

Bridge Group Overview David Benton P.E. Assistant State Bridge Engineer-Design Service



Bridge Group Functions

Group Manager – Dave L. Eberhart

- •Bridge Design Service
- Bridge Preservation Service
- Geotechnical Service

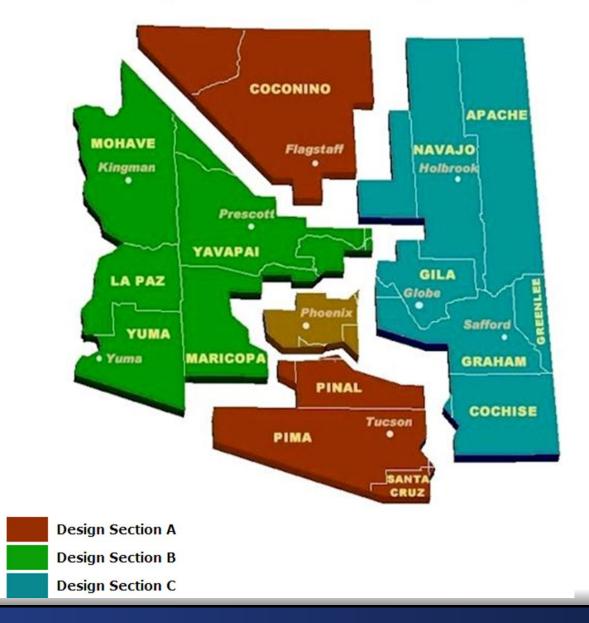


Bridge Design Service

- Bridge Design Section A
 - Section Leader Mr. Bill Downes
- Bridge Design Section B
 - Section Leader Mr. Noon Viboolmate
- Bridge Design Section C
 - Section Leader Mr. Rafe Davis
- Bridge Standards Engineer
 - Mr. Amjad Alzubi



Design Sections' Areas of Responsibility



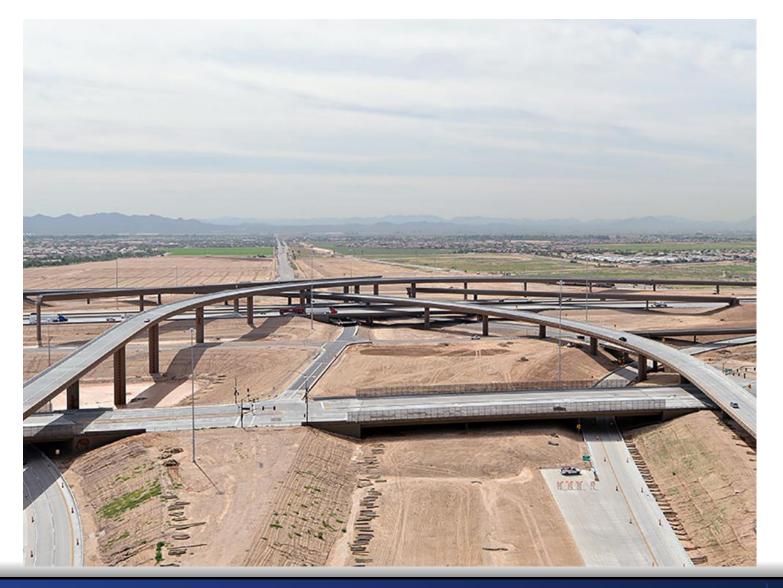


Bridge Design Service

- Scope bridge preservation projects
- In-house bridge design
- In-house transportation structure design
- Review of consultant design plans and specs
- Provide construction support
- Develop and update bridge design guidelines, standards and construction specifications



I-10/303L TI Phase I





Bridge Preservation Service Manager - Mr. Pe-Shen Yang

- Bridge Inspection Section
 - Section Leader Mr. Peng Chen
- Bridge Management Section
 - Section Leader Mr. Henry Sung



Bridge Management Section

- Maintain Arizona's bridge inventory-Database Management
- Evaluate bridge repair, rehabilitation, and replacement needs for all state bridges
- Prioritize bridge preservation needs and projects
- Develop and maintain structural models for all bridges in the Arizona bridge inventory
- Perform bridge load capacity ratings
- Perform analysis and review of overweight vehicle permits
- Generate bridge evaluation reports for scoping docs



Bridge Sub-Programs

- ITEM 762XX
 - Bridge Replacement and Rehabilitation
- ITEM 714XX
 - Bridge Inspection, Deck Replacement and Scour Retrofit

Projects are nominated through the P2P process utilizing various bridge inventory and condition data from our bridge inspections.

On average \$60 million programmed each year from ADOT preservation funding.



Bridge Inspection Section

- Implement NBIS and NTIS in Arizona
 - National Bridge Inspection Standards
 - National Tunnel Inspection Standards
- Bridge inspection (initial, routine, in-depth, special, damage, emergency)
- Inspect State bridges
- Inspect Local bridges
- Oversight of 1 self-inspecting agency







Geotechnical Service Manager-Mr. Patrice Brun

- Geotechnical Design Section
- Geotechnical Operations



Geotechnical Design

- Develop & implement design guidelines & specifications
- Design and support the construction and maintenance of highway facilities—buildings, bridges, culverts, spillways, roadways, rock cuts, fill slopes, earth retaining structures
- Monitor and mitigate unstable slopes and embankments, rock fall sites
- Troubleshooting transportation facilities
 - You name it:

Pavement, weeping cracks, breaks, displacements, abandoned mines, sink holes, groundwater, earth fissures, faults, landslides and active subsidence zones







Geotechnical Operations

Geotechnical Field Operations
Conduct geotechnical field investigations
Monitor instrumented cut and fill slopes



US 89 Landslide









Any Questions?



