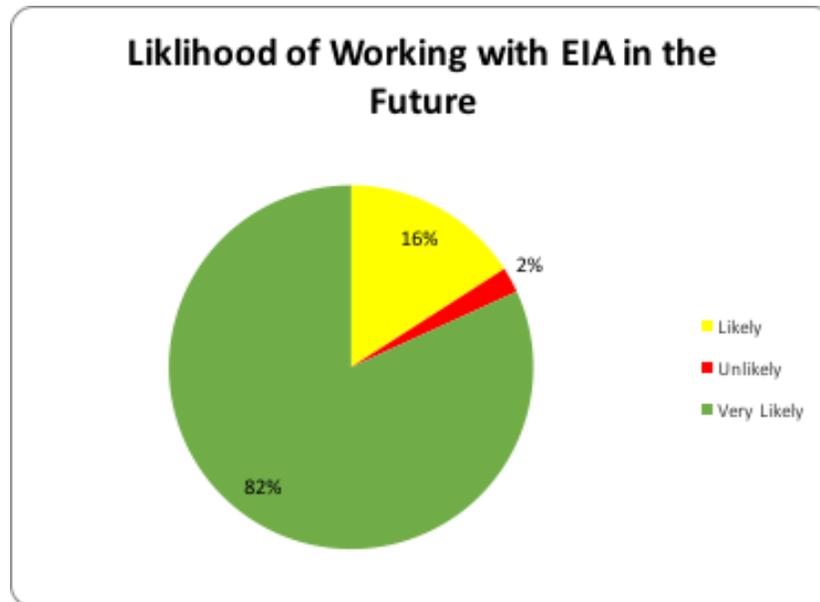




2016 TEAM SURVEY RESULTS

In 2016, Engineers in Action (EIA) distributed a link to an online survey to all team members who traveled and worked in Bolivia. The survey included quantitative and qualitative questions about the type of projects they worked on, the performance of their EIA Project Manager, EIA's other support services, community support, and the team's performance. The high rate of response and especially the many comments and suggestions will help us improve our support and lead to even more successful projects.

Forty-four team members, including students, professional mentors, faculty advisors, and professional members responded to the survey. Overall 98% of respondents said they were likely or very likely to work with EIA in the future.



Everything was very professional, and comfortable.

The billing process has been a little less than organized and we have still not received the final invoice for our project. Other than that, however, all of the services EIA provided were spectacular.

Living arrangements were not as described prior to the trip. Still waiting for updated invoice. It's been almost 2 months since the trip.

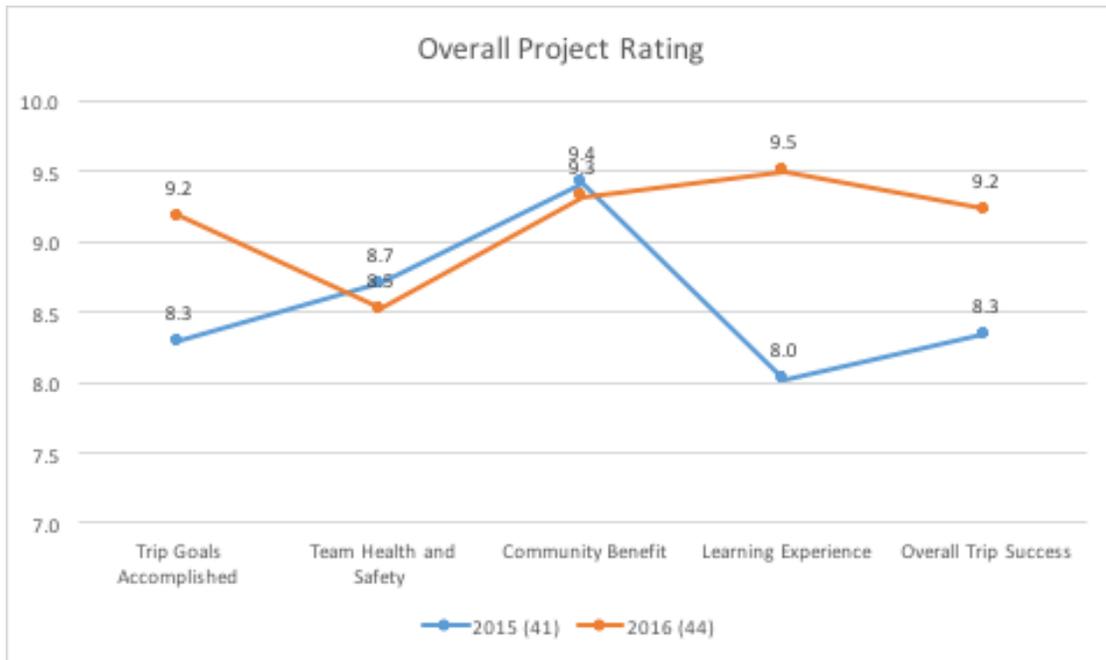
More complete planning early in the process. Too many things left to the last minute. Several EIA people requested the same information so I believe better coordination or sharing information in La Paz is needed. Failure to follow up on some questions.

RESPONDENT BREAKDOWN

Team	Community	Project Type	Main Project	# of Responses
University of Kansas, EWB	Azacilo	Implementation	Water, Sanitation	2
Cornell University, EWB	Calcha	Implementation	Water, Structures	10
University of Idaho, HEC	Carani	Implementation	Water	3
University of Colorado at Boulder, EWB	Churo Alto	Implementation	Structures	5
University of Kansas, EWB	Colani	Implementation	Water, Agriculture	3
North Texas Professionals, EWB	Culli Culli Alto	Assessment	Water	1
Gateway Professional Chaptper, EWB	Komocala	Implementation	Water	6
Missouri University of Science & Technology, EWB	Los Eucaliptos	Implementation	Water, Structures	7
Missouri University of Science & Technology, EWB	Tacachia/Puerto Pando	Assessment	Water	4
University of New Mexico, EWB	Taccaral Del Matto	Implementation	Water	1
EIA Volunteer Team	Timisu	Assessment	Water	3

OVERALL

Significant gains were made on the Overall Project Rating, with only one component – health and safety – scoring below 9. This indicates that the review of 2015 data and the planning that occurred to address the ratings improved operations for the programs in 2016. Aside from worry about water availability and safety, the greatest percentage of comments (28%) were related to issues around communication.



This community and project manager were AMAZING. I've heard stories from other teams when things didn't work out at all like they had planned (like University of Florida) and I'm incredibly lucky and thankful to be part of this team, to work with this organization/mentor, and to work with this community. It was the experience of a lifetime.

EIA, through Ricardo, did an excellent working with the community. Thanks. I'd be honored to work on another project. Johann Zimmermann, PE

Great start to a continued relationship between CU B2P and EIA. We are excited to be working on another footbridge in 2017.

Thank you for bringing the potty seat. That had to be the best surprise ever.

Nothing. It was an awesome trip and I had so much fun.

I think that the trip could have been improved with better communication with the community about the design. (if we had given them the drawings and made sure that they reviewed them then we might have been able to avoid some misunderstandings)

Meet and discuss communication efforts with the community more thoroughly. During home assessments, there was a miscommunication/misinterpretation of the questions asked. Planned a schedule of the tasks to be performed beforehand.

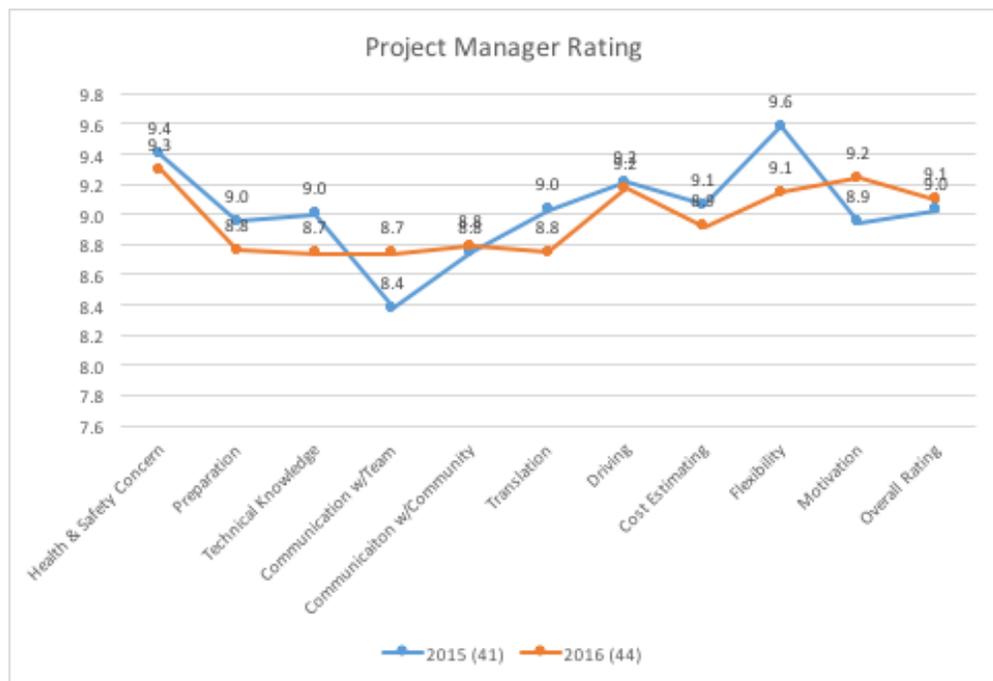
Only a few concerns about adherence to use of PPE, safety talks would have made more of an impression on Students. Real world project usually have a 5 minute safety talk at the beginning of each shift.

The trip was a huge success with the completion of the bridge project. The team however suffered from a lot of stomach illnesses throughout the trip and sanitation was an issue. In the second week the team decided to build two latrines to improve quality of life and that seemed to help a good amount.

This is mostly on us for not asking specific enough questions, but we did find that the pipes the community had bought to build a new agricultural water supply pipeline were not the pipes that we had been told. I think that during communication we were told that the pipes were probably one type, when really they were another. We were able to work around this, but it slowed us down a bit. I think that maybe in the future we could have a living document (i.e. Google doc) where we can write our questions for the community or for EIA that can be continually edited leading up to a trip. This way we could have a centralized, easily accessible file to combat the confusion that arises when there are 10 or so email chains with information throughout!

PROJECT MANAGERS

While Project Manager Ratings remained at a 9, there were several aspects whose scores dropped in 2016 compared to 2015, such as preparation, technical knowledge, translation, and cost estimating. Only two project managers scored below 9 - Carlos Ernesto and Luz Hurtado. Carlos's weakest areas were in preparation and flexibility. Luz's score was the lowest at 7.86, with primary concerns regarding her preparation and her lack of command with the team and the community. This could be a symptom of cultural difference, and she could perhaps benefit from some extra support in these areas. Further, a pre-trip orientation would probably prepare students for the imperfect nature of operations in a developing country.



Nothing, Ricardo succeeded our expectations beyond comparison.

Ricardo is amazing to work with and I would not change anything! I would definitely recommend him to continue working with student chapters.

Carlos is an amazing individual committed to improving the quality of life for communities. I am very happy to have met Carlos and to learn from him and alongside him.

Nothing on this trip, EIA exceeded my expectations for what we had set out to do.

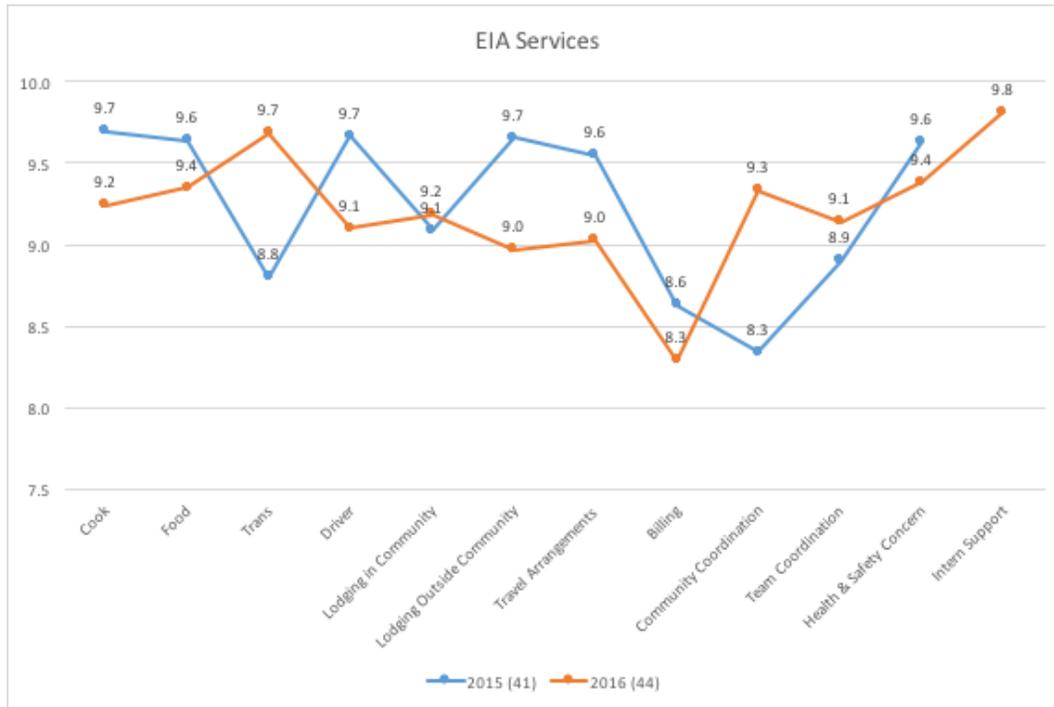
Juan's performance was excellent. We were nervous going into the trip since our PM changed a few times right before we reached implementation, but Juan made the transition very smooth.

I feel that Luz could improve in two ways: 1) Increase her communication with the team, acting more as a coordinator than a translator, and 2) Express herself as an authority; Luz is the local engineer and should be more forceful in speaking to the team and to the community. I doubt that Luz would cause offense, and sometimes I felt we needed her to be stronger in her opinion/express more confidence. That confidence will increase with more projects and experience.

Overall, Carlos Ernesto did a very good job of working with us and adjusting to changes if needed.

EIA SERVICES

EIA Services average rating remained at a high 9.2. There was a significant improvement in translation, community coordination and team coordination. Interns clearly felt supported throughout the experience, rating intern support at 9.8. But there were drops in scores for driver, lodging outside the community, and travel arrangements. Billing was again one of the lowest-scoring components of EIA Services, scoring 8.6 in 2015 and 8.3 in 2016.



Everything was very professional, and comfortable.

Other than letting us keep Ricardo for the whole time, I don't think there's anything that could be improved.

The billing process has been a little less than organized and we have still not received the final invoice for our project. Other than that, however, all of the services EIA provided were spectacular.

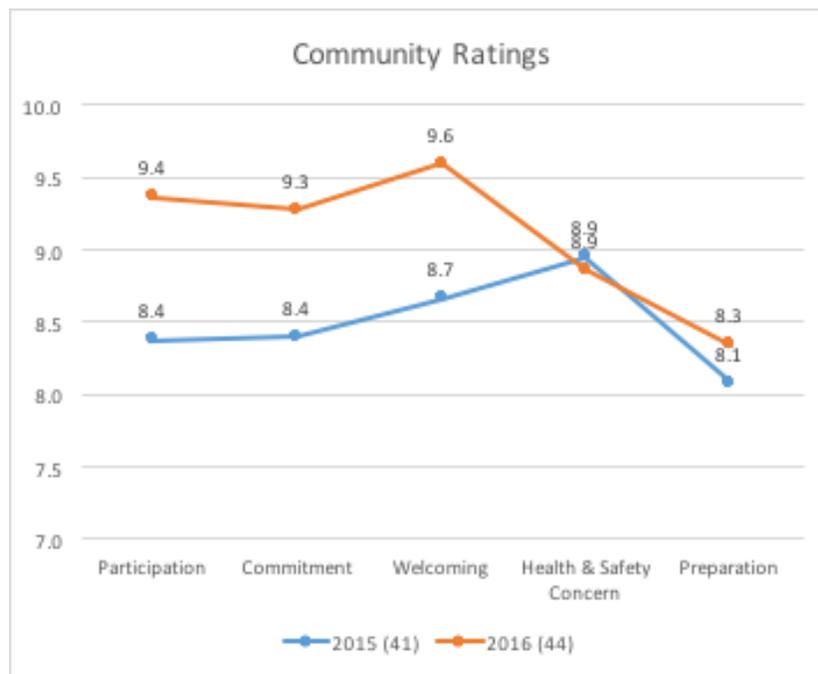
First, I should say that the "cook" and "food" questions need an 11 option, food and cooks on-site are always awesome! FEIA's support is invaluable to our team, and the communication and pre-trip preparations made by FEIA staff directly contributed to the success of our project. My one concern with FEIA's handling of our project is the continual turn-over of project managers. We have worked with 3 different managers in as many years, and I worry that the lack of long-term community-project manager relationship could be a destabilizing force in the project.

Living arrangements were not as described prior to the trip. Still waiting for updated invoice. It's been almost 2 months since the trip.

More complete planning early in the process. Too many things left to the last minute. Several EIA people requested the same information so I believe better coordination or sharing information in La Paz is needed. Failure to follow up on some questions.

COMMUNITY

Participation, commitment, and welcoming scored very high in the Community Ratings, showing significant gains since 2015. Health and Safety and Preparation, however, did not improve much. These may be effectively addressed by a pre-orientation that students and volunteers are required to undergo before leaving the U.S. Students' and volunteers' expectations may be unrealistic or based on American ways of doing things. Clearly, however, the newly implemented ABCD model has helped substantially raise the Community Ratings. The EIA Volunteer Team had the lowest ratings, indicating that they may need more support and preparation about the expectations and transition into a developing country.



Nothing, the community and our team worked very well together, and had a great bond.

The community did not do anything to prepare for the arrival though we had expected them to dig the foundations and collect material, but as soon as we arrived they got right down to work and were an amazing partner. The level of commitment to the project was inspirational and they welcomed us with open arms by playing soccer with us, teaching us traditional dances, and taking us into their homes frequently for bread and coffee.

Our community cared for us as if we were there own. The community participated in the project and worked hard to complete it. I really loved our community!

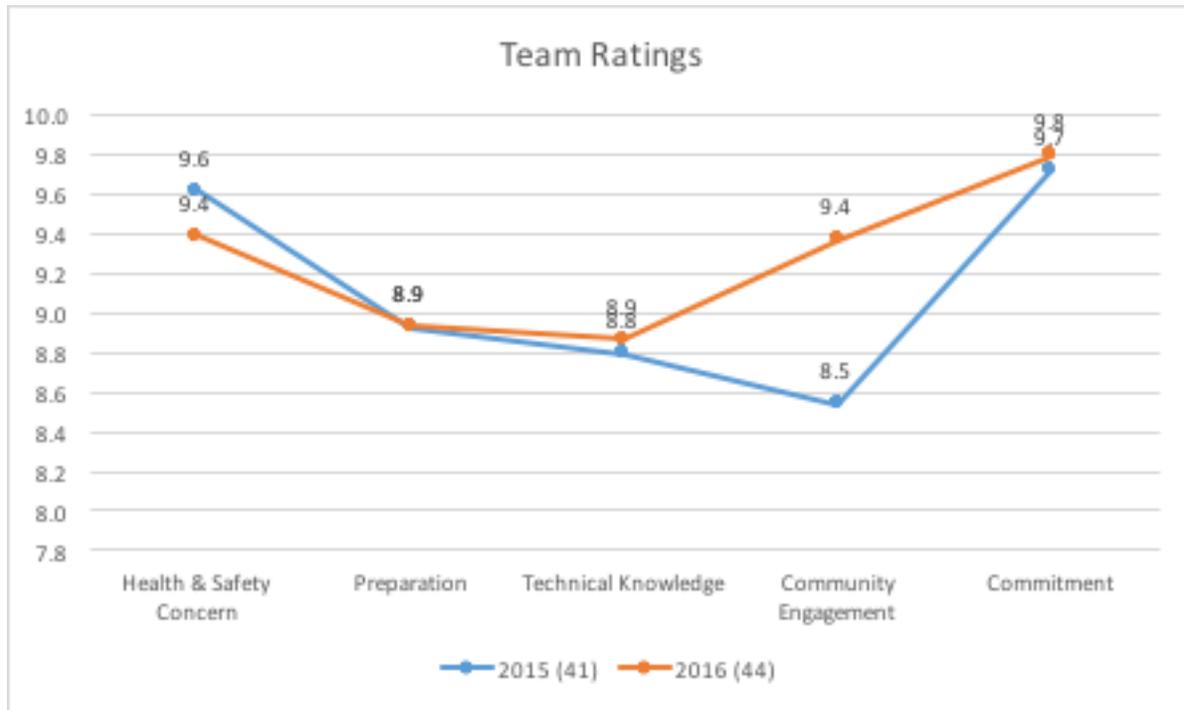
The community was great. There was some disagreement between the OU team and the community, but it did not impact our interactions with the community.

The community was extremely helpful and supportive and wonderful to us!

The community went above and beyond to make us welcome. This was my second trip, and they have become more family than a community.

TEAM

Team Ratings saw an important improvement in Community Engagement - from 8.5 in 2015 to 9.4 in 2016. Preparation and Technical Knowledge were the lowest-scoring components. These will be best addressed by an orientation that give students and volunteers an idea of the kind of challenges they will face and the kind of projects they'll be undergoing. Students also need to know what materials and tools are available ahead of time so they can pack appropriately and feel prepared.



We could have had material lists submitted earlier to give Ricardo more time to find locally sourced materials and for us to give him information he needs to buy what we need.

We could have prepared more in regards to coming up with a more extensive action plan for different health and safety issues that could commonly occur and communicating that plan to all team members.

I think it would be useful to have members of the community come talk to the group on various subjects concerning the history, culture an issue in the communities. More cultural interchange

Our division of labor could be improved. There were several times where only one or two of us were working, simply because it was a task that only one or two people could do at a time. We tried to avoid this 'bottlenecking', but we need to be more aware of when it will happen and how to avoid/diminish it.

If we had started with more information that we later found was available we could have been more efficient and possibly come to even better conclusions. A little more detailed preparation in conjunction with EIA may help. Especially an orientation meeting before heading to the field, but starting early in the planning process to get information to prospective team members.