National Pipeline Mapping System
www.npms.phmsa.dot.gov

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What is the NPMS?

- GIS data collected from over 1500 different pipeline operating companies
- Per 49 CFR 191.29 and 195.61, operators are required to submit geospatial data for gas transmission and hazardous liquid pipelines and LNG plants annually; breakout tank submission is optional.
  - Nearly 1 million pipeline records, over 520,000 miles
- PHMSA also maps pipeline history, accident and incidents associated to pipelines to track asset history, PHMSA inspection boundaries, UNGS and many integrity management related sensitive areas.
What isn’t the NPMS?

- Gas gathering or gas distribution pipelines
- Facilities not regulated by PHMSA
- All abandoned pipelines
  - Optional submission to NPMS
- Planned pipelines
  - If it’s in the NPMS then it is in or on the ground!
- Pipelines not already in service at least 1 year ago
  - Regulations require operators submit pipeline operations as of 12/31 of the previous year
- A huge data processing or help center
  - 3 full time GIS analysts (npms@dot.gov)
- Experts on interpreting pipeline regulations
  - Contact PHMSA’s Community Liaison Group
How can I access the NPMS?

- Public Map Viewer
- Public Map Viewer iPhone App
- Search Operator directory by state, county or ZIP where they operate pipelines
- Download national pipeline map or lists of pipeline mileage by county and offshore area
- Pipeline Information Management Mapping Application (PIMMA)
- PIMMA iPhone App
- GIS Data Request

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What NPMS data can I see?

Registered NPMS users are limited to viewing NPMS data for facilities they operate, or that are operated in their area of jurisdiction.

• **General public**
  – Only publicly available tools. Same pipelines as other users, but additional limitations.

• **Pipeline operators** with gas trans. or haz. liquid pipes, LNG Plants or BOTs.
  – Only the data for facilities they operate.

• **Local government officials**, including all emergency responders and tribal governments.
  – All NPMS facilities in their county.
  – If your jurisdiction spans more than 1 county email npms@dot.gov to modify your PIMMA account, or include this information on your data request application.

• **State government officials**.
  – All NPMS facilities in their state.

• **Federal government officials**.
  – All NPMS facilities in their area of interest or the entire US.
Public Map Viewer VS PIMMA

Both show the same pipelines, but additional limitations on the Public Map Viewer:

1) You cannot see more than 1 county at a time.
2) You cannot zoom in closer than 1:24,000.
   - Pipeline layer turns off when you zoom in too close; zoom out and turn pipelines layer on again.
3) You cannot see a pipeline’s diameter, level of spatial accuracy, detailed commodity information or operator’s emergency contact information.
4) Accidents (HL) and Incidents (GT) do not include information about the pipeline.
   - Not limited to your area of jurisdiction because all accident and incident data can be downloaded from PHMSA’s main website.
   - Limited to your area of jurisdiction on PIMMA because data includes pipeline information.
5) You cannot see federal lands, water ports or military bases
6) Measure Tool only displays miles
   - PIMMA also shows feet, meters and kilometers
7) No offshore pipelines
   - Offshore pipelines will be added to the Public Viewer in 2020
Can I use NPMS data in my agency’s GIS system?

Complete the GIS Data Request form on the NPMS website to start your request

• ESRI Shapefile or Geodatabase Feature Class
• All pipelines and attributes in your area of jurisdiction
• LNG Plants and BOTs in your area of jurisdiction are also available by request
• Application has a section for additional information to NPMS staff
  – leave a note if your jurisdiction covers more than 1 county
• Other GIS data available for public download from the NPMS website:
  – High and Other Population Areas
  – Commercially Navigable Waterways
  – Coming Soon: Great Lakes Ecological Unusually Sensitive Area
• Data use agreements differ based on jurisdiction type; stronger limitations and agreements if your jurisdiction extends more than 1 county.
  – NEVER share GIS data
  – NEVER share a NPMS map that shows more than the Public Map Viewer
What else is new or coming soon?

• Offshore pipelines on the Public Map Viewer
• Tool to gather information about all pipelines inside of a box you draw on the map
  – Will include pipeline attributes and contact information
• Great Lakes Ecological Unusually Sensitive Area (for hazardous liquid operator integrity management planning)
• Underground Natural Gas Storage facilities
• New pipeline information spreadsheets on the NPMS website (mileage by county)
• Pending White House approval - potential changes to the NPMS:
  – Require all abandoned pipelines and BOTs
  – Improve spatial accuracy from +/- 500 ft to 50-100 feet
  – Require all Diameters (reported as Nominal Pipe Size, or NPS)
    • Above NPS 14 this represents the outer diameter, or in between below NPS 14
  – Last pipe assessment, if a pipe could affect a high consequence area, pipe material, seam type, wall thickness, pipe grade, year of installation
  – More information about LNG Plants (such as exclusion zones)
THINK SPATIALLY

GEOGRAPHIC INFORMATION SYSTEMS (GIS)
DEPARTMENT OF TRANSPORTATION

NPMS Questions?

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