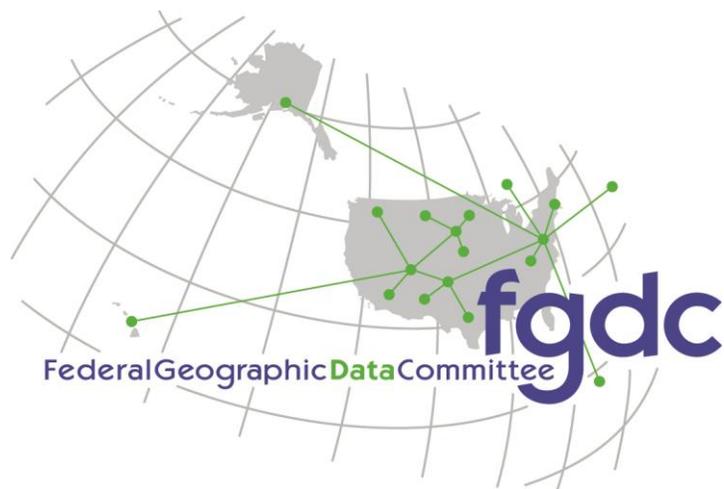


# National Geospatial Dataset Asset Management Plan Lifecycle Maturity Assessment Tool



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Modification Date	Modification Comment	Completed By
5/31/2015	Question 12 – added 2 part maturity metric	Lorri Peltz-Lewis
5/31/2015	Question 19 – maturity metrics include disposition	Butch L

## National Geospatial Dataset Asset (NGDA) Lifecycle Maturity Assessment Tool

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### BACKGROUND

In November 2010, the Office of Management and Budget (OMB) released the OMB Circular A-16 Supplemental Guidance. Its primary focus was on geospatial data as a capital asset and providing the foundation for a portfolio management approach to a National Geospatial Data Asset (NGDA) Portfolio. The portfolio consists of National Geospatial Data Asset Themes (NGDA Themes) and their associated National Geospatial Data Asset Datasets (NGDA Datasets). An **NGDA Dataset is an asset** that has been designated as such by the Federal Geographic Data Committee (FGDC) Steering Committee and **meets at least one of the following criteria:** (1) supports mission goals of multiple Federal agencies; (2) statutorily mandated; or (3) supports Presidential priorities as expressed by Executive Order or by OMB. The **NGDA Dataset Inventory identifies the assets that comprise the A-16 NGDA Portfolio universe** described in the [National Geospatial Data Asset Management Plan](#). “Geospatial datasets will be routinely inventoried and recommended for inclusion in the NGDA Portfolio when merited” as found on page 10 in [OMB Circular A-16 Supplemental Guidance](#).

Reporting on the developmental status of National Geospatial Data Assets (NGDAs) is a requirement of the [OMB Circular A-16](#) and the [OMB Circular A-16 Supplemental Guidance](#). **Assessing the developmental maturity of the NGDA will provide managers the ability to support datasets in a more holistic and transparent manner.** To assist with reporting, an inter-agency team developed a 7 stage geospatial lifecycle (Figure 1) with associated benchmark activities for each stage. Each benchmark has a range of activities, from none to significant activity, which provide the interpretation of maturity for that benchmark. The cumulative level of activity will determine the maturity of the dataset. The NGDA Lifecycle Maturity Assessment Tool was developed to help determine the maturity of the NGDA. This approach for lifecycle-based geospatial portfolio management of NGDAs is defined in [OMB Circular A-16 Supplemental Guidance \(page 3\)](#). The stages are consistent with the approach for Federal agency information asset management improvement outlined in [OMB Circular A-130 \(section 4\)](#). All NGDA Dataset Managers are required to do an initial maturity assessment once their dataset(s) has been declared an NGDA. It is anticipated that Dataset Managers will report on changes to the maturity status of their NGDAs via annual reports as required under both OMB Circular A-16 and the A-16 Supplemental Guidance.

The NGDA lifecycle is a cyclic process built upon business requirements that change over time. In 1990 the OMB Circular A-16 was updated to include geographically referenced computer-readable (digital) data. The **first or initial baseline maturity assessment** will include all pertinent information associated with the dataset for each lifecycle stage since the most recent business requirements were defined. This may include information prior to 1990. Datasets that came into existence after 1990 will assess maturity from the time the business requirements were defined. It is anticipated that dataset requirements will change as policies or business processes evolve, cyclic updates occur, user needs change, or new technologies are released that improve data management and delivery. **Annual assessments, once the initial maturity assessment is completed, will focus on changes over the past year.** Dataset Managers may choose to update assessments at any time during the reporting year if any dataset requirements, maturity, or cyclic processes change. Determining the overall

maturity of the NGDAs over time is a critical component for maintaining, evolving, and delivering returns on the A-16 NGDA Portfolio.

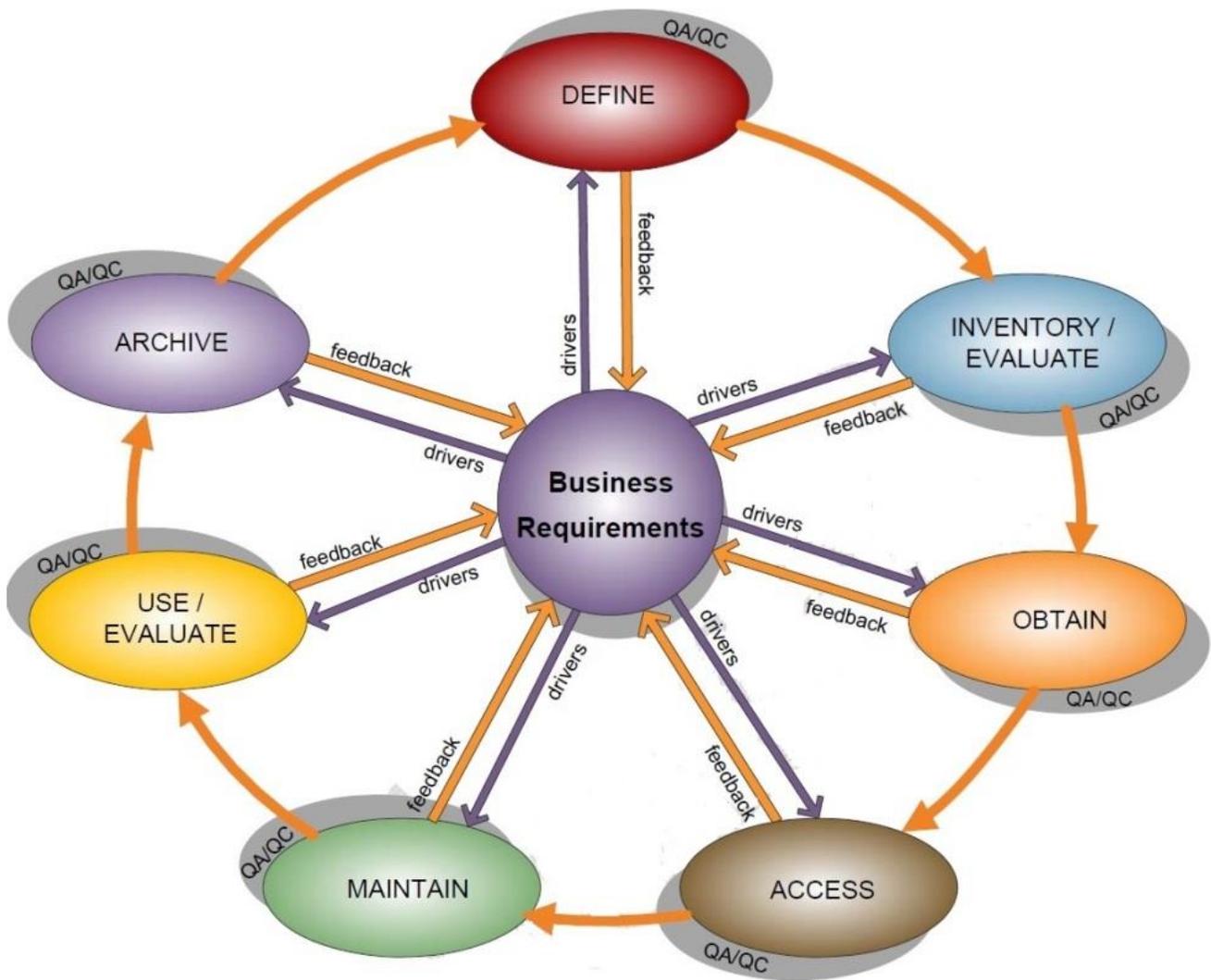


Figure 1 - OMB Circular A-16 Supplemental Guidance - lifecycle stages for developing, managing and reporting on nationally significant datasets to meet business requirements.

## INTRODUCTION

The NGDA Lifecycle Maturity Assessment Tool is composed of questions about the benchmark activities within each lifecycle stage, (Figure 2) an explanation of specific actions that might be used to accomplish the benchmark activity (clarifying statements), and a series of status metrics. The Dataset Manager chooses the metric that most accurately describes the current maturity level for the NGDA they manage. The responses to all the questions collectively determine the overall maturity of an individual NGDA. The tool also includes several overarching questions related to NGDA financing, continuity, and compliance with open government and transparency guidelines **that are pertinent to all the lifecycle stages**. Dataset Managers will need to provide commentary justifying the selected metric as part of the assessment. Clarifying statements and references are provided for every question.

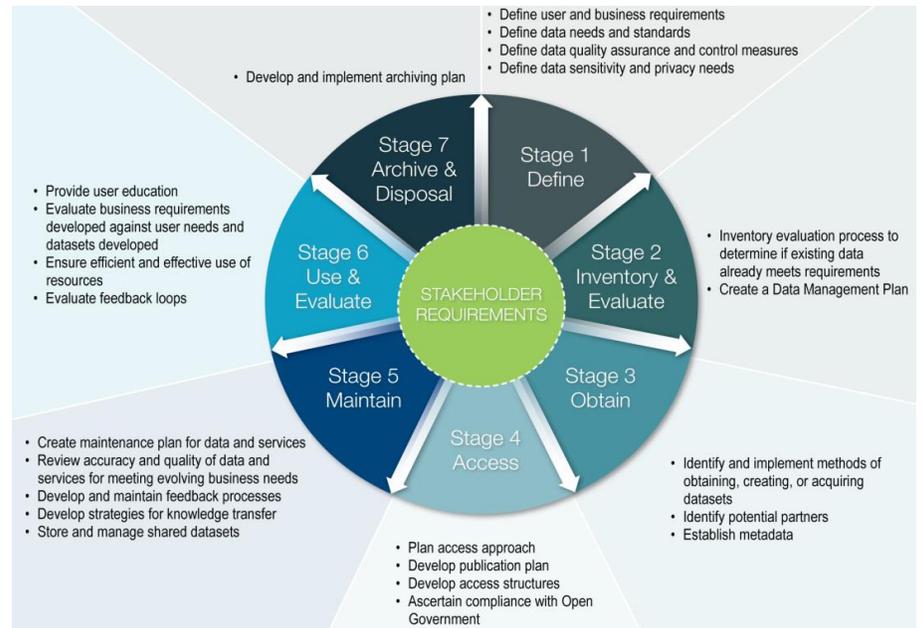


Figure 2 - Benchmarks mapped to Lifecycle Stages

Dataset Managers will need to provide commentary justifying the selected metric as part of the assessment. Clarifying statements and references are provided for every question.

### The three components of the assessment tool are further described:

**Questions:** An interagency team developed a series of benchmark activities associated with each lifecycle stage that must be completed for the dataset to reach full maturity. The series of questions within the tool ask about what actions have been taken to reach the defined benchmarks within each lifecycle stage. The questions should be revisited as business requirements for the dataset change or management gaps are filled.

**Clarifying statements:** For each question there are example actions that may be associated with the successful completion of the question. The activities outlined in the clarifying statements are only examples, and are not intended to be a complete list of business practices or actions. It is recognized that in some cases implementing one activity in the list is sufficient for achieving a fully mature dataset and that approaches taken to meet benchmarks may vary between the agency and dataset being assessed.

**Metrics:** Each question has a series of metrics from which the Dataset Manager will need to select. The metrics associated with the question represents levels of implementation maturity for the development of the dataset. All questions have an initial metric statement of “no” which indicates that no activity has been taken for the question under consideration. All questions have a justification comment area for the Dataset Manager to justify the metric chosen. Entering justification comments are required to support the maturity review process. Comments can include web links to additional supporting material. Question 5 there is a non-applicable (NA) option; this may be used if the dataset is sensitive or meets controlled but unclassified information (CUI) requirements.

The metrics for each question reflect policies, directives, and technology actions that may have taken place during development of the dataset for the initial assessment, or changes within the current year. The Dataset Manager will need to research actions taken with respect to the dataset they manage to determine which metric selection is appropriate for each question. For the initial baseline assessment, select the highest completed metric accomplished. This may require the Dataset Manager review Agency policy as it may pertain to the policies referenced in this tool. Subsequent yearly assessments will reflect reporting year.

## MATURITY ASSESSMENT

The NGDA dataset maturity will be assessed by aggregating the responses for both the general questions and by lifecycle stage specific questions, and then collating all the responses into an overall dataset maturity. The higher level metric selected will result in a greater maturity or cyclic process. Final maturity will be calculated as follows:

1. **General Questions for all Lifecycle Stages Assessment** – the questions that pertain to all Lifecycle stages will be separated into one maturity group.
2. **Dataset Maturity by Lifecycle Stage Assessment** – total percentage for each Lifecycle Stage.
3. **Overall Dataset Maturity Assessment** – total percentage for all Lifecycle Stages, including the General Questions pertaining to all Lifecycle stages.

The rankings for determining maturity will be simple groupings: **early maturity or early cycle, mid-level maturity or mid-cycle, more mature or completing cycle, and no activity**. The number of metrics associated with each question will determine the percentages assigned. Additional details on how this is done are available for review.

The questions will be aggregated into overall maturity for the General Questions and Lifecycle Stages for each dataset. In the case of a not applicable response, the question will be excluded from the aggregation process. An Overall Dataset Maturity including the general questions and all lifecycle stages will also be calculated. Theme maturity will be determined by aggregating the lifecycle maturity for each dataset in the Theme. Figure 3 is an example of how the maturity for each dataset could be displayed including the general questions and lifecycle stages.

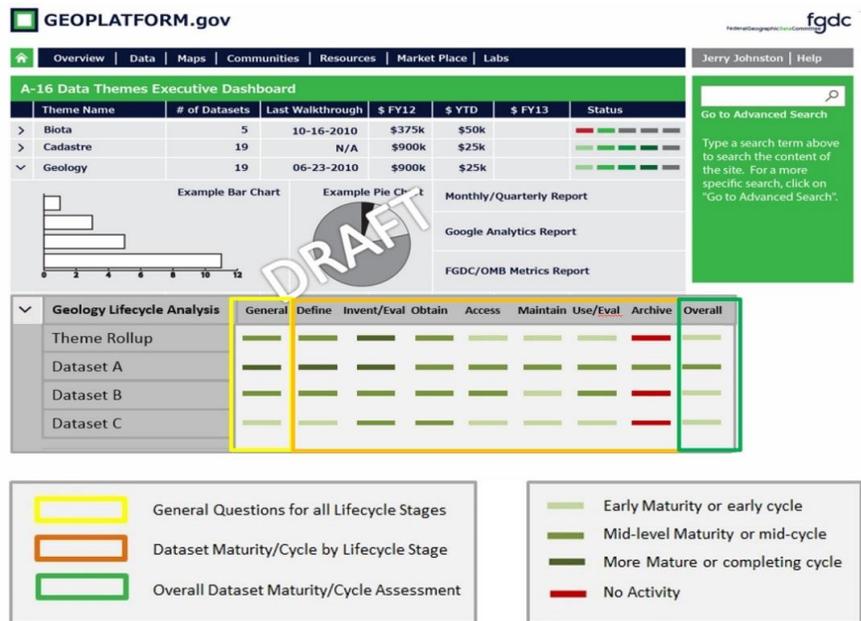


Figure 3 - Example of how the aggregated maturity responses might appear in the GeoPlatform.gov.

## COMPLETION TIME FRAME

The initial maturity assessment for the NGDAs identified in 2014 must be completed by June 30, 2015. The Dataset Managers for any additional NGDAs added to the NGDA portfolio after 2014 must complete a maturity assessment within a year after the NGDA is declared. Dataset Managers will report on changes to the maturity status of their NGDAs via annual reports as required under both the [OMB Circular A-16](#) and the [OMB Circular A-16 Supplemental Guidance](#). The FGDC Secretariat will track all NGDA Themes for completion of the baseline assessment, and ensure the June 30, 2015 NGDA Maturity Assessment deadline is met. The results of this maturity assessment will be incorporated into an annual NGDA Dataset Report that describes additional information about the NGDA Dataset in addition to the maturity assessment.

## LIFECYCLE STAGE QUESTIONS, CLARIFYING STATEMENTS, AND METRICS

Lifecycle Stages	Questions	Metrics
<p><b>Question 1</b> General – questions for overall stages</p>	<p><b>Is there a recurring process to obtain funding for all lifecycle stages of this dataset?</b></p> <p><i><b>Clarifying statement - example actions may include:</b> identifying existing sources of funding (i.e. - local, agency, interagency, etc.), identifying supporting staff (i.e. - contracting officer, contracting officers representative, etc.), funding requests updated and submitted annually or tied to dataset schedules, and coordinating with supporting offices including, but not limited to, information technology, records management, data centers, including archiving and ultimate disposition, etc.</i></p> <p><i>Lifecycle Stages include – Define (Plan), Inventory/Evaluate, Obtain, Access, Maintain, Use/Evaluate, and Archive</i></p> <p><i><b>Justification Comment</b>– provide supporting statements justifying metric selection, where appropriate provide links to web documentation. This is for all lifecycle stages – if one stage is having difficulties please provide additional comments here.</i></p> <p>Reference as it pertains to all Lifecycle Stages : <a href="#">OMB Circular A-16 Supplemental Guidance</a> (pages 31-32)</p>	<ul style="list-style-type: none"> <li>• No</li> <li>• Funding is from local offices, budgeting effort minimal, staffing minimal</li> <li>• Funding is planned at agency level, supporting staff assigned, but funding is not recurring, some lifecycle stages are supported.</li> <li>• Funding support exists but is not adequate to meet known requirements, most lifecycle stages are supported.</li> <li>• Funding support is part of agency budget on a recurring basis, funding is consistent and tied to business processes, and supports <b>all lifecycle stages</b></li> </ul> <p>Justification Comment (required) –</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><i>Web tool will have open text box to support response</i></p> </div>
<p><b>Question 2</b> General – questions for overall stages</p>	<p><b>Is there a process in place to ensure that open government and transparency guidelines are followed in all lifecycle stages for this dataset?</b></p> <p><i><b>Clarifying statement - example actions may include:</b> steps taken to ensure that dataset processes include openness in communication and accountability (i.e. - improves opportunities for public participation and collaboration, announcements such as Federal Register, marketplace utilization, etc.), actions are performed in an open manner appropriate to the sensitivity requirements* determined for the dataset including consideration of Controlled Unclassified Information (CUI)**, records management assessment and long-term value financial commitments considered, for official use only (FOUO), etc.</i></p> <p><i>Lifecycle Stages include – Define (Plan), Inventory/Evaluate, Obtain, Access, Maintain, Use/Evaluate, and Archive</i></p> <p><i><b>Justification Comment</b>– provide supporting statements justifying metric selection, where appropriate provide links to web documentation. This is for all lifecycle stages – if one stage is having difficulties please provide additional comments here.</i></p> <p><i>* and ** - NOTE – these will all be subsumed by the term Controlled Unclassified Information (CUI) in 2015.</i></p>	<ul style="list-style-type: none"> <li>• No</li> <li>• Process under development</li> <li>• Process identified, early implementation</li> <li>• Process established, significant portions of the documentation is complete</li> <li>• Process is published as appropriate with respect to sensitivity requirements, process is transparent, published appropriately</li> </ul> <p>Justification Comment (required) –</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><i>Web tool will have open text box to support response</i></p> </div>

	<p><i>*Sensitive But Unclassified, Sensitive Security Information, unclassified/for official use only (FOUO); protected as restricted data, limited distribution, proprietary, originator controlled, law enforcement sensitive, for official use only (FOUO), etc.</i></p> <p><i>**CUI includes, but is not limited to: Enforcement Confidential, Attorney-Client Privilege, Confidential Business Information (CBI/Trade Secret, CBI contract materials, scientific research not yet published, Personally Identifiable Information (PII).</i></p> <p>References as they pertain to all Lifecycle Stages:  <a href="#">Transparency and Open Government</a>, <a href="#">Federal Register</a>, <a href="#">GeoPlatform.gov Market Place</a>, <a href="#">Controlled Unclassified Information EO 13556</a>, <a href="#">Personally Identifiable Information</a>, <a href="#">NIST Special Publication 800-122</a>, and <a href="#">OMB Circular A-16 Supplemental Guidance</a> (pages 31-32)</p>	
<p><b>Question3</b>  <b>General – questions for overall stages</b></p>	<p><b>Are there processes and tools in place so that staff are sufficiently knowledgeable to ensure a continuity of the dataset for all stages of the lifecycle, especially during staffing transitions?</b></p> <p><b>Clarifying statement - example actions may include:</b>  <i>ensuring documentation is sufficient to preserve, protect, and provide for continuity of the dataset (i.e. - data management documentation, standard operating procedures (SOP), etc.); dataset has been assessed for records management requirements and long-term value; continuity of operations as they pertain to the dataset are assessed; tools and strategies for knowledge transfer are implemented; staff roles, responsibilities, education and experience are in line with agency standards, guidelines, and policies to ensure dataset continuity; ensuring staff are appropriately trained through professional development opportunities for education, networking, and sharing with the goal to ensure dataset continuity; dataset continuity knowledge is transferred during staff transitions; etc.</i></p> <p><i>Lifecycle Stages include – Define (Plan), Inventory/Evaluate, Obtain, Access, Maintain, Use/Evaluate, and Archive</i></p> <p><b>Justification Comment</b>– <i>provide supporting statements justifying metric selection, where appropriate provide links to web documentation. This is for all lifecycle stages – if one stage is having difficulties please provide additional comments here.</i></p> <p>References as they pertain to all Lifecycle Stages : <a href="#">Managing Government Records Directive</a>, <a href="#">E-Government Act Implementation</a>, <a href="#">OMB Circular A-16 Supplemental Guidance</a> (pages 31-32), and <a href="#">Guidance On The Selection and Appraisal Of Geospatial Content Of Enduring Value (FGDC draft 2014)</a></p>	<ul style="list-style-type: none"> <li>• No</li> <li>• Processes and tools to ensure dataset continuity are under development</li> <li>• Processes and tools to ensure dataset continuity are defined and beginning to be implemented</li> <li>• Processes and tools to ensure dataset continuity are in place and implemented for all lifecycle stages</li> </ul> <p>Justification Comment (required) –</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><i>Web tool will have open text box to support response</i></p> </div>

<p><b>Question 4</b>  <b>STAGE 1 - Define/Plan –</b>  Characterization of data requirements based upon business-driven user needs</p>	<p><b>Are user and business requirements defined and formalized?</b></p> <p><i><b>Clarifying statement - example actions may include:</b> identifying user and agency requirements, agency collection process i.e. - review organizational documentation, evaluate internal and external needs, timeliness, dataset resolution or scale needed, dataset geographic extent, review and evaluate existing business requirements, data quality requirements, sensitivity requirements, records management and archive control considered, etc.</i></p> <p><i><b>Justification Comment</b>– provide supporting statements justifying metric selection, where appropriate provide links to web documentation.</i></p> <p>References as they pertain to Stage 1 Define/Plan: Business requirements defined - <a href="#">Business Requirements - Wikipedia</a>, <a href="#">Sigma Six</a> and <a href="#">OMB Circular A-16 Supplemental Guidance</a></p>	<ul style="list-style-type: none"> <li>• No involvement</li> <li>• Ad hoc process is used for involving Partners/stakeholders in identifying requirements</li> <li>• A recurring process exists for gathering partners/ stakeholder requirements is in place and is in the beginning stages of implementation</li> <li>• A recurring process is in place, including defining new partner and stakeholder business needs as they arise, and is fully implemented</li> </ul> <p>Justification Comment (required) –</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><i>Web tool will have open text box to support response</i></p> </div>
<p><b>Question 5</b>  <b>STAGE 1 - Define/Plan –</b>  Characterization of data requirements based upon business-driven user needs</p>	<p><b>How are partners/stakeholders involved in the requirements collection process?</b></p> <p><i><b>Clarifying statement - example actions may include:</b> Stewards are included as part of stakeholders; partners/stakeholders for the dataset are identified at all levels (i.e. - local, regional, national, etc.); partners/stakeholders are involved and supporting the dataset; roles and responsibilities of partners/stakeholders is defined; etc.</i></p> <p><i><b>Justification Comment</b>– provide supporting statements justifying metric selection, where appropriate provide links to web documentation. If not applicable identify sensitivity (PII, CUI, etc.) requirements.</i></p> <p>References as they pertain to Stage 1 Define/Plan: <a href="#">Transparency and Open Government</a>, <a href="#">Controlled Unclassified Information EO 13556</a>, <a href="#">Personally Identifiable Information, NIST Special Publication 800-122</a> and <a href="#">OMB Circular A-16 Supplemental Guidance</a> (pages 31-32)</p>	<ul style="list-style-type: none"> <li>• Not applicable (NA)</li> <li>• No involvement</li> <li>• Ad hoc process is used for involving Partners/stakeholders in identifying requirements</li> <li>• A recurring process exists for gathering partners/ stakeholder requirements is in place and is in the beginning stages of implementation</li> <li>• A recurring process is in place, including defining new partner and stakeholder business needs as they arise, and is fully implemented</li> </ul> <p>Justification Comment (required) – if NA documentation sensitivity reasons.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><i>Web tool will have open text box to support response</i></p> </div>
<p><b>Question 6</b>  <b>STAGE 1 - Define/Plan –</b>  Characterization of data requirements based upon business-driven user needs</p>	<p><b>Is there a quality assurance process for the dataset?</b></p> <p><i><b>Clarifying statement - example actions may include:</b> actions may include ensuring the dataset has quality assurance, quality control processes started, quality action planning, dataset is in compliance with the agency’s information quality directives, quality management processes are in place, etc.</i></p> <p><i><b>Justification Comment</b>– provide supporting statements justifying metric selection, where appropriate provide links to web documentation.</i></p>	<ul style="list-style-type: none"> <li>• No</li> <li>• Processes under development</li> <li>• Process identified, early implementation</li> <li>• Process established, significant portions of the documentation is complete</li> <li>• Quality assurance published as appropriate with respect sensitivity requirements</li> </ul> <p>Justification Comment (required) –</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><i>Web tool will have open text box to support response</i></p> </div>

	References as they pertain to Stage 1 Define/Plan: <a href="#">Agency Information Quality Guidelines</a> , <a href="#">Public Law 106-154 sec. 515a (Information Quality Act)</a> , <a href="#">Data Quality Act</a> , <a href="#">Data.gov</a> , <a href="#">Data.gov FAQ</a> , <a href="#">GeoPlatform.gov</a> , and <a href="#">OMB Circular A-16 Supplemental Guidance</a> (pages 31-32)	
<p><b>Question 7</b>  <b>STAGE 1 - Define/Plan –</b>  Characterization of data requirements based upon business-driven user needs</p>	<p><b>Is there a process to evaluate the sensitivity, privacy, and confidentiality of this dataset?</b></p> <p><i><b>Clarifying statement - example actions may include:</b> actions may include identifying sensitive data, personally identifiable information, privacy, classification level*, Controlled Unclassified Information (CUI)**, level of publication (restricted, internal, publically available, etc.), Privacy Act assessment, Title 13 requirements, for official use only (FOUO), etc. Actions can include steps to employ methods to protect and obscure the sensitive data in line with the requirements.</i></p> <p><i><b>Justification Comment</b>– provide supporting statements justifying metric selection, where appropriate provide links to web documentation.</i></p> <p><i>* and ** - NOTE – these will all be subsumed by the term Controlled Unclassified Information (CUI) in 2015.</i></p> <p><i>*Sensitive But Unclassified, Sensitive Security Information, unclassified/for official use only (FOUO); protected as restricted data, limited distribution, proprietary, originator controlled, law enforcement sensitive, etc.</i></p> <p><i>**CUI includes, but is not limited to: Enforcement Confidential, Attorney-Client Privilege, Confidential Business Information (CBI/Trade Secret, CBI contract materials, scientific research not yet published, Personally Identifiable Information (PII)</i></p> <p>References as they pertain to Stage 1 Define/Plan: <a href="#">Transparency and Open Government</a>, <a href="#">Controlled Unclassified Information EO 13556</a>, <a href="#">Personally Identifiable Information</a>, <a href="#">NIST Special Publication 800-122</a>, and <a href="#">OMB Circular A-16 Supplemental Guidance</a> (pages 31-32)</p>	<ul style="list-style-type: none"> <li>• No</li> <li>• Process to define under development</li> <li>• Process to define identified and documented</li> <li>• Process being implemented</li> <li>• Sensitivity, privacy, and confidentiality evaluations fully implemented, reviewed and updated on a recurring basis</li> </ul> <p>Justification Comment (required) –</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><i>Web tool will have open text box to support response</i></p> </div>
<p><b>Question 8</b>  <b>STAGE 1 - Define/Plan –</b>  Characterization of data requirements based upon business-driven user needs</p>	<p><b>Are defined data standards used in collecting, processing and/or rendering the data?</b></p> <p><i><b>Clarifying statement - example actions may include:</b> actions taken to define data standards to meet dataset and business requirements. i.e. - accuracy/precision requirements, timeliness, collection methods, data formats, conversion needs, processing needed to support required formats, open geospatial standards are incorporated, attribute specifications, data modeling (logical and physical), use cases, etc. Metadata tools may be used to support this process provide this information in the justification comments.</i></p>	<ul style="list-style-type: none"> <li>• No</li> <li>• Standards being researched and/or under development</li> <li>• Standards developed and/or selected</li> <li>• Standards being implemented</li> <li>• Standards fully implemented documented and published as appropriate</li> </ul> <p>Justification Comment (required) –</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><i>Web tool will have open text box to support response</i></p> </div>

	<p><b>Justification Comment</b>– provide supporting statements justifying metric selection, where appropriate provide links to web documentation.</p> <p>Reference as it pertains to Stage 1 Define/Plan: <a href="#">OMB Circular A-16 Supplemental Guidance</a> (pages 31-32), <a href="#">Open Geospatial Consortium (OGC) Standards</a>, and <a href="#">FGDC Geospatial Metadata Standards</a>.</p>	
<p><b>Question 9</b> <b>Inventory/ Evaluate</b> - 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 need</p>	<p><b>Is there a process for determining if data necessary to meet requirements already exist from other sources (either within or outside the agency) before collecting or acquiring new data?</b></p> <p><b>Clarifying statement - example actions may include:</b> actions may include identifying existing similar internal and external datasets, reusing or reutilizing datasets as appropriate to defined requirements, reducing duplication, data inventory evaluated for suitability to meet business requirements, E-Government (e-Gov) requirements, inventory updated for new data assets and requirements. Includes identifying conversion needed to refine or modify attributes, domains, data accuracy/precision, use limitations, restrictions, etc. Identification of conversion costs and financial impacts evaluated; etc.</p> <p><b>Justification Comment</b>– provide supporting statements justifying metric selection, where appropriate provide links to web documentation.</p> <p>Reference as it pertains to Stage 2 Inventory/Evaluate: <a href="#">GAO Geospatial Information</a>, <a href="#">OMB Circular A-16 Supplemental Guidance</a> (pages 31-32)</p>	<ul style="list-style-type: none"> <li>• Process is under development to identify datasets promoting reuse and reduce unnecessary duplication</li> <li>• Process is being implemented to identify datasets promoting reuse and reduce duplication</li> <li>• Process for determining appropriate data is being reused fully implemented, reviewed, and updated on a regular basis</li> </ul> <p>Justification Comment (required) –</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><i>Web tool will have open text box to support response</i></p> </div>
<p><b>Question 10</b> <b>STAGE 3 - Obtain</b> - The collection, purchase, conversion, sharing, exchanging, or creation of geospatial data that were selected to meet the business needs is identified</p>	<p><b>Is there a process for obtaining data in relation to this dataset?</b></p> <p><b>Clarifying statement - example actions may include:</b> actions may include developing a data acquisition plan to procure the data, if the data is not available the creation process would include collect, produce, generate, make, build or construct, this covers any spatial data collected with government equipment and includes data that currently does not exist(new data) and generation of additional data; may include determining cyclic refresh of dataset and/or methodology used to create the dataset; identifying cost associated with conversion, financial process created and updated for the purchase of, modification of, converting of, or transforming of data; leveraging the sharing or exchanging of data; creating or obtaining data to support and meet business requirements with respect to the geographic extent and data resolution; Federal Acquisition Regulations (FAR) as appropriate; etc.</p>	<ul style="list-style-type: none"> <li>• No</li> <li>• Process is under development</li> <li>• Process is being implemented</li> <li>• Process is fully implemented, reviewed and updated on a regular basis</li> </ul> <p>Justification Comment (required) –</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><i>Web tool will have open text box to support response</i></p> </div>

	<p><b>Justification Comment</b>– provide supporting statements justifying metric selection, where appropriate provide links to web documentation.</p> <p>Reference as it pertains to Stage 3 Obtain: <a href="#">OMB Circular A-16 Supplemental Guidance</a> (pages 31-32), <a href="#">Federal Acquisition Regulations System, Electronic Code of Federal Regulations Title 48</a></p>	
<p><b>Question 11</b> <b>STAGE 3 - Obtain</b> - The collection, purchase, conversion, transformation, sharing, exchanging, or creation of geospatial data that were selected to meet the business needs is identified</p>	<p><b>Is the metadata in a FGDC endorsed geospatial metadata standard?</b></p> <p><b>Clarifying statement - example actions may include:</b> Metadata records should include all the information needed to ensure the National Geospatial Data Asset (NGDA) is discoverable, accessible and understandable. In addition, it must include or refer/provide access to all the information required to make the dataset usable. Metadata should provide adequate information so users can determine appropriate uses of the data. Metadata for NGDAs needs to include appropriate keyword tags to make it discoverable as an NGDA. See references for current standards.</p> <p><b>Justification Comment</b>– provide supporting statements justifying metric selection, where appropriate provide links to web documentation.</p> <p>Reference as it pertains to Stage 3 Obtain: <a href="#">FGDC Content Standard for Digital Geospatial Metadata (CSDGM)</a>, <a href="#">FGDC Geospatial Metadata Standards</a>, <a href="#">International Standards Organization (ISO) 19115-1:2014</a> (data and services), and <a href="#">OMB Circular A-16 Supplemental Guidance</a> (pages 31-32)</p>	<ul style="list-style-type: none"> <li>• No</li> <li>• Metadata or documentation is available but not in a format endorsed by the FGDC (i.e. - FGDC CSDGM or ISO 19115).</li> <li>• Metadata is available in a format endorsed by the FGDC but does not fully describe the information needed to make the dataset discoverable, accessible, and usable</li> <li>• Metadata is available in a format endorsed by the FGDC, it fully describes the dataset and provides all the information required to make the dataset discoverable, accessible, and usable</li> </ul> <p>Justification Comment (required) –</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><i>Web tool will have open text box to support response</i></p> </div>
<p><b>Question 12</b> <b>STAGE 3 - Obtain</b> - The collection, purchase, conversion, transformation, sharing, exchanging, or creation of geospatial data that were selected to meet the business needs is identified</p>	<p><b>How complete is the geographic coverage as defined in the requirements for the dataset?</b></p> <p><b>Clarifying statement - example actions may include:</b> actions taken to obtain data as defined in Stage 1 Define/Plan requirements. Geographic coverage is defined as spatial extent and resolution.</p> <p><b>Geographic extent</b> – the area which the dataset requirements are defined to include. (see examples provided below)</p> <p><b>Resolution</b> – two commonly used defined here (see examples provided below):  <b>Spatial resolution</b> – the scale or ability to discriminate between adjacent objects.  <b>Spectral resolution</b> – ability to resolve electromagnetic spectrum.</p> <p><b>Justification Comment</b>– must include a description of the geographic coverage and resolution defined for the dataset. Dataset Managers will provide supporting statements justifying metric selection, where appropriate provide links</p>	<p>Part 1 is regarding the business processes controlling the geographic extent</p> <ul style="list-style-type: none"> <li>• Business requirement targets identified for completing geographic coverage. Cyclic updates for refreshing dataset in early phases</li> <li>• Business requirement targets are on track, milestones are being met</li> <li>• Business requirement targets are being attained, cyclic updates being assessed.</li> <li>• Business requirements for cyclic updates identified and a process is in place.</li> </ul> <p>Part 2 is regarding the completeness of the geographic extent as determined by the business requirements.</p> <ul style="list-style-type: none"> <li>• Dataset is presently less than 25% complete based on current requirement</li> <li>• Data set is roughly 50% of the geographic coverage is presently complete per current requirement</li> </ul>

	<p><i>to web documentation. Include information on the cyclic updates, research methodology, emergency response requirements, etc.</i></p> <p><b>Examples of Geographic Coverage requirements –</b>  A – Complete 133 cities at high (1:24,000-scale or better) resolution.  B – Complete dataset for all 50 states at 1:24,000-scale.  C – Collect, aggregate and integrate tabular data per defined standards including greater than 80% of contributors.  D – Complete elevation data at 1/9 arc seconds for coterminous USA and 2 arc seconds for Alaska, Hawaii, etc.  E – Collect imagery supporting emergency response requirements as needed by the incident staff. Geographic coverage and resolution defined by staff.  F – Three-year cycle began in 2009 to collect coterminous USA.  G – Five-year cycle began in 2006 30-meter resolution land cover for coterminous USA.</p> <p>Reference as it pertains to Stage 3 Obtain: <a href="#">OMB Circular A-16 Supplemental Guidance</a> (pages 31-32),</p>	<ul style="list-style-type: none"> <li>• Dataset presently about 75% complete per current requirement</li> <li>• Dataset has presently attained the greatest geographic coverage as defined by the current requirements or roughly 100%</li> </ul> <p>Justification Comment (required) –provide a brief description of geographic coverage along with achieving the metric. (see examples under clarifying statements)</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><i>Web tool will have open text box to support response</i></p> </div>
<p><b>Question 13</b>  <b>STAGE 4 - Access</b> –Making data produced known and retrievable to the community through documentation and discovery mechanisms so the users can meet their business requirements</p>	<p><b>Is there a process for providing users access to the data in an open digital machine readable format?</b></p> <p><b>Clarifying statement - example actions may include:</b> <i>converting data into a standard data format that a machine or computer can read; development of an access/dissemination process; engaging communities of interest; both internal/external access, data accessible with respect to sensitivity requirements; open and machine readable (<a href="#">EO 13642</a>), and open geospatial standards. Additional actions can include; development of CRUD (create, read, use, delete) or similar matrix, access management reviews, update matrix based on user feedback or business requirements; defining data services, documenting services as part of the metadata, development of application programming interfaces (API) that are available for use to many applications and web services using the dataset, etc.</i></p> <p><b>Justification Comment</b>– <i>provide supporting statements justifying metric selection, where appropriate provide links to web documentation.</i></p> <p>References as they pertain to Stage 4 Access: <a href="#">Managing Government Records</a>, <a href="#">E-Government Act Implementation</a>, <a href="#">Making Open and Machine Readable the New Default for Government Information EO 13642</a>, <a href="#">OMB Circular A-16 Supplemental Guidance</a> (pages 31-32), <a href="#">Wikipedia - CRUD</a>, and <a href="#">Open Geospatial Consortium (OGC) Standards</a></p>	<ul style="list-style-type: none"> <li>• No</li> <li>• Process is under development</li> <li>• Process is developed and documentation started</li> <li>• Process is developed, documented, and beginning to be implemented</li> <li>• User access process is fully implemented, data is available, process is reviewed and updated on a recurring basis</li> </ul> <p>Justification Comment (required) –</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><i>Web tool will have open text box to support response</i></p> </div>

<p><b>Question 14</b>  <b>STAGE 5 - Maintain</b> –The ongoing processes and procedures to ensure that the data meet business requirements</p>	<p><b>Is there a maintenance process for updating and storing the dataset?</b></p> <p><i><b>Clarifying statement - example actions may include:</b> the creation of management/maintenance processes including standard operating procedures (SOP), addressing evolving dataset requirements over time, internal and external evolving policies over time, working with other staff or offices to identify hardware &amp; software needs, storage and backup solutions, resources to maintain and update data and services, including agency records management requirements, linking to computer systems lifecycles, assigning maintenance responsibilities and frequency, identify/develop agreements to support the maintenance process, versioning control, etc.</i></p> <p><i><b>Justification Comment</b>– provide supporting statements justifying metric selection, where appropriate provide links to web documentation.</i></p> <p>Reference as it pertains to Stage 5 Maintain: <a href="#">OMB Circular A-16 Supplemental Guidance</a> (pages 31-32) and <a href="#">OMB Circular A-11 Exhibit 300 and 53 Guidance</a></p>	<ul style="list-style-type: none"> <li>• No</li> <li>• Dataset maintenance process is under development</li> <li>• Dataset maintenance process is identified and documented</li> <li>• Dataset maintenance process is being implemented</li> <li>• Dataset maintenance process is fully implemented and processes are reviewed and periodically updated</li> </ul> <p>Justification Comment (required) –</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><i>Web tool will have open text box to support response</i></p> </div>
<p><b>Question 15</b>  <b>STAGE 5 - Maintain</b> –The ongoing processes and procedures to ensure that the data meet business requirements</p>	<p><b>Is there an error correction process as part of dataset maintenance?</b></p> <p><i><b>Clarifying statement - example actions may include:</b> processes to identify existing dataset errors, quality control as determined by the quality assurance planning completed in Stage 1 Define/Plan, feedback from users regarding possible errors existing in the current dataset are collected, errors are corrected as deemed appropriate, updated dataset provided as deemed appropriate, and update notifications delivered through various means. Various means can include, but not limited to, errors are documented in metadata (ex. - including descriptions of dataset limitations, errors identified, errors corrected, release notes, etc.) may include emailing end users, webpage updates, and official notification processes (ex. – Federal Register, etc.), and training. May include establishing error correction process, process reviewed on a recurring basis, etc.</i></p> <p><i><b>Justification Comment</b>– provide supporting statements justifying metric selection, where appropriate provide links to web documentation.</i></p> <p>Reference as it pertains to Stage 5 Maintain: <a href="#">Federal Register</a> and <a href="#">OMB Circular A-16 Supplemental Guidance</a> (pages 31-32)</p>	<ul style="list-style-type: none"> <li>• No</li> <li>• Error correction process under development</li> <li>• Error correction process established</li> <li>• Error correction process includes user notification, process reviewed on a recurring basis</li> </ul> <p>Justification Comment (required) –</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><i>Web tool will have open text box to support response</i></p> </div>

<p><b>Question 16</b> <b>STAGE 6 - Use/Evaluate –</b> The ongoing assessment, validation, and potential enhancement of data to meet user needs and business requirements</p>	<p><b>Is there a process to determine if the dataset meets user needs?</b></p> <p><i><b>Clarifying statement - example actions may include:</b> reviewing initial requirements to dataset created; users include internal and external; incremental review of requirements, reviewing accuracy, quality, data format, geographic extent, dataset resolution; utilizing feedback processes (ex.- internal and external user surveys, community of use questionnaires, communities of interest, user Teams, outreach, user rating, tagging, star rating, etc.) to inform changing requirements, efficient and effective use analysis; evaluating business requirements across agencies; acting upon evolving business needs and changing technology, etc.</i></p> <p><i><b>Justification Comment</b>– provide supporting statements justifying metric selection, where appropriate provide links to web documentation.</i></p> <p>Reference as it pertains to Stage 6 Use/Evaluate: <a href="#">OMB Circular A-16 Supplemental Guidance</a> (pages 31-32)</p>	<ul style="list-style-type: none"> <li>• No</li> <li>• Process is being developed to determine if user needs are being addressed or met</li> <li>• Process is complete and being implemented on ad hoc basis</li> <li>• Process is fully implemented and repeated on a recurring basis</li> </ul> <p>Justification Comment (required) –</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><i>Web tool will have open text box to support response</i></p> </div>
<p><b>Question 17</b> <b>STAGE 6 - Use/Evaluate –</b> The ongoing assessment, validation, and potential enhancement of data to meet user needs and business requirements</p>	<p><b>Is there a process to provide users information on how to access and properly use the dataset?</b></p> <p><i><b>Clarifying statement - example actions may include:</b> providing information to end users on accessing data, data services, promoting use of the dataset, proper use of the dataset – can include electronic documentation in the form of websites, downloadable documents, etc.; dataset is delivered with all of the information available to understand and use the dataset and/or services; information available to all types of end users; stakeholder engagement, outreach in the form of “how to” documents, tools to support access, meetings, presentations, wikis, documented in Data.gov, included in GeoPlatform.gov, etc.; recommendations for referencing or acknowledging dataset source, recognition of copyright or agreements, data use limitations, use restrictions, etc.</i></p> <p><i><b>Justification Comment</b>– provide supporting statements justifying metric selection, where appropriate provide links to web documentation.</i></p> <p>Reference as it pertains to Stage 6 Use/Evaluate: <a href="#">OMB Circular A-16 Supplemental Guidance</a> (pages 31-32)</p>	<ul style="list-style-type: none"> <li>• No</li> <li>• Process is being developed for providing access and proper use</li> <li>• Process implementation started for access and proper use</li> <li>• Process is fully implemented supporting access and proper use, process is reviewed on a recurring basis</li> </ul> <p>Justification Comment (required) –</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><i>Web tool will have open text box to support response</i></p> </div>
<p><b>Question 18</b> <b>STAGE 6 - Use/Evaluate –</b> The ongoing assessment, validation, and potential enhancement of data to meet user needs and business requirements</p>	<p><b>Are the business processes and management practices assessed to meet changing technology?</b></p> <p><i><b>Clarifying statement - example actions may include:</b> reviewing use/utilization of the dataset, may include efficiency analysis, reviews of effectiveness of current technology vs. new technology (ex.- shapefiles vs</i></p>	<ul style="list-style-type: none"> <li>• No</li> <li>• Assessment process is being developed to take advantage of changing technology</li> <li>• Assessment process implementation started for taking advantage of changing technology</li> </ul>

	<p><i>geodatabases), value analysis for updating antiquated formats, financial impact analysis, is the dataset meeting business requirements and management practices with current technology, evaluate how changing technology impacts requirements or practices, evaluating optional and necessary upgrades, identifying opportunities to collaborate internally or externally, and integrating new policies, etc.</i></p> <p><b>Justification Comment</b>– provide supporting statements justifying metric selection, where appropriate provide links to web documentation.</p> <p>Reference as it pertains to Stage 6 Use/Evaluate: <a href="#">OMB Circular A-16 Supplemental Guidance</a> (pages 31-32)</p>	<ul style="list-style-type: none"> <li>Assessment process is fully implemented for taking advantage of changing technology , process is reviewed on a recurring basis</li> </ul> <p>Justification Comment (required) –</p> <div data-bbox="1010 346 1502 478" style="border: 1px solid black; padding: 5px;"> <p><i>Web tool will have open text box to support response</i></p> </div>
<p><b>Question 19</b> <b>STAGE 7 - Archive –</b> Facilitate the selection/appraisal retention, storage, preservation and accessibility of geospatial content with long-term value and establish mechanisms for the coordinated development of stewardship tools and services across all impacted Federal agencies.</p>	<p><b>Is there an archiving process for the dataset?</b></p> <p><b>Clarifying statement - example actions may include:</b> <i>identifying business justifications for long-term archiving; establishing long-term archiving requirements; inventorying geospatial data for effective long-term management; selecting and appraising geospatial content of enduring value; establishing records schedules in conjunction with the National Archives and Records Administration (NARA); implementing records management processes and oversight as determined by records schedules; identifying responsible stewards at each step of the data lifecycle; establishing agreements with creating agencies, intermediate stewards and the National Archives for the sequential management of archival data; integrating national initiatives such as the Geospatial Platform in archiving activities; developing technical approaches to data preservation and stewardship; preparing, normalizing or enhancing data to assist long-term preservation; establishing digital repositories and storage to house data of enduring value; training on archiving and preservation processes for frontline staff at each stage of the data lifecycle; engaging federal, state and local stewarding organizations to explore opportunities for shared stewardship; establishing access management plans to exploit the value of long-term data; disposition of data without enduring value in accordance with records management and legal principles.</i></p> <p><b>Justification Comment</b>– provide supporting statements justifying metric selection, where appropriate provide links to web documentation.</p> <p>References as they pertain to Stage 7 Archive: <a href="#">Managing Government Records</a>, <a href="#">NARA Transfer Guidance</a>, Guidance On The Selection and Appraisal Of Geospatial Content Of Enduring Value (FGDC draft 2014), <a href="#">OMB Circular A-16 Supplemental Guidance</a> (pages 31-32)</p>	<ul style="list-style-type: none"> <li>No archival or disposition process.</li> <li>Archival and/or disposition processes are in development.</li> <li>Archival and/or processes are in early implementation.</li> <li>Archival and disposition processes are fully implemented.</li> </ul> <p>Justification Comment (required) –</p> <div data-bbox="1010 961 1502 1094" style="border: 1px solid black; padding: 5px;"> <p><i>Web tool will have open text box to support response</i></p> </div>

## GLOSSARY

TERM	DEFINITION
<b>access</b>	Obtain, examine or retrieve data or a file, Lifecycle Stage 4
<b>accessible</b>	Easy to approach, reach, enter, or use
<b>accuracy</b>	The quality or state of being correct or precise. The degree to which the result of a measurement, calculation, or specification conforms to the correct value or standard
<b>activity</b>	The condition in which things are happening or being done
<b>adequate</b>	Satisfactory or acceptable in quality or quantity, for this purpose if not adequate funding cannot support the requirements as identified in the Define stage.
<b>agreement</b>	A negotiated and typically legally binding arrangement between parties as to a course of action
<b>antiquated formats</b>	Continued from, resembling, or adhering to the past; old-fashioned; no longer used; obsolete or obsolescent
<b>application program interfaces (API)</b>	An application programming interface is a set of software instructions and standards that allows machine to machine communication. Source <a href="http://www.data.gov/glossary">http://www.data.gov/glossary</a>
<b>appropriate use</b>	Suitable or fitting for a particular purpose, put into service in a suitable manner
<b>acquire or acquisition</b>	To come into possession or ownership of, to gain through actions or efforts
<b>archive</b>	To place or store in an archive, collection of historical documents of records providing information, Lifecycle State 7; required retention of data and the data's retirement into long-term storage. Source A-16 Supplemental Guidance. Also Facilitate the selection/appraisal, retention, storage, preservation and accessibility of geospatial content with long-term value and establish mechanisms for the coordinated development of stewardship tools and services across all impacted Federal agencies. Also A data archive is sometimes distinguished from a backup (archive), the former storing data in a form that is readily accessible by software applications and the latter storing data along with system files and applications in a format that supports restoration of part or all of a system after a disaster.
<b>archives management (archives administration)</b>	(also archives administration), n. ~ The general oversight of a program to appraise, acquire, arrange and describe, preserve, authenticate, and provide access to permanently valuable records. <a href="http://www2.archivists.org/glossary/terms/a/archives-management">http://www2.archivists.org/glossary/terms/a/archives-management</a>

<b>assessment</b>	The act of assessing (to fix or determined the amount, to estimate or judge the value of), appraisal, evaluation
<b>asset</b>	A useful and desirable thing, items of ownership, having exchange value
<b>Attorney-Client Privilege</b>	Per 12 USC 78x: The term "privilege" includes any work-product privilege, attorney-client privilege, governmental privilege, or other privilege recognized under Federal, State, or foreign law. Per 502(g): (1) "attorney-client privilege" means the protection that applicable law provides for confidential attorney-client communications; and (2) "work-product protection" means the protection that applicable law provides for tangible material (or its intangible equivalent) prepared in anticipation of litigation or for trial
<b>backup</b>	A copy or duplicate version, especially of a file, program, or entire computer system, retained for use in the event that the original is in some way rendered unusable.
<b>benchmark</b>	A standard of excellence, achievement, etc. against which similar things must be measured or judged.
<b>business requirements</b>	That which is required by the business, a thing demanded or obligatory
<b>changing technology</b>	Transform or converting knowledge that deals with the creation and use of technical means.
<b>classified</b>	Material that a government body claims is sensitive information that requires protection of confidentiality, integrity, or availability.
<b>clarifying statements</b>	Communication to make clear or intelligible
<b>collecting</b>	To gather together, assemble
<b>collection methods</b>	The act of collecting using a procedure, technique or way of doing something, especially in accordance with a definite plan.
<b>community of use</b>	A social unit of any size that shares common use
<b>compliance</b>	Conforming, cooperation
<b>Confidential Business Information (CBI)</b>	Confidential Business Privilege - includes items such as trade secret, contract materials, scientific research not yet published, etc.
<b>confidentiality</b>	Spoken, written, acted on, etc. in strict privacy or secrecy

<b>Content Standard for Digital Geospatial Metadata (CSDGM)</b>	The content standard for metadata, data about data, for digital geospatial data. The standard is to provide a common set of terminology and definitions for the documentation of digital geospatial data. Full document at: <a href="http://www.fgdc.gov/standards/projects/FGDC-standards-projects/metadata/base-metadata/v2_0698.pdf">http://www.fgdc.gov/standards/projects/FGDC-standards-projects/metadata/base-metadata/v2_0698.pdf</a>
<b>continuity</b>	The state of being continuous
<b>Continuity of Operations (COOP)</b>	Defined as the National Continuity Policy Implementation Plan and the National security Presidential Directive 51/Homeland Security Presidential Directive 20, is an effort within individual executive departments and agencies to ensure that primary Mission Essential Functions continue to be performed during a wide range of emergencies, including localized acts of nature, accidents, and technological or attack-related emergencies. <a href="http://www.fema.gov/pdf/about/org/ncp/coop_brochure.pdf">http://www.fema.gov/pdf/about/org/ncp/coop_brochure.pdf</a>
<b>contracting officer (CO)</b>	A person who can bind the United States government to a contract that is greater than the micro-purchase threshold. This is limited to the scope of authority delegated to the CO by the head of the agency.
<b>contracting officers representative (COR)</b>	An individual who is designated and authorized in writing by the contracting officer to perform specific technical or administrative functions on contracts or orders.
<b>Controlled or Confidential Unclassified Information (CUI)</b>	Controlled Unclassified Information - Controlled Unclassified Information EO 13556 - <a href="http://www.whitehouse.gov/the-press-office/2010/11/04/executive-order-controlled-unclassified-information">http://www.whitehouse.gov/the-press-office/2010/11/04/executive-order-controlled-unclassified-information</a> , previously included confidential but this term is no longer being used.
<b>Contract</b>	Pay to get collected/processed/created (Contract) - covers data acquired via contract with the private sector to collect, process, and/or create new data to meet our requirements and specs. Also includes data acquired in partnership with other agencies and entities in which the agency expends funds and receives data in return.
<b>conversion</b>	The act or process of converting, change in form or function
<b>copyright</b>	the exclusive legal right, given to an originator or an assignee to print, public, perform, film, or record literary, artistic, or musical material, and to authorize others to do the same

<b>create</b>	Produce, generate, make, fabricate, fashion, build, construct, or cause something to happen; also Collect/improve/maintain with Government instrumentation (Create) - covers any spatial data collected with government equipment. Includes data that currently does not exist (new data) and generation of additional data (supplemental data) in a manner that requires the federal agency's resources such as sensors or field data collection operations. This process may involve adding elements to an existing data set.
<b>Create, Read, Update, and Delete (CRUD)</b>	Create, Read, Update, and Delete - the four basic functions of persistent storage of datasets
<b>cyclic updates</b>	Revolving or recurring in cycles to incorporate new or more accurate information, increasing geographic extent and/or resolution
<b>data acquisition</b>	Activities and costs associated with the purchase or lease of geospatial datasets from commercial, governmental, or nongovernmental entities, including States, tribes, local governments, other Federal agencies, and nongovernmental organizations for use in geospatial information systems and software. Source OMB Geospatial Data Call 2006/2007.
<b>data analysis</b>	Analysis of geospatial data for the purpose of developing a targeted geospatial product or answering a specific programmatic question. Source OMB Geospatial Data Call 2006/2007.
<b>data center</b>	A large group of networked computer servers typically used by organizations for the remote storage, processing, or distribution of large amounts of data.
<b>data collection</b>	Activities and costs associated with the collection of new geospatial data (that is, data not available commercially or from other governmental or nongovernmental entities) for use in a geospatial information systems and software. Includes costs associated with data development and with joining a data consortium that collects or develops new data. Source OMB Geospatial Data Call 2006/2007.
<b>data formats</b>	Items of information in an arrangement, data type, format for encoding data for storage, format for storage on a storage medium
<b>data modeling</b>	A process used to define and analyze data requirements needed to support the business process within the scope of corresponding information systems in organizations.
<b>Dataset Steward</b>	see Steward
<b>data.gov</b>	A US Government website launched in 2009 by the Federal Chief Information officer of the US. The purpose is to increase public access to high value, machine readable datasets generated by the Executive Branch of the Federal Government. <a href="http://www.data.gov/">http://www.data.gov/</a>
<b>dataset</b>	Actual logical and physical representations of geographic features. Source OMB Circular A-16.

<b>dataset continuity</b>	the unbroken and consistent existence or operation of the dataset over a period of time
<b>dataset schedules</b>	A plan for carrying out a process or procedure, giving lists of intended events and times as they pertain to the dataset.
<b>define</b>	State or describe exactly the nature, scope or meaning of, Lifecycle Stage 1
<b>delivery</b>	The act or manner of giving or sending forth, the state of being delivered
<b>discoverable</b>	To see, get knowledge of, learn of, find, or find out, capable of being found out.
<b>downloadable</b>	To transfer a file copy from a remote computer to a local computer over a network. To transfer information from one computer to another over a network.
<b>duplication</b>	A copy exactly like an original, to do or perform again, repeat
<b>E-Government (e-Gov, EGOV, eGov)</b>	Refers to the use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government.
<b>emergency response</b>	Aggregate of decisions and measures taken to contain or mitigate the effects of an emergency to prevent any further loss of life and/or property, restore order, and reestablish normality. Emergency response is the first immediate response.
<b>end user</b>	Individuals and agencies who use data after the dataset has been fully developed; the intended users of the data Source A-16 supplemental guidance (2008)
<b>enduring value</b>	Continuing or long-lasting importance, worth, or usefulness
<b>Enforcement Confidential</b>	Related to techniques and procedures for law enforcement operations, investigations, prosecutions, or enforcement actions intended to be kept secret.
<b>error correction</b>	substitution or fixing of a deviation from accuracy or correctness,
<b>evaluate</b>	For an idea of the amount, number, or value of, assess, part of Lifecycle Stage 2 and Stage 6
	An order having the force of law issued by the president of the U.S. to the army, navy, or other part of the executive branch of government
<b>external</b>	External to organization
<b>Federal Acquisition Regulations (FAR)</b>	The principal set of rules in the Federal Acquisition Regulation System. The FAR System governs the "acquisition process" by which the government purchases (acquires) goods and services. Electronic Code of Federal Regulations Title 48 Federal Acquisition Regulations System - <a href="http://www.ecfr.gov/cgi-bin/text-idx?SID=0a20cc3944a9d611982b9d2697c56669&amp;tpl=/ecfrbrowse/Title48/48tab_02.tpl">http://www.ecfr.gov/cgi-bin/text-idx?SID=0a20cc3944a9d611982b9d2697c56669&amp;tpl=/ecfrbrowse/Title48/48tab_02.tpl</a>
<b>Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata (CSDGM)</b>	The current US Federal Metadata standard - <a href="https://www.fgdc.gov/metadata/geospatial-metadata-standards#csdgm">https://www.fgdc.gov/metadata/geospatial-metadata-standards#csdgm</a>

<b>Federal Geographic Data Committee (FGDC)</b>	A United States government committee which promotes the coordinated development, use, sharing, and dissemination of geospatial data on a national basis.
<b>Federal Geographic Data Committee (FGDC) Secretariat</b>	Executive and support staff that support the FGDC and its interagency substructure and working groups
<b>Federal Register</b>	A daily publication of the US federal government that issues proposed and final administrative regulations of federal agencies. <a href="https://www.federalregister.gov/">https://www.federalregister.gov/</a>
<b>feedback</b>	A reaction or response to a particular process or activity, evaluative information derived from a reaction or response
<b>financing</b>	The act of obtaining or furnishing money or capital for purchase or enterprise
<b>for official use only (FOUO)</b>	Is a document designation, not a classification, this designation is used by Department of Defense and a number of other federal agencies to identify information or material which, although unclassified, may not be appropriate for public release. Term will be replaced by CUI in the near future.
<b>formalized</b>	To make forma, to give a definite form to, to state or restate the rules or implied rules in a symbolic form
<b>geographic extent</b>	the area which the dataset requirements are defined to include
<b>Geoplatform.gov</b>	The Geospatial Platform (Platform), an initiative based in the Fiscal Year (FY) 2011 Presidential Budget, with the goal of ultimately increasing access to geospatial data is designed to become a component of the National Spatial Data Infrastructure (NSDI).
<b>geospatial</b>	Of or relating to the relative position of things on the Earth's surface
<b>hardware</b>	Equipment acquired and maintained, including under vendor and contractor maintenance contracts, and used for geographic information systems. Source OMB Circular A-130a Section 6.
<b>harmonize</b>	Produce a pleasing visual combination (synonyms: coordinate, go together, match, etc.)
<b>holistic</b>	Incorporating the concept of whole entities, as fundamental components of reality, in theory or practice

<b>information</b>	Any communication or representation of knowledge, such as facts, data, or opinions in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audiovisual form. Source OMB Circular A-130a
<b>information technology</b>	Any equipment or interconnected system or subsystem of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by an executive agency. Source OMB Circular A-130a Section 6.
<b>internal</b>	Internal to organization
<b>International Standards Organization (ISO)</b>	An independent, non-governmental membership organization and the world's largest developer of voluntary International Standards. More at: <a href="http://www.iso.org/iso/home/about.htm">http://www.iso.org/iso/home/about.htm</a>
<b>inventory</b>	Make a complete list of, Lifecycle Stage 2
<b>law enforcement sensitive</b>	Related to techniques and procedures for law enforcement operations, investigations, prosecutions, or enforcement actions.
<b>Leverage</b>	Leverage from others at no cost (Leverage) - covers acquisition of existing data produced by others with no direct acquisition cost (with no contract, purchase order, etc.)
<b>lifecycle</b>	A series of stages that characterize the course of existence
<b>limited distribution</b>	Distribution of a product is limited as determined necessary
<b>machine readable</b>	Data or text in a form that a computer can process. <a href="http://www.whitehouse.gov/the-press-office/2013/05/09/executive-order-making-open-and-machine-readable-new-default-government-">http://www.whitehouse.gov/the-press-office/2013/05/09/executive-order-making-open-and-machine-readable-new-default-government-</a>
<b>maintain</b>	Cause or enable to continue, Lifecycle Stage 5
<b>marketplace or market place</b>	Ann open space where a market is held, competitive or commercial dealings, geoplatform.gov - listings of datasets that are planned for acquisition by one or more of the FGDC member agencies. More at: <a href="https://www.geoplatform.gov/node/261/%26fq%3Dmetadata_type%3A%22geospatial%22%2BAND%2Bprogress%3A%22planned%22%2BAND%2B">https://www.geoplatform.gov/node/261/%26fq%3Dmetadata_type%3A%22geospatial%22%2BAND%2Bprogress%3A%22planned%22%2BAND%2B</a>
<b>maturity</b>	Full development, perfect condition, state of being mature
<b>metadata or metadata tools</b>	A set of data that describes and gives information about other data, data about data; a tool to create metadata – <a href="#">FGDC Metadata tools</a>
<b>metric</b>	A standard for measuring or evaluating something
<b>National Archives and Records Administration (NARA)</b>	The agency that oversees management of federal government records including presidential libraries and historic collections. More at: <a href="http://www.archives.gov/">http://www.archives.gov/</a>
<b>National Geospatial Data Asset (NGDA) Management Plan</b>	A geospatial dataset that is of value to the nation <a href="http://www.fgdc.gov/policyandplanning/a-16/ngda-management-plan">http://www.fgdc.gov/policyandplanning/a-16/ngda-management-plan</a>

<b>National Institute of Standards and Technology (NIST)</b>	Non-regulatory agency of the US Department of Commerce that promotes US innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways to enhance economic security and improve our quality of life.
<b>National Spatial Data Infrastructure (NSDI)</b>	A cooperative effort involving federal, state, and local government, the private sector, and academia. The Federal Geographic Data Committee is charged through a Presidential Executive Order with providing the federal leadership for evolving the NSDI.
<b>obtain</b>	Get, acquire, or secure, Lifecycle Stage 3 Includes data that currently does not exist (new data) and generation of additional data (supplemental data) in a manner that requires the federal agency's resources such as sensors or field data collection operations. This process may involve adding elements to an existing data set.
<b>Office of Management and Budget (OMB)</b>	Division of the Executive Office of the President that prepares and administers the federal budget and improves management in the executive branch.
<b>Open Geospatial Standards (OGC)</b>	An international industry consortium of companies, government agencies and universities participating in a consensus process to develop publically available interface standards
<b>open digital machine readable format</b>	Data or text in a form that a computer can process. <a href="http://www.whitehouse.gov/the-press-office/2013/05/09/executive-order-making-open-and-machine-readable-new-default-government-">http://www.whitehouse.gov/the-press-office/2013/05/09/executive-order-making-open-and-machine-readable-new-default-government-</a>
<b>originator controlled</b>	Ensures that the originator can track possessors of the information
<b>overarching questions</b>	Encompassing all other stages
<b>partner</b>	A person who takes part in an undertaking with another or others, especially in a business or company with shared risks and profits; Local (city, town, district) / Regional (counties, state, states) / National (nation)
<b>Personally Identifiable Information (PII)</b>	As used in US privacy law and information security, is information that can be used on its own or with other information to identify, contact, or locate a single person or to identify an individual in context. NIST Special Publication 800-122 - <a href="http://csrc.nist.gov/publications/nistpubs/800-122/sp800-122.pdf">http://csrc.nist.gov/publications/nistpubs/800-122/sp800-122.pdf</a>
<b>plan</b>	Detailed proposal for doing or achieving something, deciding on and arrange in advance, Lifecycle Stage 1 added during maturity assessment discussions
<b>polling</b>	Record the opinion or vote of
<b>portfolio</b>	Total holdings of assets or valuables
<b>privacy</b>	State of being concealed, secrecy
<b>precision</b>	State of being precise, accuracy, exactness
<b>preservation</b>	To keep up, maintain

<b>process or processing</b>	A series of actions or steps taken in order to achieve a particular end, perform a series of mechanical operations on something in order to change or preserve it. Also A continuous and regular action or succession of actions occurring or performed in a definite manner, and having a particular result or outcome; a sustained operation or series of operations.
<b>proprietary</b>	Technology or product that is owned exclusively by a single company or organization
<b>protected as restricted data (PARD)</b>	A handling method for computer generated information that is not readily recognized as classified or unclassified because of the high volume of output and low density of potentially classified data. Classified as PARD because it has not had a sensitivity (classification) review and must be protected under a different set of security rules.
<b>purchase</b>	Contract from a data store and/or for a service (Purchase) - covers data purchased from a data store or other source.
<b>quality assurance</b>	The maintenance of a desired level of quality in a service or product
<b>quality control</b>	A process by which entities review the quality of all factors involved in production
<b>questionnaires</b>	A set of printed or written questions with a choice of answers, devised for the purposes of a survey or statistical study.
<b>records management</b>	Refers to a set of activities required for systematically controlling the creation, distribution, use, maintenance, and disposition of recorded information maintained as evidence of business activities and transactions
<b>recurring</b>	Occurring or appearing again
<b>rendering</b>	To cause something to be in a specific condition, to convert, to produce a copy or a version,
<b>required formats</b>	To have a need of a specific format, necessary structure
<b>restrictions</b>	To confine or keep within limits, to restrict
<b>reuse</b>	To use again or more than once, the act of using something again
<b>research methodology</b>	The process used to collect information and data for the purpose of making business decisions.

<b>resolution</b>	The resulting state, the act or process of separating into constituent parts, examples used in this document: <b>Spatial resolution</b> – the scale or ability to discriminate between adjacent objects. <b>Spectral resolution</b> – ability to resolve electromagnetic spectrum.
<b>roles and responsibilities</b>	Role is a descriptor of an associated set of tasks, responsible are those who do the work to achieve the task
<b>Sensitive But Unclassified (SBU)</b>	Is a designation of information in the United States federal government that, though unclassified, often requires strict controls over its distribution – this will change with future policy.
<b>Sensitive Security Information</b>	Is a category of sensitive but unclassified information under the United States government's information sharing and control rules – this will change with future policy.
<b>service or services</b>	Automated program, interface, application, or engine that performs a defined action that can be found, invoked, and executed over the Web. A geospatial Web-based service is a service that performs an action on geospatial data or information to transform, translate, or convert it to a more usable format or to update, distribute, or integrate it into an existing database or dataset for use. Source OMB Geospatial Data Call 2006/2007.
<b>Software</b>	Applies to all types of computers and includes operating systems, applications software, database management software, software development suites, and any ongoing software maintenance and upgrades. Software can be commercial off-the-shelf software or customer-developed software. Computer software used for geographic information systems (GIS) includes but is not limited to spatial database software, spatial data viewers, three-dimensional visualization software licenses and maintenance plans and contract for this software. Source OMB Geospatial Data Call 2006/2007.
<b>sources</b>	The place from which something comes or is obtained
<b>spatial resolution</b>	The scale or ability to discriminate between adjacent objects.
<b>spectral resolution</b>	The ability to resolve electromagnetic spectrum.
<b>staffing transitions</b>	Group of persons, as employees, charged with carrying out the work when positions change, employees are hired, or employees depart
<b>Stakeholder</b>	a person with an interest or concern in something, especially business; for the maturity assessment stewards are included as stakeholders; Local (city, town, district) / Regional (counties, state, states) / National (nation)
<b>standard</b>	A level of quality or attainment, an idea or thing used as a measure, norm, or model in comparative evaluations

<b>Standard Operating Procedures (SOP)</b>	Detailed explanation of how a policy is to be implemented. Established or prescribed methods to be followed routinely for the performance of designated operations or in designated situation.
<b>standards development</b>	Development of common geospatial content, structure, or exchange specifications. Source adapted from FDC Web site May 2008
<b>status metric</b>	The state or condition of the standard for measuring or evaluating something
<b>star rating</b>	Stars are often used as symbols for classification purposes. They are used by reviewers for ranking things such as movies, TV shows, etc.
<b>Steward (Data Steward)</b>	Job role that incorporated processes, policies, guidelines, and responsibilities for administering a dataset in compliance with business and/or regulator obligations. Also individuals that work with Theme Leads and National A-15 Dataset Managers (or principal dataset managers) to ensure the successful implementation of nationally significant datasets associated with the themes identified in OMB Circular A-16. They are accountable for implementing national standards and data models within their organization. They are responsible for the documentation, metadata and responsible usage of the datasets within their organization. Data stewards also work with subject matter experts and program specialists within their organization to integrate geospatial data into agency business processes. Source A-16 supplemental guidance (2008).
<b>storage</b>	Offline - Any digital storage medium that must first be attached to a computing device before being made accessible to the computing system. Offline storage may be in the form of tape drives, fixed media (CDs, DVDs, flash drives) or hard drives that are not continuously network accessible. Also called removable storage. See also "Nearline Storage" and "Online Storage." Online - Local or network-accessible storage utilized for data that is immediately accessible to an application without the need to stage it in from a lower tier of storage. See also "Nearline Storage" and "Offline Storage."
<b>sufficiently knowledgeable</b>	Adequate possession or knowledge
<b>tag or tagging</b>	Method used on web pages allowing linking of topics for end users to search for similar or related content. Also tags (or keywords) help users discover your dataset and should include terms that would be used by technical and non-technical users. Source <a href="http://www.data.gov/glossary">http://www.data.gov/glossary</a>
<b>technology</b>	The application of scientific knowledge for practical purposes, especially in industry. The use of science in industry, engineering, etc., to invent useful things or to solve problems. A machine, piece of equipment, method, etc. that is created by technology.

<b>timeliness</b>	Occurring within a suitable time, well-timed
<b>transparent or transparency</b>	Condition of being transparent (easy to perceive or detect synonyms: obvious, evident, self-evident, undisguised, unconcealed, etc.)
<b>unclassified</b>	Not designated as a secret
<b>understandable</b>	Capable of being understood, comprehensible. To understand or perceive the intended meaning of words.
<b>use</b>	Take, hold, or deploy as a means of accomplishing a purpose or achieving a result, Lifecycle Stage 6
<b>use limitations</b>	Take, hold or deploy within a limiting condition
<b>versioning</b>	Create a new version of; version is a particular form of something differing in certain respects from an earlier form or other forms of the same type of thing.
<b>web page</b>	A hypertext document connected to the World Wide Web
<b>wiki</b>	A website that allows collaborative editing of its content and structure by its users

## REFERENCES

REFERENCE	WEBLINK
Agency Information Quality Guidelines	<a href="http://www.whitehouse.gov/omb/inforeg_agency_info_quality_links">http://www.whitehouse.gov/omb/inforeg_agency_info_quality_links</a>
Controlled Unclassified Information EO 13556	<a href="http://www.whitehouse.gov/the-press-office/2010/11/04/executive-order-controlled-unclassified-information">http://www.whitehouse.gov/the-press-office/2010/11/04/executive-order-controlled-unclassified-information</a>
Create, read, use, delete (CRUD)	<a href="http://en.wikipedia.org/wiki/Create,_read,_update_and_delete">http://en.wikipedia.org/wiki/Create,_read,_update_and_delete</a>
Data Quality Act	<a href="http://en.wikipedia.org/wiki/Data_Quality_Act">http://en.wikipedia.org/wiki/Data_Quality_Act</a>
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FGDC Content Standard for Digital Geospatial Metadata (CSDGM)	<a href="http://www.fgdc.gov/metadata/csdgm/">http://www.fgdc.gov/metadata/csdgm/</a>
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GeoPlatform.gov	<a href="https://www.geoplatform.gov/overview-page">https://www.geoplatform.gov/overview-page</a>
Guidance On the Selection and Appraisal Of Geospatial Content Of enduring Value (FGDC draft 2014)	draft document
GAO – Geospatial Information – OMB and Agencies Need to Make Coordination a	<a href="http://www.gao.gov/assets/660/650293.pdf">http://www.gao.gov/assets/660/650293.pdf</a>

<b>Priority to Reduce Duplication</b>	
<b>International Standards Organization (ISO) 19115-1:2014</b>	<a href="http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=53798">http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=53798</a>
<b>Managing Government Records</b>	<a href="http://www.whitehouse.gov/sites/default/files/omb/memoranda/2012/m-12-18.pdf">http://www.whitehouse.gov/sites/default/files/omb/memoranda/2012/m-12-18.pdf</a>
<b>NARA Transfer Guidance</b>	<a href="http://www.archives.gov/records-mgmt/policy/transfer-guidance.html">http://www.archives.gov/records-mgmt/policy/transfer-guidance.html</a>
<b>OMB Circular A-11 Exhibit 300 and 53 Guidance</b>	<a href="http://ocio.os.doc.gov/ITPolicyandPrograms/Capital_Planning/DEV01_002689">http://ocio.os.doc.gov/ITPolicyandPrograms/Capital_Planning/DEV01_002689</a>
<b>OMB Circular A-16 Supplemental Guidance</b>	<a href="http://www.fgdc.gov/policyandplanning/A-16-supplemental-guidance-endorsed-dec08.pdf">http://www.fgdc.gov/policyandplanning/A-16-supplemental-guidance-endorsed-dec08.pdf</a>
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<b>Public Law 106-154 Sec. 515a (Information Quality Act)</b>	<a href="http://www.gpo.gov/fdsys/pkg/PLAW-106publ554/html/PLAW-106publ554.htm">http://www.gpo.gov/fdsys/pkg/PLAW-106publ554/html/PLAW-106publ554.htm</a>
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