

## **Concept Paper by**

**Global MapAid  
The University of New Orleans  
Americorps\*Vista**

**To build operate and hand over a Geographic Emergency Response Vehicle or ‘GEO ERV’**

**Stop Press: GMA was awarded US \$80,000 in late April 2007 to kick-start this program, which we intend to start in June 2007.**

## **PROJECT NARRATIVE**

### **A. Executive Summary**

Global MapAid’s (GMA) primary mission is to put accurate maps of disaster relief areas into the hands of aid workers in the field, as well as returning victims, as quickly as possible. This results in much safer and effective navigation as well as better targeted planning and delivery of urgent aid supplies. Better maps *do* result in the improvement and saving of lives, as evidenced by the quotes GMA received in New Orleans, during the aftermath of Hurricane Katrina, which are at [www.globalmapaid.rdvp.org](http://www.globalmapaid.rdvp.org) and in Attachment A. More information about GMA’s worldwide mapping experience can be found in Section H: *Organizational Capacity*.

The maps produced by GMA come in all shapes and sizes. They are not necessarily complex contour maps; often they are simple black and white thematic maps, showing the major routes and locations for sources of help, or where help is needed. The information to make maps is gathered by teams who assess initial critical requirements and then deploy mobile data collection teams to collect the latitudinal and longitudinal coordinates for such requirements, including for example, water and food supply routes and storage sites. Data are collected using hand-held Global Positioning Systems units (GPS), which are then input into Geographic Information Systems (GIS) software programs for converting the data into legible maps quickly and efficiently. Completed maps are then quickly printed, reproduced, and distributed into the hands of people who urgently need them.

GMA and the University of New Orleans propose to collaborate in the development of a mobile Geographic Emergency Response Vehicle (GeoERV) – a mobile office capable of being quickly deployed into disaster areas, to produce maps in the immediate aftermath for emergency service personnel, longer term aid workers and evacuees. All of the necessary map production equipment will be housed within the GeoERV, as will quite simple living quarters, to allow a small field team to quickly and effectively travel to critical locations and produce maps onsite for those who urgently need them. The home-

base for the GeoERV will be UNO, and complementary activities will be implemented during the non-disaster periods to build capacity of local personnel, students, and local residents. The goal of the GeoERV project is to build a team of highly qualified mappers with the skills to provide a critical resource (up-to-the-minute maps) in a time of disaster. The GeoERV will be focused on the southern coastline of the USA, but also able to drive to disaster zones in other states, when called upon.

GMA encourages local personnel and volunteers to train and equip themselves to make maps *before* a disaster. This approach is highly sustainable in the long-term, and builds on the methodology of external intervention by non-local personnel arriving moments after disaster has struck. One way to build capacity of local personnel and other stakeholders in mapping is to engage in *community mapping activities* between disasters. GMA and UNO propose a series of activities with local disenfranchised communities in the New Orleans area to build capacity and a sense of community cohesiveness for disaster mitigation and preparedness, including data collection and other mapping techniques.

The goal of the community mapping component of the GMA/UNO project is to support decision-making and consensus-building for improved program design, policy development, organizing, and advocacy in low-income and struggling communities recovering from the effects of hurricane Katrina. Ultimately the project will stand as an inspiration for other Geo ERVs in other disaster prone areas for example California, Texas and Florida and even overseas.

The proposed Geo ERV will generate several outcomes:-

#### 1. Direct Service in a Disaster - Utilizing Community Participation Whenever Possible

- 1 Speed – e.g very soon after a disaster, it will be possible to get a map to a single mother who needs to find where she can locate diapers.
- 2 Ability – e.g the ability to be able to move from one area to another so that multiple populations are served, by virtue of a cohesive, well-led, and equipped, core team.
- 3 Empowerment of local leadership - working with the local leadership, including municipal city leaders, church leaders, and 'small town heroes' to create maps that will enable them to speak and act with greater authority on behalf of their ~~people~~ constituents.
- 4 Empowerment of local NGOs – including, for example, the Salvation Army, American Red Cross, and the United Methodist Conference on Relief.
- 5 Wide area coverage – the core Geo ERV team, living out of the vehicle, will have the ability to send out roving data collection teams, so that a) several maps will be made in parallel and b) updated maps can be made as needed.
- 6 Local knowledge and experience – the roving data collection mentioned above will be greatly enhanced by the deployment of local community personnel, additional to the core team, who know their own areas - some of these personnel

- may have trained with the Geo ERV on Social & Poverty Alleviation mapping in-between disasters.
- 7 Variety of map types – maps for victims as well as aid workers are possible, so too are maps for the internet, that can encourage strategic aid delivery, and serve as an indispensable aid to those individuals who coordinate or fund raise for such operations.
  - 8 Value for money – one 11'' x 17'' black & white map cost GMA US \$0.07 after Hurricane Katrina. If such a map enables a family to obtain US \$100 in aid the 'social return on investment' is 1:1400.
  - 9 Precedent for other states - for example, California, where to date no Geo ERV(s) exist and yet they suffer earthquakes and forest fires.
  - 10 Precedent for other countries - for example, Orissa state in N.E India, where to date no Geo ERV(s) exist, yet they suffer regular famine, typhoons, hurricanes, earthquakes, tsunami and inland flooding.

## 2. Social & Poverty Alleviation in-between Disasters

- 11 Empowerment – local communities with real problems will be able to partner with the Geo ERV team, to help create maps through accurate and systematic data collection efforts.
- 12 Social and Economic Advocacy – such maps will be helpful in determining where to target humanitarian development assistance in terms of populations.
- 13 Environmental Advocacy – such maps will be helpful in determining where to target humanitarian development assistance in terms of populations living in vulnerable coastal or river flood plain or tornado areas including those in Texas and Florida.

Strategies GMA and UNO will employ to achieve these outcomes:

- i) Use of Geography Students to train on the Geo ERV, as part of their geography studies. Some of these students may come from local communities and have participated in volunteer data collection before university entry.
- ii) Use of Geography Teaching faculty to volunteer to train students on the Geo ERV, making geography totally relevant to the needs of New Orleans and the world at large. Teaching Faculty will be in charge day-to-day.
- iii) Use of Geography Teaching faculty to help negotiate 'working partnerships' with the Local Community Leaders to make maps with the Local Communities support.
- iv) Use of Local Community Leadership to promote long-term project continuity in their own communities, especially in data collection for up-dated maps.
- v) Use of UNO Administration volunteers to promote long-term project continuity and handle vehicle storage and hand-over, to and from Teaching Faculty, year-to-year.
- vi) Use of GMA to help spread the gospel of the Geo ERV to other states in the USA and also abroad.

Each of the above groups will prove vital to the success of the Geo ERV. The great benefit of building relationships in-between disasters with local communities will be *during* the hurricane season, when maximum local support and understanding will be needed for the Geo ERV.

## **B. Needs and Activities**

### 1. Description of the specific community need(s) the Geo ERV project will address.

Why a Geo ERV? During the GMA intervention in New Orleans in September and October 2005, the resources to make maps were very spread out. Internet access was at one location, printers and photocopiers at another, a bank at yet another, accommodations at yet another. Volunteers were working on laptops out of the trunks of rented cars and sleeping at Red Cross shelters, recharging the laptop batteries wherever possible. This spacing of resources *significantly slowed down the rate of data collection and mapping and did not allow for reprints of updated maps in an ever-changing situation.*

The key idea behind the Geo ERV is that all the resources to make the maps should be located in one unit and as it will be on wheels, it will be able to a) get out of the way of an oncoming hurricane and b) move from one disaster area to another, making maps or map re-prints, as it goes, with very little outside support. A detailed description of the equipment contained in a typical GeoERV can be found in Attachment B.

The recent experience of the Hurricane Katrina disaster has shown the inadequacy of not having a centralized data collection and mapping unit, both before and following a disaster of this scale. A Geo ERV unit will therefore enable *systematic and rapid* data capture, mapping, up-date mapping and rapid distribution of maps. In other words a 'living' project team that is well trained and experienced, before a disaster strikes will undoubtedly go along way to alleviating the inadequacy and limited effectiveness of previous attempts (i.e. Hurricane Katrina).

Members of all socio-economic groups were affected by Katrina, however the needs of the poorest members of society were the greatest, as they often did not have the means to evacuate the areas for any length of time and were therefore driven to return home, before government departments were able to offer alternative solutions. Once they got home, they were then faced with the confusing task of not only trying to support themselves and often their children, but locating the help they needed, in a context that had radically and definitely totally changed for the worst.

The New Orleans tragedy relief operation resulted in an overall fractured emergency response. This was partially due to lack of information, or in some cases too much information that was difficult to understand. For example, one of the real problems faced by the American Red Cross Vehicles (ARC) was that their volunteers were often from 'out-of-state' and did not know the local route system. Sometimes they 'went in circles.' GMA was able to supply a limited set of maps to the ARC food delivery teams operating out of First Baptist Covington, to help individual teams know their aid delivery location and boundaries. This certainly helped to a) reduce overlap of food aid delivery and b)

address gaps in aid delivery in the Covington area. However, *really lacking* was a comprehensive coverage of this type of ‘team areas mapping’ for all of the ARC teams in all New Orleans and surrounding areas.

The need for a mobile emergency vehicle that allows a crew of trained specialists to arrive in an area and create maps for any given population of victims or group of aid workers is therefore of paramount importance.

The importance of producing emergency response maps can be summarized in that they speed up the accuracy and coverage of aid delivery to all populations, especially the poorest of the poor, in two main ways:

- i) Enabling sources of aid to be better known to local populations e.g. distribution centers for drinking water, food, clothing, etc.
- ii) Enabling local populations to be better sourced by aid agencies e.g. mobile food and clothing delivery vehicles etc.

GMA is also keen that the Geo ERV will perform a series of vital disaster mitigation and preparedness tasks in-between disasters, working closely with the most politically, socially, or environmentally disenfranchised communities. The need for such activities was clearly demonstrated in the communities where GMA worked post hurricane Katrina. To help address this need, GMA will work with local communities to encourage their sense of map ownership and Geo ERV ownership, particularly by having them help with accurate data collection. In essence this will encourage them to be part of the process of making maps that have ‘real meaning’ to the people of their own community and one which will help everyone, including all politicians and voters, to see more clearly where to locate humanitarian and technical assistance, for example small family business investments, schools and environmentally sustainable housing.

## 2. Number of Americorps\*VISTA Members and Project Mangers requested

GMA requires twelve paid personnel, four per year per team, to develop a ‘Geographic Emergency Response Vehicle’ or ‘Geo ERV,’ which will be a mobile ‘office-cum-home’ out of which data collection and mapping will emanate, not least when there is a ‘full-on’ disaster.

- i) Vista Project Manger x3 - to organize and help deliver the technical and marketing plans and host the conferences, with an extensive sales and marketing career
- ii) Vista Researcher and Disaster Expert x3 – to help find contacts, build database for conference(s) presentations, organize and maintain the website, support the Manager and other Vistas with real disaster knowledge
- iii) GIS specialists x3 – to lead GIS training support the Manager and other Vistas
- iv) Technical electronics specialists x3 – to support the Manager and other Vistas

These individual personnel would join the team in a staggered start lasting up to three

months, so that hand-over periods between individuals in the four person teams would constructively overlap.

Ideally the Vista Manger will join first, with the second person being the Researcher, to join the project will be the GIS specialist. GMA has good links with the US GIS Corps, which has many skilled volunteers, itching to be of service.

GMA anticipates the project will take about 36 months from inception to launch. This represents twelve AmeriCorps\*VISTA members, in 3 teams of 4 people, each working for one year, with a staggered start and end.

## **C. Strengthening Communities**

### 1. Description of how the project will help to bring communities out of poverty

A major goal of this project is to minimize the impact to victims of natural disasters in New Orleans and environs, which is totally complementary with another major goal, namely to befriend and work with local communities in-between disasters to improve their situations. This second goal will mean that local communities will help create maps that clearly show the spread and depth of problem(s) they face and where possible have solution(s) overlaid, to help illustrate how local communities might start to solve them. Maps requested and made for and with city leaders, church organizations and 'small town heroes' will enable them to advocate more effectively for the support for their communities.

Community mapping is a vibrant way of telling a neighborhood's story. It can highlight the rich array of neighborhood assets, analyze the relationship between income and the location of services, or document vacant lots and buildings. Community mapping does this in order to support social and economic change on a community level. Mapping is a powerful tool in two ways: (1) it makes patterns based on place much easier to identify and analyze and (2) it provides a visual way of communicating those patterns to a broad audience, quickly and dramatically. The central value of a map is that it tells a story about what is happening in a given community. This understanding supports recovery in the aftermath of disasters such as hurricane Katrina.

An example of this is an analysis of family based industries, often in the service sector, over a large geographic area. Ratios of numbers of employees in a given service sector, per thousand head of population, in a small area, can be acquired. Over a larger area, an average ratio, a 'standard ratio' may be produced for a given sector. This will allow a numerical comparison to be made with actual ratios, so that map may be produced which illustrates where market gaps may exist for a given population in its own small geographic area. 'Gaps' that low cost training and equipping *from other programs* might help to plug.

### 2. How communities will be involved to help ensure sustainability

After Katrina, GMA partnered with a rural Catholic community at a village called Dedeaux, situated north east of New Orleans and 12 miles due north of Bay St. Louis.

This village is relatively poor and under-populated and as a result of these factors claims it is poorly represented in the wider area, including the majority living on the coastal strip to the south, which probably therefore obtains more funding for humanitarian intervention.

Mapping of the social situation in Dedeaux is something that this community would welcome as a tool to 'put them on the map.' When GMA was collecting data after Katrina, two or three motivated members of their community shared their transport and time and church accommodation, to help with data collection - this is exactly the type of capacity building and partnering with local communities that will be possible to develop in-between disasters. This type of community involvement leads to sustainability of project activities.

Community mapping initiatives could also be initiated for AIDS clinics, mother and child centers and other initiatives, that if well mapped, can help towards breaking the health and poverty cycle in-between disasters.

### 3. Collaboration with other national service programs

In the course of implementation of the GMA/UNO project, community needs will be identified, and opportunities for collaboration with like-minded national service projects will be pursued.

## **D. Recruitment and Development**

### 1. Methods and challenges to recruiting Americorps\*VISTA members:

GMA has previous experience working with Americorps\*VISTA members. Ten to fifteen AmeriCorps\*VISTA members from Biloxi and Pass Christian, Mississippi, worked successfully for and with GMA in 2005, including Josh Smith, Ben Lewis, Erin Rohan, and others.

At the outset, the project will have clear objectives with clear milestones, making all roles and responsibilities clear for personnel recruitment. In addition the project will require a large degree of self-supervision by the AmeriCorps\*VISTA members themselves. Therefore their selection on the basis of maturity of character and impetus to plan and act as responsive and well-rounded team members will be vital.

GMA will have Rupert Douglas-Bate interview the proposed AmeriCorps\*VISTA members by phone. At the beginning of the project he will make every effort to personally interview the Project Manager and ensure they are properly launched with a work plan containing milestones. He or his appointed representative from GMA would also be present at the marketing conferences.

### 2. Transportation needs

Vista Americorps is willing to pay a reasonable transportation allowance, beginning in the second quarter of the project. Until then any local project-related travel will be payable by GMA at a reasonable/flat allowance rate which will be negotiated in advance.

### 3. Orientation and training activities for Americorps\*VISTA members:

GMA and UNO cannot provide a structured training program for AmeriCorps\*VISTA members, however it will work with them to evolve a structured plan for how best they use their time, to achieve the desired outcome. The GMA and UNO partnership will be look after them in a Supervisory role.

GMA envisages the recruitment of older personnel, and there is excellent precedent for this, since after the Katrina and Rita disasters, the majority of the aid personnel working for the Southern Baptists and the American Red Cross out of Covington, were of middle aged seniority. It seems from anecdotal evidence that the reason older personnel came along to help, was because they had pensions and homes paid for back home and few if any immediate responsibilities for children. They also brought with them a wealth of experience, insights and calmness, which were indispensable. The exception to this will probably be the GIS specialist, since the GIS industry has only been around for 10 years.

Of the four person team, one of them will be the informal leader or Project Manager, under the Vista Supervisory role provided by Professor Juana Ibanez and Rupert Douglas-Bate. It is envisaged that this person will have a 'pastoral heart' and be a rounded, well-trained and experienced personality, like so many of the aid workers mentioned above.

The Project Manager that is selected will be able to input a lot of their own experience of planning and operations into the structured plan for the team. Indeed all the team members will contribute towards it, thus making it a plan that is owned by them and therefore more likely to be delivered successfully by them, as well as passed on by them to new Vistas.

GMA will be able to certify at the end of the year the results that were achieved and on behalf of Vistas, to act as a reference to future employers.

## **E. VISTA Assignment Description**

### 1. Tasks and activities Americorps\*VISTA members would be asked to perform

#### **Year 1**

The project will be split into three phases, which will splice into one another.

#### **Phase1**

The four person AmeriCorps\*VISTA team needs to be carefully recruited for the best blend of complimentary teamwork, marketing, technical and organizational skills.

Working closely with the University of New Orleans and GMA, the AmeriCorps\*VISTA team will firstly establish project objectives and boundaries and then research and write a) a technical plan and b) a marketing presentation and c) an operational plan. GMA and UNO will review and help in the completion of these

plans.

Throughout the project the AmeriCorps\*VISTA team will be able to work out of UNO offices in New Orleans and also when necessary out of the GMA offices in Silicon valley at The Enterprise Network of Silicon Valley in Santa Clara. They will be based in New Orleans.

UNO and GMA will review and help in the completion of this phase.

Estimated time from start to completion: 2 months.

Estimated time for recruitment of all four personnel: 3 months.

## **Phase 2**

The AmeriCorps\*VISTA team will then make a list of 400+ potential supporters, of all types, from industry, foundations and government. GMA already has its own list of helpful contacts to base this upon.

Specific donors will be approached for the equipment they may be able to provide for free i.e. Canon for photocopiers, Suzuki for motorbikes, Cannondale for mountain bicycles. According to their donation, donors will be offered exposure branding on the vehicle, the maps and the GMA & UNO websites, as 'added value' to their donations. Long-term support will also be much encouraged.

As 'principle founders' of the Geo ERV, the UNO and AmeriCorps\*VISTA and GMA may have their names and logos written prominently on the Geo ERV and maps, if they so wish.

Working closely with GMA, the team will set up and run two conferences, one at the University of New Orleans and the other at Stanford University.

Rupert Douglas-Bate has launched other humanitarian projects using this type of marketing methodology.

The GIS specialist in the team will begin to work part-time with students and faculty, in training for basic GIS and mapping, to begin to build a sense of community ownership.

Estimated time from start to completion: 4 months.

## **Phase 3**

The AmeriCorps\*VISTA team will then use the cash and in-kind donations of equipment and expertise and begin the build. They will carry out risk assessments and also ensure health and safety regulations are adhered to. They will test the effectiveness of both hardware and software and the general handling of the vehicle, with a view to adapting and adjusting the unit to strive towards optimal operational value and performance.

The GIS specialist in the team will continue to train at UNO, part time.

Estimated time from start to completion: 3 months.

Buffer time: 4 months.

Total time from Project start to finish: 1 year.

**Year 2:** Planning based upon Year 1 – but probably a great deal of community mapping, and possibly some disaster mapping.

**Year 3:** Planning based upon Year 2 – but probably a lot of mapping and the start of a second vehicle build.

## 2. Required skills and qualifications of AmeriCorps\*VISTA members and leaders

All personnel need to be able to demonstrate they can be highly flexible and patient, as the project will certainly involve a lot of multi-tasking, including some aspects which are highly repetitive, for example making endless phone calls to invite potential donors to the conference the ultimate objective of which is to raise funds and 'gifts in kind' for the project.

The AmeriCorps\*VISTA members will be required to be proactive self-starters on a daily basis. They will be expected to be able to choose and/or blend the most practical views and suggestions of local communities, the UNO Geography department, GMA and any other partners into the project. They will need to be the sort of individuals who can easily hand over the project once their year is complete. This idea is somewhat definitive of a good aid worker.

## **F. Program Management**

### 1. Daily supervision plan for AmeriCorps\*VISTA members

GMA is committed to working in partnership with a local partners, the University of New Orleans (UNO). Professor Juana Ibanez from UNO will act in an official Supervisory role at the field level. Professor Ibanez and Rupert Douglas-Bate, attended an AmeriCorps\*VISTA Supervisors training scheme in June 2006.

At a later stage, if it seems appropriate the UNO may co-sponsor with another local NGO, for example the American Red Cross or Salvation Army; either or both would be fine.

Ideally the first person to start the project in Year 1 will be the Manager, who will go on to recruit the GIS specialist and the Technical specialist. The Manager will need to set the tone, direction and pace for selling the project to donors. They will certainly need to have a field-tested passion for their work, a politeness and determination, and the ability to portray confidence, despite setbacks, all of which are critical sales skills. Professor Juana Ibanez from the Geography Department has volunteered to be the daily or weekly point of reference, by phone, fax and email for project management.

Furthermore, Rupert Douglas-Bate from GMA and Professor Ibanez will receive a weekly report from the Manager, detailing recent successes and challenges of the project, including its financial and gifts-in-kind status. This reporting will be done in the context of pre-agreed targets and milestones. Rupert will synthesize a quarterly report for AmeriCorps\*VISTA. Rupert will also be on hand, by email and phone, to provide direction and friendly advice or just to listen, when needed.

UNO's Professor Merrill Johnson, Ph.D, has volunteered to help Professor Ibanez. Dr Johnson is the Associate Dean for the UNO and is Professor of Geography at its College of Liberal Arts.

## 2. Advisory Council to ensure representation of the community served by the project

A list will be submitted to the Corporation before the end of the first quarter of the project.

## 3. Other organizations who will host/supervise Americorps\*VISTA members

GMA is keen that the University of New Orleans (UNO) shall be involved in the entire process and take leadership of the Geo ERV, once it is built.

## 4. Monitoring and Evaluation plan for the project

Progress will be measured in achieving the project outcomes both qualitatively and quantitatively.

### i) Qualitative measures

Comments on the GMA action in New Orleans in the summer of 2005 are already listed on the website. [www.globalmapaid.org](http://www.globalmapaid.org). The Geo ERV would have on board a book for comments by aid workers, demonstrating the accomplishments and lessons learned during the course of the project.

Furthermore it the UNO Faculty and Students running the Geo ERV would want to research and survey how the maps were received and therefore carry our surveys amongst a diverse cross-section of local community members in-between disasters and aid workers and victims after a disaster.

### ii) Quantitative measures

In the summer of 2005 the social return on investment (SROI) for creating simple black & white paper maps for victims was in the order of magnitude of 1:1400. This low figure was achieved because volunteers gave their time and transport costs for free and also food & accommodation were provided by local NGOs for free. The main costs were printing.

The SROI for a Geo ERV would probably be lower as it would be doing all the printing itself on a large photocopier. This is assuming the capital outlay costs are discounted after one year, which is not unreasonable given the nature of a disaster zone.

## **G. Organizational Capacity**

### 1. Current/recent activities of GMA being undertaken to address the needs identified in the needs statement

GMA was initiated at Stanford University in 2003, as a result of a Reuters funded Fellowship by Rupert Douglas-Bate becoming registered as a 501(c) 3 in November 2004. The objective was to build a technology to capture and map humanitarian data and this was successfully accomplished. Rupert Douglas-Bate has been an international aid worker since 1989.

It was felt by the Board of GMA that the Katrina disaster required an extremely rapid response, despite not having all the resources, or having had time to train local personnel in advance. Therefore beginning at the start of September 2005 it sent in a team of 4 personnel to New Orleans (and nearby) who then recruited local personnel including some from the University of New Orleans (UNO). This joint effort resulted in 7 template maps and 50,000 copies, to assist returning victims towards the help they needed. The GMA mapping was therefore 'disaster response' and not 'disaster assessment', which was already well covered by FEMA and NASA etc.

Interestingly in Pass Christian and Biloxi young Americorps volunteers were particularly helpful in data collection and also organizing map printing and distribution.

During 2005 GMA assisted in three disaster zones:-

- a) Banda Aceh in Northern Sumatra – giving data collection equipment and training to the University of Syiah Kuala, enabling them to make maps for themselves.
- b) New Orleans – working closely with local personnel, including those from the University of New Orleans (UNO), to create maps to help victims to find their needs and also car route maps for the American Red Cross emergency food supply vehicles so they could access victims quickly and systematically.
- c) Pakistan – working with PODA, local women's rights NGO and also SUNGI a local development NGO, in both cases to make maps to show where they are working and what they are doing, so that aid workers and donors can plan and navigate effectively. Pakistan maps are now on the website.

During 2007 GMA is:-

- d) Continuing to develop plans in New Orleans.
- e) Developing a humanitarian mapping symbology set and Google earth application.
- f) Continuing to hold and develop links with Pakistan for a mapping center in Faislabad.

Rupert Douglas-Bate has over 15 years of humanitarian experience, a successful fellowship at Stanford, and he also founded a successful British humanitarian NGO similar to GMA, which is the European equivalent of GMA.

## **H. Comments on GMA's mapping after Hurricane Katrina**

From a person organizing the dishing out of hot food hurricane survivors:-

“As the leader of 10 emergency response vehicles I could not do without maps to get vehicles to the people who need hot food. This service from GMA is excellent especially as the Red Cross volunteers do not know the area.”

John de Pugh  
Emergency Response Vehicle Coordinator at Covington in Louisiana

September 2005

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“Dear Map Guys,

Thanks for the maps showing relief efforts in our community. This is a tool the public has been asking for and you have provided. I applaud your efforts. Kudos to your team!  
In His Care,

Jim Caldwell  
Pastor, Riverside Baptist Church, New Orleans  
September 2005”

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“The maps are magnificent and helpful!”

Kirk Knipp Field Director, Global Impact

September 2005

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“These maps are absolutely wonderful and can we have some more?”

Anonymous US Army Lieutenant whose men were handing out food and water to returnees. GMA gave him another 300 maps, totaling 500 maps for returnees to the City of New Orleans...

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## **I. Technical Configuration of typical Geo ERV:**

Typical hardware for the Geo ERV will be:

x1 mobile home or ex-military mobile office (repainted white). Refurbished second hand,

- with long-range fuel tanks, diesel preferred. Off-road capability preferred.
- x1 large volume photocopier — black and white plus paper supplies
  - x1 color copier - plus paper supplies
  - x2 computer workstations for computer map making  
known as 'Geographic Information Systems' or simply 'GIS'
  - x1 color laser printer for computer
  - x1 map laminator
  - x1 v-sat internet connectivity
  - x1 local wireless internet connectivity
  - x6 VHF radios with chargers and spare batteries
  - x1 air conditioning (heating/cooling/dehumidifying) unit
  - x1 small towable car
  - x2 off-road motorbikes
  - x2 off-road bicycles
  - x3 copies of ArcGIS or MapMaker software for map production
  - x6 GPS locators (hand-held units)
  - x4 single beds, stow-away type
  - x4 sets of emergency food rations for two weeks
  - x1 multi-fuel camping cooker with reserve kerosene
  - x2 ceramic filter water purification units with spare filters
  - x1 storage or operations tent
  - x1 comprehensive first aid kit
  - x1 chainsaw set for removing trees blocking routes
  - x2 electric winches front/back for muddy conditions
  - x1 comprehensive tool kit, spare tires and other spares

Should any organization or person want to donate any of the above, please contact GMA.

## **J. Funding**

Americorps\*Vista has agreed to donate over US \$80,000 in Year 1, to kick-start the project. In Years 2 and 3 similar amounts will be forthcoming conditional upon our project success.