

NATIONAL ADDRESSING SYSTEM for the
Republic of Liberia



Introduction

Addressing Homes, LLC, was created to assist in the effort set forth by municipalities, governments, and nations in updating, restructuring, or developing addressing systems. Our objective is to give homes, businesses, and organizations a legal address and establishing them in a community network that is efficient and feasible for unforeseeable future.

In order to accomplish our objectives, we developed the patent pending **Global Addressing System**, or G.A.S. When bringing together the criteria needed for this new addressing system, a number of factors seemed almost impossible to fulfill. One of these was the need for the system to be flexible. The system had to work for rural regions as well as portions of urban areas with extremely high density. Also, this flexibility had to allow for constant modification, making it possible for the addressing system to continue to evolve effortlessly with the continual change found in cities and towns.

Another element was integration, which would be incorporating a new or updated system, into an existing one. Recognizing the system in some areas could be deployed quickly, while other areas would require deployment to be implemented over time.

Also in our research, we soon understood just how important having an address was for the individual, for a family, and for a community. We needed a system that would allow for rapid deployment, but most importantly,

it was essential the system be useful and highly functional.

Of course many other factors were also considered in the research and development phase. Through determination and persistent efforts, the **Global Addressing System** was established. Highlighted below are a number of the key characteristics of the Global Addressing System:

Flexible: implemented anywhere, with ease, in constantly changing environments.

Modular: applied in various phases overtime, or through a rapid deployment.

Useful: System is efficient and functional, making it a valuable infrastructure component.

After establishing the **Global Addressing System**, the technology was developed into the **Global Addressing System Portal** or G.A.S.P. A web software solution, G.A.S.P. allows for the complete use of the **Global Addressing System**, including data management, storage and security. Additional features are accessible and can assist with a wide range of tasks.

Global Addressing System

The addressing system provides a unique numerical address for each dwelling unit, which can be as small as 8.8 feet by 8.8 feet. If more than one dwelling unit occupies an 8.8 foot by 8.8 foot dwelling space, these units will be assigned with a unit value (Suite, APT, Unit, etc.)

Geographic Zip codes are assigned, each zip code region is 11.5 miles by 11.5 miles, totaling about a 132.25 square miles. For Liberia, this creates approximately 325 zip codes.

For a dwelling that is located on a roadway, or "street", the name of the street will be included with the address. After the roadway, the optional clan name follows.



EXAMPLE:

7545 N 4995 W
Tubman Boulevard, Sinkor
062-107 Monrovia
Liberia



EXAMPLE:

5231 N. 7117 W.
United Nations Dr.
061-104 Monrovia
Liberia

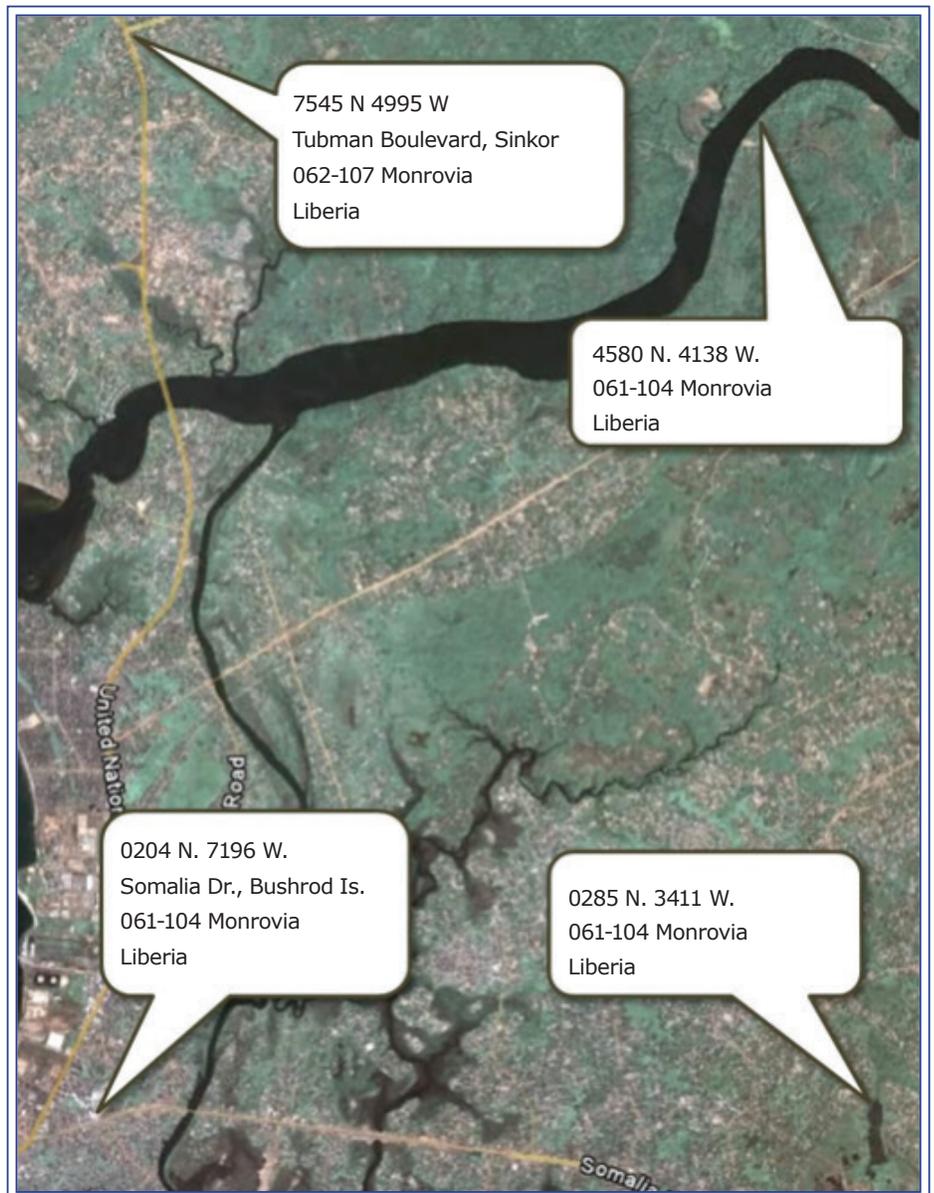
Global Addressing System

For a dwelling that is located with multi-level building, the unit number (apt#, suite#, floor#, etc.) is located after the address.

EXAMPLE:

0204 N. 7196 W.
Somalia Dr., Bushrod Is.
061-104 Monrovia
Liberia

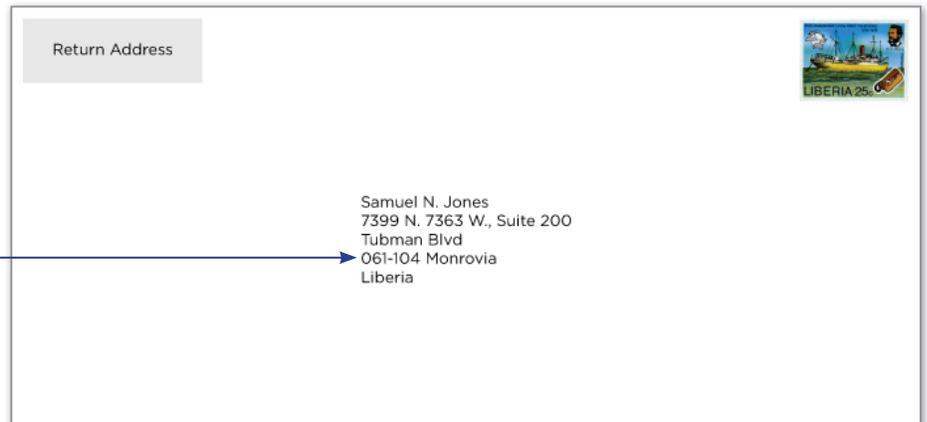
Addresses that are located on the North side of a roadway or West of a Roadway will end in an EVEN number. Addresses that are located on the South side of a roadway or East of a Roadway will end in an ODD number. For those addresses not located on a roadway, interpolation is used to the closest roadway for assigning the address or if unable to determine, the ODD and EVEN ending value will not be applied.



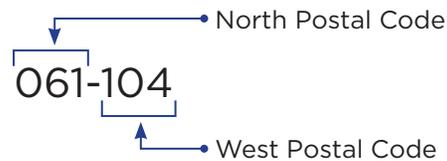
Liberia Addressing

POSTCODE TYPE AND POSITION

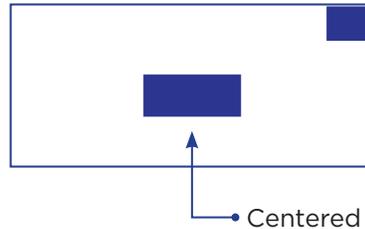
6 digits left of city
and above country



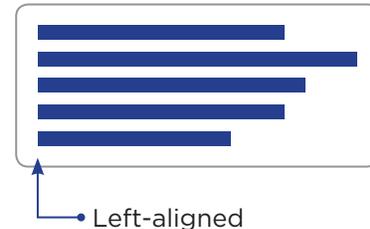
CODING METHOD



POSITION OF THE ADDRESS ON THE ENVELOPE



ALIGNMENT OF ADDRESS LINES



ADDRESS FORMAT

Correct formatting for Liberian addresses:

- The address starts with the most specific information (name and/or company name and ends with the most general (country of destination).
- First Address line must include a 4-digit North and a 4 digit West.
- Second address line optional, can include roadway (i.e. Street, Blvd., Lane, etc.) and/or Clan/Neighborhood.
- Second to last line includes 6-digit zip code and optional city.
- Last line is country, Liberia.
- A maximum of six lines (seven for international mail). No blank lines to be included.
- A maximum of 38 characters or spaces per line. There should be one space between words.
- Capital letters are recommended for the last 3 lines (4 with the country name) of the address.
- The address field should be left-aligned and without italics.

Examples

URBAN STREET ADDRESS:

Samuel N. Jones
7399 N. 7363 W., Suite 200
Tubman Blvd
061-104 Monrovia
Liberia

recipient name
address
roadway and neighborhood
zip code, city

RURAL ADDRESS:

Michael Gurley
9357 N 7670 W
069-094 Gbarnga
Liberia

recipient name
address
zip code, city

BUSINESS ADDRESS:

Ministry of Finance
Attn: Angie Roberts
1720 N. 0816 W. Suite 200
Broad Street
063-108 Monrovia
Liberia

organization name
recipient name
address and suite
roadway and neighborhood
zip code, city

PROFESSIONAL ADDRESS:

Dr. Franklin H. Woods
2471 N. 2515 W., 2nd Floor
Preston ST.
055-100 Buchanan
Liberia

recipient name
address & floor
roadway
zip code, city

P.O. BOX ADDRESS:

Mary Tucker
5073 N. 2032 W.
P.O. Box 548425
064-112 Robertsport
Liberia

recipient name
address
P.O. Box number
zip code, city

COMPLIANCE WITH UNIVERSAL POSTAL UNION (UPU) STANDARDS

Global Addressing Methodology

The **Global Addressing System Portal (G.A.S.P.)** provides an efficient and reliable system for creating a national addressing infrastructure. In response to a Universal Postal Union (UPU) initiative to facilitate the adoption of and improvement to national addressing systems around the world, **ADDRESSING HOMES, LLC** has developed software that streamlines the delivery of postal databases in keeping with UPU standards.

The UPU's criteria for planning, implementation and maintenance of a sustainable addressing system, includes these 13 guidelines (activities) which were followed by Addressing Homes, LLC in the methodology for design and deployment of G.A.S.P.

ACTIVITY 1: DESIGNING THE STREET ADDRESSING PROGRAM

This early stage activity is used to define the approach for system delivery and identify the engagement teams responsible for its implementation and maintenance. The UPU refers to these teams as "street-addressing units".

ADDRESSING HOMES, LLC engages with the governments' street addressing units to prepare them for deployment of G.A.S.P and ensure the team leaders are properly equipped to manage personnel and field activities. As required, ADDRESSING HOMES, LLC performs these services on behalf of the government

ACTIVITY 2: CONDUCTING A FEASIBILITY STUDY

Feasibility studies are conducted to consolidate an understanding of the project scope, funding and resource obligations, as well as the mapping methods and addressing conventions required to deploy a system. In this activity, the UPU is provisioning for agreement between independent municipal authorities whose local conditions often impose unique requirements on the system.

ADDRESSING HOMES, LLC supports this activity with careful analysis of all conditions which contribute to project scope. Feasibility studies can be abridged and in

some cases eliminated altogether by virtue of the G.A.S.P application. Addresses derived by G.A.S.P conform to a codification standard that applies to all jurisdictions – urban, suburban, and rural.

ACTIVITY 3: SETTING UP THE STREET ADDRESSING UNIT

This stage involves two areas of responsibility: decision-making and implementation. Decision-making falls under the responsibility of the municipal authorities which undertake and finance the program. The decisions made during the feasibility study determine the role of the street-addressing units and the level of support required from the system provider.

ADDRESSING HOMES, LLC is involved throughout the whole process. Training and development of best practices is provided during the implementation. This role can be expanded to manage street-addressing units and provide oversight of the deliverables on a long-term basis.

ACTIVITY 4: ESTIMATING COSTS AND TIME FRAMES

The objective of this activity is to estimate the cost of a street-addressing program and to design safeguards for keeping the project costs within budget. These estimates should consider the capital expenses required to deploy the system and all operating expense associated with street-addressing units. Then certain assumptions are made regarding the geographic extent and population density of the areas being addressed to derive estimates on the time required to implement.

To validate the results of the estimate and reconcile any variances, the UPU recommends a simulation run of the target system. By automating many of the time-intensive manual processes typically required for implementing an addressing system, G.A.S.P is able to raise the accuracy of project cost estimates and eliminate many sources that contribute to a variance.

**ACTIVITY 5:
DEFINING THE SCOPE OF THE PROGRAM**

This activity is used to determine the scope of the street-addressing program by comparing the resources available with coverage of planned activities. The results of this phase are intended to resolve key issues – a) prioritizing the neighborhoods/areas that are to receive addresses; b) the coverage of the street addressing program; and c) the definition and location of the pilot implementation.

The scope of the program is evaluated and approved by the supervisory committee during the feasibility study refined during the implementation phase.

**ACTIVITY 6:
CHOOSING A CODIFICATION SYSTEM**

The purpose of this phase is to adopt a codification system that meets the criteria for improving navigation throughout the city and making signage visible for streets and buildings. The codification system selected by the consultant (in the feasibility study) is subject to approval by the supervisory committee. Consideration is given to how the system supports the task of: a) dividing the city into zones; b) identifying streets; c) numbering streets; d) numbering buildings and e) handling special cases.

ADDRESSING HOMES, LLC has researched each of these requirements in depth and incorporated essential logic into G.A.S.P algorithms that provides a consistent and practical treatment for codification in all countries and geographic locations.

ACTIVITY 7: MAPPING

The objective of this activity is to create an address map at a scale that allows for visualization of streets and neighborhoods, their toponymy, administrative boundaries and principal buildings. The resulting map is applied to street annotation to derive a signage.

The UPU defines six tasks which comprise this activity, each a function of cartography and map generation. The base map solution adopted by G.A.S.P obviates these tasks altogether and allows for visualization of the streets, boundaries and buildings at any scale.

**ACTIVITY 8:
SURVEYING AND NUMBERING DOORWAYS**

The stated objective of this phase - to number building doorways and conduct a survey – is considered the most time-consuming and labor-intensive aspect of the addressing system implementation.

The UPU lists 5 prerequisites for conducting the survey all of which are supported by **ADDRESSING HOMES, LLC** through supervision of street addressing-units or deployment of **ADDRESSING HOMES, LLC** staff. Depending on the scope of the questionnaire and type of buildings and structures scheduled for survey, this effort can be reduced through visual observations made at the time the addresses are collected and assigned.

ACTIVITY 9: RECORDING ADDRESSES

This phase supports two objectives: a) to create an address directory based on the findings of the survey; and b) to make it available to government agencies and utility providers who combine this data with supplementary information for other purposes. Examples of how the survey findings may be analyzed include number of households/doors by neighborhood and types of business activities by neighborhood.

G.A.S.P provides default fields in the address database for classification of structures based on use, occupancy and ownership or business name. Additional fields can be provided to support specific requirement as determined by the supervising committee.

ACTIVITY 10: INSTALLING STREET SIGNS

The objective for installing signage is to designate each street by name and/or number at street intersections. The type of street sign and placement (i.e. on building faces or posts) is generally driven by budget.

ADDRESSING HOMES, LLC works in an advisory capacity with the supervising committee to determine the most effective option for conducting this activity. As required **ADDRESSING HOMES, LLC** is prepared to procure the sign material and perform the installation.

ACTIVITY 11:
PRODUCING THE ADDRESS MAP AND STREET INDEX

This objective responds to the need for printed maps which are made to various government entities and the general public. The UPU advises that this activity be coordinated around a media campaign (Activity 12) that promotes the street-addressing program and builds support for the survey.

G.A.S.P provides utilities for generalizing maps and street indexes at any scale and printing selected output.

ACTIVITY 12: CONDUCTING A MEDIA CAMPAIGN

The objective of the media campaign centers on keeping the public informed. The UPU encourages dissemination of information about the substance and scheduling of the street-addressing program as a vital resource for achieving the goals of the program. Key audience targets include municipal authorities, government departments and ministries, business and utility operators and civic leaders.

Media campaigns are typically conducted by advertising and marketing agencies. ADDRESSING HOMES, LLC supports the development of these campaigns with maps, project schedules and details regarding the implementation.

ACTIVITY 13:
MAINTAINING AND ADAPTING THE SYSTEM

The objective of the final phase of the UPU's street-addressing methodology is to ensure ongoing operation and content updates in the addressing system. This activity is particularly important in urban areas which are undergoing continual development. To protect against obsolescent after the initial implementation, the UPU recommends that municipalities adopt an action plan and budget for ongoing maintenance.

ADDRESSING HOMES, LLC can help governments define the scope of maintenance responsibilities and get those services incorporated into administrative departments. Alternatively, ADDRESSING HOMES, LLC provides services for oversight and performance of those tasks directly.