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OFFICE OF MANAGEMENT AND BUDGET  
WASHINGTON, D.C. 20503

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MEMORANDUM TO HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM: Vivek Kundra *Vivek Kundra*  
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SUBJECT: Issuance of OMB Circular A-16 Supplemental Guidance

Data-management, and particularly geospatial data-management, is one of the essential components for addressing the management of the business of government and for supporting the effective and economical use of tax dollars. It is, however, susceptible to constant renewal, information quality, and information management challenges. A portfolio-centric model cures the single agency, stovepipe model by applying consistent policy, improved organization, better governance, and understanding of the public to deliver outstanding results.

The Office of Management and Budget (OMB) Circular A-16, "Coordination of Geographic Information and Related Spatial Data Activities," provides for improvements in the coordination and use of spatial data, and describes effective and economical use and management of spatial data assets in the digital environment for the benefit of the Federal Government and the Nation. This Supplemental Guidance document further defines and clarifies selected elements of OMB Circular A-16 to facilitate the adoption and implementation of a coordinated and effective Federal geospatial asset management capability that will improve support of mission-critical business requirements of the Federal Government and its stakeholders.

This updated guidance is effective for agencies to use immediately through coordination with the Federal Geographic Data Committee. Please contact [egov@omb.eop.gov](mailto:egov@omb.eop.gov) and have the term "A-16 Supplemental" in the subject line of the email if you have any questions regarding this guidance.

Attachment



**GEOSPATIAL LINE OF BUSINESS**

**OMB CIRCULAR A-16 SUPPLEMENTAL GUIDANCE**

**NOVEMBER 10, 2010**



# Contents

	<b>Page</b>
1. Introduction	3
2. Elements of the National Geospatial Data Asset Portfolio	9
3. Portfolio Management of National Geospatial Data Assets	12
4. Roles and Responsibilities Pursuant to OMB Circular A–16, Section 8	20
5. National Geospatial Data Asset Portfolio Investment Strategy	27
Appendix A. Acronyms	33

# 1. Introduction

## 1.1. Background and Purpose

The Office of Management and Budget (OMB) Circular A-16, “Coordination of Geographic Information and Related Spatial Data Activities” (revised 2002)<sup>1</sup>, provides for improvements in the coordination and use of spatial data, and describes effective and economical use and management of spatial data assets in the digital environment for the benefit of the government and the Nation. This Supplemental Guidance document further defines and clarifies selected elements of OMB Circular A-16 to facilitate the adoption and implementation of a coordinated and effective Federal geospatial asset management capability that will improve support of mission-critical business requirements of the Federal Government and its stakeholders. Its primary focus is on geospatial data as a capital asset. It provides the foundation for a portfolio management approach to a National Geospatial Data Asset (NGDA) Portfolio comprised of National Geospatial Data Asset Themes (NGDA Themes) and their associated National Geospatial Data Asset Datasets (NGDA Datasets)<sup>2</sup>. NGDA Themes are synonymous with OMB Circular A-16 Themes<sup>3</sup>. The balance of this Supplemental Guidance speaks to NGDA Portfolio management in the context of the NGDA Themes and their associated NGDA Datasets and sets forth a systematic process whereby both within-theme and crosscutting portfolio management enables direct performance toward a shared enterprise-wide “target state” that optimizes the value of the NGDA Portfolio.

Data management and particularly geospatial data management is one of the essential components for addressing the management of the business of government and for supporting the effective and economical use of tax dollars. It is, however, susceptible to constant renewal, information quality, and information management challenges. A portfolio-centric model cures the single agency stovepipe model

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<sup>1</sup> The complete text of OMB Circular A-16 (2002) can be found at [http://www.whitehouse.gov/omb/circulars/a016/a016\\_rev.html](http://www.whitehouse.gov/omb/circulars/a016/a016_rev.html)

<sup>2</sup> A NGDA Dataset is defined as a geospatial dataset that has been designated as such by the FGDC Steering Committee and meets at least one of the following criteria: Supports mission goals of multiple federal agencies; statutorily mandated; Supports Presidential priorities as expressed by Executive Order or by OMB.

<sup>3</sup> An A-16 Theme is defined as representations of conceptual topics describing digital spatial information for the Nation. Themes contain associated datasets (with attribute records and coordinates) that are documented, verifiable, and officially designated to meet recognized standards. A theme contains one or more datasets of geographic information to be used in common and from which other datasets can be derived. Themes are listed in OMB Circular A-16.

by applying consistent policy, improved organization, better governance, and understanding of the electorate to deliver outstanding results.

Portfolio management is the process of tracking, maintaining, expanding, and aligning assets to address and solve the business needs of an enterprise. Portfolio management approaches include a number of components:

- Strategic portfolio planning;
- Coordinated development and resource pooling;
- Established goals and performance measures, indicating the benefits of each asset investment, and how it contributes to the overarching goals (particularly completion/renewal) of the portfolio;
- Investment selection criteria; and
- Processes for reviewing the health of, and return on, asset investments that inform investment decisions, redistribution of resources, management of issues and mitigation of risks to the portfolio.

Each NGDA Theme consists of a related group of NGDA Datasets selected from a larger, constantly changing universe of geospatial datasets because they meet the inclusion criteria for the NGDA Theme. The overall assets involved include geospatial data, funding, infrastructure, hardware, software, personnel, applications, services, and products<sup>4</sup>. Portfolio management provides a systematic way to manage overall assets. In this Supplemental Guidance, only data assets are specifically addressed. Hardware and software funding is tracked in parallel processes under the Capital Planning and Investment Control (CPIC) process developed in Clinger-Cohen. Awareness of this hardware and software funding is relevant to the data asset management process but is not directly involved in it.

As governance of Federal geospatial assets matures toward administration of Federal geospatial assets as a cross-cutting portfolio, the roles and responsibilities for managing assets beyond data will in many instances require closer ties between agency managers. These include geospatial program managers, agency Chief Information Officers (CIO) and Chief Financial Officers (CFO), and the managers of the Federal geospatial portfolio through the Federal Geographic Data Committee (FGDC). These relationships will particularly be needed to identify geospatial data, capabilities, services, and tools that should be elevated from a program level to a Federal level for resourcing and management because they can better serve as a valuable Federal-wide geospatial asset. The resourcing, management, and

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<sup>4</sup> The geospatial portfolio includes establishing the resources for platform, geospatial data and applications management. The Supplemental Guidance links all portfolio elements to geospatial data assets.

maintenance of these assets at a Federal level, e.g. cross-agency funding for a shared service, or designation of a single program as the lead for a specific capability, will be a result of, and become a part of, the overall geospatial portfolio management process.

### 1.2. Guidance, Goals, and Authority

This guidance further defines the elements, roles, responsibilities, management processes and investment strategies needed for systematic and effective execution of the Federal agency responsibilities, referenced in OMB Circular A–16, via implementation of the NGDA Portfolio, the principal component of the full Federal geospatial portfolio. It establishes the framework for lifecycle-based NGDA Dataset management, interagency NGDA Theme management, and government-wide NGDA Portfolio management. It specifies and incorporates reporting processes intended to increase transparency of the development and maintenance of NGDA Datasets. It also establishes a “collaborative investment process” whereby peer review and consultation regarding the NDGA Themes and their associated NGDA Datasets are conducted annually and whereby recommended interagency priorities are provided to OMB to inform the budget process. This Supplemental Guidance was developed by the FGDC under authority granted to it by Executive Order 12906 and OMB Circular A-16. While this Supplemental Guidance expands upon and clarifies some of the language and responsibilities contained in OMB Circular A–16, it is a supportive document that does not alter the current language of OMB Circular A–16. Note that OMB Circular A–16 Appendix A includes a list of other authorities that “provide requirements or guidance pertaining to management of data and Federal information assets related to geographic locations...OMB may amend the list [of authorities] as new authorities are approved.”<sup>5</sup>

### 1.3. Why the guidance is needed

Issues affecting both citizens and mission-critical government functions are often place-based or location-specific. The Supplemental Guidance is needed to link interagency portfolios, portfolio enhancement, reuse, and programmatic benefit to Department/Agency missions and the larger stakeholder community. To support mission-critical functions, the Federal Government makes large investments in acquiring and developing geospatial data. Historically these investments were largely uncoordinated and often lacked transparency, and sometimes resulted in data deficiencies, lack of standardization, inefficient use of resources, lack of interoperability, or inability to share data. The enterprise-wide adoption and execution of these practices not only foster improved operating efficiencies in Federal and partner programs but also include reporting that supports government transparency.

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<sup>5</sup> Language taken directly from OMB Circular A–16 Appendix A (Revised 2002) available at [http://www.whitehouse.gov/omb/rewrite/Circulars/a016/a016\\_rev.html](http://www.whitehouse.gov/omb/rewrite/Circulars/a016/a016_rev.html)

#### 1.4. Who should use the guidance

This guidance is primarily directed to Federal agencies designated by OMB as Theme Lead Agencies<sup>6</sup> who work with their partners to develop, maintain, and manage NGDA Themes and their associated NGDA Datasets. It has received broad Federal, stakeholder, and OMB review.

Fully implementing this guidance across all agencies will take a number of years, as agencies shift resources to address a more robust management of NGDA Themes and NGDA Datasets. In the sense that at promulgation it represents a future scenario of operations, this guidance recommends that all involved entities take steps to develop and annually execute plans and report to the FGDC Steering Committee on their progress in implementing this guidance. The FGDC Steering Committee will annually recommend government-wide steps for achievement of the portfolio management approach, will annually report the NGDA Portfolio status to agency CFOs and CIOs and OMB, and will ensure that appropriate resources are identified in the agency budget requests to OMB. The FGDC Secretariat will consult with agencies to support definition and development of their agency-specific roles, responsibilities, and obligations through education and use of standards.

#### 1.5. Non-Federal stakeholders

The development of NGDA Datasets often results from partnerships involving multiple levels of government. Therefore NGDA Theme Leads and NGDA Dataset Managers need to be informed of the requirements and activities of the State, Tribal, and local levels of government, especially since in aggregate these other levels of government annually acquire more geospatial data than does the Federal Government.

While coordination between government and non-government organizations is an ongoing aspect of geospatial data collection, management and sharing, the FGDC structure also includes an official body that represents non-Federal constituents. The National Geospatial Advisory Committee (NGAC) was established under the Federal Advisory Committee Act (FACA) and is sponsored by the U.S. Department of the Interior, the FGDC Chair. The NGAC is an advisory body that provides advice and recommendations on Federal geospatial policy and management issues and serves as a forum to convey views and priorities representative of the broad geospatial community. Consultation with such stakeholders allows the FGDC to consider the implications of its recommendations for the overall

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<sup>6</sup> The definition for the term Theme Lead Agency can be found in the Lexicon of Geospatial Terminology found on the FGDC web site ([www.fgdc.gov](http://www.fgdc.gov))

National Spatial Data Infrastructure (NSDI)<sup>7</sup>, rather than just the Federal portion of the NSDI, and to consider intergovernmental priorities, views, and initiatives in its portfolio management process.

#### 1.6. Organization of the guidance

Sections 2 through 5 of this Supplemental Guidance describe the framework for NGDA Portfolio management. The information covered in these sections includes:

- Section 2: Elements of the National Geospatial Data Asset Portfolio—what the NGDA Portfolio contains

NGDA Datasets are organized into NGDA Themes that make up the NGDA Portfolio. NGDA Portfolio elements and relationships are defined and described in this section.

- Section 3: Portfolio Management of National Geospatial Data Assets—how the NGDA Portfolio is managed

Portfolio management processes are described from both a long-term and an annual perspective, and a future portfolio management approach is articulated.

- Section 4: Roles and Responsibilities Pursuant to OMB Circular A-16 Section 8—who manages the NGDA Portfolio

Roles and responsibilities related to OMB Circular A-16 are defined for Federal agencies involved in geospatial activities. This section clarifies leadership and stewardship roles to minimize or eliminate confusion, facilitate communication and partnering between Federal agencies and other stakeholders, and enhance NGDA Portfolio management accountability and transparency.

- Section 5: National Geospatial Data Asset Portfolio Investment Strategy—setting priorities for the NGDA Portfolio

The section describes a recommended priority setting process for the NGDA Portfolio at many levels of government. The FGDC Steering Committee makes recommendations of high level NGDA Portfolio-wide priorities based on key Federal mission needs, Presidential priorities, Congressional mandates, and FGDC planning processes. All of these have implications for each NGDA Theme and its associated NGDA Datasets.

- Appendix A: Glossary of Acronyms

This Appendix provides a list of acronyms used throughout this Supplemental Guidance.

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<sup>7</sup> The definition for the term National Spatial Data Infrastructure can be found in the Lexicon of Geospatial Terminology found on the FGDC web site ([www.fgdc.gov](http://www.fgdc.gov))



Additional Supplemental Guidance Reference Materials have been developed to further inform and assist with the implementation of this guidance. The materials listed here were developed in tandem with the Supplemental Guidance document. These materials, and any future reference materials, are available on the FGDC website: <http://www.fgdc.gov/policyandplanning/a-16>

- Reference Material: FGDC Structure and Federal Agency and Bureau Representation, available at: <http://www.fgdc.gov/policyandplanning/a-16>

The FGDC is an interagency committee responsible for facilitating OMB Circular A-16 related activities and implementation of the NSDI. The FGDC is chaired by the Secretary of the Interior, with the Deputy Director for Management, OMB serving as Vice-Chair. All agencies responsible for NGDA Themes (as designated in OMB Circular A-16 Appendix E) are required to be members of the FGDC.

- Reference Document: Process for adjusting OMB Circular A-16 Appendix E: NSDI Geospatial Data Theme Principles, available at: <http://www.fgdc.gov/policyandplanning/a-16>

NSDI geospatial data theme principles define the characteristics of NGDA Themes and serve as guidelines for inclusion of a NGDA Theme in OMB Circular A-16 Appendix E. These principles are a precursor to establishing a predictable and repeatable process for designation and management of NGDA Themes under the authority of OMB Circular A-16 and listed in OMB Circular A-16.

- Reference Material: Lexicon of Geospatial Terminology, available at: <http://www.fgdc.gov/policyandplanning/a-16>

The Lexicon of Geospatial Terminology provides a common set of geospatially-related terms and concepts to encourage consistent use of terminology and to promote a clearer understanding of the commonly used terms.

- Reference Document: Stages of the Geospatial Data Lifecycle pursuant to OMB Circular A-16 Sections 8(e)(d), 8(e)(f), and 8(e)(g), available at: <http://www.fgdc.gov/policyandplanning/a-16>

This document describes the Geospatial Data Lifecycle stages that NGDA Dataset Managers should employ when developing, managing, and reporting on NGDA Datasets under the auspices of OMB Circular A-16. The matrix establishes a framework of standard terminology and processes for seven Geospatial Data Lifecycle stages.

- Reference Document: Key Roles and Responsibilities, available at: <http://www.fgdc.gov/policyandplanning/a-16>

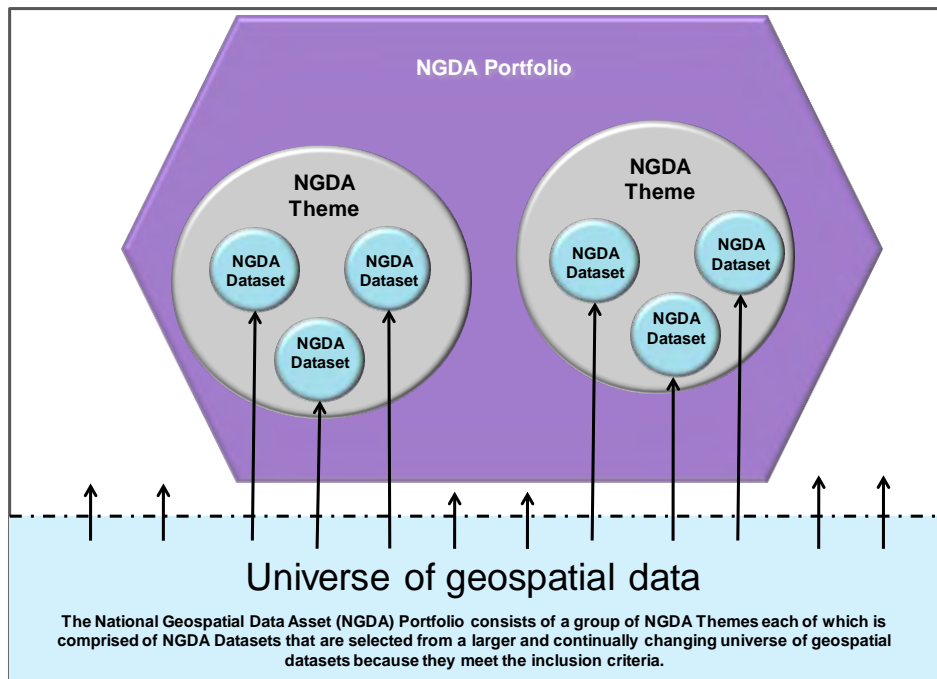
This document describes the key roles and responsibilities of each party to NGDA Portfolio management in detail.

## 2. Elements of the National Geospatial Data Asset Portfolio

### 2.1. NGDA Portfolio

The NGDA Portfolio is envisioned as a group of NGDA Themes, each of which is comprised of related NGDA Datasets selected from a much larger and continually changing universe of geospatial datasets (Figure 1). There are a large number of Federal geospatial datasets that, to varying degrees, are useful to Federal agencies, their business partners, stakeholders, and the public. Only a select subset of these will rise to the significance required for NGDA Dataset designation as recommended by the relevant NGDA Theme Lead, concurred on by the FGDC Coordination Group, and designated by the FGDC Steering Committee. The number of NGDA Themes in the NGDA Portfolio should remain relatively stable once defined, but the number and character of the NGDA Datasets comprising each NGDA Theme may change over time in response to geospatial and other business drivers.

**Figure 1. Structure of the NGDA Portfolio**



## 2.2. NGDA Theme

A NGDA Theme (synonymous with “A-16 Theme”) is an organizational construct under which multiple related NGDA Datasets are logically grouped and managed as a unit. The NSDI geospatial data theme principles summarized below and described in more detail in [Reference Document: Process for adjusting OMB Circular A-16 Appendix E: NSDI Geospatial Data Theme Principles](#) provide guidance on selecting the geospatial themes that fall under the purview of OMB Circular A–16.

- **Principle 1:** Themes are logical groupings of related national capital assets serving the needs of citizens, readily discoverable, and accessible to anyone.
- **Principle 2:** Themes are national in scope and are created and managed in response to well-defined spatial data requirements that are common across multiple Federal agencies and other organizations.
- **Principle 3:** Themes reflect legislated mandates, clearly defined directives, or core spatial reference datasets.
- **Principle 4:** Themes promote cohesive and collaborative development, maintenance, and evolution of multiple related datasets across Federal, State, Tribal, and local governments and the private or nonprofit sectors.
- **Principle 5:** Themes focus on the spatial representation of natural and manmade assets that are important to the Nation, including boundaries (jurisdictional, legal, and analytical).

The FGDC community will use these principles to establish, modify, and maintain the list of NGDA Themes that comprise the NGDA Portfolio.

## 2.3. NGDA Datasets

Geospatial datasets will be routinely inventoried and recommended for inclusion in the NGDA Portfolio when merited. The inventory process is considered a collaborative responsibility of NGDA Theme Leads and Thematic Committees. For approval by the FGDC Steering Committee as an NGDA Dataset, a geospatial dataset must meet at least one of the following criteria:

- Used by multiple agencies or with agency partners such as State, Tribal and local governments;
- Applied to achieve Presidential priorities as expressed by OMB;
- Required to meet shared mission goals of multiple Federal agencies; or
- Expressly required by statutory mandate.

To ensure quality and usability of NGDA Datasets by a broad range of agencies and programs, the data must be:

- Discoverable – published and available;

- Reliable – coordinated by a recognized national steward;
- Consistent – supported by defined schema, standards and understood content definitions to ensure their integrity (including conformance with FGDC Standards as applicable);
- Current and applicable – maintained regularly and adaptable to current needs; and
- Resourced – established and recognized as an enterprise investment.

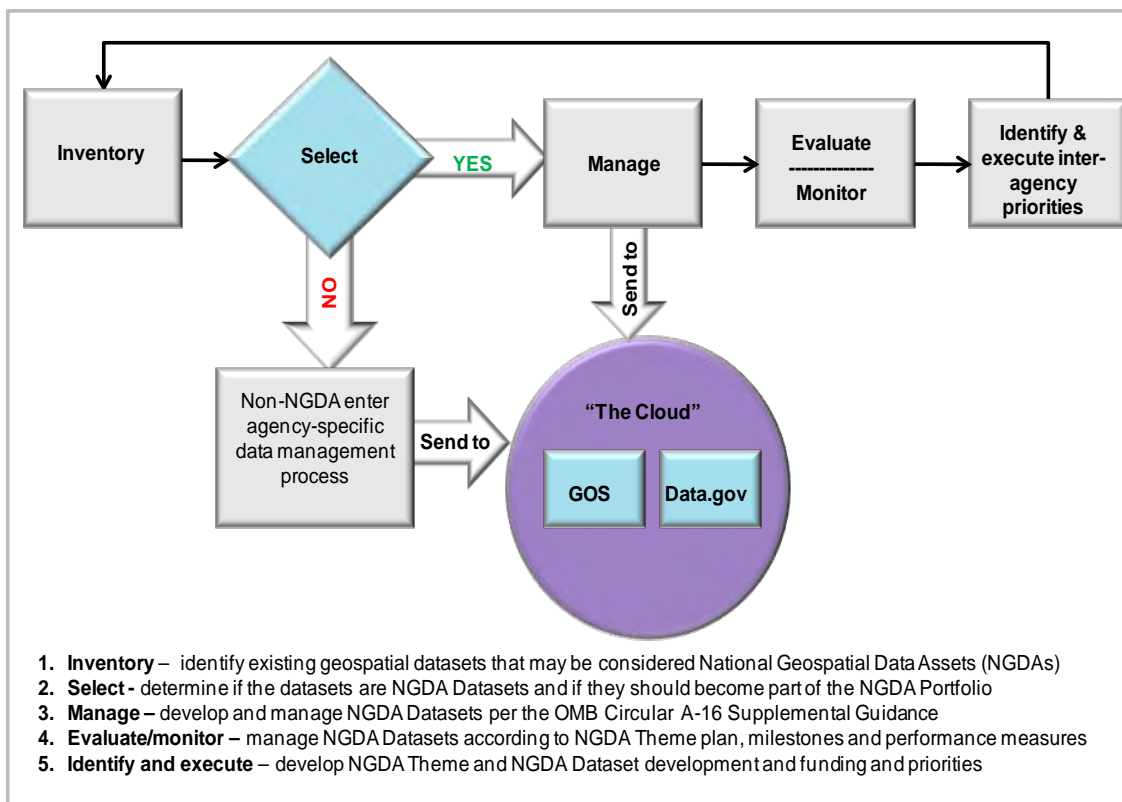
# 3. Portfolio Management of National Geospatial Data Assets

## 3.1. Portfolio Management

This section of the guidance describes a governance process for portfolio management of NGDA Themes and their associated NGDA Datasets. The portfolio management approach includes both a multi-year dimension premised on continual improvements and annual reporting on implementation progress. NGDA Datasets are essential to support agency mission and program needs, satisfy a multi-agency or stakeholder requirement and in simple words meet business-driven requirements.

NGDA Portfolio management consists of the inventory, selection, organization, management, evaluation, monitoring, and setting of Federal geospatial dataset priorities to ensure that NGDA Datasets are available to support the mission needs of the Federal Government and its partners, as determined by Federal agencies and their partners and as recommended to OMB. The activity flow within each stage of the NGDA Portfolio management process is shown in Figure 2.

**Figure 2. NGDA Portfolio Management Process**



### 3.2. Inventory

To identify geospatial datasets that comprise the NGDA Portfolio universe, the FGDC Steering Committee must know what geospatial data exist and how they support the business requirements of the Federal Government and its partners. Datasets compare to each other in characteristics such as definition, content, quality, application, and validity. Obtaining this information requires a recurring inventory and selection process. This initial inventory activity will be conducted to create a baseline portfolio, which will be routinely maintained on at least an annual basis. NGDA Theme Leads will work with their respective Thematic Committees and other appropriate communities of interest to constantly identify and evaluate geospatial datasets that are candidates for consideration as NGDA Datasets within the NGDA Theme. NGDA Theme Leads, the FGDC Coordination Group, or the FGDC Steering Committee can annually create, update or replace (delete) themes and/or datasets through the collaborative review process – OMB must be informed upon the addition or deletion of NGDA Themes accepted by the FGDC Steering Committee.

### 3.3. Select

NGDA Theme Leads will recommend datasets for inclusion under their data themes to the FGDC Coordination Group. The FGDC Coordination Group will work with communities of interest to determine which geospatial datasets should be part of the NGDA Portfolio under each NGDA Theme. The Coordination Group will present recommendations based on their determinations on NGDA Dataset candidates to the FGDC Steering Committee annually. Determinations by the FGDC Coordination Group will be based on the following high-level criteria:

- Used by multiple agencies and partners;
- Applied to achieve Presidential priorities as expressed by OMB;
- Required to meet shared mission goals of multiple Federal agencies; or
- Expressly required by statutory mandates.

The FGDC Coordination Group will recommend to the FGDC Steering Committee candidate NGDA Themes and NGDA Datasets (with NGDA Theme assignments) for inclusion in the NGDA Portfolio. After the initial update of the NGDA Themes and their associated NGDA Datasets is complete, the selection process will primarily apply to addition, change, or deletion of datasets. NGDA Themes and their associated datasets have already changed on a limited basis within the span of OMB Circular A-16, and will surely continue to do so. Agencies are required to establish the proposal for a new NGDA Theme and/or a new NGDA Dataset therein. The FGDC Steering Committee reviews proposals for acceptance or rejection as part of the annual NGDA Portfolio management process.

### 3.4. Manage

The “manage” phase of portfolio management consists of activities at both the NGDA Theme and NGDA Dataset levels. Activities for this phase of portfolio management include:

- An initial baseline assessment of the state and maturity of each NGDA Dataset within the NGDA Portfolio.
- Annual development of an NGDA Theme Report that covers the status of each associated NGDA Dataset. The NGDA Theme Report will also address those areas where NGDA Datasets need to be developed and/or managed jointly to ensure that they can be used most effectively to support mission goals and objectives and that they are developed in a manner that is most cost effective by minimizing duplicate development and leveraging resources. An annual NGDA Portfolio Summary will roll up this information in support of continuously improving the quality and value of the NGDA Datasets.

- NGDA Theme Leads will periodically present NGDA Theme status based on NGDA Theme and NGDA Dataset Reports to the FGDC Coordination Group to address status, plans, and resources.

#### **3.4.1. NGDA Dataset Management**

NGDA Dataset Managers should use the Geospatial Data Lifecycle (Reference Document: Stages of the Geospatial Data Lifecycle pursuant to OMB Circular A-16 Sections 8(e)(d), 8(e)(f), and 8(e)(g)) to plan, develop, maintain, evolve, and archive the NGDA Dataset(s) for which they are responsible. Figure 3 summarizes the Geospatial Data Lifecycle stages: Define Inventory/Evaluate, Obtain, Access, Maintain, Use/Evaluate, and Archive. Business requirements drive recommended management practices in each stage. The expected outcomes of adopting this lifecycle management framework include:

- Better understanding of the current maturity of NGDA Datasets;
- Identification of management practices that NGDA Dataset Managers use to develop NGDA Datasets;
- Provision of timely and high-quality geospatial data to support business processes and operations;
- Creation of stronger partnerships and coordination across all levels of government (and when appropriate, the private sector) to increase cost efficiency and return on investment;
- Improved strategies for completing and maintaining the NGDA Themes and their associated NGDA Datasets to enhance services to citizens; and
- Improved efficiencies in addressing Federal and national priorities.

NGDA Dataset Managers should evaluate their NGDA Dataset(s) against the Geospatial Data Lifecycle stages in order to report on their maturity and status. They should also report on how they are conforming to the NGDA Dataset Managers' responsibilities, expended resources (dollars and full time equivalent [FTE] staff), and other performance measures concurred upon by the FGDC Steering Committee. If funding information is not currently available, NGDA Dataset Managers should work with their agency leadership to develop means of tracking this financial information. The NGDA Dataset Manager will annually submit an NGDA Dataset Report to the relevant NGDA Theme Lead and will assist with incorporation of that information into a comprehensive annual NGDA Theme Report. The NGDA Theme Report will be submitted to the FGDC Secretariat for analysis by the FGDC Coordination Group and development of a NGDA Portfolio Summary. Based on their analysis the FGDC Coordination Group will make annual recommendations to the FGDC Steering Committee on NGDA Portfolio actions.



Figure 3. The Geospatial Data Lifecycle



**Stage 1. Define:** Characterization of data requirements based upon business-driven user needs.

**Stage 2. Inventory/Evaluate:** The creation and publication of a detailed list of data assets and data gaps (both internal and external) as they relate to business-driven user needs.

**Stage 3. Obtain:** Identify the mechanism(s) for the collection, purchase, conversion, transformation, sharing, exchanging, or creation of geospatial data that were selected to meet the business needs

**Stage 4. Access:** Making data produced known and retrievable to the community through documentation and discovery mechanisms so the users can meet their business requirements.

**Stage 5. Maintain:** Ongoing processes and procedures for data operation and maintenance to ensure that the data continue to meet business requirements.

**Stage 6. Use/Evaluate:** The ongoing assessment, validation, and potential enhancement of data to meet user needs and business requirements.

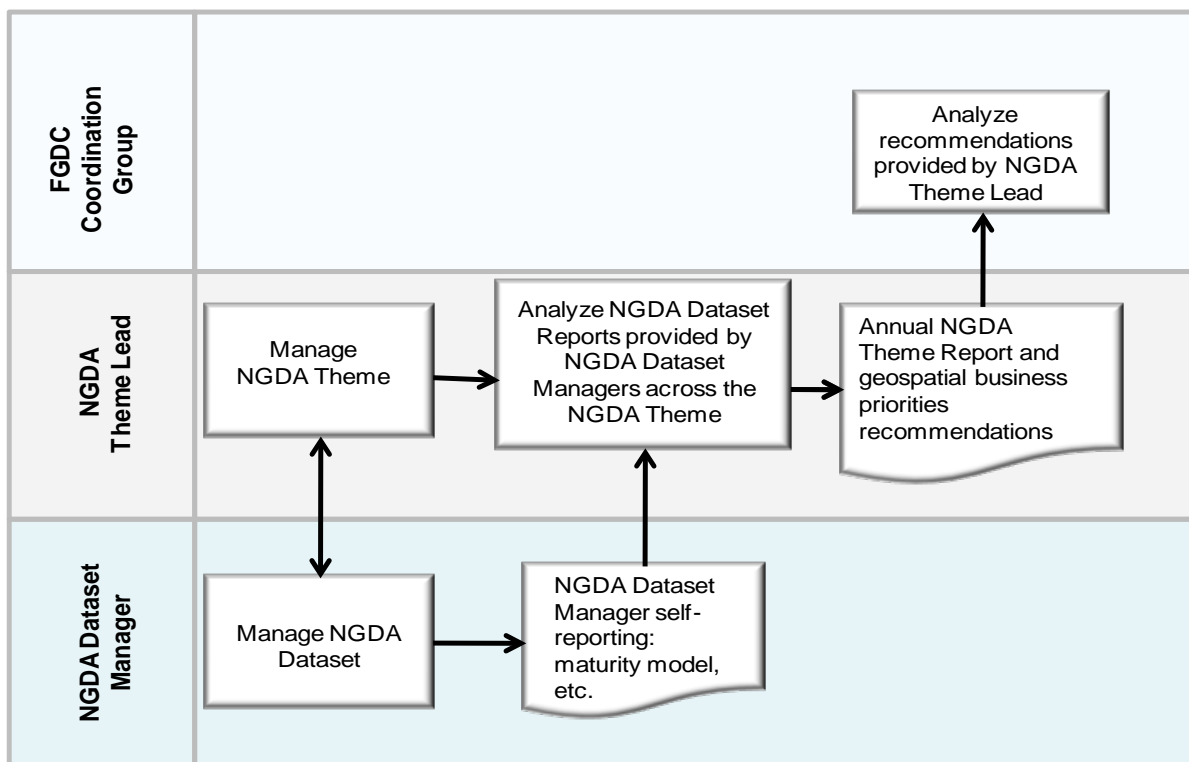
**Stage 7. Archive:** Required retention of data and the data's retirement into long-term storage.

### 3.4.2. NGDA Theme Management

Figure 4 depicts a standard process for NGDA Theme management and evaluation. NGDA Theme Leads should comprehensively coordinate with their NGDA Dataset Managers to provide overall management for the NGDA Datasets associated with the NGDA Theme. This will ensure that their NGDA Datasets effectively support the business processes reliant on them and that they are produced in the most cost effective manner. Coordination and integration of NGDA Dataset management will frequently occur across agencies, making interagency coordination a key responsibility of the NGDA Theme Lead. NGDA Theme Leads will also coordinate with other NGDA Theme Leads to ensure that NGDA Datasets applicable to more than one NGDA Theme are effectively co-developed. The FGDC Secretariat will facilitate these coordination activities.

The baseline and subsequent annual NGDA Dataset Reports comprise a key foundational element of the NGDA Theme Lead’s ability to collaborate with the NGDA Dataset Managers associated with the NGDA Theme, and to identify and execute common practices and shared services across NGDA Datasets within the NGDA Theme.

**Figure 4. Standard Process for NGDA Theme Management**



### 3.5. Evaluate/Monitor

Completion, maintenance, and evolution of the NGDA Portfolio will require the governance and organizational structures described in this Supplemental Guidance to be in-place. As noted earlier, the NGDA Dataset Managers will annually submit NGDA Dataset Reports to their relevant NGDA Theme Leads and will assist with incorporation of that information into a comprehensive annual NGDA Theme Report. NGDA Theme Leads will develop NGDA Theme Reports that capture plans for, milestones for, and progress in establishing the necessary organizational structures and resources. Theme Lead Agencies will submit NGDA Theme Reports to the FGDC Secretariat for summarization, and to the FGDC Coordination Group for analysis and development of a NGDA Portfolio Summary. Based on this analysis the FGDC Coordination Group will make annual recommendations to the Steering Committee on NGDA Portfolio actions.

### 3.6. Identify and Execute Interagency Priorities

A key goal of NGDA Portfolio management is to enable the FGDC Steering Committee to make informed decisions on setting both short- and long-term priorities on NGDA Themes and NGDA Datasets as well as cross-agency collaboration targets for NGDA Dataset development and funding. Portfolio-wide metrics will provide a comprehensive picture of the NGDA Portfolio allowing better enterprise-level decision-making than is possible under the current decision process. Under the current process where decisions are made without the benefit of inter-agency discussions, decisions are often “stove-piped”<sup>8</sup> and made with insufficient information in terms of the benefits and risks associated with multiple investment paths. Under the new process, NGDA Theme Leads and the FGDC Coordination Group are responsible for identifying collaboration opportunities. This more inclusive process is one of the advantages of NGDA Portfolio management.

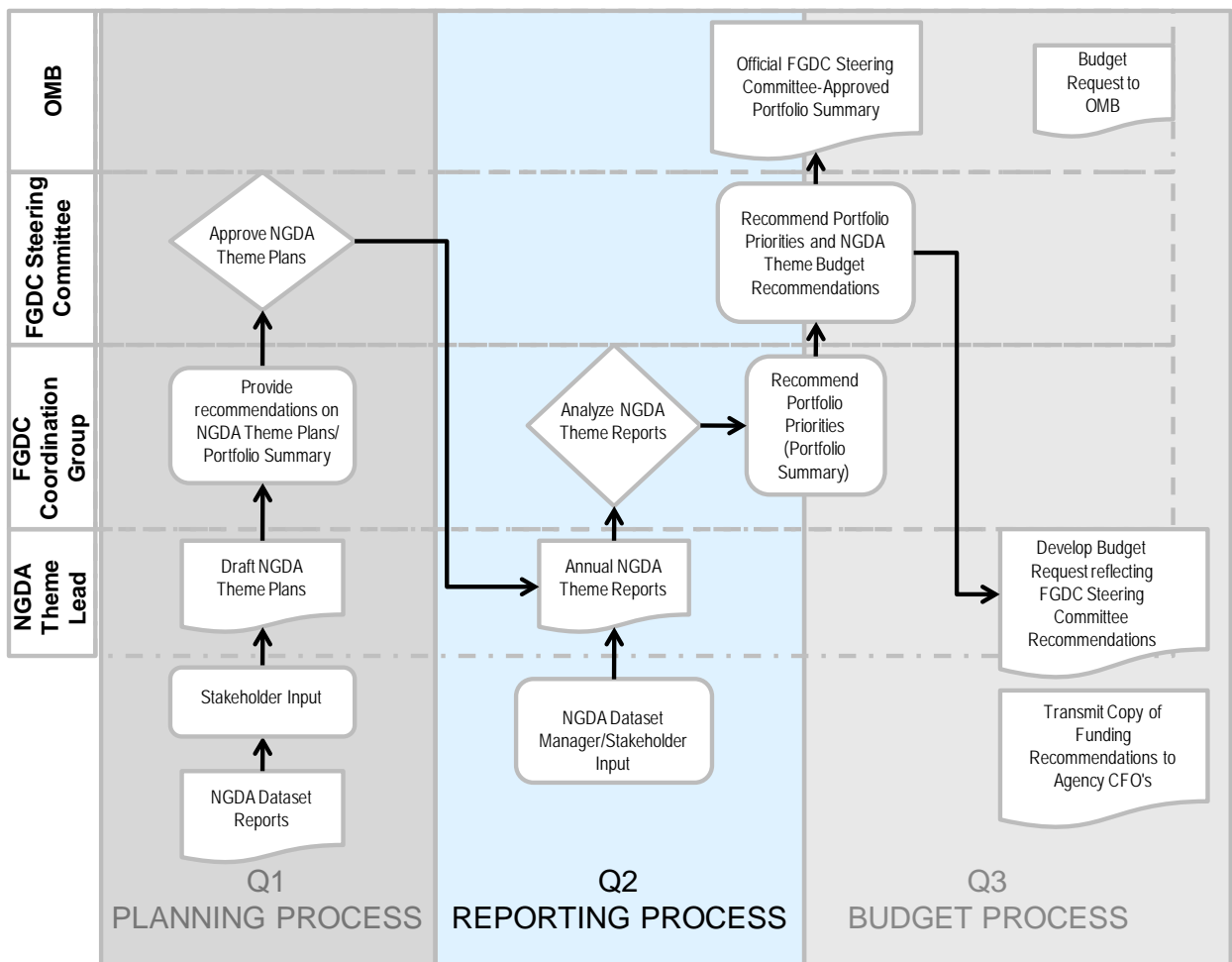
NGDA Theme Leads and members of the FGDC Coordination Group have roles in identifying and recommending NGDA Dataset development priorities to the FGDC Steering Committee; the FGDC Steering Committee, in turn, assesses them and makes/shares the recommendations with agency CFOs and CIOs and OMB. NGDA Theme Leads will periodically make presentations to both the FGDC Coordination Group and FGDC Steering Committee providing updates on NGDA Theme requirements as determined by their Thematic Committees and communities of interest, as incorporated in the annual NGDA Theme Report, or as requested by agency or FGDC leadership.

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<sup>8</sup> "Stove-piped - to develop, or be developed, in an isolated environment; to solve narrow goals or meet specific needs in a way not readily compatible with other systems." ([http://www.doubletongued.org/index.php/dictionary/stove\\_pipe/](http://www.doubletongued.org/index.php/dictionary/stove_pipe/))

The FGDC Coordination Group will use NGDA Theme Lead presentations in conjunction with performance metrics contained in or derived from the annual NGDA Theme Reports to make annual recommendations on cross-agency NGDA Theme and NGDA Dataset development and investment to the FGDC Steering Committee. The FGDC Steering Committee will be responsible for 1) assessing the recommendations in the context of overall FGDC strategic goals and objectives; 2) coming to concurrence on cross-agency NGDA Dataset development and funding priorities; and 3) presenting these recommendations to agency CFOs and OMB. Linkages between NGDA Theme planning, annual NGDA Theme progress reporting, and setting cross-agency funding priorities are portrayed in Figure 5. Budget activities remain under the purview of the agencies and OMB.

**Figure 5. Relationship of the NGDA Theme planning, reporting, and budget advisory processes**



## 4. Roles and Responsibilities Pursuant to OMB Circular A–16 Section 8

### 4.1. Purpose of Roles and Responsibilities Framework

This section of the Supplemental Guidance defines the roles and responsibilities of Federal agencies as they implement OMB Circular A-16. Implementation of OMB Circular A-16 via these roles and responsibilities will help ensure that the Nation has a rich collection of NGDA Themes and NGDA Datasets that are accessible to Federal, State, Tribal, and local agencies and their clients to support their business needs, requirements, and priorities. Reference Document: Key Roles and Responsibilities defines in greater detail what is expected of participants in the NGDA Portfolio management process. As the NGDA Portfolio management process matures, Reference Document: Key Roles and Responsibilities will be updated as needed.

Successful management of the NGDA Portfolio requires coordination across a wide variety of organizations, each of which has specific roles to fulfill. Some of these roles and responsibilities involve management across NGDA Themes that helps maximize potential return on investment and identifies and reduces any overlap that currently exists. OMB Circular A–16 implementation promotes overall NGDA Portfolio management and leverages the Federal Enterprise Architecture.

Implementing the framework:

- Facilitates proactive execution of business and implementation strategies for each NGDA Theme and its associated NGDA Datasets;
- Helps NGDA Theme Leads and NGDA Dataset Managers identify, develop, quantify, allocate, and sustain the resources necessary to develop the NGDA Themes and NGDA Datasets for which they are responsible;
- Enables a range of people with business requirements for NGDA Datasets to be involved in every component of the NGDA Portfolio management process to ensure business requirements are satisfied;

- Ensures people involved in making management decisions about NGDA Themes and associated NGDA Datasets are fully apprised of implications for the NGDA Portfolio; and
- Helps ensure that NGDA Themes and NGDA Datasets meet OMB Circular A-16 and FGDC goals, objectives, and milestones.

#### 4.2. Implementation of the Roles and Responsibilities Framework

The roles and responsibilities contained in this Supplemental Guidance describe activities needed for successful NGDA Portfolio management. All agencies are encouraged to make these roles and responsibilities operational, especially those agencies that have NGDA Theme Lead responsibilities. It is important to note that these roles are generic, particularly in the case of a Theme Lead Agency and its stakeholders. NGDA Theme Leads will work with their communities of interest and members of their Thematic Committees to customize the NGDA Portfolio management process in ways that meet the specific needs of their stakeholders. To accommodate the planning needs and timelines of agencies, NGDA Theme Leads and, by extension, the associated NGDA Dataset Managers should submit, through an initial NGDA Dataset and/or NGDA Theme to the FGDC Secretariat for development of a NGDA Portfolio Summary. The FGDC Steering Committee will annually submit to OMB the Portfolio Summary that includes the performance of each Theme Lead Agency in meeting its roles and responsibilities.

#### 4.3. Roles and Responsibilities

A Federal agency may perform multiple functions and serve multiple roles related to NGDA Portfolio management. It may, for example, have leadership responsibility for one or more NGDA Theme, or be in a non-leadership role for a NGDA Theme but contribute NGDA Datasets to a NGDA Theme. Likewise it may not be leading or contributing to an NGDA Dataset, but may still have a programmatic interest associated with a NGDA Theme or NGDA Dataset. Whatever the case, any agency or individual with a role described in OMB Circular A-16 or this Supplemental Guidance is accountable to their SAOGI, the FGDC Steering Committee, and ultimately OMB for fulfilling their responsibilities.

#### **Roles Specific to NGDA Theme Management**

- **Executive NGDA Theme Champion** – A member of the Senior Executive Service or a senior level individual designated by a Theme Lead Agency’s SAOGI, who advocates for, raises awareness of, and promotes the implementation of a NGDA Theme and its NGDA Datasets. An Executive NGDA Theme Champion provides recommendations to, and advises the SAOGI on, important matters relative to the NGDA Theme’s role in the NGDA Portfolio.

- **NGDA Theme Lead** – Individuals who provide interdepartmental leadership and coordination at the NGDA Theme level. They work with component NGDA Dataset Managers to develop standards and provide guidance. The NGDA Theme Lead, or designee, chairs the NGDA Theme’s Thematic Committee and manages the annual process of providing NGDA Dataset collaboration and funding recommendations to the FGDC Steering Committee for those NGDA Datasets within their NGDA Theme. Additionally, the NGDA Theme Lead reports to the Executive NGDA Theme Champion and the FGDC Coordination Group on the NGDA Theme’s activities and investments (both current and planned).
- **NGDA Dataset Manager** – Individuals who provide coordination and standards for NGDA Datasets at a national level. NGDA Dataset Managers provide information to their NGDA Theme Lead for management and reporting.
- **Data Steward** – Data Stewards manage that part of a NGDA Dataset that their organization contributes to a seamless national dataset. They work with the NDGA Dataset Managers in providing coordination support, implementing needed changes to data, informing and cooperating with stakeholders, performing field work, ensuring data standards are followed, and performing data maintenance. Data Stewards are often not Federal employees, coming from other levels of government, academia, or the private sector.

The responsibility assignment matrix, or RACI matrix, (Table 1) describes the roles and responsibilities of the entities involved in NGDA Portfolio management. The matrix is simplest to follow by starting with the responsible party. For example, under Inventory – NGDA Dataset Managers, Data Stewards, and stakeholders are responsible for creation and update to NGDA Datasets whereas NGDA Theme Leads are accountable for coordination, review, and reporting on the inventory.

The RACI matrix is composed of the four key responsibility areas as follows:

**Responsible (R)** - the person or entity assigned to do the work including core work elements such as managing, executing, controlling, and implementing. Other work elements include prioritizing, evaluating, and directing.

**Accountable (A)** - the person or entity who makes decisions about and who has ultimate ownership of the work including core work elements such as deciding, approving, prioritizing, allocating, evaluating, or directing.

**Consult (C)** - the person or entity conferred with before a decision can be made or an action can be taken. This responsibility also includes facilitation and core work elements such as prioritizing. Other work elements will be done in consultation with persons or entities that are “accountable” and

“responsible”, and may include functions such as approving, evaluating, or directing. This is usually a two-way communication.

**Inform (I)** - the person or entity that must be made aware that a decision or action is pending or has been taken. This is usually a one-way communication.

**Facilitate (F)** – the person who assists, coordinates, directs, or guides people or entities in various stages of the NGDA Portfolio management approach (added for the F this guidance).

**Table 1. RACI Matrix**

Entity	Inventory	Selection and Theme Placement	Manage (Portfolio, Theme and Dataset)	Evaluate/Monitor	Identify and Execute Interagency Priorities
OMB		Consult		Inform	Accountable
FGDC EC				Inform	Inform
FGDC SC		Accountable	Accountable (portfolio)	Accountable (portfolio)	Responsible
FGDC CG	Inform	Responsible	Inform	Inform, Consult	Responsible
FGDC Secretariat	Consult		Facilitate	Facilitate	Facilitate
Executive Champion		Inform, Consult	Inform, Consult (theme)	Accountable (theme)	Accountable
FGDC WG			Consult	Consult	Consult
FGDC Subcommittees	Consult		Responsible	Inform	Consult
Theme Lead	Accountable (theme)	Inform	Accountable (theme)	Responsible (theme)	Responsible
Dataset Manager	Accountable (dataset), Responsible		Accountable (dataset)	Responsible (dataset)	Facilitate
Data Steward	Responsible		Responsible	Responsible	
Stakeholders	Responsible		Responsible	Responsible	Consult
NGAC Advisory Committee			Consult	Consult	Consult
Theme Community of Interest		Consult		Inform	Consult
CIOC					Inform
CFOC					Inform

**Key:**

**Responsible** - an entity or person assigned to do the work

**Accountable** - an entity or person who makes the final decision and has ultimate ownership

**Consult** - an entity or person who must be conferred with before a decision or action can be taken

**Inform** - an entity or person who must be made aware that a decision or action is pending or has been taken

**Facilitate** - an entity or person who coordinates, directs, or guides activities or people

Due to the complexity of managing NDGA Datasets, multiple “accountable” designations may exist but will in each instance be specific to the NGDA Portfolio, NGDA Theme, or NGDA Dataset. In the RACI matrix, roles have been assigned to the lowest possible person or entity in the hierarchy. For each task, at least one person or entity must be “responsible”, but again, due to the complexity of NGDA Portfolio management and the need for coordination among multiple people or entities, there may be



more than one responsible party associated with each stage of the portfolio management process. For “consulted,” only those persons or entities that must be always consulted are indicated. Consultations with persons or entities not included in this matrix may also occur, but are not always required. Detailed roles and responsibilities associated with each component of the NGDA Portfolio management process are contained in Reference Document: Roles and Responsibilities.

Descriptions and typical tasks for each person or entity involved in NGDA Portfolio management are listed in Table 2.

**Table 2. Stakeholder Summary**

Entity	Members	Role
1. OMB	OMB Deputy Director for Management, or his designee, is co-chair of the FGDC Steering Committee	<ul style="list-style-type: none"> <li>a. Maintain OMB Circular A-16 and its appendices</li> <li>b. Consider NGDA Theme and NGDA Dataset funding recommendations of the FGDC Steering Committee</li> <li>c. <i>Budget Examiners participate at appropriate point with support from E-Gov Office</i></li> </ul>
2. FGDC Executive Committee	A subgroup of members of the FGDC Steering Committee appointed by the Chair, whose agencies produce or use geospatial data or technology. The FGDC Executive Committee is chaired by the FGDC Steering Committee Chair.	Advise the FGDC Steering Committee and establish agendas for FGDC Steering Committee meetings
3. FGDC Steering Committee	SAOGIs, designated by their agencies pursuant to OMB Memorandum 06-07 <sup>9</sup> or agency officials as specified in the FGDC Steering Committee Charter <sup>10</sup>	<ul style="list-style-type: none"> <li>a. Provide NGDA community leadership</li> <li>b. Represent Federal agencies on the FGDC Steering Committee</li> <li>c. Oversee agency NGDA Portfolio investments</li> <li>d. Provide funding recommendations by NGDA Theme and associated NGDA Datasets to OMB, the CIO Council, and the agency CFO community</li> </ul>
4. FGDC Coordination Group	Representatives from Federal agencies as specified in the FGDC Coordination Group Charter <sup>11</sup>	<ul style="list-style-type: none"> <li>a. Formulate recommendations by consensus on the NGDA Portfolio Summary for NGDA Portfolio management</li> <li>b. Advise the FGDC Steering Committee</li> <li>c. Increase awareness of efforts associated with OMB Circular A-16 implementation and portfolio management and foster partnerships at all levels of government to leverage efforts and reduce development and investment</li> </ul>

<sup>9</sup> Memorandum available at <http://www.whitehouse.gov/omb/memoranda/fy2006/m06-07.pdf>

<sup>10</sup> Charter available at <http://www.fgdc.gov/participation/steering-committee/steering-committee-charter.pdf>

<sup>11</sup> Charter available at <http://www.fgdc.gov/participation/coordination-group/coordination-group-charter>

Entity	Members	Role
		redundancies
5. FGDC Thematic Committees	FGDC member agency representatives and FGDC-recognized stakeholder groups who have common interests that cross-cut or affect several NGDA Themes	<ul style="list-style-type: none"> <li>a. Advise NGDA Theme Leads and associated NGDA Dataset Managers</li> <li>b. Respond to guidance from the FGDC Steering Committee by updating NGDA Theme -specific collaboration or funding recommendations for NGDA Datasets within each NGDA Theme, for consideration by the FGDC Steering Committee</li> </ul>
6. FGDC working groups	Representatives from Federal agencies and FGDC-recognized stakeholder groups who have common interests that cross-cut or affect two or more NGDA Themes	Produce cross-NGDA Theme and cross-NGDA Dataset development and management guidance and procedures
7. FGDC Secretariat	Executive and support staff that support the FGDC and its interagency substructure and working groups	<ul style="list-style-type: none"> <li>a. Assist agency NGDA Theme Leads and NGDA Dataset Managers</li> <li>b. Support the FGDC Steering Committee</li> <li>c. Support the FGDC Coordination Group</li> <li>d. Facilitate portfolio management activities with other FGDC activities and government initiatives</li> </ul>
8. Theme Lead Agency	Federal agencies identified in OMB Circular A-16 Appendix E, to lead the coordination of a NGDA Theme	<ul style="list-style-type: none"> <li>a. Oversee the development, implementation, and maintenance of NGDA Themes and associated NGDA Datasets, including chairing Thematic Committee meetings to develop funding recommendations for NGDA Datasets within the NGDA Theme and reflected in the annual NGDA Theme Report</li> <li>b. Provide Executive NGDA Theme Champion<sup>12</sup></li> <li>c. Appoint NGDA Theme Lead<sup>13</sup></li> <li>d. Designate and/or work with NGDA Dataset Manager<sup>14</sup></li> <li>e. Designate and/or work with Data steward<sup>15</sup></li> </ul>
9. Stakeholder Community	<ul style="list-style-type: none"> <li>a. Members can come from Federal, State, Tribal, or local governments as well as the private or nonprofit sectors or academia (may vary from theme to theme)</li> </ul>	<ul style="list-style-type: none"> <li>a. Serve as Data steward as designated</li> <li>b. Are data end users</li> <li>c. Are data producers</li> </ul>
	<ul style="list-style-type: none"> <li>d. NGAC composed of representatives from Federal, State, Tribal, and local governments and the private sector, the nonprofit sector, and academia</li> </ul>	Provides advice and recommendations to FGDC Chair

<sup>12</sup> The definition of this term can be found in the Lexicon of Geospatial Terminology located on the FGDC web site ([www.fgdc.gov](http://www.fgdc.gov))

<sup>13</sup> The definition of this term can be found in the Lexicon of Geospatial Terminology located on the FGDC web site ([www.fgdc.gov](http://www.fgdc.gov))

<sup>14</sup> The definition for this term can be found in the Lexicon of Geospatial Terminology located on the FGDC web site ([www.fgdc.gov](http://www.fgdc.gov))

<sup>15</sup> The definition for this term can be found in the Lexicon of Geospatial Terminology located on the FGDC web site ([www.fgdc.gov](http://www.fgdc.gov))

Entity	Members	Role
	e. General users who may or may not have a relationship with a Federal agency	Data end users <sup>16</sup>

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<sup>16</sup> The definition for this term can be found in the Lexicon of Geospatial Terminology located on the FGDC web site ([www.fgdc.gov](http://www.fgdc.gov))

## 5. National Geospatial Data Asset Portfolio Investment Strategy

This guidance establishes an investment analysis and collaboration process integral to strategic management of the NGDA Portfolio. It provides a mechanism for annual peer review and consultation to inform both potential partner agencies and OMB as to the completeness, value of, and priorities for the NGDA Themes and their associated NGDA Datasets. By conducting such an annual investment review, the geospatial community will increase its effectiveness by better aligning its activities with other Federal investment processes and investments.

Two primary results arise from this approach: (1) partnering opportunities for investment collaboration are jointly identified and considered, providing the opportunity to align resources and improve mission delivery, and (2) on a timely basis during the annual budget process, OMB and the interagency CFO community are informed by government-wide geospatial experts about opportunities for improved geospatial resource alignment. This model is consistent with the CPIC process, which addresses other components of the geospatial portfolio (specifically hardware and software).

The planning, reporting, and budget processes form the basis for establishing interagency partnerships and provide linkages to the broader Federal agency budget process. This Supplemental Guidance establishes an 'investment collaboration process' whereby peer review and consultation for NDGA Themes and associated NGDA Datasets is conducted annually and whereby suggested interagency priorities are provided to Agency CFOs and OMB to inform the budget process. Budget activities remain under the purview of agencies and OMB. Budget information regarding NGDA Dataset investment informs the budget process and may inform prioritization--or funding adequacy-- where relevant. Agency SAOGIs and Executive NGDA Theme Champions update NGDA Theme Leads and NGDA Dataset Managers on final resource disposition to complete the process.

## 5.1 Benefits

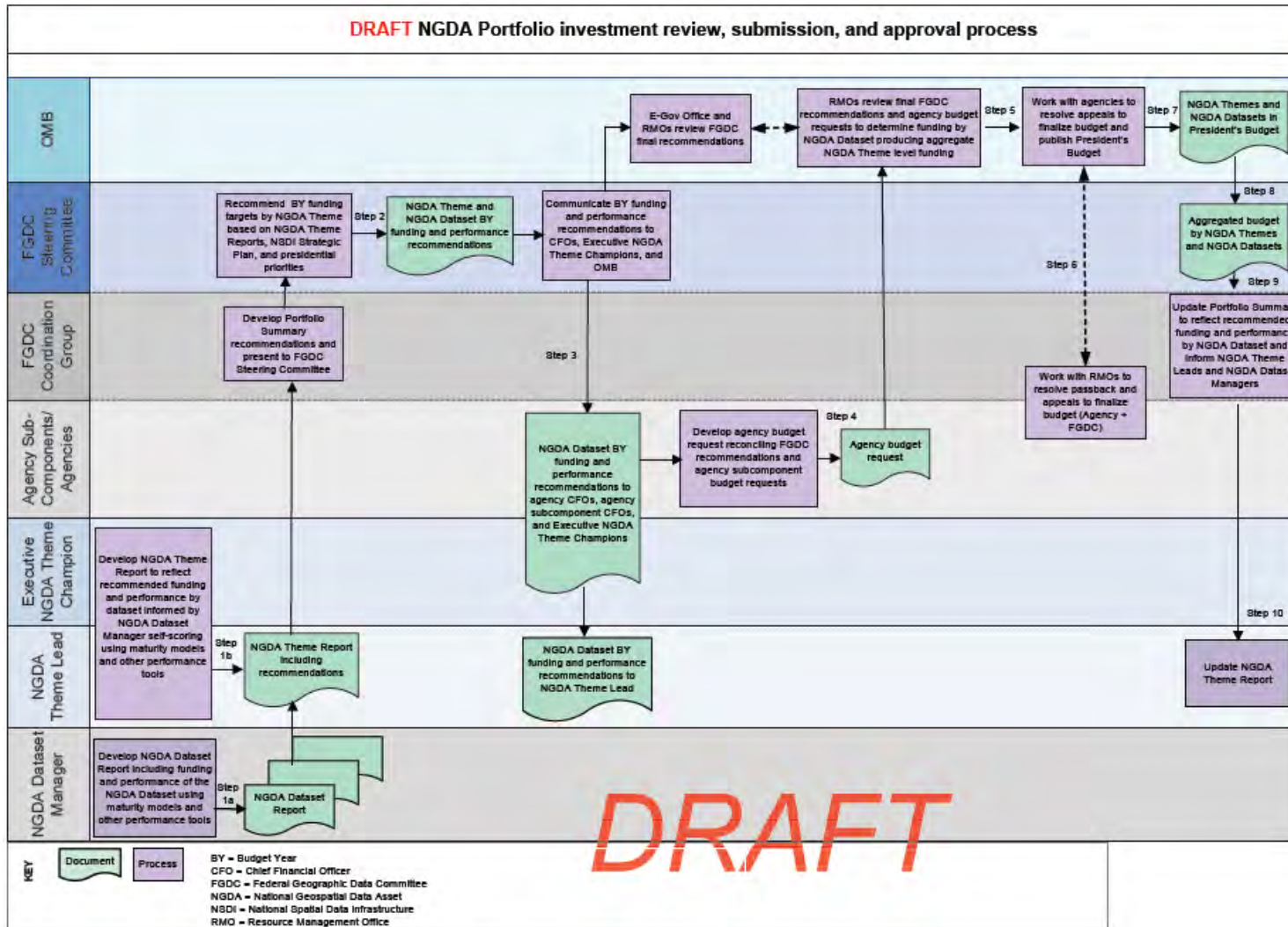
Conducting an annual investment review process increases the geospatial community's effectiveness by focusing investment and development efforts on those assets that are most critical for supporting missions and output goals and by integrating its activities into other Federal investment processes. The players traditionally active in the Federal agency budget formation process, most notably the agency CFO community, rarely have expertise in geospatial management or issues. At the same time, those with significant geospatial expertise rarely have a distinct role in the budget process. The fact that much Federal geospatial spending is subsumed unidentifiably within other program budgets, and therefore opaque to the CFO community, is one reason for this disconnect. The FGDC will work with OMB, NGDA Theme Leads, and NGDA Dataset Managers using the FGDC governance structure to lay out an aggressive but achievable process whereby funding levels for the NGDA Datasets become known over time. Achieving the transparency contemplated by this guidance will empower the FGDC to address broad long-term geospatial policy issues that are presently unresolved, facilitate annual initiatives, explore priorities across and within NGDA Themes, and enable all involved parties to assess the completeness and quality of management of individual NGDA Datasets. While the long-term NGDA Portfolio management activities described in Sections 3 and 4 of this Supplemental Guidance are evolving, the annual Federal budget process provides a shorter-term opportunity to begin improved management of, and priority setting for, the NGDA Portfolio.

## 5.2 The Process

The FGDC Steering Committee annually establishes a NGDA Portfolio Summary inclusive of funding recommendations and shares it with agency CFOs and OMB E-Gov and Resource Management Offices. This advice is timed so that it may be considered in routine agency budget formulation and operational plan development processes. Budget recommendations of the FGDC Steering Committee align with the budget formulation process of agency program managers and the CFO community to facilitate a government-wide perspective on NGDA Portfolio funding priorities (OMB Circular A-16, 2002; page 6).. Note: a publicly releasable geospatial Portfolio Summary will be included in the FGDC Annual Report.

The steps in the NGDA Portfolio investment review, submission, and approval process, as shown in Figure 6, are described below.

Figure 6: NGDA Portfolio investment review, submission, and approval process



- The process begins with NGDA Dataset Managers who develop annual NGDA Dataset Reports including current level of completion, prior year (PY) and current year (CY) spending amounts, NGDA Dataset Manager self-scoring and reporting using the Geospatial Data Lifecycle stages maturity model, and other information as required in FGDC reporting guidance. Upon approval by their agency SAOGI, the report is provided to the NGDA Theme Lead, who then collaborates with all NGDA Theme-related dataset managers (including those of possibly relevant non-NGDA Datasets) to identify opportunities for integration, collaboration, improved efficiency, or improvements such as greater completeness, accuracy, or precision across the NGDA Theme. (mid-February, after release of the President’s Budget; Step 1A).
- NGDA Theme Leads develop NGDA Theme Reports, compiling their NGDA Dataset Reports and other information including potential opportunities for cross-agency collaboration, performance improvement, investment opportunities, and other information as required in FGDC reporting guidance. When developing NGDA Dataset BY funding recommendations, NGDA Theme Leads should take into account non-Federal sources of funding for the NGDA Datasets and the NGDA Dataset’s significance in meeting the needs of both Federal and non-Federal levels of government.
- The FGDC Secretariat compiles NGDA Theme Reports into a NGDA Portfolio Summary for the FGDC Coordination Group. The FGDC Coordination Group develops recommendations aligned with the NSDI Strategic Plan and Presidential priorities, and informed by NGDA Theme Reports, NGDA Dataset Reports, and other relevant information. The FGDC Coordination Group presents the Portfolio Summary including their recommendations on BY spending amounts organized by NGDA Dataset (mid-February, at the same time as Step 1A and Step 1B).
- The FGDC Steering Committee concurs or recommends BY funding by NGDA Theme based on the Portfolio Summary, funding levels in the budget that were just released, NGDA Theme Lead recommendations, and any shifts in Presidential priorities not yet conveyed by the FGDC reporting guidance (mid-March; Step 2).
- The FGDC Steering Committee communicates its BY funding recommendations for NGDA Themes and their component NGDA Datasets, plus any corresponding performance recommendations, to OMB, the relevant members of the CFO community, Executive NGDA Theme Champions, and the NGDA Theme Leads via the Executive NGDA Theme Champions. Agency CIOs should also be informed to ensure alignment with the agency’s CPIC process (late April; Step 3).
- Agency CFOs, in consultation with the SAOGIs and Executive NGDA Theme Champions within their agencies, develop and submit agency budget requests reconciling the FGDC recommendations and agency subcomponent budget requests. Agency budget requests should reflect suggested FGDC



investment collaboration status. Agency CIOs should be consulted to ensure alignment with respect to the agency's CPIC process (May-September; Step 4).

- OMB RMOs review FGDC Steering Committee recommendations and agency budget requests to determine consistency and funding by NGDA Dataset. In aggregate, OMB's individual NGDA Dataset funding decisions produce NGDA Theme level funding for the BY (October- November; Step 5).
- Agencies and OMB RMOs collaborate to resolve Passback and appeals to finalize the President's Budget (December; Step 6).
- OMB publishes the President's Budget (February; Step 7).
- The Steering Committee racks up the resolved agency appeals by collecting information from OMB RMOs by NGDA Dataset, and then organizes agency-specific information by NGDA Theme and communicates that information to the FGDC Coordination Group (mid-February; Step 8).
- The FGDC Coordination Group updates the Portfolio Summary to reflect recommended funding and performance by NGDA Dataset and informs NGDA Theme Leads and NGDA Dataset Managers of OMB decisions (mid-February; Step 9).
- NGDA Theme Leads update the NGDA Theme Reports to reflect the final budget decisions in the recently released President's Budget (late-February; Step 10).

### 5.3 Staged Process Implementation

All NGDA Datasets across all NGDA Themes will be involved in the NGDA Portfolio management process. In year one, the FGDC Steering Committee will indicate to OMB how and when the FGDC plans to progressively stage implementation of this portfolio budget recommendation process. In subsequent years, the FGDC Steering Committee will report to OMB on progress toward implementing the NGDA Portfolio management process and outcomes. Completion of two activities is critical before an enterprise NGDA Portfolio management process can be fully implemented. These are 1) the designation and active leadership of NGDA Theme Leads and associated NGDA Dataset Managers and 2) the documentation and availability of financial information for NGDA Datasets within a particular NGDA Theme.

Documenting and making financial information available presents a more complex challenge for some agencies than others. This is because the desired degree of transparency and accountability may depend on modest refinements to agency financial management and budget systems that would allow for NGDA Dataset spending to be identified within the larger budget structures. It may therefore be necessary to gradually increase over a period of years the number of NGDA Datasets within a particular NGDA



Theme that are capable of being fully included in this process. This is because achievement of the desired degree of transparency and accountability may depend on modest refinements to agency financial management and budget systems that would allow for NGDA Dataset spending to be individually identified within the larger budget structures. However, the FGDC need not wait until relevant financial information is available for all NGDA Datasets within a NGDA Theme before beginning to apply this process to that NGDA Theme. This process can begin when the FGDC determines it has the necessary financial information for a critical mass of NGDA Datasets associated with an NGDA Theme needed to derive value from the process.

The FGDC will coordinate with OMB and the agency CFO/CIO community to ensure a consistent approach to providing the required level of resolution of financial information for NGDA Datasets, recognizing that some agencies may require more time in order to satisfy the reporting requirements. This process will enable the FGDC Steering Committee to make informed decisions on setting both short- and long-term priorities on NGDA Themes and NGDA Datasets as well as cross-agency collaboration targets for NGDA Dataset development and funding. This collaborative process serves as an important component in the foundation of portfolio management in fulfillment of OMB Circular A-16.

## Appendix A. Acronyms

Acronym	Definition
BY	Budget Year (in reference to the Federal Budget Process)
CFO	Chief Financial Officer
CIO	Chief Information Officer
CIO Council	Chief Information Officers Council
CPIC	Capital Planning and Investment Control
CY	Current Year (in reference to the Federal Budget process)
eGOV	E-Government Initiative
FACA	Federal Advisory Committee Act
FGDC	Federal Geographic Data Committee
FTE	Full-time equivalent
NGAC	National Geospatial Advisory Committee
NGDA	National Geospatial Data Asset
NSDI	National Spatial Data Infrastructure
OMB	Office of Management and Budget
PY	Prior Year (in reference to the Federal Budget)
RMO	Resource Management Office
SAOGI	Senior Agency Official for Geospatial Information