

National Park Service
U.S. Department of the Interior



Mojave National Preserve

Roadway Safety Improvements Project

Agenda

- Why the project is needed
- Proposed actions
- Issues
- Project schedule
- Questions and answers

Why is the project needed?

Deficiencies on the some road cause a large number of vehicle accidents

- tight curves
- improper super-elevation (banking or tilting of the roadway surface)
- inadequate sight distance and signage
- poorly designed intersections.
- dirt roads also wash out during large flood events

This road conditions become even more dangerous when are distracted and/or exceeding the speed limit.



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Washed out roads are hazardous to drivers and reduce public access.



EXPERIENCE YOUR AMERICA



EXPERIENCE YOUR AMERICA

Site 1, Kelbaker Road Curve



Problem: Kelbaker has a long straight stretch with a sharp curve that is hard for drivers to maneuver safely

Fix: Realign the road with a more gradual and larger radius so cars can better negotiate the curve



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Site 2, Kelbaker Road and Kelso Pass

Problem: Straight road interrupted by several sharp curves and abrupt grade changes. Drivers can't see oncoming curve or vehicles.

Fix: Realign the road to make more gradual curves. Correct the vertical road grade to remove dips.





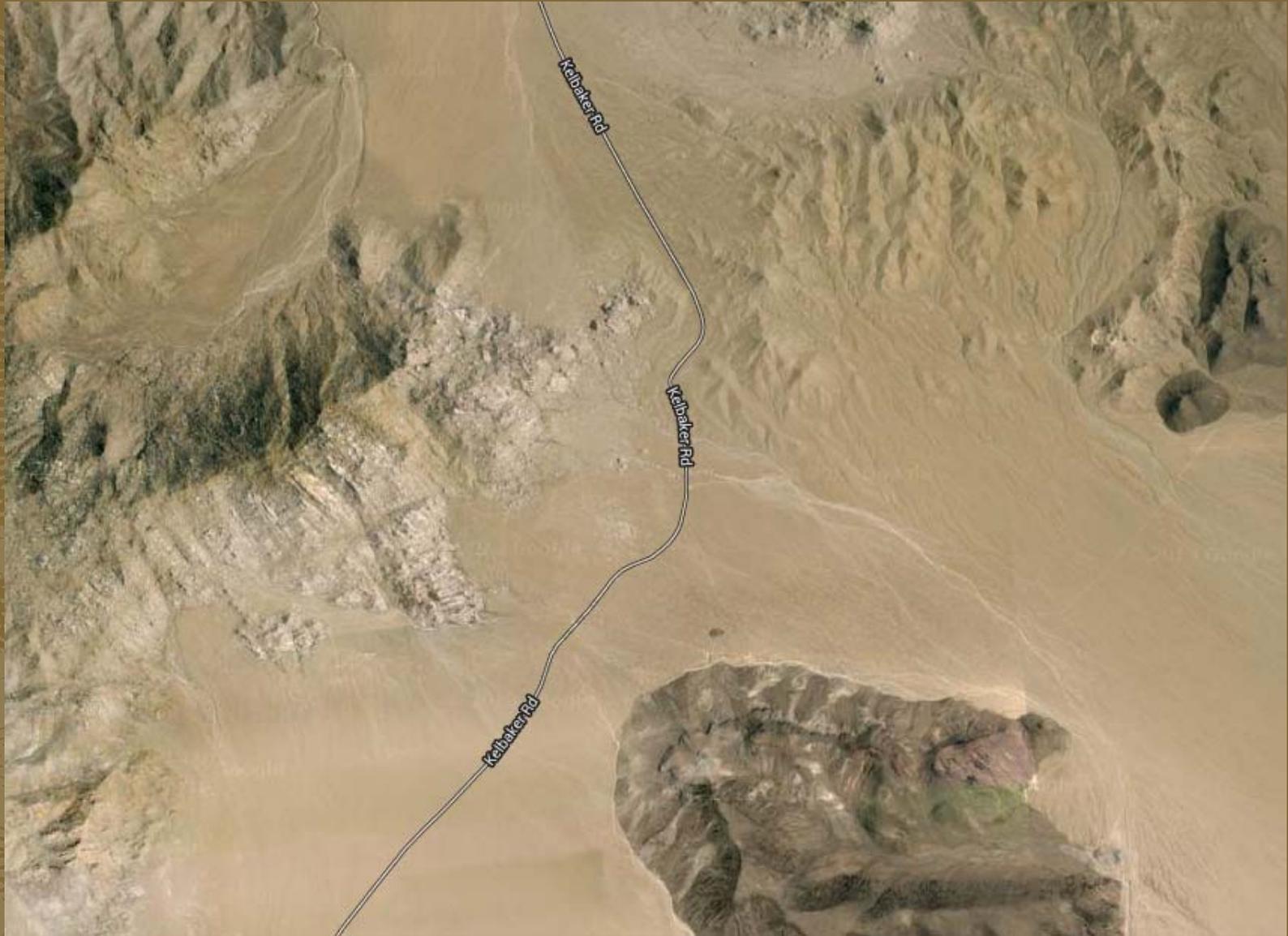
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Site 3, Granite Pass



Problem: Several sharp curves and hazardous dips on a straight stretch of road.

Fix: Realign the road into one large curve with a smooth vertical grade. Add signs, flashers, rumble strips. Replace culvert.



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Site 4, Kelbaker Road/Kelso-Cima Road Intersection

Problem: Cars approaching the intersection from the south on Kelbaker Road cannot see the road beyond the railroad tracks. Speeding increases the likelihood of accidents.

Fix: Raise Kelbaker Road and level out the dips to improve sight distance.



Site 4, Kelbaker Road/Kelso-Cima Road Intersection, continued

Problem: Cars approaching the intersection from Kelso-Cima Road cannot see traffic on Kelbaker Road.

Fix: Realign Kelso-Cima Road to the north to form a T intersection and reduce the curve in the road.



Site 4, Kelbaker Road/Kelso-Cima Road Intersection, continued



Problem: Pedestrians cross Kelso-Cima from a gravel parking lot. Vehicles speed through this area and there is no crosswalk.

Fix:
Install speed slowing devices and a crosswalk from the parking lot to the picnic area.



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Site 5, Morningstar Mine/Cima/Kelso-Cima Intersection



Problem: A railroad spur line on Kelso-Cima is 5-7 feet above the road grade, resulting very limited sight distance. Further, after crossing the tracks from the south, drivers are faced with these three roads forming a very confusing Y intersection. This results in rear end collisions and cars driving off the road.

Fix: Raise the grade of the road, improve signage and striping, and possibly realign the intersection to improve sight distance and create a more driver-friendly T intersection.



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Site 6, Cedar Canyon Road, Low Water Crossing



Problem: Washouts occur in two locations during storm events, limiting access and creating dangerous road conditions for drivers.

Fix: Pave the lower water crossings with asphalt and install barriers on the road edges.

Site 7, Cedar Canyon Road, Low Water Crossing

Problem: A curve has the wrong super-elevation – improper banking/tilting of the road, which causes drivers to slide off the road as they go through the curve.

Fix: Re-grade the curve.



Site 8, Black Canyon Road, Slope Protection



Problem: Black Canyon Road runs parallel to a desert wash. The road washes out during storm events and restricts access to/from private residences and park facilities.

Fix: Armor the side of the road embankment with large rock to stabilize the road.

Issues

- Critical habitat for the threatened desert tortoise could be affected and there is a potential for tortoises to be within construction zones.

Construction would disturb soils and landforms, remove vegetation and possibly spread or introduce invasive plants.

The Kelbaker Road/Kelso Pass project area is near is an archeological site.

- Temporary road detours and/or delays and other construction related activities may negatively impact park operations, traffic, residents, and visitors.

- - Armoring channel banks with riprap to reduce flood-related road damage could affect stream flow.



What's Next

The planning and environmental compliance process is underway.

- January-February 2014 (now!): Public Scoping
- Winter - Spring 2014: Develop alternatives based on the purpose and need, issues, and objectives, with input from the public
- Spring - Summer 2014: Preparation of Environmental Assessment
- Summer 2014: Release of EA to the public for review and comment
- Summer - Fall 2014: Analysis of public comments, preparation of a decision document
- Fall 2014: Completion of construction documents
- 2015: Construction begins

Thank you for your participation!

Questions?



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