### What is Digital?

Digital communication is the electronic transmission of digitally encoded information on digital platforms, such as websites and applications; digital services can be accessed by delivering digitized text, images and video content through digital devices and displays. Digital displays can range in size from wrist-watch faces measured in square inches to large billboards measured in 1000's of square feet.

## Where is Digital Advertising being employed?

Digital displays are presently being used on transit furniture in numerous U.S. cities as well as in other countries and cities world-wide. Some U.S. market areas with street furniture employing digital panels include:

- West Hollywood, California
- Metro Stations/platforms Los Angeles, California
- San Francisco, California
- New York City, New York
- Chicago, Illinois
- Boston, Massachusetts
- Denver, Colorado

- Miami-Ft. Lauderdale, Florida
- Northeast Texas/Louisiana
- San Antonio, Texas
- Saint Louis, Missouri
- Cleveland, Ohio
- Columbus, Ohio
- Baltimore, Maryland

# **Digital Element Sizes**

Sizes of the digital elements vary between out of home advertising contractors; however, that variance between suppliers ranges from two and four inches. The following are general sizes of digital screens for each element:

- Transit Shelters have two 67" to 70" high x 46" to 48" wide digital displays
- Digital Kiosks are pylon-like structures with displays that are up to 12' high and 48" wide
- Interactive Kiosks have two 55" to 50" high screens with variable widths
- Digital Urban Panels come in two sizes- 67.5" high x 38.5" wide or 56" high x 38" wide



### Digital Display Energy Consumption

Digital Displays utilizing Light Emitting Diode (LED) technology is presently the most common and energy efficient delivery system for advertising on transit furniture related displays. Energy consumption on street furniture is dependent upon the size of the displays. The following details energy consumption according to street furniture type:

- Transit Shelters 200-400 Watts per month
- Urban Panels 200-400 Watts per month
- Smart Components 100-200 Watts per month
- Vending Kiosks 500-600 Watts per month
- Interactive Kiosks 700-800 Watts per month

#### Digital Display Illumination

The Out of Home Advertising industry standard for illumination levels require digital displays to not exceed 0.3 foot candles over ambient light levels.

STAP elements will establish further standards based upon light levels measured an average of 12 feet from the display and brightness will be automatically controlled according to the time of day and to weather conditions.

#### **Digital Display Effects on Traffic**

All traffic studies related to the effects of digital displays, otherwise known as Commercial Electronic Variable Message Signs (CEVMS) on vehicle operators and safety researched thus far have been focused on large-scale (200 square feet to 800 square feet+) billboards visible to drivers on Public Rights-of-way. These traffic studies generally reviewed driver gazes away from the roadway without the presence of billboards, with the presence of static billboards, and with the presence of CEVMS signage under both daytime and nighttime driving conditions. Conclusions have varied between CEVMS signage having none or less impact to driver gazes compared with other visual distractions, to slightly longer driver gazes (measured in milli-seconds), to higher levels of distraction to drivers under certain conditions.

It is important to note that there is no single definitive study that is accepted by all parties (out of home advertising industry, anti-billboard factions, and government officials) and most importantly, *no studies have been found detailing the effects of smaller CEVMS signage (less than 24 square feet) commonly found on street furniture.*