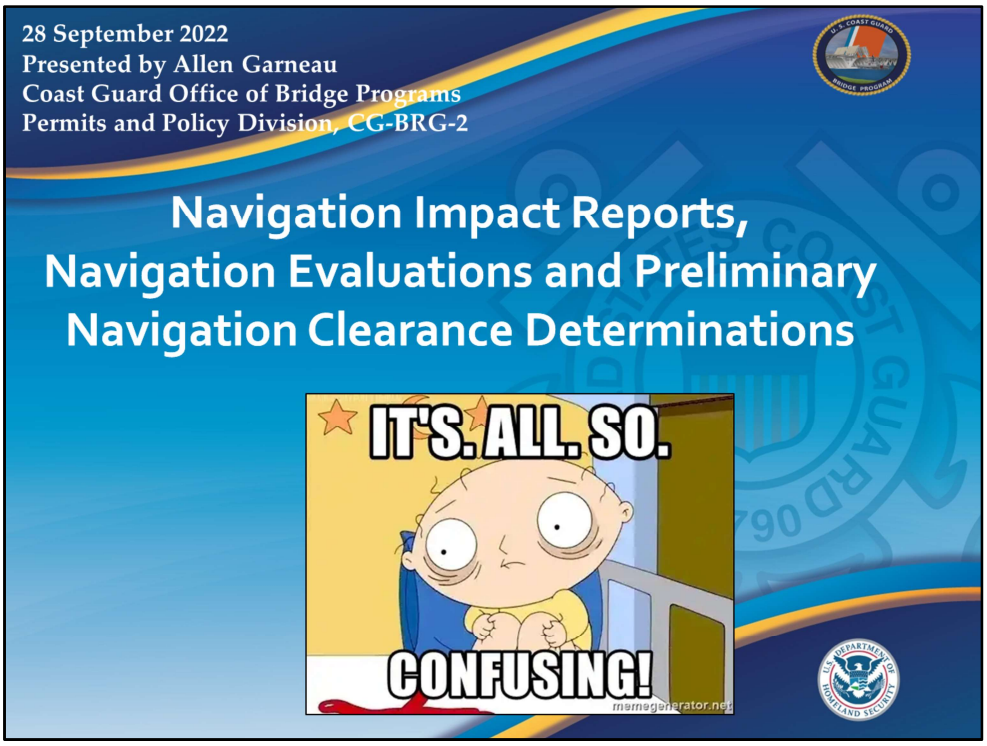
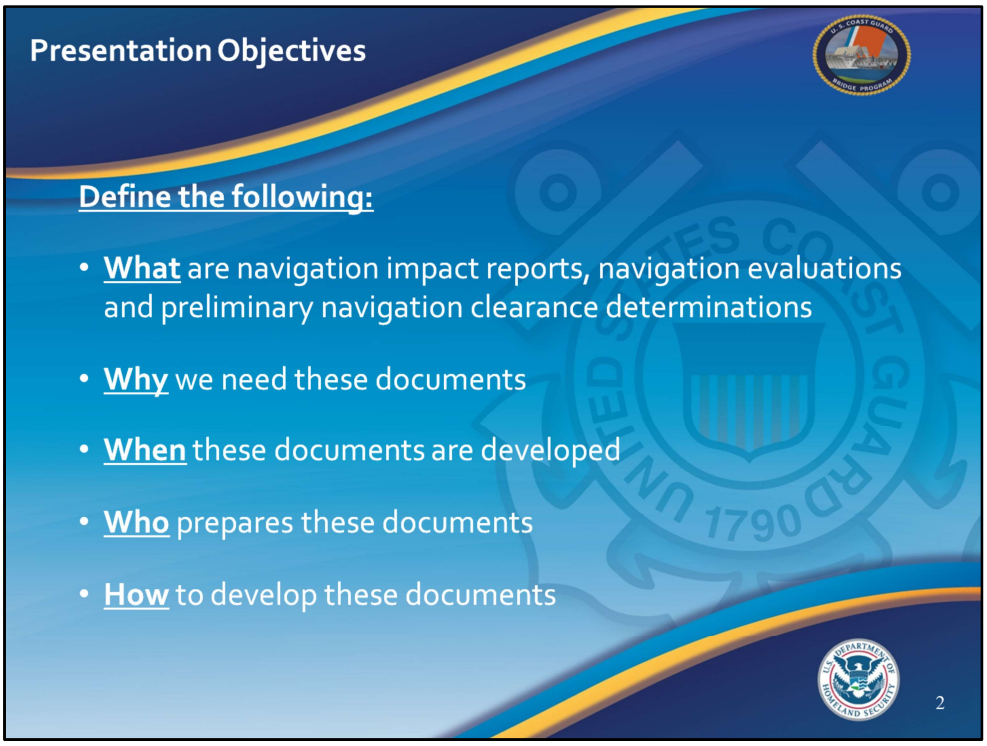


Good day and thanks for joining us today. My name is Allen Garneau and I'm with the Permits and Policy division of the Coast Guard Office of Bridge Programs at Coast Guard Headquarters in Washington, DC. Today I'll be discussing the difference between three tools used by the Coast Guard during the bridge permitting process to help determine the navigational needs of a waterway. These tools are the Navigation Impact Report, the Navigation Evaluation and the Preliminary Navigation Clearance Determination. This presentation is designed to address the basics of these three items. Some projects are much more complex and will require greater coordination with your local Coast Guard District Bridge Office.



The objectives of this presentation are to:

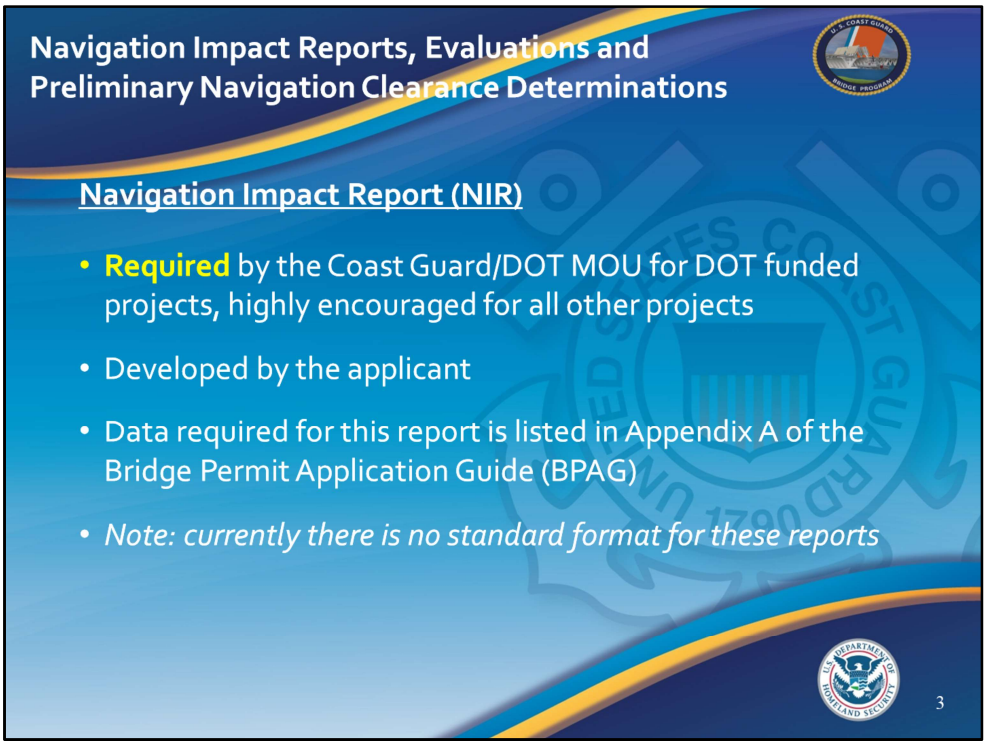
Identify what a navigation impact report, navigation evaluation and preliminary navigation clearance determination are,

We'll identify why are these documents needed

We'll identify when these documents are developed during the permitting process

We'll discuss who prepares these documents

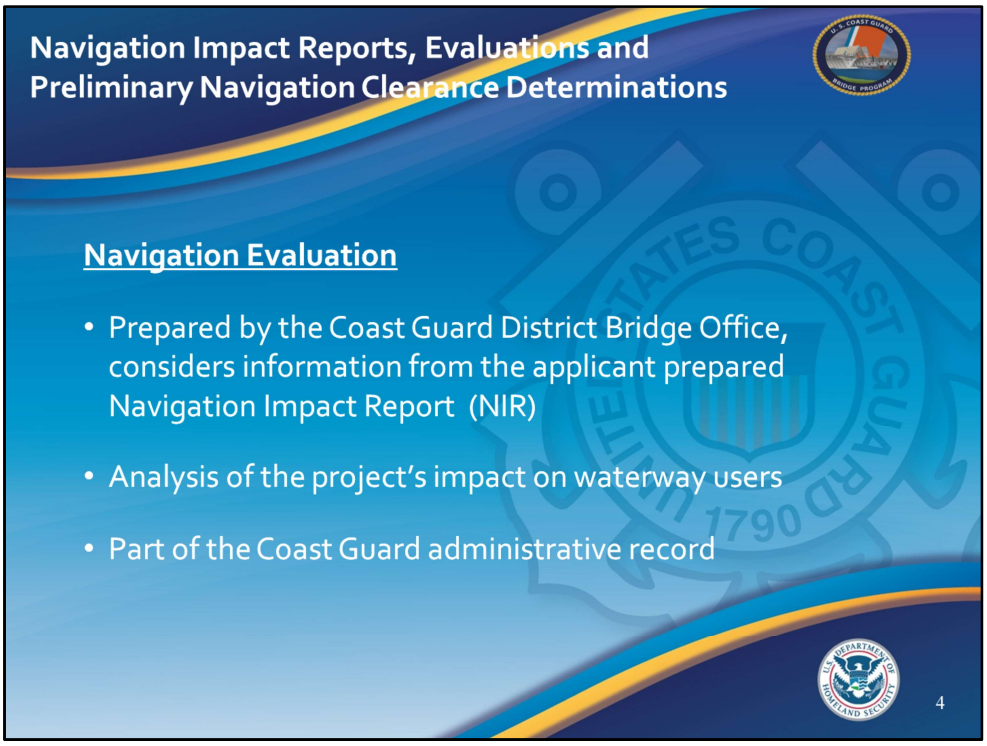
And finally we'll identify how are these documents developed



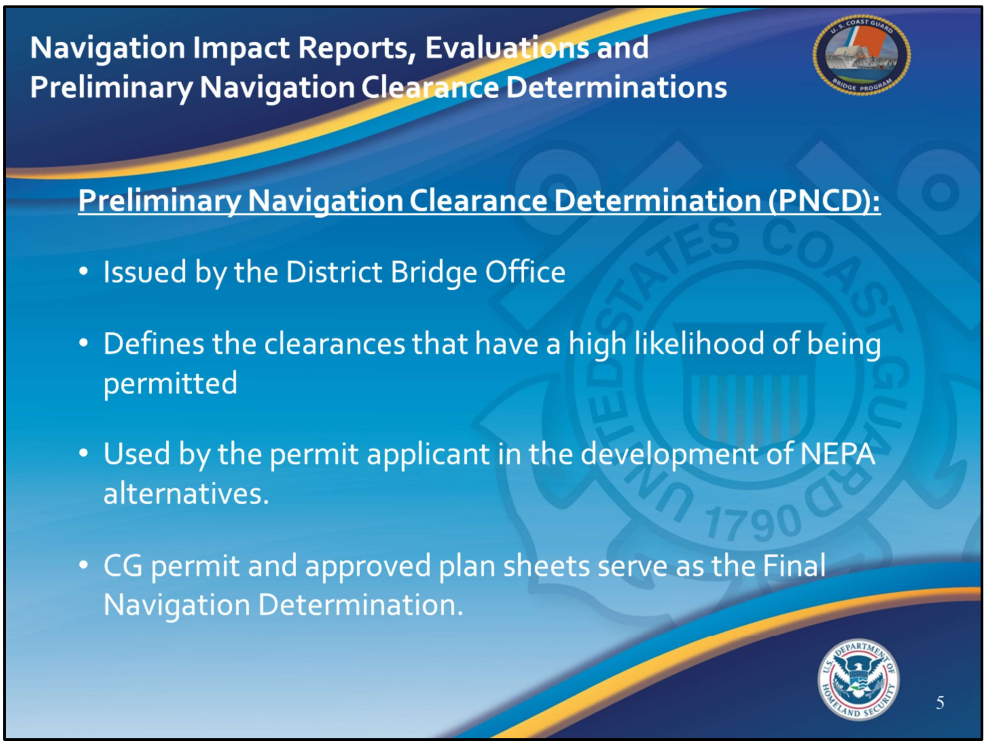
Let's discuss the three documents and their procedures. They are presented in the order that they are completed in the bridge permitting process.

We'll first start with the Navigation Impact Report, or most commonly referred to as the NIR. An NIR is required by a Memorandum of Understanding between the Coast Guard and the Department of Transportation for DOT funded projects, and is otherwise highly encouraged for all other projects to facilitate the permit application process. Due to unique nature of each project, the format and content of the NIR is at the discretion of the local Coast Guard District Bridge Manager. They will identify to the applicant what requirements are to be included in the document. The NIR is actually developed by the bridge permit applicant or their contractor, not the Coast Guard. It serves to inform the District Bridge Office's navigational evaluation and the preliminary and final navigation clearance determinations.

- The data required for this report is 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 has greater navigational data for some waterways compared to others, there is no standard format for these reports.



Now lets take a quick look at the Navigation Evaluation. This evaluation is part of the larger Coast Guard evaluation completed to determine what navigation clearances meet the reasonable needs of navigation. It serves as the holistic analysis of the project's impact on waterway users. This evaluation is prepared by the local Coast Guard District Bridge Office and considers information from the Navigation Impact Report to identify the potential navigational impacts from a proposed project. The information is documented in the Coast Guard's administrative record and becomes an integral part of the overall permit decision process.



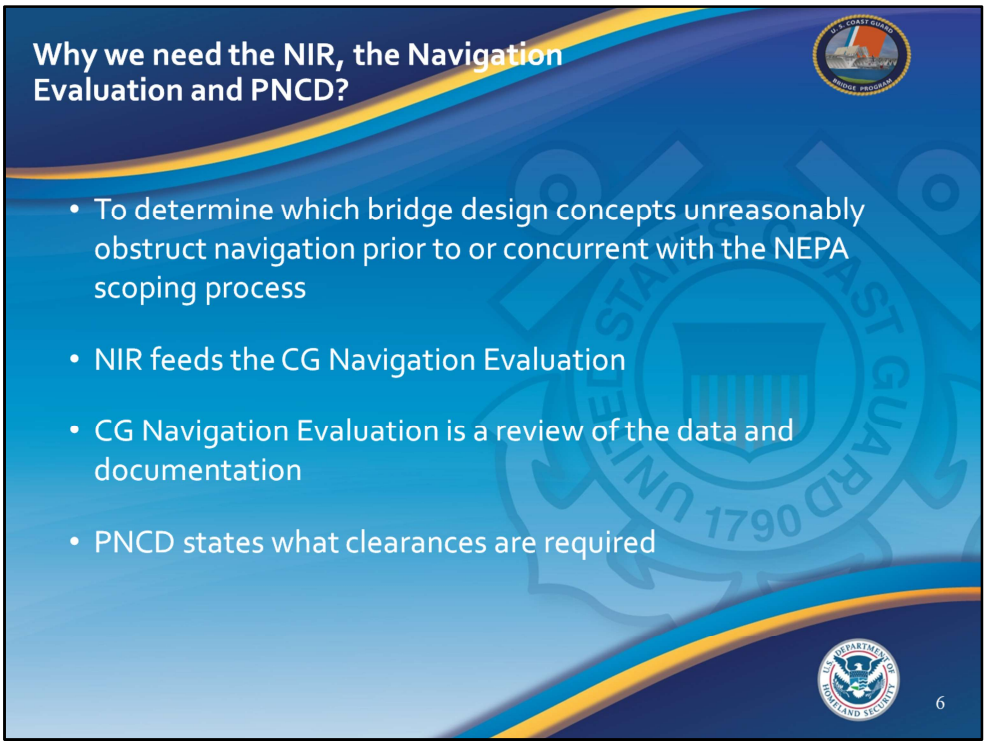
Finally, let's take a look at the Preliminary Navigation Clearance Determination process.

Once the District Bridge Office has reviewed the NIR and completed their navigation evaluation, a Preliminary Navigation Clearance Determination (PNCD) will be made and issued via letter to the applicant.

The purpose of the PNCD is to define the vertical and horizontal clearances that have a high likelihood of being permitted.

These clearances should then be used by the applicant in the development of NEPA alternatives for a proposed project.

The Coast Guard permit and approved plan sheets serve as the Final Navigation Determination for the project.



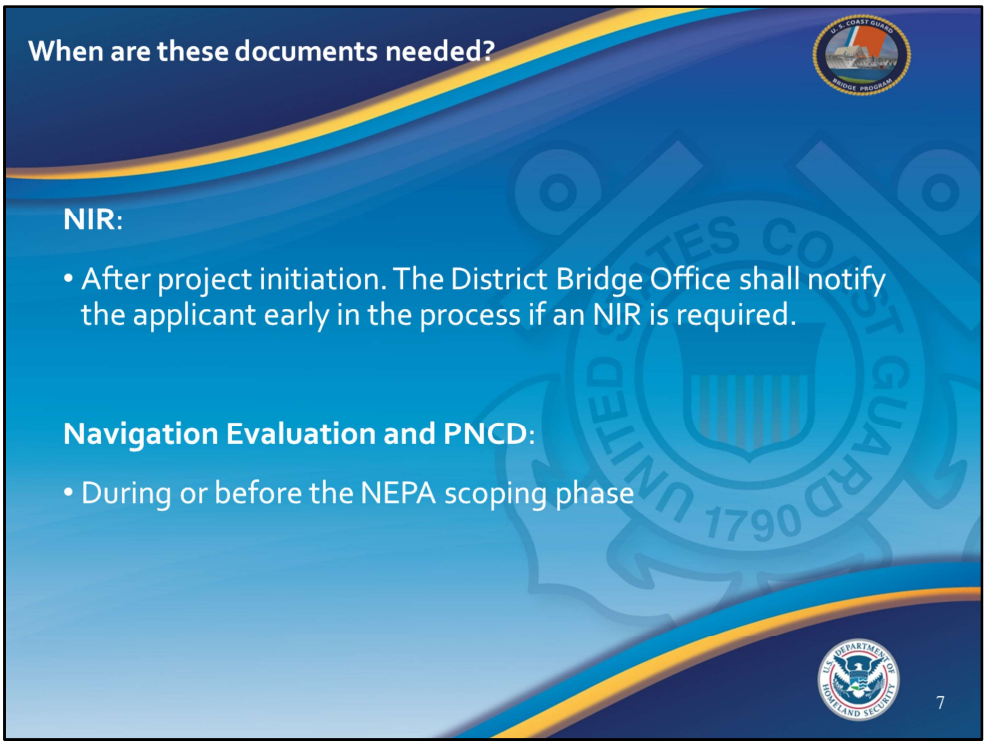
Why does the Coast Guard need the NIR, the Evaluation and the Determination

The Bridge Program uses these tools to determine which bridge design concepts might unreasonably obstruct navigation prior to or concurrent with the NEPA scoping process in order to inform viable project alternatives.

The NIR is the data set that feeds the Coast Guard Navigation Evaluation

The Navigation Evaluation is a review of the navigational data and documentation that has been prepared for the administrative record

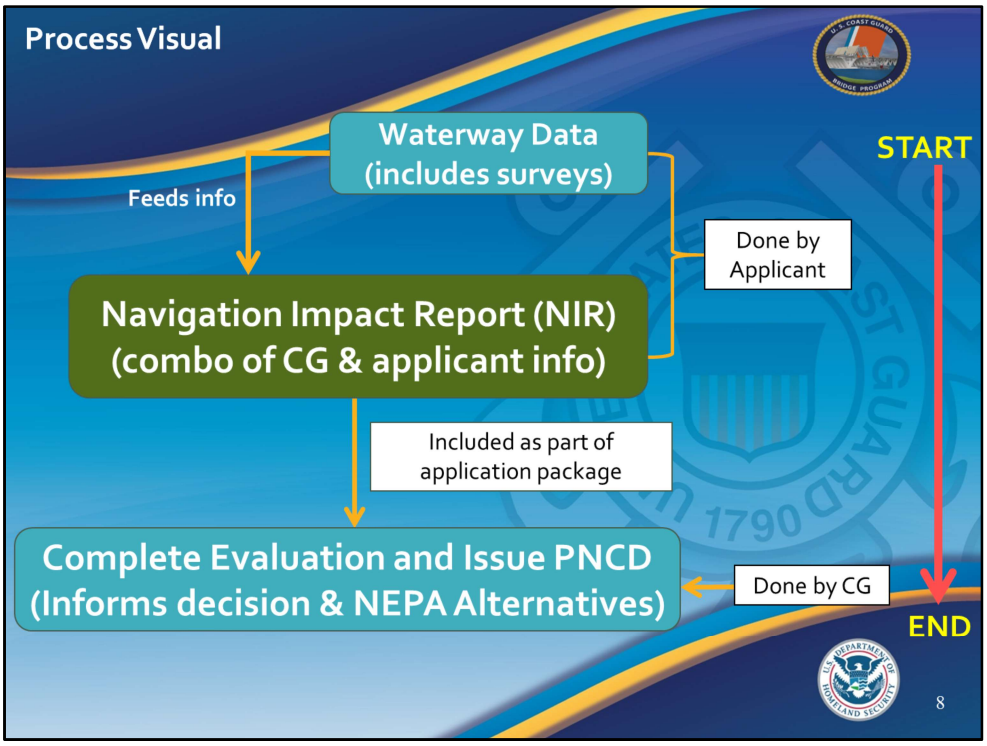
The Preliminary Navigation Clearance Determination states the minimal clearances that should be requested and evaluated in order to meet the reasonable needs of navigation as currently analyzed.



Let's next discuss when these documents are needed

The applicant will be notified early in the process by the local Coast Guard District Bridge Office if an NIR is required and what should be included in it. The NIR is needed shortly after project initiation. 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 any required NIR data either before or during the NEPA scoping phase. Failure to complete these at this time can lead to costly project delays in the application process, so it is critical that the applicant supply all waterway data needed for a complete NIR in a timely manner.



This graphic depicts the timing of the preliminary navigation clearance determination in relation to the NEPA process. As you can see at the top we will first ask the applicant to collect the necessary waterway data to feed into the NIR. This is the stage where the District Bridge Office conveys to the applicant what data is needed from the requirements found in Appendix A of the Bridge Permit Application Guide. One tool often used to assist in the collection of this information is a Coast Guard preliminary public notice which can be used to advertise that a waterway data survey is available from the applicant.

Once the NIR is complete the information is used to inform what NEPA alternatives should be studied. The NIR should also be included as part of the application package. The District Bridge Office will then use the data to complete the navigation evaluation and issue a Preliminary Navigation Clearance Determination.

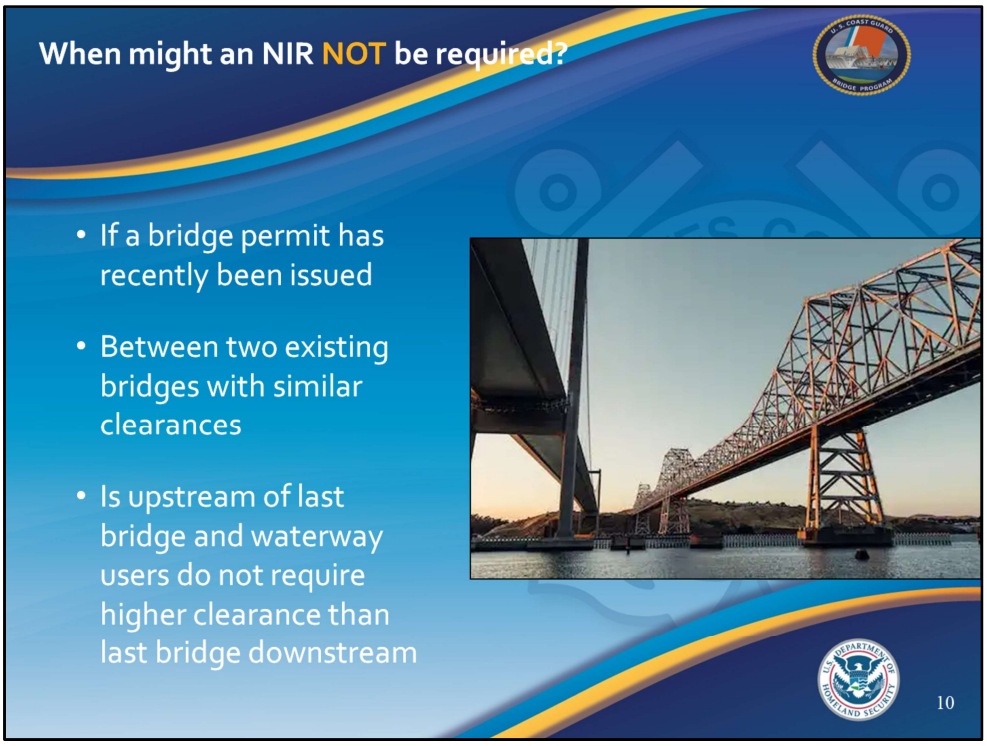
As previously mentioned, the District Bridge Office will notify the applicant of the requirements of what to include in the NIR, and the NIR is then developed by the applicant, with assistance from the Coast Guard

A few examples of when an NIR would be required include:

- When a bridge is being converted from a moveable drawbridge to a fixed bridge

- When there is a proposed reduction from existing clearances on the waterway

- 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



With all that said, it is not uncommon for the district bridge office to not require NIR at all. The District Bridge Office may already have the required information for a waterway, either from prior bridge permitting projects or other Coast Guard activities. In the examples shown the application materials submitted to the Coast Guard must still include information about the waterway usage that supports the proposed clearances.

Examples of when an NIR is not required include if 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 with similar clearances.

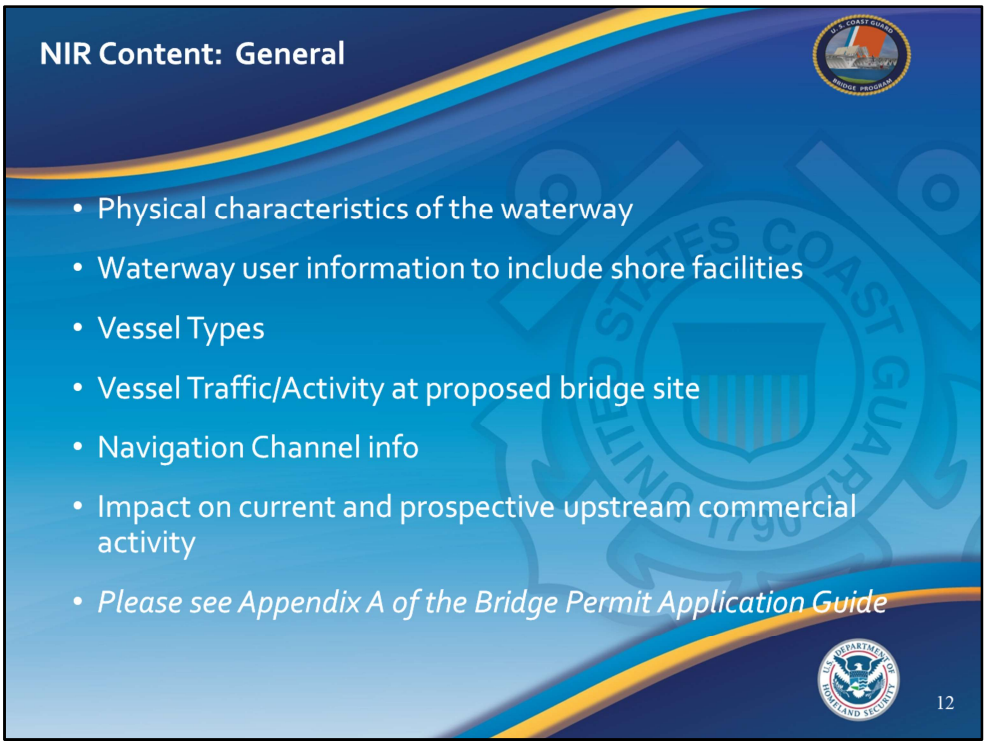
And maybe when a proposed bridge is upstream of the last bridge on the waterway and waterway users do not require higher clearance than the last bridge downstream from proposed bridge.

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 an existing bridge and no changes have occurred on the waterway that warrant further analysis through an NIR.

When the proposed project is a complete removal and replacement of a superstructure and the road bed that has no impact on, or improves, 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.



So lets take a look at some of the general information required by Appendix A of the Bridge Permit Application Guide for a Navigation Impact Report, remembering it is developed by the applicant with CG guidance on what to include.

The general content should include the physical characteristics of the waterway around the project

Waterway user identification and information which does include shore facilities

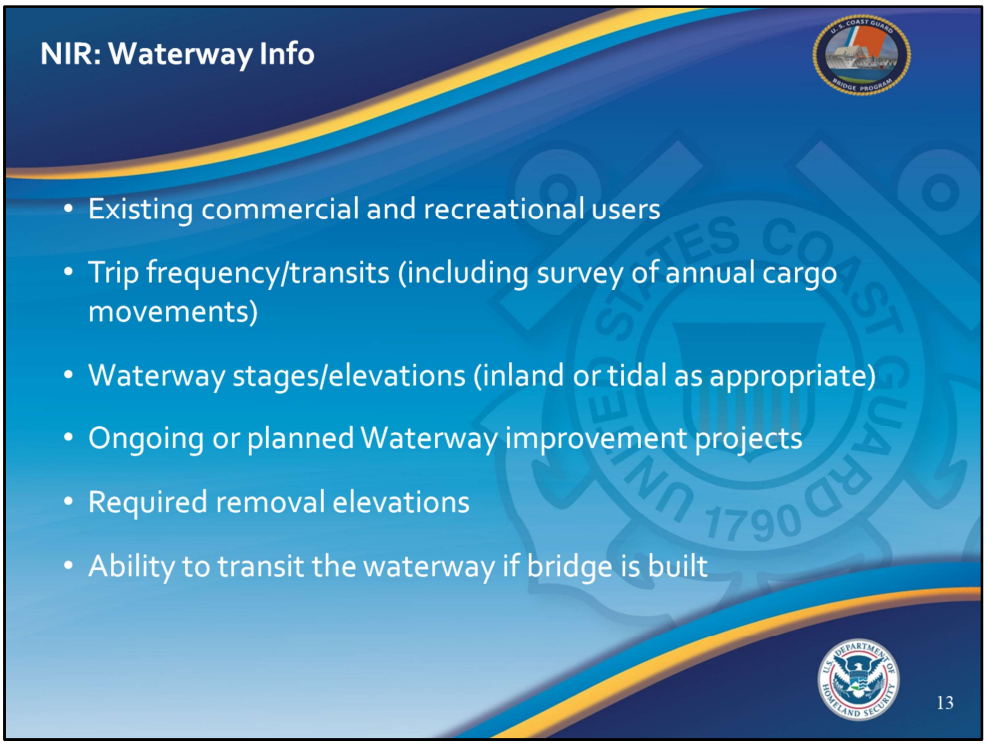
We ask about the types of Vessels that use the waterway

We often ask about vessel traffic and activity on the waterway at proposed bridge site

We require that the NIR identify any federal Navigation Channel info

And we expect discussion on impacts on current and prospective upstream commercial activity on the waterway

We're next going to review this general content in greater detail, but do to the number of potential variables we can 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 (BPAG) - All Documents (uscg.mil)



One of the most important aspects of an NIR is to identify specific waterway information. This will include:

Looking at existing commercial and recreational users

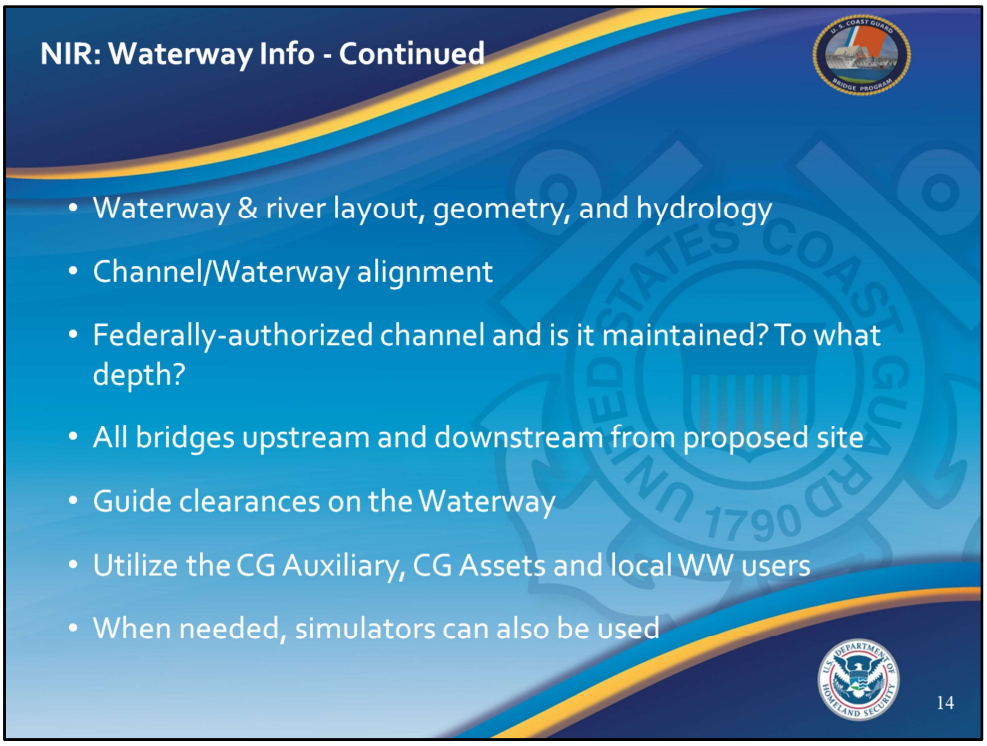
Identifying trip frequency, which includes the number of transits and a survey of annual cargo movements when available for commercial waterway traffic

Waterway stages and elevations for inland or tidal areas should be identified as appropriate. The Coast Guard will normally contact the Corp of Engineers for this information. They can provide normal pool elevation, 2% flowline, and tidal information. 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 utilize the National Weather Service website or contact your local National Weather Service office to obtain up-to-date information.

We look at Impacts of ongoing or planned waterway improvement projects. The Coast Guard may visit a bridge project site and talk to industry in the area, and we may reach out to other federal entities to determine if there are any plans for improvements such as widening of a channel or placement of docks. If the project is over a Federally-maintained waterway the applicant will communicate with the Corps of Engineers as they have information and projections on waterway improvement projects. For non-federally maintained waterways, both the applicant and District Bridge Office should contact cities/counties/local gov'ts and private facility owners since they can make waterway improvements w/ permission from the Corps.

Additionally, during these conversations is the perfect time to discuss if there are required removal elevations for a waterway, such as identifying the depth to which any old pilings/piers must be removed when conducting a bridge removal as part of a replacement project.

We'll also look to identify impacts to vessel owner's ability to transit a waterway if a bridge is built



Continuing to gather waterway information we might look at waterway and River Layout, Geometry, and Hydrology. In addition to using the methods for waterway stages, applicants should look to reference USGS and NOAA charts for data.

We ask that you look at channel or waterway alignment – During NIR development, the District Bridge Manger will communicate to the applicant the necessity of including pier placement in discussions and the NIR to facilitate an accurate navigation evaluation. We'll want you to communicate with the largest vessel operators (both size + volume) and/or industry and get their size and necessity for pier placement. After identifying pier location, we'll consult navigational charts to see if there is navigation channel identified on a federal navigation project, and if there is no specific channel already identified, we'll talk to industry to get a sense of the general preferences for transit, for example talk to the commercial towing industry to see if they favor a certain aspect or side of the waterway.

All bridges upstream and downstream from a proposed site should be identified and considered, and the Coast Guard will identify whether there are guide clearances already established for the Waterway which identify minimum clearances for a proposed bridge.

If needed, the Coast Guard can use assets to assist in gathering relevant waterway information such as the Coast Guard small boats, the Auxiliary or local waterway users.

Finally, for complex projects: the Coast Guard can even run simulations for industry which can be used to verify channel and waterway alignment and the appropriateness of the proposed clearances.

Normally vessel information for an NIR is captured through the use of a vessel survey. The information normally gathered includes:

Name & registration/documentation #s

A description of the vessel type & owner contact info

Identification of the primary mooring location (incl. WW mile #)

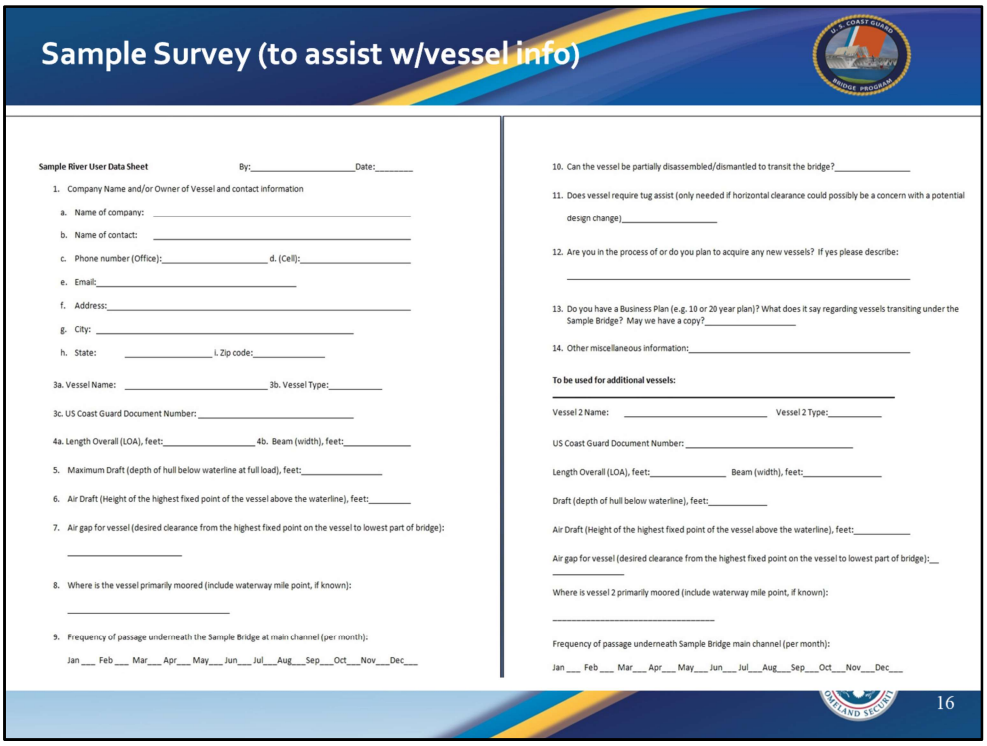
Vessel dimensions (beam, length, draft, air draft)

Identifying if it is a specialized vessel with any restrictions such as limited maneuvering

The required Horizontal and Vertical safety margin required to transit a bridge should be identified.

And any vessels that might require modification such as the need to be partially or fully dismantled to transit the bridge and discussion on whether they have the capability to already do so

When the waterway has a Corps facility such as a lock + dam, consultant with that facility to get their vessel traffic data.



Here's an example of what a sample vessel survey might look like. While it's probably hard to read, it's a two pager that asks most of the questions we've just discussed**.** In addition to the applicants actions, the Coast Guard District Bridge Office can choose to have the local CG assets post information and surveys in Marinas. District Bridge Managers should be able to provide applicants with a marina contact list for the waterway in question. You should also contact private barge companies. During this time you'll want to identify potential emergency vessel and maintenance vessel operations on the waterway. If it's a smaller waterway with little commerce but heavy recreation traffic sending surveys to marinas is often the best way to gather waterway usage information.

The Coast guard can assist in considering waterborne activities at the bridge site.

We look to identify vessel transit frequency under the proposed bridge

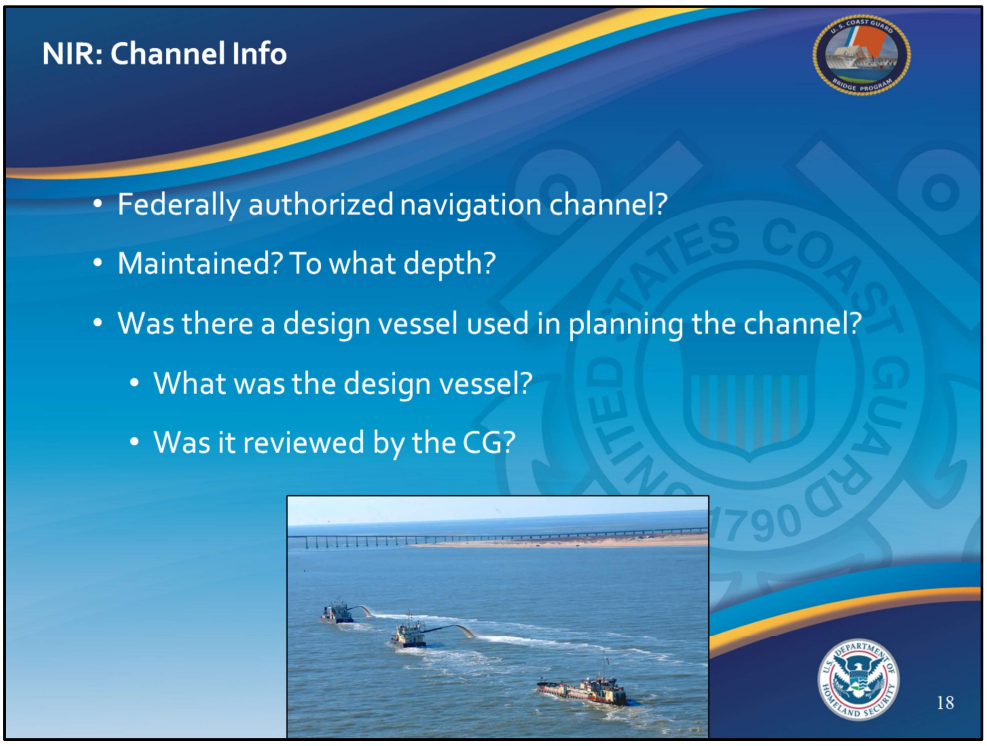
We can provide historical data on bridge allisions and collisions, rammings, and groundings. This can be attained internally using Coast Guard data systems, we can speak to industry, and if a replacement project, we can speak to the current bridge owner to get info, but realize this might not be an entirely reliable or comprehensive source.

We'll want to consider transit speeds, again speaking to industry, marinas, etc. We can also consider using the CG Auxiliary to assist in conducting site visits and simulations of proposed piers using buoys to find out best transit speeds.

As the NIR is developed the applicant should be looking at load configurations on the waterway as they might transit the bridge site.

It should look at all traffic characteristics – It is often best to coordinate with the local Corps of Engineer office to get this information.

And finally we'll want to consider annual cargo movements: Again, consulting with the Corps for federally maintained waterways; for ports/harbors we'll normally contact the port business office/industry groups/and facility operators.



The NIR should include channel information such as

Identifying if there is a Federally authorized navigation channel?

It should identifying if it is Maintained? And if so to what depth?

Determining if there was a design vessel used in planning the channel?

What was the design vessel?

Was it reviewed by the Coast Guard?

Additional information on federal navigation channels can be obtained by contacting the Corps of Engineers.

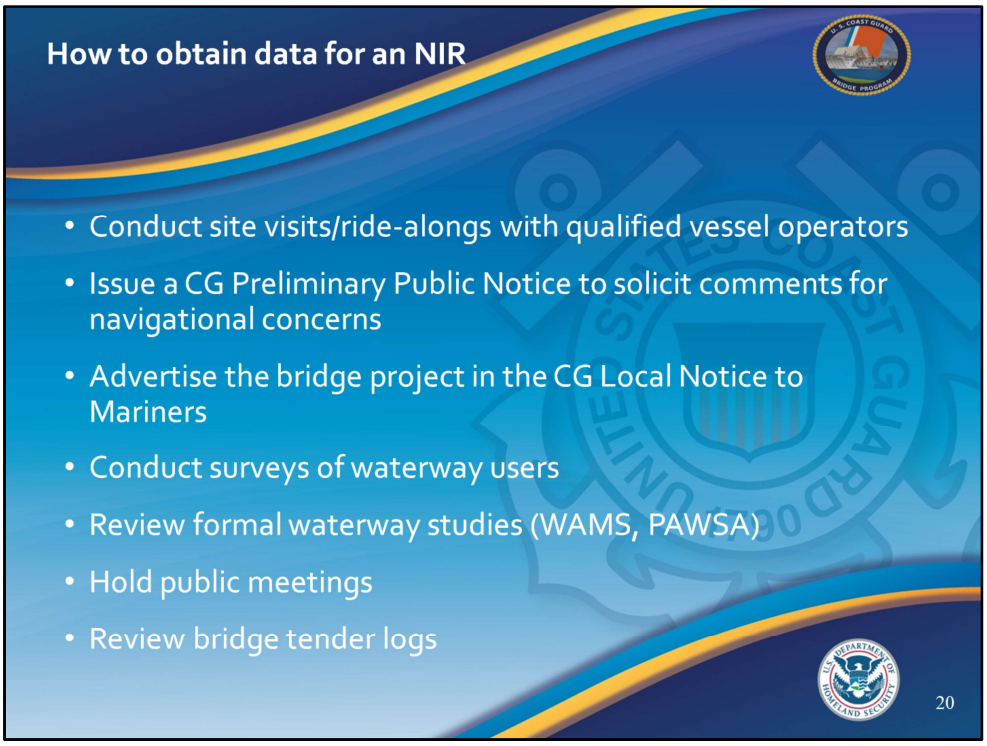
The NIR will look to identify relevant economic impacts such as whether there are any existing or planned industrial developments that will be negatively impacted by proposed clearances

It should identify if there is any specific land use zoning identified along the waterway

It will look to identify future vessel size and traffic trends. Generally industry is the best source for this info. When available, we encourage communications with industry and see what future development is known among the operators. Industry will almost always approach District Bridge Offices when they want a higher bridge.

You might also want to speak to the Corps of Engineers to see if they have any permits in process for future waterway facilities. You want to look at any other publically-available information, such as conducting general internet & newspaper report searches, and contact industry groups in the area. Another way of confirming plans for future waterway development is to seek input from local and state governments and from waterway landowners and stakeholders

Lets take a closer look at how on how the Coast Guard can help obtain information for the NIR.



So we've briefly mentioned some of these, but lets discuss the ways we can obtain the data for the NIR.

We can conduct 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 for navigational concerns

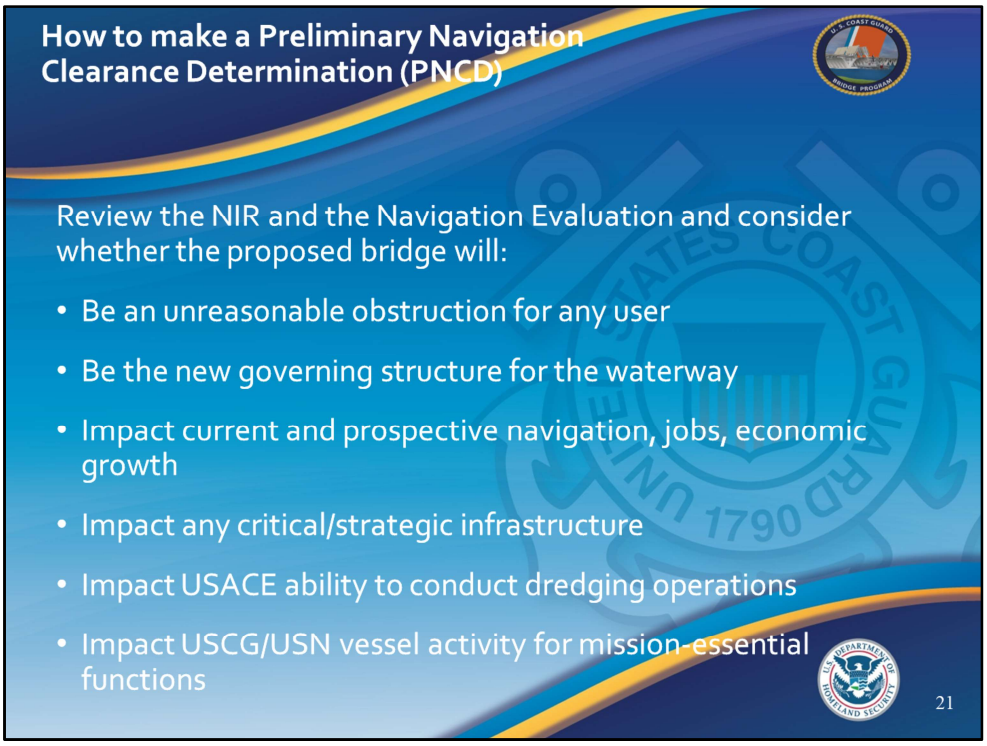
We can advertise the bridge project in the Coast Guard Local Notice to Mariners

As we previously discussed you can conduct surveys of waterway users

We can review previously completed formal Coast Guard waterway studies

The Coast Guard can hold public meetings to gather comments on the proposed project

And we'll review bridge tender logs for existing movable spans on the waterway



Now lets talk about how the Coast Guard makes a Preliminary Navigation Clearance Determination, or PNCD. The Coast Guard will review of the navigation impact report and the navigation evaluation to identify if the proposed project has the potential to impact identified navigational needs in any way. If there are impacts we evaluate these potential 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.

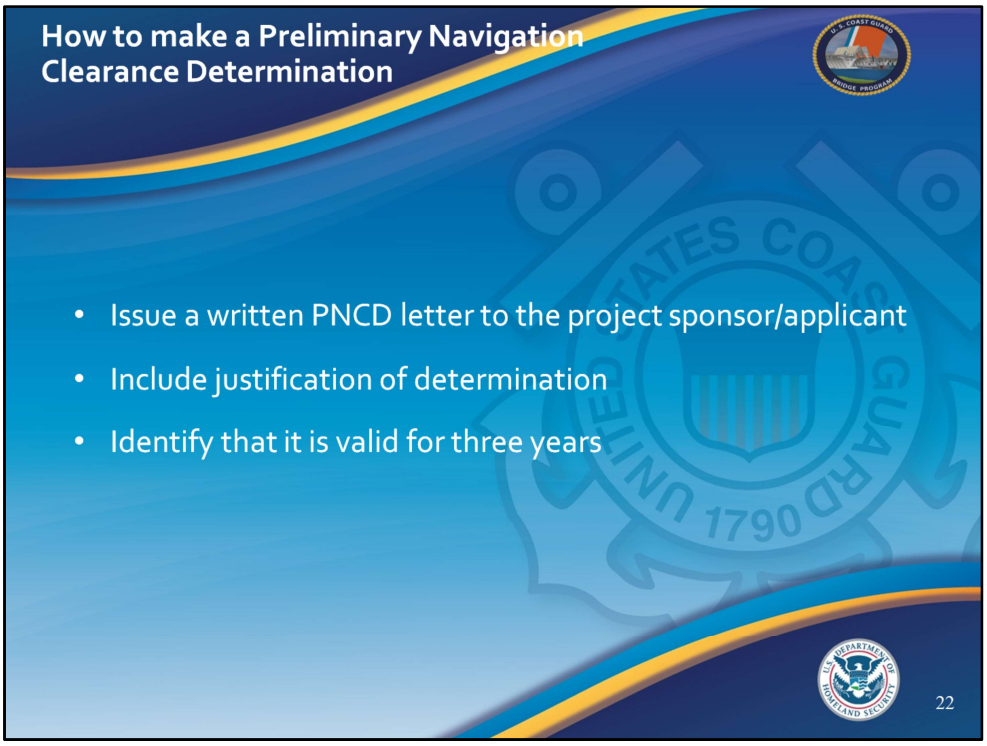
- We determine if the proposed bridge establishes a new navigational limiting factor, such as will the proposed bridge be the most restrictive/obstructive structure across the waterway or will it match the navigational clearance of existing structures on the waterway.

- We 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/industrial developments?

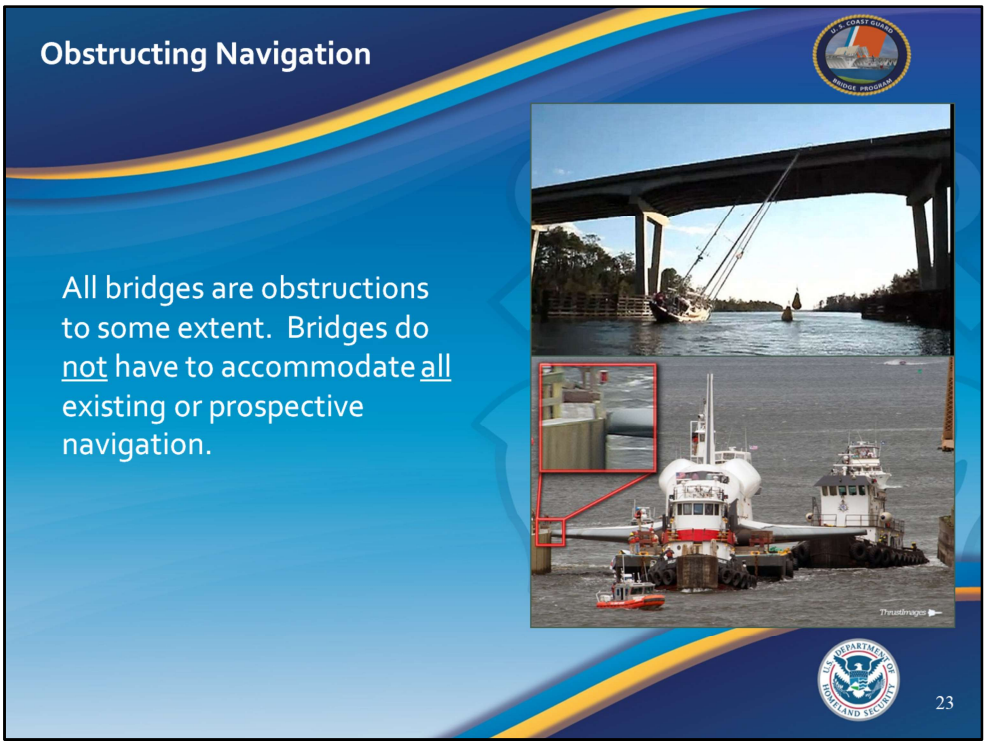
- We look at whether the proposed bridge impacts existing facilities on the waterway that are or could be considered critical infrastructure, key resources, or important/unique US industrial capability, for example are these facilities unique or one of only a few of the type in the area?

- We identify if the proposed bridge impacts the Corp's ability to transit the bridge in a federal project 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.



Once the preliminary navigation clearance determination is made it is issued to the applicant and considered valid for three years if there are no navigation changes on the waterway. The letter will include the preliminary navigation clearance determination, the justification, and indentify the three-year validity.



Lets take a minute to discuss obstructions to navigation. As we look at navigation on a waterway, we consider all bridges as obstructions to some extent. Bridges do not have to accommodate all existing or prospective navigation on a waterway.

Potential Mitigation

The Coast Guard has no legal authority to require a project sponsor to offer any mitigation.

- 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 assume that particular waterway user will no longer oppose the project.
- The Coast Guard does have a legal obligation to investigate and fully understand the prospective navigation impacts associated with a project

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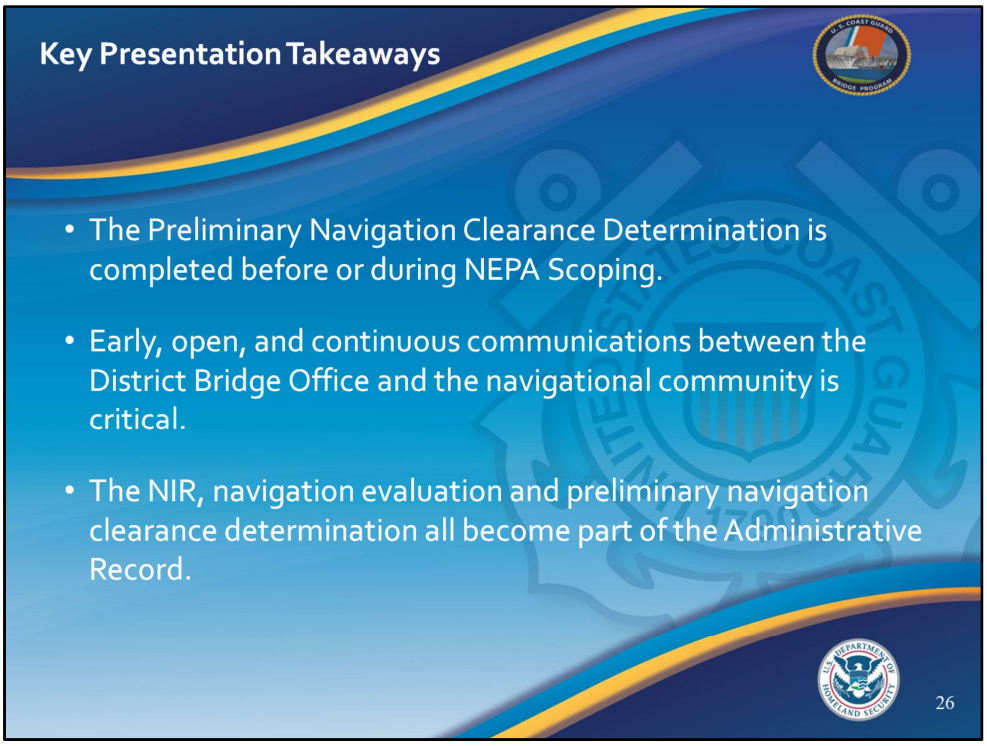
The Coast Guard will **not** ask applicants for mitigation/compensation agreements, nor tell either the applicant or any waterway users that mitigation/compensation will be required.

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 that it to be an unreasonable obstruction to navigation.

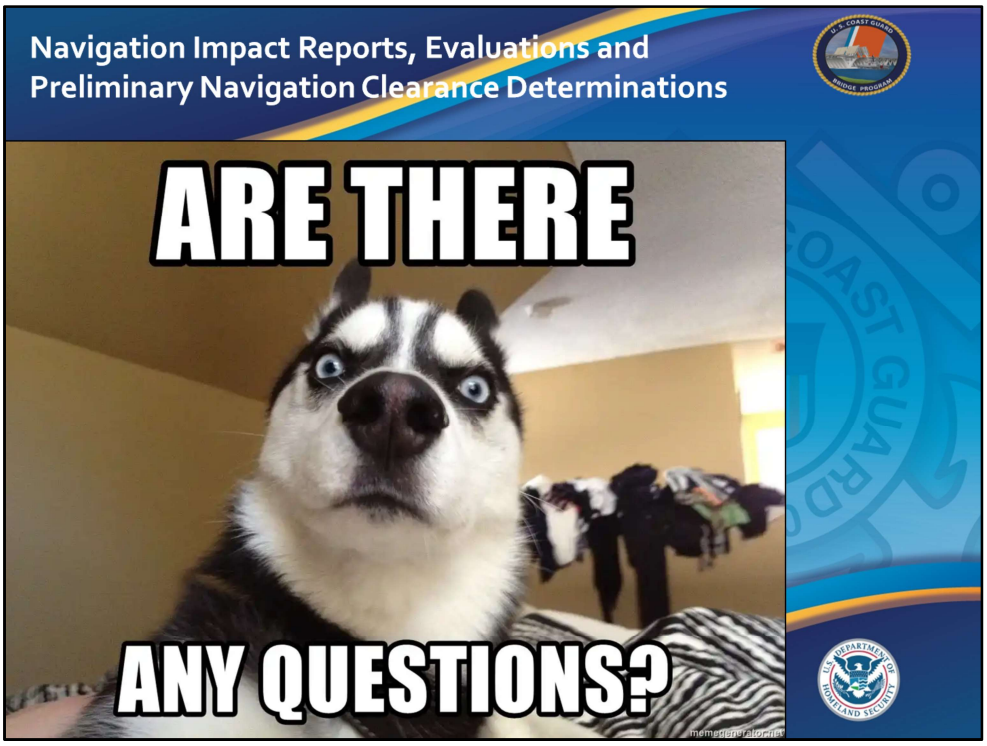


So here are a few of the key takeaways I hope you come away with from this presentation:

The Preliminary Navigation Clearance Determination is completed before or during NEPA Scoping to influence designs that have a high likelihood of being permitted by the Coast Guard.

Early, open, and continuous communications between the applicant, the Coast Guard District Bridge Office and the navigational community is critical.

The NIR, navigation evaluation and preliminary navigation clearance determination all become part of the Coast Guards Administrative Record used to determine whether it is appropriate to issue a bridge permit for a proposed project.



You made it! That's all I have for this presentation. If you haven't already done so please feel free to provide any additional questions you might still have in the Q&A. Thank you.