

# Equal access: Crowdsourcing a wheelchair map

Due to the lack of awareness among road and infrastructure engineers and policy makers, most buildings and roads in Ulaanbaatar fail to follow standards that address the amenity needs of wheelchair users. Thus, this lack of wheelchair friendly bathrooms, elevators and ramps for building entrances and curbsides, greatly restricts the movement of handicapped residents. For those places that are accessible, there is no means for wheelchair users to find out about them easily. A social map has been created in the past, but it is not adequately user friendly and accessible for wheelchair users.

## CATEGORY

[Social Inclusion of Vulnerable Populations](#)

## LOCATION

[Mongolia](#)

## WHAT IS THE CHALLENGE OR NEED YOUR PROJECT WILL ADDRESS AND WHAT INNOVATIVE METHODS WILL YOU EMPLOY?

### Describe the specific need or challenge that your team will address with this project

Due to the lack of awareness among road and infrastructure engineers and policy makers, most buildings and roads in Ulaanbaatar fail to follow standards that address the amenity needs of wheelchair users. Thus, this lack of wheelchair friendly bathrooms, elevators and ramps for building entrances and curbsides, greatly restricts the movement of handicapped residents. For those places that are accessible, there is no means for wheelchair users to find out about them easily. A social map has been created in the past, but it is not adequately user friendly and accessible for wheelchair users.

### Briefly describe the specific solution or approach to address the need or challenge and explain why it is innovative

Our aim is to make available a user friendly mapping tool to wheelchair users. We will populate an existing open source map (Wheelmap.org) with the purpose of showing wheelchair accessibility information. The wheelchair accessibility of the entrances, elevators and bathrooms of buildings in the city center, such as apartments (408), hospitals (185) and schools (65), and the curbs of intersections of central UB (12 subdistricts) will be available in Mongolian on the site. This will all be done in conjunction with workshops and a retrofit site to show the public how solutions can be achieved.

### How will the project impact your community? What changes (in people, institutions, attitudes, practices) do you think you will see?

Aside from Mongolia's low GDP level having negative consequences on the disabled community's quality of life, the low level of institutional capacity also plays a role in the lack of amenities for disabled people. The voice and needs of the disabled community have not adequately reached the public sector that is mandated to impose the rules and regulations for the city's buildings and infrastructure. This map has the potential to be a useful advocacy tool for non-profit organizations that can show direct evidence of the lack of amenities that address the needs of their target group.

With increased levels of awareness that are tailored for each of the different audiences, the general population will be more inclined to support wheelchair friendly amenities. This project also aligns closely with the goals of the City Municipality of Ulaanbaatar, which is working hard to create a 'Smart City' that follows international city standards.

## WEBSITES

<http://www.masa.org.mn>

<https://www.facebook.com/MASAForDevelopment>

## MEET THE TEAM

Project owner

[Bayasal Batdelger](#)

[Mongolia](#)

[Fulbright Student Program](#)

Project members

[Manage members](#)

[Bayartsengel Da...](#)

[Mongolia](#)

[Fulbright Student Program](#)

[\[remove from project\]](#)

[Jargalmaa Erden...](#)

[Mongolia](#)

[Global Undergraduate \(UGRAD\)](#)

[Exchange Program](#)

[\[remove from project\]](#)

[Badruun Gardi](#)

[Mongolia](#)

[International Visitor Leadership](#)

[Program \(IVLP\)](#)

[\[remove from project\]](#)

[Naranbulag Khukhuu](#)

[Mongolia](#)

[Fulbright Student Program](#)

[Open World Program](#)

[\[remove from project\]](#)

[Uuganjargal Dam...](#)

[Mongolia](#)

[English Access Microscholarship](#)

[Program \(Access\)](#)

[\[remove from project\]](#)

[Tuya Zorig](#)

[Mongolia](#)

[Fulbright Student Program](#)

[\[remove from project\]](#)

[Amar Batkhuu](#)

[Mongolia](#)

[Global Undergraduate \(UGRAD\)](#)

[Exchange Program](#)

[\[remove from project\]](#)

[Mahmoud Suliman](#)

[Israel](#)

[Fulbright Student Program](#)

[\[remove from project\]](#)

[Munguntuya Otgo...](#)

## WHO WILL BE INVOLVED?

### Beneficiaries: who are your target groups (or communities) and how many people will directly benefit from your project?

The latest Ministry of Health and Sports statistics state that there are currently 20,137 residents who receive welfare for a given disability and 4071 residents on wheelchairs. This is widely considered to be a severe underestimation of the number of people with disabilities in the city. Much of the statistics surrounding people with disabilities in Mongolia vary depending on the source, which also reveals the wide knowledge gap regarding this target group. This in turn has negative implications for policymakers and public servants who are responsible for advocating for this target group. In addition, this project benefits the friends and family of this target group, whom, in the case of Mongolia, often bear the responsibility of transporting their disabled loved ones to different destinations. On a wider scale, this project's end result will be a useful tool for policy advocacy to improve infrastructure in the city, which benefits all pedestrians alike.

### Local partners

The project will be implemented by board members of MASA, members of Bid Chadna NGO, students from the Mongolian University of Science and Technology and the City's Municipality Office.

The Mongolian Association of State Alumni (MASA), is an NGO consisting of a dynamic professional network of 1000 Mongolian alumni. MASA is devoted to democratic social development, promoting equal opportunities in all spectrums of society, and for engaging state alumni through public activities.

The project team will work closely with Bid Chadna NGO, an organization which it has worked closely with since 2008, when it was borne out of a MASA project idea. Bid Chadna is devoted to supporting handicapped people in gaining equal opportunity in education and employment. Bid Chadna is connected to a wide network of disabled citizens. Bid Chadna will use its existing networks and channels to provide information to wheelchair users, to engage them in the mapping tool, to manage the volunteers who will be adding sites to the mapping tool, and to connect the project to other relevant NGO-s such as the Association of Citizens on Wheelchairs.

The project team will also work with community architect Batdorj, who has a wide set of experience in community mapping and planning to improve services provided to people living in ger districts and other target groups that face urban challenges. His mapping skill set will be very useful for the project.

Since the goals of the project overlaps with the goals of the City Municipality Office, whom members of the team have prior working experience with, we expect that they will support the project in their capacity.

### Alumni team

**Bayasal Batdelger** is experienced in helping to make websites more user friendly. Her role will be to be the main person working on the Wheelmap.org mapping tool to make it specifically tailored towards users in Ulaanbaatar.

**Badruun Gardi's** role will be to manage and implement the promotional component of the project. With rich experience in relationship building, Badruun will play a vital role in meeting necessary parties who will help to make the project run smoothly.

**Bayartsengel Damdinjav** will be responsible for organizing the workshops to train different groups on existing standards and to introduce the mapping tool to the public. He will also carry out the research that will be relevant to this project.

As an urban planner and architect, **Tuya Zorig** will provide her expertise on building codes and road design to the project.

**Amar Batkhuu** will be responsible for creating public awareness and main point of contact for the map opening at retrofit site in the city.

**Proposed Project Dates:** June 15, 2015 - June 01, 2016

## HOW AND WHEN WILL YOU IMPLEMENT YOUR PROJECT?

### Implementing Plan and Timeline

The project implementation will start in the middle of June 2015 and finish in June 2016. The

[Mongolia](#)  
[Global Undergraduate \(UGRAD\)](#)  
[Exchange Program](#)  
[\[remove from project\]](#)

[Chandmanibaatar...](#)  
[Mongolia](#)  
[Open World Program](#)  
[\[remove from project\]](#)

project milestones are divided into three major categories which are subdivided into the following categories:

**1. Prepare** (Prepare different stakeholders to use the wheelmap by increasing their knowledge of wheelchair friendly standards and on how to use the tool)

- Prepare the training pack for target groups
- Create a video tutorial for Wheelmap.org data population
- Training for wheelchair users and their family members.
- Conduct workshops on existing standards for ramps, elevators, and bathrooms for policy makers (i.e. city municipality officers, specialized inspection agency officers, and the road and building construction sector)
- Workshops for volunteer students and MASA alumni, khoroo social workers, and NGO staff.

**2. Populate** (Populate the map with wheelchair accessibility information for all sites in the city center)

- Populate the Wheelmap for all priority places that have to get mapped (i.e. schools, universities, hospitals, banks, khoroo buildings, ministries)
- Populate the Wheelmap with building information in 12 khoroos in the city center through crowdsourcing (Chingeltei and Sukhbaatar districts)
- Populate the Wheelmap for the main road intersections (whether or not they have curb ramps)

**3. Promote** (Promote the mapping tool, retrofitting projects and the significance of the cause)

- Create an online video to show examples of wheelchair friendly amenities
- Launch and introduce the mapping tool at the opening of a model retrofit site
- Organize public events to educate people on the difficulties of getting around in wheelchairs
- Embed the Wheelmap.org on the websites of Bid Chadna, Ulaanbaatar Municipality Office among others
- Publicize the project on public media channels (i.e. public TV channels, daily newspapers, popular websites and public TV screens)

### Communication Plan

Organizations working on accessibility issues are part of a tight-knit community. Therefore, local partner organizations can easily disseminate information about the project to their members, our beneficiaries. Since not all physically disabled citizens are necessarily part of one of these organizations, we will also utilize various forms of media platforms to reach both beneficiaries and the public. As it is the most cost effective, social media will be used widely. Members of partner organizations will be encouraged to post and share information about the project on their various social media accounts. Facebook sponsored ads will also be used to reach a wider audience, with a potential reach of 880,000 (29% of the total population of Mongolia) Facebook users in Mongolia.

Social media usage is generally skewed towards a younger audience, so other forms of media will also be utilized. News articles about the project will be placed on some of the most visited websites as well as on the websites of local partner organizations. Two daily newspapers with the highest circulation will also run an article related to the project. To create more buzz, we plan to utilize the creation of a model handicap friendly area as a media opportunity that will be covered by numerous TV outlets and radio stations. This will act as both an advocacy activity aimed at influencing other businesses to improve their accessibility as well as an opportunity to further disseminate information about the accessibility map.

### Evaluation

The following numbers will be used as metrics to evaluate the project:

- Number of people who have visited the wheelmap.org site from Mongolia since the launch

fo the project

- Number of people who have contributed to the map by adding new sites
- The total number of crowdsourced contributions to the map
- Number of YouTube hits on the mapping tool tutorial and the standards video
- Number of retrofits that have taken place or are being planned
- Attendance level and the comments given on the mapping tool at public discussions

After each workshop, the participants will be asked to fill in an evaluation sheet that will seek to measure any attitude changes in the participant as a result of the workshop, as well as their general sentiments about the importance of the topic discussed in the workshop. Members of wheelchair community will be interviewed about their sentiments about the mapping tool and ways to improve its usability. City Municipality officers will be interviewed before and after the project to evaluate any changes in their future plans for the city, and to gage their level of knowledge.

### **Sustainability**

We hope this platform serves as a tool not only for finding wheelchair accessible places, but in the future also becomes a powerful tool for accessibility advocacy. In this regard, there is an extensive focus on providing workshops for important stakeholders that will expose them to existing standards and best standards in accessibility while also instructing participants on how to effectively use the accessibility map.

As the stakeholders populate the map with priority places in the center of the city, the poor level of accessibility will be clearly visible to anyone that visits the site. Through the next step of promoting our project, we hope to raise awareness among the general public on the issue of accessibility through the media. As the public starts to visit the map and see the poor level of accessibility in most places, we believe this will compel the public to start adding accessibility information on places throughout the city. In this manner, it won't be just the direct beneficiaries populating the map, but a much larger number of engaged citizens. As the map gets more populated, it will become a strong tool for advocacy and therefore provide even more incentive for concerned stakeholders to keep the map updated.

## **TOTAL FUNDING REQUESTED**

\$18,300.00

## **PROPOSAL DOCUMENT:**

[Download budget](#)