



January 23 – February 3
Oakland, CA

PR Bridge Program



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Puerto Rico Bridge Program

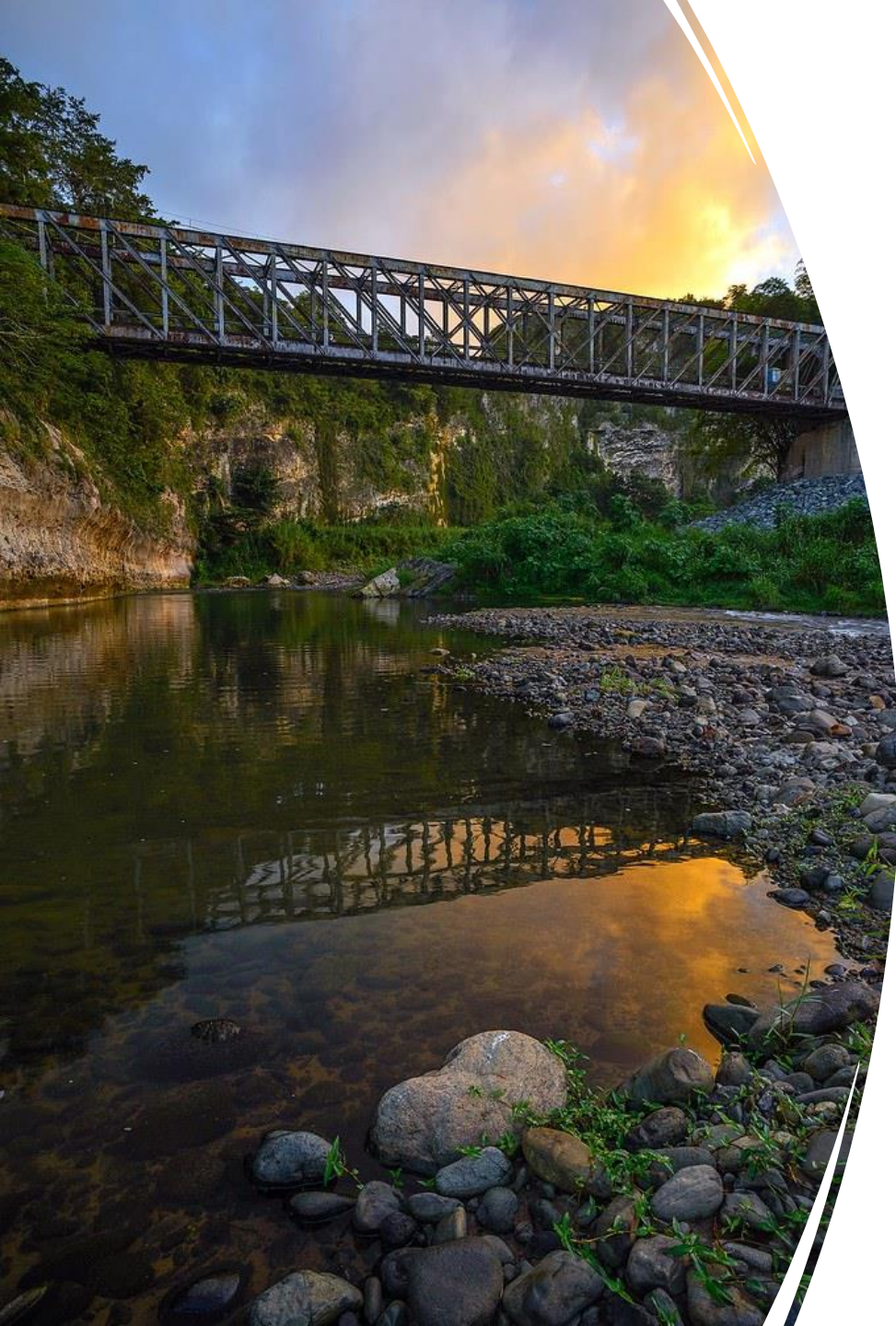
PRHTA created the *Bridge Study & Evaluation Office* in 1970.

- Renamed it *Bridge Engineering Office* in 2004
- Currently Bridge Inventory Management Office

PRHTA is the responsible entity for the compliance of the:

- inventory,
 - inspection standards and procedures
- of all structures included in the National Bridge Inventory (NBI) of Puerto Rico.

This includes state owned and locally owned bridges.



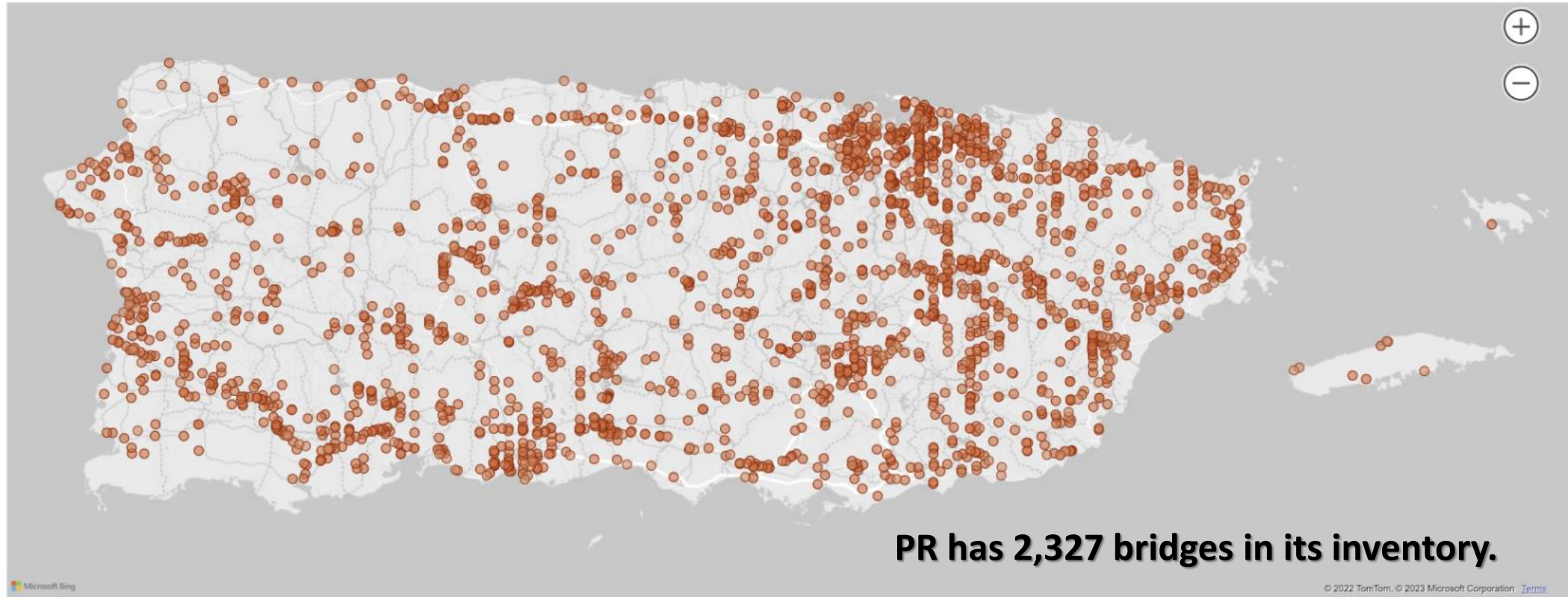
Puerto Rico Bridge Program

The bridge safety inspections are to be conducted in compliance with:

- National Bridge Inspection Standards (NBIS), as established in the Code of Federal Regulations Title 23, Part 650, Subpart C (23 CFR 650.3);
- The Manual for Bridge Evaluation (MBE), First Edition, 2008, AASHTO, as incorporated by reference in 23 CFR §650.317;
- and the Puerto Rico Highway and Transportation Authority's (PRHTA) Standard Operating Procedure: Bridge Safety Inspection Manual.



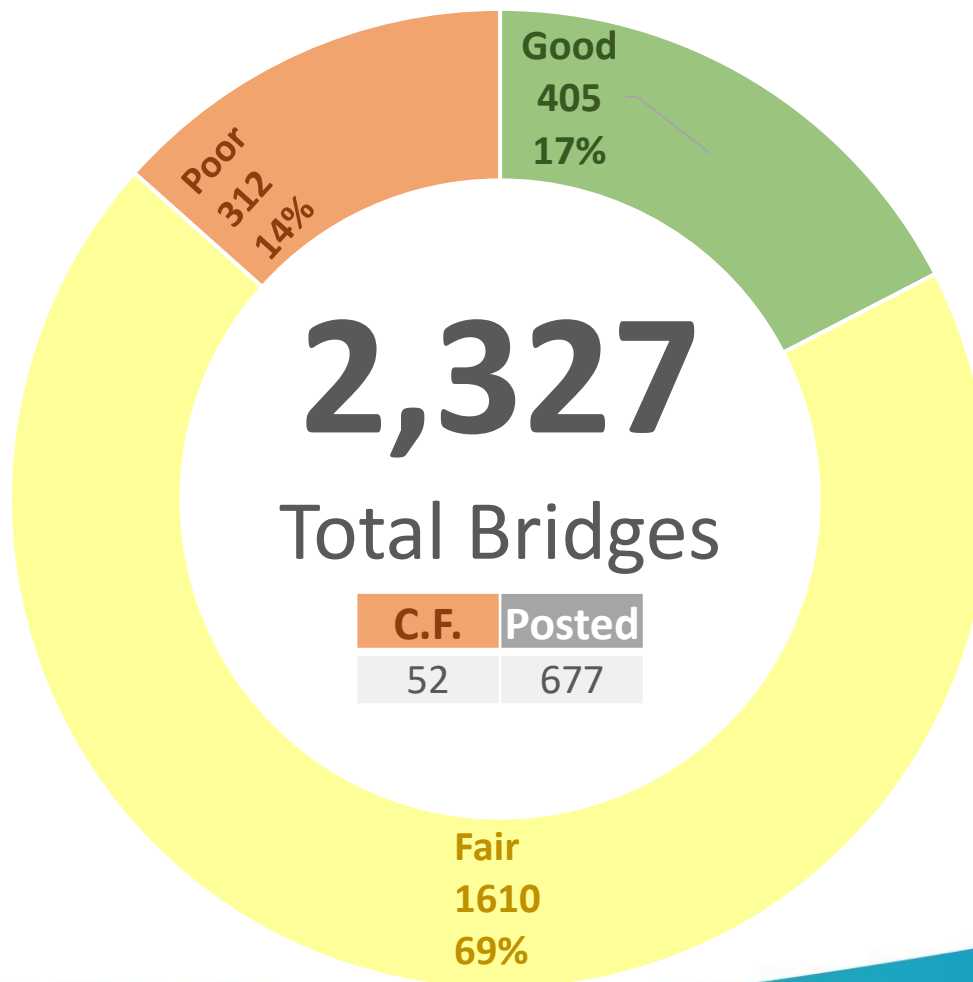
Puerto Rico Bridge Inventory





Bridge Inventory Summary

NBI Condition Ratings		
7-9	Good Condition <ul style="list-style-type: none"> Routine maintenance 	
5-6	Fair Condition <ul style="list-style-type: none"> Preventative maintenance or minor rehabilitation 	
4	Poor Condition	Poor <ul style="list-style-type: none"> Major rehabilitation or replacement
2-3		Serious or Critical <ul style="list-style-type: none"> Emergency repair or high priority major rehabilitation or replacement Unless closely monitored it may be necessary to close until corrective action can be taken.
0-1		Imminent Failure or Failed <ul style="list-style-type: none"> Major rehabilitation or replacement Bridge is closed





Softwares

- Bridge Management
 - PONTIS Bridge Management System
 - Also known as **AASHTOWare Bridge Management**
 - Inventory & Appraisal documentation
- Bridge Rating
 - WYOMING DOT: BRASS Suite of Programs
 - ASR, LFR and LRFR ratings
 - SAP2000, Mathcad

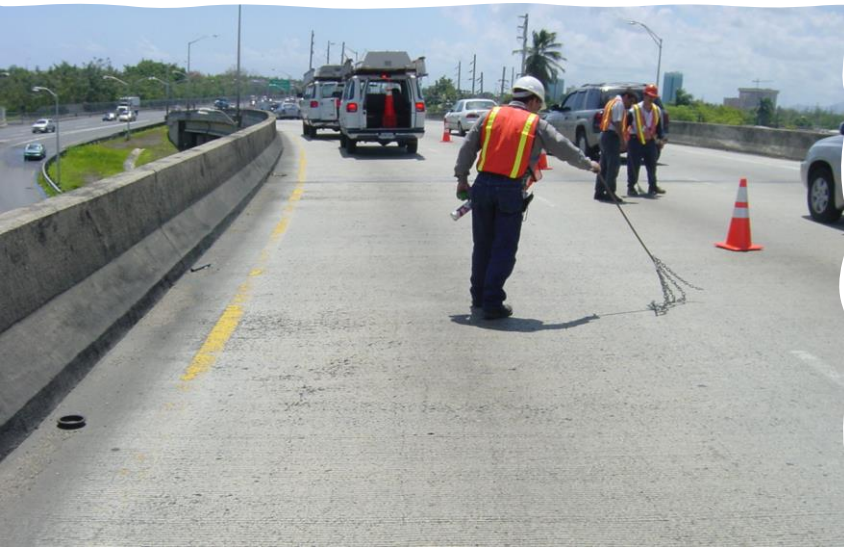




Bridge Inventory Management Office

The bridge safety inspections are categorized as:

- Initial Inspection
- Routine Inspection
- Flood Monitoring Inspection
- Fracture-critical Inspection
- Underwater Inspection
- Load Rating Analysis
- Bridge Testing



Underwater Inspection



“Snooper”



Instrumentation







BIL Bridge Formula Program

- The BIL allocates \$45M annually for the Bridge Formula Program: \$38,250,000 for Main bridges, and \$6,750,000 for Off-system bridges.
- These funds are eligible for bridge replacement, rehabilitation, preservation, protection, or construction projects on federal-aid highways.
- Inspection and Load Rating and Posting of highway bridges are not eligible projects under the BFP.
- Off-System Bridges have a Federal share of 100%.



THANK YOU!