

**Amended**  
**Art Activation Strategy for the**  
**San Jose Airport Public Art + Technology Program**

**BACKGROUND**

The Public Art Program for the San Jose Airport was conceived as a “unified program of Art + Technology” giving travelers an immediate sense that they had landed in Silicon Valley, a global center for innovation. The Art + Technology program is fully integrated into the architecture and design of the airport’s Terminal B, influencing the terminal’s structural, interior and IT design, and has transformed the exterior of the ConRAC garage, the front door to the airport.

The Airport Public Art Master Plan was the result of a multi-year effort that involved professional planners working with over 500 community members and policymakers to craft a public art program that is unique to the City of San Jose and region. Foundational to the planning was the City’s 2003 Economic Development Plan that recommended reinforcing “the important powerful and positive first impression of the Airport as a major gateway to the region, critical to attracting creative and innovative people and companies in a highly competitive global environment.”

The Airport Art + Technology Program has taken a landmark approach to public art implementing an “Art Activation Strategy” that operationalized the Master Plan’s vision. The \$8.4 million program was designed to be a platform for ongoing creative innovation now and in the future. It called for integrating flexible technological and networked “platforms” throughout the new terminal to accommodate long-term, permanent anchor artworks, and two-year short-term rotating art installations.

**ART ACTIVATION STRATEGY**

Fundamental to the Art Activation Strategy’s vision of the Art + Technology Master Plan was the establishment of Flexible Platforms -- each comprised of three systems that worked together: Physical Systems, Technology Systems, and Human Systems:

- Physical Systems are infrastructure elements, seamlessly integrated into the architecture, that include power, data and structures that can accommodate a broad variety of artwork types. Not all physical platforms were intended to be commissioned at any given time. All but the Display Cases in the landside areas of Terminal B are invisible when not in use.
- Technology Systems include: a dedicated, and secure network, to enable dynamic, responsive and data-driven art and to streamline their maintenance; servers with scripts to control aspects of the physical environment (e.g. lighting and sound) and manage time-based media; and other baseline technology such as sensors, cameras and displays that can be used by artists in the creation of work in the airport.

- Human Systems include: An Art Technician role whose job is to help artists work within the airport, both practically (by being a badged airport contractor who is familiar with policies and procedures) and technically (by understanding and documenting the evolution of the Art + Technology infrastructure noted above). This role is also responsible for periodic maintenance and troubleshooting of the artworks and their associated platforms, inventory of the airport's art program assets, and interfacing with airport personnel in the case of any issues with the art that arise.

Flexible Platforms were strategically sited throughout Terminal B both in the pre-security areas and in the secure area of the concourse.

## **IMPLEMENTATION**

When Terminal B opened in 2010, three permanently-sited artworks were installed. Also included in the opening commissions were nine temporary technology-based artworks that worked with the pre-established Flexible Platforms. These temporary commissions were to be rotated out and replaced by other artworks in two years. Several of the projects involved partnerships with Silicon Valley-based technology and cultural institutions.

Pursuant to the rotating program, a \$3 million budget was set aside as seed funding to stimulate strategic partnerships to support the ongoing commissioning of a rotating program of artworks responding to current technologies developed in Silicon Valley. In May 2010, to address the financial situation at the Airport from the impacts of the recession and the debt from the Terminal Area Improvement Area Program, City Council approved an ordinance deferring expenditures and/or appropriations for public art projects at the airport until the passenger activity at the Airport reaches a level of 12.2 million passengers per year or, unless otherwise provided by Ordinance adopted by the City Council. The 12.2 million annual passenger number had been previously established in the Airline Lease agreement as the activity level that could "trigger" the start of Terminal B Phase II.

After eight years, with limited funding for maintenance, and no funding for replacement, the majority of the temporary public art projects have been removed; what remains are the permanent projects.

## **PHASE II**

In 2018, the 12.2 million annual passenger number was reached and funds are once again available to support public art at the airport. With eight years of experience as a reference, as the program evolves, the following Addendum to the Art Activation Strategy, is offered as a framework to direct future commissioning.

## **ANALYSIS**

With the benefit of 8 years of operation, the following is a retrospective analysis of the Art Activation Strategy and initial Phase I commissions.

### **Permanent Artworks**

The Art Activation Strategy called for 4 significant permanent artworks.

- A sculpture on the mezzanine
- A suspended sculpture marking the concourse food court
- A landmark installation on the facade of the rental car garage
- A suspended sculpture in the Baggage Claim area

Three of these artworks (*Space Observer*, *eCloud*, and *Hands*) have been successful artworks for the following reasons:

- Guided by the Art + Technology Master Plan, the designs are reflective of innovation.
- Considering the long-term nature of the installations, artists deliberately considered proven materials and used them in innovative ways resulting in robust installations.
- The budget investment resulted in artworks of significant scale; landmarks that serve as intuitive wayfinding.
- *Space Observer* and *Ecloud* compelled strategic partner donations from Microsoft Corporation and Adobe Foundation for long term maintenance.
- Intended to be permanent, after initial troubleshooting they have required limited maintenance.

A large-scale suspended permanent artwork was considered for the Baggage Claim space. While it was considered a prime location to mark as distinct, the challenge of creating and maintaining a suspended technology-based artwork in the Baggage Claim space was ultimately deemed not practical and the piece was cancelled before construction.

### **Temporary Artworks:**

In keeping with the intent of the Art + Technology Master Plan and the Art Activation Strategy, artists commissioned for temporary works took risks, with limited budgets. Although these works were not intended to be maintainable beyond two years, several of them lasted for many more years. Considering issues associated with these projects is useful in planning for future commissioning.

Based on the design criteria, the first round of commissions was successful in various areas:

- Artists took risks and were ambitious.
- Working within the constraints of the Flexible Platforms inspired creative response.
- That premise of the platforms being invisible when not in use was a successful strategy that recognized the dynamic nature of technology related works.
- The Art Activation Strategy called for “human systems” to support the program. The Art Technician position is key to the operation of the program. Because the nature of technology work can require routine attention, the remote monitoring capabilities did prove important.

- A key component of the physical infrastructure of the program is storage on the basement level and a workshop/administration/server room on the first floor. These spaces have been well-used by the Art Technician and City staff for planning and staging aspects of installations. While the Art Room is well-equipped for prototyping new artworks, with few new works developed, it was under-utilized for this purpose.
- Currently, aspects of the “technology systems” in the form of a server dedicated to use by artworks as well as sound equipment are located in the airport's MDF (master data facility). Additionally, until recently a virtual cloud-based server was operating to provide anticipated data interfacing technology for artists. Over the past months, the functioning of these back-end systems has been upgraded and consolidated for greater flexibility and easier long-term support.

#### Challenges:

- Funding: Of the \$8.4 million forecasted percent for art funding, \$3 million budget was set aside as seed funding to stimulate strategic partnerships to support the ongoing commissioning of a rotating program of artworks responding to current technologies developed in Silicon Valley. All funding allocations ceased in 2010 due to the recession. When the funding returned in 2018, after passenger levels reached 12.2 million, the allocations were reduced by half to reflect the City's current 1% for arts ordinance. (Prior to the deferment, in 2010, the City's percent for art program was receiving 2% from designated Capital Improvement Projects).
- While temporary artworks were designed for only 2 years, without funding to replace them they remained. Over time, they became increasingly costly to maintain and some began to look dated or malfunctioned. This was contrary to the intent of the rotating platforms' goal of “evergreen” technology-based work.
- When the temporary works remained beyond their intended life, it set unrealistic expectations for longevity. Removal of successful pieces was disappointing to some employees and travelers who had come to appreciate the works.
- Removing artworks from display cases, without funding to replace, was problematic as it left visual vacancy.
- Without permanent staffing at the airport, the day-to-day visual inspection of the work is problematic.

#### Lessons Learned:

- Physical systems on their own are not enough to support innovative artwork. Also required are functioning and up-to-date back-end technology systems, and human systems (including the ongoing support of the City and Airport's Senior Staff).
- The need for long-term funding of a dedicated Art Technician as well as consistent funding for ongoing commissions is unrealistic without administrative support from Airport Staff.
- The curatorial process to select the artists for the temporary artworks was intensive. Going forward, a more direct approach should be considered.

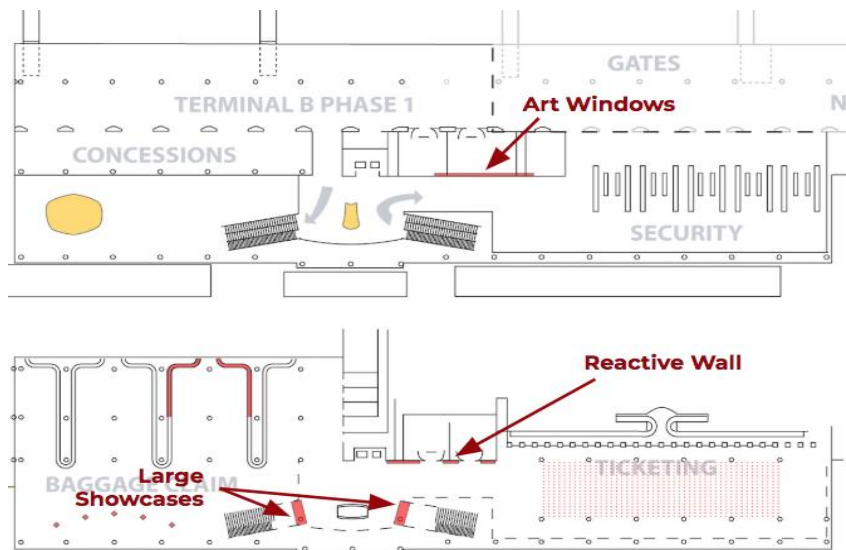
- Regarding the Art Technician role, over time it seems the job is better divided into two positions: a technology-focused scope vs. detail-oriented art installer familiar with building techniques.

A project specific summary is included in Appendix A.

## PHASE II RECOMMENDATIONS: FOCUS ON VISIBLE PLATFORMS

The July 2006 Art Activation Strategy proposed developing integrated platforms for ongoing commissioning. When the platforms are not displaying artworks, they would by design be invisible to the public, ensuring that the program could be flexible in the face of uncertain technologies, artistic practices, and funding. To this end, the program in the North Concourse has proven successful in the face of reduced funding: as temporary artworks have been decommissioned due to lack of maintenance and have outlived their designed lifetimes, the platform opportunities in the concourse remain but are invisible, and therefore not in need of urgent attention.

Conversely, the three landside activations of Terminal B (Reactive Wall, Art Windows, and Showcases) are highly visible, requiring consistent, ongoing attention to avoid the appearance of artwork that is dated, in disrepair or absent. This has proven financially and logistically impossible in the face of budget deferments. For this reason, our current recommendations and utilization of unlocked Capital Improvement Project funds focus on the sustainability of these three platforms.



*Visible Landside Terminal B Activations*

The following recommendations promote a strategy that results in a growing collection of low-risk, high-impact work that is easily managed for long-term exhibition within these platforms.

## **Mezzanine Showcases (“Art Windows”)**

### **Status / curatorial issues and learnings:**

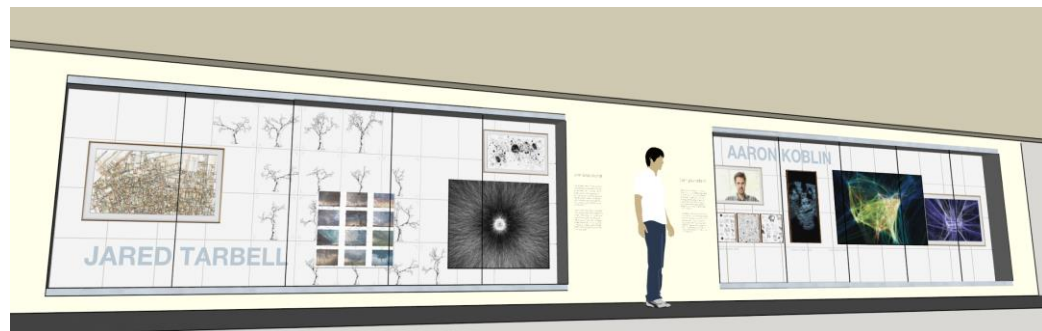
- Only one commission was ever installed, in 2010 (Angela Filo’s Connected: Silicon Valley + Bangalore).
- In 2012 a fresh set of photographs were installed in the light boxes and the bulbs in the light boxes refreshed
- In 2018, 7 of 8 lightboxes bulbs have burned out and need replacement.
- The original curatorial considered the security lines would queue here and the public would have time to consider the artwork. Over time the context of this platform location has changed from a place of dwelling while in security lines to a rapid flow of people via the CLEAR and TSA PreCheck lanes.



*ArtWindows: Dwell time has been significantly reduced by new TSA flow patterns*

### **Recommendations:**

- Acquire archival prints of significant and emerging artists creating 2D software-generated work (e.g.: [Scott Draves](#), [Aaron Koblin](#), [Liu Chang](#), [John Maeda](#), [Casey Reas](#), [Shirley Shor](#), [Jared Tarbell](#), [Marina Zurkow](#)).
- Aesthetically, work should be bold, visible from a distance and/or by an audience that is walking by vs. dwelling in a queue.
- Include as part of the platform 4 monitors to display video clips of dynamic generative source.
- Acquisitions would be stored when not on display and could be rotated to sustain a program when there is no funding to procure new works.



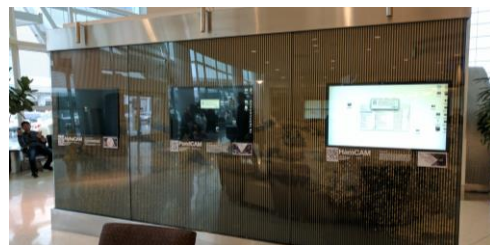
*Mockup installation of mixed generative 2D print work and dynamic content for two artists.*

- Curatorial Process:
  - With the intention of curating a pipeline of exhibitions, work with a curatorial-oriented selection team to identify available artwork. Exhibitions may be curated to showcase a single artist, relevant themes, genres, etc.
  - Consideration should be given for selected artworks to be displayed flexibly in more than one exhibition. (e.g. Aaron Koblin's work might be shown as a body of work and, in future years displayed with other art generated by aviation data).
  - Initiate program with a pilot program directly soliciting work from a select group of seminal artists. Based on response, directly work with artist(s) to determine curatorial specifications for 2-D work and dynamic content. Lessons learned from this pilot process will inform collection process going forward.

### **Large Showcases (street level)**

#### **Status / curatorial issues and learnings:**

- There have been extended periods of inactivity and disrepair in these very public showcases.
- Artwork installed has shown that monolithic installations not appropriate for the physical format of the showcases.
- Effective use of transparent showcase volume for curated collection of existing artworks, vs. less effective use as massive structure featuring experimental and unstable technology.
- Maintaining a pipeline of work to show has been difficult without an established curatorial process (current experimental curatorial partnership with MACLA has sought to address this but budget was a handicap).
- Dust buildup within the cases has created ongoing need for maintenance.



*Left: Effective use of transparent showcase volume for curated collection of existing artworks, Right: Less successful use as filled volume / display surface*

#### **Recommendations:**

- Modify showcase corners and doors to reduce dust build-up.
- Purchase or commission new long-term artworks by accomplished artists, with the goal of impactful, permanent, robust work. Curatorial parameters will be to preserve the transparency of the showcase volumes with lightweight, low-density interventions.

- Consider intricate works that benefit from being seen in close proximity but would otherwise be vulnerable in a public venue (e.g. [Reuben Margolin](#); [Philip Beesley](#); [Drift Studio](#); [Nick Dong](#), [Sarah Sze](#)).



*Mockup showing use of showcase for visually lightweight artwork (Philip Beesley) that benefits from close inspection.*

- Selected work should extend across both showcases or enter into dialogue between the showcases as a curated pair, but not necessarily by the same artist.
- Consider a “Quality Control Allowance” to address maintenance and/or retrofit issues that may have fallen short of expectations (see 2019 Anticipated Funding). Planned cycles of retrofit will support path to long-term robustness and longevity.

## **Reactive Wall**

### **Status / curatorial issues and Learnings:**

- Only one commission was ever installed, in 2010 Camille Utterback’s projection based *Shifting Time* -- San José. This artwork was de-installed in 2018.
- Ambient lighting makes projected work impractical in the daytime. Even at night, the airport is well lit; lighting projects are impracticable and visually diminished.
- The interactivity of the artwork was largely unnoticed by the travelling public.
- Replacement projector lamps are expensive. To maximize their life, the artwork is only visible at set times, further limiting the active hours of the piece.



*Reactive Wall: Ambient light makes projected artwork difficult*



**Recommendations:**

- Convert this platform from a 2-year term to a long-term (“permanent”) piece.
- Take advantage of the site’s visible, high-traffic location to add a new highly memorable and popular ‘signature’ piece. While scaled appropriately, the impact should be comparable to Hands, eCloud, or Space Observer.
- The site opportunity calls for a low-relief sculptural approach that can be mechanical or static.
- Projected or light-based works are not appropriate and, learning from experience, do not work well in this space.
- Low-maintenance and robustness are critical.
- Silent or very quiet actuation if any (e.g. sound based artworks are not appropriate) -- this is important so as not to intrude on business/customer service operations.
- Curatorial Process:
  - Consider a short list of invited artists to be reviewed by a selection panel of arts professionals.

## BUDGET RECOMMENDATION

### NEW FUNDS

**Total Available Budget (2018):**     **\$670K** (current allocation)

- 1. Art Windows:**                     **\$ 30K** Collection of 2-D work (3 curatorial cycles @ \$10K)  
  **\$ 20K** Dynamic displays, cabling and media players  
  **\$ 5K** Contingency for equipment installation
  
- 2. Showcases:**                     **\$220K** Commission new artwork or  
  purchase of pre-existing pieces (2 @ \$110K)  
  **\$10K** Retrofit showcase structure to mitigate dust.  
  **\$25K** Contingency
  
- 3. Reactive Wall:**                 **\$300K** Commission/Purchase of artwork  
  **\$ 30K** Installation support  
  (e.g. site & technical preparation/modification, etc.)  
  **\$ 30K** Contingency

Note: Funding for project management and curatorial services/selection is covered through the TAIP overhead allocation.

### ANTICIPATED FUTURE FUNDING

1. In 2019 the remaining deferred Terminal Area Development Program (“TAIP”) funding, \$600,500, will become available. Funding strategy may include:
  - Up to \$375,000 to realize a mid-size permanent sculpture with the potential for significant impact. Site considerations for the latter will target either Gate 26, across from security (former site of *Dreaming FIDS*) or a suspended piece at Gate 19 (former site of *Chronos & Kairos*).
  - Up to \$100,000 to refresh the Art Window archival print collection. Based on initial pilot curation, expand collection of archival 2D software-generated prints.
  - Up to \$75,000 for Quality Control Allowance. Learning from 2010 commissioning, it is advisable to revisit long-term artworks to evaluate robustness. Showcase artists will be contracted for routine site visits to survey the performance of the artworks. Funds will also support hard costs to maintain, retrofit and/or rebuild any elements if they fall short of expectations. This will lead to long-term robustness and sustainability of the work.
  - Up to \$50,000 contingency for unexpected issues and/or opportunities.
  
2. In FY 2022, the 5-year CIP Forecast anticipates an additional \$25,500. Additional funding may be used to augment the Art Window’s 2-D archival print collection.
  
3. If and when Phase II of Terminal B development occurs, triggering further art budget allocation, it is recommended that funds be used at that time for easily-integrated, permanent commissions that take advantage of existing physical and technology infrastructure along the concourse(s).

## Appendix A

A detailed assessment of temporary artworks:

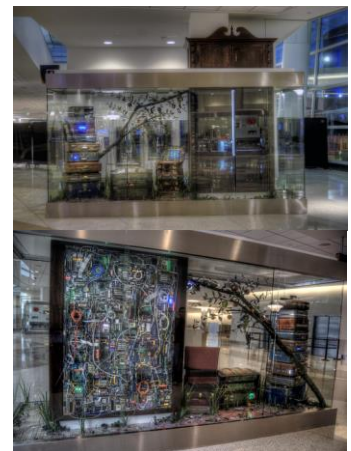
**Convey** (2010 - 2011) Ambitious in form (projection onto baggage claim conveyor belts) and integration of multiple underlying technologies (vision system, social media APIs, real-time flight information integration, AI sentiment analysis) this piece never achieved its potential before removal being decommissioned. Primary issues were the ambient brightness of the area making the projectors less impactful and lack of robustness and consistency in parsing airport operational data in time to produce meaningful output for passengers on specific flights.



**Courtesy of Nature** (2010 - 2012) This work was located in the HVAC columns flanking the east side of the concourse. It was intended for small interventions integrated into these successive columns to create a rhythmic, dynamic effect where the whole is greater than the sum of its parts. Courtesy of Nature was conceptually strong and utilized multiple technological platforms and data feeds. While the integration was successfully developed by the artists, and the piece was aesthetically beautiful, it was subtle and was not widely noticed by passengers in the HVAC column platform. Additionally, the first-generation LED-control circuits designed for this piece had robustness issues as they tended to overheat and shut down.



**Wunderkammer** (2010 - 2012) Installation designed was engaging for passengers in the Baggage Claim area pre-security. Viewing from all sides was successful and passengers were drawn to it. A challenge for any piece installed in the large street-level. Display Cases is that they were designed with gaps between glass sheets, making dust management difficult. For an installation such as Wunderkammer, with many small details, it was difficult to keep dust-free. Working with Zero1 as a curatorial partner was beneficial - it cultivated relationships with other organizations, enrolled other audiences that might not otherwise recognized the airport as an important venue. The curatorial and administrative support from the Zero1 staff streamlined the selection administration.



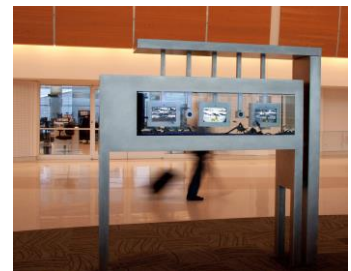
**Small Wonders** (2010 - 2012) As with *Wunderkammer*, the Installation designed was engaging for passengers in the baggage claim area pre-security. Viewing from all sides was successful and passengers were drawn to it. It also suffered from the same dust-collection issues as *Wunderkammer*. A challenge for any piece installed in the Display Cases is that they were designed with gaps between glass sheets making dust management difficult. For an installation such as *Wunderkammer*, with many small details, it was very difficult to keep dust free. Working with Zero1 as a curatorial partner was beneficial - it cultivated relationships with other organizations, enrolled other audiences that might not otherwise recognized the airport as an important venue. The curatorial and administrative support from the Zero1 staff streamlined the selection administration.



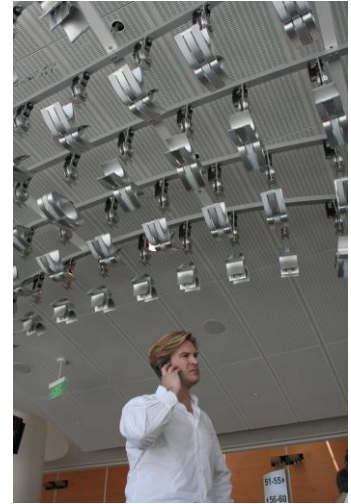
**Sonic Gateway:** (2010 -2014): The vision for this platform was to experiment with destination-specific sound-based experiences for boarding or deplaning travelers. The reality of the jetways is that they are a challenging space to engage with soundscapes. Passengers are preoccupied with boarding and disembarking from the plane. Also, the length of the jetway is relatively short and is not typically an area where passengers dwell.



**Dreaming FIDs** (2010 - 2016) This was a popular installation directly across from the security checkpoint. Conceptually it was a strong artwork and relevant to issues of air travel -- surveillance. It was engaging to the diverse audience of the airport. Supporting live fish for 2 years was one thing, 6 years became was extremely ambitious and challenging.



**Chronos & Kairos** (2010 - 2017) Suspended in the ceiling of the Gate 19 hold room, this kinetic artwork was very popular with both the traveling public and airport staff. Conceptually the artwork was strong and its theme - time - is relevant to issues of air travel. In order to realize the work, the artists cultivated partnership with a local company who supplied an in-kind contribution of motors. In return their company name and logo was displayed on the artwork's identification signage. The mechanical nature of the installation required maintenance which was to be expected. Other unexpected issues with this piece involved the presence of birds in the terminal, disrupting the intricate suspended cabling of the piece and soiling its components, as well as instability resulting from power fluctuations resetting the programming of the motors.



**Wave Matter Tessellation** (2010 - ongoing) This work was located in the HVAC columns flanking the east side of the south end of the concourse. While Courtesey of Nature used the HVAC platform dynamically, this project addressed the platform statically. While requiring no maintenance, the design is also very subtle, and was not widely noticed by passengers.



**Wired Wilderness** (2012 - 2016) Located in the Display Cases, the artists approached the opportunity by wrapping the interior to the glass as a frame for dynamic screens. The density of the installation created was a heavy presence in the terminal which was a less-than-ideal use of the clear volumes of these showcases. The piece was conceptually strong, displaying real-time natural landscapes from the Silicon Valley region into the Airport. However, the technology deployed by the artists, IT infrastructure supporting the installation, both at the airport and in the wilderness, lacked robustness, resulting in many patches, tweaks and attempts to repair. Ultimately, the was unstable and screens often appeared dark.



**Shifting Time** (2010 - 2018) Focusing on San Jose past and present, the work was relevant to the pre-security location within the airport. The interactivity of the work in a location where people are passing through, made sense. That said, in actuality the work's interactivity was too subtle given its location. Ambient lighting makes projected work impractical in the daytime. Even at



night, the airport is very well lit, and lighting projects are diminished visually. The interactivity of the artwork was largely unnoticed by the travelling public. Replacement projector bulbs are expensive and to maximize their life the artwork was/is only visible at set times, further limiting the active hours of the piece.



**Connected: Silicon Valley + Bangalore** (2010 - ongoing) The installation designed was engaging for passengers in the security lines. The artist's approach, mounting photographs on lightboxes, was appropriate for the location. However, the reality is travelers do not dwell in this location, but rather pass by quickly on the way to security.



**Paradise/Dreaming** (2018 - 2019) Located in the Display Cases, the artists approached the opportunity by creating a structure internal to the Display Case. Within the structure are infinity mirrors. While the internal structure is not as all-encompassing as Wired Wilderness, the density of the installation doesn't allow transparency or viewing from all sides. The modest \$5,000 budget, limited results as the built-form lacks polish. The mirrors are warped and the carpentry is very rough.

