



2019

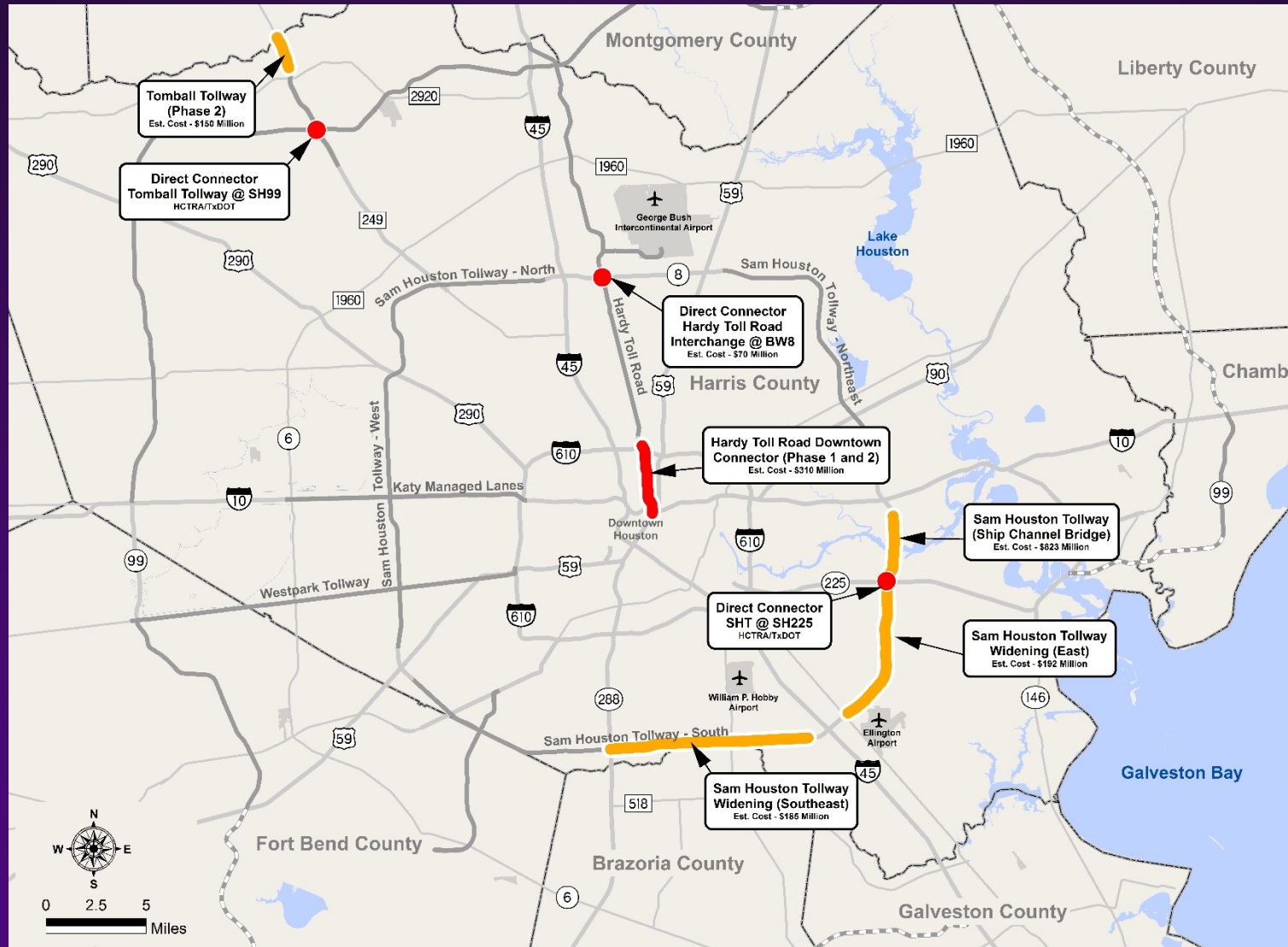
Harris County Toll Road Authority

JOHN C. TYLER P.E.



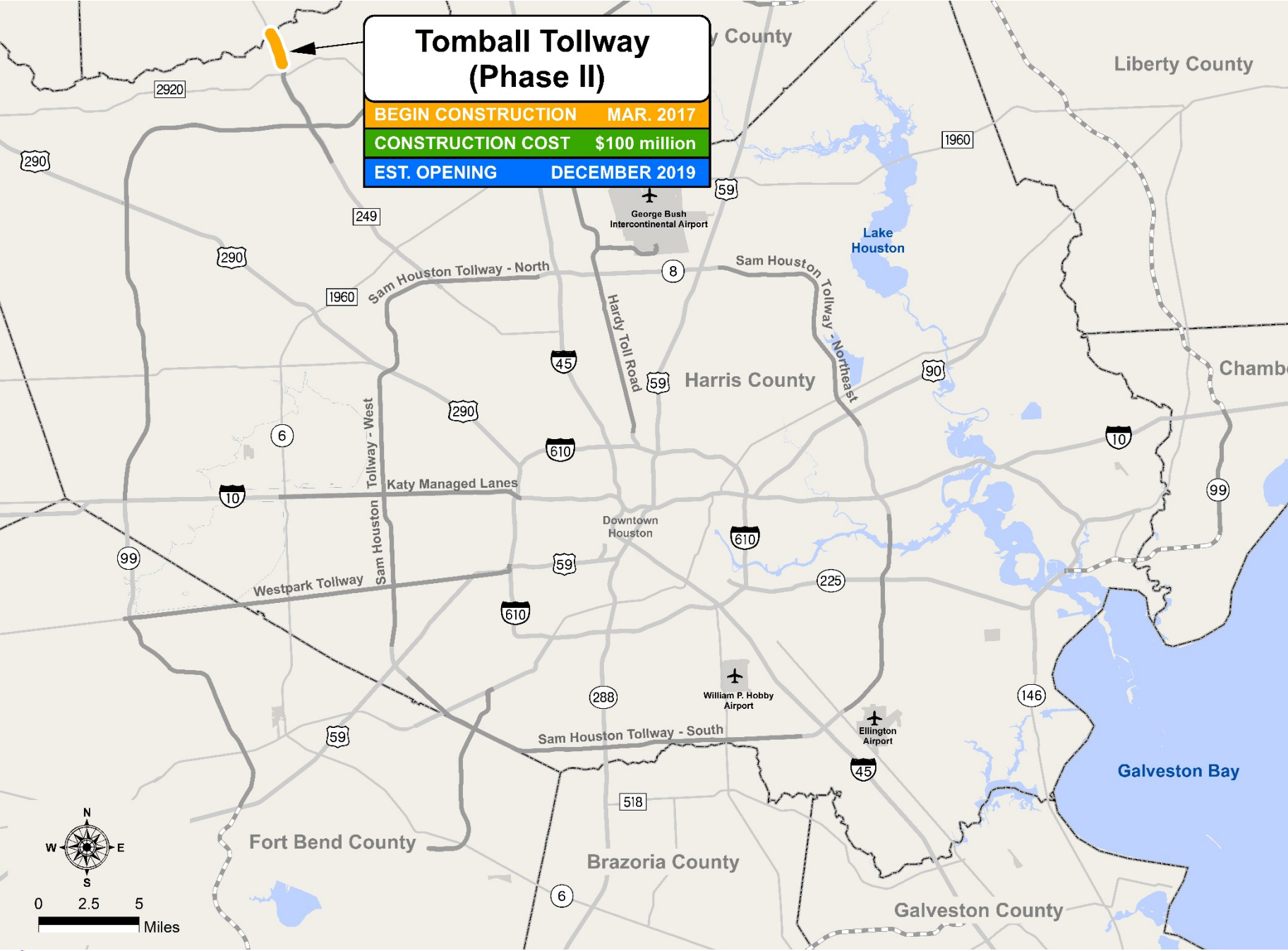
HARRIS COUNTY TOLL ROAD AUTHORITY

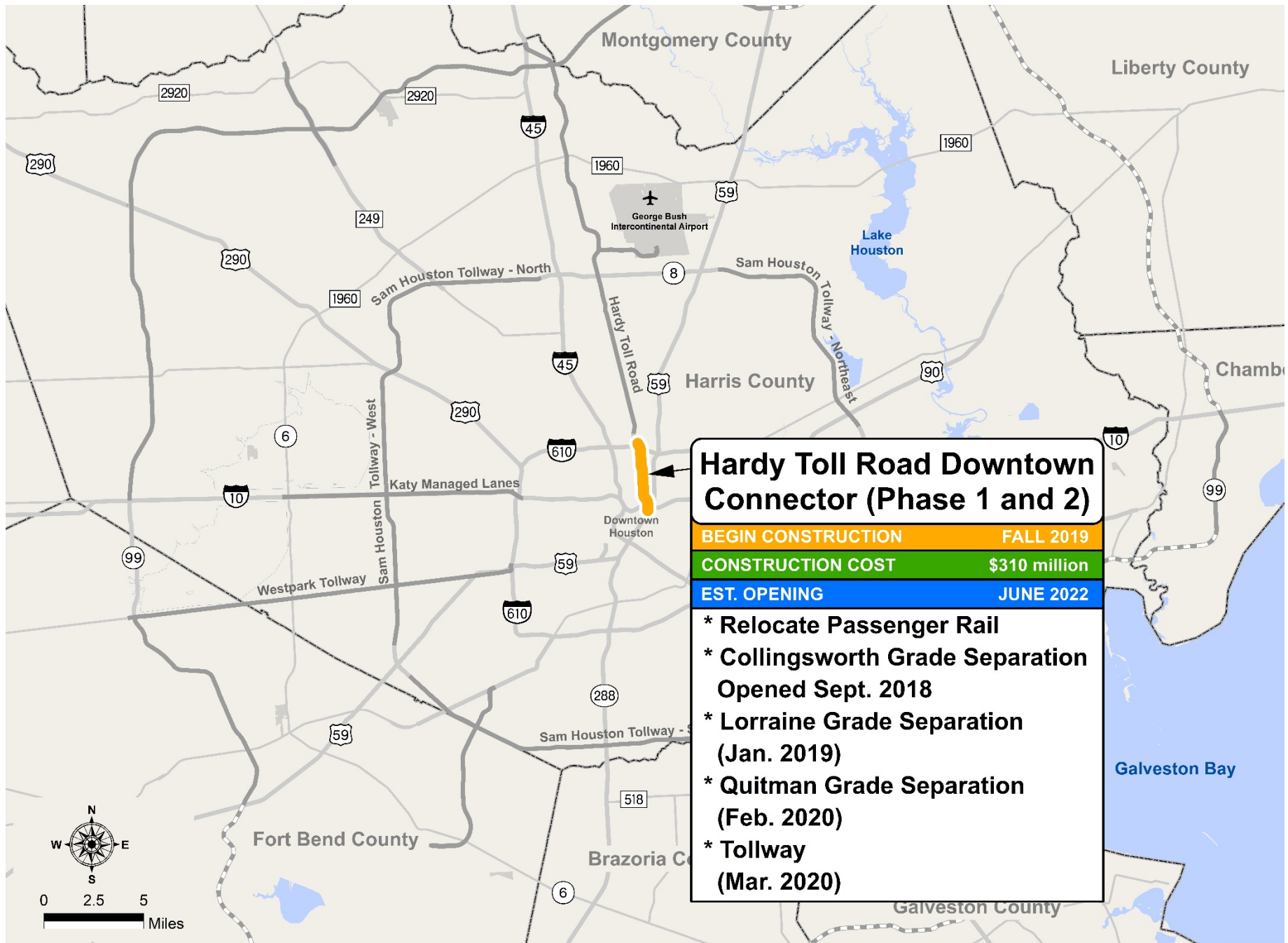
Capital Improvement Program - (2018 - 2023)

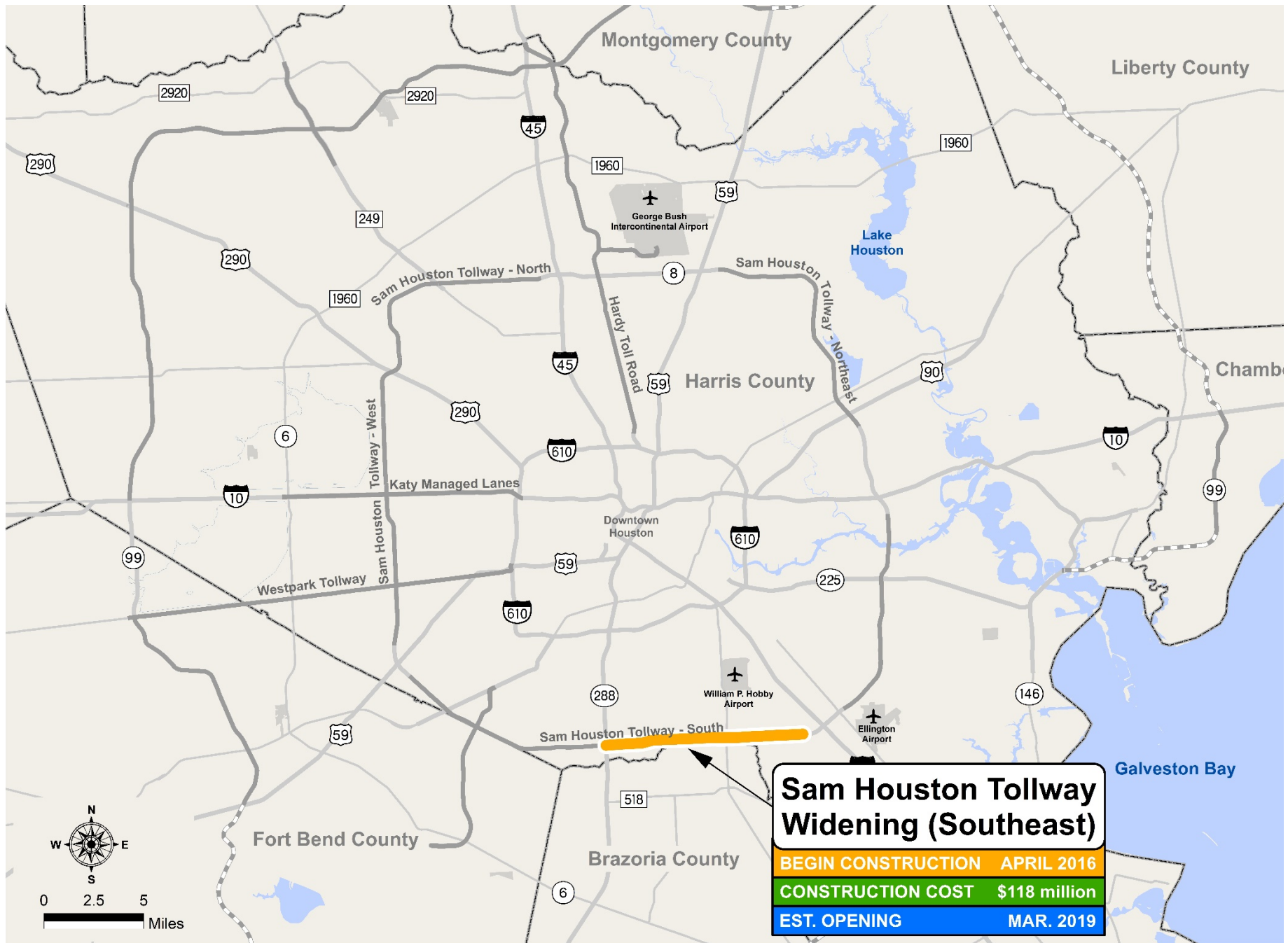


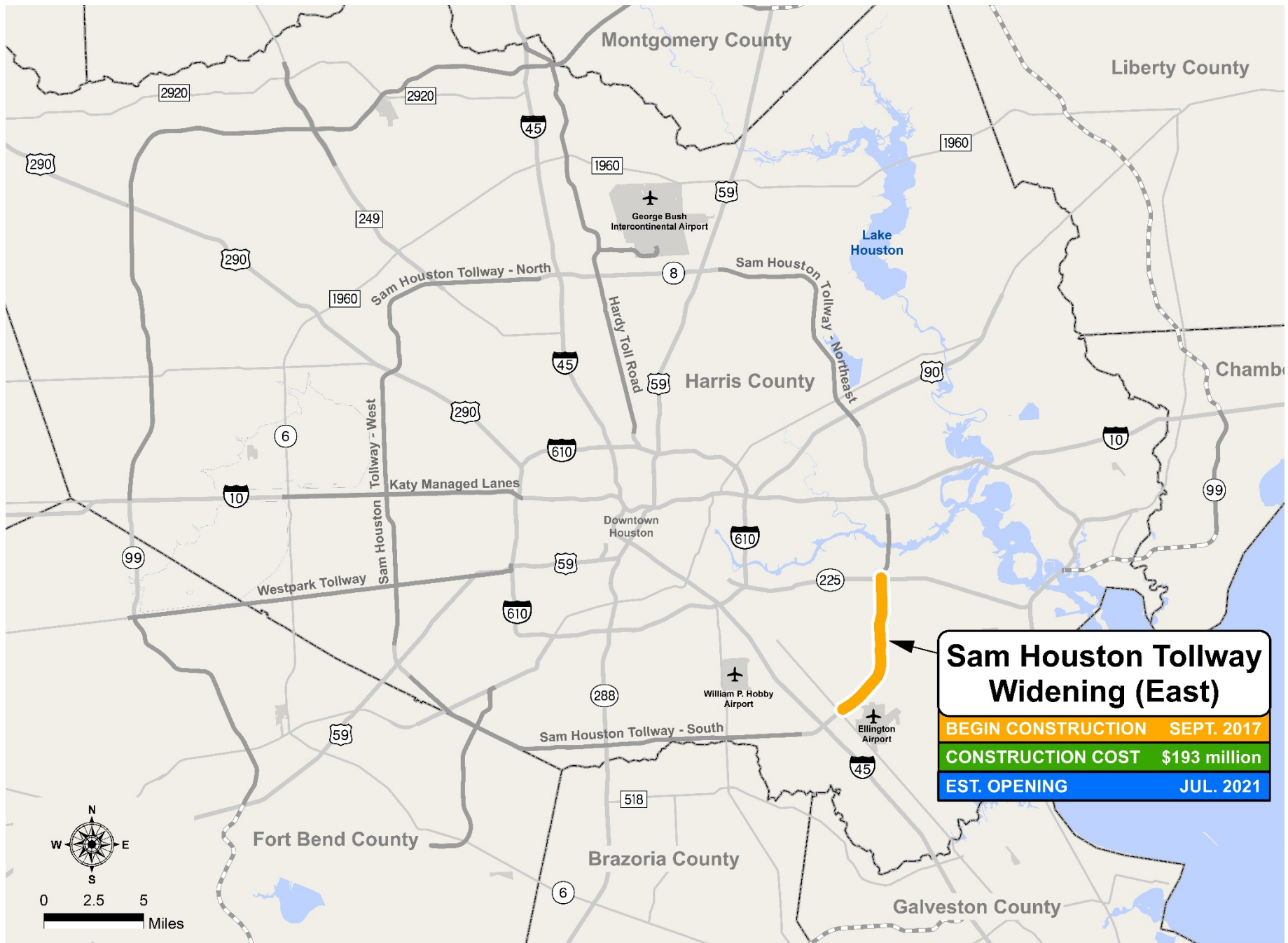
**Tomball Tollway
(Phase II)**

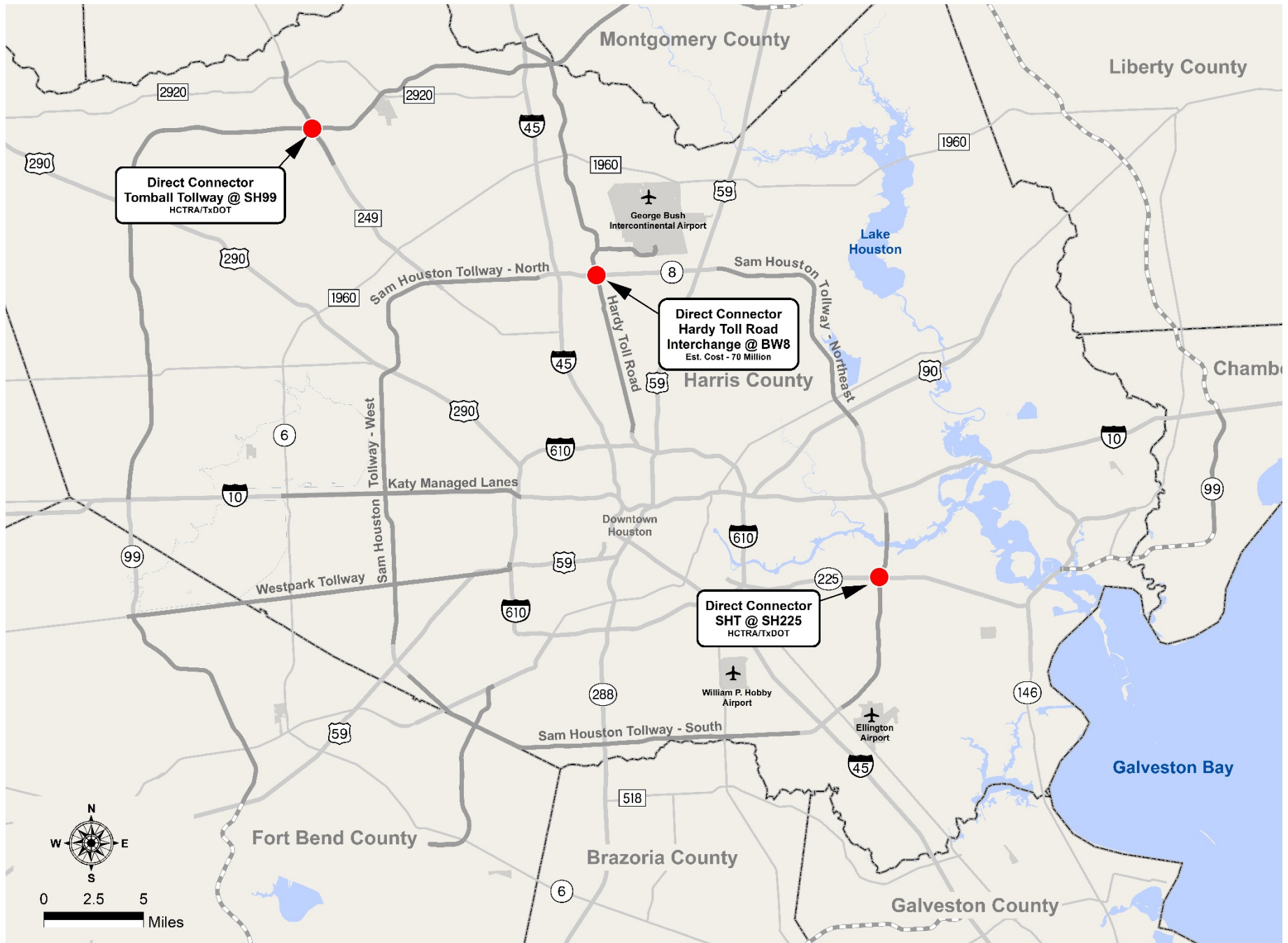
BEGIN CONSTRUCTION	MAR. 2017
CONSTRUCTION COST	\$100 million
EST. OPENING	DECEMBER 2019







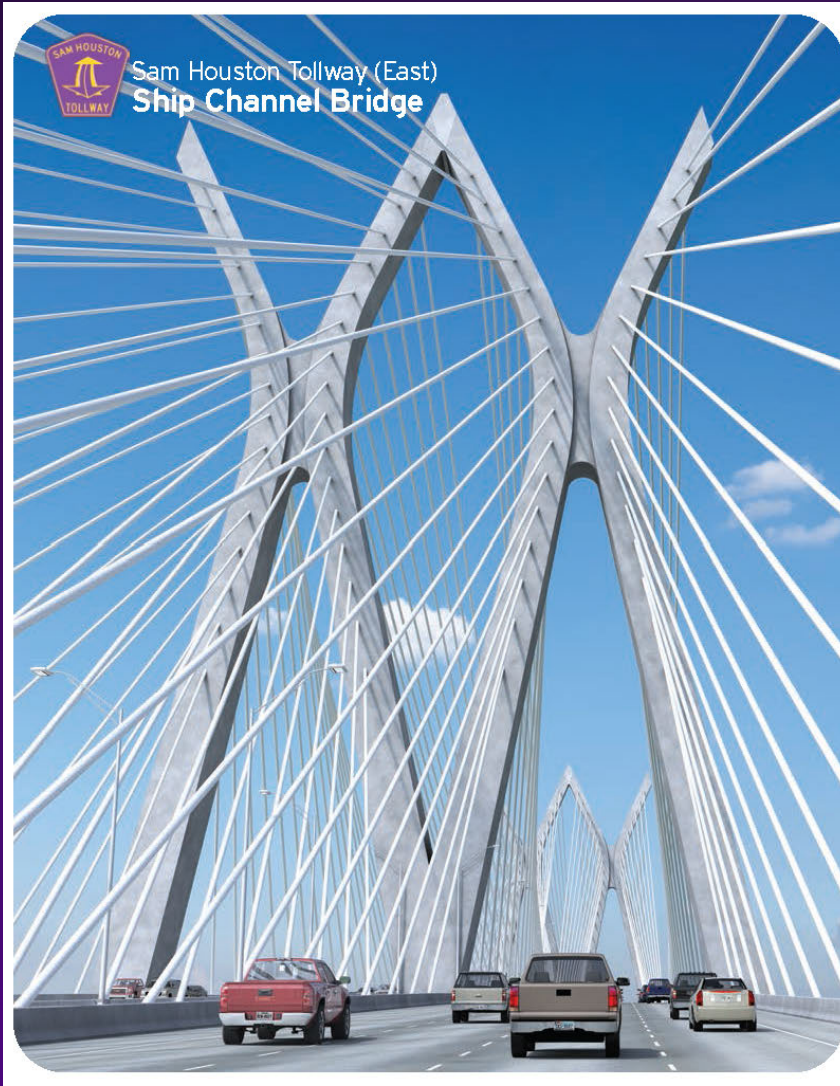




Ship Channel Bridge - Day



Ship Channel Bridge Stats



Tower Height 514'

Vert. Clearance 175'

Main Span Length 1320'

Lanes 8

Shoulders 4

Concrete 259,425 cu yd.

Cable Stayed 19.5 Miles

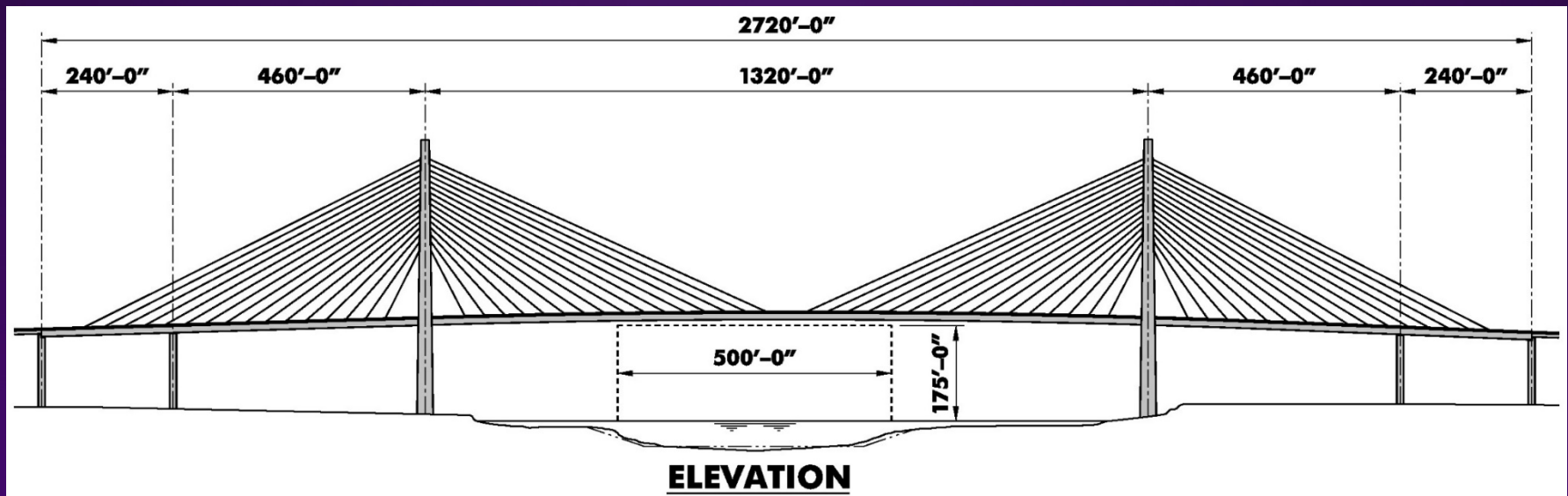
Cost \$962 Million





Ship Channel Bridge - New Bridge Erection

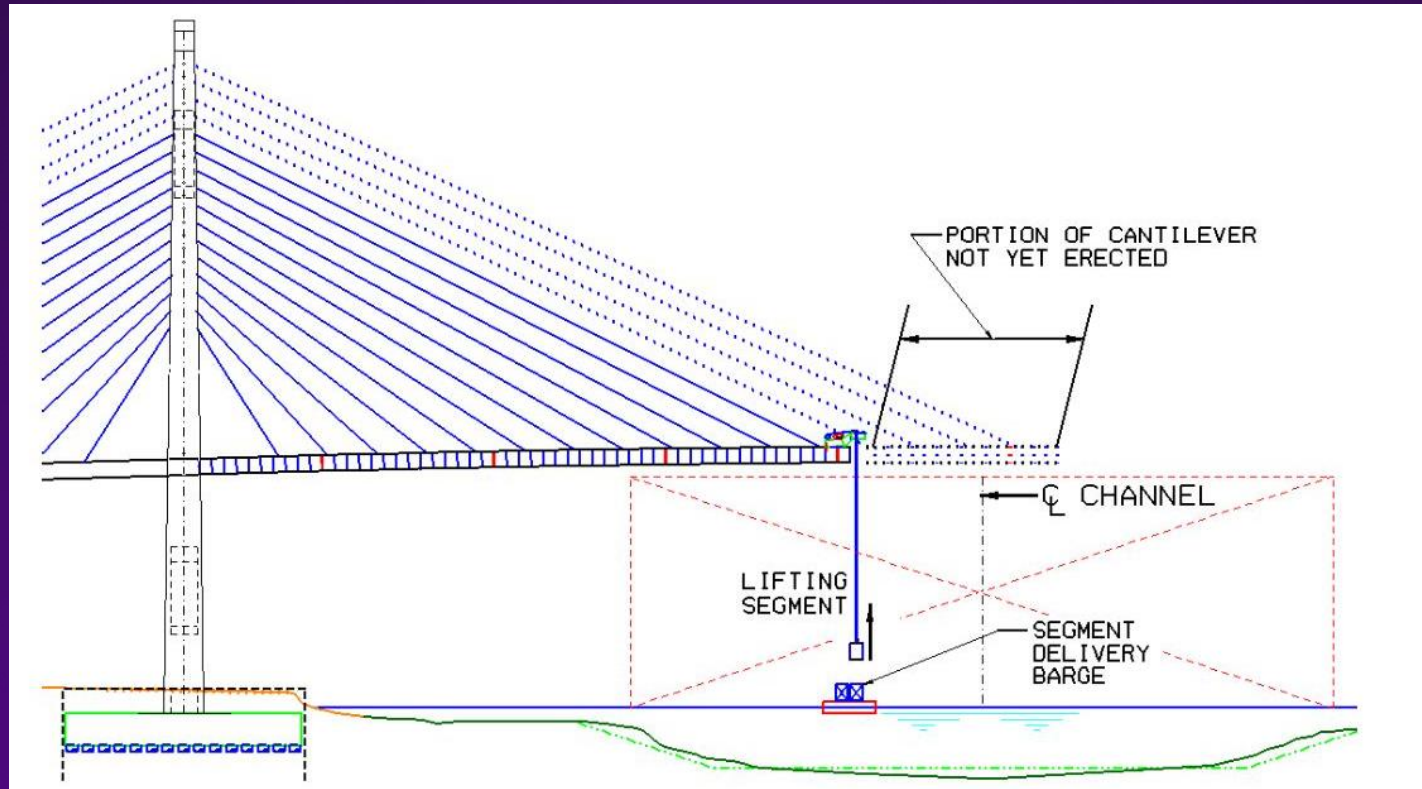
MAIN SPAN ERECTION



Ship Channel Bridge - New Bridge Erection

MAIN SPAN ERECTION

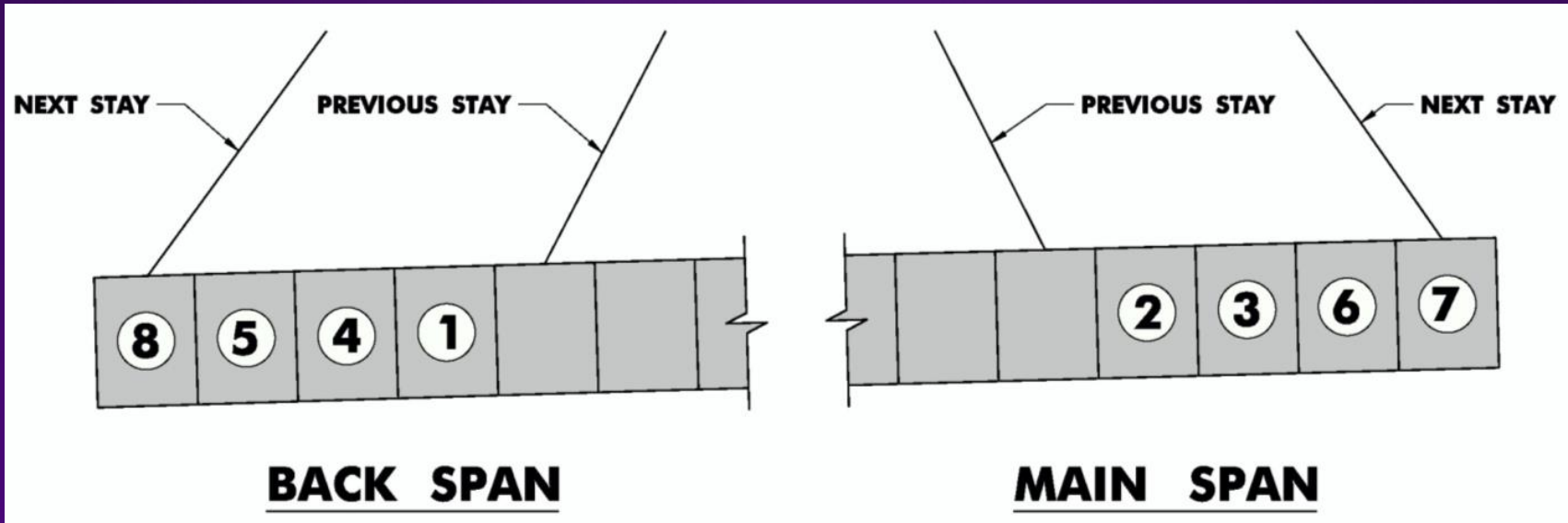
- The only construction operation for the new bridges requiring channel closures will be lifting of the precast segments located within the closure window.



Ship Channel Bridge - New Bridge Erection

MAIN SPAN ERECTION

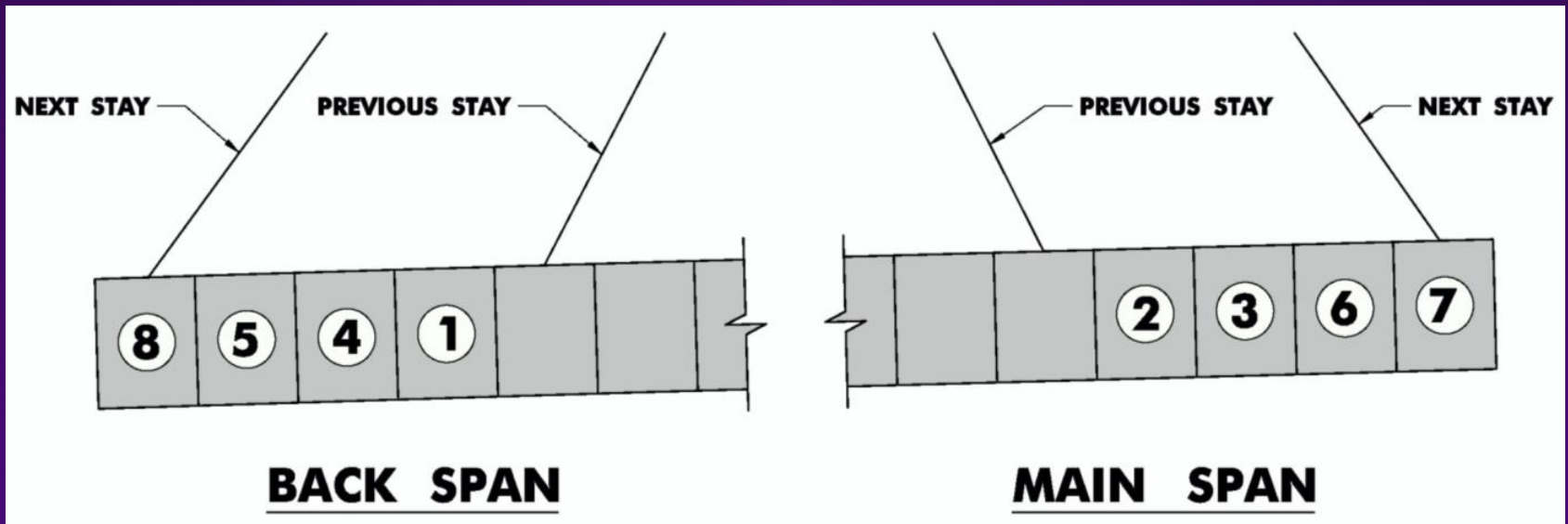
- 4 segments between stays
- 16 segments to be erected per cycle
 - both north and south pylons working
- Commences after initial stay cable stressing



Ship Channel Bridge - New Bridge Erection

MAIN SPAN ERECTION

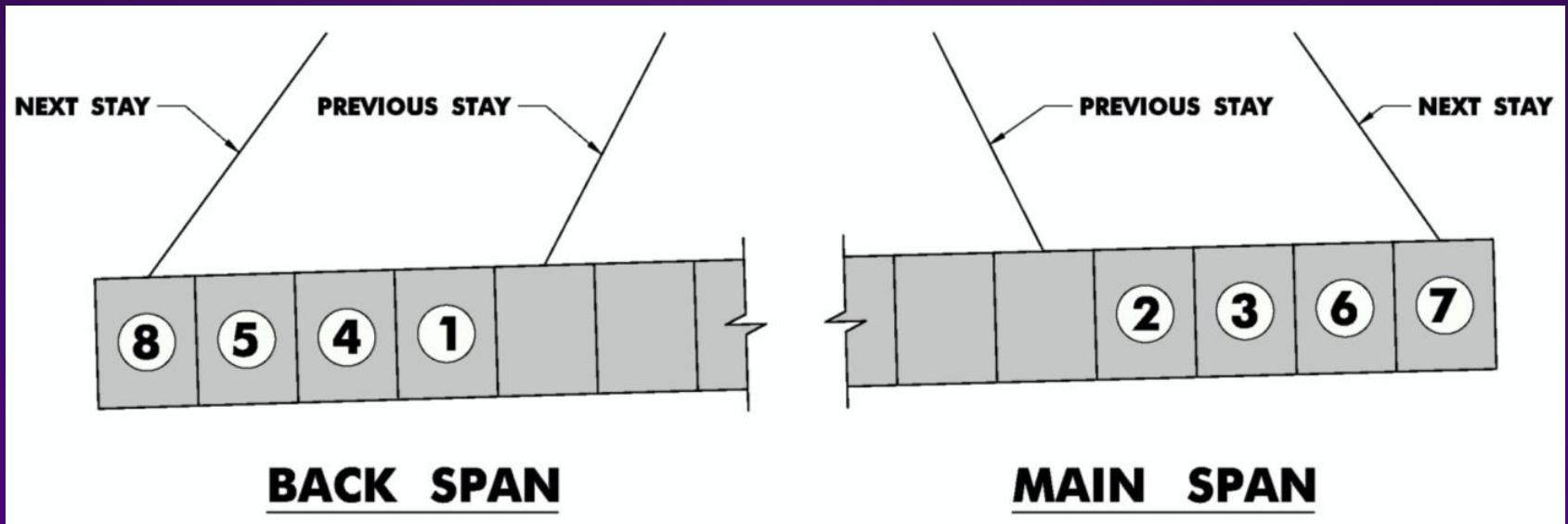
- a) Erect #1 segment in back span
- b) Erect #2, #3 segments in **main span (Channel closure)**
- c) Erect #4, #5 segments in back span



Ship Channel Bridge - New Bridge Erection

MAIN SPAN ERECTION

- d) Erect #6, #7 segments in **main span (Channel Closure)**
- e) Erect #8 segment in back span
- f) Stress stay cables after #8 segment erected



Ship Channel Bridge - New Bridge Erection

MAIN SPAN ERECTION

- The safest way to lift the segments for this project will be by use of beam and winch methods.
- Segments are lifted directly vertical from the barge and are thus only handled once, by only one piece of equipment, while on site.



B&W lift of Segment Over
Shipping Channel, Tampa
Florida



B&W lift of Segment Over
Shipping Channel,
Richmond Va.



Ship Channel Bridge Construction Photos

North Approach (08-2018)



Ship Channel Bridge Construction Photos

North Approach (08-2018)



Ship Channel Bridge Construction Photos

North Approach (08-2018)



Ship Channel Bridge Construction Photos

North Approach (08-2018)



Ship Channel Bridge Construction Photos

North Approach (08-2018)

