



Reconstruct Road Segments to Improve Safety Environmental Assessment



Dear Friends of Mojave National Preserve,

The National Park Service (NPS) has completed an Environmental Assessment (EA) on a road and safety improvement project within Mojave National Preserve. The proposed project would reduce the number of accidents by improving roadway curves, grades, and sight lines and realigning two intersections.

Public review of the EA is underway and we welcome your input on project. Please join us for a public meeting on the project on Saturday November 22, 2014. You may also comment online at <http://parkplanning/nps.gov/moja-road-safety> or by mail, before the end of the public review period on December 8, 2014. Page 6 of this newsletter contains additional information on the meeting and how to comment.

If you have questions about the project, or would like a hard copy of the EA, please contact Mr. David Moore, Chief of Maintenance, at david_b_moore@nps.gov or (760) 252-6142 or Danette Woo, Environmental Protection Specialist, at danette_woo@nps.gov or (760) 252-6107.

Thank you for your help!

Stephanie Dubois
Superintendent

Why is the Project Needed?

The purpose of the proposed project is to improve public safety by reducing the number and severity of traffic accidents in the Preserve. It would also enhance the visitor experience by correcting existing road design deficiencies and conditions that endanger those driving through the Preserve or limit safe access to residences and facilities. Numerous serious accidents occur every year on Preserve roads, often involving vehicle rollovers, injuries and fatalities.

Traffic on Mojave National Preserve roads has increased from 250,000 to 536,000 since 1993, the year before the Preserve was designated. Some of the roads drivers most frequently use have geometric deficiencies that contribute to vehicular accidents and fatalities. From 2001 to 2012, there were 134 accidents on Kelbaker Road, four of which were fatalities; 50 accidents on Morning Star Mine Road, with three fatalities; 62 accidents on Kelso/Cima Road; and eight on Black Canyon Road.



Proposed Action

The problems on sections of paved and dirt roads include: tight horizontal and vertical curve alignments (sharp curves and/or dips); improper superelevation (banking or tilting of the roadway surface), inadequate sight distance; inadequate signage; and poorly configured intersections. These dangerous road conditions have contributed to high accident rates and increased accident severity, particularly for drivers who are distracted by the scenery, and/or exceeding the speed limit. Safe access for residents, visitors, and emergency personnel is also compromised when storms wash out sections of unpaved road.

Eight roadway locations would be improved. Five locations on paved roads total approximately 1.9 linear miles. The project also includes improvements to maintain safe ingress/egress at three sites on unpaved roads that serve as main access roads for the local community. Roadway embankment protection totaling about 1.6 miles in length will be installed where flood events have frequently caused damage, and two low water crossings which total 320 feet in length will be reinforced to reduce the severity and incidence of washouts. Vegetation removal, transplanting, and revegetation would occur at Sites 1, 2, and 3.

Site 1: Kelbaker Road Curve Alignment

The long straight stretch of Kelbaker Road east of Baker is interrupted by a sharp curve with substandard superelevation would be realigned to match the 55 mph design speed for the road. Approximately 1650 feet of roadway would be realigned to form a more gradual horizontal curve. The road would be leveled during the realignment to flatten the road and remove dips. The centerline and edge line would be restriped and rumble strips would be installed to warn motorists of the upcoming curve and to slow down, and to alert drivers when they drift from their lane of traffic.

Site 2: Kelbaker Road, Kelso Pass

At Kelso Pass, another long straight road section is interrupted by several sharp curves and abrupt grade changes which limit sight lines and make it difficult for drivers to see oncoming vehicles. Approximately 3,600 feet of roadway would be reconstructed to realign curves, correct vertical alignment deficiencies (dips and peaks) within the curves, and improve the superelevation of the curves. The project would also improve signage and striping, and install centerline and edge line rumble strips. Large, mature Joshua trees at the site will be avoided and fenced off during construction. Wildlife crossing signs will also be installed.

Site 3: Kelbaker Road, Granite Pass

Approximately 3000 feet of roadway would be realigned, regraded and reconstructed to correct a series of sharp curves and vertical dips and rises. The curves of the existing 30 mph and 45 mph curves would be realigned to provide safe driving conditions at the posted speed limit, and the vertical road alignment would be regraded to remove the abrupt grade changes. Other improvements would include additional signage, speed feedback signs, flashing beacons, and transverse rumble strips, and installation of wildlife crossing signs. The existing unimproved pullout would be converted to a paved .08 acre parking area for cars and RVs.

Site 4: Kelbaker Road/Kelso-Cima Road Intersection

This intersection at the historic town of Kelso poses hazards to pedestrians. Kelbaker Road would be raised approximately three feet as it approaches the railroad crossing to improve sight lines and allow drivers to have a better view of the road ahead. Kelso-Cima Road would be moved approximately 50 feet to the northwest at the intersection of Kelbaker Road, the large expanse of asphalt and gravel in the existing intersection would be reduced and new asphalt curbs would be constructed on both sides of Kelso-Cima Road. These changes would allow for more space between the railroad crossing and the intersection to improve the line of sight in the Kelso Depot area.

The realignment of Kelso-Cima Road would help clarify the traffic flow and slow down vehicles as they move through the intersection and pedestrian crossing. The informal gravel parking lot on the east side of Kelso-Cima Road would be eliminated. A speed hump would be installed on Kelso-Cima Road across from Kelso Depot, approximately 400 feet from the intersection. In addition, installation of speed feedback signs and other speed slowing measures would promote slower speeds. The large visitor parking lot will also be repaved.

Site 5: Morningstar Mine Road/Cima Road/ Kelso-Cima Road Intersection

Kelso-Cima Road, Cima Road, and Morning Star Mine Road form a Y intersection that is confusing to drivers. The proposed work at this location includes raising the grade of the roadway between the railroad spur crossings, improved signing and striping, and possible realignment of Cima Road. If the NPS can acquire access by way of fee simple or right of way, Cima Road would be realigned to create a "T" intersection at a greater distance from the railroad crossing. These modifications would clarify the dominant through-traffic route and make it easier to see approaching vehicles.

The railroad spur line is located on Kelso-Cima Road approximately 70 feet south of the intersection and rises about five to seven feet above the road grade. The elevation difference between Kelso-Cima Road to the south and west of its intersection with Cima Road impedes the visibility of oncoming vehicles on Kelso-Cima Road. This situation reduces motorists' reaction time as they approach the intersection, increasing the risk of rear-end collisions.

Site 6: Cedar Canyon Road, Low Water Crossings

Cedar Canyon Road is an unpaved road where washouts during storm flooding events have required frequent and substantial re-grading and road maintenance. To minimize damage from floods, the project proposes to pave two low water crossings (LWCs) on Cedar Canyon Road with asphalt, and install riprap and buried concrete barriers (known as “Jersey Barriers”) on both sides of the LWC to reinforce the pavement against undermining.

Site 7: Black Canyon Road, Curve Improvement Site

A small curve with incorrect superelevation would be re-graded to prevent vehicles from sliding off the roadway as they go through the curve. In addition to road improvements, sign improvements would be installed to identify curves and reduce speed. This curve grading is within the existing roadway.

Site 8: Black Canyon Road, Slope Protection Project

On a section of Black Canyon Road which frequently washes out during storm events, riprap or gabions would be placed into the side of the road embankment adjacent to the wash to provide reinforcement against future storm-water damage. Near the northern end of the bank protection work at this site, a 50-foot long low water crossing will be constructed to allow the drainage on the east side of the roadway to cross over into the main channel on the west side of the roadway. The roadway will be lowered about three feet to the existing channel elevation and additional slope armoring will be placed at the corners of the low water crossing to protect the roadway and assist in diverting the water across the roadway.

Environmental Review

The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 and analyzes a No Action alternative and the Proposed Action. Other alternatives were considered but dismissed and include alternate road alignments and lowering speed limits/increasing enforcement only (no construction).

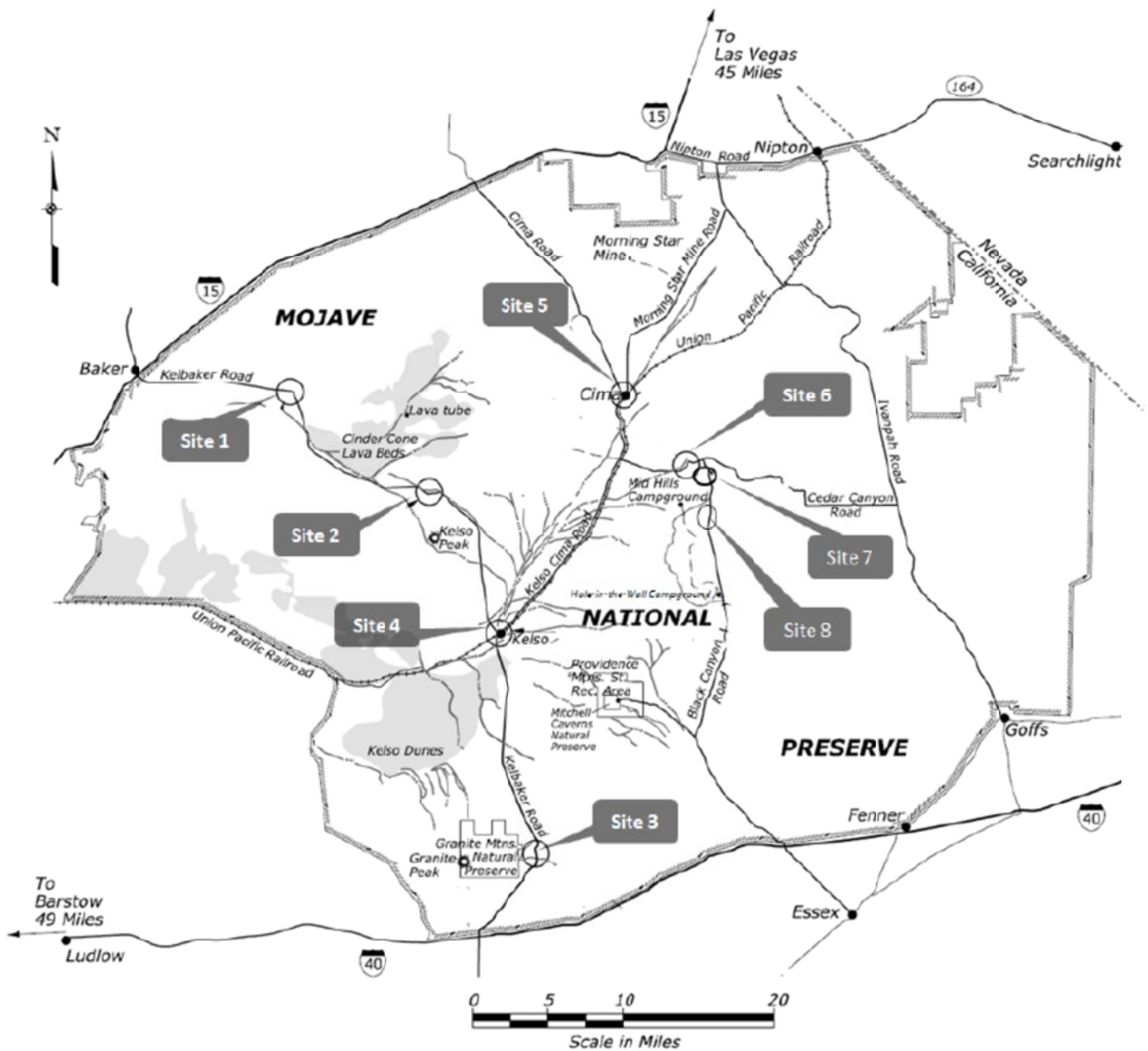
The EA analyzes the effects of the project on cultural resources, federally listed species, wildlife, vegetation, geological resources, water, transportation, and visitor resources. Mitigations have been included to minimize impacts. The NPS is consulting with the US Fish and Wildlife Service on impacts to the desert tortoise and with the California State Preservation Office on impacts to cultural resources.

Next Steps

An approximate project timeline is as follows:

- ☐ November-December 2014: Public review of EA
- ☐ December 2014-January 2015: Analyze public comment
- ☐ Winter/Spring: Decision document finalized
- ☐ Fall/Winter 2015: Construction begins

Project Location Map



How to Comment

We welcome your input on the project. The NPS website, listed below, has been set up to receive your comments. The site will also provide updates about the project's progress and other related documents. Please provide comments by **December 8, 2014**. You may provide comments in the following ways:

1. Attend the public meeting on **November 22, 2014, from 11:00 a.m. to 1:00 p.m.** The meeting will be held at the Interagency Fire Center at Hole in the Wall, 1 Black Canyon Road, Essex, CA, 92332.

2. Submit comments electronically on the NPS planning website:

<http://parkplanning.nps.gov/moja-road-safety>

3. Send a letter or write comments on the enclosed form. Comments may be sent to:

National Park Service

Mojave Roadway Safety Improvements Project, Attn: Karen Cantwell

333 Bush Street, Suite 500

San Francisco, CA 94104-2828

Please note: Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment — including your personal information — may be made publicly available at any time. Although you can request that we withhold your personal identifying information from public view, we cannot guarantee that we will be able to do so.



National Park Service
Mojave National Preserve
2701 Barstow Road
Barstow, California 92311

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Let Us Know What You Think

Please consider the following questions when submitting comments about the project:

- Does the proposed action address the need for the project?
- What aspects of the proposed action do you like or dislike?
- Does the EA adequately analyze the effects of the project?
- Do you have any other concerns about the project?

Write your comments below and mail them to the address on the reverse by **December 8, 2014**.

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National Park Service
Pacific West Regional Office
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Attn: Karen Cantwell
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Comments, continued...

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