



AGENDA ITEM#: 5

MEMORANDUM

TO: Metropolitan Planning Commission

FROM: Mark Donaldson, Executive Director

DATE: December 8, 2011

SUBJECT: Request of MPC by Knox County Commission to study and make recommendations regarding amendments to the Knox County zoning ordinance regulating billboards and electronic message centers.
12-A-11-OA

REQUEST

MPC has been requested by Knox County Commission to study and make recommendations regarding amendments to the Knox County zoning ordinance prohibiting new billboards and regulating electronic message centers (EMC) in commercial areas of unincorporated Knox County.

BACKGROUND

This request comes to MPC following discussion by Knox County Commission regarding their continuing moratorium on new billboards. That discussion was recently expanded to include the desire for regulation of EMC. The discussion included an acknowledgement that the boundary between development which is within the city and that which is outside the city is hard to discern and regulations of the city and county with regard to signs should be made as compatible as possible.

ANALYSIS

Advertising signs, billboards and electronic message center signs are defined in the City of Knoxville and Knox County zoning ordinances as shown in Exhibit A.

Billboards and other outdoor advertising structures are currently permitted in CA (General Business), CB (Business and Manufacturing), CH (Highway Commercial) and I (Industrial) zone districts. They are expressly prohibited in all other zone districts.

There is no definition of EMC in the Knox County zoning ordinance. The current code allows electronically operated message boards limited to time and temperature displays [3.90.02(C)] as an exception to a prohibition against flashing intermittent or animated illumination on signs.

The City of Knoxville zoning ordinance now bans new EMC except as a changeable price sign (such as gasoline prices) or within areas with approved design guidelines (such as an overlay zone district) and approval by an appropriated review board or commission (such as the D-1 Review Board). The ordinance also allows the continuation of existing EMC provided they meet the operational standards of the regulations, such as the size of text and minimum hold time for each message.

An example of the city's regulations regarding EMC is attached as Exhibit B.

STRATEGY

To address the issue of banning billboards throughout all of unincorporated Knox County:

- Add language prohibiting billboards and other advertising signs to the CA, CB and CH zone districts comparable to that found in other districts.
- Add language providing for registration of current legal billboards and providing legal, non conforming status similar to that found in the City of Knoxville zoning ordinance.

To address the issue of defining and regulating EMC throughout all of unincorporated Knox County:

- Add a definition for EMC similar to that of the City of Knoxville.
- Add a definition for a changeable price sign as a type of EMC.
- Add regulations for EMC similar in format to those found in the City of Knoxville.

If Knox County Commission wishes to ban altogether the permitting of new EMC it could be handled in a manner comparable to billboards:

- Add a definition for EMC and changeable price signs similar to that of the City of Knoxville.
- Add language prohibiting EMC in all of the zone districts.
- Add language providing legal, nonconforming status to existing signs, subject to meeting new operational requirements.
- For legal, on-premise EMC signs, an amortization program could be implemented to allow for the capture of the economic value of current legal signs, but requiring that property is brought into compliance with new regulations once the amortization period has expired.

RECOMMENDATION

Staff recommends that the Planning Commission recommend to Knox County Commission:

- An expansion of the prohibition of billboards and other advertising signs to all zone districts in accordance with the amendments to the Knox County zoning ordinance shown in Exhibit C
- The creation of regulations for electronic message centers in accordance with the amendments to the Knox County zoning ordinance shown in Exhibit D.

ATTACHMENTS

- Exhibit A, current City and County definitions
- Exhibit B, current City of Knoxville regulations for EMC in commercial zone districts.
- Exhibit C, proposed amendments to the Knox County zoning ordinance necessary to prohibit billboards
- Exhibit D, proposed amendments to the Knox County zoning ordinance necessary to regulate electronic message centers
- Exhibit E, proposed amendments to the Knox County zoning ordinance necessary to prohibit electronic message centers

City of Knoxville and Knox County
Advertising sign, billboard and EMC definitions

	Knox County	City of Knoxville
Advertising Sign	A sign which directs attention to a business, commodity, service or entertainment conducted, sold or offered elsewhere than on the premises and only incidentally on the premises if at all.	A sign which directs attention to a business, commodity, service or entertainment conducted, sold or offered elsewhere than on the premises and only incidentally on the premises if at all.
Billboard	A type of advertising sign having more than one hundred square feet of display surface which is either erected on the ground or attached to or supported by a building or structure.	A type of advertising sign having more than one hundred square feet of display surface which is either erected on the ground or attached to or supported by a building or structure.
Electronic Message Center Sign	No definition	A sign which uses a bank of lights that can be individually lit to form copy such as words, letters, logos, figures, symbols, illustrations, or patterns to form a message without altering the sign face.

City of Knoxville
EMC Regulations for Commercial Zone Districts

ARTICLE V, Section 10 (Signs, billboards, and other advertising structures)

E. Commercial districts.

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2. Within all commercial districts the following regulations shall apply to Electronic Message Centers (EMC).

- a. EMCs legally existing on April 10, 2009, shall be allowed to continue operation subject to meeting the operational standards as required by subsection (m) herein. After April 10, 2009, no EMC shall be permitted in any location except in the following instances:
 - (1) An EMC may be permitted in those areas covered by an H-1 overlay district subject to approval as required within an H-1 district.
 - (2) An EMC may be permitted in those areas covered by a D-1 overlay district subject to approval as required within a D-1 district.
 - (3) An EMC may be permitted in those specific zone districts that allow EMCs with approved design regulations or guidelines subject to approval by the appropriate regulatory body for such district.
 - (4) An EMC may be used as a changeable price sign subject to the following:
 - (a) For the purposes of these regulations a changeable price sign is one that shows a product or service, such as fuel or hotel/motel room rates as an unchanging element of the sign and shall not be included as part of the EMC with only the price as part of the EMC and only the price is changeable.
 - (b) Changeable price signs shall be limited to parcels with a minimum of two hundred fifty (25)0 feet of frontage on the street where the property is addressed.
 - (c) Changeable price signs shall be integrated into a business ground sign or monument sign or be placed on a canopy or wall in accordance with these regulations,
 - (d) Changeable price signs shall be limited to three (3) per sign structure.
 - (e) The minimum matrix area of each changeable price sign shall be six (6) square feet and the maximum shall be twenty-five (25) square feet per changeable price sign.
 - (f) Each changeable price sign on a parcel shall be counted toward the total allowable signage allowed per parcel.
- b. No EMC shall be erected or used by a business unless any changeable letter reader board is first removed from the parcel.
- c. An EMC shall be included in the total signage permitted on the parcel.
- d. An EMC shall be permitted as a wall sign, or an integrated part of the total sign surface of a free standing business sign. For purposes of this section, integrated into the total sign surface of a free standing business sign shall mean an EMC cabinet contained within or contiguous to the smallest, simple polygon enclosing all of the non-electronic advertising content of a sign.
- e. An EMC permitted as part of a ground or monument sign shall have a minimum matrix area of twenty (20) square feet and a maximum size of one third (1/3) of the total signage permitted or one hundred (100) square feet, whichever is less.
- f. An EMC permitted as a wall sign shall not exceed one hundred (100) sq. ft. maximum.

City of Knoxville
 EMC Regulations for Commercial Zone Districts

- g. Each display on an EMC shall hold constant for a minimum of sixty (60) seconds.
- h. An EMC shall not display light of such intensity or brightness to cause glare. An EMC must be equipped with an automatic dimmer device and controlled by a light detector. It is the responsibility of the sign owner to demonstrate compliance with brightness/intensity and dimming settings. Brightness, also known as intensity, shall be measured in candelas per square meter, which is also referred to as nits, and shall not exceed the following standards:

Daytime maximum brightness	3,000 nits
Nighttime maximum brightness	750 nits
Maximum brightness at the property line	0.2 footcandles
Maximum bulb wattage for incandescent light	40 watts

For purposes of EMC regulations, the following definitions shall apply:

- *Candela* means a unit which expresses the luminous intensity of a light source.
- *Dimmer* means a device which changes the brightness of a display or which creates the capacity of increasing or decreasing the overall brightness/intensity of a display.
- *Footcandle* means a unit of illuminance (light falling on a surface). One lumen falling on one square foot equals one footcandle.
- *Light detector, light sensor* means an electronic component used to detect the amount or level of ambient light surrounding a display.
- *Nit* means one candela per square meter.

- i. No electronic message center (EMC) shall be permitted in any location which is zoned C-1.
- j. The images and messages displayed must be static. The images and messages displayed must be complete in themselves, without continuation in content to the next image or message or to any other sign.
- k. The transition from one display to another must be instantaneous without any special effects.
- l. Every line of text in an EMC shall exceed the following standards:

Designated Speed Limit on Frontage Road (in MPH)	Minimum Text Size (in Inches)
25 to 34	7
35 to 44	9
45 to 54	12
55 and above	15

If there is insufficient room for text of this size in the area allowed under clause 5 above, then no text is allowed.

- m. All EMCs legally existing on [the effective date of this ordinance], must comply with the operational standards listed in subsections g, h, j, k, and l above. A legally existing EMC that cannot meet the minimum text size requirement in subsection l above must use the largest size possible for one line of text to fit in the available space.
- n. An EMC used as a changeable price sign shall be integrated into a business ground sign or monument sign or be placed on a canopy or wall in accordance with these regulations. For the purposes of these regulations a changeable price sign is one that shows a product or service, such as fuel or hotel/motel room rates as an unchanging element of the sign and only the price is changeable.

Proposed Amendments to Knox County Zoning Ordinance
Prohibiting Billboards and Other Advertising Signs in All Zone Districts

TO PROHIBIT BILLBOARDS AND OTHER ADVERTIZING SIGNS IN ALL ZONE DISTRICTS IN THE KNOX COUNTY ZONING ORDINANCE, THE FOLLOWING AMENDMENTS ARE RECOMMENDED:

Amend Article 3, Section 3.90.09 as follows:

- C. Billboards and other ~~outdoor~~ advertising structure **signs** are ~~permitted~~ **prohibited** in **PC, SC**, CA, CB, and CH commercial zones.

Amend Article 3, Section 3.90.11 as follows:

- A. 3. Billboards and other ~~outdoor~~ advertising structure **signs** are ~~permitted~~ **prohibited** in I zones.

Amend Article 3, Section 3.90.16 as follows:

3.90.16 NON-CONFORMING OUTDOOR ADVERTISING SIGNS AND STRUCTURES

An owner of any ~~advertising or~~ business sign or structure legally existing at the time of the adoption of this amendment shall have the right to continue such non-conforming use.

An owner of any billboard or other advertising sign or structure legally existing at the time of the adoption of this amendment which does not conform to the requirements of this ordinance shall have until July 1, 2012, to register with the Knox County Codes Administration for purpose of ensuring to the owner the right to continue such non-conforming use.

After July 1, 2012, any non-conforming sign not registered shall be considered an illegal sign. The Codes Administrator shall notify or make reasonable effort to notify the owner of the sign of such condition. If after thirty (30) days of such notification the sign has not been removed by the owner, the County, its officials, or its employees shall have the authority to enter on the private property on which the sign is located to remove such sign and/or institute appropriate action to have the sign removed. The County is further authorized to place a lien, in the amount of the removal cost, against the property upon which the illegal non-conforming sign is located.

Proposed Amendments to Knox County Zoning Ordinance
Regulating Electronic Message Center Signs in All Zone Districts

TO REGULATE ELECTRONIC MESSAGE CENTER SIGNS IN ALL ZONE DISTRICTS, THE FOLLOWING AMENDMENTS ARE RECOMMENDED:

Add a definition to the zoning ordinance as follows

Electronic Message Center Sign	A sign which uses a bank of lights that can be individually lit to form copy such as words, letters, logos, figures, symbols, illustrations, or patterns to form a message without altering the sign face.
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Amend Article 3, Section 3.90.02 as follows:

- C. No sign having flashing intermittent or animated illumination or moving parts shall be permitted except ~~electronically operated message boards which shall display no more than time and temperature~~ **electronic message centers as regulated in subsection Q below.**

Amend Article 3, Section 3.90.02 to add:

- Q. Electronic message centers may be permitted as part of a wall or monument sign in CA, CB, CH, PC, SC, I, LI, BP and EC zone districts in accordance with the following regulations:
 1. EMCs legally existing on April 10, 2009, shall be allowed to continue operation subject to meeting the operational standards as required by subsection (m) herein.
 2. No EMC shall be erected or used by a business unless any changeable letter reader board is first removed from the parcel.
 3. An EMC shall be included in the total signage permitted on the parcel.
 4. An EMC shall be permitted as a wall sign, or an integrated part of the total sign surface of a free standing business sign. For purposes of this section, integrated into the total sign surface of a free standing business sign shall mean an EMC cabinet contained within or contiguous to the smallest, simple polygon enclosing all of the non-electronic advertising content of a sign.

Example A:
Electronic Message Center (EMC)
contained within content of sign

Example B:
Electronic Message Center (EMC)
contiguous to content of sign
 5. An EMC permitted as part of a ground or monument sign shall have a minimum matrix area of twenty (20) square feet and a maximum size of one third (1/3) of the total signage permitted or one hundred (100) square feet, whichever is less.
 6. An EMC permitted as a wall sign shall not exceed one hundred (100) sq. ft. maximum.
 7. Each display on an EMC shall hold constant for a minimum of sixty (60) seconds.

Proposed Amendments to Knox County Zoning Ordinance
Regulating Electronic Message Center Signs in All Zone Districts

8. An EMC shall not display light of such intensity or brightness to cause glare. An EMC must be equipped with an automatic dimmer device and controlled by a light detector. It is the responsibility of the sign owner to demonstrate compliance with brightness/intensity and dimming settings. Brightness, also known as intensity, shall be measured in candelas per square meter, which is also referred to as nits, and shall not exceed the following standards:

Daytime maximum brightness	3,000 nits
Nighttime maximum brightness	750 nits
Maximum brightness at the property line	0.2 footcandles
Maximum bulb wattage for incandescent light	40 watts

For purposes of EMC regulations, the following definitions shall apply:

- *Candela* means a unit which expresses the luminous intensity of a light source.
- *Dimmer* means a device which changes the brightness of a display or which creates the capacity of increasing or decreasing the overall brightness/intensity of a display.
- *Footcandle* means a unit of illuminance (light falling on a surface). One lumen falling on one square foot equals one footcandle.
- *Light detector, light sensor* means an electronic component used to detect the amount or level of ambient light surrounding a display.
- *Nit* means one candela per square meter.

9. The images and messages displayed must be static. The images and messages displayed must be complete in themselves, without continuation in content to the next image or message or to any other sign.

10. The transition from one display to another must be instantaneous without any special effects.

11. Every line of text in an EMC shall exceed the following standards:

Designated Speed Limit On Frontage Road (in MPH)	Minimum Text Size (in Inches)
25 to 34	7
35 to 44	9
45 to 54	12
55 and above	15

If there is insufficient room for text of this size in the area allowed under clause 5 above, then no text is allowed.

12. All EMCs legally existing on [the effective date of this ordinance], must comply with the operational standards listed in subsections 7, 8, 9, 10, and 11 above. A legally existing EMC that cannot meet the minimum text size requirement in subsection 11 above must use the largest size possible for one line of text to fit in the available space.

13. An EMC used as a changeable price sign shall be integrated into a business ground sign or monument sign or be placed on a canopy or wall in accordance with these regulations. For the purposes of these regulations a changeable price sign is one that shows a product or service, such as fuel or hotel/motel room rates as an unchanging element of the sign and only the price is changeable.

Proposed Amendments to Knox County Zoning Ordinance
 Prohibiting Electronic Message Center Signs in All Zone Districts

TO PROHIBIT ELECTRONIC MESSAGE CENTER SIGNS IN ALL ZONE DISTRICTS IN THE KNOX COUNTY ZONING ORDINANCE, THE FOLLOWING AMENDMENTS ARE RECOMMENDED:

Add a definition to the zoning ordinance as follows

Electronic Message Center Sign	A sign which uses a bank of lights that can be individually lit to form copy such as words, letters, logos, figures, symbols, illustrations, or patterns to form a message without altering the sign face.
Changeable Price Sign	A type of electronic message center sign for the purposes of these regulations a changeable price sign is one that shows the price of a product or service, such as fuel or hotel/motel room rates, within a sign matrix area of no less than six square feet nor more than twenty-five square feet.

Amend Article 3, Section 3.90.02 as follows:

- C. No **electronic message center or** sign having flashing intermittent or animated illumination or moving parts shall be permitted **after [the effective date of this amendment]** except ~~electronically operated message boards~~ **electronic message center signs** which shall display no more than time and temperature **and changeable price signs meeting the operational requirements as shown at 3.90.16 A - E.**

Amend Article 3, Section 3.90.16 as follows:

3.90.16 NON-CONFORMING OUTDOOR ADVERTISING SIGNS AND STRUCTURES

An owner of any advertising or business sign or structure legally existing at the time of the adoption of this amendment shall have the right to continue such non-conforming use, **except that electronic message centers legally existing on [the effective date of this amendment] shall be allowed to continue operation subject to meeting the operational standards as follows:**

- A. Each display on an EMC shall hold constant for a minimum of sixty (60) seconds.**
- B. An EMC shall not display light of such intensity or brightness to cause glare. An EMC must be equipped with an automatic dimmer device and controlled by a light detector. It is the responsibility of the sign owner to demonstrate compliance with brightness/intensity and dimming settings. Brightness, also known as intensity, shall be measured in candelas per square meter, which is also referred to as nits, and shall not exceed the following standards:**

<u>Daytime maximum brightness</u>	<u>3,000 nits</u>
<u>Nighttime maximum brightness</u>	<u>750 nits</u>
<u>Maximum brightness at the property line</u>	<u>0.2 footcandles</u>
<u>Maximum bulb wattage for incandescent light</u>	<u>40 watts</u>

Proposed Amendments to Knox County Zoning Ordinance
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C. The images and messages displayed must be static. The images and messages displayed must be complete in themselves, without continuation in content to the next image or message or to any other sign.

D. The transition from one display to another must be instantaneous without any special effects.

E. Every line of text in an EMC shall exceed the following standards:

<u>Designated Speed Limit On Frontage Road (in MPH)</u>	<u>Minimum Text Size (in Inches)</u>
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<u>35 to 44</u>	<u>9</u>
<u>45 to 54</u>	<u>12</u>
<u>55 and above</u>	<u>15</u>

If there is insufficient room for text of this size in the area allowed under clause 5 above, then no text is allowed.