

**Government of Guam  
Fiscal Year 2018 Budget  
Department / Agency Narrative**

**FUNCTION:** Land and Housing and Natural Resources

**DEPT. / AGENCY:** Department of Land Management – Land Survey Division

**MISSION STATEMENT:**

The purpose of the Division of Survey is to pursue the survey of public lands, to acquire certificates of title through the land registration process, to establish and maintain island-wide horizontal and vertical control networks, to develop and maintain an accurate land cadastre program, and to efficiently administer the map review process to ensure that all surveys conducted on island meet the standards set forth by regulations.

**GOALS AND OBJECTIVES:**

1. **CADASTRATION:** To maintain and supplement a Land Square Grid System (Guam Map Grid 1993) and land cadastre system.

Establish an accurate land cadastre system through the use of Geographic Information System (GIS) and Computer Aided Design and Drafting (CADD) Technology. This computer-driven land cadastre program will be necessary to keep up to date with constantly changing information that affect the cadastre.

Using GIS/CADD, prepare digital maps of boundaries of all lands owned, controlled or in possession of the government of Guam, or which may hereafter be acquired, controlled or in possession of the government of Guam, or of private lands which are to be acquired by the government of Guam through purchase or condemnation.

Map all real properties belonging to the government of Guam for which certificates of title have not been issued, in order to accomplish the registration of such properties.

Place all parcels of lands on a cadastral map clearly illustrating government and private lands.

2. **PUBLIC LANDS REGISTRATION:** To survey and map all real properties belonging to the government of Guam for which certificates of title have not been issued in order to accomplish the registration of such properties.

Select from the remaining parcels of government land those parcels of highest land values and proceeding to survey them in order of value, on a parcel basis, until all government lands are surveyed.

Conduct a study of the patterns of land ownership and of public land use on Guam in order to identify those areas where the public may be able to establish a legally sufficient claim for ownership for use thereof in a land registration proceeding referred to as *Monte Sin Dueño*. Testify in private land registration court proceedings to ensure that privately claimed lands do not overlap with or adversely affect government land.

3. **MAP AND SURVEY RECORDS AND REPRODUCTION:** Maintain and preserve current records of surveys and maps of the island in accordance with the Subdivision Law and the Land Survey Manual.

Reproduction of graphical illustrations as requested by customers and the general public.

Participate in the Document Imaging Management System (DIMS) by imaging maps, records of surveys, and other graphical illustrations.

Implementation and/or update a fee schedule for the following:

- a. Reproduction of survey maps and of other required documents;
- b. Update and revise the “*1966 Manual of Instructions for the Survey of Lands in the Territory of Guam*” to conform to modern surveying practices and technology;
- c. Update the “*1993 Guam Geodetic Network (GGN) Horizontal and Vertical Control Book*”.

4. **GUAM GEODETIC NETWORK (GGN):** To maintain and densify the island-wide horizontal and vertical control networks.

The Guam Chief of Cadastre is responsible for the administration of the GGN and the uniform procedures for the survey of real property within the island.

Establish a uniform system of primary, secondary, and tertiary geodetic network controls known as the Guam Geodetic Network (GGN) in accordance with the Federal Geodetic Control Committee’s Geometric Geodetic Accuracy Standards and Specifications for using GPS Relative Positioning Techniques.

Establish uniform procedures for the survey of public and private lands within the island in conformity with the provisions of the Guam Geodetic Network.

Maintain and preserve the geodetic control stations.

Complete the calculations and field traverses necessary to ensure complete establishment of the GGN, including the referencing of all markers, the integration of such system with those previously established on Guam, and the restoration and/or replacement of all monuments destroyed since the initiation of the system.

5. **SURVEY MAP REVIEW:** To establish a uniform procedure for the survey of public and private lands within the island in conformity with the provisions of the Subdivision Law and the Land Survey Manual and sound surveying practices.

Develop uniform specifications of survey data to be included on maps, plats, sketches or other plane pictorial representations of land.

Implement a fee schedule for the processing, review, and approval of survey maps that require recordation.

6. **OPERATIONAL FIELD SURVEY:** Provide for an area re-plat survey, to mark and reserve legal and adequate access right-of-way to the lots within an area, adjust property lines to give each lot a shape that is conducive to its maximum utilization with the least disturbance of existing uses, describe individual lots by metes and bounds description to create a basis for clear title, and provide traffic circulation pattern that will give the residents ease of movement within the area as well as suitable connections with other areas.

Survey, locate, mark and map land boundaries, preparation of metes and bounds descriptions and all other work related thereto, of all land owned, controlled or in possession of the government of Guam, or which may hereafter be acquired, controlled or in possession of the government of Guam or of private lands which are to be acquired by the government of Guam through purchase or condemnation.

Verify questionable boundaries of proposed survey maps prepared by private land surveyors submitted to the Department for review and approval.

### **IMPACT STATEMENT:**

The Chief of Cadastre/Guam Chief Surveyor is the chief official of the Division of Survey and is charged with the overall supervision of the personnel and functions of the Division.

Sixteen (16) employees, including the Chief of Cadastre, currently staff the Survey Division with an authorized twenty-one (21) FTE's. With the volume of work the Division has, the division is hard-pressed to perform its jobs effectively, and more so, if one or two are on leave thereby disrupting the daily operations of the division of its assigned tasks. In order to effectively and legally carry out the division's administrative and technical duties and responsibilities, and to assure professional development and upward mobility for the engineering technicians, the Division has submitted the necessary paperwork to the

Department of Administration to re-establish the Surveyor Series positions and to establish the Deputy Chief Surveyor position as mandated by Public Law 25-92.

Furthermore, with the military build-up and with anticipated retirements of long-term employees, it is imperative that we recruit technical and professional staff to meet the demands placed on the Division as more information, data, and services are requested from the Division. The Division has been in need of recruiting for the positions of two (2) Cartographic Supervisors; one (1) Surveyor Supervisor; five (5) Engineering Technicians/Engineering Aides and the creation of the Deputy Chief Surveyor.

The vacant positions are direly needed, more so, since the military buildup is in process. Surveyors, planners and technicians would be tasked to tackle the first stages of the military buildup and development.

Additionally, with ever changing technology, it is important to modernize and replace with new equipment and technology as the demands on existing equipment are strained and may reach the point where the equipment cannot be repaired because of obsolescence.

Furthermore, the Division has specific requirements of software unique to the survey profession. These software requires annual upgrade/replacement.

The above are the principal components that would go a long way towards satisfying the goals and objectives of the Survey Division to deliver its essential services to the public in the coming years.

### **PROGRAM BUDGET PLAN:**

The Division of Survey requires additional personnel and equipment in order to fulfill its mandates. The Survey Division collaborated with Department of Revenue and Taxation (DRT) consultants to complete the mapping phase of the Department of Revenue and Taxation's Computer-Aided Mass Appraisal (CAMA)/Guam Property Assessment System (GPAS) Project. The Division has reviewed the digital maps provided by DRT's consultants using existing personnel. The review indicates that the mapping work meets DRT's mapping requirement; however, additional editing needs to be performed to meet the Survey Division's more accurate Cadastral mapping standards. Unless additional personnel are recruited, it would be very difficult to complete the editing; furthermore, additional trained personnel would be needed to sustain and continually update the mapping project. In addition to the need to recruit additional technical and professional staff, the Division will require modernization and replacement of its equipment, including specialized field computers and survey instrumentation and software upgrades to include the latest GIS and Survey CAD software at a cost of approximately **\$100,000**.