

NGDA Dataset Report

Official NGDA Title: Waterway Nodes

Metadata Record Title: Navigable Waterway Nodes (National) - National Geospatial Data Asset (NGDA) Waterway Nodes

A-16 NGDA Theme: Transportation

Executive NGDA Theme Champion(s):

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Metadata:

Registration Status: Complete

Registered on 4/11/2014

GeoPlatform Link*: <https://www.geoplatform.gov/node/243/9b09638a-3f74-4439-b1db-5520a9be6ba0>

Data.gov Metadata Link*: <http://catalog.data.gov/harvest/object/6efe33ae-65c1-4e2a-890a-aead1c9f8e3f/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:

The dataset activities include from 1996 to 2014

LMA Submission:

Status: Complete

Date: 9/29/2015

Extension Requested: No

LMA Reviewer(s):

Supervisor: Kevin Cutress

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Attachments:

To get access to any attachments referenced in the report, email the LMA Help Desk at 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: 8%

No Activity

Stage 4 - Access: 100%

Optimized; Established

Stage 1 - Define/Plan: 56%

Managed; Predictable

Stage 5 - Maintain: 57%

Managed; Predictable

Stage 2 - Inventory/Evaluate: 100%

Optimized; Established

Stage 6 - Use/Evaluate: 78%

Mature; Consistent

Stage 3 - Obtain: 66%

Managed; Predictable

Stage 7 - Archive: 100%

Optimized; Established

NGDA Dataset Maturity Definitions:

How To Calculate Maturity: 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 is from local offices, budgeting effort minimal, staffing minimal.

Justification Comment:

Attachment(s): 0

Data set was developed to support the Waterborne Commerce Statistics Center (WCSC) mission which is authorized by Rivers & Harbors Act of 1922.

<http://www.navigationdatacenter.us/wcsc/wcscmiss.htm>

Continued maintenance is essential to accomplishing the WCSC mission and ongoing maintenance and updates will be performed as part of that mission.

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: No.

Justification Comment:

Attachment(s): 0

Dataset was developed with input from several federal agencies and is used by WCSC, other U. S. Army Corps of Engineers offices, and other government agencies. Data set is available to the public on the Navigation Data Center website and comments/input from the public is solicited through the web site.

National Waterway Network overview is available at

<http://www.navigationdatacenter.us/data/datanwn.htm>

Product availability:

-Annually on the National Transportation Atlas Database (NTAD)

-Data.gov <http://catalog.data.gov/dataset/navigable-waterway-nodes-national-national-geospatial-data-asset-ngda-waterway-nodes>

-CorpsMap <http://maps.crrel.usace.army.mil:7778/apex/cm2.cm2.map?map=UOC>

-NDC website <http://www.navigationdatacenter.us/db/gisviewer/>

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: No.

Justification Comment:

Attachment(s): 0

Several members of WCSC staff are familiar with the dataset. Actual maintenance requires GIS skills that will need to be recruited or contracted out if needed.

STAGE 1 - Define/Plan

4) Are user and business requirements defined and formalized?

Answer: Ad hoc process is used for involving Partners/stakeholders in identifying requirements.

Justification Comment:

Attachment(s): 0

Over time, WCSC has made waterway node dataset available to public in a variety of formats....ASCII, shapefiles, and KMZ/KML files.

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

Answer: Ad hoc process is used for involving Partners/stakeholders in identifying requirements.

Justification Comment:

Attachment(s): 0

Several decisions were made by stakeholders. In 2006 waterway network/nodes merged with national channel frame to reflect correct features in GIS and channel framework for the Corps' 59 critical

projects.
Currently, merging part is on hold.

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

Answer: Process identified, early implementation.

Justification Comment:

Attachment(s): 0

The quality assurance process was developed by Vanderbilt University. In 1996, the accuracy of waterway network was improved to 1:100,000 scale. This task was completed with use of Digital Line Graphs.

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

Data is unclassified and is available to the public on the Navigation Data Center website and comments/input from the public is solicited through the web site. National Waterway Network overview is available at <http://www.navigationdatacenter.us/data/datanwn.htm>

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

Answer: Standards developed and/or selected.

Justification Comment:

Attachment(s): 0

The standards were set by original developers- Oak Ridge National Laboratory and Vanderbilt University with input from the National Waterway/nodes GIS Design Committee. The Oak Ridge National Lab developed databases for the inland waterway and nodes; Vanderbilt constructed databases for the off-shore waterways and nodes.

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

Dataset was developed to meet requirements to track vessel/commodity movements on commercially navigable waterways and to credit Corps of Engineers navigation projects with the correct tonnage and trip information. Existing data within the agency was used in the development of this dataset. The features are reviewed, updated and implemented on a regular basis as new data is available within or outside of the agency.

STAGE 3 - Obtain

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

Answer: No.

Justification Comment:

Attachment(s): 0

N/A, no data is obtained for this dataset. WCSC is responsible for maintaining waterway network dataset.

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

Metadata is available in FGDC and ISO format. ISO format is available through the dataset when viewing using ArcCatalog, and FGDC is available through data.gov (<https://catalog.data.gov/dataset/navigable-waterway-routes-national-national-geospatial-data-asset-ngda-waterway-nodes>).

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

Part 1 Answer: Business requirements for cyclic updates identified and a process is in place.

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

The Node points covers the entire United States, Puerto Rico, also, the deep spines, Atlantic-Puerto-Rico Access, Pacific Deep Water Spine and Gulf Deep Water Spine, as required.

Data is at 1:100K scale.

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

The Shapefiles are available to public for download.

Dataset is available through the web or on DVD. Access to the data can be achieved through any of the websites:

-Annually on the National Transportation Atlas Database (NTAD)

(http://www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/publications/national_transportation_atlas_database/index.html)

-Data.gov (https://catalog.data.gov/organization/fc5cb2c1-d0b0-482a-8a52-7d42ea186ae1?metadata_type=geospatial)

-Web Mapping Service (<http://gis.rita.dot.gov/ArcGIS/rest/services/NTAD>)

-Order NTAD DVD through DOT library

(<https://1bts.rita.dot.gov/pdc/user/products/src/products.xml?p=33653&c=-1>)

-Additional Shapefile source (<http://www.navigationdatacenter.us/db/gisviewer/>)

-<http://maps.crrel.usace.army.mil:7778/apex/cm2.cm2.map?map=UOC>

STAGE 5 - Maintain

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

Answer: Dataset maintenance process is identified and documented.

Justification Comment:**Attachment(s):** 0

SOPs developed and are used.

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

Answer: Error correction process established.

Justification Comment:**Attachment(s):** 0

Any feedback from external users or within agency, which result in changes to Shape points, mile points, channel depth, river name, and other features in dataset . The updated dataset published onto website.

STAGE 6 - Use/Evaluate

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

Answer: Process is complete and being implemented on ad hoc basis.

Justification Comment:

Attachment(s): 0

The users are encouraged to contact WCSC to provide feedback as they have it.

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

Answer: Process implementation started for access and proper use.

Justification Comment:

Attachment(s): 0

Metadata on how to use the dataset is available on data.gov
(https://catalog.data.gov/organization/fc5cb2c1-d0b0-482a-8a52-7d42ea186ae1?metadata_type=geospatial)

The data is also available through the National Transportation Atlas Database (NTAD)
(http://www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/publications/national_transportation_atlas_database/index.html), which also provides additional “how to” information.

A press release for NTAD goes out in mid-July signifying the new release of that year’s NTAD, and mentions various data layers. However no formal process is in place to explicitly communicate with users as to how to obtain this specific dataset

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

Done as part of regular reviews of the Center’s performance and ability to meet current and evolving needs.

STAGE 7 - Archive

19) Is there an archiving process for the dataset?

Answer: Archival and disposition processes are fully implemented.

Justification Comment:

Attachment(s): 0

We create annual Data CD/DVD for in-house users and for other federal/state agencies (which can be kept in house as an archived copy).

The data has a schedule with the National Archives and Records Administration (NARA) through the National Transportation Atlas Database (NTAD)

(http://www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/publications/national_transportation_atlas_database/index.html)