Geographic Information Systems
Summary of
Policies and Procedures of the
Gila River Indian Community GIS

Developed by:
Geographic Information Systems Team
Date: October 2022
Team leader:
Leslie Stovall, GIS Manager
GIS team members:
Sara Lucas, GIS Technician
Jeremy Moore, GIS Technician
Bishan Zhao, GIS Technician

Last Updated: 8/22/2023
This document does not include all functions of the GIS Program as of 9/7/2016. To be updated periodically.

Contents

1.0 Introduction and Mission Statement

Gila River Indian Community (GRIC) Geographic Information Systems (GIS) will maintain distributed geodatabases/GIS with integrated data through the coordination of the departments that exist within GRIC, and to the extent possible, GRIC businesses and associated activities/programs/projects. GRIC GIS will be a strategic resource for the GRIC executive/administrative body (to be referred to as the "Authority", see definition in section 4.1) and its activities that involve spatial (geographic) data, capabilities and technologies, Community members, industries, local, state and/or federal governments.

Geographic Information Systems Mission Statement

The mission of the GRIC Geographic Information System (GIS) is to coordinate the development and management of the Geographic Information System (GIS) and geographic data for the Gila River Indian Community. We seek to ensure that Gila River's decision-makers and others have access to geographic information that is complete, timely, accurate, and reliable. We promote the use of GIS and related technologies to more effectively address resources of the Gila River Indian Community.

2.0 Vision

GIS data will be readily available and accessible throughout the Authority and, to the extent possible, the public. GRIC GIS will strive to provide the highest quality geospatial data for use in Community decision-making and as an informational resource for Community members. GIS will continue to evolve as technologies change.

3.0 Objectives

GIS will provide coordination at the Authority level to share GIS resources, including GIS personnel, hardware, software, data, procedures and training. GIS at the desktop level will be made available, with training, to select management, supervisory, and division personnel
GIS will maintain comprehensive Community-wide, plans/standards/guides for GIS data management, protection and preservation. GRIC GIS will implement these standards throughout the Community

4.0 Organization

This section is organization structure is organized between GIS and the Hierarchy, stated in order includes the following Authority, GIS Team, Finance, GIS Core Group and Management Information Systems.

4.1 Executive Management

The authority determines/ endorsees policy concerning GIS in-line with the GRIC general Policy. Authority includes Governor, Lt. Governor, Community Manager and Department Director

4.2 Finance and Administration GIS

The Director of Land Use planning and Zoning reviews the GIS Manager's recommendations and approves or forwards them to Authority

4.3 GIS Core Group

GIS Core Group is a standing, cross-departmental committee that develops the strategic direction of GIS and is consistent with the vision and mission of the Gila River Indian Community.

4.4 Gila River Indian Community Geographic Information Systems

The GRIC GIS Team is supervised by the GIS Manager and coordinates GIS activities within the Community. Responsibilities of the GIS Team include, but are not limited to: implementing GRIC GIS policies; providing and/or coordinating GIS technical support and resources; assessing the needs of the department's customers and stakeholders (i.e., human resources, software, hardware, standards, guides, procedures, data, etc.); conducting research, promoting the development of GIS throughout the Community, managing/maintaining/sharing metadata; coordinating the development of geospatial/non-spatial data and geodatabases within the Community.

4.5 Divisions

The GIS Team will assist the divisions/departments in developing GIS capabilities. The divisions/departments will strive to integrate GIS with existing and future decision making processes.

5.0 GIS Procedures

5.1 Thoroughfare Naming Procedures

The main objective is to provide clear street names in accordance with NENA standards. Names can be submitted in the O'odham, Pee Posh and/or English language for the Gila River Indian Community for use in GRIC Public Safety systems and Community GIS. Any unnamed thoroughfare(s) shall be named by the District in which they exist and must comply with the Thoroughfare Naming Procedure per GIS Policies.

5.2 Addressing Procedures

To ensure all structures that requires a physical address are consistent with the Gila River Indian Community physical addressing system, the GIS Team uses an established address assignment process. Requests for address verification can be submitted by tribal entities and/or Community members. Once a request for addressing is submitted, the GIS manager will approve or deny. If necessary, GIS will contact the requestor for more clarification on the request.

For **Tribal Subdivisions** the verification process is a coordination between the Subdivision and GIS teams.

Allotted land address verification requests require a survey plat be included upon submission. Inconsistencies between documents will require the requestor to contact BIA.

Once the requestor has provided the required forms, and the request has been approved for processing, a letter or memo will be issued as verification of a physical address. Upon process approval and completion, the requestor will be contacted for pick up (unless otherwise noted). *NOTE*: After two weeks of attempting to notify the requestor, the request can be cancelled.

Detailed addressing procedures are available upon request and approval from GRIC GIS.

5.2.1 Addressing Tribal Subdivision / HUD Subdivisions

Each lot in a Tribal subdivision is assigned a physical address. In lots containing multiple structures, each structure is assigned a unique, physical address.

5.2.2 Addressing Allotments

Addressing structures on Allotments requires the land owner to submit proper documentation from the Bureau of Indian Affairs (BIA), in addition to the GIS request form. A homesite lot less than a quarter acre will be assigned a physical address. In the case of lots larger than a quarter acre, containing a structure, the physical address will be assigned to the structure, not the lot.

5.2.3 Addressing Tribal Scattered Lots

Physical address requests for Tribal Scattered Lots require a current survey plat to accompany the request form. If the lessor does not have a survey plat, GIS will request a survey plat from the Subdivision Team (if available).

5.2.4 Physical Addressing Procedure – Industrial Parks or Commercial Development

Industrial Park addressing is determined based on the structures within the lot. The Industrial Park submits a requested address. The address is then reviewed by the GIS Team to determine if it follows physical addressing procedures and is approved or corrected to an acceptable alternative.

Commercial Development submits a request to the GIS Team, similar to the process for a Community member. That request is then processed and approved/denied following normal addressing procedures.

5.2.5 Displaying Physical Addresses

Physical addresses displayed must correspond to the GRIC physical addressing system; no other address numbers should be displayed and cannot be smaller than 4 inches. Numbers must be clearly displayed on buildings and visible from the street.

5.3 Mapping Procedures

Mapping requests require the completion and submission of a map request form. This form should include as much detail as possible regarding the information being requested (area, features, etc). GIS will review the request and contact requestor, if more details are needed for clarification. Once request is approved by the GIS manager, a Technician will design and develop the map. Prior to completion, maps are reviewed for accuracy and completeness. The requestor will be notified accordingly. Requests are generally completed within a two-week timeframe, dependent on GIS Team workload and request complexity.

5.4 Field Work Procedures

GIS performs regular field work within the Gila River Indian Community. Field work consists of GPS surveying, site verifications, letter deliveries and outreach, as part of creating and maintaining geospatial data for the Community GIS. The goal is to collect accurate and error free data to be used in the Community GIS.

5.4.1 Overall Goals for Field Work

The overall goals for field work are to keep GIS data as current, accurate, consistent and complete as possible by executing data collection and update procedures to the best of our ability in a timely manner.

5.4.2 Field Work Procedures

Detailed field work procedures are available upon request and approval from GRIC GIS.

6.0 Data Quality and Consistency

In this section, the procedures and standards for non-spatial/spatial geodatabase design, development, documentation and maintenance are described.

6.1 Geodatabase Design and Development

Geodatabase are designed and developed per requirements determined by the type of data that will be contained within and the expected use. The GIS Team regularly develops geodatabases for Community use and coordinates with other Community entities in determining the appropriate type (file or sde) of geodatabase and schema design.

6.2 Geodatabase Maintenance

GIS geodatabases require adequate documentation to allow for determining appropriate use of the data. The documentation informs the potential user of the GIS geodatabase's quality and limitations, enabling proper use of the feature classes contained within. Authoring and maintaining accurate documentation is an essential part of geodatabase creation and maintenance.

7.0 Security

GRIC GIS will follow MIS guidelines for network and application security.

8.0 Hardware and Software

General guidelines for computer hardware running GIS applications are determined by two considerations: types of feature classes/geodatabases and network connection speed. The type of data used in the GIS is very important, because GIS feature classes /geodatabases, such as image data, soils data, or land cover data, can be large. This increases the need for the storage, processing power and video capabilities.

When specifying machine processor/memory, the GIS Team strongly recommends exceeding the minimum stated requirements and purchasing systems that can be easily upgraded (larger hard drives and RAM).

Moving or using feature classes/geodatabases is highly dependent upon network speed. Use of GIS data can be very network intensive. This should be taken into consideration when designing geospatial data applications.

The GIS Team obtains ESRI software from the Bureau of Indian Affairs (BIA). ESRI software is considered an industry leader within the GIS landscape. Software can be obtained independently by the GIS Team in specific instances, based on need.

9.0 Accessibility

9.1 Introduction

Facilitating stakeholders' access to geospatial/non-spatial data, and the tools used to analyze and present the data, is a core process for GRIC GIS. GIS data will be accessible to GRIC staff and possibly outside stakeholders, including Community Members. GIS resources, such as hardware, software, peripherals, training and expertise of GIS Team personnel, will be accessible to GRIC staff. Some personnel resources should be available to Community Members and other external GRIC stakeholders.

9.2 Accessibility to Data

The goals for GIS accessibility include the ability to view and query Community feature classes/geodatabases. GRIC is the sole "owner" of GIS information produced and stored on the network servers. The GIS Team is the "caretaker" of GIS feature classes/geodatabases. When necessary to make data distribution efficient, a Main Community Geodatabase for GIS feature classes will be set up. The GIS Team will develop standard procedures for the inclusion and timely update of feature classes in the Main Community Geodatabase and Departmental Geodatabases.

9.3 Accessibility to Resources

Another goal for the GIS Team is to enable all GRIC staff to increase the efficiency and effectiveness of GRIC business and decision-making processes through the use of spatial/non-data. Staff accessibility to GIS resources that include hardware, software, data, training, peripherals, and personnel will be directed towards attaining this goal.

10.0 Technical Support

Information concerning GIS activities at all levels of government and the private sector will be disseminated to GRIC staff through the GIS Team. The GIS Team will coordinate GIS support within GRIC in three main areas: user support, software support, and training.

10.1 User Support

The GIS Team will directly support feature classes/geodatabases, and will be the central clearinghouse for information about GIS feature classes/geodatabases developed at GRIC. The GIS Team will provide guidance and requirements to Community departments requesting GIS data from outside entities.

10.1.1 Software Support

The GIS Team will perform testing of GIS software that will be widely used within GRIC. Major new releases of software already in use and new software tools will be investigated for their functionality and integration into the existing GIS environment.

10.1.2 Hardware and Peripheral Support

The GIS Team will maintain a resource list of hardware and peripherals used by GIS programs within the departments of GRIC. The GIS Manager will coordinate access to peripherals.

10.2 Training

A requirement of receiving ArcGIS software will be all end users will be required to take basic GIS training, provided by the GIS Team. This training must be completed before software and access to the GIS system is given. As part of this training, end users will be shown how the GIS system is organized as well as how it works. Training on specific GIS topics relevant to department projects will be provided once basic training has been received. A review of what training is required will be assessed and training provided, if available. If not available GIS will provide resources to where this training can be found.

11.0 Funding

GRIC will support and maintain a state-of-the-art GIS facility for the GIS Team. This facility will include the latest hardware and software for workstations, scanners, plotters, GPS equipment, a workstation dedicated to data processing, workstations dedicated to training end users and other peripherals. The GIS Team should budget sufficient funds to purchase hardware and software that will achieve full range of GIS capabilities necessary to meet the needs of GRIC Divisions. The GIS Team will be responsible for establishing consistent GIS hardware, software, and training standards and will coordinate purchases within GRIC to enable consistent GIS data and technical capabilities.

13.0 Safety

GRIC GIS employees are expected to conduct business in a safe and healthy manner consistent with current law, rule, and technology. Employees are required to follow the provisions of the GRIC/LUPZ GIS Safety Manual, including use of personal protective equipment, avoiding unnecessary risk, attending regular safety training, and reporting any incidents to supervision.

14.0 Amendment

GRIC GIS will review this document annually and revise it as necessary.