

Q&A Electronic Marquee Signs:

What sign can we get for 75k?

There is no definitive answer. Signs are typically customized to the client and based on the requested requirements for the potential audience. Staff requested a sign that meets the requirements and goals of the city. A similar sign to the Library, Community Center, Courts and the Golf Course locations would cost in the 50k range.

What is the reason for the increased cost over the original signs?

The sign is about three (3) feet taller and requires more material to manufacture. It also requires a larger base and support. Another significant difference is the size of the LED boards. This LED for this sign is approximately four (4) foot by seven (7) foot. The other signs are approximately two (2) foot by seven (7) foot so the LED is 2X larger.

Why don't we just put a similar sign (as our other locations) at this location?

Research shows that this location is much different than the other locations that currently have similar LED signs and so too is the potential audience. Because this sign is in a much more open area with a higher speed limit, it requires a higher maximum readable distance in order to be effective.

What is Maximum Readable Distance?

The maximum readable distance (MRD) is the distance between the sign and the point at which it can be read.

According to:

DAKCO (<https://www.dakcoled.com/blog/choosing-right-size-outdoor-led-sign.html>), the MRD is key to determining the right size of outdoor LED displays.

To calculate the MRD, we simply multiply the character height in mm by 0.4 in order to get a MRD in meters. In our data, we have converted our measurements into feet. Our particular sign has a maximum readable distance of 160 feet. In order to display three lines of readable information, we would be required to purchase a four (4) foot LED.

For a 2' sign with 1 line the maximum readable distance would be 800 feet.

For a 2' sign with 2 lines the maximum readable distance would be 400 feet.

For a 2' sign with 3 lines the maximum readable distance would be 40.6 feet (other city locations)

For a 4' sign with 1 lines the maximum readable distance would be 1600 feet.

For a 4' sign with 2 lines the maximum readable distance would be 800 feet.

For a 4' sign with 3 lines the maximum readable distance would be 162.4 feet. (EMS and Fire Station 3)

How was 160 feet determined as the Maximum Reading Distance?

At 160 feet, the sign can be read from both East Blvd and Ave X. Also, it was determined that because of the speed and perspective of the proposed sign location, that 160 foot would be the most effective maximum reading distance.

Why do we need to spend 93k for a sign?

The short answer is that engineered signs are expensive and have a lot of unseen cost and overhead requirements that add up to higher cost. Among the major factors that go into the pricing are:

- Design
- Materials used for the sign and the sign foundation
- Powder coat painting and printing
- Lighting and Lighting Controls
- LED panels and controls

The sign must meet wind load requirements and the design must be approved and stamped by a state certified engineer.

Note: Daktronics pricing has been approved through the rigid Buy Board process and the City is getting the best prices available.

Will the sign increase volunteer recruiting?

The short answer is yes. Research has shown that local direct marketing is one of the most effective ways to get a message to the targeted audience. For example, you probably know the current price of gas and you did not get that off social media or news print. East Blvd during election time is inundated with political signs because local direct marketing works. Since the sign will be located between the city and industry, it makes sense that it would have a positive effect on volunteer recruiting from those that work in the industry. A traffic study done in 2012 indicates that between 11k - 15k people travel on East Blvd daily (and those number have and continue to increase).

Why don't we continue to use the portable signs we currently use for recruiting. Aren't they just as effective?

No. The portable signs can only be used when they are not being used in other areas of the city. The portable signs sit low to the ground and cannot be seen as well as a sign that is eight (8) foot in the air. The portable signs are also a much lower resolution and have limitations on where they can be placed and for how long. A permanent sign allows for a consistent 24 hour a day, 365 days a year recruiting message.

Should we be spending the money on equipment instead of a sign?

Council rated increasing volunteer recruitment as #8 in overall strategic planning process. Staff is making the recommendation for this sign based on this ranking.

We have budget 200k for 27 way finding signs, why do we need this one?

The wayfinding programs is different from the electric marquee signs. The wayfinding program serves a much different purpose with different goals. Whereas the wayfinding program helps direct traffic to locations, this sign identifies the building(s) at each location and informs the public of current events including actively recruiting for the Volunteer Fire Department membership.

Are we worried that a sign may distract drivers at the intersection?

Staff could find no reports specifically for electronic marquee signs. In 2015, the US Department of Transportation (DOT) released a study on fatal accidents and found no correlation between digital billboards and traffic accidents. In fact it stated that no research supports that conclusion. The majority of researchers agree that the impact of digital billboards on driving warrants future study, but evidence so far supports their continued presence on the roads. The study goes on to say that studies have been going on for upwards of a decade, too. Barring a major and unexpected behavioral change from drivers, that evidence will not change. (<https://dashtwo.com/blog/statistics-on-fatal-accidents-indicate-no-correlation-between-digital-billboards-and-traffic-accidents/>)

The Police Station does not have a sign. Don't they struggle with the same challenges?

No. The Police Stations does not operate a volunteer base like the Fire Department. Many of the PD recruits come from other cities and areas. The Police Departments most effective recruiting comes from area and regional job postings whereas the Volunteer Fire Department is limited to local candidates only.