THE BRIDGE PROJECT | 2009

STUDENT DESIGN [BUILD] CHARRETTE

REPORT

FINDINGS FROM THE TWO DAY EVENT AND RECOMMENDATIONS FOR THE FUTURE PUBLIC SPACE

Kent State University's Cleveland Urban Design Collaborative

Villa Angela · Saint Joseph · Cleveland Ohio

The Bridge Project

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Cover photo: www.clevelandmemory.org (historic bridge postcard)
Gauri Torgalkar (Bridge Project event)

The Bridge Project organizers:

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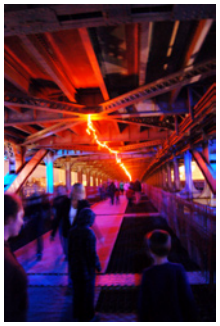
1. THE BRIDGE PROJECT

On September 25-26, 2009, the lower level of the Detroit-Superior Bridge was re-opened to the public. The two-day Bridge Project event included installations and performances by local artists organized by the Ingenuity Festival, in collaboration with All Go Signs and the Cleveland Urban Design Collaborative. The project took place with the cooperation with the Office of Cuyahoga County Engineer Robert Klaiber and with permission of the Cuyahoga County Commissioners. Participants included SPACES gallery, the Cleveland State University Theatre Department, Opera Circle, Opera per Tutti, and many others. Funders included the National Association of Office and Industrial Projects, the Mastriana Endowment, the Ohio Arts Council, the George Gund Foundation, the Cleveland Foundation, Cuyahoga Arts & Culture, and the Center for Community Solutions.

Detroit-Superior Bridge (Veterans Memorial Bridge)

Year Built: 1918
Length: 0.6 mile (3,112 ft.)
Height: 196 ft. (above the river)
Clearance: 96 ft. (above the river)
Year trolley service stopped: 1954
Current operator: Cuyahoga County Engineers Office



2. COMMUNITY DESIGN [BUILD] CHARRETTE

Charrette [shuh-ret]:
The word charrette may refer to any accelerated collaborative session in which a group of designers drafts a solution to a design problem. Such charrettes serve as a way of quickly generating a design solution while integrating the aptitudes and interests of a diverse group of people.

+

Design-Build:
is a construction project delivery system where the design and construction aspects are contracted with a single entity known as the design-builder or design-build contractor.

+

Rapid Prototyping:
The main value of rapid prototyping is the ability to quickly evaluate your concept, and refine it through a series of iterative prototypes. Instead of spending time and resources speculating solutions and analyzing the problem, time is spent solving it. Fail early in order to succeed sooner.

As part of the Bridge Project, students from Kent State University's College of Architecture and Environmental Design and Villa Angela High School participated in a community design [build] charrette. The charrette (or design workshop) focused on the role of infrastructure in a depopulating city.

Cleveland has far more roads, bridges, sewers, and power lines than are needed to meet the demands of our current population. Case in point, the Detroit Superior Bridge (a.k.a. the Veteran's Memorial Bridge or the High Level Bridge). This massive two-level bridge across the Cuyahoga River was the biggest structure of its kind 100 years ago. Originally, the top level was used for cars and pedestrians, while the bottom level was for streetcars. The streetcar line was closed in 1954 and the lower level has not been used since. What remains is a vast, cathedral-like space suspended over the river with views of the industrial valley, downtown, and the Flats.

The charrette was a design/build exercise. The students, working with the staff of the Cleveland Urban Design Collaborative, developed a range of temporary uses and installations for the bridge that enabled this space to function as a community resource. The design team spent two weeks developing schematic designs for the bridge. The most compelling ideas were then constructed rapidly, at full-scale on the lower level of the bridge.

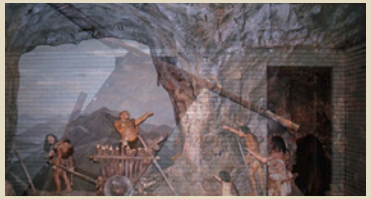
The bridge design ideas focused on:

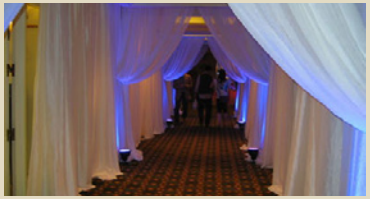
- Differentiating the space The bridge is over half a mile long from end-to-end, so breaking things up and creating intimate spaces within the larger structure was a key aspect of the work.
- Functional aspects of the bridge For example, illuminating dark places, eliminating trip hazards, and establishing places where people could sit and linger.
- Wayfinding designs to help people find the bridge and draw attention to the entry points.

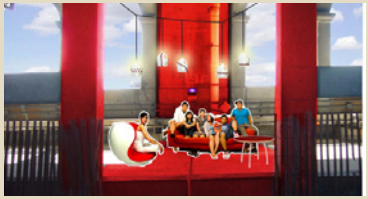
The charrette was a rapid prototyping exercise intended to test ideas for the future use of the bridge. Instead of making sketchy drawings for the public to critique, the design team developed a sketchy place for the public to experience. The event drew about 8,000 people to the bridge and the team observed how the public responded to the various design ideas that were put in place. After the event was over, all of design interventions disappeared, but this report summarizes what we learned about the ways people used and inhabited the bridge during the two days that the bridge was open to the public. We hope this information will guide future design decisions if and when the lower level of the bridge becomes a permanent public space.

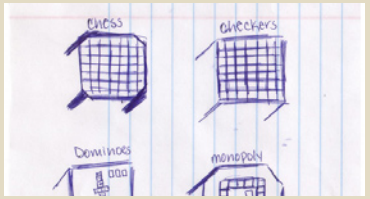
DESIGN CONCEPTS

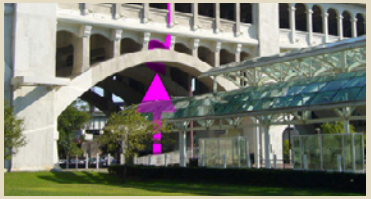


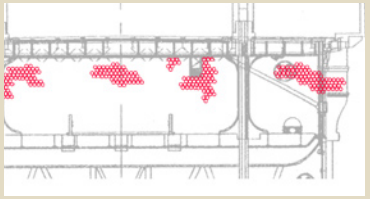



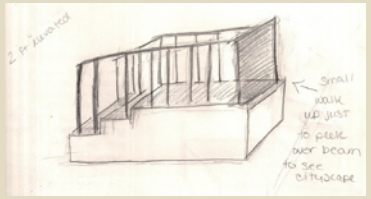


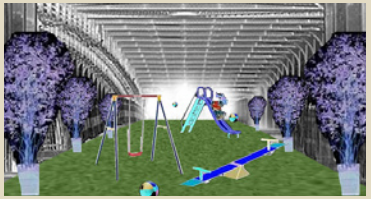





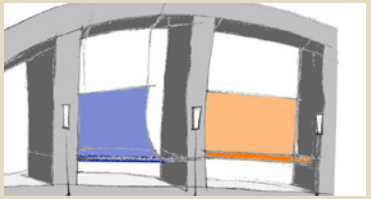


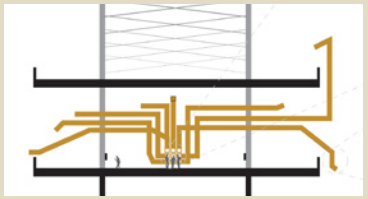






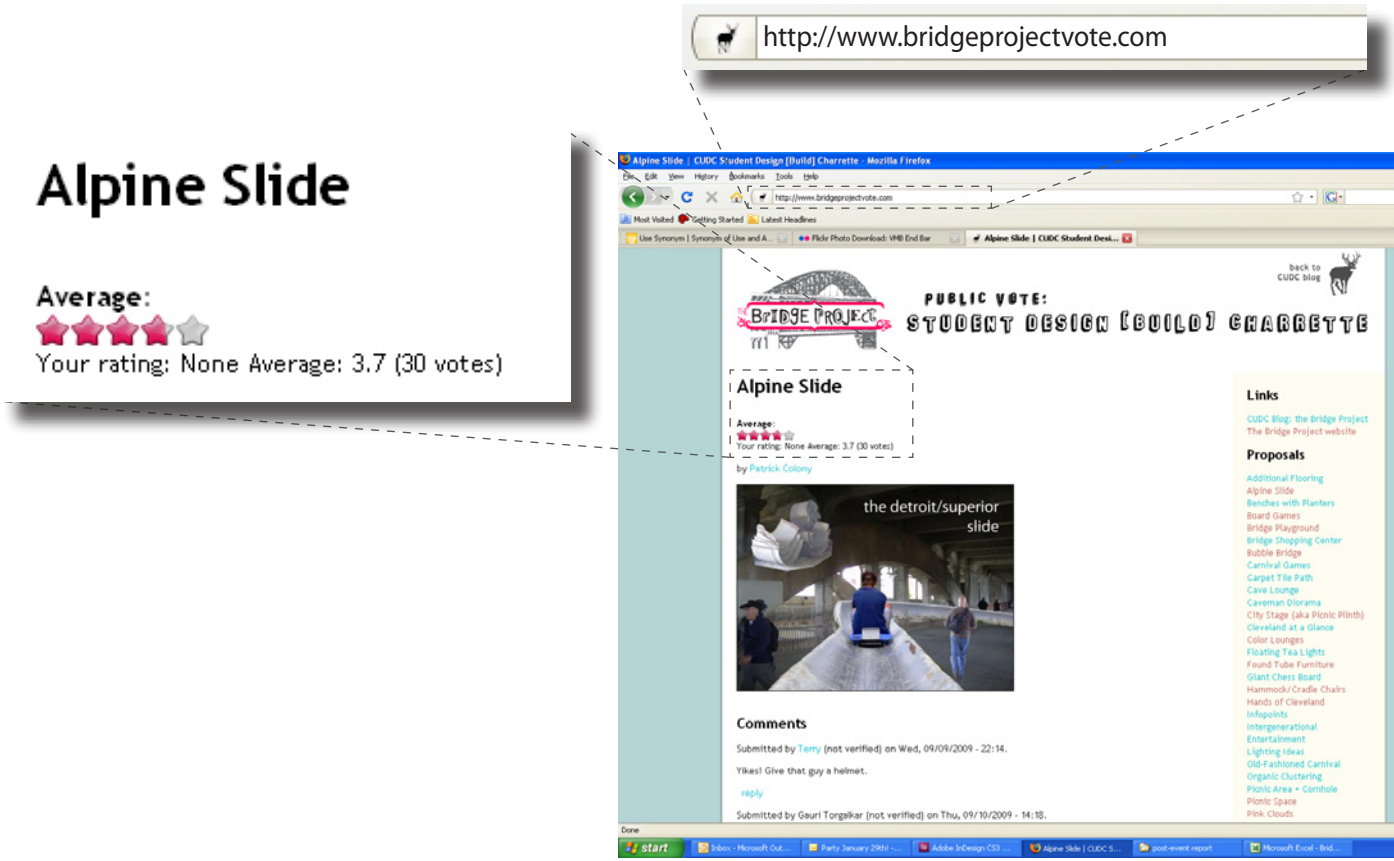


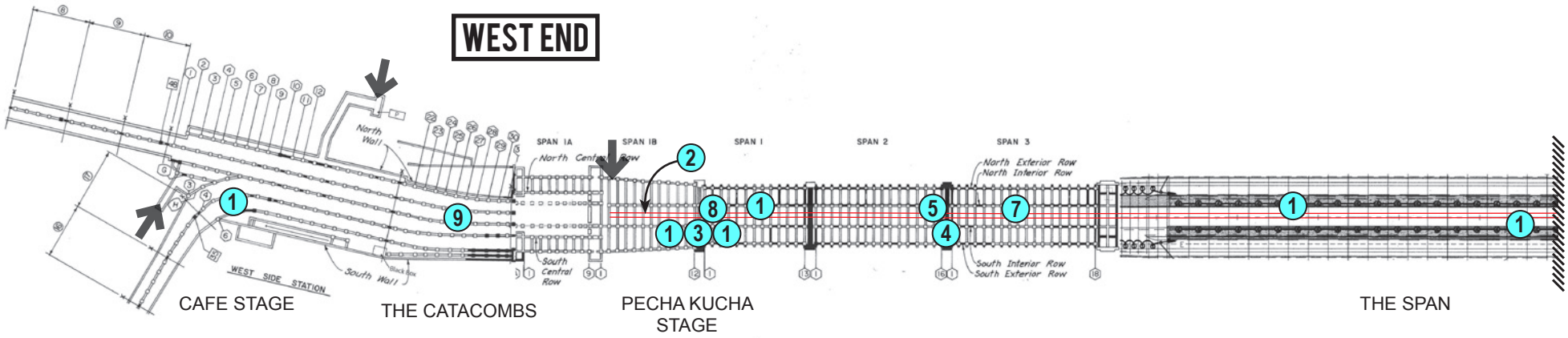





4. BUILT STUDENT PROJECTS

As shown on the previous page, the students developed a wide range of design concepts for the bridge. Some ideas were more feasable than others (e.g. the zipline) and considering the short two week timeframe for construction, only a few of the ideas could be selected. In order to aid decision-making, a website was created where the public, stakeholders and students from the two schools could vote for the ideas they liked best. The web voting results combined with in-class discussions determined the ten projects that were rapidly-prototyped.

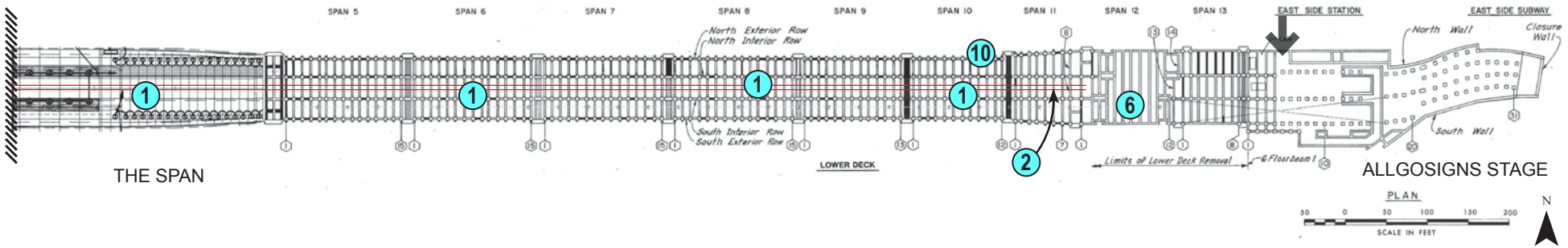



WEST END
North Wall
SPAN 1A
SPAN 1B
SPAN 1
SPAN 2
SPAN 3
North Central Row
North Exterior Row
North Interior Row
South Central Row
South Interior Row
South Exterior Row
South Wall
WEST SIDE STATION
CAFE STAGE
THE CATACOMBS
PECHA KUCHA STAGE
THE SPAN

Student Projects

1. BENCHES
2. BIKE LANE
3. GREEN LOUNGE
4. RED LOUNGE
5. PINK CLOUDS
6. HAMMOCKS
7. HANDS OF CLEVELAND
8. PICNIC PLINTH
9. SHADOW SCREEN
10. ARROW SIGN

EAST END

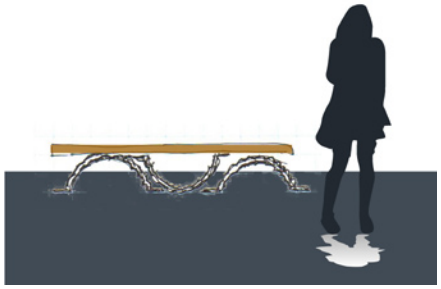


Map of Bridge Lower Level

BENCHES *Travis Logsdon*

Ten 12' long benches were constructed using corrugated metal sheathing found on-site. The benches were placed at key locations providing seating for the public and creating a unifying identity along the length of the bridge. The County Engineer's office chose to keep the benches for future use.

Seating
Views


BIKE PATH *Various Students*

Using a chalk striping machine, a temporary 8' wide bike lane was drawn down the center of the bridge. A seven person Conference Bike was a very popular attraction, providing event-goers with a fun means of transportation across the bridge, but the lane became difficult to use when the event crowd grew large.

Transportation



GREEN LOUNGE *Lilly Russell*

The Green and Red Lounges were conceived as two of several Color Lounges to be located at equal intervals, intended to punctuate the bridge's long monotonous rhythm. The Green Lounge provided an intimate space for socializing and introduced a sense of nature on the bridge with large green plants.

Seating
Plant Life




RED LOUNGE *Lilly Russell, Devon Carter, James Maher*

The Red Lounge had a decidedly younger user group than the Green Lounge. Parents could often be found relaxing on the benches as their young children played with the stuffed animals, oversized checker board and pink foam noodles.

Seating
Kid Friendly
Activity




HAMMOCKS *Allison Mayle*

Seating

Hammocks were tied and hung from the distinctive arches found near the east end of the bridge. At times, both hammocks were used creating a social interaction hub and at other times a single hammock provided a relaxing, solitary space within the large concrete expanse of the bridge.



HANDS OF CLEVELAND *Jesse Sweigart*

Kid Friendly Activity

This activity station provided visitors walking down the bridge an opportunity to leave their mark in the form of a concrete cast hand print. The station was a big hit with parents and children, frequently waiting in long lines for their turn. Once dried, the prints were given to local community gardens.




PICNIC PLINTH *Latrice Harrison, David Jurca, Anthony Rini, Jack Seidel, Ryan Gallagher*

The Picnic Plinth is an 8' x 24' wheeled stage, designed to provide a variety of seating options and introduce a soft grassy area for guests to relax on. Standing on the 2' high plinth afforded views over the previously eye-level concrete beam and transformed it into a bar-height counter, complete with bar stools.

Seating
Plant Life
Views



SHADOW SCREEN *Marcus Schaeffer*

The Shadow Screen employed the simple childhood pleasure of making shadows to create a fun programming element in a highly trafficked but dark section of the bridge. There were no signs instructing passersby what the screen was intended for, but people naturally began making shadow figures on their own.

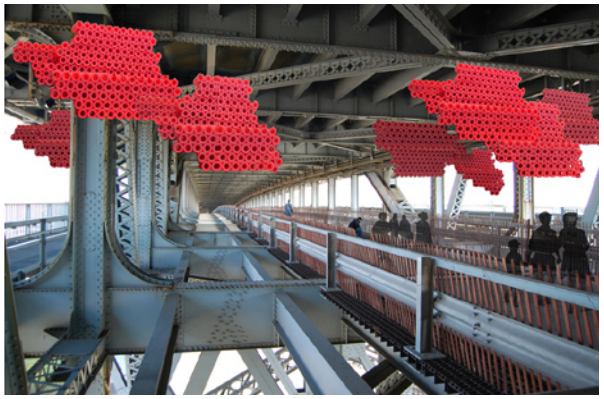
Activity



PINK CLOUDS *Gauri Torgalkar*

Pink foam pool noodles (originally a public art piece commissioned for the Cleveland Museum of Art) were hung from the ceiling creating a fanciful visual art element. The noodles extended the presence of the Red Lounge and created a spatial divider between the western and central sections of the bridge.

Public Art
Seating

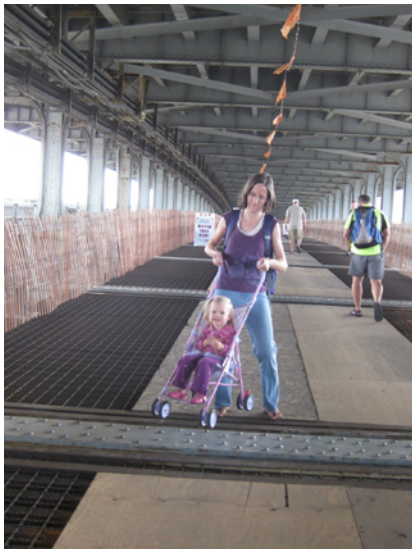


ARROW SIGN *Lilly Russell*

A 30' tall pink arrow with the words, "WE'RE UP HERE" was hung from the North side of the bridge. Located next to the Settler's Landing rapid station, the large iconic sign was intended to draw attention to the lower-level of the bridge from transit riders, pedestrians and boaters passing by.

Wayfinding

5. OBSERVATIONS FROM PUBLIC USE



Before the public opening on Friday, all the students were given a form on which to record their obervations regarding the publc's use of the space and installations. The students' observations fell into three main categories:

1. Access
2. Function
3. Impact

Access

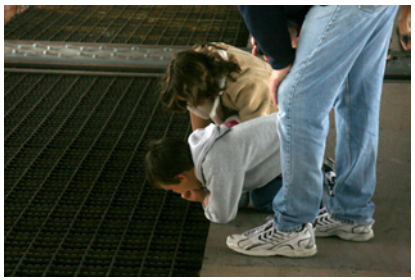
There are four entry points to the lower level of the bridge:

- Western entrance (through Massimo di Milano restaurant)
- Subway entrance (off the Superior Viaduct)
- Central entrance (through the County Engineer's parking lot)
- Eastern entrance off Superior Avenue on the east side of the river.

The central and eastern entrances are accessible to people in wheelchairs. The western and subway entrances are only accessible via stairways. People parked in lots throughout the Flats area and in parking areas off of West 25th Street. It was difficult to gauge which parking lots were most popular, but in general, parking did not appear to be a problem during the event.

The central span attracted people from both ends of the bridge. The defining experience of the bridge was one of movement, as people moved constantly from one end of the bridge to the other. The distance across the bridge did not seem to be a problem—people were very willing to walk back and forth across the entire 0.6 mile span. We striped a temporary bike lane across the bridge, an idea the bicycling community supported very strongly. Due to the large number of pedestrians during the event, there weren't a lot of bicyclists using the bike lane. However, a seven-seat conference bike provided rides during the event and this proved to be a very popular way for people to travel back and forth.

Some people appeared apprehensive about walking over areas of the deck where you could see the water below. The open metal deck at the central span is currently topped with sheets of plywood along the center to create a walking surface, flanked by open metal grates on either side of this walking surface. Although some people appeared nervous about walking over the open metal grates, many seemed to enjoy this



experience as well—there were numerous instances of children lying on the bridge deck to peer through the grates. The views of the Cuyahoga Valley through the grates are especially striking, so preserving some degree of transparency in the bridge deck would be valuable.

Gaps between the sheets of plywood on top of the metal deck create an uneven walking surface that makes access difficult for people in wheelchairs or pushing strollers. Covering or filling the gaps, or adding a second, continuous layer of plywood to the deck surface would reduce trip hazards and make the central span easier to cross.

People were drawn to the outer catwalk along the northern side of the central span. This area was off-limits to event participants because the deck surface is an open metal grate, considered to be unsafe for public access. However, the views to the north from the catwalk are among the most interesting sites along the bridge. And the semi-transparent deck also allowed for exciting (if somewhat frightening) views of the river below. Finding a way to allow at least partial public access to the catwalk would enhance the bridge experience.

Function

The bridge space can accommodate many simultaneous activities. The western edge of the bridge (the Café stage) was the warmest part of the space; at least this was the case in September. People tended to linger around the tables in this part of the bridge because the temperature was comfortable and the acoustics were conducive to conversation. The eastern end of the bridge was well suited to music performances. The acoustics seemed to be best just outside of the eastern entrance to the bridge. Acoustics were not as good in the performance area immediately east of the central entrance, the entrance just off the County Engineer's parking lot. The noise from passing crowds and the openness of the southern edge of this area allowed sound to dissipate and made it difficult to hear.

The performance areas at the east and west end of the bridge functioned somewhat independently during the event and could become self-contained venues on a permanent (or seasonal) basis. Developing a means to partition these areas off from the rest of the bridge would enable them to function independently. The partitions should be removeable so that the entire bridge could still be used for larger events.

Power lines on the southern side of the bridge need to be buffered from the public. Currently, a four-foot high snow fence provides a barrier that keeps people away from dangerous areas. During the event, the snow fence was notched back in several places to create seating areas, a bar, and small performance areas. In these bump-out areas, the fencing still served as a barrier between people and the power lines. A more permanent barrier edge could be created, preferably with moveable sections that would allow for flexibility in creating bump-out areas and subdividing the space to accommodate a wide range of programming.

Some areas heading west from the central entrance were very dark. Additional illumination may be needed in this area. Temporary overhead lighting at the central span was iconic—it was visible and dramatic from all approaches to the bridge. This lighting also helped to mitigate the trip hazards posed by the uneven deck surface.

Impact

Although the eastern entrance to the bridge is near the Settler's Landing stop on the GCRTA's Waterfront Line, it was difficult to gauge whether the bridge project increased transit ridership. Long-term use of the bridge as a public space, combined with a concerted effort to promote the Waterfront Line as a convenient way to reach the bridge, is likely to result in increased ridership.

There may be opportunities for spin off development with the bridge as the anchor attraction. As evidence of the bridge's potential to become a development anchor, nearby restaurants experienced a dramatic increase in business during the bridge event. Ponte Vecchio, a restaurant on the Superior Viaduct, ran out of food and had to shut down on the first night of the Bridge Project. Opening the bridge to the public on a permanent or seasonal basis would attract people from throughout the region, benefiting local businesses, attracting new development, and enhancing property values in the surrounding neighborhood.

5. NEXT STEPS

The Bridge Project clearly demonstrated the potential of the lower level of the Detroit Superior Bridge to become one of Cleveland's most dramatic and beloved public spaces. The Greater Cleveland community showed its support for this idea by turning in large numbers, donating at the entry gates, and sharing positive feedback throughout the two-day event.

To take this idea to the next level, a schematic design study is needed to determine how to retrofit the space for permanent public use. The study would determine where the power should go, where to bring in water lines, and locations for restrooms. It would also address accessibility, trip hazards, and security, and include some mechanism for subdividing the space so it could accommodate smaller events as well as large ones. It is important not to over-design the space, since the rawness of the bridge is a big part of its appeal. But some basic infrastructure enhancements will make it easier to accommodate public access and a range of events and programming. The schematic design study should also include a cost estimate of what it would take to make these basic improvements.