



Client
Los Angeles World Airports

Location
Los Angeles

Budget
\$40 million

Open Date
September 2013

Architect
Fentress Architects

Project Director, Media System Design and Business Platform Development
MRA International *concept master plan, business strategy development, content strategy*

Design Director/Creative Producer
Sardi Design *environmental integration, materials palette, design intent*

Content Producer
Digital Kitchen

Systems Designer and Technical Consultant
Smart Monkeys

Systems Engineering and Integration
Electrosonic Inc.

LED and LCD Manufacturer
Daktronics



As arriving passengers descend an escalator toward baggage claim, they're greeted with a stunning mediascape: an 80-foot-tall "Welcome Wall" that displays high-definition imagery is accompanied by welcome greetings in languages keyed to the arriving flights. (Photo: Sardi Design)

The Romance is Back

At LAX's new Tom Bradley International Terminal, an epic digital landscape delights passengers, pushes the media frontier, and creates a new business model for airport operators.

By Leslie Wolke

Art deco curtains part to reveal gold-toned dancers spinning inside a multi-tiered clock-like confection. Three-story-tall guitar strings quiver and plunk to the movements of passersby. A dapper 70-foot-tall gentleman tips his hat through a blizzard of slow-motion confetti.

These aren't scenes you would normally encounter in an airport, but then again, Tom Bradley International Terminal at LAX is not your typical airport. Phase one of a \$1.9 billion upgrade to LAX's international service opened in September 2013—a LEED Silver-certified building designed by Fentress Architects of Denver.

With the new terminal, Los Angeles World Airports (LAWA) also sought to elevate the passenger experience. A \$40 million, architecturally integrated media program does just that, tuning sophisticated content to the passenger journey through the terminal and reminding them of the excitement and adventure of travel.

An epic welcome

As the country's largest international gateway to Asia, LAX TBIT welcomes more than 17 million international passengers a year. And at the new terminal, that welcome is now a literal one: after clearing immigration, in-bound passengers descend a two-story escalator to baggage claim that faces an 80-foot-tall by 26-foot-wide LED display. Breathtaking high-definition videos sweep the screen—from a slow-motion California shoreline bubbling toward the sand to a close-up of a metal aircraft carapace reflecting the setting sun. Interlaced with these videos are greetings to the arriving passengers in their native languages, uniquely timed to each arriving flight. That mesmerizing 45-second descent transforms into a colossal yet personal—and undeniably memorable—welcome to Los Angeles.

The Welcome Wall is just one of seven iconic and enormous digital experiences designed and produced by a multidisciplinary team for the new Tom Bradley terminal. The epic, cinematic landscapes are an ode to LA's most celebrated industry. The project as a whole is called the Integrated Environmental Media System (IEMS) and is the largest digital media installation by far at any airport in the world. The statistics are stunning: 20 million LEDs over 12,000 square feet of displays, 105 million pixels or the equivalent of eight IMAX theaters.

While the Welcome Wall delights arriving passengers, the other six digital monuments were designed to captivate departing passengers, who tend to arrive at the terminal two to four hours prior to their international flight. Their route to the gate is a linear sequence: from security to the Great Hall with its 110-foot ceilings and to either the North or South concourse. Perpendicular to the Welcome Wall is the Bon Voyage Wall, positioned to catch the eyes of outbound passengers as they collect themselves after security. At roughly one-third the height of the Welcome Wall, it is an ample digital canvas to broadcast larger-than-life Angelinos jumping and waving goodbye in super-slow motion.

After encountering just two of the seven icons, a fundamental question comes to mind: Why would an airport spend \$40 million to design and launch such a massive and technically ambitious array of digital spectacles?

“Could we think about media in a way that both supports the passenger experience and creates a revenue platform?”



✈️ A series of 28-ft.-tall pylons provide a transitional experience as passengers move toward the North or South concourses and their departure gates. The slender monoliths consist of vertically stacked LCD monitors with content keyed to the art traditions of destination cities. Passenger movement triggers changing visual effects. (Photo: Moment Factory)

Rethinking the role of media

It all began with a series of conversations between Mike Doucette (LAWA's chief of airport planning and project manager for the new terminal), public relations executive Michael Collins, and Mike Rubin, principal and founder of MRA International, a development consultancy specializing in destination and place branding. The fundamental question was, as Rubin remembers, “Could we think about media in a way that both supports the passenger experience and creates a revenue platform?” LAWA's Board and its Executive Director, Gina Marie Lindsey, made it clear the two goals were nearly equal, but that the passenger experience must be the primary guide for the media program.

LAX had been relatively late in pursuing on-site advertising as a source of revenue, starting in 2006 with static and traditional digital displays positioned along the passengers' journey. Airports derive most of their revenue from landing fees and leasing gates to airlines. But as the economy contracted and airlines staved off bankruptcy by slimming margins and squeezing expenses, airports' aviation revenue fell and advertising became a priority.

The train had left the station

The new terminal was already under construction, but the opportunity to define a revenue-generating strategy while enhancing the visitor experience was too critical to ignore. So Rubin, Doucette, and architect Curtis Fentress brought Marcela Sardi, a designer of immersive experiences and a long-time collaborator with Rubin, into the project. Rubin's role was to conceive the master plan for the entire media ecosystem. The team agreed on a guiding principle: for the outcome to be successful, the program had

to be integral to the passenger experience and well integrated into the architecture.

Sardi recalls the initial exploration: “We looked at the architecture—where could we feasibly integrate pieces? The placement had to make sense in terms of the flow of passengers through the space.”

Drafting the business model

While concept design proceeded, Rubin worked with a large LAWA team to develop a business case for the IEMS. The client team included LAWA Executive Director Gina Marie Lindsey, the LAWA Commercial Development Group led by Airport COO Steve Martin, Deputy Executive of Commercial Development Debbie Bower, PR representative Michael Collins, and LAWA's Board of Airport Commissioners. Rubin emphasized the importance of this effort early on: “Design is not just a physical expression. It's an overall strategy that must address the sustainability of the experience and its evolution,” and in most cases, he adds, that means generating revenue to sustain it.

Together, Rubin and the LAWA executive team crafted a sponsorship strategy that combines entitlement (naming and branding opportunities for each media feature) and visitor engagement (ways that sponsors can provide a benefit or service to the passengers.). A successful sponsorship “is one where the sponsor's interest is in engaging with the audience not just to communicate their brand but to provide something of value, a connection, an experience, an enhancement that makes the brand memorable,” says Rubin. Sponsorship programs had not been undertaken in airports here or abroad and they provide a unique challenge, because, as Rubin notes, most airports are “bereft of any enjoyment and engagement.”



✈️ The Time Tower was conceived as a four-sided mediascape wrapped around an existing elevator core. Here it displays a short film inspired by comedy actor/producer Harold Lloyd. Moment Factory built a full-scale model and shot live-action film for the short. A functional clock face is also integrated into the tower. (Photo: Moment Factory)

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Iconic features take shape

After a series of collaborative meetings with Doucette and Fentress Architects, the definition and location of each of the seven features was complete. Mike Rubin headed the content strategy for the program while Marcela Sardi developed the materials palette and design intent of each feature as mindful extensions of the Great Hall’s interior design.

While structural, engineering, and lighting modifications for the landmarks were made as a series of change orders to the architectural plans, Moment Factory, a multimedia design and production studio headquartered in Montreal, transformed the content strategy into immersive, ambient media.

With one year left before the terminal’s opening, Senior Multimedia Director Melissa Weigel explains, “Our mandate was not only to produce the media itself, but to produce the content guidelines to help future creators develop for the system.” Moment Factory’s team of 60 full-time motion designers, filmmakers, and animators joined forces with an army of freelancers to create not just the media for individual elements, but to design what Weigel calls an “orchestrated media environment...with a common cinematic language.” That language has aspects of travel documentary, fantastical set pieces, and ethereal imagery, all conveying the romance of travel and the delights of Los Angeles.

Moment Factory created 40 short-films, each tuned to the exact technical requirements and dimensions of its media landmark.

Creative and environmental design agency Digital Kitchen came on board to design and deliver a collection of “ambient narratives”—documentary-style stories that captured the spirit of Los Angeles and portraits of destinations like Seoul and Barcelona. Their hypnotic cinematography washes across the Story Board and down the Welcome Wall. In addition, Digital Kitchen was charged with developing brand expressions for LAX from the poetic slow-motion aviation skins with HDRs to sculptural cloud layers that float across the features.

Innovations behind the scenes

The complexity of building, installing, and deploying the media ecosystem cannot be understated. Moment Factory and Digital Kitchen produced about five hours of HD and large-format content, some of which process real-time flight information to render customized experiences timed with flight arrivals and departures. Moment Factory’s X-Agora video servers render the interactive content and generative content. Smart Monkeys (Miami) designed the sophisticated playback and show control system—the platform that runs all the media features. The system is a fusion of broadcast, A/V, digital signage, and enterprise-level networking to support the speed, data, and



The Bon Voyage Wall, positioned to catch the eyes of outbound passengers as they collect themselves after security, features slow-motion video of Los Angelenos waving goodbye. (Photo: Moment Factory)

performance benchmarks the project required. LA-based Electrosonic Inc. integrated the entire system and built its NASA-like control room.

As the winner of a public RFP process, Daktronics manufactured and installed the LED and LCD video displays, along with the architectural surrounds and a fiber-optic backbone. By the end, Adam Gilliland, Daktronics project applications engineer, tallied “approximately 10,000 modules totaling over 20 million LEDs.”

Of the \$40 million spent on design, development, and deployment of the IEMS, roughly \$20 million was spent on the display technology, \$6 million on the content, and the rest on fabrication, engineering, and consulting.

Seeking sponsorship

To inaugurate the system and enable the sponsorship platform, the airport authority sought bids for a Terminal Media Operator or TMO. Rubin and LAWA’s Commercial Development Group defined the TMO as a unique collection of responsibilities: to manage the sponsorship guidelines, to solicit sponsorship opportunities for the seven media landmarks, to manage those agreements after they have been approved by the airport authority, and to maintain the media infrastructure itself, which is estimated at roughly \$2 to \$4 million a year.

The sponsorship guidelines drafted by Rubin and LAWA are intended to protect and evolve the high caliber of the content designed by Sardi, Moment Factory, and Digital Kitchen. Sponsors are allowed a maximum of 12 minutes per hour in aggregate (equivalent to 20% of the time) to communicate their brand on the media feature. Sponsors are also required to provide passenger benefits such as apps, charging stations, or other amenities to make the travel experience more enjoyable.

In early December 2013, a joint-venture named JCDecaux/Airport Sponsorships/Time Warner was awarded a six-year contract that guarantees at minimum \$180 million in sponsorship revenue (and advertising in other terminals) to the airport. In his presentation to the LAWA Board of Airport Commissioners, JCDecaux president Bernard Parisot called this opportunity “nothing short of revolutionary, bringing together sponsorships with new services to make the passenger experience more rewarding.”

Mike Rubin summed up this massive and ground-breaking project quite modestly: “We started with the passenger itinerary, looked at what is missing from the airport experience, and sought to identify sustainable models of engagements to support those enhancements.”■

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The Storyboard is a 120-foot-long, digital version of the medium so commonly used in Los Angeles creative industries. The multiple LED screens, manufactured by Daktronics, were designed to be viewed from multiple angles. Both Moment Factory and Digital Kitchen created “ambient narratives” for the feature. (Photo: Moment Factory)