

# NGDA Dataset Report

**Official NGDA Title:** USGS National Structures Dataset

**Metadata Record Title:** USGS National Structures Dataset (NSD) Downloadable Data Collection - National Geospatial Data Asset (NGDA) USGS National Structures Dataset

**A-16 NGDA Theme:** Real Property

## Executive NGDA Theme Champion(s):

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## Dataset Manager(s):

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## Metadata:

**Registration Status:** Complete

**Registered on** 12/17/2014

**GeoPlatform Link\*:** <https://www.geoplatform.gov/node/243/f0e636d3-a63f-4096-aa0f-1f15e56ef520>

**Data.gov Metadata Link\*:** <http://catalog.data.gov/harvest/object/df27bb02-c83b-420c-9d44-4e66a59bc85d/html>

\*If the metadata has been updated and reharvested after publication of this report, the link may no longer be valid. The dataset may be searched for manually in Data.gov or GeoPlatform.gov.

# NGDA Lifecycle Maturity Assessment (LMA) Report

## Time Frame:

Baseline assessment responses include dataset activities from 2005 to 2015.

## LMA Submission:

**Status:** Complete

**Date:** 9/29/2015

**Extension Requested:** No

## LMA Reviewer(s):

**Supervisor:** Bob Davis

**Theme Lead:** Did not review

**Executive Champion:** Did not review

**SAOGI\*:** Did not review

**Other:** Did not review

## LMA Verifier:

**Name:** Larry (Bob) Davis

**Email:** Irdavis@usgs.gov

## Attachments:

To get access to any attachments referenced in the report, email the LMA Help Desk at [NGDA\\_LMA\\_help@fgdc.gov](mailto:NGDA_LMA_help@fgdc.gov). Please use the subject "Dataset Report Attachment(s)" and indicate the associated official NGDA title.

\*Senior Agency Official for Geospatial Information (SAOGI)

## Lifecycle Maturity Assessment (LMA) Summary

### Overall Maturity:

**Mature; Consistent**

General Questions: 90%

**Optimized; Established**

Stage 4 - Access: 100%

**Optimized; Established**

Stage 1 - Define/Plan: 100%

**Optimized; Established**

Stage 5 - Maintain: 100%

**Optimized; Established**

Stage 2 - Inventory/Evaluate: 100%

**Optimized; Established**

Stage 6 - Use/Evaluate: 100%

**Optimized; Established**

Stage 3 - Obtain: 80%

**Mature; Consistent**

Stage 7 - Archive: 0%

**No Activity**

### NGDA Dataset Maturity Definitions:

How To Calculate Maturity: [https://www.geoplatform.gov/sites/default/files/How\\_to\\_Calculate\\_Maturity.pdf](https://www.geoplatform.gov/sites/default/files/How_to_Calculate_Maturity.pdf)

Maturity	Maturity Characteristics for All Lifecycle Stages
Optimized; Established Rank = 5	Dataset meets virtually all business needs of all users. The dataset is considered authoritative by owners and secondary users. It is curated across all stages of the approved lifecycle. Future needs are defined on a regular basis and resources for addressing both current and future business requirements are available.
Mature; Consistent Rank = 4	Dataset meets all the business needs of the primary owner and most of the secondary users. The dataset is curated and used as authoritative by the primary owner. Dataset is used widely by secondary users actively engaged in sustaining the dataset. Future needs are identified and steps are planned to address these. All stages are supported and reviewed on a recurring basis. The dataset is well managed in relation to the approved lifecycle.
Managed; Predictable Rank = 3	Dataset meets a significant number of the business needs of the primary owner and is widely used as an authoritative resource by secondary users. Benchmark activities are occurring in at least four of the approved lifecycle stages. Management practices in relation to the approved lifecycle is moderate but consistent. Dataset is integrating changing business requirements in lifecycle stages impacting overall maturity.
Transition; Transformation Rank = 2	Dataset meets business needs of the primary owner and has moderate use by secondary users. Benchmark activities are occurring in at least three stages. Efforts to integrate funding, include partners, and obtain data are not supported in a sustained manner. Management practices in relation to the stages of the approved lifecycle is limited.
Planned; Initial Development Rank = 1	Dataset limited in meeting business needs of the primary owner. Benchmark activities in the approved lifecycle are just starting to consider secondary uses, partnerships are forming to support additional dataset uses. Dataset development is in a very early stage. Minimal or limited management against the benchmarks in the approved lifecycle.
No Activity Rank = no activity	Dataset meets project or local business needs of the primary owner, secondary or additional uses or users were not considered, not recognized as an authoritative data or is part of a similar dataset. Not managed to any of the benchmarks in the approved lifecycle.

## General Questions for All Stages

1) Is there a recurring process to obtain funding for all lifecycle stages of this dataset?

**Answer:** Funding support is part of agency budget on a recurring basis, funding is consistent and tied to business processes, and supports all lifecycle stages.

**Justification Comment:**

**Attachment(s):** 0

Yes. There is funding support as part of agency budget.

Additional Comment:

Data is acquired from National Authoritative Sources such as Department of Education for schools, the United States Postal Service for post office locations and National Cemetery locations from the Veterans Administration. Several datasets (fire stations, police stations, hospitals, prisons) come from the information gathered as part of NGA's HSIP program and are not maintained and 5 years out-of-date..

In some cases QA and/or data collection is done using Volunteer Geographic Information (VGI) program at USGS. The mapping crowd-sourcing program, known as The National Map Corps (TNM Corps), encourages citizens to collect structures data by adding new features, removing obsolete points, and correcting existing data for The National Map database (<http://nationalmap.gov/TheNationalMapCorps/index.html>). Funding for TNMC is part of the current NGP budget under the National Structures Dataset.

2) Is there a process in place to ensure that open government and transparency guidelines are followed in all lifecycle stages for this dataset?

**Answer:** Process is published as appropriate with respect to sensitivity requirements, process is transparent, published appropriately.

**Justification Comment:**

**Attachment(s):** 0

Yes. Process for NSD served/published as appropriate with respect to sensitivity requirements, process is transparent, published appropriately. Management of this dataset follows all scientific data management per the USGS.

The National Map Corps (TNMC) project was documented as per requirements of Privacy Impact Assessment (PIA) with notification of the project and data use published in Federal Register December 2014.

Additional Comment:

The USGS provides unbiased, objective, and impartial scientific information upon which our audiences, including resource managers, planners, and other entities, rely.

Since the inception of USGS in 1879, the agency has maintained comprehensive internal and external policies and procedures for ensuring the quality and integrity of its science. This has led to the reputation of USGS being noted for science excellence and objectivity. In 2006, the scientific policies and procedures were updated, and are now known as USGS Fundamental Science Practices (FSP), a set of consistent practices, philosophical premises, and operational principles to serve as the foundation for research and monitoring activities related to USGS science.

The FSP clarifies how USGS science is carried out and how the resulting information products (including maps, imagery, and publications) are developed, reviewed, approved, and released.

More information on USGS's Fundamental Science Practices can be found at :  
<http://www.usgs.gov/fsp/>

3) 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?

**Answer:** Processes and tools to ensure dataset continuity are defined and beginning to be implemented.

**Justification Comment:**

**Attachment(s):** 0

Yes. Annually as part of the NGP planning process NGP staff are involved in reviewing processes and tools associated with maintaining the National Structures Database (NSD).

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## STAGE 1 - Define/Plan

4) Are user and business requirements defined and formalized?

**Answer:** A recurring process is in place, including defining new partner and stakeholder business needs as they arise, and is fully implemented.

**Justification Comment:**

**Attachment(s):** 0

Yes. USGS/NGP management identified the “structures theme” and the associated National Structures Dataset (NSD) as a “maintenance investment” meaning that USGS/NGP intends to maintain current coverage by obtaining data from other organizations and suppliers with a minimum investment of Program resources.” This effort leveraged the resources of multiple partners to achieve significant cost savings through economies of scale while meeting program requirements. The “structures” maintenance program focused on partnerships with Federal, State, and local agencies to leverage resources and expand collection coverage.

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5) How are partners/stakeholders involved in the requirements collection process?

**Answer:** A recurring process is in place, including defining new partner and stakeholder business needs as they arise, and is fully implemented.

**Justification Comment:**

**Attachment(s):** 0

Partners/stakeholders were involved in the requirements collection process. USGS/NGP management identified “structures” as a “maintenance investment” meaning that USGS/NGP intends to maintain current coverage by obtaining data from other organizations and suppliers with a minimum investment of Program resources.” The “structures” program focused on partnerships with Federal, State, and local agencies to leverage resources and expand collection coverage.

NGP stakeholders are involved through the annual budget planning and SOI process. Interest is solicited through “Communities of Use” coordination activities through the National Geospatial Program.

Additional Comment:

Data in the USGS National Structure Database (NSD) is acquired from National Authoritative Sources such as Department of Education for schools, the United States Postal Service for post office locations and National Cemetery locations from the Veterans Administration. Several datasets (fire stations, police stations) come from the information gathered as part of NGA’s HSIP program and are not maintained and 5 years out-of-date.

In some cases QA and/or data collection is done using VGI program at USGS. The mapping crowd-sourcing program, known as The National Map Corps ( TNM Corps), encourages citizens to collect structures data by adding new features, removing obsolete points, and correcting existing data for The National Map database (<http://nationalmap.gov/TheNationalMapCorps/index.html>). The National Map Corps volunteers are successfully editing structures in all 50 States, Puerto Rico, and the US Virgin Islands. Structures include schools, hospitals, post offices, police stations and other important public buildings. Volunteers collect and/or improve structures data by adding new features, removing

obsolete points, and correcting existing data using a web-based mapping tool. Both newly collected and modified point features become part of the USGS National Structures Database, The National Map, and ultimately U.S. Topo Maps. Volunteers include youth from various organizations such as 4-H and scouting, retirees, students, and anyone with an interest in contributing. Through their participation, volunteers are making significant contributions to the USGS's ability to provide the Nation with accurate mapping information.

Additional Information on USGS National Geospatial Program Partnerships can be found at: [http://nationalmap.gov/tnm\\_partnerships.html](http://nationalmap.gov/tnm_partnerships.html)

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**6)** Is there a quality assurance process for the dataset?

**Answer:** Quality assurance published as appropriate with respect sensitivity requirements.

**Justification Comment:**

**Attachment(s):** 0

Yes, there is a Quality Assurance for National Structures Dataset and the affiliated VGI data collection efforts.

Additional Comment:

U.S. Geological Survey Information Quality Guidelines can be found at: [http://www.usgs.gov/info\\_qual/](http://www.usgs.gov/info_qual/)

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**7)** Is there a process to evaluate the sensitivity, privacy, and confidentiality of this dataset?

**Answer:** Sensitivity, privacy, and confidentiality evaluations fully implemented, reviewed and updated on a recurring basis.

**Justification Comment:**

**Attachment(s):** 0

Source data must be accompanied by ISO or FGDC standard metadata which fully describes the dataset and any use or distribution constraints.

Privacy policies of the U.S. Geological Survey can be found at: <http://www.usgs.gov/laws/privacy.html>

Additional Comment:

Addition information on Information Policies and Public Release of data can be found at: [http://www.usgs.gov/laws/info\\_policies.html](http://www.usgs.gov/laws/info_policies.html)

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**8)** Are defined data standards used in collecting, processing, and/or rendering the data?

**Answer:** Standards fully implemented documented and published as appropriate.

**Justification Comment:**

**Attachment(s):** 0

USGS has data standards in place for "structures" and all data USGS collected and maintained For detail see: <http://nationalmap.gov/standards/>

Principles, Policies and Procedures of Domestic Geographic Names (PDF), <http://geonames.usgs.gov/domestic/policies.htm>

Additional Comment:

Guidelines for Contributing Structures Data to the National Map (version 2/3/11) – a set of data collection guidelines created for volunteers associated with The National Map Corps volunteer geographic information project. This is an internal document, not yet a published standard.

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## STAGE 2 - Inventory/Evaluate

**9)** 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?

**Answer:** Process for determining appropriate data is being reused fully implemented, reviewed, and updated on a regular basis.

**Justification Comment:**

**Attachment(s):** 0

USGS/NGP management identifies the “structures theme” and the affiliated National Structures Database (NSD) as a “maintenance investment” meaning that NGP intends to “maintain current coverage by obtaining data from other organizations and suppliers with a minimum investment of Program resources.”

Data in the USGS National Structure Database (NSD) is acquired from National Authoritative Sources such as Department of Education for schools, the United States Postal Service for post office locations and National Cemetery locations from the Veterans Administration. Several datasets (fire stations, police stations) come from the information gathered as part of NGA’s HSIP program and are not maintained and currently 5 years out-of-date.

In some cases QA and/or data collection is done using VGI program at USGS. The mapping crowd-sourcing program, known as The National Map Corps (TNM Corps), encourages citizens to collect structures data by adding new features, removing obsolete points, and correcting existing data for The National Map database (<http://nationalmap.gov/TheNationalMapCorps/index.html>). The National Map Corps volunteers are successfully editing structures in all 50 States, Puerto Rico, and the US Virgin Islands. Structures include schools, hospitals, post offices, police stations and other important public buildings. Volunteers collect and/or improve structures data by adding new features, removing obsolete points, and correcting existing data using a web-based mapping tool. Both newly collected and modified point features become part of the USGS National Structures Database, The National Map, and ultimately U.S. Topo Maps. Volunteers include youth from various organizations such as 4-H and scouting, retirees, students, and anyone with an interest in contributing. Through their participation, volunteers are making significant contributions to the USGS's ability to provide the Nation with accurate mapping information.

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### STAGE 3 - Obtain

**10)** Is there a process for obtaining data in relation to this dataset?

**Answer:** Process is being implemented.

**Justification Comment:**

**Attachment(s):** 0

Yes. Data in the USGS National Structure Database (NSD) is acquired from National Authoritative Sources such as Department of Education for schools, the United States Postal Service for post office locations and National Cemetery locations from the Veterans Administration. Several datasets (fire stations, police stations, hospitals, prisons) come from the information gathered as part of NGA’s HSIP program and are not maintained and currently 5 years out-of-date.

In some cases QA and/or data collection is done using VGI program at USGS. The mapping crowd-sourcing program, known as The National Map Corps (TNM Corps), encourages citizens to collect structures data by adding new features, removing obsolete points, and correcting existing data for The National Map database (<http://nationalmap.gov/TheNationalMapCorps/index.html>). The National Map Corps volunteers are successfully editing structures in all 50 States, Puerto Rico, and the US Virgin Islands. Structures include schools, hospitals, post offices, police stations and other important public buildings. Volunteers collect and/or improve structures data by adding new features, removing obsolete points, and correcting existing data using a web-based mapping tool. Both newly collected and modified point features become part of the USGS National Structures Database, The National Map, and ultimately U.S. Topo Maps. Volunteers include youth from various organizations such as 4-H and scouting, retirees, students, and anyone with an interest in contributing. Through their participation, volunteers are making significant contributions to the USGS's ability to provide the Nation

with accurate mapping information.

**11)** Is the metadata in a FGDC endorsed geospatial metadata standard?

**Answer:** 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.

**Justification Comment:**

**Attachment(s):** 0

The USGS is dependent upon the metadata maintained by the national authoritative sources for each dataset in the NSD. Format of this metadata is generally FGDC or ISO standard. Metadata for the NSD 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. Project metadata describing the production process and data for NSD was developed as a deliverable. Federal Geographic Data Committee (FGDC) compliant metadata was provided in extensible markup language (.xml) format.

Metadata for the dataset fully describes the dataset and how to use it. Keyword tags and associated information has been entered and to make it discoverable via Data.gov, GeoPlatform.gov, and other catalogs.

Additional Comment:

For more detail see:

<http://nationalmap.gov/standards/pdf/1META997.PDF>

**12)** How complete is the geographic coverage as defined in the requirements for the dataset?

**Part 1 Answer:** Business requirement targets are being attained, cyclic updates being assessed.

**Part 2 Answer:** Dataset has presently attained the greatest geographic coverage as defined by the current requirements or roughly 100%.

**Justification Comment:**

**Attachment(s):** 0

NSD contains Structures data for all 50 states (partially complete for some territories) at 1:24,000-scale for the data layers contained with the NGP Data Life Cycle Management Plan (DLCMP). Maintained structures in the USGS National Structure Database (NSD) are acquired from National Authoritative Sources such as Department of Education for schools, the United States Postal Service for post office locations and National Cemetery locations from the Veterans Administration. Several datasets (fire stations, police stations) come from the information gathered as part of NGA's HSIP program and are not maintained and currently 5 years out-of-date.

## STAGE 4 - Access

**13)** Do you have a process for providing users access to the data in an open digital machine readable format?

**Answer:** User access process is fully implemented, data is available, process is reviewed and updated on a recurring basis.

**Justification Comment:**

**Attachment(s):** 0

View and download access is currently available on the USGS National Map Viewer. Further information and data download are available at: <http://nationalmap.gov/viewer.html>. User access process is fully implemented, data is available, process is reviewed and updated on a recurring basis.

## STAGE 5 - Maintain

**14)** Is there a maintenance process for updating and storing the dataset?

**Answer:** Dataset maintenance process is fully implemented and processes are reviewed and

periodically updated.

**Justification Comment:**

**Attachment(s):** 0

Data in the USGS National Structure Database (NSD) is acquired each year, or as updates are available, from National Authoritative Sources such as Department of Education for schools, the United States Postal Service for post office locations and National Cemetery locations from the Veterans Administration. Several datasets (fire stations, police stations, hospitals, prisons) come from the information gathered as part of NGA's HSIP program and are not maintained and currently 5 years out-of-date.

Data will be processed to the NSD as it becomes available, generally on a yearly basis for national layers. Updates will also be provided through The National Map Corp project.

**Additional Comment:**

View and download access is currently available on the USGS National Map Viewer. Further information and data download are available at: <http://nationalmap.gov/viewer.html>. User access process is fully implemented, data is available, process is reviewed and updated on a recurring basis.

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**15) Is there an error correction process as part of dataset maintenance?**

**Answer:** Error correction process includes user notification, process reviewed on a recurring basis.

**Justification Comment:**

**Attachment(s):** 0

An Error correction process has been established for the National Structures Dataset (NSD). NSD content is exposed through the TNMC for updates, review and correction, or as notified by general public, or corrected internally as updates to datasets occur.

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## **STAGE 6 - Use/Evaluate**

**16) Is there a process to determine if the dataset meets user needs?**

**Answer:** Process is fully implemented and repeated on a recurring basis.

**Justification Comment:**

**Attachment(s):** 0

Structures maintenance program focuses on partnerships with Federal, State, and local agencies to leverage resources and expand collection coverage. The "structures" program leverages the resources of multiple partners to achieve significant cost savings through economies of scale while meeting mapping requirements of USGS.

**Additional Comment:**

Interest may be solicited through Communities of Use coordination activities through the National Geospatial Program.

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**17) Is there a process to provide users information on how to access and properly use the dataset?**

**Answer:** Process is fully implemented supporting access and proper use, process is reviewed on a recurring basis.

**Justification Comment:**

**Attachment(s):** 0

The users information on how to access and properly use the dataset is available as part of the metadata. Keyword tags and associated information has been entered and made discoverable via Data.gov, GeoPlatform.gov, and other catalogs.

**Additional Comment:**

View and download access is currently available on the USGS National Map Viewer. Further information and data download are available at: <http://nationalmap.gov/viewer.html>

**18)** Are the business processes and management practices assessed to meet changing technology?

**Answer:** Assessment process is fully implemented for taking advantage of changing technology, process is reviewed on a recurring basis.

**Justification Comment:**

**Attachment(s):** 0

Assessment process was fully implemented for taking advantage of changing technology, process was reviewed on a recurring basis. Business processes and management practices are assessed to meet changing technology each year during program review and planning.

Additional Comment:

The USGS is dependent upon its national authoritative sources for maintenance of the data. Data in the USGS National Structure Database (NSD) is acquired each year from National Authoritative Sources such as Department of Education for schools, the United States Postal Service for post office locations and National Cemetery locations from the Veterans Administration. Several datasets (fire stations, police stations) come from the information gathered as part of NGA's HSIP program and are not maintained and currently 5 years out-of-date.

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## **STAGE 7 - Archive**

**19)** Is there an archiving process for the dataset?

**Answer:** No archival or disposition process.

**Justification Comment:**

**Attachment(s):** 0

No. USGS is working on a process for archiving at this time.