

ASP/ADOT



Catalina State Park



Homolovi State Park



Slide Rock State Park

2017–2021 Road Improvement Plan Summary

Partners in Excellence





THANK YOU!



Arizona State Parks appreciates the opportunity to share the Road Improvement needs of it's Parks to help ADOT better understand our immediate needs and challenges.



Arizona State Parks

By ADOT District



DISTRICT #1 – Maricopa County

- Joseph E. La Rue, Chairman
- Jack Sellers

PARK: Vulture Mountain



Arizona State Parks

By ADOT District



DISTRICT #2 – Pima County

- Michael S. Hammond

PARK: Catalina State Park



Arizona State Parks

By ADOT District



DISTRICT #3 – Cochise, Greenlee, Santa Cruz Counties

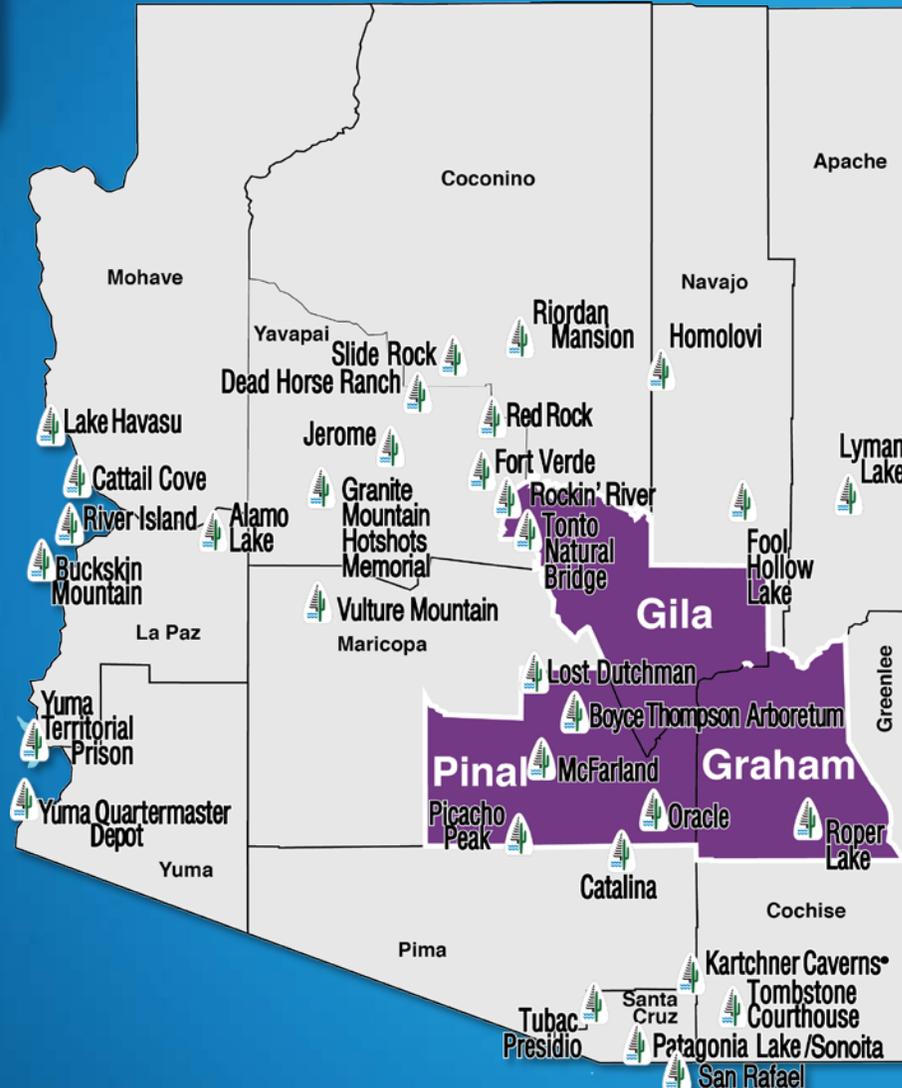
• William F. Cuthbertson

PARKS: Kartchner Caverns State Park, Tombstone Courthouse State Historic Park, Patagonia Lake State Park, San Rafael State Natural Area, Sonoita Creek State Natural Area and Tubac Presidio State Historic Park



Arizona State Parks

By ADOT District



DISTRICT #4 – Pinal, Gila, Graham Counties

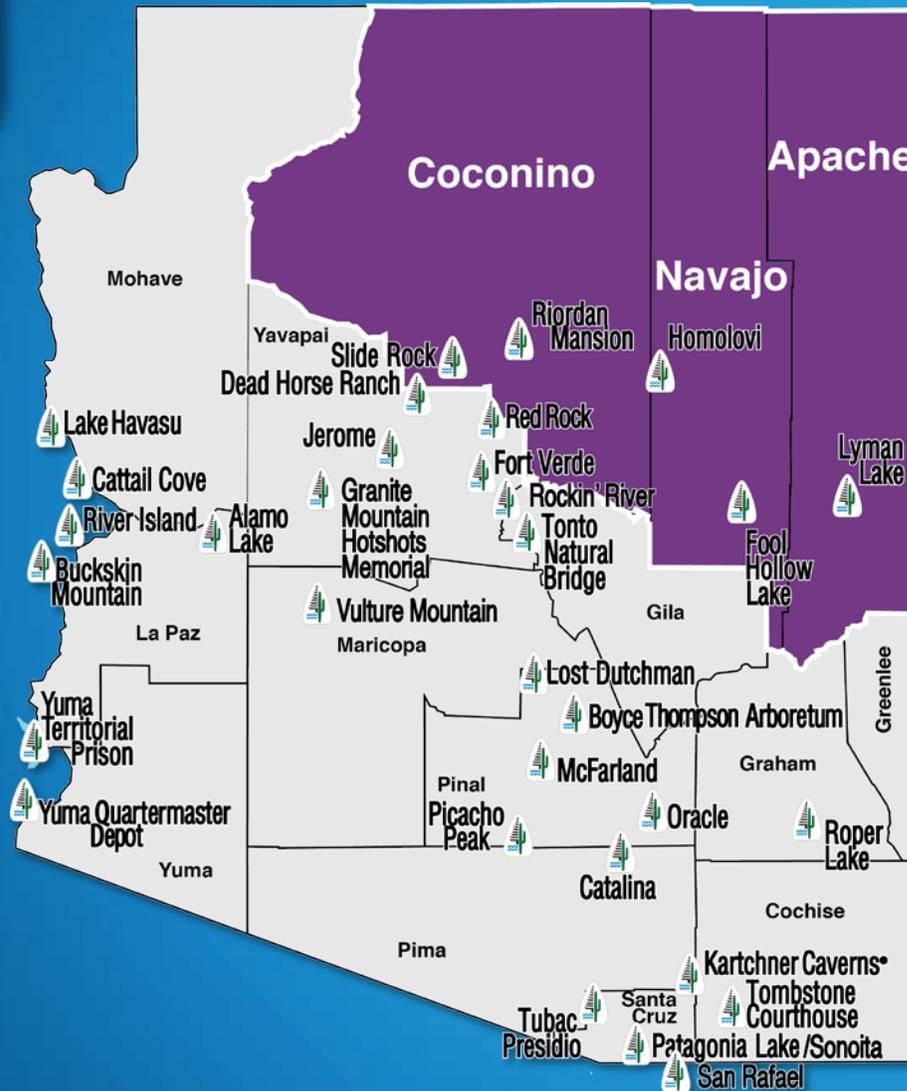
- Steve Stratton

PARKS: Boyce Thompson Arboretum State Park, Lost Dutchman State Park, McFarland State Historic Park, Oracle State Park, Picacho Peak State Park, Tonto Natural Bridge State Park and Roper Lake State Park



Arizona State Parks

By ADOT District



DISTRICT #5 – Apache, Navaho, Coconino Counties

• Arlando S. Teller

PARKS: Lyman Lake State Park, Homolovi State Park, Fool Hollow Lake, Riordan Mansion State Historic Park and Slide Rock State Park.



Arizona State Parks

By ADOT District



DISTRICT #6 – Yavapai, Yuma, Mohave, La Paz Counties

- Deanna L. Beaver, Vice-Chair

PARKS: Fort Verde State Historic Park, Jerome State Historic Park, Dead Horse Ranch State Park, Rockin' River State Park, Verde River Greenway, Red Rock State Park, Yuma Quartermaster Depot State Historic Park, Yuma Territorial Prison State Historic Park, Cattail Cove State Park, Lake Havasu State Park, Alamo Lake State Park, Buckskin Mountain State Park and River Island State Park.



Arizona Revised Statute 28-6538



Allows ADOT to provide up to \$5 million annually for the purpose of: ***“Acquisition, Construction, or Improvement of entry roads or roads in State Parks”*** from the Arizona Highway User Fund.

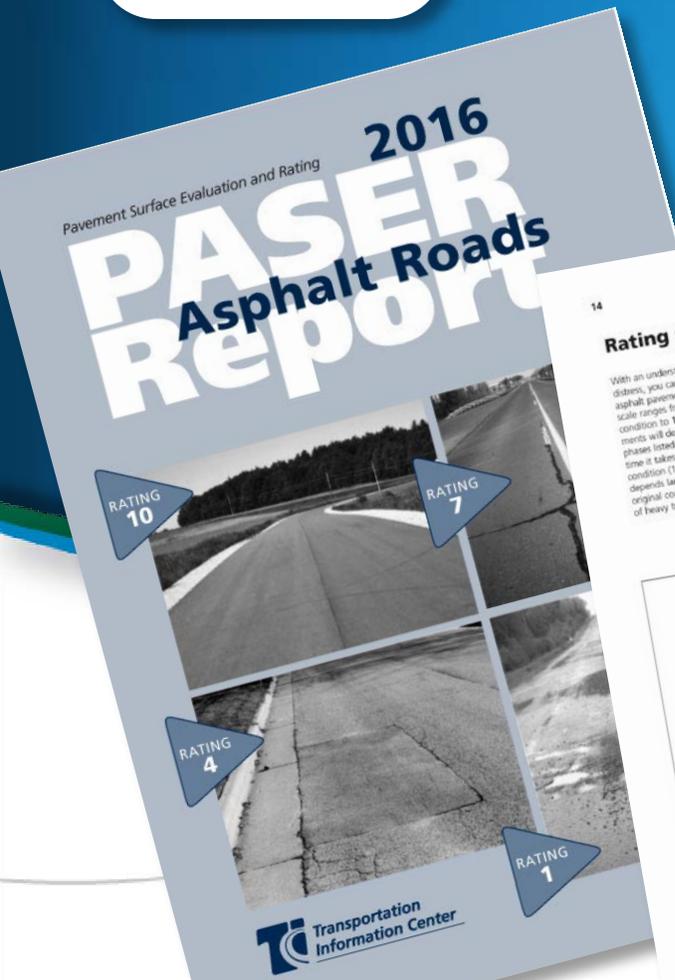


Asphalt Roads Analysis

Comprehensive study completed in 2016 to identify the needs & condition of Park roads.



Total: 3,430,187 sq. yds.



Rating pavement surface condition

14

With an understanding of surface distress, you can evaluate and rate asphalt pavement surfaces. The rating scale ranges from 10—excellent condition to 1—failed. Most pavements will deteriorate through the phases listed in the rating scale. The time it takes to go from excellent condition (10) to complete failure (1) depends largely on the quality of the original construction and the amount of heavy traffic loading.

Once significant deterioration begins, it is common to see pavement decline rapidly. This is usually due to a combination of loading and the effects of additional moisture. As a pavement ages and additional cracking develops, more moisture can enter the pavement and accelerate the rate of deterioration.

Look at the photographs in this section to become familiar with the descriptions of the individual rating categories. To evaluate an individual pavement segment, first determine its general condition: Is it relatively new, toward the top end of the scale? Or is it in very poor condition and at the bottom of the scale? Or somewhere in between? Next, think generally about the appropriate maintenance method. Use the rating categories outlined below.

Finally, review the individual pavement distress and select the appropriate surface rating. Not all pavements will **not** have all of the types of distress listed for any particular rating. They may have only one or two types.

RATINGS ARE RELATED TO NEEDED MAINTENANCE

Rating 9 & 10	No maintenance required
Rating 8	Little or no maintenance
Rating 7	Routine maintenance, crack/seal
Rating 5 & 6	Preservative treatments (sealcoat)
Rating 3 & 4	Structural improvement and/or
Rating 1 & 2	Reconstruction

In addition to indicating the surface condition of a road, a given rating also includes a recommendation for needed maintenance or repair. This feature of the rating system facilitates its use and enhances its value as a tool in ongoing road maintenance.

Rating system

Surface rating	Visible distress*	General condition
10 Excellent	None.	New construction
9 Excellent	None.	Recent construction
8 Very Good	No longitudinal cracks except reflection of paving joints. Occasional transverse cracks, widely spaced (40' or greater). All cracks sealed or tight (open less than 1/4").	Recent and Little or no required.
7 Good	Very slight or no raveling, surface shows some traffic wear. Longitudinal cracks (open 1/4") due to reflection or paving joints. Transverse cracks (open 1/4") spaced 10' or more apart, little or slight crack raveling. No patching or very few patches in excellent condition.	First signs of deterioration with routine maintenance.
6 Good	Slight raveling (loss of fines) and traffic wear. Longitudinal cracks (open 1/4") spaced less than 10'. First sign of block cracking. Slight to moderate flushing or polishing. Occasional patching in good condition.	Shows signs of a structural condition extend life with seal.
5 Fair	Moderate to severe raveling (loss of fine and coarse aggregate). Longitudinal and transverse cracks (open 1/2") show first signs of new pavement edge. Block cracking up to 50% of surface. Extensive flushing or polishing. Some patching or edge wedging in good condition.	Surface aging. Some condition. Needs seal than non-structural (less than 2").
4 Fair	Severe surface raveling. Multiple longitudinal and transverse cracking with slight raveling. Longitudinal cracking in wheel path. Block cracking (over 50% of surface). Patching in fair condition. Slight rutting or distortions (1" or less) deep or less.	Significant aging and first signs of need for strengthening (2" or more).
3 Poor	Closely spaced longitudinal and transverse cracks often showing raveling and crack erosion. Severe block cracking. Some alligator cracking (less than 25% of surface). Patching in fair to poor condition. Moderate rutting or distortion (1" or 2" deep). Occasional potholes.	Needs patching and repair to major overlay. Milling and removal of deterioration and the life of overlay.
2 Very Poor	Alligator cracking (over 25% of surface). Severe distortions (over 2" deep). Extensive patching in poor condition. Potholes.	Severe deterioration. Needs reconstruction with extensive base repair. Pulverization of old pavement is effective.
1 Failed	Severe distress with extensive loss of surface integrity.	Failed. Needs total reconstruction.

* Individual pavements will not have all of the types of distress listed for any particular rating. They may have only one or two types.

Rating pavement surface condition

24

RATING 2

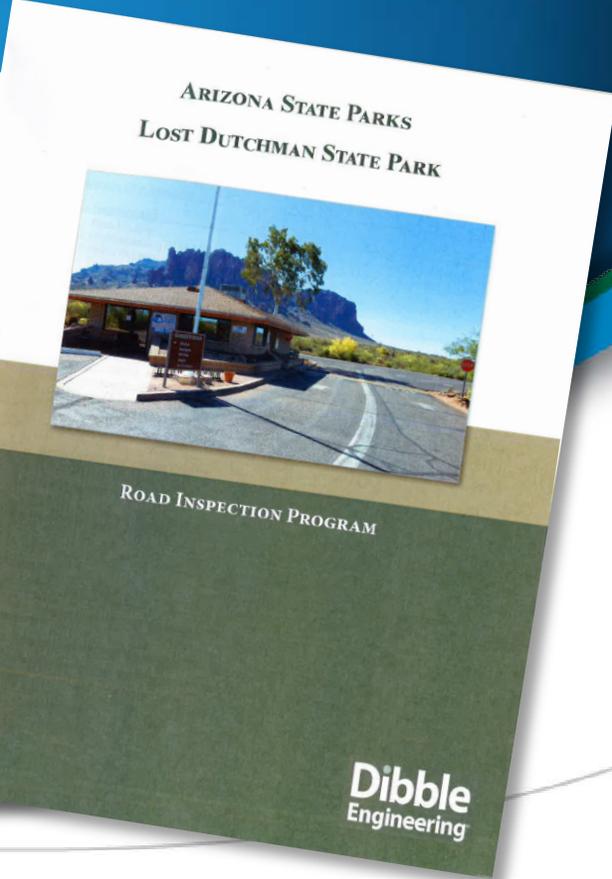
VERY POOR—
Reconstruction required

Roads are severely deteriorated and need reconstruction. Surface pulverization and additional base may be cost-effective. These roads have more than 25% alligator cracking, severe distortion or rutting, as well as potholes or extensive patches in poor condition.

Extensive alligator cracking. Pulverize and rebuild.

Patches in poor condition, wheelpath rutting. Pulverize, strengthen and reconstruct.

Severe frost damage. Reconstruct.





Park Roads Rating



Alamo Lake SP

Average Rating – 5.0

Dead Horse SP

Average Rating – 2.74

Boyce Thompson SP

Average Rating – 7.17

Tonto Bridge SP

Average Rating – 6.67

Buckskin Mountain SP

Average Rating – 3.0

Fort Verde SHP

Average Rating – 5.25

Catalina SP

Average Rating – 3.31

Kartchner Caverns SP

Average Rating – 5.50

Cattail Cove SP

Average Rating – 3.71

Homolovi SP

Average Rating – 4.40

Fool Hollow Lake

Average Rating – 4.11

Patagonia Lake SP

Average Rating – 7.63

Lake Havasu SP

Average Rating – 3.40

Jerome SHP

Average Rating – 5.25

Lost Dutchman SP

Average Rating – 6.75

Picacho Peak SP

Average Rating – 2.97

River Island SP

Average Rating – 3.71

Red Rock SP

Average Rating – 4.50

Lyman Lake SP

Average Rating – 3.90

Roper Lake SP

Average Rating – 6.44

Yuma Qtr. Mstr. SHP

Average Rating – 5.0

Riordan Mansion SHP

Average Rating – 3.0

McFarland SHP

Average Rating – 3.0

Tombstone SHP

Average Rating – 2.5

Yuma Prison SHP

Average Rating – 4.67

Slide Rock SP

Average Rating – 4.33

Oracle SP

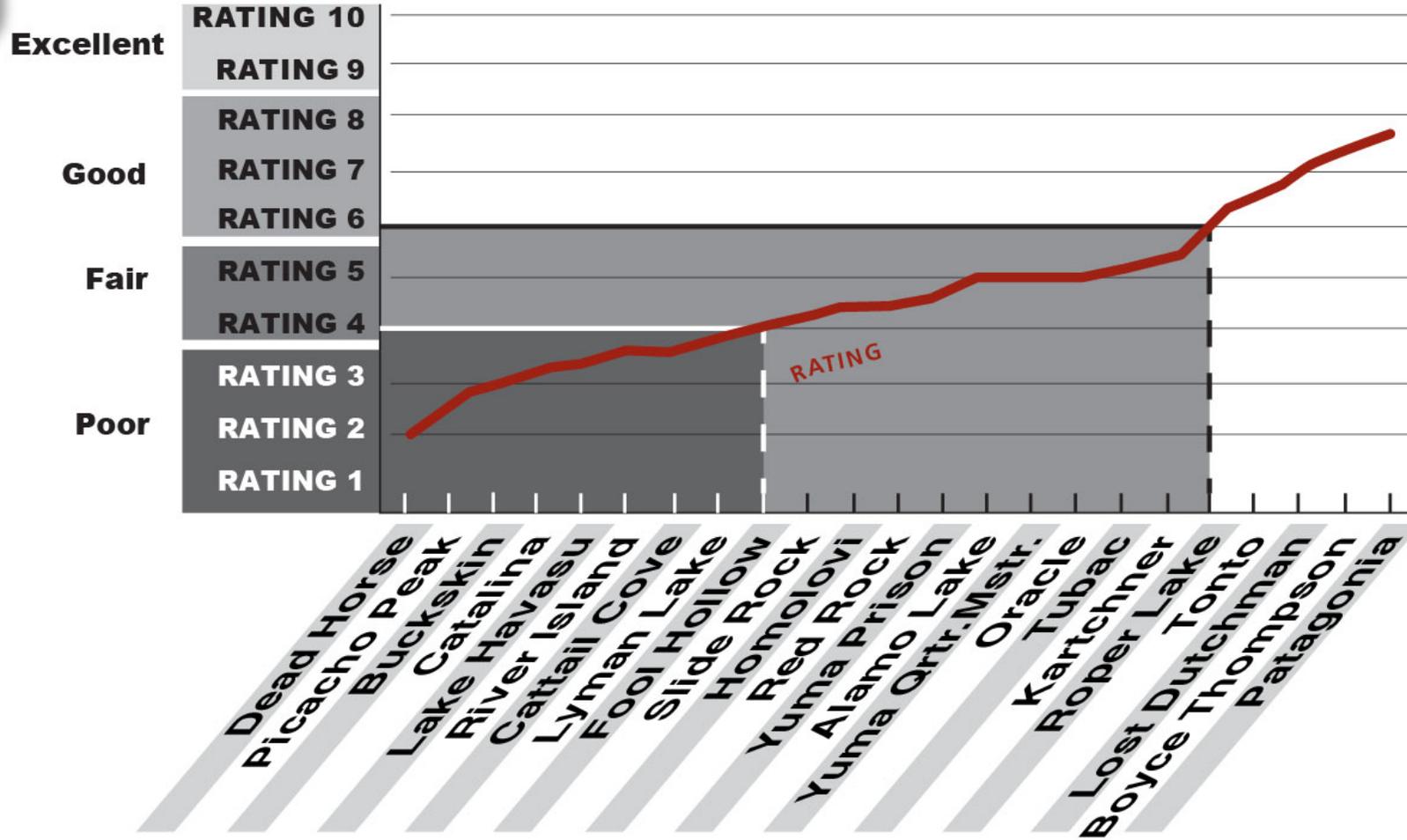
Average Rating – 5.0

Tubac Presidio SHP

Average Rating – 5.25



Park Roads Rating





5-Year CIP Project Overview



DISTRICT #1 – Maricopa County

Vulture Mountain – Parking/OHV Access Road

DISTRICT #2 – Pima County

Catalina SP - Pavement Analysis and Pavement Restoration

DISTRICT #3 – Cochise, Greenlee, and Santa Cruz Counties

Tombstone SHP – Pavement Analysis and Pavement Restoration

Dead Horse SP – Pavement Analysis and Pavement Restoration

Tubac Presidio SHP - Pavement Analysis and Reconstruction

Kartchner SP - Pavement Analysis and Reconstruction

DISTRICT #4 – Pinal, Gila, and Graham Counties

Picacho Peak SP – Pavement Analysis and Pavement Restoration

McFarland SHP - Pavement Analysis and Pavement Restoration

Oracle SP - Pavement Analysis and Reconstruction

Lost Dutchman SP - Pavement Analysis and Reconstruction

DISTRICT #5 – Apache, Navajo, Coconino Counties

Riordan SHP – Pavement Analysis and Reconstruction

Lyman Lake SP - Pavement Analysis and Reconstruction

Fool Hollow SP - Pavement Analysis and Reconstruction

Slide Rock SP - Pavement Analysis and Reconstruction

Homolovi SP - Pavement Analysis and Reconstruction

DISTRICT #6 – Yavapai, Yuma, Mohave, and La Paz Counties

Cattail Cove SP – Sand Point Access Road and Internal Roadway Construction

Buckskin Mountain SP – Park Road System Reconstruction

Rockin' River SP – Access Road Construction

River Island SP – Access Road Construction



Park Overview

Buckskin Mountain State Park





Park Overview

Dead Horse Ranch State Park





Park Overview

Lyman Lake State Park





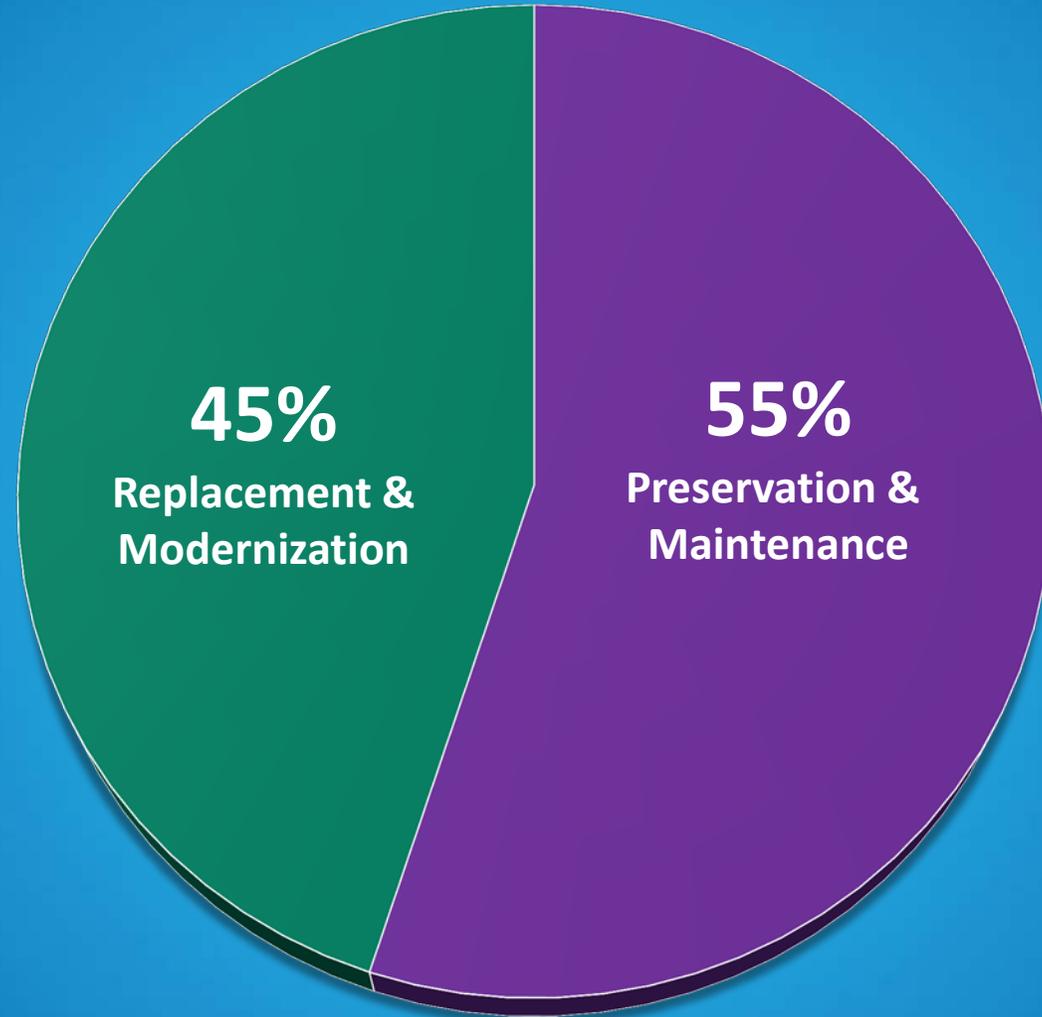
Park Overview

Picacho Peak State Park





THE PLAN



\$5 Million



REPLACEMENT & Modernization



Dead Horse Ranch

Picacho Peak

Catalina

Lake Havasu

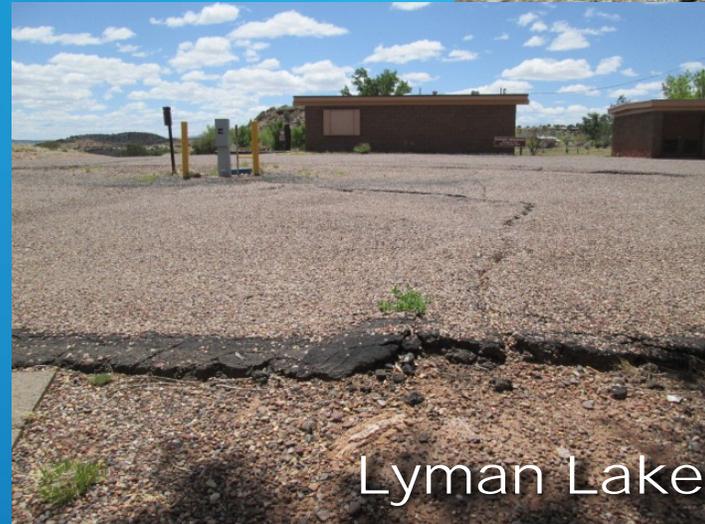
River Island

Cattail Cove

Lyman Lake



Lake Havasu



Lyman Lake



Picacho Peak



PRESERVATION & Maintenance



Fool Hollow Lake

Slide Rock

Homolovi

Red Rock

Yuma Terr. Prison

Alamo Lake

Quartermaster Depot

Oracle

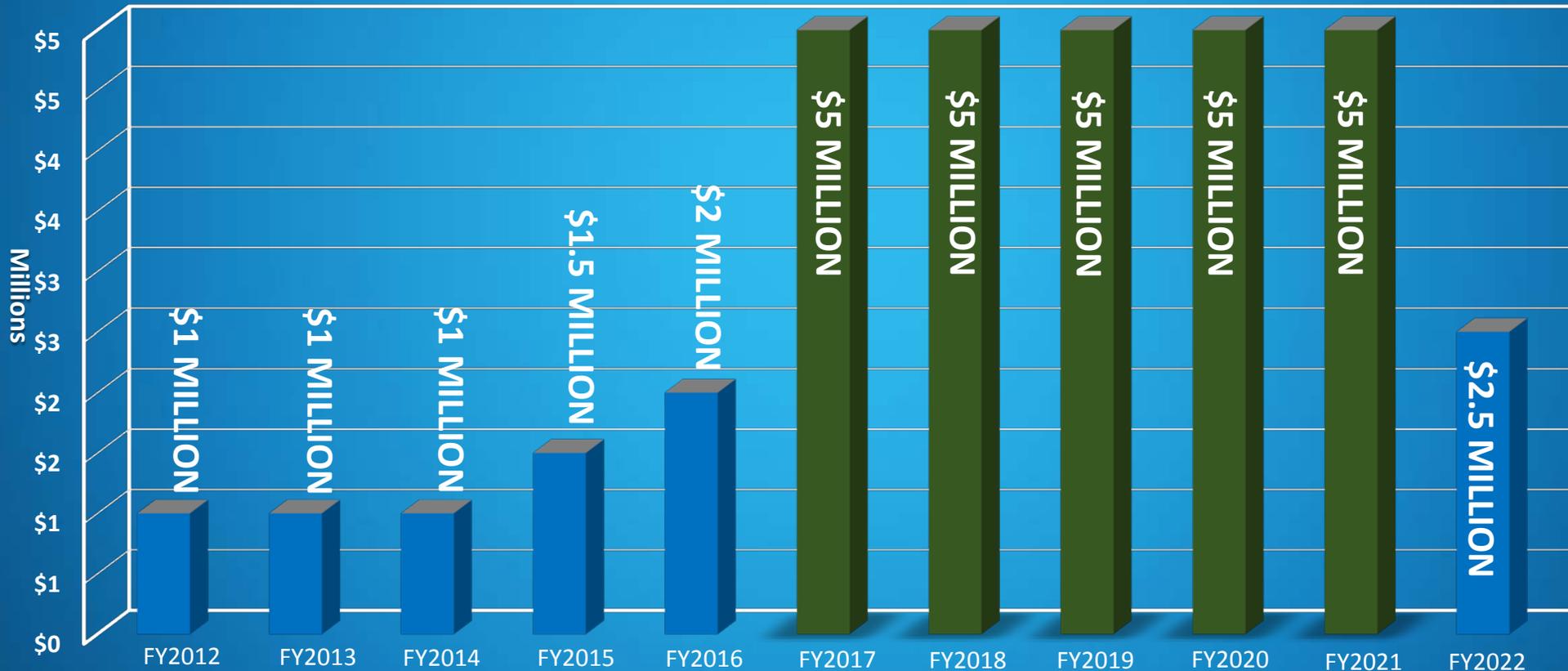
Tubac

Kartchner Caverns





Deferred Maintenance FUNDING REQUEST





THANK YOU!

