
DeLand Area Chamber of Commerce	Andy Grose,	President	336 North Woodland Avenue	DeLand, FL 32720	X
Holly Hill Chamber of Commerce	Steve Tyler,	President	1056 Ridgewood Avenue	Holly Hill, FL 32117	X
Ormond Beach Chamber of Commerce	Tony Capozzi,	President	165 West Granada Blvd.	Ormond Beach, FL 32174	X
Port Orange/South Daytona Chamber of Commerce	Steve Messinger,	President	3431 Ridgewood Avenue	Port Orange, FL 32129	X
Southeast Volusia Chamber of Commerce	Robert Lott,	President	115 Canal Street	New Smyrna Beach, FL 32168	X
Bauer & Associates Attorneys at Law, P.A.	Kirk	Bauer	P.O. Box 459	DeLand, FL 32721-0459	X
Booker & Associates, P.A.	Kim C.	Booker	1019 Town City Drive, Suite 201	Orange City, FL 32763	X
Cobb Cole	Robert A.	Merrill, III	P.O. Box 2491	Daytona Beach, FL 32114	X
Cobb Cole	Christopher N.	Challis	P.O. Box 2491	Daytona Beach, FL 32114	X
Cobb Cole	Michael J.	Woods	P.O. Box 2491	Daytona Beach, FL 32114	X
Doran, Wolfe, Ansay & Kundid	Michael	Ciocchetti	444 Seabreeze Blvd., Suite 800	Daytona Beach, FL 32118	X
Douglas A. Daniels, P.A.	Douglas	Daniels	501 N. Grandview, 3rd Floor East	Daytona Beach, FL 32118	X
Heebner, Baggett & Upchurch	Pete	Heebner	523 N. Halifax Avenue	Daytona Beach, FL 32118	X
J. Sam Owens, Jr. & Associates	J. Sam	Owens	400 S. Palmetto Avenue	Daytona Beach, FL 32114	X
Law Firm of Astrid de Parry, P.A.	Astrid	de Parry	107 E. Church Street	DeLand, FL 32724	X
Law Office of Dennis Bayer	Dennis	Bayer	109 S. 6th Street	Flagler Beach, FL 32136	X
Law Offices of Robert Riggio	Robert J.	Riggio	400 S. Palmetto Avenue	Daytona Beach, FL 32115	X
Mark R. Hall			124 Faulkner Street	New Smyrna Beach, FL 32168	X
Mary D. Hansen, Esq.			4393 S. Ridgewood Avenue, Suite 1	Port Orange, FL 32127	
Paul & Elkind, P.A.	Darren J.	Elkind	505 Deltona Blvd., Suite 106	Deltona, FL 32725	X
Storch, Morris & Harris, LLC	Glenn	Storch	420 S. Nova Road	Daytona Beach, FL 32114	X
Storch, Morris & Harris, LLC	Jim	Morris	420 S. Nova Road	Daytona Beach, FL 32114	X
Storch, Morris & Harris, LLC	Ty	Harris	420 S. Nova Road	Daytona Beach, FL 32114	X

