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Press Release FOR IMMEDIATE RELEASE

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## BUILD CHANGE SHOWCASES DRONE MAPPING PROJECT FOR RECONSTRUCTION IN NEPAL AT AUTODESK UNIVERSITY

Build Change will publicly showcase their project using drone technology to improve mapping and planning of safe, sustainable reconstruction in earthquake-affected communities in Nepal for the first time at Autodesk University, November 15-17, 2016.

Denver, CO (November 2016) - <u>Build Change</u>, an international non-profit social enterprise, will be publicly showcasing their mapping project – the first government-sanctioned international Non-Governmental Organization (iNGO) project using drone technology to guide reconstruction efforts in earthquake-affected communities in Nepal – for the first time at Autodesk University in Las Vegas, NV, November 15-17, 2016.

Unmanned Aerial Vehicle (UAV) technology is only recently being used in post-disaster situations. Immediately after disasters, UAVs have been used to detect and reduce risk for emergency responders, locate survivors, and evaluate situations from the air. For long-term recovery solutions, such as the programs Build Change provides, UAVs can be used in the assessment of difficult-to-access locations to support reconstruction and development efforts.

This project will guide the design of an effective, sustainable reconstruction program in some of the hardest-hit areas of Nepal through highly accurate, high-resolution aerial images of earthquake-affected communities. These images and associated data will enable Build Change to:

- Prepare a high-resolution digital surface model of the project location, accurate to within 5-10 centimeters, which helps in the selection of suitable new building construction sites;
- Evaluate properties of damaged buildings and surrounding areas to determine sites for reconstruction or new building construction; and
- Investigate large piles of stone and debris that have been deposited in different locations surrounding sites, helping engineers estimate the amount of reusable building material available in the area.

Build Change is the first iNGO to use UAV technology for post-disaster reconstruction in Nepal with full approval and support from the Nepali Government. Various branches of the national and local government will continue to be involved with the project and will utilize the data collected to inform further reconstruction and development-planning efforts.





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Processing and editing of images for the project are completed with Autodesk ReCap 360 Pro, Autodesk InfraWorks 360, Autodesk Remake, and Autodesk AutoCAD Civil 3D software made available through a collaboration with Autodesk, and using ThinkStations and Thinkpad P Series computers provided through a partnership with Lenovo. Both companies are supporting Build Change's attendance at Autodesk University 2016. Lenovo will showcase the project at their booth throughout the event, and attendees will be able to meet the Build Change staff involved on Wednesday, November 16 at the Lenovo booth from 11:30 AM – 12:30 PM, or at the ReCap booth at 2:00 PM.

**Uttam Pudasaini, Build Change Geomatics Engineer in Nepal**, said: "The use of drones in Nepal is very relevant right now due to the ongoing recovery efforts following the 7.9-magnitude earthquake last year. I am passionate about this technology, and I joined Build Change so that I could have an opportunity to use this technology in Nepal's reconstruction process. There are so many opportunities to use this amazing technology for better planning and monitoring of construction activities, as well other humanitarian work before and after disasters."

## **ABOUT BUILD CHANGE**

Build Change saves lives in earthquakes and windstorms by working with people in emerging nations to build homes and schools that will protect their families and children. Build Change works to strengthen buildings before and after disasters strike in Colombia, Guatemala, Haiti, Indonesia, Nepal, and the Philippines by improving local construction practice and building long-term resilience. More than 25,000 people have been trained in disaster-resistant design and construction techniques and have built over 48,000 safer homes, impacting 245,000 people. Build Change began working in Nepal after the earthquakes in early 2015 which displaced 2.8 million people, killed more than 8,700, and destroyed nearly 500,000 houses. Visit www.buildchange.org.

## **ABOUT LENOVO**

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