CASE STUDY

LAS VEGAS RTC

Metro Las Vegas is home to 2.9 million Nevadans with an visitor rate of 40.8 million tourists in 2023. These bus shelters provide invaluable ad space for a bustling city network.

SOLUTION OVERVIEW

Digital outdoor media delivers dynamic, efficient, and bright advertisements in the Out Of Home (OOH) industry. Bus shelters are a popular location with a captive audience.

PROJECT PARTNERS

The Regional Transportation Commission of Southern Nevada (RTC) - The regional transportation entity that oversees public transportation in Southern Nevada.

OUTFRONT Media, Inc. - The international media company awarded the Vegas bus shelter advertising space.

Manufacturing Resources International, Inc. - Vertically integrated fabricator of the BoldVu® by MRI product used to replace existing hardware.

PRODUCT DETAILS

86" BoldVu® XT | BX1686PS
Single-Sided Universal
Mount Display (UMD)
5000 Nit Extreme Daytime Luminance
10-Year Service Agreement
New Patent Pending Install Kit

BOLDVU 86" SINGLE-SIDED DISPLAYS FOR OUTFRONT MEDIA AND RTC LAS VEGAS BUS SHELTERS

BoldVu® by MRI, a leading provider of outdoor digital signage solutions, recently completed a project to install their 86-inch displays in existing bus shelters across Las Vegas in collaboration with OUTFRONT Media and the Regional Transportation Commission of Southern Nevada (RTC). This improvement initiative aimed to create engaging experiences for commuters and visitors in high-traffic areas while replacing old infrastructure with the exceptionally durable BoldVu® product.

PROJECT CHALLENGES

POWER DISTRIBUTION & AVAILABILITY

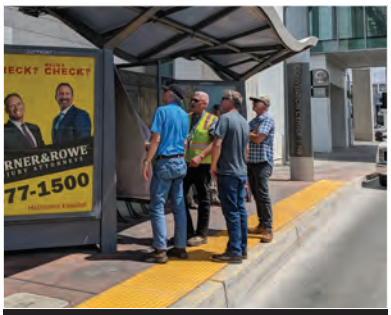
Cities commonly have different power scenarios at different locations throughout the city. Las Vegas is no different. Site power is a combination of 120Vac, 208Vac, and 240Vac depending on where the bus shelter is located. Interestingly, shelters along The Strip often tie into electricity supplied from the nearest casino whereas locations off-Strip may tie into a power source blocks away. Las Vegas casinos are increasingly generating their own power through solar or buying from a private power company. Therefore, there is a combination of municipal, private, and shared power grid. In any case, it is unknown what is connected and drawing current on any given circuit at the street level.

And much like other major cities, Las Vegas deals with spikes, surges, and deficits exacerbated by the bright lights of the casinos at night, as well as the taxing air conditioning in peak summer.

STRUCTURAL VARIATION

The other considerable challenge is the diversity of existing bus shelters in Las Vegas. Three shelter styles were built by different manufacturers with variation in dimension and structural configuration, requiring MRI to create universal mounting/cladding kits and a simple installation process for the large 86-inch display. Previous displays used large electrical cabinets, equipment racks and air filters which needed to be disposed of.

In summary: 19 units – 3 styles, 5 structural variations, 6 power scenarios between voltages and private power, municipal power, shared power.



BoldVu® Team travels to Las Vegas to assess the existing structures.

The inherited digital displays experienced pre-mature failure due to severe dust ingress and overheating.

SOLUTIONS

POWER DISTRIBUTION & AVAILABILITY: BOLDVU TECHNOLOGY

BoldVu® trademarked smart power management technology, WattVu®, AmpVu®, and VoltVu® allow the display system to be powered with a range of voltages from 120V to 277V. Each unit can be remotely programmed with a current limit and will autonomously adjust to provide maximum possible visual performance (i.e., image brightness) based upon available power without tripping breakers or harming display lifespan.

Each BoldVu®

- Monitors AC and DC current, voltage, and wattage.
- Calculates and tracks kWh energy usage.
- Dynamically sheds power load to prevent power supply over current and tripped circuit breakers.
- Automatically identifies poor connections of site primary wiring.

STRUCTURAL VARIATION: UNIVERSAL INSTALL KIT DESIGN & FABRICATION

Field Measurement:

BoldVu®'s engineering team conducted thorough measurement of the various bus shelter designs in Las Vegas. They studied dimensions, materials, mounting points, and structural integrity to understand the diversity of the installation environments. It was important that the solution provide the strength necessary to install an 86" BoldVu® at each location.

Design Concept:

Based on their findings, the BoldVu® Engineering Team developed a modular bracket design that could adapt to different shelter configurations. From the beginning the final Install Kit was engineered to be adjustable, accommodating variations in shelter size, shape, and mounting constraints.

Prototyping and Testing:

The design of the installation kit was analyzed in a simulated environment to ensure structural integrity under static weight and wind loads. This phase involved iterative refinements to optimize the kit's performance across a range of scenarios while ensuring proper airflow for the BoldVu® intake and exhaust.

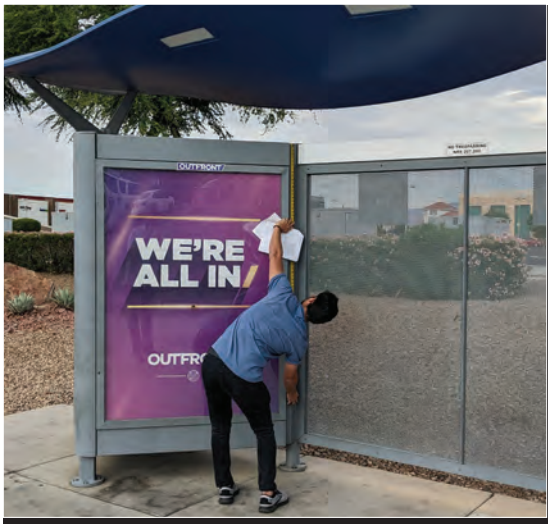
Modularity and Flexibility:

The modular design uses Patent Pending mounting features allowing adaptation into all Las Vegas bus shelter types. Without the need for modifications to the existing structure, besides removal of previous media components, the kits contain the adaptable hardware to essentially hang the BoldVu® product in place and provide the increased structural rigidity needed.

Installation Process:

By pre-leveling the Install Kit's mounting hook, the installer can be certain that the BoldVu® unit will also be plumb and level before it's hoisted into place, eliminating any extra time on site to plumb/level the display after installation.

After hanging and setting the BoldVu® unit, only two fasteners are added for the installation to be complete.



Mechanical Engineering field measurement.

BoldVu® Structural Finite Element Analysis

Parts in RED part of the installation kit.

RESULTS

With BoldVu®'s power flexibility and universal Install Kit, the installation team was able to efficiently deploy the pre-configured 86-inch displays across Las Vegas bus shelters. The adjustable nature of the brackets reduced installation time and costs, ensuring a seamless integration with minimal disruption to shelter function. The BoldVu® ability to operate and manage power consumption with as little as 120V of power guaranteed an efficient deployment with content running within hours instead of days.

ENHANCED VISIBILITY AND ENGAGEMENT

The large, high-resolution displays attracted attention and improved communication with commuters with advertisements and public service announcements.

ADAPTABILITY AND SCALABILITY

The universal bracket design proved adaptable to various shelter configurations, paving the way for scalable deployments in other cities with diverse infrastructure.

DURABILITY AND RELIABILITY

The robust construction of the installation kit ensured the stability and longevity of the installed displays, even in challenging outdoor environments like the Vegas desert. If service is needed, the front of all BoldVu® units swing open, allowing access to components without disassembly of a bus shelter or removal of the BoldVu® unit. If vandalized, the BoldVu® ToughVu® cover glass and/or the entire the digital side assembly (i.e., ToughVu® Coverglass, LCD and backlight subassemblies) can be replaced without removing the BoldVu® from the bus shelter. BoldVu® is IP66 sealed (no dust or water penetration) and fully self-contained. BoldVu® needs no external cabinets or racks, has no air filters, and requires zero periodic maintenance for its entire 10+ year life.

The installed 86" BoldVu® is in the foreground, while a static poster can be seen in the background. The digital image on the BoldVu® display is more crisp, bolder, vibrant and color saturated.

A POSITIVE CLIENT EXPERIENCE

"BoldVu®'s engineering team created a universal solution that made deployment easier, quicker, and cost effective. We were able to update the Las Vegas Bus Shelters with minimal downtime. The integration of 86-inch displays has significantly enhanced the commuter experience, showcasing the RTC's commitment to modernization and power efficiency."
Scott Edelblute, Transit Amenities Supervisor, RTC

"Time and time again, BoldVu® is up for any challenge we bring them."
Bobby Gill, General Manager - San Diego & Las Vegas, OUTFRONT Media

"After Outfront secured the contract to take ownership of the ad space at Las Vegas bus shelters, MRI was our first call. The versatility and extreme climate performance of their BoldVu® product was the solution to replacing the previous signage."
Damian Gutierrez, VP, Head of Transit at OUTFRONT Media

CONCLUSION

BoldVu®'s innovative approach to integrating 86-inch displays with a universal design has transformed Las Vegas bus shelters into dynamic communication hubs. The success of this project highlights the importance of adaptable solutions in outdoor signage, setting a new standard for engaging, informative, and visually impactful public spaces.

LIKE SOMETHING YOU SEE?
THE BOLDVU TEAM IS HERE FOR YOUR DIGITAL OUT OF HOME PROJECT.

CONTACT US AT BOLDVU.COM

May 13, 2024

BoldVu® by MRI

BoldVu® by MRI
Manufacturing Resources International, Inc.
6415 Shiloh Road East, Alpharetta, GA 30005