

An Unexpected JOURNEY

BY VICTORIA
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A dozen volunteers travel to an isolated community in Central America to construct a suspension bridge that will help kids cross a flooded river.

THIRTY MINUTES AWAY from the closest town, and still 30 minutes away from their destination, the winding, asphalt-paved road carrying 12 volunteers dissolves into a rough, dirt and gravel path.

The loss of cellular phone service is forgotten as succulent greenery surrounds the SUVs carrying the travelers, who chat apprehensively. Outside, it is 95 °F with nearly 100% humidity—an average temperature for mid-April in this part of Panama.

As they continue travelling down the dusty road, small, single-story homes begin to appear every few hundred yards until finally, the travelers reach a valley.

Although there is a language barrier—only one of the group’s members can speak Spanish—the curiosity and excitement are mutual as the amiable villagers greet the group and assist in assembling their tents outside the pavilion. Covered but without walls, the pavilion will serve as their base for the next two weeks.

The serene farming community of Lura, in Churuquita Grande, Coclé, Panama is where they will build a 51-m (about 168 ft) suspension bridge across the Lura River to replace the hazardous existing bridge, made even more perilous in the rainy season, which is starting soon.

The travelers comprise a volunteer team of industry professionals from the U.S. representing Bridges to Prosperity (B2P), a Denver-based, nonprofit organization that builds footbridges in isolated communities around the world.

Over the past 18 months, Jeff Carlson, National Steel Bridge Alliance (NSBA) regional director, commissioned a team of 11 other volunteers including Holly Bartelt, (B2P), Rafael Davis, (Arizona DOT), Jonathan Hirschfeld (Hirschfeld Industries), Mike Keever (California DOT), Jessica Martinez (Colorado DOT), Curt McDonald (HDR, Inc.), Theodore “Tad” Molas (WSP | Parsons Brinckerhoff), Adrian Moon (WSP | Parsons Brinckerhoff), Nate Neilson (Utah Pacific Bridge and Steel), John Rohner (CH2M HILL) and Josh Sletten (Utah DOT), a group that is unique to B2P’s Industry Partnership Programs because of the diversity in the type of organizations involved.

“What is great about this team is that we all came from different backgrounds,” said Sletten. “We’re all at different levels in our own organizations. When we came to this team, we were all equals.”

Unanticipated Progress

In the dense darkness, a rooster begins crowing long before 6 a.m., prompting team members to gradually emerge to divide responsibilities and prep for the day’s work—roughly eight hours of physical labor under the tropical sun.

Before this trip, no one on the team had been involved in the manual exertion of bridge building. The B2P team in Panama—consisting of program manager Devin Connell, two masons (David Hernandez and Asuncion “Chon” Sanchez Castro) and



Jonathan Hirschfeld

- ▲ According to the United Nations’ Sustainable Development Goals, inadequate infrastructures thwart inhabitants from leaving their community to access agricultural, educational, economic and health-care resources, perpetuating poverty.
- The volunteers slept in tents for their two-week stay.
- ◀ Basic infrastructure—roads, information and communication technologies, sanitation, electrical power and water—remains scarce in many developing countries.



Holly Bartelt/Brenda Troyo

- ▲ ▼ The bridge was made of local materials consisting of custom bent rebar suspenders with steel cross-beams, timber decking and safety fencing.

- ▲ The team connecting angles to the main tower structure.
- ▼ The team pulling the main cable through the anchors.

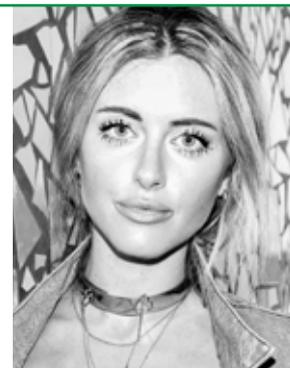


Brenda Troyo

Bridge Corps Fellow (B2P’s volunteer division) Kelsey Welch—have already built the anchors, ramps and the pedestals that the tower rests on. Now the team must enact their strategy to complete construction in 12 days.

Unlike the meticulous calculations and planning and incorporation of historical data for bridges in the U.S., the masons determined bridge dimensions by asking villagers to recall the highest level they saw the river at during previous rainy seasons, then add 2 m (about 6.5 ft) of freeboard onto the estimate to elevate the highest point of the bridge, the mid-span, to be 6 m (about 20 ft).

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Jonathan Hirschfeld

▲ Mike Keever (left) and Josh Sletten (right).
▼ Holly Bartelt (left) and Jeff Carlson (right).



Jonathan Hirschfeld



Devin Connell & Kelsey Welch, B2P



Jonathan Hirschfeld

▲ ▼ When the bridge opened, the entire community walked across.



Jonathan Hirschfeld

◀ B2P staff and community members assemble the reinforcing cage for the anchor.

Community residents journey more than an hour to the jobsite; walking and horseback riding are their only form of transportation. Without a safe bridge to cross, the Lura River segregates neighbors on each side. But now with the shallow water levels, they join the team not only to build the bridge but also to learn how to maintain and repair it.

Although the language barrier sometimes slowed progress, the tireless determination of the bridge builders, as well as the village women who cooked all of the meals and even laundered some of the volunteers' clothing, invigorated and united the team and community.

At noon, they briefly exchanged work for lunch and shade. The soup du jour, replete with chicken, potatoes, plantains, rice, root and yucca, introduced exotic flavors to some of the team members. Five hours later, dinner was a combination of the same ingredients, presented in a different form. After the final meal, nonverbal cues and common interests cheerfully connected the villagers with the volunteers as they played baseball, Frisbee and kickball until everyone contentedly retired for the night.

"Being in the Lura community allowed me to focus on just living in the moment and I wasn't worried about the normal things that distract on a daily basis, you're just enjoying the moment," Hirschfeld said.

Aside from occasional trips to Penonomé, the province's capital, for Internet access and more supplies, the team repeated their daily pattern and completed the bridge four days early and under budget.

Overwhelming First Steps

The team decided special supplies were needed to inaugurate the bridge. "No fumar" read the sign when they pulled up to a difficult-to-locate home an hour away from Lura—"No smoking" because the house could easily be consumed by flames: It was full of fireworks. The team purchased 100 fireworks to help with the celebration.

A few short, but sentimental speeches opened the inauguration. The community donated one of their cows for the festive lunch, performed traditional dances and played a three-inning baseball game against the project team, using the home plate backstop the volunteers just constructed on the village's makeshift field.

"Just to see how proud the community was, and to hear that they really want to take ownership of the bridge, was really gratifying," Carlson said.

When the bridge opened, the entire village joyfully walked across it. An older man grabbed Bartelt's arm and with a look of overwhelming gratitude, repeatedly thanked her and conveyed to the translator how he had been waiting for the bridge for years and was elated the team came to build it.

"A lot of my life choices were solidified in this moment," Bartelt said. Nine months before arriving in Panama on her first suspension bridge construction project, Bartelt moved from Indianapolis to Denver to work for B2P, moving out of her home state for the first time in her life. After traveling to Kenya to consult on a bridge project, she realized her purpose: to use her engineering skills to support isolated communities.



Jonathan Hirschfeld

- ▲ Bartelt and the villager who thanked her on inauguration day.
- The volunteers purchased 100 fireworks to light at the inauguration.

Isolated Community, Connected Commonality

Several of the team members described the trip as “exceeding expectations” and an “overwhelming success.” Not only had the project been completed early and within budget, but the team also had no health, safety or weather issues. The volunteers’ commitment to create safe access to vital services such as health care, jobs, markets and schools for the community of more than 500 also helped to develop fast friendships amongst the group.

Upon meeting the group on the first day, the Peace Corps volunteer translator, Brenda Troyo, was in awe of their camaraderie and was convinced that they were all longtime friends. “We were able to work together, solve problems, communicate well and then execute on that strategy and build a successful project,” said Hirschfeld. “I thought it was pretty impressive. The people within the community and the people that we had on the project are who made it memorable and successful.”

And the greatest measure of success is the knowledge that almost 200 children who once walked more than an hour-and-a-half to school each day, without knowing for sure that they could complete their journey over the sometimes flooded old bridge, now had a sure path. ■



Jonathan Hirschfeld



Brenda Troyo

▲ The team on the completed bridge.

Through local engagement, from regional governments to members of each partner community, B2P is committed to a sustainable model that puts the focus on people and the opportunities that make it possible for them to thrive. In 2016, B2P will build 40 new footbridges, increasing the overall total to more than 200 bridges and raising their cumulative impact to one million people worldwide. To learn more about B2P, how you can become a volunteer or industry partner or to support their mission, visit www.bridgestoprosperty.org/what-you-can-do.