

Belle Chasse Bridge and Tunnel Replacement



Americas

Transport

The Project will improve connectivity of the Belle Chasse Highway in Plaquemines Parish and will maintain or improve interrelationships between vehicular traffic on LA 23 and maritime traffic in the Gulf Intra-coastal Waterway (GIWW).

Project facts

Location

Belle Chasse, Louisiana,
USA

Client

Louisiana Department of
Transportation and Devel-
opment

Value (NPV)

US \$169 million

Our role

Developer
Equity investor
Financial advisor
Bridge maintenance
Tolling operations

Builder

Traylor Bros., Inc. and
Massman Construction Co.
joint venture

Engineer

Huval & Associates Inc.

O&M contractor

Plenary Infrastructure Belle
Chasse

Tolling operations

Plenary Infrastructure Belle
Chasse

Tolling installation and opera- tions

Kapsch TrafficCom USA Inc.

Financial close

December 2019

Completion date

April 2024

Contract terms

Design, build, finance, op-
erate and maintain for 30
years

Project website

bellechassebridge.com

The project includes the following major elements:

- Design and construction of an aesthetically pleasing four-lane fixed span bridge over the GIWW
- Removal of the LA 23 Judge Perez Bridge over the GIWW
- Decommissioning of the LA 23 Belle Chasse Tunnel beneath the GIWW
- Operation and maintenance of the Judge Perez Bridge and Belle Chasse Tunnel during construction
- Operations and maintenance of the new LA 23 project corridor
- Development and operation of a new toll revenue collection system.



Design features

The bridge will replace an existing bridge and tunnel with two lanes of travel in each direction. The new structure, with a 73-foot vertical clearance and 150-foot wide horizontal clearance, will be located between the existing vertical lift bridge and tunnel. The ends of the bridge curve toward the east to allow the roadway approaches to tie into the existing alignment of LA 23.

The bridge structure selected consists of precast pre-stressed concrete girder approach spans with a 3-span continuous steel unit over the GIWW.

Public input is considered on the project through the development of two options for aesthetic schemes. In addition, members of the surrounding communities will contribute to developing design ideas for the redevelopment of a Veterans Plaza located below the existing bridge as well as to provide input on color schemes and thematic elements included on the bridge structure.

In addition to aesthetic features, a landscape/hardscape plan is incorporated for the area underneath the proposed bridge structure to include a multi-use space for nearby communities.



The plan uses a series of walkways identified with distance markers to encourage walking and exercise.

Innovations

The structural design of the new bridge helps minimize the bridge length which acts to mitigate ROW impacts and inconvenience to travelers during project construction, helping ensure four lanes of traffic remain open throughout. In addition, the vertical clearance of the bridge allows marine traffic to pass underneath the bridge structure without impeding vehicular traffic.

The roadside electronic toll collection system is designed to efficiently collect and distribute toll transactions that occur in the toll collection zone in a free-flow manner.

Bridge users will also benefit from the various options available for queries or feedback: integrated voice response, website, or an agent over the phone. Multiple customer contact channels ensure a positive motorist experience.

Local economic impacts

The Plenary Infrastructure Belle Chasse (PIBC) consortium includes several Louisiana-based design consultants and contractors to support the diverse needs of the project. Furthermore, throughout the term of the Project, PIBC will continually identify opportunities for qualified Disadvantaged Business Enterprises (DBE) to participate in the project.

PIBC's delivery plan includes provisions for DBE outreach events to generate interest in the local community and local job fairs to gather on-the-spot applications from qualified individuals for project employment.