



NORTH CAROLINA

Department of Transportation



Division Innovations

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Division Managed DB

Why go Design Build at the Division level?

- Time constraints
- Management of construction activities
- Project complexities offer need for possible innovations
- Severe maintenance of traffic issues
- Need to shift some or mitigate risk

Why Not

- Wrong project type
- Wrong time constraints
- Division personnel may not have adequate background or support
- Division may want more design control
- Central Design Build Unit availability

Division Managed DB

Applicable Project Types to Consider

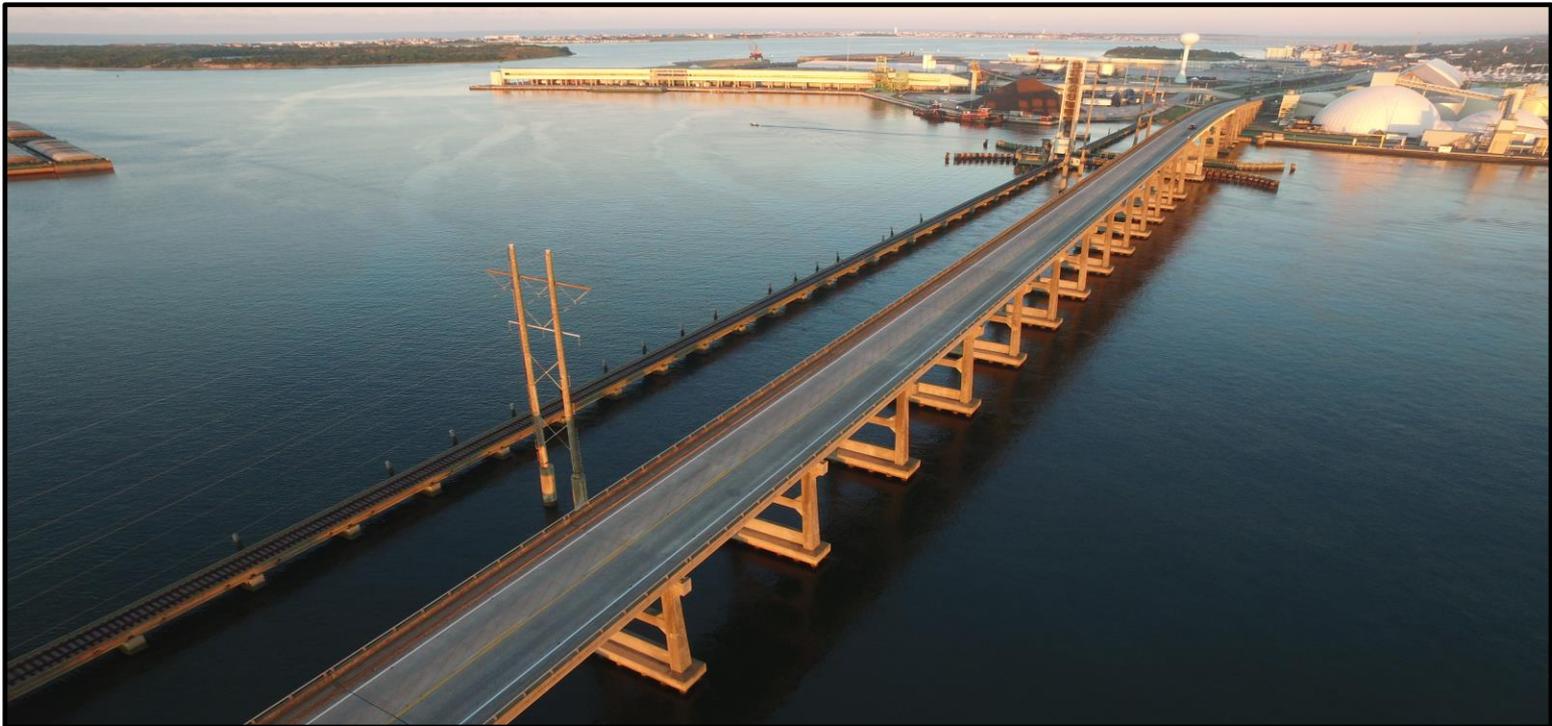
- New Construction
- Interchanges
- Non typical bridges
- Express DB Bridge putting a number of smaller bridges together

Express DB Bridge Pros and Cons

- Can get a number of bridges underway quickly to push schedule
- Ease of tracking multiple bridges due to one designer & contractor
- Inadequate scoping may lead to significant supplemental agreements, cost overruns, and time extensions.
- There have been a number of complaints from RE offices about contract administration issues

Div 2 US 70 Newport River Bridge

- U-5876/U5740 1.7 Miles Port of Morehead to Radio Island
- RFP Jun 19 Award to Team Dec 19
- RS&H supporting Division as Owner's Rep, from initial solicitation, TRC support, post award engineering reviews, and contract admin



Div 2 US 70 James City

- U-5713/R-5777AB US 70 Neuse River Bridge to Thurman Rd Interchange in Craven County 6 Miles, 5 interchanges, 4-6 lanes to interstate standards, plus service road network.
- RFQ Jun 18 Award to Team Dec 18 / Jan 19
- HNTB supporting Division as Owner's Rep, from initial solicitation, TRC support, post award engineering reviews. Contract admin TBD



Div 2 Best Practices

- Upfront and continual coordination with USACOE & Agencies.
- Early coordination with the public and local officials – ensure community support at the beginning and throughout the process.
- When feasible use DB steps such as getting PE and ROW authorization at same time allowing early ROW acquisition.
- Promote early coordination with ROW, Utilities, and engineering staff to develop a ‘Team’ approach to increase efficiencies and minimizing rework - avoid stovepipes.
- Expediting Submittals thru clear communication - Strong Partnering & Collaboration between Div/PEF using enhanced communications and shared scheduling. Eliminate unnecessary submittals.
- Get designers and reviewers on board early to establish project priorities and requirements.
- Understand and accept the risks involved and take pre-emptive measures to minimize or mitigate them.

Utility Phase Best Practices

- Utility Kick-Off Meeting at 25% Stage (14)
- PUE determined using Redline Plans (9)
- Oversight of Utility Relocation by Design Firm or Sub (4)
- Clearing Contract (4)
- 5 Year Project List (4)

Design Build Techniques

- Utility Coordinator in conventional DBB contract (5)
- Phased Design, R/W, Utilities (6,12)

Other Opportunities

- Combining adjacent projects (4,12)
- Request select Appraisals early (14)