



February 24, 2017



# Nice Bridge

Preservation and Replacement Project



Maryland  
Transportation  
Authority

# Maryland Transportation Authority

## The Governing Body of the MDTA?



- A group of eight citizens appointed by the Governor and confirmed by the Maryland Senate serves as the policy-setting, decision-making, and governing body.
- Maryland's Secretary of Transportation, Pete K. Rahn serves as the MDTA's Chairman.
- Membership represents the geographic regions of all toll facilities
- The MDTA is an independent State agency that acts on behalf of but is separate from the Maryland Department of Transportation.

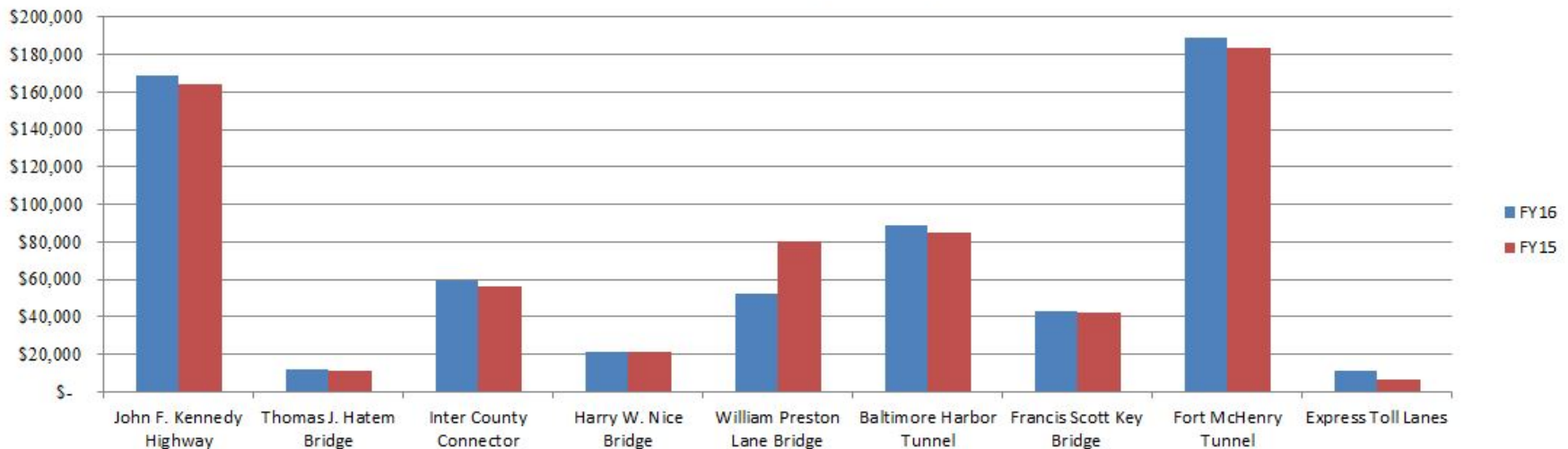
# Maryland Transportation Authority

## How is MDTA Financed?



- The MDTA is a non-budgeted agency that relies solely on revenues generated from its transportation facilities.
- Toll revenues are pooled to cover financing, construction, operating, maintenance, and law-enforcement costs.

Toll Revenue by Facility

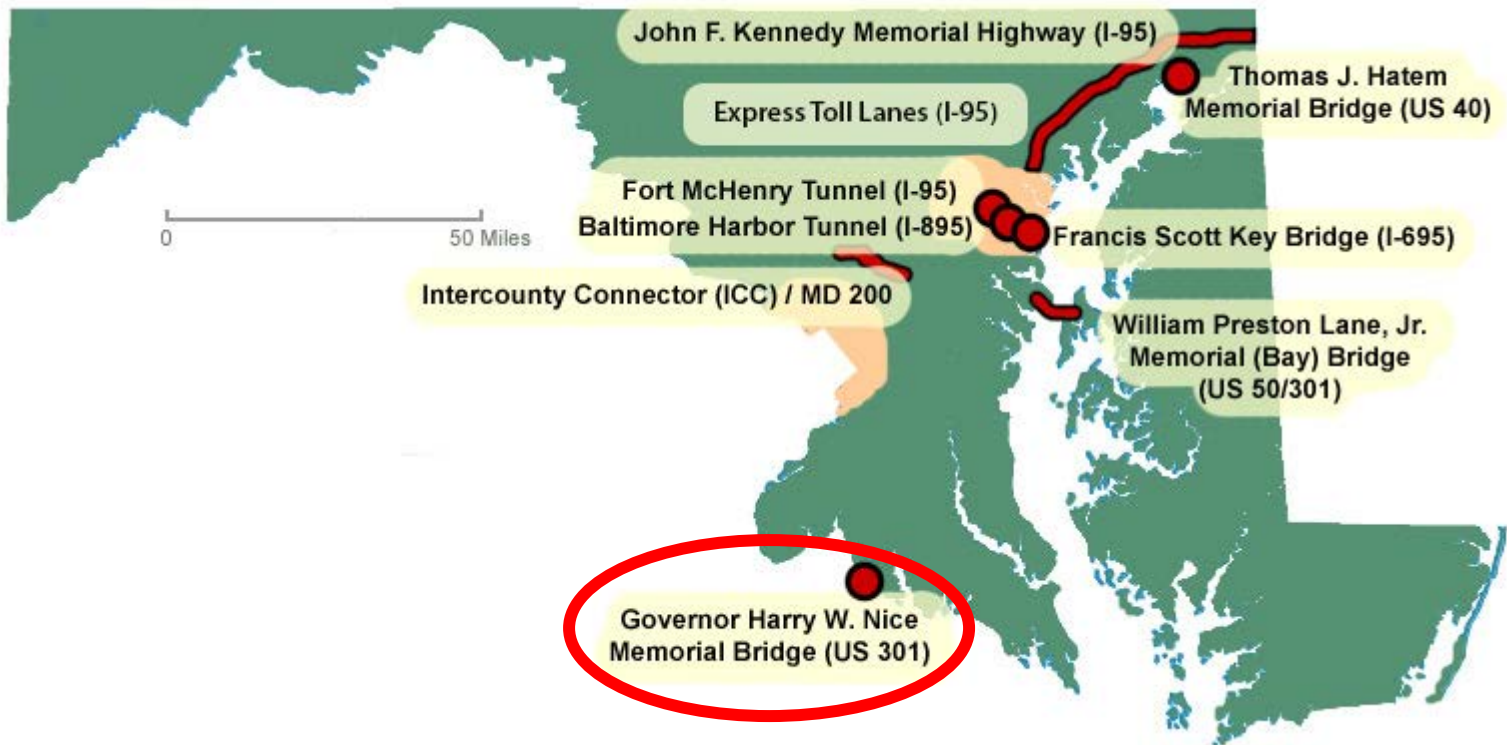


# Maryland Transportation Authority

## MDTA's Tolling Facilities



- Since 1971, the MDTA has been responsible for constructing, managing, operating and improving the State's toll facilities, as well as for financing new revenue producing transportation projects.



# Project Background

## Nice Bridge Fast Facts



- Construction dates: March 1938 – December 1940
- Original cost to construct: \$5 million
- Named in 1968 for Maryland Governor Harry W. Nice
- Length of entire facility (including bridge and approaches): 2.2 miles
- Bridge length: 1.9 miles of two-lane bridge
- CY 2015 traffic volume: 6.6 million vehicles (average annual daily traffic: 18,600)
- FY 2016 toll revenue: \$21.0 million



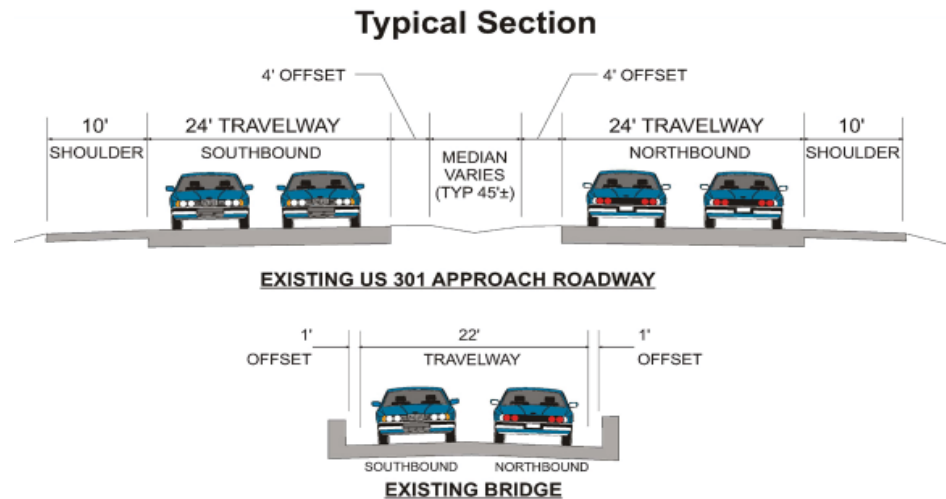
# Project Background

## Purpose & Need



### MOST SIGNIFICANT NEEDS FOR BRIDGE REPLACEMENT:

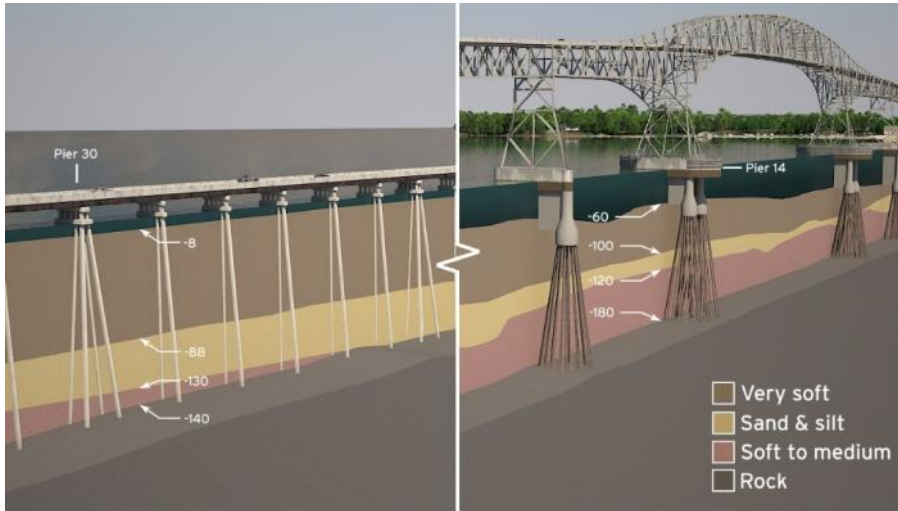
- From NEPA Documents:
  - Geometric inconsistencies
  - Safety issues
  - Traffic capacity limitations
  - Traffic impacts due to incidents, maintenance & wide-loads
- Life Cycle Cost Analysis (LCCA)
  - Major rehab needed in the near future will be very problematic, and a cost driver in the LCCA timing
  - Detour is 115 miles





# Actions to Date

## Existing Site Investigations



### Geotechnical:

- **Borings** - Field work completed May 2016, Geotechnical Data Report compiled for new bridge design
- **Test Piles** - Accomplished small test pile program in February 2016 (2 – 24" steel pipe piles)

### MEC/UXO Investigation

- 2 dive investigations completed. 151 anomalies investigated. **No UXO indicated**; mostly construction, fishing debris, crab pots

### Utility Investigation:

- Completed level 'C' Utility Mosaic Basemap
- Confirmed AT&T under river crossing well clear of proposed new bridge location

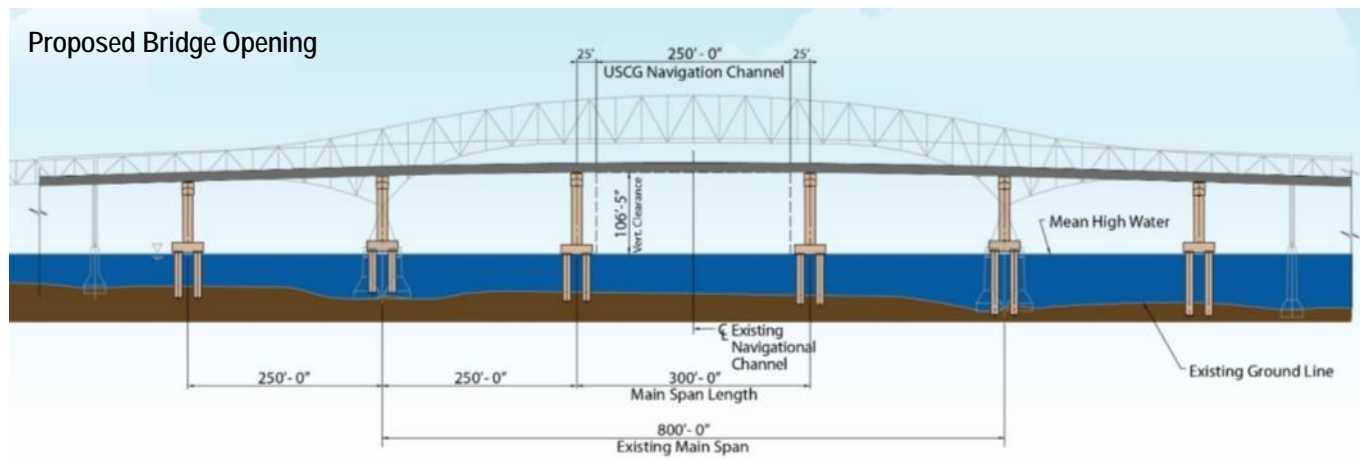
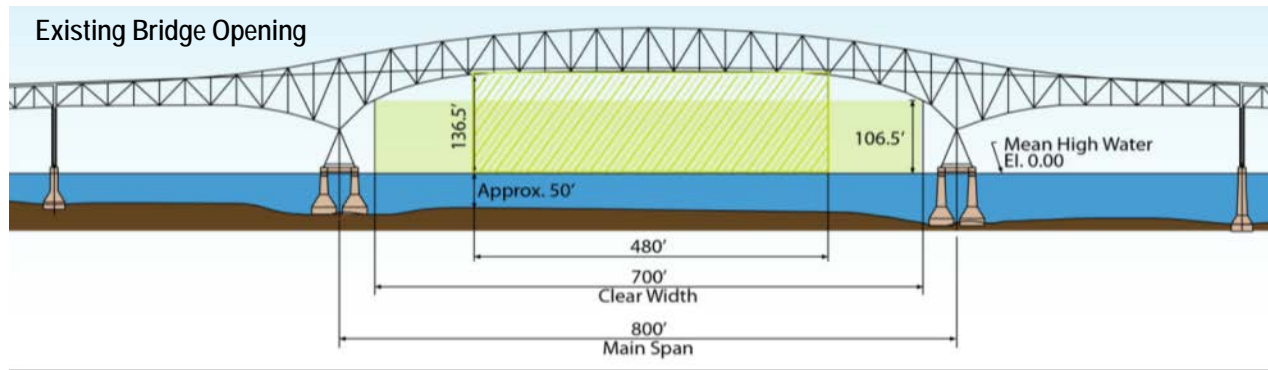
# Actions to Date

## US Coast Guard Coordination



Maryland  
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### PROPOSED CLEARANCE CHANGES





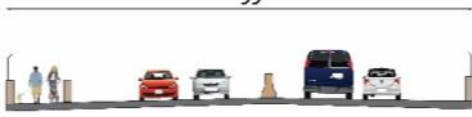
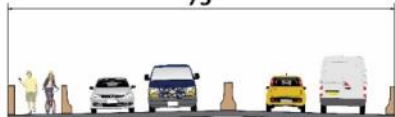
# Actions to Date

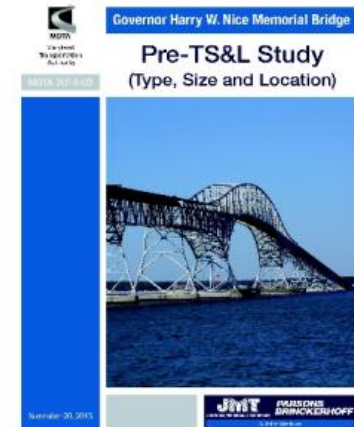
## Practical Design



### BRIDGE DESIGN

- Several alternatives have been evaluated to reduce the horizontal and vertical clearances, as well as the types and sizes of structures.

	NEPA Preferred Alternative Mod. 7A - FHWA CER	"Practical Design" <i>With</i> Ped/Bike Path
	99'	73'
	 NEPA P.A.	 PRACTICAL DESIGN
2016\$*	\$839 million	\$608 million – \$675 million
YOE 2020\$**	\$994 million	\$724 million – \$805 million
YOE 2028\$**	\$1,234 million	\$904 million – \$1,006 million



\* Cost estimates have been developed in 2016 (FY17) dollars.

\*\* Dates in the Year of Expenditure (YOE) dollar cost estimates are the start of construction.  
Cost estimates include PE, ROW, and CO.

# Actions to Date

## Right-of-Way



### RIGHT-OF-WAY ACQUISITION STATUS

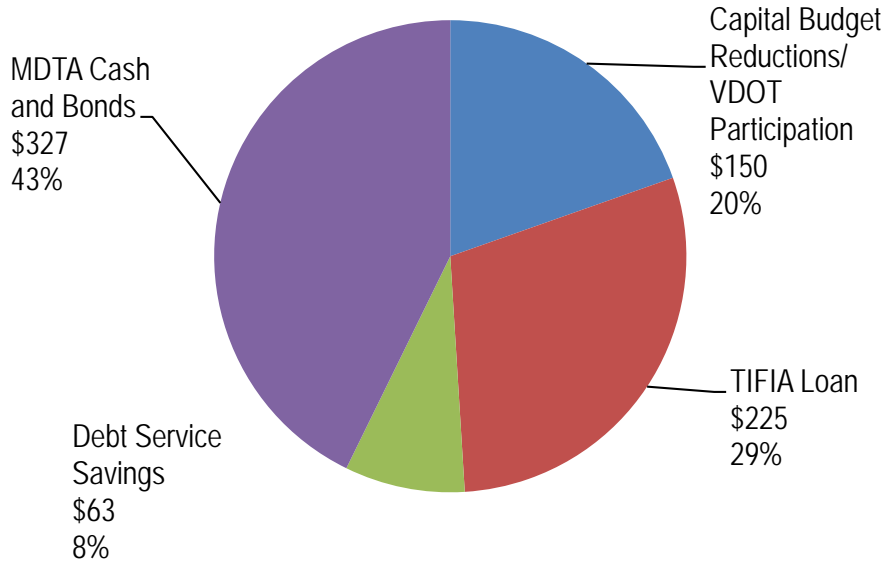
	Property Owner	Status	Acquisition Area (In Acres) Fee Simple
Maryland Side	BRC, LLC (Aqua-Land Marina)	ROW plats approved, Appraisals completed, Negotiations underway	7.153
	Mundi Enterprises Inc.	ROW plats approved, Appraisals completed, Negotiations underway	0.500
	Bryan Road Corporation	ROW plats approved, Appraisals completed, Negotiations underway	1.047
Virginia Side	King George County, Virginia	ROW plats prepared, Appraisals underway	6+
	Virginia Tourism Authority	ROW plats prepared, Appraisals underway	2.115
	Virginia 4(f) & 6(f) Replacement Parkland sites - locations being investigated	ROW plats prepared, mitigation properties search underway	13+/-

# Project Funding



## NICE BRIDGE FUNDING PLAN

\$ in Millions



**Project Cost = \$765 million (\$61 million currently funded)**

## Project Cost

Total Project Cost	\$765 million
Currently Funded	\$61 million
<b>Net Project Cost</b>	<b>\$704 million</b>

## Project Funding

Paygo Cash	\$335 million (44%)
MDTA Debt	\$430 million (56%)
<b>Total</b>	<b>\$765 million</b>

# Delivery Method – Design-Build



## DESIGN-BUILD ADVANTAGES

- Consistent with nation-wide industry recent trends for comparable projects.
- Firm-fixed price contract with early pricing works well with required FHWA funding obligations and financial plan for TIFIA loan, etc.
- Pre-TS&L concepts showed that a number of design options are cost comparable, allowing for cost efficiencies from a Contractor customized design.
- Alternative Technical Concepts offer innovation opportunities prior to award.
- Based on a Start-of-Construction date of FY 2020, DB deemed to be best method to meet the schedule
- No specific site characteristics presenting significant risks of unknowns (e.g., UXO low risk, boring data reasonably consistent, no HAZMAT identified, etc.)
- No anticipated 3rd Party agreements requiring upfront full design

# Approximate Project Schedule



## OVERVIEW



- 2016 (late): Funded for construction
- 2018 (late): Request for Qualifications
- 2019 (early): RFP to be advertised
- 2019 (late): Notification of award
- 2020: Construction to begin
- 2023: New bridge open to traffic
- 2024: Demolition of old bridge begins



# Next Steps



- Progress right-of-way acquisition
- Continue working with Coast Guard on clearance changes
- Re-engage FHWA for coordination of NEPA reevaluation
- Develop detailed schedule with milestones
- Begin procurement document development:
  - Preparation of project request for qualifications (RFQ)
  - Project performance specifications
  - Preparation of project request for proposals (RFP)
- Develop indicative and directive plans for RFP
- Continue to work with the Build America Bureau on application process for TIFIA loan for the project

