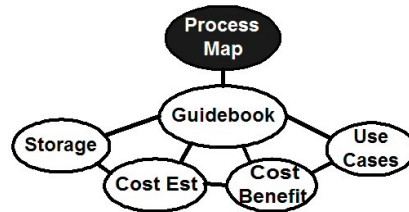# Geoarchiving Business Planning Process Map and Checklist

Geospatial Multistate Archive and Preservation Partnership (GEOMAPP)

in Partnership with

The Library of Congress

National Digital Information Infrastructure and Preservation Program (NDIIPP)

Contract Number: EP#4825336

Prime Contractor:

Subcontrator:

Produced under contract to the North Carolina Center for Geographic Information and Analysis. GeoMAPP, the Geospatial Multistate Archive and Preservation Partnership with the Library of Congress National Digital Information Infrastructure and Preservation Program (NDIIPP).

Acknowledgements

TABLE OF CONTENTS

INTRODUCTION

The Geoarchives Business Planning Process Map and Checklist provides an organized approach and process for establishing a Geoarchives Program. Contents include a graphic depiction of the entire business planning process for geoarchives, and a checklist to help walk the participants through the various stages and steps. Throughout the planning process a Geoarchives Business Planning Committee/Team should be engaged in marketing the concept of a Geoarchiving program; measuring progress towards achieving it; and reporting at each stage to senior leadership.

This document includes a comprehensive list of subjects to be discussed, debated, and decided on by the group of stakeholders that is tasked with developing the Plan (i.e. your Geoarchives Business Planning Committee/Team).   Separately the Geoarchives Business Planning Guidebook (different from this Geoarchives Process Map and Checklist) goes into greater detail on many of the subjects. During the planning process, this Committee/Team will meet regularly and work together to plan your approach, strategize, and author the plan. Once a plan has been formally adopted by the Committee, its members will need to advocate for the plan's adoption and guide its progress during implementation.
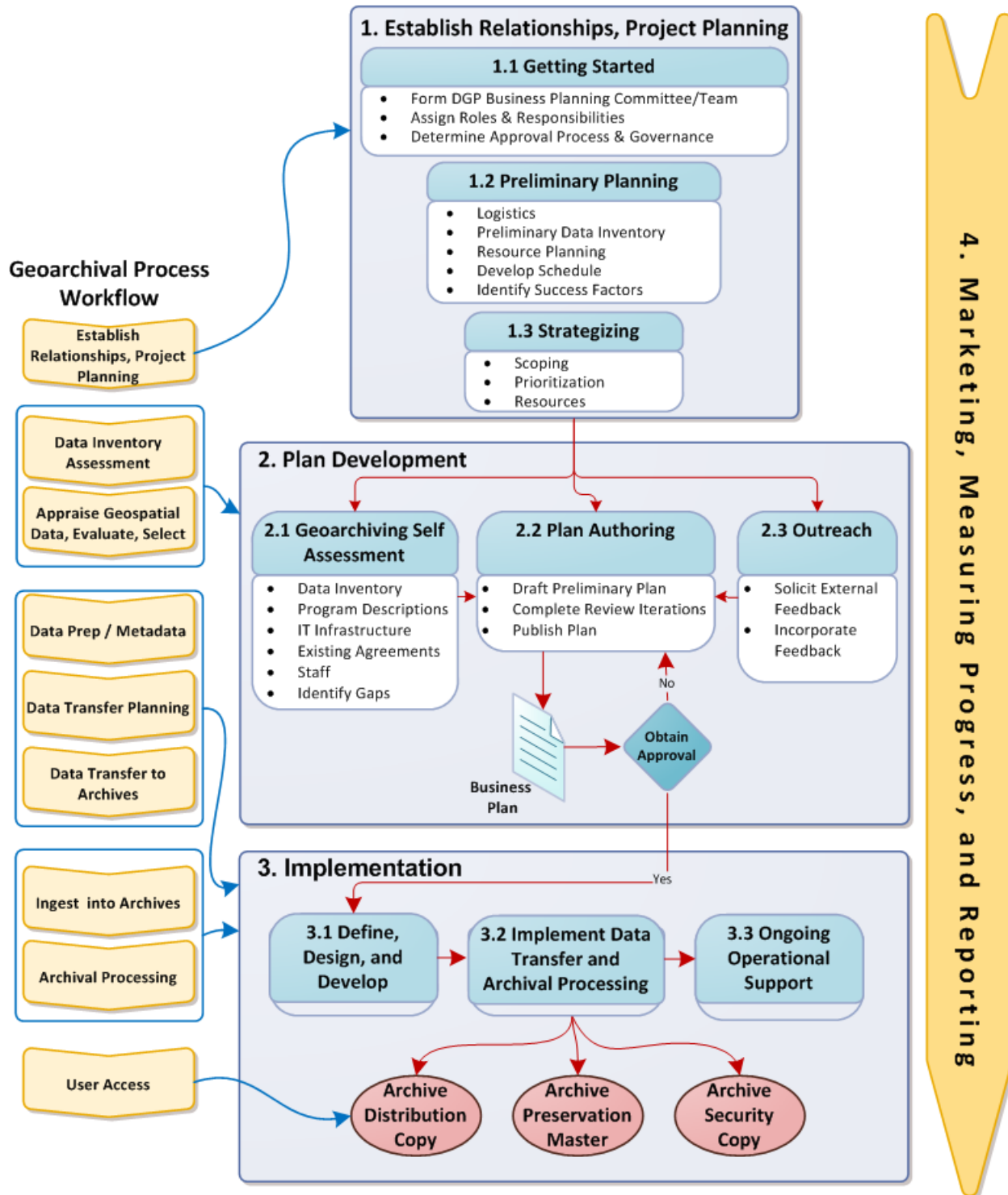
★ The **Process Map** divides the process of creating the business plan into simple steps or phases. Each phase is characterized by certain activities, tasks, and accomplishments. Your Committee/Team is encouraged to use the Process Map to help get organized, focused, and productive. Its simple format will help you get the job done quickly and efficiently. The left column of the Process Map displays the Geoarchival Process Workflow developed and used by the GeoMAPP team. Using arrows, we have graphically "linked" these steps to the more comprehensive business planning process.

★ The **Checklist** is a handy tool for keeping track of progress. The structure and approach can be modified to suit the needs of your situation as you undertake the business planning effort. For convenience, a cross-reference to the Geoarchives Business Planning Guidebook is provided. It is strongly recommended that you become familiar with the Guidebook as well.

This method is based on the successful planning approach used by most states for their GIS strategic and business planning efforts under the Federal Geographic Data Committee (FGDC) Fifty States Initiative, modified here to suit GEOARCHIVING.

The Figure on the following page shows the phases of establishing a Geoarchiving program, including creation of a Business Plan for Geoarchiving. This diagram is a simplified view of the overall planning

process. It is essential that you seek and incorporate management and stakeholder feedback during every phase of the planning process. Working through the planning process with all of the stakeholders can be a valuable bonding experience that leads to trust and improved cooperation.

Business Planning Process Map for Geoarchiving

1. Establish Relationships, Project Planning

1.1 Getting Started
- Form DGP Business Planning Committee/Team
- Assign Roles & Responsibilities
- Determine Approval Process & Governance

1.2 Preliminary Planning
- Logistics
- Preliminary Data Inventory
- Resource Planning
- Develop Schedule
- Identify Success Factors

1.3 Strategizing
- Scoping
- Prioritization
- Resources

Geoarchival Process Workflow

- Establish Relationships, Project Planning
- Data Inventory Assessment
- Appraise Geospatial Data, Evaluate, Select
- Data Prep / Metadata
- Data Transfer Planning
- Data Transfer to Archives
- Ingest into Archives
- Archival Processing
- User Access

2. Plan Development

2.1 Geoarchiving Self Assessment
- Data Inventory
- Program Descriptions
- IT Infrastructure
- Existing Agreements
- Staff
- Identify Gaps

2.2 Plan Authoring
- Draft Preliminary Plan
- Complete Review Iterations
- Publish Plan

2.3 Outreach
- Solicit External Feedback
- Incorporate Feedback

Business Plan

Obtain Approval

No

Yes

3. Implementation

3.1 Define, Design, and Develop

3.2 Implement Data Transfer and Archival Processing

3.3 Ongoing Operational Support

- Archive Distribution Copy
- Archive Preservation Master
- Archive Security Copy

4. Marketing, Measuring Progress, and Reporting

1 PHASE ONE: ESTABLISHING RELATIONSHIPS; PROJECT PLANNING

1.1 GETTING STARTED

☐ Identify likely Planning Committee/Team participants and determine their willingness to participate

☐ Establish a Planning Committee/Team that is able to effectively identify the issues, develop practical solutions, and create clear objectives

☐ Define roles and responsibilities for completing the Geoarchiving planning process

☐ Assign roles and responsibilities

☐ Assign the role of Facilitator for the planning process

☐ Nominate a Committee Chair (if not pre-designated)

☐ Specify the target audience for the Business Plan

☐ Determine the plan approval process

☐ Identify and engage the appropriate people who need to participate in the Plan development effort (e.g., representatives of state GIS, Archives/Library, Information Technology offices and other stakeholders: regional and local government agencies, regional utility companies, private sector, etc)

1.2 PRELIMINARY PLANNING

Logistics

☐ Schedule a kick-off meeting

☐ Determine future meeting frequency

☐ Determine the venue(s) for meetings

☐ Establish tools for communication exchange

☐ Define locations and dates for stakeholder informational gathering sessions

Resource Planning

☐ Determine what resources are needed to complete the effort

☐ Assess what resources are available and how any existing gaps can be bridged

☐ Document and understand the impact of any relevant constraints to the planning process itself (time, money, people availability)

Planning Approach

☐ Define the overall planning approach (e.g., are we going to complete the exercise internally, or use consultants?)

☐ Define brainstorming approaches that will be used

☐ Determine whether a survey mechanism will be used to gather input from stakeholders

☐ Identify exemplary Geoarchiving plans completed by other organizations that can be used as reference material

Planning Schedule

☐ Identify any timing considerations, such as grant application deadlines, or other planning efforts (such as statewide IT plans)

☐ Develop a schedule and establish milestone dates for completing the plan

Organization

☐ Establish a Geoarchiving Business Planning Committee/Team Charter

☐ Establish sub-committees as necessary and ensure that subcommittee chairs understand what is expected of them

☐ Identify factors that will ensure a successful planning process

1.3   STRATEGIZING

Scoping

☐ Review any existing related plan(s) such as GIS and IT initiatives

☐ Review other intra-organizational mandates and stakeholder mission statements that just and support the current activity

☐ Identify political initiatives that the Goals can support

☐ Indentify roadblocks or political barriers that may inhibit the Goals

☐ Review other documents and materials that are relevant to this effort

☐ Understand the breadth and scope of the Geoarchives Business Plan Guidebook

☐ Determine period to be covered by your Geoarchives Business Plan

☐ Review the Geoarchives Business Plan Guidelines Questions and tailor as appropriate

Prioritization of Effort

☐ Prioritize the aspects of the business planning goals that best match your needs

☐ Develop templates for capturing information in a structured manner

☐ Identify preliminary programmatic sub-goals

☐ Itemize, prioritize, refine, and validate programmatic sub-goals

☐ Prioritization of uses cases, e.g. water rights, water quality, climate change, redistricting, etc.

☐ Preliminary identification of historical data sets

☐ Validate objectives with stakeholders, management, and executives

☐ Identify programmatic goals with a 'quick win' potential and use them to show early progress

☐ Consider a pilot project for a limited amount of data

☐ Develop strategies for realizing each programmatic sub-goal

☐ Identify any roadblocks or barriers and tactics for overcoming them

☐ Iterate with stakeholders to establish consensus view

☐ Develop a strategy to promote the Geoarchives program objectives (marketing)

☐ Measure progress and report to senior leadership during the planning process

Gather Resources

☐ Enlist political champion(s)

☐ Identify and generate consensus among involved stakeholders and executives to become advocates for the plan objectives

☐ Modify business planning tools as necessary for your situation and needs

☐ Assign responsibilities for performing actionable items

2 PHASE TWO: PLAN DEVELOPMENT

2.1   GEOARCHIVING SELF ASSESSMENT

☐ **Refer to Guidebook Section 3**

☐ Perform Geospatial Maturity Assessment on the state GIS program

☐ Assess state archives readiness for managing geospatial data

☐ Determine relevant state IT infrastructure and policies

☐ Identify gaps and additional needs

2.2   PLAN AUTHORING

☐ **Refer to Guidebook Sections 3, 4, 5, 6, 7, 8, 9, 10.2, 10.3, 10.4**

☐ Develop content aimed at the target readership in terms of style and presentation

> ☐ **Refer to Guidebook Section 4**

☐ Use business planning tools and procedures to describe current conditions and justify needs

> ☐ **Refer to Guidebook Section 3**

☐ Develop metrics to confirm initialization costs, operations costs and measurable benefits over time

> ☐ **Refer to Guidebook Sections 7, 10.2, 10.3**

☐ Determine the level of progress monitoring required for this planning activity and how metrics will be used to mange the process.

> ☐ **Refer to Guidebook Section 9**

☐ Estimate storage needs (GIS organization: data staging; Archival org: data staging, archival storage, access storage)

> ☐ **Refer to Guidebook Sections 7, 10.2, 10.3**

☐ Estimate manpower effort & resources for each plan phase (define, design, development)

> ☐ **Refer to Guidebook Sections 7, 10.2, 10.3**

☐ Estimate manpower resources for ongoing operational support of the archival system

> ☐ **Refer to Guidebook Sections 7, 10.2, 10.3**

☐ Estimate costs for storage

    ☐ **Refer to Guidebook Sections 7, 10.2, 10.3**

☐ Estimate costs for servers and other hardware

    ☐ **Refer to Guidebook Sections 7, 10.2, 10.3**

☐ Estimate costs for software and tools

    ☐ **Refer to Guidebook Sections 7, 10.2, 10.3**

☐ Characterize benefits, monetize benefits where possible

    ☐ **Refer to Guidebook Sections 6, 10.2, 10.3, 10.4**

☐ Draft a preliminary plan

    ☐ **Entire Guidebook**

☐ Solicit feedback from external reviewers, incorporate comments

    ☐ **Refer to Guidebook Sections 4, 10.4**

☐ Publish your Geoarchives Business Plan

☐ Submit funding requests based on Business Plan cost estimates

2.3 OUTREACH

☐ **Refer to Guidebook Sections 4, 8.5, 10.4**

☐ Solicit external feedback to Geoarchives Business Plan

☐ Incorporate feedback into plan

☐ Publish revised plan

☐ Promote final Geoarchives Business Plan

3 PHASE THREE: IMPLEMENTATION

PHASE 3.1: Define, Design, Develop

☐ **Refer to Guidebook Sections 7, 8, 10.4**

☐ Define requirements for data transfer

☐ Define archival processing business process flow

☐ Define requirements for archival processing solution and/or tools (e.g. database, software platform, etc.)

☐ Define requirements for access solution

☐ Design data transfer implementation (data submitter, archival organization receiver)

☐ Design preservation solution, design archival metadata scheme

☐ Design access solution, design access search and access scheme

☐ Hardware and software procurement

☐ Infrastructure installation & configuration: Hardware, Software, Network (data submitter, archival organization receiver)

☐ Implement tools to conduct data transfer

☐ Implement tools and software infrastructure for preservation solution and preservation repository

☐ Implement access solution

PHASE 3.2: Conduct Data Transfer

☐ **Refer to Guidebook Sections 7, 8**

☐ Appraise GIS data inventory for candidates for inclusion in geoarchives

☐ Data Preparation, Geospatial Metadata

☐ Data transfer to Archives, Validate and Quality Control of transferred datasets

☐ Archival Processing and ingest into archival storage repository to describe and store geospatial datasets for long-term preservation

☐ Prepare and publish datasets for User Access

PHASE 3.3: Ongoing maintenance of Preservation environment

☐ **Refer to Guidebook Section 8**

☐ Ongoing file integrity checking

☐ Media migrations, as needed

☐ Format migrations

4 PHASE FOUR: GEOARCHIVES MARKETING; MEASURING PROGRESS; REPORTING

☐ **Refer to Guidebook Sections 8.5, 9**

☐ Generate and evaluate metrics to confirm initialization costs, operations costs and measurable benefits over time; present results and modify operations accordingly.

☐ Identify those responsible for overseeing the status review process

☐ Determine the frequency of status review meetings for reporting on progress

☐ Identify and market to specific individuals whose support can further guarantee a successful planning outcome

☐ Identify appropriate forums for the active and broad marketing of the Geoarchiving plan goals and objectives, (these could be conferences, user group meetings or other similar gatherings)

☐ Determine how feedback from marketing efforts will be incorporated into the process