

## Navigation Impact Reports, Navigation Evaluations and Preliminary Navigation Clearance Determinations

Presented by Crystal Tucker  
Coast Guard Office of Bridge Programs  
Permits and Policy Division, CG-BRG-2

Through this presentation we'll be **reviewing the processes involved in completing a navigation impact report, discussing how the Coast Guard conducts a navigation evaluation and then issues a Preliminary Navigation Clearance Determination.** Jim touched on some of this earlier, but we'll now take a much closer look at each component. Please feel free to ask questions as we go along.

## Objectives:

**Define the following:**

- **What** are navigation impact reports, navigation evaluations and preliminary navigation clearance determinations
- **Who** prepares these documents
- **Why** we need these documents
- **When** these documents are developed
- **How** to develop these documents



The objectives of this presentation are:

Identify **what** the navigation impact report, navigation evaluation and preliminary navigation clearance determination are, as well as **who** prepares them.

I'll talk about **why** these documents are needed, plus **when** they are developed during the permitting process,

And finally, I'll give more detail about **how** these documents, particularly Nav Impact Reports, are developed.

## Navigation Impact Reports, Evaluations and Preliminary Navigation Clearance Determinations



### Navigation Impact Report (NIR)

- Developed by the applicant early in scoping
- **Required** by the Coast Guard/DOT MOU for DOT funded projects, highly encouraged for all other projects
- Data required for this report is listed in Appendix A of the Bridge Permit Application Guide (BPAG)

*Note: currently there is no standard format for these reports*

I'll first briefly discuss the **three different items, presenting them in the order that they are completed.**

**First** we will go over the **Navigation Impact Report**, which is appropriately named since it is a document that describes how navigation on the waterway might be **impacted** by the proposed bridge project. Quick question, does anyone either in the room or online have any experience with **developing navigation impact reports?**

The navigation impact report is prepared early in the process ideally shortly after project initiation or at the earliest stages of NEPA scoping. Since we're an organization who loves our acronyms, be aware we often refer to this report as the NIR. The NIR is a requirement of the Memorandum of Understanding between the Coast

Guard and the US Department of Transportation for DOT funded projects. It is otherwise highly encouraged for all other projects to facilitate the permit application process. Due to the unique nature of each individual project, the specific format and content of the NIR is at the discretion of the Coast Guard District 1 Bridge Offices. ~~For you that is Doug Blackmore from District 8 bridge office and he is here with us today. Doug will identify for applicants what required information is to be included in the report.~~ The NIR is then prepared by the applicant or their contractor, not the Coast Guard. The general data requirements for this report are listed in Appendix A of the Bridge Permit Application Guide, also affectionately known as the BPAG. Because each bridge project is different, and the Coast Guard may have greater navigational data already available for some waterways compared to others, the data requirements vary from one project to another.

Please note, the NIR is the first product that serves to inform the two follow on items--the Coast Guard navigation evaluation and the preliminary navigation clearance determination .

## Navigation Evaluation



Conducted by the Coast Guard District Bridge Office



Analysis of the project's impact on waterway users



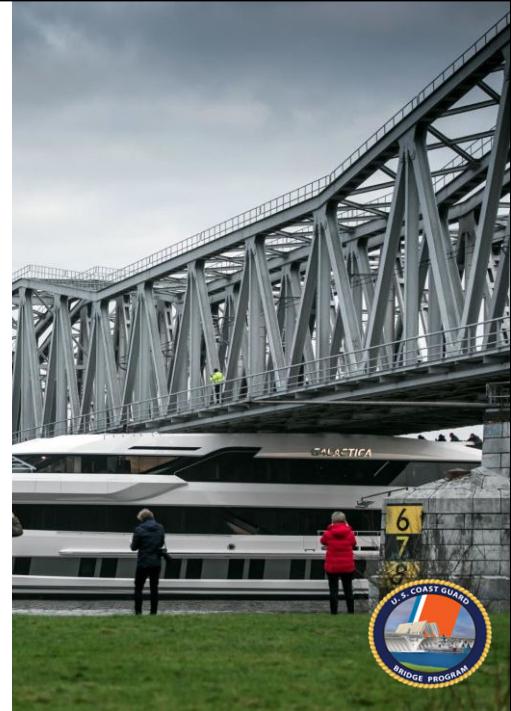
Part of the Coast Guard administrative record

Now let's look at the second item, the Navigation Evaluation. For this, the Coast Guard considers the information documented in the NIR, plus any navigational comments received related to the project, and then evaluates the traffic, waterway configuration, existing structures, and the proposed project. Is the waterway navigable? Who navigates it and what are their needs? The evaluation serves as a holistic analysis of the project's impact on waterway users and is conducted to determine what navigation clearances would meet the reasonable needs of navigation. This evaluation is conducted by the Coast Guard District Bridge Office. The complexity of both the project and the waterway influence how long the evaluation will take. The evaluation is documented in the Coast Guard's administrative record and is an important part of the overall permitting process.

## Preliminary Navigation Clearance Determination (PNCD)

- District Bridge Office (DBO) reviews the NIR, conducts a navigation evaluation, then issues a Preliminary Navigation Clearance Determination (PNCD)
- Defines the minimum clearances favorable to meet the reasonable needs of navigation - highest likelihood of being permitted
- Used by the applicant in the development of NEPA alternatives

*The permit and approved plan sheets serve as the Final Navigation Clearance Determination*



Finally, let's take a look at the Preliminary Navigation Clearance Determination.

Once the District Bridge Office has reviewed the NIR and then completed their navigation evaluation, they create the Preliminary Navigation Clearance Determination, or PNCD. The clearance determination will take the shape of a letter issued to the applicant.

The purpose of the PNCD is to identify the minimum vertical and horizontal clearances that have the highest likelihood of being permitted.

These clearances should then be used by the applicant to develop the alternatives for the proposed bridge project.

The PNCD document is considered to be preliminary because the Coast Guard permit and approved plan sheets serve as the

project's Final Navigation Clearance Determination.

Why does the Coast Guard need this stuff?

To determine the clearances needed to best meet the reasonable needs of navigation while facilitating other modes of navigation

NIR documents the waterway characteristics and navigation

CG Navigation Evaluation is an analysis of the data and documentation

PNCD states what clearances are required

Clearances inform alternatives ideally during or before NEPA scoping

So why does the Coast Guard need these three items?

Overall, it is our goal to smartly determine, document, and share with you how wide and tall the opening under the bridge should be to support the reasonable needs of navigation while facilitating other modes of transportation. In other words, we need to document why we are permitting an obstruction to navigation.

The NIR documents a variety of waterway characteristics and user information, which we will cover in greater depth coming up. The NIR often provides the bulk of the information considered during the Coast Guard's Navigation Evaluation.

The Navigation Evaluation is the Coast Guard's formal analysis of the waterway and navigational information. It is documented in the Coast Guard administrative record.

The resulting product of the Nav Eval is the Preliminary Navigation Clearance Determination. It's a letter that we'll provide to you documenting the minimal clearances that should be incorporated into the design alternatives in order to meet the reasonable needs of navigation.

When are these documents needed???

Answer – EARLY!



NIR: Once notified of project initiation, the District Bridge Office will notify the applicant if an NIR is required



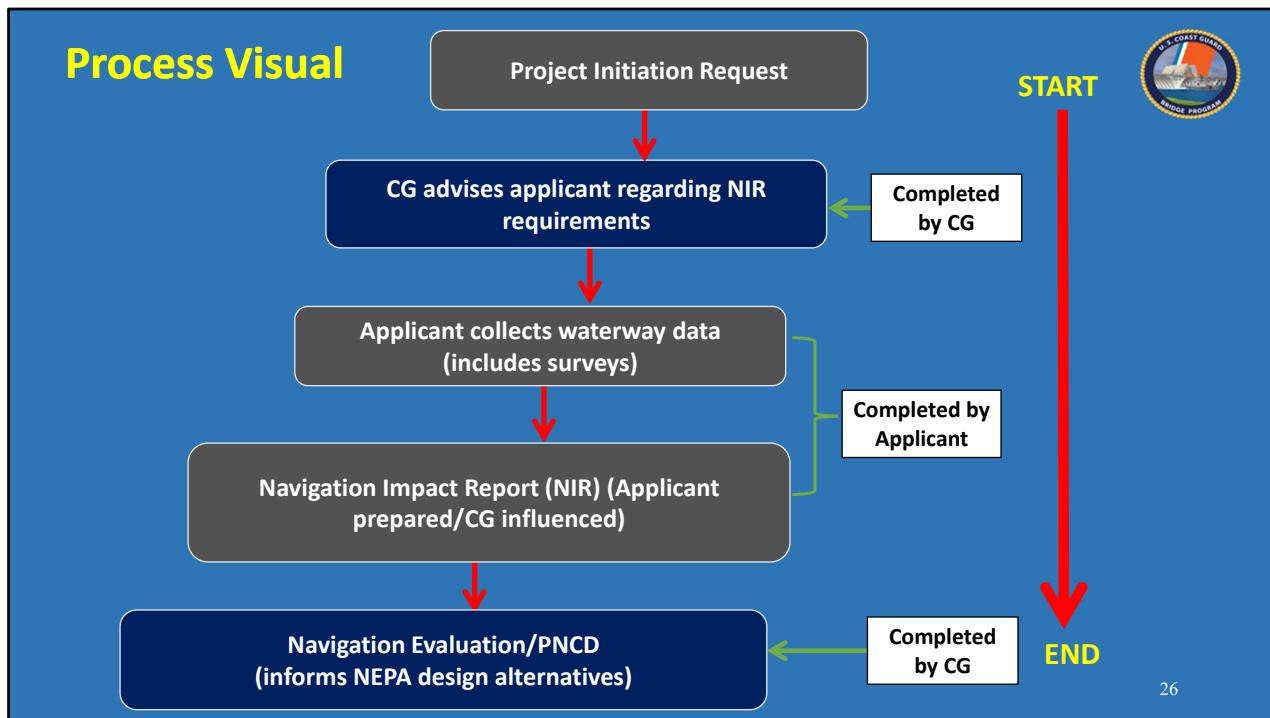
Navigation Evaluation and PNCD: Before or during the NEPA scoping phase

**Let's next discuss when these documents are needed in the Coast Guard bridge permitting process.**

At the very start of, or at a minimum very early in the process applicants should reach out to your local CG District Bridge Office to let them know of a bridge project's initiation. As Jim stated earlier the buzzwords for this are "early and often." The earlier you advise the CG of a project, the sooner they will advise you of the permitting requirements, including the need for a Navigation Impact Report and what should be included in it. It is advised and ideal to develop the NIR shortly after project initiation. Failure to complete it at this time or delaying it until later can lead to project delays. So, it is critical that the applicant supply all required waterway data in a complete NIR in a timely manner. Please note I will discuss later in this webinar when an NIR is not required.

**The Navigation Evaluation and PNCD** are completed by the Coast Guard after receipt of the required NIR. This is ideally before or during the NEPA scoping phase. The Nav Impact Report should be completed early so that the Nav Eval and PNCD can also be completed early. Why early? Well, that is so the required clearance information is available during or before NEPA scoping to best inform the bridge alternatives. It's best to know what specs to design to rather than risking a design that might not be feasible.

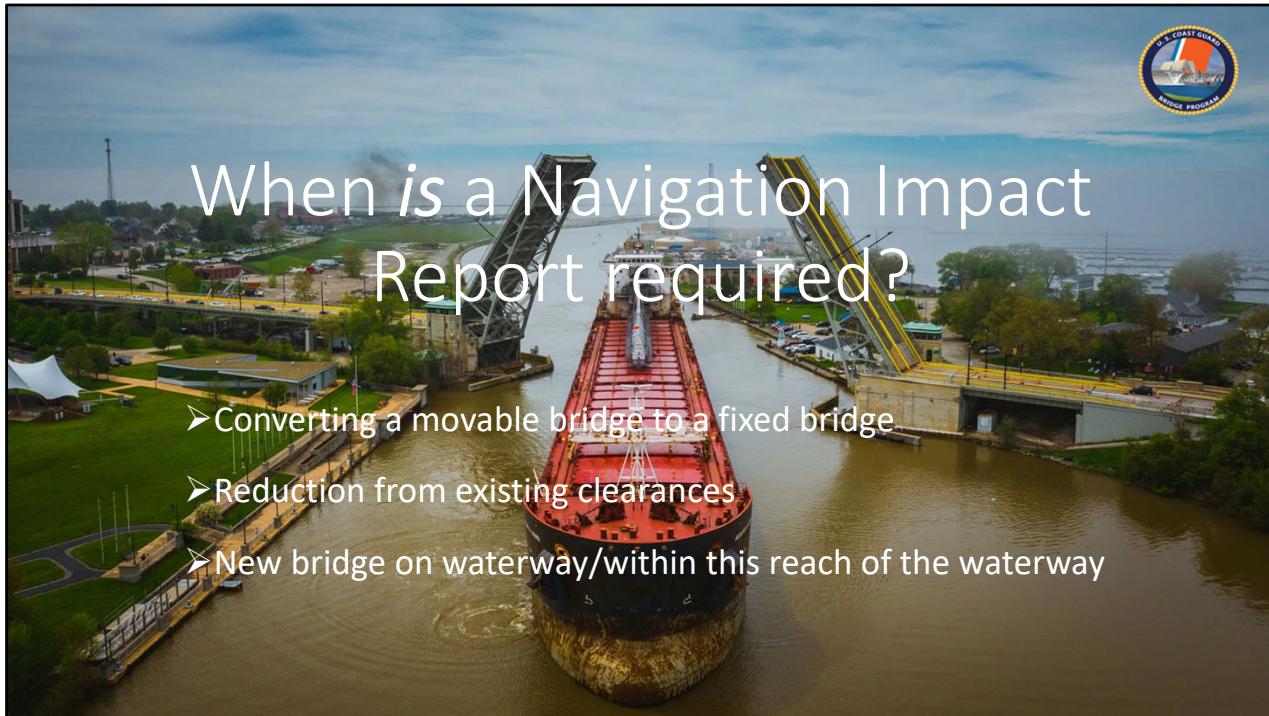
Please note that the PNCD typically has a three-year shelf life. If a project takes longer than three years to receive a CG permit, reach out to the point of contact at the District Bridge Office. They will let you know if any re-evaluation is necessary. Remember, communication early and often can often prevent a world of setbacks.



Here is a graphical depiction of developing the NIR, conducting the Navigation Evaluation, and issuing the PNCD.

Once notified of a project's initiation, the CG relays the project-specific NIR requirements to the applicant. General NIR requirements are documented in Appendix A of the Bridge Permit Application Guide. Next the applicant or their consultant gathers waterway data—that includes documenting who currently uses or is anticipated to use the waterway; how big are the vessels, how many are there, etc. We'll discuss data collection in more depth in a few slides. That data is compiled into the NIR. It is helpful, but not required to provide a draft report to the CG for feedback. Once the final report is provided to the CG, the District Bridge Office will complete the Navigation Evaluation and document the clearances in the PNCD. The PNCD will be provided to the applicant for use in developing the project's design alternatives.





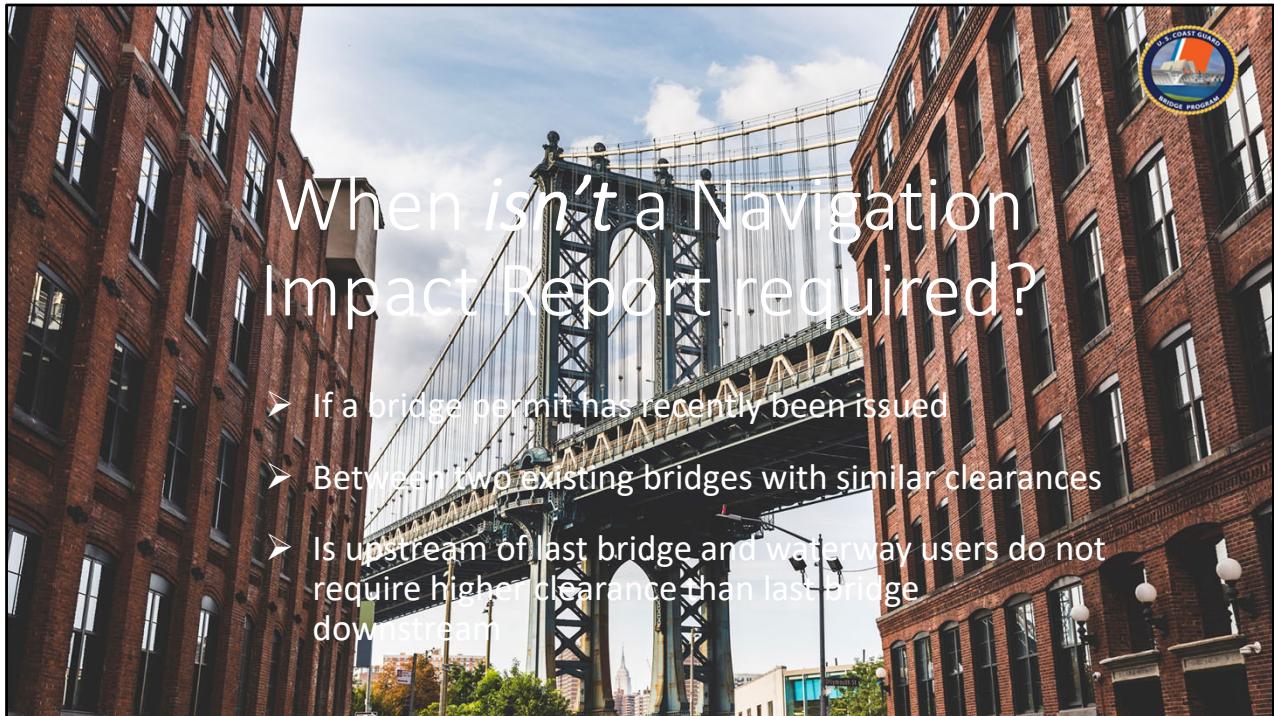
## When *is* a Navigation Impact Report required?

- Converting a movable bridge to a fixed bridge
- Reduction from existing clearances
- New bridge on waterway/within this reach of the waterway

Now I want to dive deeper into the Navigation Impact Report, which is the document that the applicant is responsible for completing. As previously mentioned, the District Bridge Office will notify the applicant of what to include in the NIR, and the NIR content is then researched and compiled by the applicant or their consultant. The Coast Guard will likely be able to help with some data gathering, but the responsibility is on the one seeking the permit. Here are a few examples of project types that normally require development of a navigation impact report:

- When an existing bridge is being converted from a moveable bridge to a fixed bridge;
- When there is a proposed reduction of the existing clearances. That is when the proposed bridge will be lower and/or more narrow than the existing bridge;

- Or when a new bridge is proposed on a waterway and there is no existing bridge at the proposed location, or at a minimum there is no existing bridge within this reach of the waterway and the Coast Guard doesn't already have good data on vessel usage.



## When *isn't* a Navigation Impact Report required?

- If a bridge permit has recently been issued
- Between two existing bridges with similar clearances
- Is upstream of last bridge and waterway users do not require higher clearance than last bridge downstream

It is also not uncommon for the district bridge office to NOT require NIR. Often the District Bridge Office may already have the required information for a waterway, either from prior bridge permitting projects or other Coast Guard activities. Even if an NIR is not required, the application materials submitted to the Coast Guard must still include general information about the waterway's usage.

Examples of when an NIR is not required include when a bridge permit has recently been issued for a project upstream or downstream from the proposed project site and where that navigation data could be re-used for the new project in question.

Also if a proposed bridge is between two existing bridges and all will have similar clearances.

And maybe when a proposed bridge is upstream of the last bridge on the waterway and waterway users do not require higher clearance than that last bridge downstream.

Some waterways already have guide clearances established by the Coast Guard. This list of already identified clearance recommendations for various waterways is available on the Bridge Program's website.

Some additional examples of when an NIR might not be required include:

When the proposed bridge is a modification or replacement and will offer similar clearances as the existing bridge and no changes have occurred on the waterway that warrant further analysis.

Or when the proposed project is a removal and replacement of just the superstructure and/or the roadbed and it has no impact on, or actually increases navigational clearances.

Please note only the District Bridge Office determines if previous navigation evaluations are sufficient, current and comprehensive enough to be used for the project.

Are there any questions at this point, particularly regarding when an NIR might be required or what it entails?

## NIR – General content



- Physical characteristics of the waterway
- Waterway user information to include shore facilities
- Vessel Types
- Vessel Traffic/Activity at proposed bridge site
- Navigation Channel info
- Impact on current and prospective upstream commercial activity
- *Please see Appendix A of the Bridge Permit Application Guide*



So if it hasn't become evident yet, the Navigation Impact Report, when required, is key to project progression and success. We're next going to review required content in greater detail, but due to the number of potential variables we have to look at, we won't be reviewing everything. The full list of factors and variables is found in Appendix A of the Bridge Permit Application Guide, which is found on the Coast Guard Office of Bridge Programs website.

Let's hit the content...The NIR should:

Discuss the waterway info, that is the physical characteristics of the waterway in the vicinity of the project.

Identify waterway user information, including vessel types and shore-side facilities, and their navigational requirements.

It should describe the types of vessels that use the waterway

- commercial, recreational, governmental, big boats, small boats, sail boats, motor boats, row boats, paddle boats, all the boats.

It should also describe activity at the proposed bridge site including the frequency of vessel traffic—one boat, two boats, 10 boats or more boats per what—day, week, month or year.

Identify any federal Navigation Channel info.

And we expect discussion on potential impacts on current and prospective commercial activity on the waterway. Is the waterfront being developed to support more maritime commerce or less?

[Bridge Permit Application Guide \(BPAG\) - All Documents](#)  
[uscg.mil](http://uscg.mil)

## NIR – Waterway info

- Existing commercial and recreational users
- Trip frequency/transits (including survey of annual cargo movements)
- Waterway stages/elevations (inland or tidal as appropriate)
- Ongoing or planned waterway improvement projects
- Required removal elevations
- Ability to transit the waterway if bridge is built



Through the NIR, we ask for the identification of specific waterway information. This includes:

Describing existing commercial and recreational users and identifying their trip frequencies or transits. It's helpful to include a survey of annual cargo movements when available for commercial traffic.

Also identify the waterway stages and elevations for inland or tidal areas, as appropriate. Tidal data is available from NOAA. The Army Corps of Engineers may be contacted for non-tidal waterway stage information such as ordinary high water, normal pool elevation or 2% flowline. For waterway hydrology and flood information that is for a specific period of time, such as how often a river hits flood stage, we suggest you visit the National Weather Service website or contact your local National Weather Service office to obtain up-to-date information.

You may be asked to research and consider the impacts of

ongoing or planned waterway improvement projects. The Coast Guard may assist by engaging industry in the area, and/or other federal entities to determine if there are any plans for improvements such as widening of a channel or placement of new docks. If the project is over a Federally-maintained waterway, the Corps of Engineers will have information and projections on such waterway improvement projects. For non-federally maintained waterways, the applicant should contact cities/counties/local gov'ts and private facility owners. As a permitting agency for waterway projects, the Army Corps may be aware of these non-Federal projects.

Additionally, conversations with private, local, state, and Federal stakeholders may provide an opportune time to discuss any required removal elevations for any existing bridge structure. We prefer that previous structures be removed in their entirety, but understand that that may not be feasible. It is helpful to identify early on the depth to which any old pilings/piers must be removed when conducting a bridge removal as part of a replacement project.

Generally speaking, the information provided in the NIR should identify impacts to various vessels' ability to transit a waterway if the proposed bridge is built.

## NIR – Additional waterway info



- Waterway or river layout, geometry, and hydrology
- Channel/Waterway alignment
- Federally-authorized channel and is it maintained? To what depth?
- All bridges upstream and downstream from proposed site
- Guide clearances on the Waterway
- Possible use of CG Auxiliary, CG Assets and local WW users
- When needed, employ the use of simulators

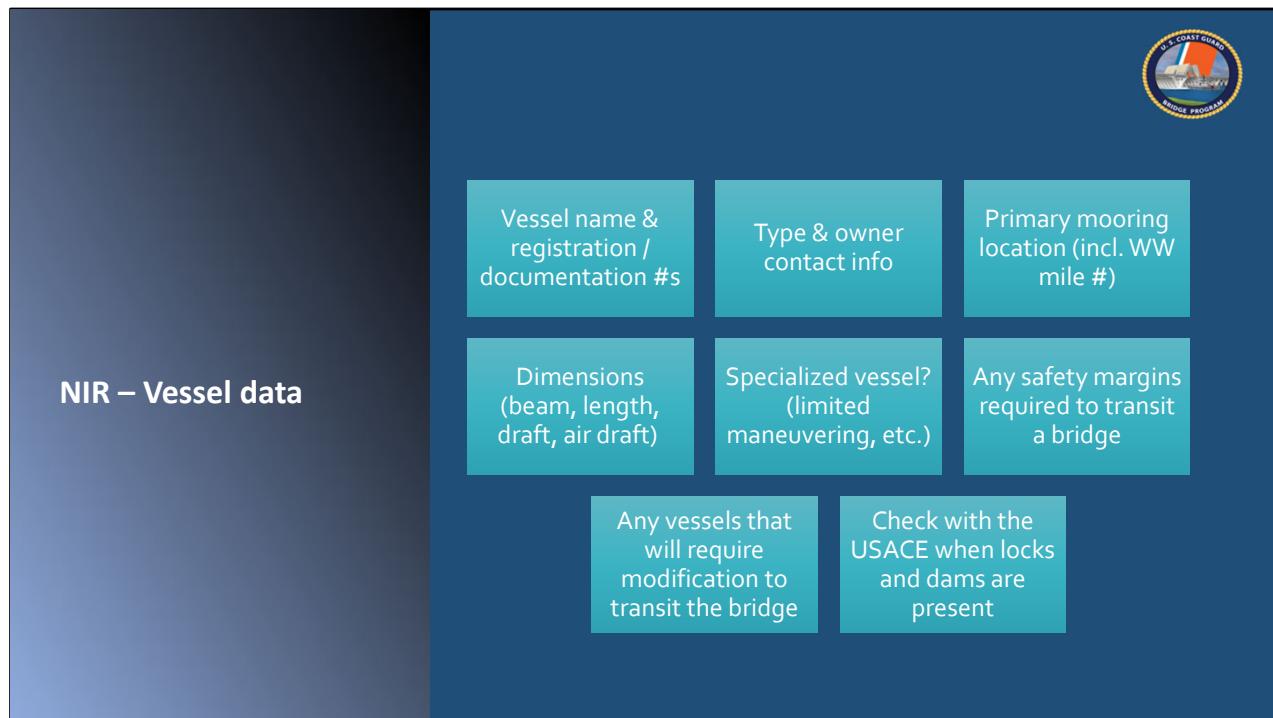


Digging more into waterway information, we request a description of the waterway or river layout, geometry, and hydrology. We ask that you discuss channel or waterway alignment. Is it on or near a bend in the waterway? Is there a channel maintained by the Army Corps? What depth is the waterway? Consult navigational charts for information as needed.

Much of this plays into bridge pier placement and related discussions. Those discussions may need to include the Coast Guard and maritime industry, especially those operating the waterway's largest vessels and/or tugs and tows. Often due to local conditions, vessel operators may favor particular track lines to maximize control of the vessel. If there is no specific channel identified on the chart, it is still beneficial to talk to mariners to get a sense of their general transit preferences.

We ask for a listing of bridges upstream and downstream from a proposed site, including their clearances. Also, note if guide clearances are already established for the Waterway and

if established, what are they? The guide clearances document found on the Bridge Program website establishes minimum clearances for proposed bridges along particular waterways. It may be possible for the District Bridge Office to coordinate ride-alongs on CG, CG Auxiliary, or other local vessels to assist in gathering relevant waterway information. Finally, for complex projects, it may be advisable to run simulations to verify channel alignment and various vessels' ability to safely navigate through proposed clearances especially if the waterway is on a bend or there are multiple bridges in a row.



Now let's discuss what we like to see specifically about the waterway users. Common ways to obtain this information is through surveys, interviewing harbormasters and/or port authorities, reviewing drawbridge logs, and visiting marinas. Required information may include:

Vessel name & registration/documentation #'s

A description of the vessel type & owner contact info

Identification of the primary mooring locations - are they near or far?

Vessel dimensions (beam, length, draft, air draft)

Identifying if it is a specialized vessel with any restrictions such as limited maneuvering - think tug and tow, tankers, fish trawlers, bulk or container cargo vessels, ferries, dinner cruises, etc.

What is the vessel's Horizontal and Vertical safety margins?

Do or will any vessels require modification to safely transit the bridge? Examples include the need and ability to partially or fully dismantle masts, outriggers, or antennas.

When the waterway has an Army Corps structure such as a lock and dam, consult with that facility to obtain their vessel traffic data.



## Sample survey

Sample River User Data Sheet      By: \_\_\_\_\_ Date: \_\_\_\_\_

1. Company Name and/or Owner of Vessel and contact information

a. Name of company: \_\_\_\_\_

b. Name of contact: \_\_\_\_\_

c. Phone number (Office): \_\_\_\_\_ d. (Cell): \_\_\_\_\_

e. Email: \_\_\_\_\_

f. Address: \_\_\_\_\_

g. City: \_\_\_\_\_

h. State: \_\_\_\_\_ i. Zip code: \_\_\_\_\_

3a. Vessel Name: \_\_\_\_\_ 3b. Vessel Type: \_\_\_\_\_

3c. US Coast Guard Document Number: \_\_\_\_\_

4a. Length Overall (LOA), feet: \_\_\_\_\_ 4b. Beam (width), feet: \_\_\_\_\_

5. Maximum Draft (depth of hull below waterline at full load), feet: \_\_\_\_\_

6. Air Draft (height of the highest fixed point of the vessel above the waterline), feet: \_\_\_\_\_

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge):  
\_\_\_\_\_

8. Where is the vessel primarily moored (include waterway mile point, if known):  
\_\_\_\_\_

9. Frequency of passage underneath the Sample Bridge at main channel (per month):  
Jan \_\_\_\_ Feb \_\_\_\_ Mar \_\_\_\_ Apr \_\_\_\_ May \_\_\_\_ Jun \_\_\_\_ Jul \_\_\_\_ Aug \_\_\_\_ Sep \_\_\_\_ Oct \_\_\_\_ Nov \_\_\_\_ Dec \_\_\_\_

10. Can the vessel be partially disassembled/dismantled to transit the bridge? \_\_\_\_\_

11. Does vessel require tug assist (only needed if horizontal clearance could possibly be a concern with a potential design change): \_\_\_\_\_

12. Are you in the process of or do you plan to acquire any new vessels? If yes please describe:  
\_\_\_\_\_

13. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the Sample Bridge? May we have a copy? \_\_\_\_\_

14. Other miscellaneous information: \_\_\_\_\_

**To be used for additional vessels:**

Vessel 2 Name: \_\_\_\_\_ Vessel 2 Type: \_\_\_\_\_

US Coast Guard Document Number: \_\_\_\_\_

Length Overall (LOA), feet: \_\_\_\_\_ Beam (width), feet: \_\_\_\_\_

Draft (depth of hull below waterline), feet: \_\_\_\_\_

Air draft (height of the highest fixed point of the vessel above the waterline), feet: \_\_\_\_\_

Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge):  
\_\_\_\_\_

Where is vessel 2 primarily moored (include waterway mile point, if known):  
\_\_\_\_\_

Frequency of passage underneath Sample Bridge main channel (per month):  
Jan \_\_\_\_ Feb \_\_\_\_ Mar \_\_\_\_ Apr \_\_\_\_ May \_\_\_\_ Jun \_\_\_\_ Jul \_\_\_\_ Aug \_\_\_\_ Sep \_\_\_\_ Oct \_\_\_\_ Nov \_\_\_\_ Dec \_\_\_\_

Here's an example of a sample vessel survey. Pardon that it's a little hard to read and frankly a bit of a relic in today's digital age. Anyway, it's a document that asks most of the vessel questions I previously discussed. Engage with the District to obtain a tailorable template and discuss setting up the survey.

In addition to the applicant's outreach, the Coast Guard District Bridge Office may be able to assist with survey distribution—paper and digital. District Bridge Offices may be able to provide applicants with marina or facility contact information for various waterways. You should also research and contact private companies that operate in the vicinity, as well as emergency vessel and maintenance vessel operators. If it's a smaller waterway with little commerce but heavy recreation traffic, sending surveys to and posting surveys at marinas is a good way to gather waterway usage information.

## NIR – Site activity

- Vessel transit frequency
- Historical data on allisions, collisions, rammings, or groundings
- Transit speeds
- Load configurations
- Vessel traffic characteristics (tug assist, etc.)
- Annual cargo movements



Regarding the proposed site, we benefit from understanding the localized activity. How many and what types of vessels are transiting the area? Are there seasonal differences? If necessary, the Coast Guard can assist with identifying waterborne activities at the bridge site. If there's a Coast Guard Vessel Traffic Service unit in your area, then they can be a source of valuable information and data.

Is the existing bridge or other structures in the area prone to being hit? Have vessels had issues in the area? The Coast Guard may be able to query internal data systems to provide historical data on accidents including bridge allisions and/or vessel collisions and groundings.

We'd also like a description of vessel transit speeds, load configurations, traffic makeup and annual cargo movements. This is best obtained by engaging with maritime users, facilities, harbor masters, port authorities, marina operators, the Army Corps, Harbor Safety Committees, etc.

## NIR – Channel info

- Federally authorized navigation channel?
- Maintained? To what depth?
- Was there a design vessel used in planning the channel?
  - What was the design vessel?
  - Was it reviewed by the Coast Guard?



The NIR should include channel information such as identifying if there is a Federally authorized navigation channel.

It should also note if the channel is maintained by the Army Corps or others. And if so to what depth is it maintained?

We'll want to identify if the Army Corps used a design vessel when planning the channel, and if they did, we'll want to know what that design vessel was and identify if it was reviewed by the Coast Guard?

As you may have surmised, the Army Corps of Engineers is a great point of contact for channel info.



## NIR – Economic Impact



Any existing or planned industrial developments negatively impacted by proposed clearance?

Land use zoning along the waterway

Future vessel size and traffic trends

Input from local and state government

Input from waterway landowners and stakeholders

The NIR should also discuss relevant economic impacts such as whether there are any existing or planned industrial developments that will be negatively impacted by proposed clearances. For example, are there local shipyards that service large vessels or sailboats and will they be able to continue to do so?

What is the specific zoning for the land along the shore in the vicinity of the proposed bridge?

Identify future vessel size and traffic trends. Generally industry is the best source for this info. As I've alluded to before, we encourage communication with recreational and commercial maritime industry. Not only should you engage early and often with the Coast Guard, but also with the maritime community. Maritime commerce is a big and lucrative deal—now and into the future. And don't doubt that industry will contact the Coast Guard when they have an issue or they want a higher bridge.

Look for publicly-available information, such as through general internet & newspaper report searches. Another way of confirming plans for future waterway development is to seek input from local and state governments and from waterway landowners and stakeholders.



## How the USCG can help you gather data for the NIR



- Coordinate site visits and/or rides with qualified vessel operators
- Issue a CG Preliminary Public Notice to solicit comments for navigational concerns
- Advertise the bridge project in the CG Local Notice to Mariners
- Provide relevant formal waterway studies (WAMS, PAWSA)
- Hold public meetings
- Obtain bridge tender logs

Now, let's take a closer look at how the Coast Guard can help obtain information for the NIR. Some of these you may have already heard.

We can help coordinate site visits or ride-alongs with qualified vessel operators or on Coast Guard assets.

We can issue a Coast Guard Preliminary Public Notice to solicit comments specifically on navigational concerns or to identify waterway users.

We can advertise the bridge project in the Coast Guard Local Notice to Mariners.

We can help identify waterway users and possibly help distribute surveys such as through public notices and Harbor Safety Committees.

We can provide previously completed and related formal Coast

Guard waterway studies.

The Coast Guard can even hold public meetings to gather comments on the proposed project, though this is usually for contentious projects.

We can also request bridge tender logs for existing movable spans on the waterway.

So as you can see, depending on the location and complexity of the project, the NIR can range from simple to very detailed document. Each project and waterway location are different and have differing requirements. I'll pause here for a sec. Are there any questions?

## How does the Coast Guard conduct a Preliminary Navigation Clearance Determination (PNCD)?

*Coast Guard reviews the NIR and its own Navigation Evaluation, considering if the proposed bridge will:*



- Be an unreasonable obstruction for any user
- Be the new governing structure for the waterway
- Impact current and prospective navigation, jobs, economic growth
- Impact any critical/strategic infrastructure
- Impact USACE ability to conduct dredging operations
- Impact USCG/USN vessel activity for mission-essential functions

So moving on from the NIR... By now you might be wondering how does the Coast Guard conduct its navigation evaluation and make a preliminary navigation clearance

determination? We will review the Navigation Impact Report and analyze if the proposed project has the potential to impact identified navigational needs in any way. If there are impacts, we evaluate these impacts, taking into consideration all the factors to determine if the proposed project will meet the reasonable needs of existing and potential navigation.

- We'll identify if the proposed bridge completely obstructs the passage of any existing waterway users or access to any waterborne facilities.
- We'll determine if the proposed bridge establishes a new navigational limiting factor, such as will the bridge be the most restrictive/obstructive structure across the waterway or will it match the navigational clearance of existing structures already on the waterway.
- We'll determine if the proposed bridge will impact present and prospective commercial activity on the waterway, to

include impacting jobs, and economic growth and development. Also, does it impact existing or planned commercial or industrial developments?

- We'll look at whether the proposed bridge impacts existing facilities on the waterway that are or could be considered critical infrastructure, key resources, or important US industrial capabilities, for example are these facilities unique or one of only a few of the type in the area?
- We'll look to see if the proposed bridge impacts the Army Corp's ability to maintain a federal channel.
- And we determine if the proposed bridge impacts any Coast Guard or other government vessels' ability to transit the bridge to conduct mission essential functions such as patrols, icebreaking, etc.

All of that analyzing will be done to determine the clearances needed to support the reasonable needs of navigation. And that will be the key information written into the PNCD.

## How does the Coast Guard conduct a PNCD (continued)?



Issue a written PNCD letter to the project sponsor/applicant



Include justification of determination



Identify that it is valid for three years

Once the preliminary navigation clearance determination is made it is issued as a written letter to the applicant and is considered valid for three years so long as there are no substantial navigation changes on the waterway. The letter will include the preliminary navigation clearance determination clearances, a summary of the justification for the clearances, and the expiration date.

## Obstructions to navigation

- All bridges are obstructions to some extent.
- Bridges do not have to accommodate all existing or prospective navigation.



Let's take a minute to discuss bridges as obstructions to navigation. As we look at navigation on a waterway, we consider all bridges as obstructions to some extent. However, we also recognize that there is some benefit to those obstructions. So when it comes down to it, bridges do not have to accommodate absolutely every possible existing or prospective vessel on a waterway. Rather, it is our job to ensure that the bridge meets what the Coast Guard considers to be the **reasonable** needs of navigation while facilitating other modes of transportation. Note the emphasis on the word reasonable. And also recall, that it is our job to advocate for maritime commerce.

Pursuant to the Rivers and Harbors Act, 33 U.S.C. § 401 "No bridge shall at any time unreasonably obstruct the free navigation of any navigable waterway of the United States." In addition, per 33 U.S.C. § 494 "No bridge erected or maintained under the provisions of sections 491 to 498 of this title, shall at any time unreasonably obstruct the free

navigation of the waterway over which it is constructed."



## Potential mitigation



- Impacted persons can negotiate mitigation. If an agreement is reached, CG assumes waterway user no longer opposes the project.
- The Coast Guard has no legal authority to require a project sponsor to offer any mitigation.
- CG is legally obliged to investigate and fully understand the prospective navigation impacts associated with a project

How do we look at potential impacts to navigation or what happens when a vessel or facility will be negatively impacted? One possibility is that the project sponsor engages directly with those impacted and offers a mitigation. Mitigation of navigational impacts occasionally plays a role in the bridge permitting process. It's rare, though, because applicants are directed towards and generally incorporate designs that normally meet the needs of navigation. They do not unreasonably burden navigation.

However, there have been cases where not all navigational needs are met. If impacted persons elect to negotiate with a project sponsor, they are free to do so. If they reach an agreement, the Coast Guard has no opinion about it, but we assume that particular waterway user will no longer oppose the project if they agree to mitigation measures.

With all that said, the CG has no legal authority to require a project sponsor to offer any type of mitigation to impacted persons or businesses, but we do have a legal obligation to investigate and fully understand the prospective navigation impacts associated with a project. The bridge statutes authorize the Coast Guard to issue permits for bridges, which must accommodate the "reasonable needs of navigation" but neither the statutes nor Coast Guard regulations mention mitigation.

## Potential mitigation (continued)

- CG will not ask for mitigation/compensation agreements, nor require mitigation/compensation.
- We can tell applicants the project affects navigation to such an extent that we will likely find it to be an unreasonable obstruction to navigation.



The Coast Guard will not ask applicants for mitigation/compensation agreements, nor tell either the applicant or any waterway users that mitigation/compensation will be required.

If our evaluations identify potential impacts, we can tell applicants that the project - as proposed- appears to affect navigation to such an extent that we will likely find it to be an unreasonable obstruction to navigation.

## Takeaways and questions



- Early, open, and continuous communications between the District Bridge Office and the navigational community is critical
- The Preliminary Navigation Clearance Determination is completed before or during NEPA scoping
- The NIR, navigation evaluation and preliminary navigation clearance determination all become part of the Administrative Record

Ok, you've survived and we've finally made it to the end. Here are a few of the key takeaways I hope you come away with from this presentation:

Early, open, and frequent communications between the applicant, the Coast Guard District Bridge Office and the navigational community is critical to project success. Start the NIR as close to project initiation as possible.

This whole process ending with the Preliminary Navigation Clearance Determination is ideally completed before or during the NEPA Scoping process. That is so that the identified clearances are incorporated into the bridge design alternatives. If the bridge designs meet or exceed the clearances and the other environmental, cultural, and historical requirements are met, then the project has a

high likelihood of being permitted by the Coast Guard.

The navigation impact report, navigation evaluation and preliminary navigation clearance determination all become part of the Coast Guard's Administrative Record, which supports the decision to render a bridge permit for a proposed project.

Questions?