

# 2018

## ANNUAL REPORT



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# 2018

## Annual Report

<http://www.ewbny.org/>

## MESSAGE FROM THE PRESIDENT



Dear EWB-NY members and friends,

I am honored to present this message as the President of the Engineers Without Borders New York (EWB-NY) Professional Chapter.

This past year, 2018, was an important year for the growth of the chapter and the expansion of our impact; both abroad and within New York City. Each of our international community programs travelled to their respective communities and two of them, our Rubaya, Rwanda and Misuuni, Kenya programs, implemented their projects. The third, our Chimaltenango, Guatemala program, met their community for the first time and performed an assessment of the proposed vehicular bridge project they plan to construct in late 2019.

Another exciting step the chapter took in 2018, was the adoption of our first New York City based Community Engineering Corps (CEC) program, located at the Jackson Forest Community Garden of the Bronx. In partnership with American Society of Civil Engineers (ASCE) and American Water Works Association (AWWA), our CEC team will be providing an accessible route through the community garden, allowing elderly and disabled visitors an equal experience to the benefits of this space.

To allow our project teams to focus more on their designs and connection to their respective communities, our chapter committees strategize in areas of fundraising, marketing and appropriate design, creating continuity and engaging more members across the chapter. These committees provide a focused approach for each team, and much of 2018 was spent determining guidelines for the teams to refer to for years to come. Our committees were able to lay a strong groundwork to support each program for the next few years. We are constantly working to streamline our approach to each committee to simplify our project process and improve our efficiency.

With the enthusiasm and dedication of our members, our chapter was able to impact hundreds of lives in 2018. With that, we also saw a significant increase in interest and involvement across the chapter as a whole. We are driven by the commitment of our members looking to make a difference. Each volunteer is an integral part of the evolution of this chapter and the work we do.

Ultimately, none of this would be possible without our amazing members and the support of our donors. We are grateful for every single person who supports us in our work. We anticipate 2019 to be exciting and challenging, but with your support, it should be another year filled with life changing improvements in our communities.

Kindly,

A handwritten signature in black ink, appearing to be 'Patrick Brennan'. The signature is stylized with a large, sweeping initial 'P' and a long horizontal line extending to the right.

Patrick Brennan  
President



## EWB-NY LEADERSHIP



### **President**

Patrick Brennan

[president@ewbny.org](mailto:president@ewbny.org)

Patrick has been a civil engineer with Maser Consulting, P.A. in New Jersey, since 2013, and specializes in construction oversight & management, infrastructure design and civil/site design. He was originally involved with the Rubaya, Rwanda program and travelled as part of the implementation team in 2018. New Jersey born and raised, Patrick earned a B.S. in Civil Engineering from the New Jersey Institute of Technology in Newark, New Jersey. After 15 months of holding the role of Chapter Vice President, Patrick is excited to step into the Chapter President position.



### **Vice-President**

May ElKhattab

[vp@ewbny.org](mailto:vp@ewbny.org)

May is a senior geotechnical engineer at Arup in New York City. She specializes in the design and management of major infrastructure projects such as bridges, tunnels, and underground stations. May earned her B.E. in Civil Engineering from the American University of Beirut and her M.S. in Civil Engineer from the University of Texas, Austin. May has been involved with EWB since 2015 where she started as the technical lead for the Rubaya, Rwanda program then became program co-lead. She is currently the project lead for a WaSH project in Chiche, Guatemala, and is also on the Corporate Leadership Council for EWB-USA. May is very excited for her role with EWB-NY as the Chapter Vice President.



### **Secretary**

Prateek Srivastava

[secretary@ewbny.org](mailto:secretary@ewbny.org)

Prateek graduated from Penn State in 2017 with a masters degree in Structural Engineering and is currently working in New York City. His expertise includes designing and analysis of various civil structures like high rise buildings, wastewater treatment plants, bridges, etc. Having been involved in the field of sustainability, he is one of the 2017 JUST scholars awarded by the International Living Future Institute, Seattle and also a 2017 Grand Challenge Scholar awarded by the White House. Recently, he got an opportunity to visit Iceland and learn about renewable energies as part of The Green Program. Prateek has been involved with EWB-NY since 2018 as a member of the ATDT team. He is excited to take on the role of secretary for the EWB-NY chapter and to be part of a cohort of great minds aiming towards helping communities and building a sustainable environment for upcoming generations.



### **Treasurer**

Simon Forsyth

[treasurer@ewbny.org](mailto:treasurer@ewbny.org)

Simon is an infrastructure investor with an interest in international markets. He is currently an associate director with the Infrastructure group of the OMERS pension fund. At OMERS, he is responsible for asset acquisitions across a variety of geographic regions and infrastructure sectors (energy, transportation, social infrastructure). Simon also contributes to the management of several businesses within the OMERS portfolio. Simon is originally from Canada, holds a Bachelor of Commerce degree, is a CFA Charterholder, and is pursuing additional education in management and international economics through programs at LSE and MIT.

## EWB-NY LEADERSHIP (CONT.)



### **Appropriate Technology Design Team (ATDT)**

Phoebe Law | [atdt@ewbny.org](mailto:atdt@ewbny.org)



### **Fundraising & Marketing**

Renate Crollini | [fundraising@ewbny.org](mailto:fundraising@ewbny.org)



### **Web Manager**

Seva Liokumovich | [administrator@ewbny.org](mailto:administrator@ewbny.org)



### **Web Manager**

Jesse Lee | [web@ewbny.org](mailto:web@ewbny.org)

# MISSION STATEMENT

Engineers Without Borders New York and EWB-USA work to build a better world through engineering projects that empower communities to meet their basic human needs and equip leaders to solve the world's most pressing challenges.

## WHY?

**In the 21st century, humanity is facing tremendous global challenges:**

- *783 million people live below the international poverty line of US\$1.90 a day \**
- *2.1 billion people lack access to safely managed drinking water services*
- *4.5 billion people lack safely managed sanitation services*
- *340,000 children under five die every year from diarrhoeal diseases*
- *Water scarcity affects four out of every 10 people*
- *2.3 billion people worldwide do not have basic sanitation facilities such as toilets or latrines*
- *1.8 billion people worldwide are estimated to drink water that is not protected or treated against contamination from faeces*

These challenges must be met not only for the well-being of those in need but for the continued prosperity for all humanity. EWB-USA presents an opportunity to invest in the future of humanity, while simultaneously investing in the education of its members.

EWB-USA works to achieve a vision of a world in which all communities have the capacity to meet their basic human needs. This vision is actively pursued by engaging in community-driven development programs through the design and implementation of sustainable engineering projects. The organization is at the forefront of a movement in which university students and skilled engineers, often teaming with public health professionals, educators, business leaders and others, address some of the most prevalent challenges facing the world today, including water purification and delivery, sanitation, transportation and infrastructure projects, and sustainable and renewable energy systems.

### Notes

\* in 2015, the World Bank raised the international poverty line from \$1.25 a day to \$1.90, based on 2011 prices for the cost of living

### Source

The United Nations (accessed March 2019)



ENGINEERS WITHOUT BORDERS USA  
New York Professional Chapter

## FINANCIAL PERFORMANCE

| (USD)                                | 2016             | 2017             | 2018            |
|--------------------------------------|------------------|------------------|-----------------|
| <b>Current Assets</b>                | <b>\$107,557</b> | <b>\$111,416</b> | <b>\$96,936</b> |
| <b>Cash on Hand</b>                  | --               | --               | --              |
| <b>Cash Held at National Chapter</b> | <b>\$107,557</b> | <b>\$111,416</b> | <b>\$96,936</b> |
| <b>Property &amp; Equipment</b>      | <b>\$1,500</b>   | <b>\$1,500</b>   | <b>\$1,500</b>  |
| <b>Total Assets<sup>1</sup></b>      | <b>\$109,057</b> | <b>\$112,916</b> | <b>\$98,436</b> |

As with our parent organization, EWB-USA, EWB-NY activities are funded primarily through generous contributions from corporations, individuals, and grant makers. In 2018, 58 percent of fundraising came from individual donors and 42 percent came from our key corporate sponsors. EWB-NY projects are sustainably designed and built with assistance from the local communities. EWB-USA considers contributions to be long-lasting investments in the communities development rather than one-time donations.

EWB-NY strives to keep its overhead costs to a minimum. We are able to do so thanks to the time donated by our volunteers. In the spirit of EWB-USA, our chapter is 100 percent volunteer operated. Our 2018 results prove our commitment to this strategy, with 98.7 percent of our expenses directly allocated to our projects and 1.3 percent directed to chapter fundraising uses (website, marketing, volunteer events).

EWB-NY has had consistent and prudent net financial results. Total fundraising and total expenditures were both significantly higher in 2018 relative to previous years due to EWB-NY's new and active projects. In 2018, EWB-NY project expenditures exceeded total fundraising due to significant onsite project work by our teams; 2018 closed with a net decrease in cash of \$14,480.

While EWB-NY carries a cash balance, the majority of these funds have been fundraised by the chapter's individual projects. These resources remain dedicated to existing development plans for those projects, such that any incremental fundraising from our donors will serve to further the economic and social outcomes of the local communities that EWB-NY and its donors endeavor to support.

1. EWB-NY typically has zero outstanding liabilities.

## FINANCIAL PERFORMANCE 2018 (CONT.)

| (USD)                                          | 2017               | 2018               |
|------------------------------------------------|--------------------|--------------------|
| <b>Revenue</b>                                 | <b>\$ 34,029</b>   | <b>\$ 66,801</b>   |
| Contributions - Individuals                    | \$17,529           | \$38,723           |
| Contributions - Corporate Grants               | \$16,500           | \$28,078           |
|                                                |                    |                    |
| <b>Costs</b>                                   | <b>\$ (27,568)</b> | <b>\$ (78,931)</b> |
| Project Costs                                  | \$ (26,082)        | \$ (1,050)         |
| Chapter Costs                                  | \$ (1,486)         | \$ (77,881)        |
|                                                |                    |                    |
| <b>Balance Update with EWB-USA<sup>1</sup></b> | <b>\$ (2,602)</b>  | <b>\$ (2,350)</b>  |
| <b>Net Cash Flow</b>                           | <b>\$3,859</b>     | <b>\$(14,480)</b>  |

1. Net result of account balance updates between EWB-USA and EWB-NY. Expectation of zero for 2019.

EWB-NY enjoys its 501c(3) tax-exempt organization via its association with EWB-USA. Details about tax exemption and EWB-USA tax determination can be found at <https://www.ewb-usa.org/financials/>



# PROJECTS & INITIATIVES

## OUR IMPACT

FOOD ACCESS

WATER ACCESS

EDUCATION ACCESS

ECONOMIC DEVELOPMENT



# RUBAYA, RWANDA

## Economic development through farming

In early 2018, the Rubaya team traveled to northern Rwanda and successfully implemented phase one of the project with their community partner, GoodNeighbors. Phase one consisted of the construction of a storage facility measuring 12 meters by 12 meters, and having the capacity to house 30 tonnes of high quality shelled maize in open weave or polyethylene bags. The storage facility was a combination of reinforced concrete beams and columns, and steel trusses, all assembled on-site. The travel team consisted of six members, split into three two-member crews, each spending two weeks on the project site. The teams worked hand-in-hand with the cooperative members to achieve their goal.

The travel teams organized training workshops for GoodNeighbors on financial tracking best practices to assess the post harvest yield results and the cooperative profitability.

The Rubaya team is currently monitoring the GoodNeighbors farming co-op business performance for two harvest cycles to confirm their positive growth. Information collected during this monitoring period will allow the team to assess the required facility size for phase two of the project. Phase two is a maize flour mill, that will be operated and maintained by Goodneighbors in the early stages of their enterprise.

In addition to the maize project, the Rubaya team is pursuing a water distribution/filtration project for the Rubaya Sector. The team is aiming to travel for the assessment trip in 2019.



**PROGRAM CO-LEADS**  
**May ElKhattab, P.E. & Paroma Saha**  
[rubaya@ewbny.org](mailto:rubaya@ewbny.org)

# MISUUNI, KENYA

## Improving access to clean water

In August 2018, the Misuuni team completed one of two projects to improve rainwater harvesting (RWH) systems at two primary schools in Kenya. The team successfully installed RWH improvements at the Misuuni Primary School consisting of four 7,200 liter polyethylene tanks, new gutters, piping, and appurtenances. Two concrete foundation pads were constructed to support each tank system, which included first flush devices. Each of the two tank pads were enclosed in a chain linked fence to prevent damage and tampering by children. The constructed RWH system serves 285 students, plus staff as a supplemental source of drinking water and a new source of hand-washing water, which had not previously been available. This indirectly benefits approximately 1,000 family members of students and staff who now spend less effort dealing with family members who fall ill due to the prevalent waterborne and sanitation diseases associated with contaminated water.

A subsequent hydrogeological study, sponsored by EWB-NY and the Misuuni Development Self Help Group, was undertaken to determine the feasibility of drilling a productive well within the community. Results of the study indicated that the location of a reliable well with sustainable yield should be located in areas of fractured rock in the nearby Kataana River, and not in the location originally requested by the community. EWB-NY will further explore this opportunity in 2019.



**PROGRAM CO-LEADS**  
**Eric Lehan, P.E. & David Montoya**  
[misuuni@ewbny.org](mailto:misuuni@ewbny.org)



# CHIMALTENANGO, GUATEMALA

## Connecting communities

The AECOM-Pilot Chimaltenango Program kicked off in January 2018. The five year initiative aims to make Chimaltenango communities more resilient, reduce unsafe travel practices, improve public health, economic welfare and open a new transportation corridor, enhancing access to basic human services. The effort will commence with the design and construction of a vehicular and pedestrian bridge, providing community members with safe and affordable travel to schools, healthcare and market, while giving emergency responders reliable entry to the area.

In August 2018, a ten-person team traveled to San Martin, Guatemala to visit the proposed bridge site and fully assess the economic, environmental, social and technical feasibility of the proposed project. During this Assessment Trip, the team determined the proposed project will have long-term dividends for the resident's quality of life, allowing more children to attend high school, reduce travel risk during the rainy season and reduce disaster response time.

Following the feasibility assessment, the team secured an agreement between all parties involved (the Municipality, La Joya el Aguacatal COCODE, EWB Guatemala and EWB-NY), and outlined required contributions from each stakeholder. The Team also participated in formal Kickoff Events, conducted a PMEL survey, visited two bridge sites for evaluation of lessons learned, completed geotechnical field work, conducted door-to-door community interviews in three affected communities, visited schools and hospitals/clinics, taught classes at the grade school in La Joya el Aguacatal, led economic development activities in San Martin and Antigua markets, filmed stakeholders and video content, recruited labor for construction, visited local hardware stores and established preferred vendors, and hosted a community soccer match. The team is now working on the Implementation Phase of the project and plans to return to launch construction activities in November 2019.



**PROGRAM LEAD**  
**Kathryn Bartunek**  
[chimaltenango@ewbny.org](mailto:chimaltenango@ewbny.org)

# NEW PROGRAM

## Community Engineering Corp

In 2014, EWB-USA (in partnership with ASCE and AWWA) launched the Community Engineering Corps (CEC) as a means for chapters to work with underserved communities within America.

In June 2018, EWB-NY launched a CEC team to serve the NYC community. There were no open applications so the team networked with volunteer groups and community-based organizations to learn about different needs in the city and determine how to best help within an EWB framework and skillset. The team met representatives from Jackson Forest Community Garden (JFCG) and after further interviews and site assessments applied for a partnership with JFCG to be considered an official partner. The application was accepted, and the chapter's first domestic program was active in October 2018.

The JFCG is located in Morrisania, a neighborhood in the Bronx with one of the highest poverty rates in NYC. The community garden provides access to the outdoors and a shared green space. It helps improve the physical and mental health of visitors, and promotes a positive exchange of information, food, and culture in the neighborhood. This community garden serves as a place for neighbors to grow fresh produce, host educational workshops, and organize neighborhood gatherings.

The partnership's main scope of work is to design and construct a pathway that will make the garden accessible to elderly and disabled visitors, and improve the event space for social and educational gatherings. The goal is to have this completed by the end of summer 2019. Once completed, this will be the first physical structure EWB-NY has implemented in NYC.



**PROJECT LEAD**  
**Mira Armstrong**  
[community@ewbny.org](mailto:community@ewbny.org)



# COMMITTEES & INITIATIVES

## Appropriate Technology Design Team

The Appropriate Technology Design Team (ATDT) works on small design projects, participate in events that connect our members to ideas in engineering and international development, and connects chapter projects to relevant existing technologies and specialists.

In 2018, the ATDT team participated in several international design challenges rethinking water access in urban environments and decreasing associated waste. For 2019, the goal is to continue to examine technologies that may help our chapter's projects as well as develop a space for our volunteers to challenge, design, and build potential new solutions for our changing world.



# COMMITTEES & INITIATIVES

## Fundraising & Marketing Committee

The Fundraising and Marketing Committee consists of fundraising and marketing representatives from each program, as well as dedicated committee members. The objective is to provide assistance and general support to the programs for their fundraising efforts.

In 2018, the committee had an array of successful events and programs, including the awards of EWB-USA grants, and participating in EWB-USA annual online year-end campaign. Our programs successfully organized several social events, which combined the program's fundraising requirements while promoting connectivity and networking for our members.

The committee continued developing its Corporate Sponsorship Program (CSP) with the objective to encourage annual donations from both engineering and non-engineering firms. In addition to our long-standing partners Arup, AECOM, Gilbane, Maser Consulting and Langan, in 2018 we also obtained a generous donation from advertising holding company Omnicom Group.

We have an active presence on social media, constantly improving our website and newsletter to make it more user friendly and reaching out to our supporters and volunteers via our blog under the handle of 'ewbnyblog'. Our website received approx. 300 users per month with an average visit time of 2 minutes per session. Our twitter handle, @EWB\_NY, has over 500 followers with over 2,500 tweets to date. We have over 900 followers on LinkedIn with the top five countries following us being USA, India, UK, Canada and Saudi Arabia, and over 1,500 followers on Facebook. We are also expanding our social media presence via Instagram with the handle 'EWB-NY' and sharing a visual diary of our impact on the community we serve. We already count on 148 followers in only few months of activity in 2018.

The committee accomplished a lot in 2018 and we look forward to aiming even higher in 2019, working jointly with EWB-USA headquarters in a series of initiatives to tap the large base of individual and corporate donors in New York.

# SPONSORS AND PARTNERS

Our work and accomplishments would not be possible without the support of our many sponsors, partners, and donors, corporate or individual.

EWB-NY is extremely grateful for the support over the past year and we look forward to your continued support in 2018 and beyond.

Please contact Patrick Brennan ([president@ewbny.org](mailto:president@ewbny.org)) or Cristina Cignoli ([fundraising@ewbny.org](mailto:fundraising@ewbny.org)) if you would like to get involved with EWB-NY.

**AECOM**

**ARUP**

**Gilbane**

**LANGAN**  
ENGINEERING & ENVIRONMENTAL SERVICES



**OmnicomGroup**

# VOLUNTEERS

The success of EWB-NY programs and committees would not be possible without the hard work and dedication of the men and women who volunteer their time and expertise to help communities across the globe. Here's a list of some of the people that we would like to thank.

|                     |                      |                          |                        |                   |                          |                           |
|---------------------|----------------------|--------------------------|------------------------|-------------------|--------------------------|---------------------------|
| Adil Malik          | Chris Russo          | Ethan Cotton             | Jonathan Pita          | Michael Cervini   | Placide Magambo          | Sofia Maayah              |
| Alberto Morgante    | Chris Shipper        | Evandrike (Evan) Correia | Joshua Kogan           | Michael Scopetta  | Poonit Patel             | Sotiria (Iro) Spyropoulou |
| Alex Canterara      | Christina Carrington | Evram Dawd               | Junior Diaz            | Michelle DePinho  | Prateek Srivastava       | Sreya Sribjashyam         |
| Alexander Chowdhury | Claire Wang          | Ezra Monasebian          | Kasturi Shah           | Miguel Ramirez    | Rachel Webre             | Stefanie Moran            |
| Allie Kauffman      | Cristina Cignoli     | Goli Razaghi             | Kathryn Bartunek       | Mikayla Delury    | Renate Crollini          | Tanmay Bhalerao           |
| Allison Luongo      | Cyril Peter          | Greg Highley             | Kira Murphy            | Mira Armstrong    | Richard Mcilrath         | Tawhid Chowdhury          |
| Alyki Malliaros     | Dan Sawh             | Hannah Mitchem           | Kohinoor Mahi          | Mohammad Farhan   | Rigdha Banerjee          | Teja Jonnalagadda         |
| Aman Singhvi        | Dan Sellers          | Henry Shah               | Kyle Maer              | Molly Aaker       | Robert Brennan Jr.       | Tim Weiss                 |
| Anand Gorthi        | Daniel Buser         | Herbert Ramirez          | Leyland George         | Moustafa El-Sawy  | Roberto Garcia           | Tony Dituro               |
| Andrea Mengual      | Dave Maharaj         | Ignazio Bellini          | Louis Diaz             | Naomi Foltz       | Rohan Mutha              | Ungelli Picardal          |
| Aneesh Karlekar     | David Montoya        | James Thompson           | Luisa Torres           | Nelson Montecillo | Salvador Bentolila       | Valeri Ivanov             |
| Anthony Giamella    | Dean Challes         | James Valenzuela         | Maeva Ghonda           | Nicholas Jordan   | Sara Fletcher            | Valeri Kolev              |
| Arsanious Guirguis  | Derek Valenzuela     | Janelle Ella             | Marcellin Nshimiyimana | Noah Stein        | Sarah Hathaway           | Vanessa Galvez            |
| Bahar Ozveren       | Dhruv Hirani         | Jean-Reginald Saintange  | Maria Cuenca           | Osama Abdelfatah  | Sean O'Connell           | Weiling Xu                |
| Bhavya Reddy        | Dimitra Karachaliou  | Jeff Morgan              | Mariam Khalil          | Paroma Saha       | Sean Reischel            | Xiaofei Shen              |
| Carlos Beceroil     | Engelbert Morales    | Jerry Parnes             | Marilisa Stigliano     | Patrick Brennan   | Serena De Stefano        | Xiaolong Lee              |
| Charles Hajj        | Eric Lehan           | Jesse Lee                | Matthew Winchell       | Patrick Farnham   | Sergei Khramtsov-Templar |                           |
| Chris Frany         | Erick Martinez       | Jia Gu                   | May ElKhattab          | Peter Gregory     | Seva Liokumovich         |                           |
| Adil Malik          | Esteban Garcia       | John Crespo              | Michael Brennan        | Phoebe Law        | Shravan Nawany           |                           |

## Interested in volunteering with EWB-NY?

EWB-NY is always looking for motivated and selfless individuals like you! For more information, please visit our website [www.ewbny.org](http://www.ewbny.org) or reach out to any of our members.



# 2018

## THANK YOU!

