

Advancing Statewide Spatial Data
Infrastructures in Support of the National
Spatial Data Infrastructure (NSDI)

Business Plan Guidelines

For use by all stakeholders in the Geospatial Community



Produced for the Federal Geographic Data Committee
(FGDC) to Support the Cooperative Agreements Program
(CAP), Category 3: Fifty States Initiative

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This document replaces the “Business Plan Template” (March 2006) that was produced by the National States Geographic Information Council (NSGIC) under contract (05HQCEN0034) to the Federal Geographic Data Committee (FGDC). This replacement version was produced under a contract: issued by the U.S. Geological Survey (USGS), FGDC Secretariat

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Foreword

Strategic and business planning are critical processes for articulating a shared vision, and for building the partnerships that are necessary for disparate organizations to work together on common goals. The key is to identify the business needs for geospatial data and services that are shared by many stakeholder groups. For instance, it is easy to envision that statewide orthoimagery acquired on a routine basis would be useful to almost all stakeholders in the geospatial community, as might be a widely accessible geocoding service. Effective planning is essential for moving collaborative programs forward and for gaining the required support for investments in your statewide spatial data infrastructure (SSDI).

This project is part of the Fifty States initiative from the Federal Geographic Data Committee (FGDC), in close cooperation with the National States Geographic Information Council (NSGIC) and other stakeholders in the geospatial community. A core component of this Initiative is establishing more formal statewide geospatial coordination councils that will help to govern and complete the NSDI by enabling all stakeholders. The principal goals of this project are to:

- Encourage implementation of statewide spatial data infrastructures through effective strategic and business planning efforts
- Provide guidance on planning activities
- Encourage the formation of partnerships and alliances that will improve planning process
- Provide a uniform national framework for strategic and business plans, for comparative analysis to reveal national trends

Several documents have been created to support the geospatial community in these planning efforts, including:

- **Strategic Plan Guidelines** that provides a structure for “mapping” a clear path from present conditions to a vision for the future into a plan document.
- **Strategic Planning Process Map** that divides the process of creating the strategic plan into five simple steps or phases that are each characterized by certain activities, tasks, and accomplishments.
- **Business Plan Guidelines** that provides a detailed description of how goals and objectives will be achieved, along with the necessary justification for action.

The Strategic and Business Plan Guidelines each include major section headings with key information and a series of questions that should be considered. Your planning team will determine which questions are applicable for their activities and use the answers to these questions to help draft an effective plan. This approach was developed, because “one size does not fit all” for these plans. However, the organizational structure of the main sections can and should be consistent with the Guidelines, even though the specific content of each section will vary for a variety of reasons, reflecting the differences in the organizations undertaking the plans.

Using these Guidelines will help you navigate through the entire process of preparing high quality and effective strategic and business plans. By simply substituting terms such as “countywide” and “citywide” for “statewide,” the Guidelines should work well for most stakeholder groups.

Over the past three years, the states using these Guidelines have discovered that the “process” of working with people to create these plans, including the partnerships that are formed, may be more valuable than even the actual plans. Please make the process a valuable learning experience that leads to trust and new partnership opportunities.

BUSINESS PLAN GUIDELINES

While the Strategic Plan describes what you want to achieve and why, the Business Plan provides a detailed description of **how** objectives will be achieved, along with the necessary justification.

The purpose of your Business Plan is **to support the successful implementation** of the programs identified in the Strategic Plan of your organization, thereby advancing statewide spatial data infrastructure (SSDI). These programs may each require a different approach and may place emphasis in different areas. Examples of programs that require Business Plans could include:

An Ortho-imagery Program (data-centric)
Homeland Security Web Mapping Initiative (function or application-centric)
Statewide GIS Coordination (business process-centric)

Regardless of the approach, there are requirements for assessing where you are and where you need to be, in addition to identifying the pathway that will get you there. A good Business Plan **makes a compelling case** to those who must approve it and provide the required funding or other necessary resources. As such, you need to provide the following content:

- Describe who you are
- Describe what you want to achieve
- Describe the tangible benefits to be realized
- Quantify and/or qualify the return on investment
- Detail the options and the suggested plan of action for attaining the desired end state
- Provide evidence that your 'business case' has been fully researched and is 'highly' viable

The Business Plan provides a **clear description** of what needs to be done, including when and **how to implement** an organization's strategic goals and vision. It should itemize and describe the **benefits** that an organization will realize if the plan is followed, as well as the **costs** that will be incurred. The plan should include any **requirements** for achieving its purpose, and a **scorecard** to gauge performance once the plan is accepted and unfolds. It should also be written with a **clear focus on the readership**. Ultimately the Business Plan needs to be approved and funded. Its content should include:

- Relevant and beneficial to the organization
- Relatively short (c. 20 pages -- but there is no absolute rule)
- Easy to read (and approve)
- Clear and concise
- Compelling
- Action-oriented
- Credible
- Factually correct
- Understandable and free from any extraneous details

HOW TO USE THESE GUIDELINES

The Guidelines provide an organized approach and process for creating Business Plans. The plans take shape through an iterative process of facilitated group discussions, research, drafting, and review. Consistent with the approach used in the Strategic Plan Guidelines, the reader will find explanatory instructions in each section (in non-serif brown typeface). Also, the Business Plan Guidelines utilize a **list of questions** (in black serif typeface) to help facilitate your discussions and to generate content for each section of the document. Not all of the questions need to be answered, because the situation or approach you have selected will vary from state to state. The emphasis should be on an inclusive, **participatory** approach within the group that is charged with developing the plan. It needs to be clear who is responsible for the plan’s content, as well as its execution.

It is assumed that the programmatic goals, which are to be the focal points of the Business Plan, were articulated in the overall Strategic Plan – i.e. there should be congruence between the overall Strategic Plan and the Business Plan(s) that support implementation. Some states may choose to roll multiple objectives into a single Business Plan document. Others may choose to have one business plan per objective (this may be determined by the approval or funding mechanisms). In some states, there may be the possibility of **parallel action** on more than one program at the same time.

The Business Plan Guidelines are broken down into sections. For recipients of Fifty States Agreements, the main section topics are considered “mandatory.” This does not make everything within each section mandatory, but rather, requires that each of the main sections be addressed in a reasonable fashion. The following table is a summary of “mandatory” and “mandatory if applicable” elements within each section:

Table of Mandatory Elements

<i>Mandatory Main Section</i>	<i>Mandatory Element</i>	<i>Mandatory if Applicable</i>
1. Executive Summary	What outcome(s) are you proposing to accomplish?	
	What do you need to do it?	
2. Program Goals	What are the specific ‘Programmatic Goal(s)’ for this Business Plan (and which Strategic Goals do they relate to from your Strategic Plan)?	
	For each goal, what are the ‘Success Factors’ (or supporting objectives)?	
3. Benefits and Justification	What is the primary reason ‘why’ you want to do what you are proposing?	
4. Requirements and Costs	What is your organizational approach?	
	What are the estimated total costs of your proposal?	
		What standards are you requiring?
5. Implementation	Phasing and milestones	

<i>Mandatory Main Section</i>	<i>Mandatory Element</i>	<i>Mandatory if Applicable</i>
Program	Budget Plan	
6. Measuring Success and Feedback for Recalibration	Criteria for performance measurement	

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1. EXECUTIVE SUMMARY

The Executive Summary should be a **concise** presentation of the most important details of the Business Plan's contents. A brief context should be included for where this Business Plan fits into the organization's overall Strategic Plan. A well written Executive Summary **highlights the key benefits** of the plan, a proposed **timeline**, and the essential **call-to-action** for what is required. It should include an **implementation cost estimate** over a one, two and three year period.

It should also include summarized **financial scenarios** from any cost/benefit or ROI analysis where feasible. A brief **risk assessment** (including the risk of doing nothing), is also appropriate in this section and will indicate due diligence. If there are similar programs successfully implemented in other comparable organizations, these could be briefly noted, along with a description of the benefits that were realized.

The approval and/or funding readership should be able to appreciate the tangible benefits that the executed plan will bring. Further reading should develop a stronger case for plan approval. A one or two page summary is all that is required. Sometimes, a longer Executive Summary for stand-alone purposes may be appropriate as a companion piece to the full plan document.

- a. What outcomes are you proposing to accomplish? (*Mandatory*)
- b. What do you need to do it? (*Mandatory*)
- c. Have you clearly stated the purpose of the proposed program?
- d. Are the benefits presented in a meaningful way and is it clear that they are greater than the associated costs?
- e. What problems will this solve, reduce, or help make go away, for your politicians and executives?
- f. Are the requirements made explicit (e.g., organizational, financial, and technical)?
- g. Is the call-to-action apparent?
- h. What are the key scope items and key milestones?
- i. What are the likely costs over a one, two or three year period?
- j. How does this plan fit into the overall strategy for building your Statewide Spatial Data Infrastructure (SSDI)?
- k. Who are the key players and why will they be successful?
- l. Have you made a compelling case?
- m. Have you adequately explained the reasons that would motivate the targeted reader to say "yes" to what you are asking for?
- n. What is cost/benefit or return on investment, and what analysis techniques were used?
- o. What are the major risks associated with executing (or not executing) the business plan?

2. PROGRAM GOALS

A list of ‘**programmatic goals**’ was created as part of your Strategic Plan, to help implement your strategic goals. The business planning process is focused on defining and detailing the **incremental steps** that are necessary to implement these programmatic goals. Business plans come from goals, and not the other way around. In this section, the programmatic goal(s) for which the Business Plan is being developed are described. **(Mandatory)**

It is important to articulate why a particular program (i.e. programmatic goal) is important to your success, and how it relates to your overall Strategic Plan. And to support implementation, it is essential to clearly state the **success factors** (i.e. supporting objectives) that relate to this program. The success factors are subordinate to you programmatic goal. They comprise the **set of objectives that support the implementation of your goal**. They become the standard of record against which the results will be measured to assess the plan’s progress and successful execution; and they may need to be modified or expanded if course correction is necessary. In this section of the document, you should list the programmatic goal that is the subject of your Business Plan along with its specific success factors, or supporting objectives. **(Mandatory)**

The following Programmatic Goal (with supporting Objectives) was the subject of a Business Plan for “Improved Elevation Data for Statewide Applications” (courtesy of State of Kansas):

<i>Programmatic Goal</i>	Develop improved statewide elevation data that will support two-foot contours to support detailed topographic mapping necessary for a multitude of critical applications and risk determination
<i>Objective 1:</i>	Identify elevation program management team who will champion the project forward
<i>Objective 2:</i>	Gather core requirements and expectations for stakeholder community
<i>Objective 3:</i>	Analyze current and near future high resolution elevation data collection efforts to determine the necessary geographic extent of the program
<i>Objective 4:</i>	Evaluate available technologic options and approaches for suitability
<i>Objective 5:</i>	Determine data storage and other management strategies, including mechanisms for promoting the availability of the data and its applicability, and distribution details
<i>Objective 6:</i>	Request program cost estimates from qualified solution/data providers based on a scope of work
<i>Objective 7:</i>	Identify and pursue program funding source(s); encumber funds
<i>Objective 8:</i>	Develop technical specifications, determine acquisition criteria, and procure services according to scope of work
<i>Objective 9:</i>	Advertise and make available project deliverables to stakeholders
<i>Objective 10:</i>	Conduct post-project assessment, including scoring of success factors and lessons learned

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The following questions are intended to facilitate discussion on goals and supporting objectives for the program:

- a. What are we trying to accomplish?
- b. What is the vision for this program?
- c. What is the boundary (project limit) of what we want to achieve? (i.e., Will we include addressing as part of a road centerline project?)
- d. What items are out of bounds in this current planning cycle?
- e. Which stakeholders will benefit from the successful execution of the program(s)?
- f. Are our goals measurable?
- g. Are our goals clear, concise and attainable?
- h. Have our goals been prioritized, and which ones are most critical to the success of this effort?
- i. Where do we want to be in the near-term (i.e., one year from now), in terms of accomplishments? Where do we want to be in the long-term (i.e., five years from now)?

3. BENEFITS AND JUSTIFICATION

Itemizing the tangible benefits and providing the justification for why a program is important are essential to getting the necessary support. Value should be measured both qualitatively and quantitatively, to the extent feasible. A brief tutorial on “Economic justification: Measuring Return on Investment (ROI) and Cost Benefit Analysis (CBA)” was developed as a supplement to the Strategic and Business Plan Guidelines, and is available for reference on the NSGIC website (<http://www.nsgic.org/>)

Whether a rigorous analytical method is used or not, certain questions need to be asked, and thorough answers will **enhance your credibility** in justifying your program. For example, it is important to include **financial benefits** (such as cost savings, or cost avoidance), and also **non-financial benefits** (such as better or more available data). Historically, the latter is one of the challenges of doing cost-benefit analysis for public projects, due to the difficulty for quantifying both tangible and intangible benefits. It is also important to think of projected values as more than just a means to obtain funding. They are also measures for on-going **performance appraisal** and results-based management that are closely tied to the goals. Ultimately, the projected benefits will need to be compared to the associated costs for a justifiable case to be made.

- a. What is the primary reason ‘why’ you want to do what you are proposing? (*Mandatory*)
- b. Are there good “use cases for implementing the subject program?”
- c. Where do we get lessons-learned?
- d. What are the key reasons for saying “yes” to what you are asking for?
- e. What are the distinct qualitative benefits of implementing this program? For customers? For business partners? For other levels of government?
- f. How can qualitative benefits be presented in a meaningful way?
- g. What are the distinct quantitative benefits of implementing this program? For customers? For business partners? For other levels of government?
- h. Are there other benefits to be realized, such as reduced wait times, enhancing a centralized data store with critical data?
- i. What problems are you going to solve, or what opportunities are you going to enable by going forward?
- j. How might this program benefit our sponsor agency?
- k. What are the benefits that users across each stakeholder community will realize?
- l. What improvements to the current way of doing things will be achieved, including new efficiencies or capabilities?
- m. What are the benefits to society as a whole?
- n. What are the implications and costs of doing nothing and maintaining the status-quo?
- o. What opportunities are possible to redirect and concentrate existing resources toward accomplishing the subject program? (i.e. is there an opportunity to establish joint missions and cost-sharing?)

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- p. What opportunities are there to avoid costs by implementing the subject program? For example, will the current effort consolidate other duplicate initiatives that are underway elsewhere within the organization?
- q. How can this program eliminate duplication of effort and unnecessary redundancy?
- r. Does implementing this program provide the opportunity for a better ROI than current approaches?
- s. Are there synergies between this program and the overall mission and objectives of the local, state, tribal and federal stakeholders?
- t. How does this current program align with the organizational strategic goals? Will broader strategic goals be supported by this initiative?
- u. Are there synergies with priorities expressed in Presidential Directives, Executive Orders, or Congressional mandates? (e.g., Presidential Directive #8 on Homeland Security, Executive Order 12906 on NSDI and FGDC, or OMB Circular A-16)
- v. What opportunities are there to participate in federal, tribal, state, and local geospatial initiatives that position us for additional funding to meet our objectives for this program?
- w. Are there other states or organizations that can be cited as exemplars of success for similar programs? (Cite examples that are clearly comparable to your own situation such as states or projects of a similar size to the one you wish to have approved)
- x. Can you cite narrative or quantitative ROI case studies for similar programs?

4. REQUIREMENTS AND COSTS

This part of the Business Plan assesses the condition of the **existing infrastructure** as well as the **requirements** to achieve effective program implementation. There is a causal relationship between requirements and costs. Depending on the programmatic goals, you will need to provide appropriate program details for one or more of the sub-sections below (4.1 through 4.7).

REQUIREMENTS

This section should be closely aligned with the subject program, the **applications and business processes** that it must support, and associated user communities. It may include details for one or more of the following:

Data and Services

- Inventory of existing data or services
- Historic cost information
- Service providers
- Data owners and stewards
- Data content and metadata
- Appropriate national and or other standards (including costs of adhering or not adhering)

Technology and Architecture

- Integration with the broader statewide SSDI or national NSDI
- Assessment of the broader state level Information Technology (IT) architectural environment

The **broader role of IT** is to provide guidance, services, and infrastructure to support a full range of business requirements. The SSDI should be no different in this regard, and should bring geospatial data into play with a variety of business processes which may (or may not) be traditional GIS applications. The focus of this section is to fit the subject program into this **overall context**. It should also explore any **unique requirements** that are particular to geospatial data collection, management, and sharing.

COSTS

It is important to breakdown the cost factors associated with implementing a program. This should include an assessment of immediate costs as well as on-going costs over the longer term. Cost factors are many (and varied) and might include the following items for a functional or applications driven issue:

- System Planning
- System Acquisition
- Implementation
- Staffing
- Training
- Operations and Maintenance

Sometimes programs get up-front funding to get off the ground, and then fail due to a lack of sustainable funding for ongoing operations and maintenance. It is important to fully and adequately present the **spectrum of costs**.

Opportunity costs are often neglected because they can be hard to quantify. These costs relate to alternatives that cannot be pursued due to choices that are made (or not made), and the associated forgone benefits. For example, if geospatial interoperability is not achieved, how would you quantify the decreased benefits or increased costs? Another form of cost is that associated with **risk assessment**, including the potential severity and probability that particular outcomes might occur. For example, if your jurisdiction is not able to share data with First Responders, what is the risk of not having an accurate and current Common Operational Picture (COP) to support situational awareness in the event of an emergency?

A good example of a useful tool for projecting costs is the **Spread Sheet** approach developed by NSGIC as part of The National Map Partnership Project (see informational material on the NSGIC website). While it was principally designed for national cost estimation, it is a method to consider as you breakdown and consider the full cost of your program, including the cost of lost benefits.

4.1 Organizational Approach

A good organizational approach is necessary to accomplish your programmatic goals. It is appropriate to identify the organizations that will be required to cooperate for the implementation effort to be successful. Other content may include:

- Qualifications and experience of the key people
- Required skill sets
- Gaps in existing skill sets
- Availability of staff and their alignment
- Executive Support

This section is considered **Mandatory**. Relevant questions to help develop your organizational approach include the following:

- a. Who is behind this effort?
- b. Who are the individuals responsible for implementing the Business Plan?
- c. What is their organizational affiliation?
- d. What is their track-record for leading successful program efforts?
- e. What level of organizational support and commitment is evident?
- f. How is the Business Plan implementation team chartered?
- g. Who will manage the program to ensure success, and why?
- h. Who are the customers, consumers, or constituents for the program?

4.2 Suitability Assessment of Existing Infrastructure

Based on what you want to accomplish, you need to look at the existing technology infrastructure to determine if it is adequate, or not. This includes taking inventory of what you have, and assessing its suitability for supporting your programmatic goal(s).

- a. What is the state of our technology infrastructure to support the subject program? (e.g., hardware, software, networking, communications, storage, backup, retrieval, disaster recovery, etc.)
- b. Is there an existing State IT Enterprise Architecture that is relevant to this program? (i.e., to facilitate data exchange and distribution.)
- c. Are standards in place that relate to the subject program? If so, which ones?
- d. Are we in compliance with these standards?
- e. What is the migration plan to arrive at compliance with these standards?
- f. What geospatial content do we have that relates to the subject program? (And, what is its quality in terms of accuracy, currency, and completeness?)
- g. Is there a current user community with expectations? If so, what are the expectations? (i.e., will they applaud a change of approach, or resist it?)
- h. What existing business processes and applications need to be supported that relate to the subject program? (e.g., permitting, licensing, taxing, etc.)

4.3 Data Requirements

Depending on the programmatic goal you are planning to implement, this can be fairly straightforward. For example, if you are acquiring improved elevation data for statewide applications, you would focus on data specifications for meeting your application requirements. If you are **identifying data gaps** across the enterprise, a more extensive investigation might be needed to identify available data sets, and to assess their quality for the desired purposes that they need to support.

- a. What geospatial content do we need to fulfill the objectives of this program?
- b. What levels of accuracy, completeness, and currency do the data need to have?
- c. Is there a Federal compliance mandate for data to be built to meet certain specifications? (i.e., the EPA may have specific data requirements)
- d. Are there confidential datasets that need to be treated differently than publicly available datasets? (e.g., critical infrastructure or privacy concerns)
- e. Are basic metadata records completed and what is our plan to submit records to a discoverable metadata clearinghouse or inventory system?
- f. Are there data warehousing schemes with Extraction, Transformation, and Loading (ETL) procedures that support the distribution of subject data?
- g. Is one data schema available to implement that serves all needs?
- h. If multiple schemas are needed, what applications do they need to be tailored to?
- i. Has data been aggregated from multi-jurisdictional sources?
- j. Are data sharing agreements and MOUs in place?
- k. Are there data sharing agreements with private sector stakeholders, such as utility companies, if they are relevant to this program?
- l. Are there standards being used for data development and exchange?

- m. Are authoritative data sources identified and respected?

4.4 Technology Requirements

Based on your assessment of existing infrastructure, gaps may be identified in terms of supporting the needs of your program. In this case, you should **specify what is necessary and appropriate**. This may be as simple as identifying additional storage requirements for an image server, or as complicated as proposing a new enterprise architecture for managing geospatial data and services.

- a. Does the subject program have any particularly unique requirements and do we have personnel with experience in their use? (e.g., in terms of storage, processing, exchange, such as distribution formats and media?)
- b. What system architectures are needed? (e.g., servers, desktop clients, web browser clients, networks, etc.)
- c. What applications need to be supported?
- d. What interoperability specifications need to be followed, if any?
- e. How will the proposed technology fit into the state enterprise IT architecture? How does it relate to the Federal Enterprise Architecture (FEA) Geospatial profile?
- f. How does the proposed technology dovetail with an existing IT strategic plan?
- g. What are the security and privacy requirements and how are these safeguarded technologically?
- h. Are there relevant *de facto* standards based on a dominant product manufacturer? If so, are they congruent with statewide needs?
- i. What overarching enterprise architecture plans need to be followed (and at what level of compliance)? (i.e., is there a Service-Oriented Architecture in place?)
- j. Do we have legacy systems that need to be integrated?

4.5 Resource Requirements

In this context, resource requirements include people and facilities to support your program. There is a separate section for costs.

- a. What people expertise is needed?
- b. Are the required skills already available within the organization or will staff require training?
- c. Will staff need to be reassigned in order to support the subject program?
- d. Will new staff need to be hired?
- e. Are consultants needed?
- f. Are voluntary resources available, with the right skill sets and availability?
- g. Are there relevant resources available at local or state universities?
- h. Are there facilities to accommodate the subject program?

4.6 Standards

This section is **“Mandatory if Applicable.”** For example, standards would be applicable to plans about data, but not for plans to create the role of “GIO.”

- a. What are the relevant national standards that relate to the subject program?
(See: <http://www.fgdc.gov/standards>)
- b. What are the relevant standards that relate to the SSDI in general?
- c. Do you have any standards dictated by your organization?
- d. What determines the appropriateness of various standards for us?
- e. Are we in compliance with these standards?
- f. If we don't adopt appropriate national standards, are we decreasing our ability to partner or obtain grants and cost-share funds?

4.7 Costs

This section provides the detail about **how much** funding is needed, whereas the "Budget Plan" (Section 5.3) determines how funds will be secured and spent.

- a. What are the projected costs for all requirements (e.g., data, technology, standards, training, and staff)?
- b. Have we considered the full spectrum of costs (e.g., planning, acquisition, implementation, operations, maintenance, and the timing of costs -- annual costs, cost of project phases, cost of total project, fixed costs, variable costs, etc.)?
- c. If required, how will new staff positions be funded?
- d. What methods will be used to project our needs for funding (e.g., VMM, TNM Spread Sheet, or other analytical methods)?
- e. How are we funded (e.g., dedicated funds, mission-driven funds, general funds, special funds, service fees, assessment on agencies, permit/license fees, federal grants, central and capital funds, cost recovery)?
- f. How can we redirect existing funding to achieve our goals?
- g. What non-traditional sources of money/funding can be utilized for this initiative (e.g., Federal grants, agency assessments, incentives, matched contributions from other sources, etc.)?
- h. How do we insulate ourselves against future budget cuts and shortfalls?

4.8 Risks

Assessment of risk is an important aspect of planning. A thorough and realistic assessment of risk, as well as an analysis of **possible mitigation steps**, will demonstrate that all aspects of the initiative have been examined, and that due diligence was performed. Sometimes there are risks associated with taking no action. For example, equipment may be outdated and no longer supported by a manufacturer. If the equipment fails, the outcome could severely impact the ability to conduct business. If risks are very low, this should also be reported to make it explicit that the risk assessment was performed.

- a. What are the major external challenges that could possibly affect our efforts in a negative way?
- b. What operational issues do we have and how can we overcome these?
- c. How do we recognize and overcome obstacles?
- d. What might happen if we don't appropriately anticipate obstacles?

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- e. How do we assess program vulnerabilities (e.g., public access to sensitive data, system back-ups, viruses, etc.)?
- f. How do we reduce our risk factors?
- g. What is the severity and probability of the risk factors occurring that we identify?

5. IMPLEMENTATION PLAN

This section of the Business Plan should briefly explore all viable options and then thoroughly document the recommended set of **specific steps, schedules, budgets, and activities** required to accomplish the goals of the program. This is where a **phased approach** might be delineated, with targets for where the statewide spatial data infrastructure should be along a timeline with appropriate **milestones**. Showing early success and incremental progress is desirable. This section is aimed at the programmatic goals prioritized for business planning and implementation.

A frequent **assessment of progress** is necessary in order to ensure that plan objectives are achieved in a timely manner. **Course corrections** may be required as new information becomes available or new opportunities or threats develop. See “Success Scorecard” in Appendix 3.

5.1 Implementation Details

This section includes a summary of overall implementation details, elaborating on requirements from the previous section. For example, this is where you would name the implementation team that fulfills the required qualifications, and which needs to be available to work on the program. It may also include a “reality check” on what is feasible in your operating environment, so that your plan is reasonable to implement. For example, this is where you might explain that you are taking a phased, incremental approach, with the planned “Phasing and Milestones” and “Budget Plan” to be described in subsequent sections.

- a. Have we geared our implementation objectives to what is practical and useful to stakeholders?
- b. Have we set realistic expectations based on what is achievable?
- c. Do we have a contingency plan?
- d. Who is responsible for administering the program?
- e. How will their performance be measured?
- f. Are our proposed steps appropriately prioritized?
- g. Have we considered training requirements and who should receive this training?
- h. How much of this effort should be taken on by in-house resources and how much could be met with consultant help?
- i. Are their procurement considerations, in terms of both procedures and timing?
- j. Is partial success acceptable? If so, how is this to be determined?
- k. What would constitute failure?

5.2 Phasing and Milestones

A timeline or chart should be included in this section, showing the phases and milestones for implementing the project. This not only helps to guide action, but it serves as a baseline for monitoring progress. **(Mandatory)**

- a. Based on available time and resources, what is realistically achievable?

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- b. Should we look at a phased implementation?
- c. What are the target dates for the completion of each phase?
- d. Are incremental deliveries desirable? If so, are they feasible?
- e. Are we cognizant of specific program dependencies, such as leaf-on or leaf-off considerations for flyovers, the related timing of an RFP, pilot studies, and other execution details?

5.3 Budget Plan

In this section, the costs described under “Requirements” are factored into a budget plan. This is done in consideration of your Fiscal Year and budget cycle, as well as the Phasing and Milestones described above. **(Mandatory)**

- a. Based on the implementation plan, what are the budgetary needs?
- b. Have we documented how to redirect existing funds as our first choice?
- c. Have we documented the savings due to cost avoidance?
- d. Have we documented the savings due to reducing duplication of effort?
- e. Who is the financial authority for administering the budget?
- f. What can be allocated per time period of the implementation program?
- g. How does the available budget affect the deliverables and project timeline?
- h. Are there cost-sharing alternatives?

5.4 Marketing Outreach

Effective marketing will help increase visibility for your program, and improve the awareness for what you are trying to accomplish. It is often overlooked, but there are a number of useful tools and techniques for promoting your program and garnering support. The NSGIC website has support materials for this purpose (<http://www.nsgic.org/>).

- a. How do we get the word out (e.g., press releases, articles, whitepapers, workshops, seminars, conferences, webcasts, podcasts, etc.)?
- b. Who is our target audience for marketing?
- c. Is the target audience the same as our customers and constituents for the program deliverables?
- d. What events should we attend?
- e. What are the logistics of maintaining a sufficient level of communication between the strategic group and the stakeholder community?
- f. Are we leveraging existing GIS communities (e.g., User Groups, Roundtables, List Server members)?
- g. Do we have a group identity for our GIS coordination community?

6. MEASURING SUCCESS AND FEEDBACK FOR RECALIBRATION

Regular progress reviews are an important aspect of monitoring a program. In busy, complex organizations, it is sometimes easy to lose sight of your broader goals. Revisiting goals on a periodic basis, and determining what level of progress has been achieved in meeting those goals, offers an opportunity to make appropriate adjustments in strategy or approach. There is a separate but related document called “**Scorecard for Measuring Success**” that includes a sample rubric for developing your own scorecard for tracking progress.

Success can be measured in many ways, including measurable cost savings, direct and positive feedback from the stakeholder community, additional funding or a growing level executive support. Developing a set of quantitative performance benchmarks for each goal or supporting objective provides a way of establishing a clearly understood scorecard that is quantifiable. It also allows you to look at progress over time. If possible, each task should have an associated completion date, so an assessment of progress will include the time dimension. Assessing progress against targets obviously provides a ready means to determine the current success level. If that level is low then appropriate action needs to be taken.

- a. What are our criteria for performance measurement? (*Mandatory*)
- b. What are the critical success factors that would indicate to our stakeholders that we are on the path to success?
- c. How will we capture feedback from all appropriate stakeholder groups?
- d. What performance metrics should we use?
- e. Have we developed a set of achievable goals with associated benchmark measurements of success?
- f. Will performance metrics support measuring progress over time?
- g. How do we capture cost-benefit data and determine ROI, both quantitatively and qualitatively?
- h. How often should we assess progress and recalibrate?
- i. Who do we report our successes to? (e.g., Stakeholders, Executives, general public, others)
- j. How do we report our successes? (e.g., website, conference presentation)
- k. With growing success, are there new opportunities or sources for additional funding?
- l. Who is going to be involved in completing the score card?

7. INFORMATIONAL MATERIAL

Instructional appendices for the Business Plan Guidelines appendices are available on the NSGIC website:

www.nsgic.org

- Appendix 1: “Economic Justification: Measuring Return on Investment (ROI) and Cost Benefit Analysis (CBA)”
- Appendix 2: The National Map Partnership Project – Cost Spreadsheet
- Appendix 3: Performance Score Card
- Appendix 4: Sample SSDI Business Plans

Other Information: GITA ROI workbook on the FGDC web page at:
<http://www.fgdc.gov/policyandplanning/50states/roiworkbook.pdf>