

# **Service Level Policy**

by and between

**San Diego Geographic Information Source**

and

**City and County of San Diego**

**Version 1.0 Final –September 10, 2009**



# TABLE OF CONTENTS

INTRODUCTION .....	3
PURPOSE AND SCOPE.....	3
ROLES AND RESPONSIBILITIES .....	4
<i>Board of Directors</i> .....	4
<i>Management Committee</i> .....	5
<i>Executive Director</i> .....	5
<i>SanGIS Technical Advisory Board (STAB)</i> .....	5
<i>SanGIS Staff</i> .....	5
<i>City and County Staff</i> .....	6
GENERAL PROVISIONS.....	6
<i>Hours of Operation</i> .....	6
<i>Priority of Response</i> .....	6
<i>Problem Reporting Procedures</i> .....	7
<i>Reference Documents</i> .....	7
SERVICES AND METRICS.....	7
<i>Public Mapping Services</i> .....	8
SanGIS Internet Website - Availability .....	8
Public Mapping and Data Download Website – Data Update Frequency .....	8
SanGIS webmaster email and SanGIS online forum – Response Time .....	8
JPA Partner FTP Data Upload/Download Site – Availability .....	8
Project-Specific Data and JPA Partner Mapping – Response Time .....	9
<i>SanGIS Spatial Data Warehouse (SDW)</i> .....	9
SanGIS Spatial Data Warehouse (SDW) – Availability.....	9
SanGIS Data Warehouse – Currency .....	10
SanGIS Data Warehouse – Data Removal/Deletion.....	10
Support for Departmental ETL Jobs – Successful Completion .....	10
Data Distribution -- Safeguards.....	10
<i>Landbase Maintenance</i> .....	11
SanGIS Landbase Maintenance Infrastructure – Availability .....	11
SanGIS Landbase Data – Currency .....	11
SanGIS Landbase Data – Accuracy.....	12
Landbase Error Resolution – Response Time.....	12
<i>Change Control and Reporting</i> .....	12
Computing Infrastructure Change Control – Notification and Approval .....	13
GIS Platform/Environment Change Control – Notification and Approval.....	13
Spatial Data Warehouse Database Schema Changes – Notification and Approval .....	13
SanGIS Monthly Report – Currency .....	14
CHANGES TO THE SERVICE LEVEL POLICY .....	14
DISPUTE RESOLUTION.....	15
APPROVALS .....	16
APPENDIX A.....	17

## INTRODUCTION

In 1984, the City of San Diego and County of San Diego jointly initiated the Regional Urban Information System (RUIS) project in response to the increasing complexity of delivering efficient and effective municipal services to the residents of this large and growing region. The mission of the RUIS project was to develop an integrated geographic information system (GIS) to meet the needs of City and County departments and agencies that create or use geographic information.

Over 200 layers of geographic data were created through RUIS. Some of these layers are county-wide while others cover only the City of San Diego. These databases are maintained by various County and City departments and are made available to other departments through a distributed network. Several GIS applications have been implemented for use in day to day operations within the City and County. The RUIS project helped improve decision making and efficiency in local government by providing more timely information, eliminating redundant activities and by re-engineering and automating manual processes.

After 13 years of working together on data and application development through the RUIS project, the City and County decided to formalize their partnership in GIS by creating the San Diego Geographic Information Source (SanGIS) as a Joint Powers Authority (JPA). The SanGIS JPA was created in July 1997 and continues to provide GIS data maintenance, data warehousing, and public mapping functions for the participating agencies.

SanGIS has continued to use standards developed during the RUIS project as the basis for maintaining and updating data. In addition, other documents have been developed to define the data update and maintenance process and procedures that SanGIS must follow in meeting the needs of its City and County clients. SanGIS continues to update, clarify, and add to these written procedures as technology and customer needs dictate.

In January 2009, in response to client department feedback and a business process re-engineering effort (BPR), the SanGIS governing authority determined that a more formal procedure was needed to identify the specific services that SanGIS provides and to what level that service shall be delivered. This Service Level Policy is intended to meet that requirement.

## PURPOSE AND SCOPE

The purpose of this Service Level Policy (SLP) is to define in specific terms three items:

1. The services that SanGIS provides to the City and County
2. The method by which those services shall be measured
3. The minimum standard of service that must be met in delivering those services (the metric)

This document also seeks to define, in general terms, the roles and responsibilities of the service provider (SanGIS), the end users, and the governing bodies in monitoring and meeting these service levels. Furthermore this document provides guidelines on prioritizing services at those times when satisfying one service level metric may conflict with meeting another.

The scope of this document covers three main service areas for which SanGIS is responsible:

1. Landbase maintenance system
2. Geographic data warehouse maintenance
3. Regional geographic information services

These service areas are adequately described in the [SanGIS Policies and Procedures Manual](#) and the reader is referred there for further detail.

## **ROLES AND RESPONSIBILITIES**

SanGIS is a Joint Powers Authority of the City of San Diego and the County of San Diego. SanGIS is governed by a Board of Directors composed of one senior management member from each body. The Board of Directors meets on a periodic basis and determines strategic direction for the SanGIS JPA and directs the Management Committee by setting goals and objectives.

The Management Committee has been delegated certain powers from the Board of Directors in order to facilitate day to day management of the JPA and to implement strategic goals and objectives as set out by the Board. These delegated powers include signature authority for expenditures within certain limits and the authority to initiate operational changes and other projects. The Management Committee oversees the overall operations of the JPA on a weekly basis and implements the decisions of the Board of Directors by either direct action or by giving direction, goals, and objectives to the SanGIS Executive Director.

The Executive Director oversees daily operations of SanGIS and makes and executes decisions pertaining to those operations. The Executive Director takes direction from the Management Committee and executes their plans, goals, and objectives. The Executive Director is the primary management authority for SanGIS operations.

The SanGIS Technical Advisory Board (STAB) is an advisory body made up of GIS consumers and users from the City and County. The STAB advises the SanGIS Executive Director on technical matters related to geographic data development and maintenance, data storage and access, and standards for data, software, hardware, and network components.

The following sections describe, in general, the roles and responsibilities of the participants in the SanGIS JPA in meeting, monitoring, and reporting on the services and service levels described in this SLP.

### ***Board of Directors***

The Board of Directors provides general oversight of this SLP and is ultimately responsible for its successful implementation. The Board is responsible for insuring that the provisions of the SLP are met and that the services specified are provided at the agreed levels.

The Board of Directors is the final authority for this SLP and must approve any and all changes, additions, or subtractions to this policy. The Board may also direct changes be made and/or service levels to be added, subtracted, or altered.

The Board of Directors is the final arbitrator of all disputes regarding this SLP. The Board of Directors shall hear disputes related to the SLP in accord with the escalation procedures outlined in the [Dispute Resolution](#) section. The decision of the Board of Directors is final for all matters regarding this SLP.

### ***Management Committee***

The Management Committee is responsible for verifying that the SLP is being adhered to and reports to the Board of Directors on its implementation. The Management Committee monitors the SLP metrics on a regular basis, reports those metrics to the Board of Directors, and directs the SanGIS Executive Director to make changes when metrics are not regularly met.

The Management Committee monitors the implementation of the SLP and verifies that goals are met through regular communication with City and County end users. The Management Committee makes formal recommendations for changes, additions, and subtractions to the Board.

The Management Committee is the first arbitrator of disputes regarding the SLP. Disputes that cannot be resolved by the Management Committee are formally escalated to the Board for final remediation.

### ***Executive Director***

The SanGIS Executive Director is responsible for ensuring that the terms of the SLP are incorporated into daily operations of SanGIS staff and for monitoring the service levels on a daily basis. The Executive Director is ultimately responsible for implementing the requirements of the SLP in daily operations and for seeing that the metrics are met.

The Executive Director is responsible for developing reports on metrics for the Management Committee per their requirements and other reports that the Executive Director finds useful for daily management. The Executive Director provides feedback to the Management Committee on goals that are not met and actions taken to correct the missed metrics.

On a daily basis the Executive Director is responsible for implementation of this policy in accord with the goals and objectives set by the Management Committee. The Executive Director may make recommendations to the Management Committee for changes, additions, or subtractions to the SLP. The Executive Director shall escalate to the Management Committee any disputes about the SLP that are brought to his/her attention.

### ***SanGIS Technical Advisory Board (STAB)***

The STAB has generally the same responsibilities as the City and County staff outlined in that section below. In addition to their responsibilities as City and County staff the STAB reviews technical changes to the SLP and makes recommendations for their implementation. The STAB may bring requests for changes to the Management Committee and may represent the users' viewpoint in disputes.

### ***SanGIS Staff***

The SanGIS staff is responsible for incorporating the provisions of the SLP into their daily work routine as directed by the Executive Director. The SanGIS staff shall report on meeting SLP goals and metrics as required by the Executive Director.

SanGIS staff shall report conflicts, disputes, inconsistencies, unreasonable metrics, and other problems with the SLP to either the Executive Director or the Management Committee. SanGIS staff may recommend changes to the SLP to either the Management Committee or the Executive Director.

### ***City and County Staff***

City and County staff (end users) have the same responsibilities as SanGIS staff in regards to pointing out errors, conflicts, inconsistencies, unreasonable metrics, etc. These matters should be reported to the SanGIS Executive Director or to one of the Management Committee members when discovered.

City and County staff may also make recommendations for changes to the SLP through the Management Committee, the STAB, or the Executive Director.

It is also the responsibility of the City and County staff to notify the Executive Director and/or the Management Committee when a metric is not being met, and to provide backup data and evidence of the missed metric.

## **GENERAL PROVISIONS**

The following General Provisions apply to all services provided by SanGIS to any and all customers. These General Provisions shall usually take precedence over specific metrics outlined in the [Services and Metrics](#) section. However, disputes shall be handled in accord with the [Dispute Resolution](#) section.

### ***Hours of Operation***

SanGIS operates on a standard eight hour, 5 day a week basis. Standard Business Hours of operation are 8:00 am to 4:30 pm Monday through Friday and closed on City and County holidays. SanGIS does not operate on a 24 by 7 basis and does not provide support outside of the standard working times, on weekends, or on holidays. Issues, data corrections, and updates shall be handled during the normal working hours unless provisions are made, in advance, with the Executive Director to handle these changes outside of normal working hours.

SanGIS endeavors to maintain its editing environment, web sites, file, print, and messaging services, FTP sites and other computing infrastructure so that it is available at all times except when maintenance or repair activities are required. However, SanGIS is not structured to provide guaranteed uptime metrics outside of standard business hours. SanGIS will maintain uptime outside of standard business hours on a best effort and basis.

### ***Priority of Response***

In general, priority is given to correcting reported problems with production systems first. Production systems include: the landbase maintenance environment; the online SanGIS spatial data warehouse (SDW); the private and public FTP sites; the SanGIS web site including the interactive mapping feature; and the SanGIS email, file, and print server environment. When simultaneous problems are reported with the production systems, the Executive Director shall determine which problem has priority.

Data corrections and updates shall generally be handled on a first in/first out basis except when a bona fide public safety issue is raised. Public safety related updates shall be given priority provided the agency submitting the correction requests that the update be given priority.

Data corrections and updates shall be suspended if necessary to apply resources to correct production issues. The SanGIS Executive Director shall determine if and when the data updates and corrections must be suspended to handle production related problems.

### ***Problem Reporting Procedures***

Problems related to SanGIS production resources (FTP, SDW, website, maintenance environment) should be reported to SanGIS via a phone call to the main number as soon as the problem is noticed and/or a message sent to the SanGIS webmaster ([webmaster@sangis.org](mailto:webmaster@sangis.org)).

SanGIS seeks to remain flexible in data error reporting procedures in order to accommodate various customer levels of sophistication and familiarity with SanGIS. SanGIS does maintain a formal error reporting procedure and users are encouraged to follow the guidelines in that document. This document can be viewed on the SanGIS web site at [www.sangis.org](http://www.sangis.org).

In general, data errors and corrections should be reported through the SanGIS On Line Forum to ensure proper recording and tracking and to provide a method to categorize and respond to landbase maintenance issues. However, users may also call their problem in to the SanGIS main phone number, send an email notice to any SanGIS employee, or to the SanGIS webmaster ([webmaster@sangis.org](mailto:webmaster@sangis.org)). Data correction requests may also be sent via US Postal Service. All data correction requests, regardless of how received, must provide the required documentation and be submitted by the “owning” jurisdiction as described in the SanGIS [Error Reporting Procedures Manual](#). Requests that are made outside of the SanGIS On Line Forum shall generally take longer to resolve than those submitted through the Forum.

### ***Reference Documents***

End users and others wishing to learn more about SanGIS and SanGIS procedures are advised to review the documentation available on the SanGIS web site at [www.sangis.org/sangis\\_documents.htm](http://www.sangis.org/sangis_documents.htm). This site provides the latest published versions of the *SanGIS Policy and Procedures Manual*, the *SanGIS Error Reporting Procedures Manual*, and other useful information on SanGIS data and organization.

## **SERVICES AND METRICS**

The specific services and service levels outlined in this section are grouped into categories that generally follow SanGIS primary responsibilities – Public Mapping Services, Spatial Data Warehouse, and Landbase Maintenance. An additional category to cover services and metrics for “back office” changes and reports is included.

Each service and service level is presented in the following format:

<b>Service Title:</b>	Title of the service or product provided by SanGIS
<i>Description:</i>	Brief description of the service. Details are included in the description to the extent necessary to fully delineate the provided service and limits.
<i>Metric:</i>	The measurement method used to track the performance of the service including the expected standard to be met
<i>Tracking:</i>	The method used to track and report performance on the service relative to the metric standard

Where necessary, additional information is provided in a notes section to further clarify the limits of the service and/or what is or is not included in the provided service.

### **Public Mapping Services**

SanGIS maintains and manages an internet website, data download (FTP) sites for JPA partners and the general public, and an online collaboration forum for JPA partners. SanGIS also provides special data extract and mapping services to the general public on behalf of the JPA partners and, at times, for the JPA partners as well. These services are part of the SanGIS **Public Mapping Services** function and service metrics for specific aspects of these services are described here.

#### **SanGIS Internet Website - Availability**

*Description:* SanGIS maintains an internet website to display information about SanGIS, provide a venue for public access to SanGIS documents and data, to provide a method for JPA partners and the public to review SanGIS policy, procedures, budgets and reports, and provide a forum for feedback and inquiries from the public and partners.

*Metric:* SanGIS shall maintain the website(s) at 98% or better availability during standard business hours as measured on a monthly basis.

*Tracking:* Log of down times and reporting via the SanGIS Monthly Reports for uptime statistics for SanGIS website availability.

#### **Public Mapping and Data Download Website – Data Update Frequency**

*Description:* SanGIS maintains a website (<http://www.sangis.org>) to support public access to SanGIS data including an interactive mapping website. Data availability is determined by the City and County departments that provide data or by the Management Committee if the data is procured from other sources.

*Metric:* Public available data via the SanGIS internet data warehouse including the data supporting the interactive mapping applications shall be updated no less than quarterly if new data exists for any data layer published.

*Tracking:* Public mapping and data download site data refreshes shall be reported in the SanGIS monthly report and posted on the SanGIS web site.

#### **SanGIS webmaster email and SanGIS online forum – Response Time**

*Description:* SanGIS maintains and encourages use of its internet website for communication with the general public regarding errors in the data or general questions about SanGIS business and products. SanGIS also maintains an online forum accessible to JPA members for reporting data errors and discussion of SanGIS data and business issues.

*Metric:* SanGIS shall respond to e-mail inquiries to [webmaster@sangis.org](mailto:webmaster@sangis.org) and inquiries made via the SanGIS online forum within one business day of the receipt of the message.

*Tracking:* Receipt and response dates and times are shown on the properties sheet of the email or forum inquiry. SanGIS does not keep a log of responses and does not necessarily keep a copy of each response.

#### **JPA Partner FTP Data Upload/Download Site – Availability**

*Description:* SanGIS maintains an FTP site for data exchange by JPA partners. This site is separate from the public data download site that is accessed from the SanGIS website. The FTP

site is available for JPA partners to download SanGIS data and to upload their new data layers for incorporation into the SanGIS Spatial Data Warehouse.

*Metric:* SanGIS shall maintain the FTP upload and download sites at 99% or better availability during standard business hours as measured on a monthly basis.

*Tracking:* Log of down times and reporting via the SanGIS Monthly Reports for uptime statistics for JPA partner FTP servers.

### **Project-Specific Data and JPA Partner Mapping – Response Time**

*Description:* SanGIS staff creates specific data extracts or special maps on request of JPA partner end users. These requests may be made in person at SanGIS offices, by phone call, email, or via the SanGIS forum. Specific data extracts and special map products are not billable to JPA partners except for the cost of materials needed to provide the map or data.

*Metric:* Within one business day of the receipt of the request SanGIS shall respond to requestors for special data extracts or map products with an estimate of the time to create the extract or map provided sufficient information is provided to complete an estimate. SanGIS will make its best effort to fulfill the request within the time specified in the estimate. SanGIS will work on fulfilling JPA partner requests after public mapping (walk in) clients have been served.

*Tracking:* Log of requests showing initial response date and time.

### **SanGIS Spatial Data Warehouse (SDW)**

SanGIS collects, stores, and manages data from JPA partners and other public and private agencies in the SanGIS Spatial Data Warehouse (SDW). Data in the warehouse is accessible by JPA members and others as the JPA partners determine. The SDW serves as the central warehouse for geographic data for the City and County. SanGIS includes data in the SDW that is provided by the member agencies or by others but, except for the landbase, does not create the data. SanGIS shall acquire data for the warehouse and update the acquired data as requested by the JPA partners and approved by the Management Committee.

SanGIS staff manages the data and provides access to the SDW for JPA partners. SanGIS also develops, maintains, and supports various applications to extract, format, and transmit (via FTP or other means) data to member agencies for their special purposes (e.g. – AdMatch data extracts). SanGIS also develops, maintains, and supports applications that pull data from JPA member transfers to the SanGIS FTP site and loads the data to the SDW. The data maintained in the SDW includes metadata provided by the data owner or creator meeting specific standards. These services are part of the SanGIS **Spatial Data Warehouse** function and service metrics for specific aspects of this service is described here.

### **SanGIS Spatial Data Warehouse (SDW) – Availability**

*Description:* SanGIS provides the network and computer infrastructure needed to support the SDW and access by JPA partners and others. The infrastructure must be operational for SDW access and for batch jobs and updates to run correctly.

*Metric:* SanGIS shall maintain the SDW infrastructure at 98.5% or better availability during standard business hours as measured on a monthly basis.

*Tracking:* Log of down times during business hours and reported via the SanGIS Monthly Reports for uptime statistics for SanGIS SDW availability.

**SanGIS Data Warehouse – Currency**

*Description:* Data in the SanGIS Data Warehouse is refreshed on a weekly basis. Changes are made based on landbase edits and updates. Some data in the SDW is provided by JPA partners on either a regular or ad-hoc basis while other data is updated by SanGIS on a semi-annual or annual basis (e.g. – zip codes). The SanGIS [Policies and Procedures Manual](#) outlines how often data maintained by SanGIS is updated. SanGIS staff reviews requests for SDW updates to insure the data does not duplicate, overlay, or otherwise conflict with existing data and that the required metadata is provided.

*Metric:* SanGIS Data Warehouse is refreshed via automated processes on a weekly basis. Data updates provided by or requested by JPA partners shall be scheduled for the next weekly update after the data is received provided there are no conflicts and the correct metadata is provided.

*Tracking:* Data layer update log and documented in SanGIS Monthly Report.

**SanGIS Data Warehouse – Data Removal/Deletion**

*Description:* Data in the data warehouse, once added, is considered under use by JPA partners (other than the owner) and therefore should not be removed from the warehouse without proper notification to all members. Members may need to modify their business processes and or have an opportunity to protest the deletion. All database deletions shall be noticed as a change to the Database Schema (see [Change Control and Reporting](#)). All database deletions shall be reviewed and approved by STAB and the Management Committee.

*Metric:* All deletions to the SDW, once approved, shall be noticed to JPA partners via standard communication tools (typically a broadcast email message to JPA end users that have requested SanGIS email notifications) and Management Committee members at least 5 business days prior to the change. JPA Management Committee members are responsible for seeing that their department contacts are aware of the pending change and have a chance to comment to SanGIS

*Tracking:* Changes shall be tracked in the Change Control Log and reported via the SanGIS Monthly Report.

**Support for Departmental ETL Jobs – Successful Completion**

*Description:* SanGIS staff develops, supports, maintains and manages various batch jobs which extract and format data for specific JPA partner systems (such as AdMatch or NetRMS). These jobs are scheduled to run automatically on a regular basis and to perform specific data extract, format, and transfer functions.

*Metric:* SanGIS shall manage these automated batch jobs so that they run on-time and complete successfully 98% of the time based on their agreed to schedule. Successful completion means the job performed all functions as programmed without early termination due to error not related to hardware or network failure.

*Tracking:* Log of unsuccessful completion of jobs or jobs not run as scheduled and reported via the SanGIS Monthly Reports for batch job completion.

**Data Distribution -- Safeguards**

*Description:* Any data protected from public release must be clearly documented in the metadata in accordance with the metadata standard for SanGIS as “NOT FOR PUBLIC RELEASE”. SanGIS staff may not distribute to the public the data of any member jurisdiction if the

data has been marked as “NOT FOR PUBLIC RELEASE” and they have not been given special permission by the author or steward to release the data or byproducts of the data.

*Metric:* No data released (100% compliance) for public consumption provided customer supplied metadata complies with the SanGIS metadata standards as described in the SanGIS [Metadata Requirements](#) document, is in XML format, is received with the data, specifies the owner, and includes the statement “NOT FOR PUBLIC RELEASE”.

*Tracking:* Standing list of data layers showing those classified for public release or not for public release.

### **Landbase Maintenance**

SanGIS maintains the regional landbase for the County which includes digital entry and update of road centerlines and block ranges, land (lot) polygons, Assessor’s parcel polygons, subdivision boundary polygons, easement polygons, river lines, lake polygons and the associated attributes for each feature including addresses (City of San Diego only). Maintenance and update procedures are described in detail in the SanGIS [Policies and Procedures Manual](#). Maintenance and updates are triggered by new mapping activity, changes to associated attributes, or detection of errors in the existing database. SanGIS and the County Assessor exchange digital files in an effort to reduce duplication and to speed update times. In the situation where the Assessor has received a digital submission, SanGIS awaits receipt of the file from the Assessor rather than using the physical map for data entry.

SanGIS also provides certain editing functions to specific JPA partner departments for road information updates related to public safety and emergency call dispatch. These services are part of the SanGIS **Landbase Maintenance** function and service metrics for specific aspects of this service are described here.

#### **SanGIS Landbase Maintenance Infrastructure – Availability**

*Description:* SanGIS provides the network and computer infrastructure needed to support the landbase editing environment by SanGIS staff and specific JPA partner end users (remote editors). The infrastructure must be operational for landbase edits and updates to complete.

*Metric:* The SanGIS landbase editing environment infrastructure shall be available for use during standard business hours Monday through Friday except City and County holidays. SanGIS shall maintain the site at 98.5% or better availability during these hours as measured on a monthly basis.

*Tracking:* Log of down times during business hours and reported via the SanGIS Monthly Reports for uptime statistics for SanGIS landbase edit environment availability.

#### **SanGIS Landbase Data – Currency**

*Description:* SanGIS edits the landbase parcel, road, and other layers, including maintained attributes on a daily basis. These edits, including the additions of new lots, parcels, right-of-ways, and road segments, are completed in the landbase edit environment and then reconciled and posted to the SanGIS Spatial Data Warehouse.

*Metric:* The SanGIS landbase shall be reconciled and posted at least once per week to include all additions, edits, and updates completed during the previous week.

*Tracking:* Log of reconcile and posts and data layer update operations and reported via the SanGIS Monthly Reports.

### SanGIS Landbase Data – Accuracy

*Description:* SanGIS edits the landbase information using data provided by the owning jurisdiction or the County Assessor. The landbase is maintained in accord with GIS industry best practices and to accepted national standards. The accuracy of the data is dependent, in part, on the information provided by the owning jurisdiction.

*Metric:* Data integrity for all landbase layers is maintained with 99% accuracy for feature attribution. Spatial accuracy is maintained at the levels provided for in the source data from which the edits and additions were made. SanGIS does not and cannot provide guarantees of accuracy relative to State Plane or other coordinate systems.

*Tracking:* Log of error reports as shown in the weekly *Landbase Maintenance Report* and reported via the SanGIS Monthly Reports.

### Landbase Error Resolution – Response Time

*Description:* Landbase and other data error reports are received from JPA partners, other participating agencies, as well as the general public. These may be submitted to SanGIS via the SanGIS Online Forum (preferred), phone, email, fax, marked up maps, or other means. SanGIS shall act on the error report provided it meets the requirements of the SanGIS [Error Reporting Procedures Manual](#) including all required documentation and submittal of the error report from the proper jurisdictional authority (as outlined in the [Error Reporting Procedures Manual](#)) The error is corrected and the SDW updated at the next reconcile and post operation.

*Metric:* For non-complex errors, updates will be made within one week from receipt of all required documents and the request from the required source. Generally this means that the correction is reflected in the next publishing of the data (usually on the following Monday). For more complex corrections, SanGIS will notify the end the requestor of the estimated amount time frame to complete the corrections. If the user is not notified that their request falls into a complex category then it is assumed the error will be corrected within one week of receipt of all required materials.

Receipt of error reports shall be acknowledged via the method used to report them (email, phone, forum) within one business day of receipt. This acknowledgement shall include information on what additional information is needed or if the request must come from some other authority.

*Tracking:* Error reports are shown on the weekly SanGIS *Landbase Maintenance Report*.

### Change Control and Reporting

From time to time SanGIS must make changes to the computing and network infrastructure, standard software, customer developed applications, data model, and other aspects of the environment used to support the main functions (Public Mapping, Spatial Data Warehouse, and Landbase Maintenance). SanGIS recognizes that changes to the environment may affect the business operations of JPA partner departments, other participating agencies, and the general public. Changes that are known or suspected to cause interruption in services are typically expected to be completed at dates and times that shall minimize impact on services to the JPA partners. Partners will be notified well in advance of the expected outage so that they may have time to adjust their processes accordingly or to request other times which would be more convenient.

In some cases, changes must be made immediately in order to prevent more catastrophic failures. In these situations, SanGIS will send notification via email to the Management Committee members as soon as possible that an outage is about to occur and why the outage is necessary. Other affected users will be notified via email provided they have requested notifications from SanGIS. If notice cannot be given in advance than the partners will be notified soon afterwards regarding the cause of the outage.

### **Computing Infrastructure Change Control – Notification and Approval**

*Description:* SanGIS technical staff shall make changes to the computing infrastructure (servers and network components) to correct problems, update equipment, add features, and maintain stability as needs dictate. All non-emergency changes shall be planned, noticed, and approved. All changes shall be recorded at SanGIS as part of a change control log and approved by the SanGIS Executive Director. Staff requests for Computing Infrastructure changes should be submitted for approval at least 7 calendar days in advance of the event.

*Metric:* All changes that shall interrupt service to JPA partners or the general public shall be noticed via standard communication tools (typically a broadcast email message to JPA end users that have requested SanGIS email notifications) and Management Committee members at least 5 business days prior to the change. JPA Management Committee members are responsible for seeing that their department contacts are aware of the pending change and have a chance to comment to SanGIS

*Tracking:* Changes shall be tracked in the Change Control Log and reported via the SanGIS Monthly Report.

### **GIS Platform/Environment Change Control – Notification and Approval**

*Description:* SanGIS technical staff shall make changes to the GIS environment (software, batch jobs, etc.) to correct problems, update software, add features, and maintain stability as needs dictate or as requested and approved by JPA partners. In general, all changes shall be planned and noticed. All changes shall be recorded at SanGIS as part of a change control log and approved by the SanGIS Executive Director, the Management Committee, and STAB.

*Metric:* All changes to the GIS platform and environment, once approved, shall be noticed to JPA partners via standard communication tools (typically a broadcast email message to JPA end users that have requested SanGIS email notifications) and Management Committee members at least 5 business days prior to the change. JPA Management Committee members are responsible for seeing that their department contacts are aware of the pending change and have a chance to comment to SanGIS

*Tracking:* Changes shall be tracked in the Change Control Log and reported via the SanGIS monthly report.

### **Spatial Data Warehouse Database Schema Changes – Notification and Approval**

*Description:* SanGIS technical staff are required to make changes to the SDW database schema (add or delete fields, add lookup values, change relations, change names, etc.) to correct problems, update software, add features, and maintain stability as needs dictate or as requested and approved by JPA partners. All non-emergency changes shall be planned and noticed. All changes shall be recorded at SanGIS as part of a change control log and approved by the SanGIS Executive Director, the Management Committee, and STAB.

- Metric:* All changes to the SDW database schema, once approved, shall be noticed to JPA partners via standard communication tools (typically a broadcast email message to JPA end users that have requested SanGIS email notifications) and Management Committee members at least 5 business days prior to the change. JPA Management Committee members are responsible for seeing that their department contacts are aware of the pending change and have a chance to comment to SanGIS
- Tracking:* Changes shall be tracked in the Change Control Log and reported via the SanGIS monthly report.

### **SanGIS Monthly Report – Currency**

- Description:* SanGIS produces a monthly report which documents tasks and services performed during the reporting period (maps produced, website support, phone calls, system availability, etc.). This report is provided to the JPA partners and the general public on the SanGIS internet website and is the vehicle for reporting SanGIS Service Level Policy metrics.
- Metric:* The SanGIS report shall be completed and reported on a monthly basis and posted to the website no later than the second Friday of the month following the end of the reporting period.
- Tracking:* Report posting date is shown on the report and it is reviewed by Management Committee on a monthly basis.

## **CHANGES TO THE SERVICE LEVEL POLICY**

This Service Level Policy is not intended to be a static document. Rather, it is intended to be a living document that changes as JPA partners, technology, and end user needs change and as circumstances require. When changes are required they shall be vetted through the proper reviewing bodies and formally adopted by the Board of Directors.

A formal process for requesting a change to this SLP is not specified. End users, staff, committee members, the general public, and others may all request the SLP be changed through whatever method they find convenient (email, US Postal Service, phone call, SanGIS website, etc.). A request for change must be made to the Executive Director, a Management Committee Member, or the Board of Directors. The preferred method is to have the change request made through the SanGIS Executive Director in order to facilitate the change request and approval process.

Regardless of how the change request is made, it shall be sent to the SanGIS Executive Director for processing through the following steps:

1. The Executive Director adds the change request to the agenda for the next available Management Committee meeting
2. The Management Committee reviews the change at the scheduled meeting and determines if the change should be considered or if other mechanisms are already in place to accommodate the request or if the request is not appropriate to the SLP and SLP process. The decision of the Management Committee shall be documented in the minutes. If the Committee decides not to continue processing the request, the requestor shall be notified of the decision via email.

3. If the Management Committee determines that the request has merit, they shall request that it be vetted at the next available STAB meeting. The STAB shall add the item to the agenda and the advice of the STAB shall be documented in the meeting minutes. STAB approval is not required to advance the request however, consensus between STAB and the Management Committee on the next action is encouraged.
4. Based on the advice provided by STAB, the Management Committee may elect to continue the process or may determine that the request should not be promoted. If the change process is not continued, the requestor shall be notified and the decision documented in the Management Committee meeting minutes.
5. If the Management Committee determines that the change request process is to be continued, the Management Committee shall add the item for discussion and/or request for action on the next available agenda for the Board of Directors meeting. The Board shall hear the request for the change and determine if the change should be made. The Board may direct that the request be altered before being accepted, that it not be approved, or that it be approved as submitted. The decision of the Board is final and the requestor shall be notified of the resulting decision.
6. Changes approved by the Board shall be incorporated into the SLP document and a new version, with a revised date, published on the SanGIS website.

Changes to the SLP requested by Board members should follow this process as well in order that all stakeholders have sufficient notification of the change and the chance to review and comment on the proposed change.

Requestors whose changes have been denied may appeal the Board's decision using the **Dispute Resolution** process described in this document.

## DISPUTE RESOLUTION

End users having comments, complaints, or concerns about SanGIS meeting the terms of this SLP shall submit comments, complaints, or concerns in writing to the Executive Director of SanGIS at [director@sangis.org](mailto:director@sangis.org) or call the Executive Director at SanGIS to discuss the issue.

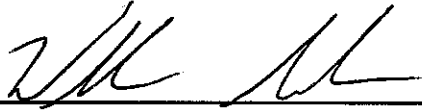
If the dispute cannot be resolved at the SanGIS Executive Director level, the party bringing the dispute may request that the Management Committee address the issue at their next scheduled meeting. Once requested the Executive Director shall add the item to the Management Committee agenda and notify the requesting party of the meeting date and time. The party bringing the dispute shall be notified of the Management Committee decision via email and the decision shall be documented in the meeting minutes.

If the party bringing the dispute wishes to appeal the decision of the Management Committee, they must make a written request that the dispute be escalated to the Board of Directors for review. The Management Committee shall add the item to the next available Board of Directors agenda and notify the party bringing the dispute of the time and place of that meeting.

The Board of Directors shall hear the complaint, including any public comment, and make a determination as to the resolution of the dispute. The decision of the Board shall be documented in the meeting minutes and the party bringing the dispute shall be notified via email. The decision of the Board of Directors shall be final.

# APPROVALS

Approved by the Board of Directors as of the latest date shown below:



William Anderson, Board Member, City of San Diego

9-10-09

Date



Chandra Wallar, Board Member, County of San Diego

9-10-09

Date

## APPENDIX A

The following summary of services and service levels is provided as a quick reference guide only. The descriptions provided here are abbreviated for the convenience of quick reference. The full description of the services and the service levels is provided in the text of the main document. In the event of a conflict between the summaries provided in this appendix and the text in the main document, the main document controls.

Service Area	Service Title	Service Metric	Service Description	Standard
<b>Public Mapping Services</b>	SanGIS Internet Website	Availability	Maintain internet website for public and JPA partner access to SanGIS documents and data and provide a forum for feedback and inquiries	Available 98% of the time during standard business hours of 8:00 am to 4:30 pm Monday through Friday except holidays as measured on a monthly basis
	Public Mapping and Data Download Website	Data Update Frequency	SanGIS website for public access to SanGIS data including an interactive mapping	Updated no less than quarterly if new data exists for any data layer published
	SanGIS webmaster email and SanGIS online forum	Response Time	Use of internet website for communication with the general public and online forum accessible to JPA members for reporting data errors and issues	Respond to e-mail inquiries to webmaster@sangis.org and inquiries made via the SanGIS online forum within one business day of the receipt of the message.
	JPA Partner FTP Data Upload/Download Site	Availability	SanGIS maintains an FTP site for data exchange by JPA partners separate from the public data download site	Available 98% of the time during standard business hours of 8:00 am to 4:30 pm Monday through Friday except holidays as measured on a monthly basis.
	Project-Specific Data and JPA Partner Mapping	Response Time	Data extracts or special maps on request of JPA partner end users	Respond with estimate of time to create the extract or map within one business of the receipt of the request

<b>SanGIS Spatial Data Warehouse (SDW)</b>	SanGIS Spatial Data Warehouse	Availability	Network and computer infrastructure needed to support SanGIS Spatial Data Warehouse (SDW)	Available 98.5% of the time during standard business hours of 8:00 am to 4:30 pm Monday through Friday except holidays as measured on a monthly basis
	SanGIS Data Warehouse	Currency	Refresh of data in the SanGIS Data Warehouse if changes were made in the prior week	Refreshed via automated processes on a weekly basis. JPA Partner data updates requests scheduled for the next weekly update after the data is received
	SanGIS Data Warehouse	Data Removal/Deletion	Removal of data from the SanGIS Data Warehouse with proper notification and approval	Deletions to the SDW, once approved, will be noticed at least 5 business days prior to the change
	Support for Departmental ETL Jobs	Successful Completion	Batch jobs are scheduled to run automatically on a regular basis and to perform specific data extract, format, and transfer functions	Batch jobs run on-time and complete successfully 98% of the time based on their agreed to schedule
	Data Distribution	Safeguards	Protection of data from distribution to the public if the data has been marked as “NOT FOR PUBLIC RELEASE”	Metadata complies with the SanGIS metadata standards, is in XML format, is received with the data, and specifies the owner
<b>Landbase Maintenance</b>	SanGIS Landbase Maintenance Infrastructure	Availability	Network and computer infrastructure for the landbase editing environment	Available for use 98.5% of the time during standard business hours of 8:00 am to 4:30 pm Monday through Friday except holidays as measured on a monthly basis
	SanGIS Landbase Data	Currency	Edits to the landbase parcel, road, and other layers, including maintained attributes and then reconciled and posted to the SanGIS Spatial Data Warehouse	Reconciled and posted at least once per week for all updates completed during the previous week
	SanGIS Landbase Data	Accuracy	Landbase maintained in accord with GIS industry best practices and according to national standards	Data integrity for all landbase layers is maintained with 99% accuracy for feature attribution
	Landbase Error Resolution	Response Time	Correct landbase and data errors received from JPA partners and others provided error report meets requirements of SanGIS <a href="#">Error Reporting Procedures Manual</a>	Error reports acknowledged within one business day of receipt. Updates made within one week from receipt of all required documents and correction reflected in the next publishing of the data

<b>Change Control and Reporting</b>	Computing Infrastructure Change Control	Notification and Approval	Changes to the computing infrastructure (servers and network components) planned, noticed, approved and recorded as part of a change control process	All changes that interrupt service noticed at least 5 business days prior to the change
	GIS Platform/Environment Change Control	Notification and Approval	Changes to the GIS environment (software, batch jobs, etc.) planned, noticed and recorded as part of a change control process	Changes to the GIS platform and environment noticed at least 5 business days prior to the change
	Spatial Data Warehouse Database Schema Changes	Notification and Approval	Changes to the SDW database schema (add or delete fields, add lookup values, change relations, etc.) planned, noticed and recorded as part of a change control process	Changes to the SDW database schema noticed at least 5 business days prior to the change
	SanGIS Monthly Report	Currency	Monthly report documenting tasks and services performed during the reporting period and provided to the JPA partners and the general public on the SanGIS internet website	Report completed on a monthly basis and posted to the website no later than the second Friday of the month following the end of the reporting period