
Grand County Scenic Byways Corridor Management Plan

Grand County, Utah



SR-128—Upper Colorado River Scenic Byway

SR-279—Potash–Lower Colorado River Scenic Byway

SR-313—Dead Horse Mesa Scenic Byway (with Island in the Sky Road)

Prepared for Grand County, Utah
by Randolph Jorgen, Moab, Utah
August, 2008

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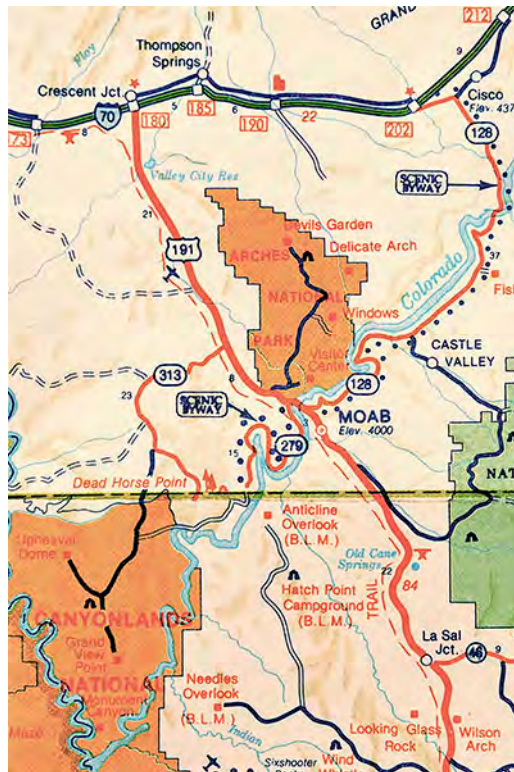
Prepared for Grand County, Utah

Researched, written, and designed by Randolph Jorgen, Moab, Utah

Changes made by the Grand County Scenic Byway Committee

August, 2008

The author wishes to thank members of the Scenic Byway Committee and other managers and citizens of Grand County who helped devise strategies to keep the byways the special places they are.



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Cover photos:

Top: Central section of SR-128. Bottom left: Monitor and Merrimac Buttes, SR-313.

Bottom right: Colorado River at The Portal, SR-279.

CONTENTS

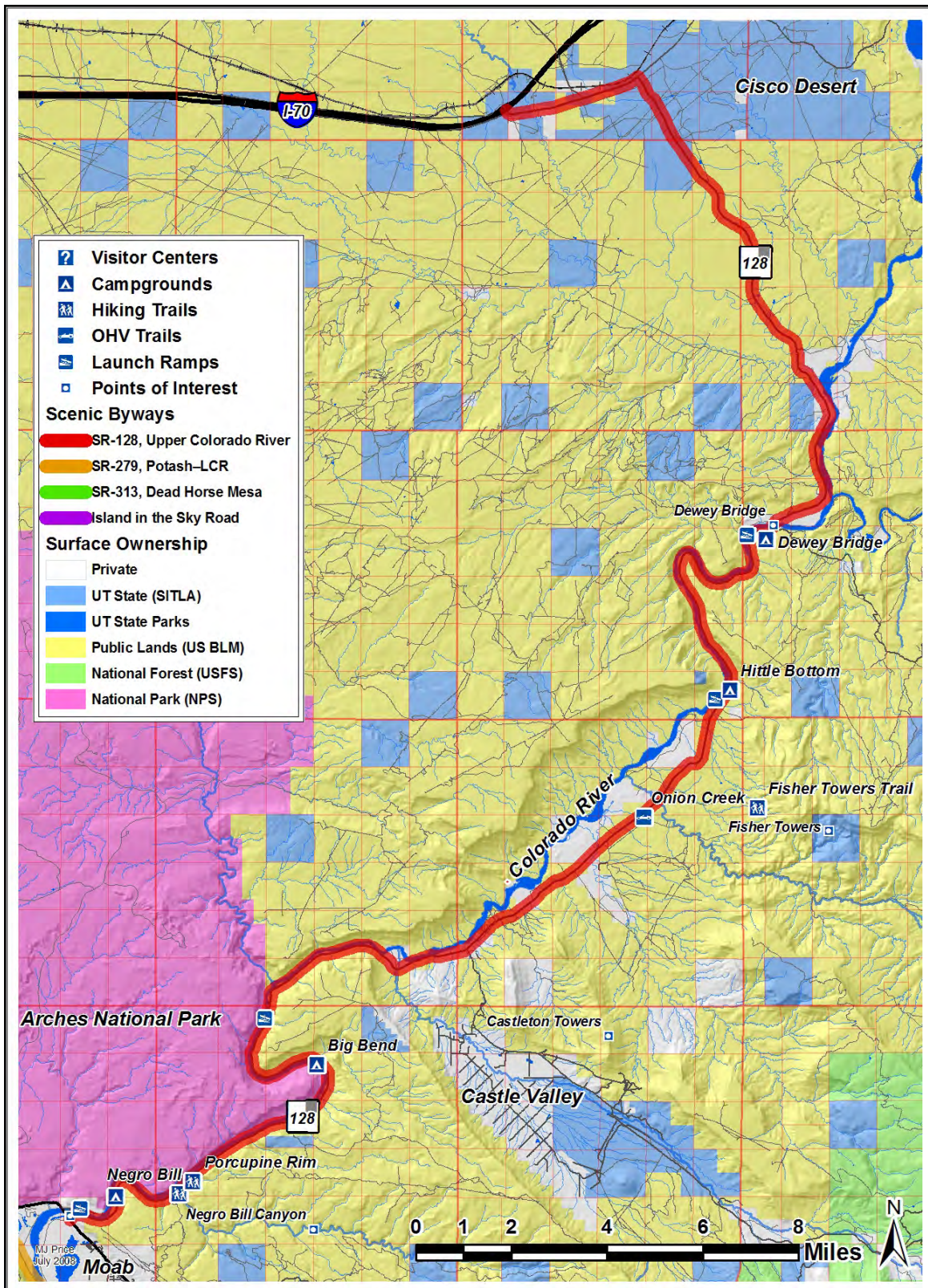
Maps	1
1. Grand County scenic byway corridors.....	3
1.1 Quick tour: SR-128—Upper Colorado River Scenic Byway	3
1.2 Quick tour: SR-279—Potash—Lower Colorado River Scenic Byway	5
1.3 Quick tour: SR-313—Dead Horse Mesa Scenic Byway (with Island in the Sky Road).....	6
2. Purposes of the corridor management plan (CMP)	8
3. Public involvement.....	9
3.1 Scenic Byway Committee (SBC) and the CMP consultant	9
3.2 Key persons consultations	9
3.3 Public participation.....	10
3.3.1 Agency public involvement processes • 3.3.2 Public meetings and written comments • 3.3.3 SBC and Grand County Council review and public comment period • 3.3.4 Future public involvement	
4. Key findings and priorities: Citizens’ desired future for the scenic byways	11
4.1 The Grand County community	11
4.2 Vision, goals, and guiding principles.....	12
4.3 Achieving our goals.....	13
5. Land ownership, administration, and uses	13
5.0.1 Public lands • 5.0.2 Atlas mill site (UMTRA) • 5.0.3 Private lands • 5.0.4 National park lands • 5.0.5 Utah School and Institutional Trust Lands • 5.0.6 Utah Sovereign Lands • 5.0.7 Utah State Park lands • 5.0.8 Utah Department of Transportation rights-of-way	
6. Intrinsic resources and their significance	14
6.1 Scenic resources: Internationally significant	15
6.2 Natural resources: Internationally significant.....	17
6.2.1 Geology • 6.2.2 Plants • 6.2.3 Wildlife • 6.2.4 Special status species • 6.2.5 Soils • 6.2.6 Wilderness	
6.3 Recreational resources: Internationally significant.....	20
6.3.1 Sightseeing and photography • 6.3.2 Camping and picnicking • 6.3.3 Multi-use trails: jeeping, biking, and hiking • 6.3.4 Bicycling • 6.3.5 Hiking • 6.3.6 Rafting and boating • 6.3.7 Rock climbing • 6.3.8 Wildlife viewing • 6.3.9 Star watching • 6.3.10 Horseback riding • 6.3.11 Cultural tourism	
6.4 Historical resources: Regionally significant.....	24
6.5 Cultural expressions: Internationally significant	25
6.5.1 Ranching and open-range grazing • 6.5.2 Global recognition through filmmaking • 6.5.3 Events	
6.6 Archaeological resources: Regionally significant.....	26
7. Visitor experience plan	26
8. Visitor services and facilities	27
8.0.1 Information services • 8.0.2 Emergency services/law enforcement • 8.0.3 Phone service • 8.0.4 Campgrounds • 8.0.5 Picnic areas • 8.0.6 Restrooms • 8.0.7 Trails • 8.0.8 Lodging, dining, gasoline, retail, and mechanic services • 8.0.9 Water • 8.0.10 Recreational rentals and tours • 8.0.11 Common carrier byways access	
9. Resource protection and enhancement	31
9.1 Goals.....	31
9.2 Agency-specific strategies	31
9.2.1 Grand County • 9.2.2 Department of Energy (DOE) • 9.2.3 Bureau of Land Management • 9.2.4 National Park Service (NPS) • 9.2.5 Utah State Institutional Trust Lands Administration (SITLA) • 9.2.6 Utah Division of Forestry, Fire, and State Lands (FFSL) • 9.2.7 Utah Division of State Parks and Recreation (State Parks) • 9.2.8 Utah Department of Transportation (UDOT)	
9.3 Issue-specific concerns and strategies	36
9.3.1 Scenic preservation/enhancement • 9.3.2 Mining and drilling • 9.3.3 Recreation management: general • 9.3.4 OHVs, bicycles, trails, and recreational conflicts • 9.3.5 Camping • 9.3.6 Climbing • 9.3.7 Special events • 9.3.8 Wild and scenic rivers • 9.3.9 Wilderness designations • 9.3.10 Ecosystems and wildlife • 9.3.11 Invasive species • 9.3.12 Soil crusts • 9.3.13 Air quality • 9.3.14 Noise pollution • 9.3.15 Dark night skies • 9.3.16 Archaeological resources • 9.3.17 Paleontological resources • 9.3.18 Historical resources • 9.3.19 Litter control • 9.3.20 Law enforcement • 9.3.21 Scientific research	
9.4 Project funding priorities	49

10. Interpretation and information services	49
10.1 Goals.....	49
10.2 Guidelines.....	50
10.3 Existing facilities, services, and products	50
10.4 Themes	51
10.5 On-site interpreters	51
10.6 Recommended new electronic and print products	51
<i>10.6.1 Guidelines • 10.6.2 Products</i>	
10.7 Roadside facilities.....	52
<i>10.7.1 Guidelines • 10.7.2 Facilities</i>	
10.8 Funding priorities	52
10.9 How a National Scenic Byway would be interpreted	53
11. Highway design, operation, maintenance, and improvements.....	53
11.1 Goals	53
11.2 Introduction	53
<i>11.2.1 SR-313 • 11.2.2 Island in the Sky road • 11.2.3 SR-279 • 11.2.4 SR-128</i>	
11.3 Maintenance.....	56
11.4 Roadway design standards and deficiencies	57
<i>11.4.1 Traffic statistics • 11.4.2 Levels of service • 11.4.3 Rights-of-way • 11.4.4 Length • 11.4.5 Pavement widths • 11.4.6 Pavement edge drop-offs • 11.4.7 Clear zones, cliffs, and drop-offs • 11.4.8 Acceleration/deceleration lanes • 11.4.9 Signals • 11.4.10 Curves • 11.4.11 Centerline rumble strips • 11.4.12 Passing lanes and zones • 11.4.13 Pullouts • 11.4.14 Parking</i>	
11.5 Traffic accommodation.....	63
<i>11.5.1 Commercial/industrial traffic • 11.5.2 Tour buses • 11.5.3 Commuter traffic • 11.5.4 Bicycles • 11.5.5 Recreational vehicles</i>	
11.6 Context-sensitive design	65
11.7 Project funding	65
11.8 Project priorities	65
12. Multimodal transportation.....	66
12.1 Goals.....	66
12.2 Private shuttle bus services.....	66
12.3 Commercial tour buses	67
12.4 Public bus services.....	67
12.5 Bicycle accommodations	67
12.6 Project priorities	68
13. Signage plan.....	69
13.1 Authority for sign placement	69
13.2 Goals.....	69
13.3 Guidelines.....	69
13.4 Existing signage.....	69
13.5 Recommendations	69
<i>13.5.1 Scenic byway identification and promotion • 13.5.2 Safety and advisory • 13.5.3 Directional • 13.5.4 SR-128 • 13.5.5 SR-279 • 13.5.6 SR-313</i>	
13.6 Multilingual needs	71
13.7 Outdoor advertising control	71
13.8 Adopt-A-Highway program.....	71
13.9 Internet and other virtual signage	71
14. Marketing, promotion, and Grand County economic development.....	71
14.1 Principles, goals, and objectives	71
<i>14.1.1 Byway goals and citizen desires • 14.1.2 Diversify the economy • 14.1.3 Sustain tourism industrial base • 14.1.4 Develop the brand • 14.1.5 More profitable tourism visits • 14.1.6 International appeal • 14.1.7 Welcome visitors • 14.1.8 Responsible messages • 14.1.9 Potential allies</i>	
14.2 Reaching target populations	74

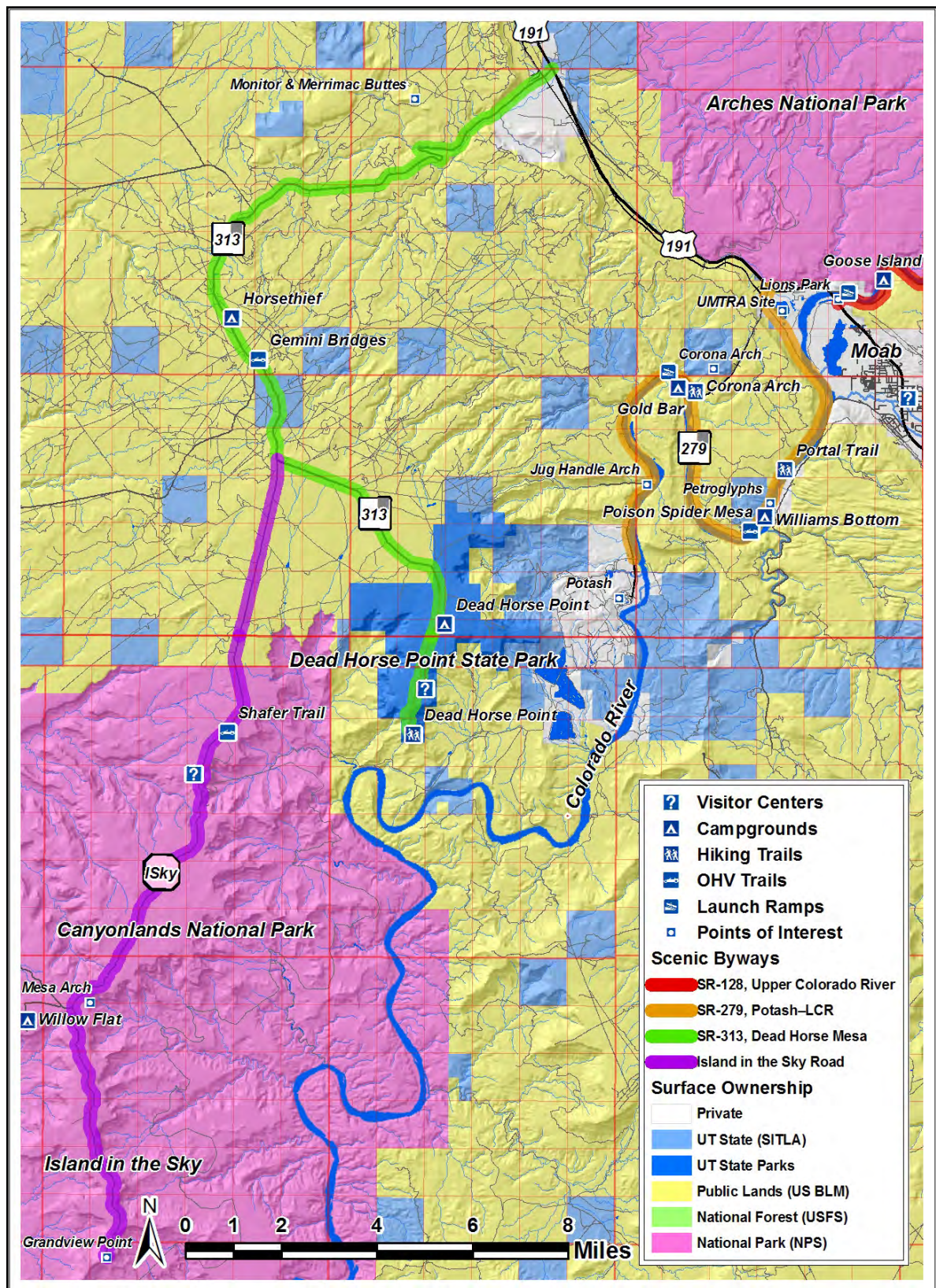
14.2.1 Internet presence • 14.2.2 Link with related websites • 14.2.3 Cooperative marketing partnerships • 14.2.4 Byway-specific publications • 14.2.5 Media coverage • 14.2.6 Press FAM tours • 14.2.7 Free advertising • 14.2.8 Seasonal timing • 14.2.9 Multisport publications

15. Byway management	75
16. Partnerships.....	75
17. Implementation plan.....	76
17.1 Implementation priorities.....	76
17.2 Project funding priorities	76
17.3 Monitoring compliance and evaluating effectiveness.....	77
18. Potential funding sources	78
Appendix A: Planning participants.....	81
Appendix B: Public Comments.....	83
Appendix C: Recommended highway improvements by milepost, SR-128.....	92
Appendix D: Potential interpretive topics	93
Appendix E: Proposed roadside interpretive developments.....	94
Appendix F: Context-sensitive solutions in highway design	97
Appendix G: Demonstration of compliance with Federal Highway Administration requirements for corridor management plans	98
Appendix H: Compilation of recommendations and action items by responsible agency.....	100

SR-128: Upper Colorado River Scenic Byway



SR-279: Potash–Lower Colorado River Scenic Byway
SR-313: Deadhorse Mesa Scenic Byway and Island in the Sky Road



1. Grand County scenic byway corridors

Scenic byways are highways and their adjacent lands that the state or federal government has recognized as having outstanding intrinsic qualities worthy of special attention. Scenic byways are often designated in honor of their scenic qualities, but can also be recognized for other qualities such as their recreational resources, natural qualities, historical resources, or cultural significance. The byways of Grand County are significant in all of these respects.

Scenic byway corridors are comprised of the highways, their rights-of-way, and the surrounding areas of interest to the traveling public that are visible or primarily accessible from the highways. Because this corridor management plan (CMP) is only advisory in nature, and has no regulatory authority. The plan should be seen as advisement on desirable policies, practices, and actions that the community wishes to be considered during routine and formal decision making by the various managing agencies.

This corridor management plan serves the following three previously designated Utah State scenic byways:

- SR-279—Potash—Lower Colorado River Scenic Byway: from its junction with US-191, to its end at the Intrepid Potash plant (17 miles)
- SR-313—Dead Horse Mesa Scenic Byway: SR-313 from its junction with US-191 to Dead Horse Point in Dead Horse Point State Park (23 miles), as well as the Island in the Sky Road from milepost 8 on SR-313 to Grand View Point in Canyonlands National Park (19 miles).
- SR-128—Upper Colorado River Scenic Byway: from its junction with US-191 near Moab, to its end, at Exit 204 on I-70 (45 miles). As the longest and most complex of the three byways, SR-128 will receive the most discussion in this plan.

A Utah/Colorado scenic byway designation, the Dinosaur Diamond National Scenic Byway, includes SR-128 and part of US-191 as part of its 480-mile course. This CMP will not discuss US-191 or the Dinosaur Diamond. The Dinosaur Diamond has its own CMP, but it does not address the resources or specific needs of the SR-128 corridor.

1.1 Quick tour: SR-128—Upper Colorado River Scenic Byway



Fisher Towers and La Sal Mountains (photo courtesy Moab Area Travel Council)

A sense of relief comes over you after you have crossed the Rockies and finally leave the hectic pace of I-70 to turn southwest onto SR-128. There in the distance, at last you see your destination: the redrock canyons and mesas at the heart of the Colorado Plateau. Everywhere the land seems to slope down, down, down into the heart. Tantalizing towers and rims are visible at the base of the snow-capped La Sal Mountains, still 50 miles distant. But first you must cross the “barren” Cisco Desert—a grand open space of subtly enchanting mud hill badlands. Here pronghorn “antelope”—the fastest land animals in North America—run free, prairie dogs wary of foxes and badgers keep lookout from the mounds surrounding their dens, and eagles perch on lone hilltops. The nearby railroad and sheepherding ghost town of Cisco speaks of earlier times.



Parriott Mesa and Castle Rock



Colorado River near Dewey Bridge

The highway dips and turns over the low hills, leading you down to your first desert encounter with the Colorado River, sliding in on your left as you enter a low canyon. Observant travelers will see the Colorado River join with the Dolores River on the left just before entering a ranching valley of colorful, smoothly sculpted Entrada sandstone bluffs sloping upward counter to the river's flow.

Beside a modern bridge across the Colorado River and at the crossing point of a variant of the Old Spanish Trail, you will see the remaining steel towers of the historic old Dewey Bridge, recently burned. A nearby campground and boat launch site make a good rest stop.

The river leads the highway around a grand horseshoe bend through a narrow, sheer-walled canyon. When the highway emerges, you are presented with a famous and stunning view of the 900-foot red sandstone Fisher Towers. From a side road hikers may walk to the base of the towers or explore the maze-like side canyons and hoodoos of Onion Creek. Boaters will want to launch from nearby Hittle Bottom to run the "Colorado River Daily," the most popular whitewater raft trip in Utah.

Leaving the river for a while, the highway roller coasts through a broad valley with looming buttes, mesas, and towers set against the 10,000-foot peaks of the La Sal Mountains. Many classic Western films have been made here. Castleton Towers, including Castle Rock, a 400-foot pillar, draw climbers like a magnet. One side trip, past the nearby town of Castle Valley, takes travelers high into the La Sal Mountains, while another affords a close-up view of Rocky Rapids, where the river slams against a cliff.

Soon the river enters a new and much deeper canyon and the highway is forced to wind along on the talus slope between the river and 1,000-foot cliffs for most of its remaining 16 miles. Careful birders may spot nesting Great Blue Herons in a riverside rookery, or Peregrine Falcons, Ravens, and Golden Eagles nesting on cliffs across the river. At the high point of the highway, at the curve above Salt Creek Rapid, watch for

bighorn sheep grazing on the opposite shore. From this point onward, the far shore is part of the Arches National Park backcountry.

At Big Bend the canyon broadens slightly and allows room for several campgrounds and small beaches overlooking the last of the rapids. Then the cliffs close in again, showcasing boulder jumbles on the talus slopes, pinnacles, and—in the monsoon thunderstorms—frothy brown waterfalls tumbling into the river. Rock layers dramatically slope downward to Negro Bill Canyon, a well-watered side canyon with a popular hiking trail. The world-famous Porcupine Rim mountain bike trail ends nearby.

Overhanging cliffs streaked with desert varnish and sculpted sandstone alcoves characterize the terrain to the highway's end at US-191, where the canyon suddenly breaks out into the broad Moab Valley. Here, near a river crossing of the Old Spanish Trail, Lion's Park offers a shady picnic area and a new bicycle/pedestrian bridge crossing the Colorado River.

1.2 Quick tour: SR-279—Potash—Lower Colorado River Scenic Byway



Colorado River as seen from Wall Street area of SR-279

Turning onto SR-279 you will be traveling beside the Colorado River and looking over the Matheson Preserve, the last intact wetlands of significant size along the Colorado River in Utah. At the dramatic South Portal the Colorado River slices cleanly through 800-foot cliffs of sculpted sandstone, evidencing its history as an entrenched meander imposed upon a rising plain. Nearby Jaycee Park offers shaded camping and picnicking sites in a moist grove as well as a two-mile trail to the top of the cliffs at the Portal.

The river bank narrows and soon the highway is pushed up against sheer cliffs streaked with desert varnish. This is what locals call Wall Street, one of the finest rock climbing areas in the region, and the site of extensive panels of ancient Native American petroglyphs, one of the finest collections in the region. Across the river you'll see a series of bald sandstone "fins" and domes of Navajo Sandstone in the Behind the Rocks Wilderness Study Area. At the turnoff to the very popular Poison Spider jeep trail is an exhibit pointing out dinosaur tracks on the side of the nearby talus slope.



SR-279 near Gold Bar



Colorado River near The Portal

The highway stays close to the cliff, with excellent views of the river as it enters a long sweep around the impressive slickrock mound known as Amasa Back. An easy trail leads to Corona Arch and Bowtie Arch. Gold Bar campground offers individual and large group camping beside the river, and a canoe/raft takeout point for those wanting to experience the glorious flat-water float down from the Moab Dock.

For the next three miles the highway is squeezed between the river and cliffs, with the Union Pacific railroad now in between. At Long Canyon a dirt road allows jeepers to connect with SR-313 above. Most people stop here to admire the delicate Jug Handle Arch.

Soon after, the canyon broadens into long views of red and purple stair stepped cliffs and distant buttes. The highway ends at the Intrepid Potash mine, where solution mining extracts potash from deep within the earth. Jeepers may opt to continue over a rough road to connect with Shafer Trail to Island in the Sky.

1.3 Quick tour: SR-313—Dead Horse Mesa Scenic Byway (with Island in the Sky Road)

In contrast to the intimate canyon settings of most of SR-279 and SR-128, SR-313 is the land of the long view. After leaving US-191 and traveling four miles up through cliff-lined Sevenmile Canyon, you will mount easy switchbacks to emerge seemingly on top of the world, on a vast park-like plain that alternates between grassland and low pinyon-juniper forests. Sentinel buttes dot the land far and near. Jeep trails branch off in many places, tempting you to explore the fingers of contorted canyons draining away into the Green River to the east, or the Colorado River to the west.



White Rim Trail from Grand View Point (photo courtesy NPS)

At The Knoll, milepost 8.1, the highest point is reached. When you stand here on a clear day and take in the 360-degree view, you will know you are somewhere special. This is the center of a vast amphitheater of geography, rimmed by the forested, snowcapped uplifts of the La Sal Mountains, 30 miles to the east, the Abajo mountains, 30 miles to the south, the 200-mile-long Book Cliffs, 30 miles to the north, and the San Juan Mountains of Colorado, visible 90 miles to the southeast on a clear day. The Henry Mountains, 60 miles west, the San Rafael Swell, San Rafael Reef, and the slopes of Thousand Lake Mountain and Boulder Mountain, up to 90 miles to the west, complete this ring, within which almost everything appears completely wild.



Colorado River from Dead Horse Point (photo courtesy Moab Area Travel Council)

Taking the left highway fork at milepost 8.0, you will travel across grassy Big Flat to Dead Horse Point State Park, the third most visited state park in Utah. Around 200,000 people a year come here to take in views that many find more impressive than those into the Grand Canyon. A “gooseneck” bend of the Colorado River meanders 1,600 feet below you and just a mile away. Layer upon layer of colorful rock ledges stretch down to the river and up into a fragmented wilderness on the other side.



Mesa Arch (photo courtesy NPS)

Returning to the highway fork and turning left, after four miles you will enter Canyonlands National Park. Just past the new visitor center you will cross “The Neck,” where the plateau grows so narrow that the whole Island in the Sky mesa before you is nearly cut off by cliffs. Here, just as at a comparable point at Dead Horse Point also known as “The Neck,” cowboys found they could create a large, secure pasture for their horses merely by building a few yards of fence. To the west of here you will see the dizzying 1,500-foot descent of the Shafer Trail jeep route down to the 100-mile-long White Rim Trail, the park’s premier four-wheel-drive and mountain bike tour.

Ten miles farther on a gently winding road over the mesa top brings you to Grand View Point Overlook. Whereas before the byway seemed like the top of the world, here it seems like the end of the world, so remote and forbidding is the display below. Cliffs drop away from your feet in giant steps 2,200 feet to the floor of the Colorado River canyon on your left, and the same to the Green River to your right, hidden in the depths of Stillwater Canyon. The two great rivers join at “The Confluence,” seven miles south. Surrounding them on all sides is one of the most rugged and unusual wildernesses in the world. So remote and difficult is it that no bridges cross the Green River for 60 miles to the north or 40 miles to the south.

Back six miles, the western fork of the Island in the Sky Road avails you a glimpse of the Green River deep in its canyon below the White Rim at Turks Head, and, lastly, an overlook of Upheaval Dome, a multi-colored geological oddity of mysterious origins, nestled in a crater one mile wide and 1,500 feet deep.

2. Purposes of the corridor management plan (CMP)

The corridor management planning process is an opportunity to look at the scenic byway corridors as a whole from the perspectives of Grand County residents, the traveling public, and the wider state and national community. It is a collaboration and a partnership, an occasion for community members and land managers to envision the most desirable future for the scenic byway corridors, and an effort to find ways to make that future real. The CMP may be thought of as a centralized reference for issues and opportunities facing the byways.

The CMP represents a commitment in principle to maintain and enhance the three byways’ many unique intrinsic resources referred to in Section 6. The preparers hope to achieve the following outcomes:

- Raise community awareness of and pride in the byways
- Document the intrinsic resources of the byways—what we treasure
- Articulate the community’s hopes for the long-term character of the corridors

- Devise and implement strategies for the protection, enhancement, and promotion of the intrinsic resources and for the improvement of the traveler's experience
- Promote coordination among governments, agencies, groups, and individuals
- Bring new enhancement resources (i.e. federal funds) to the corridors for project development and programs by raising the profile of the byways in the eyes of state, federal, and private grant making authorities
- Support future application, by the County, for National Scenic Byway or All-American Road designation if the community chooses to seek it

This CMP does not change any local land use authority. All private property rights will continue to be fully represented and protected through the authority and democratic processes of the county, state, and federal governments.

This CMP is a working document intended to be continually reviewed and revised as new information becomes available. It is an advisory document only, which the public and preparers hope will be consulted in decisions affecting the byways. Participation in the Scenic Byway Committee, the CMP planning process, or the endorsement of this CMP does not constitute a binding commitment for any agency or individual.

"The County has a Land Use Corridor Plan and the BLM has a Recreation Management Plan and this plan is not written to duplicate any of the information in those plans. All three plans will be considered when taking action to implement recommendations."

3. Public involvement

3.1 Scenic Byway Committee (SBC) and the CMP consultant

The Grand County Scenic Byway Committee (SBC) was convened in 2005 by the Moab Area Travel Council to disseminate information about Grand County's scenic byways, to supervise the preparation of the CMP, and to consider promoting an application for National Scenic Byway or All-American Road status for the combined byways.

The SBC is composed of representatives of the following:

- Grand County
- Utah Department of Transportation (UDOT)
- Moab Area Travel Council
- National Park Service (NPS)
- Bureau of Land Management (BLM)
- Utah State Parks (State Parks)
- Utah Division of Forestry, Fire, and State Lands (FFSL)
- Utah School and Institutional Trust Lands Administration (SITLA)
- Canyonlands Natural History Association (CNHA)
- Moab Information Center (MIC)
- Town of Castle Valley
- Intrepid Potash, Inc.
- The Nature Conservancy
- Owners of private property and businesses within byway corridors

The names of participating representatives appear in Appendix A.

In July of 2006 the SBC received approval of a grant from the Federal Highway Administration to fund preparation of this CMP, and in June of 2007 the Grand County Council approved the SBC's selection of consultant (the author, a local writer and editor) to consult with key persons and the public, gather information, compile and devise recommended strategies, and write the CMP.

3.2 Key persons consultations

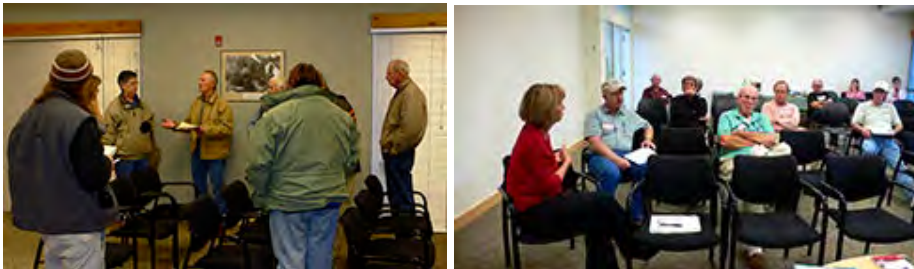
From June, 2007, through June, 2008, the author consulted with 80 key persons. Key persons included members of the SBC, transportation officials, officials of the various affected land management agencies, county and municipal government representatives and officials, scientists, scenic byway and tourism specialists, planners, law enforcement officials, business people, recreation industry representatives, conservationists, civic group representatives, and other people with first-hand or specialized knowledge relating to the corridors, their resources, and the relevant management objectives and processes. A complete list appears in Appendix A.

3.3 Public participation

3.3.1 Agency public involvement processes

This CMP relies significantly upon the extensive public input and participation that has taken place over the years in preparing the many local, state, and federal ordinances, regulations, practices, and management plans for the various participating agencies. Each of the involved entities has its own process for ensuring broad public participation. The purpose of this CMP is not to supercede these individual agency plans, but rather, to build upon them.

3.3.2 Public meetings and written comments



Between October, 2007, and February of 2008, six public meetings were held—three each in Moab and Castle Valley—to inform the public about the planning process, gather the range of public concerns, discuss issues, record public opinions, and request further public participation in achieving byway goals. Notice was given by advertisements in two community newspapers, radio interviews, press releases and news articles, and by mailings to all corridor landowners.

Attendance over the six meetings totaled approximately 56 different people, with many people returning. Additionally, citizens submitted written comments or called to discuss their concerns. In total, 15 owners of private lands within the corridors and 32 other interested citizens submitted comments in one form or another.

Participation included a cross-section of citizens. Citizen concerns and ideas, in combination with the perspective of knowledgeable key persons and the consultant, directed the shape of this plan.

3.3.3 SBC and Grand County Council review and public comment period

The draft CMP was reviewed by the SBC and the Grand County Council and approved with revisions. The council will now make the document available and accept final public comments before final approval.

3.3.4 Future public involvement

The SBC will continue to maintain public representation on the committee as it guides the implementation of this plan. Some specifics of implementation may require agency-specific public involvement processes to enact changes to existing plans, procedures, and laws, thus allowing ample opportunities for the public's voice to be heard. Individual, community service group, business, and nonprofit organization collaborative efforts to achieve byway goals will continue to be welcomed.

4. Key findings and priorities: Citizens' desired future for the scenic byways

4.1 The Grand County community



City of Moab (photo courtesy Moab Area Travel Council) Town of Castle Valley

The importance of 'rural character' to Grand County residents can hardly be overstated. Rural character, its meaning, and what must be done to preserve it frequently dominates public meetings in Grand County. . . . While rural character means different things to different people . . . everyone agrees that it is valuable and should be preserved. . . . Citizen questionnaires and interviews indicate that most county citizens choose to live here because of the small-town atmosphere and ready access to high-quality open space.

—Grand County General Plan Update (2004)

Any discussion of managing Grand County's scenic byway corridors requires some understanding of the nature and history of the local community. The remarkable red rock landscape has allowed the county's strong-minded, diverse citizens to develop a strong connection to the area and create a unique community character, but citizens still often engage in lively debates about land management issues.

The county is isolated in the southeast corner of the state, 200 miles from the metropolitan Wasatch Front and 110 miles from Grand Junction, Colorado, the nearest large city. Most of Grand County's 9422 residents (2007 census) live in the Moab City/Spanish Valley area. The only other incorporated town is Castle Valley, of about 350 people, which is located two miles off of SR-128 and 20 miles from Moab. With an area of 3,700 square miles, the county has a population density of only 2.3 people per square mile. The median household income for 2008 is about \$48,000 (HUD median), with 14.8 percent of the population living below the poverty line.

Land ownership in Grand County is 71.7 percent federal, 15.5 percent state, and 8.4 percent Native American. With only 4.3 percent of the land in private ownership, Moab, the county's only large city, does not appear to have the space to expand into a metropolitan form, and that, combined with the extraordinary nature of those "confining" public lands, is precisely why many residents choose to live here.

Moab began as an agricultural community and grew into an extractive economy dominated by mining for uranium, vanadium, and potash, and drilling for oil and gas. After the collapse of the energy markets in the 1980s, the county entered a deep depression. Increased tourism almost singlehandedly lifted the county out of that depression, coming from a contribution of 11 percent of total employment in 1980 to 53 percent in 1993. Thus, a service economy, or more specifically, a tourism-based economy has supplemented resource extraction as a way of life.

While tourism will remain important to Grand County (it now contributes around 56 percent of total employment), the county may now be entering a new economic phase, with a trend toward an "amenity" economy, in which people are investing in the community because it is a great place to live. Many of these people bring portable home businesses. Others have relocated somewhat larger businesses here. Home prices have dramatically outstripped local wage increases as homes are bought or built for second homes, retirement, or as investments predicated on future appreciation of the value of amenities.

In Grand County's *General Plan Update* (2004), five of the 10 most frequently mentioned citizen concerns were:

- Economic diversification
- Planning, land use, and growth management
- Open space protection
- Agricultural preservation
- Rural character

Grand County currently faces a crisis posed ironically by its very success in pulling itself up by its bootstraps. . . . Grand County as it was only twenty years ago has been irrevocably transformed, but it still remains among the most beautiful places on Earth. That it remains a good place to live is the challenge facing county residents and all other true lovers of the area.

—Richard A. Firmage, *A History of Grand County* (1996)

4.2 Vision, goals, and guiding principles

During interviews and public meetings, citizens and key persons were asked the following:

- What is the essence of the byway character that we should strive to create or preserve?
- What would you like to see the byway corridors become in 25 years?
- Why do you think people (including you) come to the byways? What would make them come more often? What would cause them to stay away?

Together the answers to these questions formed a vision of what citizen's value most about the byway corridors and of the future they hope for them. This vision became the benchmark against which to gauge the policies and actions suggested in this CMP. Current and future management alternatives must be congruent with this vision.

Respondents were then asked to share specific concerns, hopes, and ideas for how to achieve the vision. Virtually all citizens who voiced an opinion on these questions said essentially the same thing: Aside from a few adjustments, primarily for the sake of improving highway safety and facilitating bicycle use, ***keep the byway corridors as they are.***

Support is broad and deep for the following scenic byway goals, actions, and principles:

- Protect the raw natural beauty of the corridor including the critical attributes of agricultural fields, roadless areas, floodplains, wildlife and wildlife habitats, native vegetation, the clear night sky, and the natural appearance of steep slopes
- Preserve the noncommercial, pastoral character of the corridor
- Support agriculture, ranching, recreation, and economic diversity
- Encourage only low-impact recreational practices
- Retain the current rustic, uncrowded, uncluttered character of the corridors
- Protect private property rights while encouraging owners to participate in achieving byway goals
- Improve highway safety and facilitate better traffic flow for both tourism and local commuters, but only in ways that do not encourage additional auto traffic or change the essential two-lane, winding, rural flavor the highways currently offer
- Safeguard and enhance the long-term economic value of the byways by protecting intrinsic resources and the current nature and quality of the visitor experience
- Encourage principled, wise use marketing of the corridor resources to promote long-term community stability and preservation of the byway resources
- Better enforce highway safety and resource protection laws and regulations
- Improve bicycling opportunities
- Reduce the impacts of motorized recreation
- Promote multimodal transportation options
- Provide modest and unobtrusive interpretive facilities
- Provide adequate—but not pampering—recreational facilities for current levels of visitation. Do not accommodate ever-larger numbers of visitors to the detriment of byway resources and quality visitor experience.
- Facilitate ongoing agency collaboration to promote management from the perspective of the scenic byways
- Develop partnerships to broaden the base of community and agency support for byway goals

Thus, the CMP goals elaborated here and in later sections are shaped according to the documented preferences of county residents while referencing the experience and factual knowledge of agency managers of affected lands, elected representatives, and other knowledgeable key persons.

4.3 Achieving our goals

The recommended policies and actions in this CMP represent only a starting point for conceiving and implementing management approaches. In the long term, the following will be needed to realize the community's vision for the corridors:

Community consultation, ownership, and participation: Citizens have been asked for their comments and input and their voices must be given weight in decision making. Citizens' behavior on the ground directly affects byway resources. The CMP is a result of a collaboration of the citizen input with other resources and will be used as a guiding document by Byway administrators.

5. Land ownership, administration, and uses

5.0.1 Public lands

Most of the corridor lands are public lands, owned collectively by the citizens of the U.S. and managed by the Bureau of Land Management (BLM) for multiple uses including energy production, recreation, grazing, wildlife habitat, utility corridors, scientific research, conservation, and open space.

5.0.2 Atlas mill site (UMTRA)



The 439 acres of the former Atlas Minerals Corporation uranium ore processing site, at the junction of SR-279 and US-191, are home to 12 million cubic yards of low-level radioactive waste and uranium-contaminated soil from uranium ore processing between 1956 and 1984. Following an act of Congress in 2000, title to the site and responsibility for cleanup now rest with the U.S. Department of Energy (DOE). The site is now also known as the Moab Uranium Mill Tailings Remedial Action Project site (UMTRA), and is Grand County zoned as a Specially Planned Area pending cleanup completion.

5.0.3 Private lands

There are no private lands along SR-313 except for undeveloped parcels at the junction with US-191. At the south end of SR-279 lies the large Intrepid Potash mine and processing facilities. One other small parcel of private land lies along SR-279.



Intrepid Potash plant, SR-279



Hay fields near Dewey Bridge, SR-128



Motel, SR-128



Orchard, SR-128

Most byway private lands lie along SR-128, including two of the largest world premier destination resorts in Utah established in a manner conducive with open space and byway respect. Both were developed within the past 15 years on historic cattle ranches dating from the late 1800s. They offer medium-range to high-end accommodations, dining, and outdoor recreational services.

Agricultural and ranching traditions survive in isolated parcels along the central section of SR-128 in the form of hay growing, vineyards, and pastured and free-range livestock grazing of horses and cattle. A few smaller portions have been sold for low-density residential development.

5.0.4 National park lands

National park lands within the byways (Canyonlands National Park and Arches National Park) are administered by the National Park Service (NPS). National parks are managed for preservation, scientific research, and recreation.

5.0.5 Utah School and Institutional Trust Lands

The Utah School and Institutional Trust Lands Administration (SITLA) manages scattered parcels along the byways, which are interspersed with public lands managed by the BLM. A particularly large parcel lies along SR-128 near I-70. These lands are currently being used for oil and gas production, grazing, and recreation. Short-term permits allow commercial filming and organized events such as cross-country races.

5.0.6 Utah Sovereign Lands

Utah sovereign lands within the byways are composed of the bed of the Colorado River, as defined by the high water mark of the river in 1896, and is administered by the Division of Forestry, Fire, and State Lands (FFSL). They are devoted to navigation, fish and wildlife habitat, and recreation. Some or portions of the BLM-managed campgrounds along the river are on FFSL lands.

5.0.7 Utah State Park lands

The 5,200 acres of Dead Horse Point State Park are administered by the Division of State Parks and Recreation for recreation and preservation.

5.0.8 Utah Department of Transportation rights-of-way

Rights-of-way for state highways are administered by the Utah Department of Transportation (UDOT).

6. Intrinsic resources and their significance

6.1 Scenic resources: Internationally significant



Waterfalls after thunderstorm, SR-279



Sevenmile Canyon, SR-313



Cisco Badlands, SR-128



Buttes and towers, SR-128



Cliffs along SR-279 near Gold Bar



Side canyons of the Green River, Island in the Sky

Simply put, the byways and the surrounding region, as the heart of the Colorado Plateau, constitute one of the most extraordinary landscapes on Earth. Visitors come in large numbers from around the world to view this kaleidoscopic spectacle of buttes, sheer cliffs, labyrinthine canyons, brilliantly colored and intricately sculpted rocks, vast expanses of seemingly bare bedrock known as “slickrock,” tiered abysses, and spacious plains, with snow-capped mountains surrounding. Arguably the most rewarding aspect of it all is its overwhelmingly unspoiled condition, presented in some of the cleanest air remaining in the nation so that colors vibrate and contrasts define. This is the genuine American West.



Buttes from Grand View Point, Island in the Sky



La Sal Mountains as seen from Cisco Desert, SR-128



Dewey Bridge area, SR-128



Colorado River canyon, SR-128



High mesas near Dead Horse Point, SR-313



Colorado River near Gold Bar, SR-279

Some of the scenic highpoints of the byways were described earlier in the introductory tours, and the photographs throughout this CMP illustrate the byways' scenic qualities.

The BLM uses a visual resource management (VRM) classification scheme to guide management objectives. The class rating is an indication of the relative scenic value of an area, on an absolute scale and in relation to other, potentially competing uses. VRM Class I lands receive the most protection, with no changes to vegetation or landforms allowed. Class II lands may receive only minor modifications. All of the lands along the scenic byways have been proposed for classification as either Class I or Class II lands, indicating their high scenic value.

For a 2006 BLM National Visitor Use Monitoring survey of visitors to the Moab Field Office area in general, visitors ranked their satisfaction with area scenery with an average rating of 4.9 out of 5.

6.2 Natural resources: Internationally significant

6.2.1 Geology

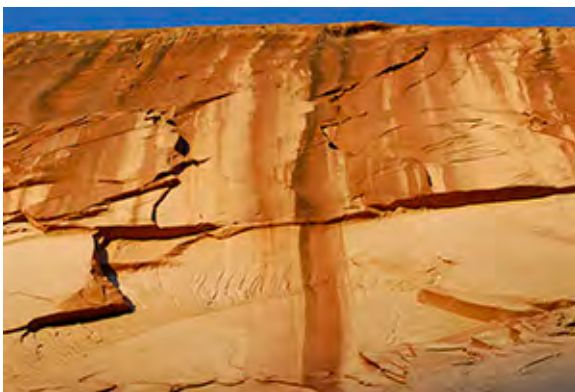


Washer Woman Arch, Island in the Sky
(Photo courtesy Moab Area Travel Council)

The landscape everywhere, away from the river, is of rock—cliffs of rock; plateaus of rock; terraces of rock; crags of rock—ten thousand strangely carved forms.

—John Wesley Powell

Grand County's byways form the very heart and most complete representation of the Colorado Plateau, a 130,000-square-mile subdivision of the American "Intermontane Plateaus." The Colorado Plateau's landmass is one of the oldest generally intact tectonic plates on the planet. As it has been lifted over a period of about 24 million years, water and wind have created one of the finest outdoor geology classrooms and most unique sculpture parks anywhere. The three corridors together have on clear display a greater assortment of geological forms and processes than perhaps any other single area of the country, drawing scientists and students from around the world, and constituting one of the three primary justifications for establishing Canyonlands National Park (along with scenic qualities and wilderness).



Cliffs and desert varnish, SR-128



Fisher Towers, SR-128

Some of processes that have shaped these rocks and some of the more notable results follow:

- *Sedimentary deposition:* Thirteen distinct layers of rock displaying 150 million years of sedimentary history underlie the Island in the Sky, and a fourteenth layer is on display in the Cisco Desert area of SR-128.
- *Natural bridges and arches:* Examples include Corona Arch, Jug Handle Arch, Morning Glory Natural Bridge, Washerwoman Arch, Mesa Arch, and Gemini Bridges.

- *Cliff formation from differential erosion:* Hard rocks erode more slowly than soft rocks, resulting in stair-stepped layered cliffs such as seen from Dead Horse Point and Grand View Point, and sheer cliffs such as seen along SR-128, SR-279, and the White Rim.
- *Mesas and towers:* Castleton Towers, Fisher Towers, Parriott Mesa, and Fisher Mesa are outstanding examples along SR-128; Monitor and Merrimac, Junction Butte, and the towers of Monument Basin are visible along SR-313.
- *Entrenched meanders:* Through much of its length along SR-128 and SR-279 and through Canyonlands National Park to the Green River Confluence, the Colorado River flows through a deep canyon cut downward by the river at a rate more or less equal to the rate of the surrounding land's uplift. The Green River, to the west of the Island in the Sky, clearly exhibits a similar history.
- *Mass wasting:* Talus slopes resulting from landslides, topples, and falls are visible below cliffs throughout most of the byway corridors.
- *Folding and faulting:* The Moab Valley, at the entrances to SR-128 and SR-279, was formed by folding and cracking of rock layers and eventual collapse following migration of salt layers far below.
- *Laccolithic mountain building:* Surrounding the byways at a distance stand the La Sal Mountains, Abajo Mountains, and the Henry Mountains, famous examples of mountain formation by igneous intrusions.
- *Flash flood erosion and waterfalls:* Summer monsoons bring floods and waterfalls to scour the landscape into a network of tributary canyons, pour offs, and alluvial plains.



Upheaval Dome, Island in the Sky (photo courtesy NPS)

- *Meteor impact?* Upheaval Dome, an area about three miles across in the Island in the Sky, remains a geological mystery. Rock layers here are dramatically deformed. Rocks in the center are pushed up into a dome, with a downwarp surrounding. Rock layers now at the surface of the dome were once buried at least a mile underground and are not visible anywhere else nearby. Scientists believe Upheaval Dome was formed either by impact of a meteor, or by an upwelling of the thousands of feet of salt that still underlies the Canyonlands region. If the latter is true, Upheaval Dome may be the most deeply eroded salt structure on Earth.

6.2.2 Plants



The byway corridors are home to more than 100 species of plants in the warm-to-cool desert shrub and semi-desert vegetative types. Riparian areas are dominated by Fremont cottonwood, willows, netleaf hackberry, Gambel oak, skunk bush, and the exotic tamarisk and Russian olive. Large expanses of native grasses still remain, including Indian ricegrass, needle-and-thread grass, galletagrass, sand dropseed, and blue gramma, with sagebrush around the perimeter. Stonier soils support blackbrush, ephedra, four-wing saltbush, single-leaf ash, cacti, yucca, and many seasonal wildflowers. Badlands and saltier soils support shadscale and four-

wing saltbush. Unique “hanging gardens” are common on shaded cliff-side seeps, with maidenhair ferns, cave primrose, monkey flower, columbine, sedges, and orchids.

6.2.3 Wildlife



Bald Eagle along Colorado River



Bighorn sheep



Tadpole shrimp. Photo courtesy NPS.



Heron rookery, SR-128

Wild lands support wild animals, and the byways have both in abundance. For example, Canyonlands National Park as a whole has recorded 273 species of birds, 50 species of mammals, 10 species of amphibians, and 28 species of reptiles.

Common birds include Common Ravens, Blackbilled Magpies, White-throated Swifts, Turkey Vultures, Cooper’s Hawks, Marsh Hawks, Red-tailed Hawks, Redwing Blackbirds, Say’s Phoebes, Pinyon and Scrub Jays, and Canyon Wrens. Great Blue Herons have established a large rookery beside the Colorado River near Big Bend, and Peregrine Falcons and Golden Eagles nest in cliffs along SR-128. A wide variety of waterfowl stop by in the Colorado River in small numbers during migrations, including ducks, geese, and White Pelicans. Wild Rio Grande Turkeys are becoming increasingly common in riparian areas. Particularly in winter, Bald Eagles can be seen fishing along the Colorado River or perching in the Cisco Desert.

Commonly seen mammals include mule deer, beaver, black-tailed jackrabbits, desert cottontails, skunks, raccoons, kangaroo rats, and rock squirrels. Pronghorn, the fastest mammals in North America, and white-tailed prairie dogs are locally abundant in the Cisco Desert. Lucky visitors may glimpse more shy or uncommon creatures such as river otters, ringtails, bobcats, mountain lions, badgers, and both grey and red foxes. Desert bighorn sheep are often seen by careful observers along the Colorado River and inside canyons and cliffs nearby, and parts of the byway corridors are critical lambing and rutting habitat.

Throughout slickrock sandstone areas of the byways, naturally occurring basins, or “potholes,” collect rain water and wind-blown sediment, forming microcosmic ecosystems with a fascinating collection of plants and animals adapted to a harsh desert life. Potholes range from a few millimeters to a few meters in depth. Fascinating pothole crustaceans such as tadpole shrimp, clam shrimp, and fairy shrimp can hatch, grow, and lay eggs even before their predators have matured. Their eggs can lose up to 92 percent of their moisture and still survive for years, and will hatch within days of rain. Potholes also serve as a breeding ground for many high desert amphibians and insects.

6.2.4 Special status species

At least nine species of U.S. Fish and Wildlife Service–listed Threatened, Endangered, and Candidate species occur within the byway corridors, including one plant species, Jones cycladenia (*Cycladenia humilis* var. *jonesii*), at the northern end of Castle Valley. The Colorado River is particularly significant as habitat for four endangered fish species, including bonytail (*Gila eleagans*) (potential occurrence), Colorado pikeminnow (*Ptychocheilus lucius*), humpback chub (*Gila cypha*), and razorback sucker (*Xyrauchen texanus*). Other special status species include Bald Eagles (*Haliaeetus leucocephalus*), which are commonly seen along the Colorado River and in the Cisco Desert along with Golden Eagles; Mexican Spotted Owls (*Strix occidentalis lucida*); Southwestern Willow Flycatcher (*Epidonax traillii extimus*) (potential occurrence); and Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*) (potential occurrence, with a recent sighting in Arches National Park). Habitat for the black-footed ferret (*Mustela nigripes*), the rarest mammal in North America, exists here in the Cisco Desert, with its populations of prairie dogs, the ferret’s preferred food.

The BLM has also listed 43 Sensitive Species (plant and animal) that may occur within the Moab Field Office area, including the byway corridors.

6.2.5 Soils



Biological soil crust (photo courtesy NPS)

The byway corridors retain outstanding remnant examples of the Colorado Plateau’s unique version of biological soil crusts (a.k.a. “biotic soil crusts,” “cryptogam soil,” “cryptobiotic soil,” or just “crypto”). These complex webs of blue-green algae, fungi, and lichens bind the sandy soil, fix nitrogen, increase water infiltration, and decrease wind and water erosion. They are the most common form of groundcover in the region, but are easily damaged by footsteps, bicycles, OHVs, grazing cattle, and perhaps from acid deposition from air pollution.

6.2.6 Wilderness

Several areas with wilderness characteristics exist along the byways, forming a backdrop to the byway experience and nearby activities. They are important as wildlife habitat, as buffers against increasing developments, and as repositories for relatively unaltered systems and organisms that can serve as baselines for scientific studies.

6.3 Recreational resources: Internationally significant

Grand County’s scenic byways are indeed a destination unto themselves for recreational visitors from around the world. Annual visitation to the Moab Field Office area of the BLM, of which the byways form the heart, is approximately 1.4 million site visits. Over 200,000 people visit Dead Horse Point State Park each year, and 250,000 visit the Island in the Sky district of Canyonlands National Park.

Studies have revealed recreation is the primary purpose of visitor trips to the Moab Field Office area of the BLM and that for 68 percent of people visiting, these BLM lands are their primary destination. Eighteen percent of visits are from local residents, while 33 percent traveled 200–500 miles and 36 percent over 500 miles to come here.

6.3.1 Sightseeing and photography

The scenic resources described above are the foundation for the byways' prime recreational pursuits—sightseeing and photography. No section of the byways is uninteresting to those who will take the time to look. The byways are also an internationally important destination for professional photographers. The view from Dead Horse Point is one of the most photographed scenic vistas in the world. Many photographic essay books depict Grand View Point, Fisher Towers, Mesa Arch, and Professor Valley.

6.3.2 Camping and picnicking

Riverside camping, canyon camping, high mesa camping, backcountry camping—all are available along the byways. Twenty campgrounds have sites of varied types to serve large groups, large motor homes and trailers, and tent campers. Most sites are drive-up, while a few are walk-in tent sites. Backpack camping is permitted almost everywhere on BLM lands, and is available by permit in Canyonlands National Park. Picnicking facilities are numerous at the national and state parks, and any BLM campsite may be used for picnicking without charge.

6.3.3 Multi-use trails: jeeping, biking, and hiking



(Photo courtesy Action Shots, Moab)

The byways are primary accesses to the thousands of miles of “jeep” trails that crisscross Grand County, the legacy of decades of exploration for uranium, vanadium, oil, and gas. These trails have made Moab a world-renowned four-wheeler’s paradise, and are now shared by four-wheel-drive vehicles of all types, ATVs, bicycles, and hikers. The annual Moab Jeep Safari brings over a thousand vehicles together each spring to drive trails branching off the byways onto BLM lands. Highlights of multi-use trails with byway trailheads are listed below.

From the SR-279 corridor:

- *Poison Spider Mesa Trail*: Switchbacks to a mesa top overlooking the Colorado River, The Portal, Moab Valley, Behind the Rocks, and the La Sal Mountains. Offshoots offer variations in routes and difficulty.

From the SR-313 corridor:

- *Gemini Bridges Road*: Downhill most of its 14 miles from SR-313 to US-191, this trail accesses many other trails, offers grand views across Arches National Park, and rewards visitors with close-ups of spectacular twin arches, Gemini Bridges, spanning Bull Canyon.
- *Shafer Trail and the White Rim Trail*: The historic Shafer Trail, a remnant from mining and ranching days, descends from the Island in the Sky 1,500 feet to the White Rim Trail, a 100-mile, world-class jeep and mountain bike tour in the heart of Canyonlands National Park. The White Rim Trail can also be accessed from SR-279.
- A vast and intricate network of roads and trails branch off SR-313 into the Spring Canyon Point, Deadman Point, Mineral Point, and Horsethief Point areas above and along the Green River.

From the SR-128 corridor:

- *The Onion Creek Road* winds through a deep canyon of fabulously sculpted red sandstone cliffs and towers near famous Fisher Towers to finally enter remote, cliff-rimmed Fisher Valley at the base of the La Sal Mountains.
- *Kokopelli’s Trail*: This trail (part two-track, part single-track) crosses an astonishing variety of terrain, from badlands to river cliffs, mesa tops, and high country, all the way from Loma, Colorado, to Moab.

6.3.4 Bicycling

The extraordinary geography of the byways region and an abundance of trails have given Moab an international reputation as the “mountain biking capital of the world.” In addition to biking the multi-use two-track trails bicyclists have two outstanding dirt single-track trails accessible from the byways:

- *Porcupine Rim Trail*: This famous advanced trail stair steps steeply down 16 miles from the mountains in back of Moab to SR-128 at Negro Bill Canyon, with incredible views over the edge of Porcupine Rim to Castle Valley, 1,500 feet below.
- *Kokopelli’s Trail*: This part two-track, part single-track trail crosses 142 miles of varied terrain, from badlands to river cliffs, mesa tops, and high country.

New mountain biking trails are being planned and built by the Moab Trails Alliance and Grand County Trail Mix Committee, including a rim side, family-friendly route at Dead Horse Point State Park.

The byways are increasingly being recognized for their outstanding road biking opportunities. A morning ride up the river along SR-279 is a popular pastime for Moab residents. SR-313 has 13 miles of open, mostly downhill travel on eight-foot-wide paved highway shoulders from the Dead Horse Point–Island in the Sky intersection to US-191. From there, bicyclists will soon be able to ride on a separated, paved bikeway all the way to Moab, passing the entrances to Arches National Park, SR-279, and SR-128 along the way and crossing the just-built, multiple government and private funded bicycle/pedestrian bridge over the Colorado River. Also recently built are portions of a four-mile paved TEA-funded bikeway from US-191 along SR-128 to the Porcupine Rim Trailhead.

6.3.5 Hiking

Byways hiking opportunities abound even for those who prefer not to share trails with OHVs or bicycles. Here are some popular designated routes:

From SR-279:

- *Portal Overlook Trail*: A two-mile gradual ascent with views of the dramatic South Portal of the Colorado River, the Moab Valley, and Arches National Park.
- *Corona Arch Trail*: An easy slickrock route to Corona Arch (140 by 105-foot opening).

From SR-313:

- *Dead Horse Point Rim Trail*: This easy loop circles the rim with spectacular views off the edge most of the way.
- *Neck Spring Trail*: A six-mile loop that dips below the rim at Island in the Sky and passes several springs and evidence of the area’s ranching tradition.
- *Syncline Loop*: A 10-mile strenuous loop around the mysterious Upheaval Dome and its crater.
- *Grand View Trail*: An easy one-mile walk to the farthest extension of the Island in the Sky in the very heart of the canyon country.
- Four other Island in the Sky trails provide easy access to rim views and challenging descents to the White Rim Trail below.

From SR-128:

- *Fisher Towers Trail*: Recently designated a National Recreation Trail. A two-mile route along the base of the famous 900-foot Titan and other sandstone spires, with views of Onion Creek, the Colorado River, and Fisher Mesa.
- *Negro Bill Canyon*: A two-mile trip through a sculpted canyon with a clear stream brings you to Morning Glory Natural Bridge. At 243 feet long, the bridge is the sixth-longest natural rock span in the U.S.
- *Amphitheater Loop Trail*: A three-mile hiking loop with river views.

6.3.6 Rafting and boating



(Photo courtesy Moab Area Travel Council)



Rocky Rapid raft ramp

Potash, at the end of SR-279, is the usual departure point for raft trips down Cataract Canyon, which at high water has the biggest whitewater in the U.S. The 13-mile “Moab Daily” section of the Colorado River, along SR-128, is the most popular whitewater day trip in Utah, with an estimated 59,000 boaters partaking each year. The six major rapids, rated up to Class III, offer enough thrills for most boaters but with relatively little hazard, compared to other rivers with more technical rock hazards. Many novices try their hand at the “Daily” in small inflatable kayaks.

The 21 river miles from Takeout Beach to Goldbar Campground on SR-279 offer outstanding opportunities for canoeing and calm-water kayaking in a stunning canyon setting. Jetboat tours are available from the Moab Bridge downstream through a serpentine canyon to the confluence with the Green River.

6.3.7 Rock climbing



Big Bend bouldering area, SR-128

Climbers come from around the world to challenge the 900-foot Titan and other towers at Fisher Towers, as well as the Castleton Towers near SR-128. Big Bend, on SR-128, is a local favorite spot for bouldering. The Wall Street section of SR-279 offers over 100 named climbing routes on solid rock vertical crack systems. Routes are of all levels of difficulty, and this is a popular destination for beginners. The Island in the Sky district of Canyonlands offers seemingly endless cliff and tower climbing opportunities.

6.3.8 Wildlife viewing

Bighorn sheep are frequently spotted along sections of the White Rim Trail, in canyons off of SR-279, and in certain locations along SR-128. Bald Eagles frequent the Colorado River canyon in the winter, while Golden Eagles, falcons, and ravens nest in riverside cliffs and Great Blue Herons nest in a large riverside rookery of oak trees. Wild turkeys are becoming increasingly common along the river. Various water birds stop by the river on their migrations. Lucky visitors may catch glimpses of the ever-present grey foxes, mountain lions, coyotes, and bobcats, and everyone is likely to encounter mule deer. Pronghorn are frequently seen in the northern badlands of SR-128, as are prairie dogs, and occasionally red foxes and badgers.

6.3.9 Star watching

Amateur astronomers and parents wanting to show their city children what the Milky Way looks like—or simply wanting to see what it used to look like back home—come to the byways to see the heavens, since we still have some of the darkest night skies and cleanest air in the nation.

6.3.10 Horseback riding

Easy trails, wide-open spaces, and spectacular scenery combine to make the plateau regions of SR-313, and the Professor Valley, Dewey, and Cisco areas of SR-128 excellent equestrian country. Two ranches along SR-128 currently provide trail rides, and SR-128 is the access point for the Onion Creek Bench equestrian trail system. Upper Sevenmile Canyon, along SR-313, has been proposed for designation as an equestrian recreation focus area.

6.3.11 Cultural tourism

Some people, especially foreigners, come to the byways to see cattle. Open range cattle grazing and rustic ranches with classic Western scenery are in demand among those living intensely urban lives. That the byways are the place to come is publicized by their long tradition of commercial filmmaking. Film buffs come to see where the movie version of Geronimo rode across the plains with snow-capped mountains above. The ranch where John Wayne and John Ford's Fort Apache stood still operates on SR-128. The cliff Thelma and Louise drove their car off of is visible from Dead Horse Point. Other famous locations abound.

6.4 Historical resources: Regionally significant

Historical themes with the most evidence still remaining along the byways include European exploration and settlement, the livestock industry, the growth of transportation infrastructure, birth of the nuclear age, and energy and minerals resource development. Following are some of the primary sites:

Along SR-313:

- *Dead Horse Point fence site*: A replica of the fence that cowboys used to seal off The Neck, thus trapping livestock to convert the Point into a ready-made corral.
- *Shafer Trail*: Built in the early 1900s to move cattle between the mesa tops and the Colorado River, this trail was later widened to serve uranium, vanadium, and oil and gas exploration along the White Rim.
- *White Rim Trail*: Built by the Atomic Energy Commission to promote uranium exploration in the 1950s.



Shafer Trail, Island in the Sky

Along SR-279:

- *Atlas uranium mill site*: For almost thirty years the Atlas mill supplied uranium to fuel the nation's nuclear weapons and nuclear energy industries. The site was also the location of a NPS CCC camp around 1940.
- *Potash mine*: In operation since the early 1960's

Along SR-128:

- *Spanish Trail*: The Old Spanish Trail was the major trading route in the Southwest around 1830–1848, connecting Santa Fe and California. The trail crossed the Colorado River about a half mile upstream from the South Portal, but no evidence remains.
- *Negro Bill Canyon*: Is the site where William Granstaff, the first African American ran cattle in this area.
- *Hittle Bottom*: Foundation remains of a homestead from 1922 can be seen.
- *King's Toll Road*: An original rock inscription marks an SR-128 precursor, a segment of a toll road built around 1900 to connect Professor Valley with the Dewey area along the Colorado River.

- *Dewey Bridge*: When completed in 1916, one-lane, 502-foot Dewey Bridge was the second longest suspension bridge west of the Mississippi River, and was the longest such bridge in Utah. It stood at the site of the old King's Ferry and on a variant of the Old Spanish Trail. After being replaced by a modern two-lane bridge in 1986, Dewey Bridge was included in the National Register of Historic Places. The bridge recently burned down as a result of a brush fire.
- *Dewey Dam site*: In the mid-1920s the Reclamation Service began planning for a large dam to be built just below Dewey Bridge. Two long wooden ladders still cling to the cliff there to mark the site where survey work was done.
- *US-6/50*: The northernmost two miles of SR-128 are on the old US-6/50 highway, replaced by I-70.
- *Cisco*: Just off SR-128 on the old US-6/50, Cisco was established in the 1880s as a sheepherding center and later grew as a livestock shipping point and primary watering stop for steam locomotives on the Denver and Rio Grande Western Railroad, with water piped from the Colorado River. In 1924 the surrounding lands became one of the earliest significant oil and gas fields in Utah. Cisco is today nearly a ghost town, and has been a location for several commercial films, including *Vanishing Point* and *Thelma and Louise*.



Dewey Bridge on SR-128, before and after recent fire

6.5 Cultural expressions: Internationally significant

6.5.1 Ranching and open-range grazing

The *true* “True West” lives on in small pockets along the byways in the form of an ongoing ranching tradition dating back to the mid-1880s. Hay growing, open-range grazing of cattle, sheep, and horses, and even an occasional small cattle drive are still seen.

6.5.2 Global recognition through filmmaking



Filmmaking history exhibit

This is where God put the West.

—Variously attributed to John Wayne or John Ford,
after scouting film locations along the byways

Through a long history of commercial filmmaking that has helped define the mythical West, the byways region has staked a firm claim on part of the world's psyche, befitting the area's status as one of the most scenic locations on Earth. From the time John Wayne, in the 1949 classic *Wagon Master*, rode onto the screen at White's Ranch along SR-128, through 1963 classics *The Greatest Story Ever Told* and *Cheyenne*

Autumn, to more modern well-known films such as *Thelma and Louise*, *Geronimo*, and *Cliffhanger*, to Bon Jovi appearing on MTV atop Castle Rock, filmmaking along the byways has been and will likely continue to be a strong contribution to this American cultural expression. An excellent exhibit installed by the Moab to Monument Valley Film Commission at the Red Cliffs Ranch along SR-128 chronicles the region's filmmaking tradition.

6.5.3 Events

Many special events help publicize and sustain the byways cultural and recreational traditions. Mountain biking and road biking events use the byway corridors, including the Century Tour, the Moonlight Ride, the Fat Tire Festival, and the Skinny Tire Festival. The Moab Half Marathon and The Other Half Marathon use SR-128 for their annual foot races. The Moab Jeep Safari accesses routes along all three byways. Extreme sports events periodically use portions of the byway corridors, including the Colorado River. The annual Moab Music Festival (motto: "Music in concert with the landscape") adds a touch of high culture to the corridors with outdoor concerts at such byways venues as Onion Creek and destination resorts along SR-128.

6.6 Archaeological resources: Regionally significant

The byways region was first visited by humans more than 10,000 years ago, and is located on the boundary of the Fremont and Ancestral Puebloan cultures, dating back as far as 1500 BC. Sites from these cultures, such as rock shelters, campsites, and lithic scatters, are fairly common along the corridors, but are unlikely to be noticed by average visitors. With the exception of rock art panels, the only publicized archaeological sites are Ancestral Puebloan granaries at Aztec Butte and an impressive tower-like structure at Fort Bottom, both in the Island in the Sky district of Canyonlands.



Petroglyphs, SR-279 and 313

Spectacular Native American rock art panels are numerous in the area. The "Wall Street panel," immediately adjacent to SR-279, is one of the finest and most elaborate in the region, with long lines of bighorn sheep, a bear-like creature, and strings of horned, bejeweled humans holding hands. Plans are underway to submit this panel for inclusion on the National Register of Historic Places.

7. Visitor experience plan

Visitors to the byways want a quality experience. What does that mean? This user group generally prefers paved access to scenic vistas, cultural sites, and interpretive stations. (From BLM RMP)

People come to Grand County's scenic byways to find something clean, pure, and authentic. Call it the "Authentic West." Marketers talk about establishing "brand" to sell goods or services. The byways' innate "brand" is "Authentic West." For the sake of the byways, *the brand is what gives the region its sense of place and what we value about that.*

The American land is a central part of the brand "America," and throughout the world the Authentic West is the most resonant theme of the American land. Grand County's byways are the heart of the Authentic West that the world desires: Vast, clean, open spaces. Bracingly clean air with a hint of sage or juniper. Virgin ground. Rugged, mysterious, wild. Soaring heights and cavernous canyons. Wild animals. Silence, serenity, darkness. The bones of the earth revealed in countless fantastic forms with crisp details. The rapids are roaring and real, not little trolleys running on rails through recycled ponds. The rocks are hard, not fiberglass. The cliffs are sheer, and most have no railings. You really can die out here . . . or become more alive. Either

way, your involvement is direct and fundamental, and no one needs to tell you a story or lead you by the hand to get you engaged—just stop your car and get outside.

That is what we are “selling,” and to the extent that we can “provide” that—or rather, can *preserve* that—in an uncrowded setting, and with a welcoming local populace, we will have satisfied visitors.

A brand can be lost or damaged by losing its authenticity, credibility, or reputation, in which case it becomes a sort of “Marlboro Man,” a leftover shell of a lost or wishfully imagined past. The most important aspect of protecting the brand is to protect the resources and experiences the brand is built upon. Thus, while the strategies discussed under all sections of this CMP are important—highway safety is vital, good interpretation and signage improves visitor experiences, and good services and facilities facilitate tourism—for Grand County’s unique situation, resource protection and enhancement will be the most critical contribution to quality visitor experiences.

8. Visitor services and facilities

GOAL: Provide necessary and appropriate facilities for visitor health and safety, and to facilitate tourism in a rustic setting.

Citizens have expressed their desire to keep the backcountry in the byways by keeping the Moab areas as the hub for accommodations, supplies, and services. The inconvenience of visitors having to carry their own food and water or travel long distances for gasoline or civilized accommodations is part of the desirable experience of the backcountry.

8.0.1 Information services

Information centers: The Moab Information Center (MIC), in downtown Moab, is owned by Grand County and operated jointly by Canyonlands Natural History Association, the Moab Area Travel Council, the BLM, NPS, and the U.S. Forest Service, with State Parks as a contributor. It is the primary information and interpretive source for byways visitors. The center offers audiovisual orientation programs and extensive sales of books, maps, and audiovisual materials on the region. Staff is on hand to answer questions and direct visitors to the most appropriate destinations based upon their interests and capabilities.

Visitor centers at Dead Horse Point State Park and Island in the Sky offer similar informational and interpretive services and resources. Some area information materials are also distributed at traveler welcome centers in Thompson Springs, Blanding, and in Fruita, Colorado.

Web sites: The Moab Area Travel Council offers the most comprehensive Web site on the byways region, providing visitors with detailed information on activities, destinations, accommodations, and essential information such as safety messages and minimum impact recreational guidelines.

<http://www.discovermoab.com/>

NPS hosts Web sites with comprehensive information on Canyonlands and Arches National Parks, including general introductions to park resources, visitor facilities, activities, regulations, and safety information.

<http://www.nps.gov/cany/>

<http://www.nps.gov/arch/>

The BLM website contains information on area resources and programs.

<http://www.blm.gov/ut/st/em/fo/moab.html>

Utah State Parks has a webpage for Dead Horse Point State Park, with links to databases of lodging, guides, rentals, camping, events, and other traveler information.

http://www.utah.com/stateparks/dead_horse.htm

Publications: Byway-specific publications are currently limited to small brochures on camping and trails, and one four-color guide to SR-128. On the other hand, regional recreational guidebooks, brochures, interpretive guidebooks, maps, and audiovisual materials are abundant. Additional byway-specific publications will be developed, as discussed under Section 10, Interpretation.

8.0.2 Emergency services/law enforcement

Medical services: Hospital and ambulance services are available in Moab, with Allen Memorial Hospital as the closest hospital to all three byways. Ambulance and EMT/paramedic services are based in Moab.

Firefighting services: Wildland and property firefighting services along the byways are the responsibility of the BLM, NPS, FFSL, Grand County, the Thompson Springs Fire Department, and the Castle Valley Fire Department, depending on location. Currently portions of SR-128 north of Hittle Bottom are not covered by any district. From the Castle Valley turnoff to US-191, structures are covered by the Castle Valley Fire Department and property is covered by FFSL.

Search and rescue: Search and rescue (SAR) services are essential to keep recreational visitors safe and secure. These services are made many times more important and more difficult by Grand County's rugged, remote, and diverse terrain and the exceptionally high volume of recreational visitors. NPS, BLM, and State Park rangers all provide SAR services, but primary responsibility for SAR services in the county lies with the Grand County SAR team, a division of the Grand County Sheriff's Office. The team is comprised of approximately 35 highly competent and dedicated volunteers who work in conjunction with sheriff's deputies and other law enforcement officers, performing about 80–120 searches and/or rescues per year. Volunteers commit a substantial amount of time and energy and receive some compensation.

RECOMMENDATION: Maintain community and financial support for SAR services. Acknowledge their essentiality to Grand County's outdoor tourism-based economy by publicizing their work and accomplishments. [Grand County; MIC; Moab Area Travel Council]

RECOMMENDATION: Consider options for providing more incentives for SAR volunteering. [Grand County]

Law enforcement: Citizen comments indicate that increased law enforcement is a priority for traffic safety, resource protection, and visitor assistance. The Utah Highway Patrol (UHP) has primary responsibility for the three state byways. This includes policing of traffic violations and of impaired drivers, criminal interdiction, enforcing vehicle safety and registration laws, public assistance, enforcing truck restrictions, accident reconstruction, public safety education, and first responder emergency medical responsibilities. UHP also serves as backup to other local law enforcement agencies. Because of limited staff and higher priority highways, the scenic byways receive little UHP attention.

The Grand County Sheriff's Office has essentially the same range of responsibilities as the UHP but works county-wide, including all backcountry areas. Sheriff's deputies are the officers currently most in evidence along the byways. Helicopter support is available to Sheriff's deputies upon request from a state-wide pool and is used during peak periods for enforcement, search and rescue, and emergency medical services.

NPS fields enforcement rangers at Island in the Sky.

Four State Parks rangers are based at Dead Horse Point State Park and the region office. They have full peace officer authority, but primarily enforce resource protection laws, OHV regulations, and boating safety regulations.

For BLM law enforcement see Section 9.3.15.

8.0.3 Phone service

Public phone service is important for emergency services and for visitor convenience, but the byways face two deficits in this regard. For the many visitors who do not have cell phones, public phones are essential, but these are unavailable along the byways except at the Island in the Sky visitor center and at the Dead Horse Point State Park visitor center on SR-313, and an emergency-only phone at Big Bend on SR-128. No phone service is available along SR-279. This makes cell phone service even more important, but many areas lack cell phone service as well. Cell service is sporadic at best on SR-313, and is unavailable along SR-279 due to the deep canyon setting. Cell phone service on SR-128 is good in the Cisco Desert, poor or absent in the canyon sections, and sporadic or poor in the central section from the Castle Valley turnoff to Hittle Bottom.

8.0.4 Campgrounds



Goose Island, SR-128



Group camping at Gold Bar, SR-279

Several large commercial campgrounds and RV parks are located in the Moab area. The byways are served by noncommercial campgrounds along them in scenic locales. These BLM, NPS, and State Park campgrounds provide spaces for tents, RVs, groups, walk-ins, and disabled persons. Dead Horse Point State Park campground offers electrical hookups.

The community has, during this and previous planning processes, stated that increasing camping demand is most appropriately met by commercial campground operators in the Moab area, which is centrally located, within reasonable distance from the byways, and in need of economic development.

RECOMMENDATION: Keep development to a scale appropriate with limited byway resources. [NPS; State Parks; Grand County]

RECOMMENDATION: In general, if a needed public service is available in the Moab area, don't develop it on public lands. Keep the backcountry in the byways. [BLM; NPS; State Parks; Grand County]

8.0.5 Picnic areas



Lions Park, SR-128

Picnicking and day use is permitted without charge at all of the BLM campgrounds along the byways.

Additional picnicking is available at Lions Park at the SR-128/US-191 junction, and at many sites in Canyonlands National Park and at Dead Horse Point State Park.

8.0.6 Restrooms

Restrooms are available at all campgrounds and most picnic areas, as well as at boat launch areas and selected scenic overlooks and trailheads.

8.0.7 Trails

As discussed previously under Section 6.3, Grand County has an extensive system of multi-use (OHV, bicycle, and hiking) two-track trails of every level of difficulty and many of these trails are accessed from the byways. Some hiking-only and bicycle-hiking trails exist. A paved bicycle trail connects the three byways along US-191, and a paved bicycle/pedestrian trail is being built along SR-128 from US-191 to the Porcupine Rim trailhead. Lions Park, at the junction of SR-128 and US-191, will soon be remodeled into the Lions Park Trail Hub, with parking and shuttle pickup. Bikeways are further discussed in Section 12, Multimodal transportation.

8.0.8 Lodging, dining, gasoline, retail, and mechanic services

No lodging or dining services are available along SR-279 or SR-313. Lodging and dining are available along SR-128 at two “destination resort” ranches, and at one small inn in Castle Valley, two miles from SR-128. The nearest other accommodations are in Moab, which has ample accommodations of all types and levels.

No gas stations, retail services, or mechanic services are available along the byways. Full services are available in Moab. Gasoline and limited food and supplies are available at the Archview RV Campground and Resort at the intersection of SR-313 and US-191

The reliance upon Moab for these services is generally considered acceptable. The public has strongly supported the principle that the byway corridors should retain their current rustic character and that additional visitor accommodations should be provided in existing developed areas outside the corridors. A few residents have supported the idea of providing gasoline at some point along SR-128, but the dominant feeling is that the corridors should be kept free of commercial facilities, and that to provide too much convenience would change the character of the corridor and degrade the existing treasured “way out there” Western feeling of these areas.

RECOMMENDATION: Discourage construction of additional commercial facilities along the byways, with the exception of the commercial development node at the intersection of SR-313 and US-191 or in Cisco. [Grand County] (See 9.2.10)

8.0.9 Water

No water is available along SR-279. Past efforts to develop a spring at Jaycee Park for public use have shown that this spring cannot be kept properly sanitized, and no other water sources are available. Along SR-313, limited water is available at Dead Horse Point State Park, and bottled water is sold at the Island in the Sky visitor center.

Along SR-128, public drinking water is available only at Lions Park and an unapproved public drinking water source exists at Matrimony Spring, near the junction with US-191. The high-quality water of Matrimony Spring pours from the rock face only a few feet from SR-128. Travelers have relied upon this spring for over a hundred years, and it is the favored watering hole and gathering spot for bicyclists hot off the Porcupine Rim Trail and hikers returning from Negro Bill Canyon. Many residents, particularly those from Castle Valley (which has many homes without water or with poor water), rely upon Matrimony for a drinking water supply.

ACTION: Secure title to water rights to Matrimony Spring. [Grand County, in cooperation with SEUDHD]

Foot access to Matrimony Spring is hazardous due to an abrupt falloff of the pavement edge.

ACTION: Improve access at Matrimony Spring by slope paving the gravel area surrounding the spring, taking care not to cover the dinosaur trackway on the sandstone slab under the spring outlet. [Grand County; UDOT]

Lions Park has a water service line from Moab. Additionally, the Lions Club holds rights to a spring on the nearby cliff face. This spring has a water quality equal to that of Matrimony Spring and is more reliable than Matrimony. This could be developed into a primary or supplemental public water supply, to alleviate traffic at Matrimony Spring.

RECOMMENDATION: Consider seeking an agreement with the Lions Club to use a portion of Lions Club Spring to develop a public water supply and place signs identifying the location. [Grand County; SBC]

8.0.10 Recreational rentals and tours

Various rentals of jeeps, ATVs, bicycles, rafts, and kayaks are available in Moab, and a wide variety of area tours are offered by companies based in Moab. These include jeep, ATV, hiking, biking, rock climbing, canyoneering, rafting, photography, and nature study.

8.0.11 Common carrier byways access

See Section 12.2.

9. Resource protection and enhancement

Grand County and the corridor land management agencies (BLM, NPS, State Parks, SITLA, FFSL, UDOT) all have planning documents created through ample study and public input. These plans address resource protection and enhancement in a manner and extent appropriate to each agency's mission, and contain the primary strategies for achieving scenic byway goals. This CMP will only summarize certain agency protection strategies particularly relevant to byway goals, and in some cases suggest possible modifications or additions to these strategies.

9.1 Goals

- Preserve open spaces and scenic integrity
- Preserve pastoral character of the corridors, including cultural landscapes of existing agricultural fields
- Promote recreation practices compatible with resource management and byway character goals
- Preserve and restore native ecosystems, wildlife habitat, soils, and threatened and endangered species
- Protect archaeological, historical, and paleontological resources
- Protect dark night skies, clean air and water, and natural soundscapes
- Promote quality visitor experiences

9.2 Agency-specific strategies

9.2.1 Grand County

Grand County ordinances and planning documents that regulate and guide private developments include:

Highway 191 North Corridor Plan (1999): A general plan meant to guide zoning regulations and county policies relating to the US-191 corridor north of Moab, including the gateway to SR-313:

- Recommends designation of the SR-313/US-191 intersection as a node for tourist-oriented commercial development
- Articulates a vision of retaining the open desert character of the gateway
- Defines critical attributes as including natural appearances of open desert views, the clear night sky, and the natural appearance of steep slopes and visible mesas
- Calls for a minimization of signage and for screening of parking areas

ACTION: Implement the remaining action plan items from the *Highway 191 North Corridor Plan*. [Grand County]

City of Moab/Grand County North Corridor Gateway Plan (2001): Specifies community preferences for land uses and streetscape appearances for the US-191 corridor from the Moab City limits to the entrance to Arches National Park, including the gateways to SR-128 and SR-279 and the UMTRA site:

- Acknowledges the unique position of the north corridor gateway as the first contact most visitors have with the Moab area

- Establishes a vision of the north corridor gateway zone as a welcoming and friendly place to pedestrians, bikers, residents, and visitors alike, with a built environment that demonstrates community pride and creates a positive first impression
- Establishes an objective of preserving the rural character north of the Colorado River beyond the current developed areas in the immediate vicinity of the Colorado River Bridge
- Documents community preference for UMTRA lands as being restored to a relatively natural state and preserved as open space

River Road (SR 128) Corridor Plan (1999): An amendment to the *Grand County General Plan* that documents a community vision and goals for the Colorado River section of SR-128 to guide future County zoning regulations and county policies:

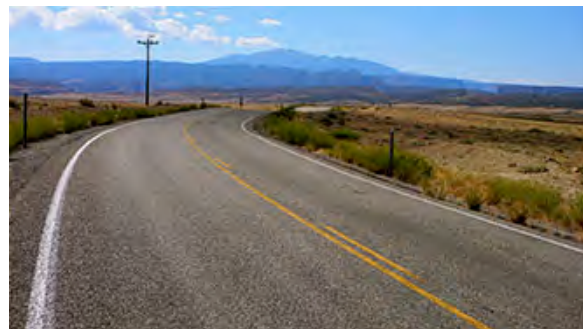
- Defines the River Road Corridor as one mile on each side of the highway centerline
- Defines critical attributes to be preserved as agricultural fields, roadless areas, 100-year floodplain areas, wildlife and wildlife habitats, native vegetation, the clear night sky, and the natural appearance of steep slopes
- Establishes general policies to achieve the following goals:
 - Protect the raw natural beauty of the canyon and its critical attributes
 - Preserve the noncommercial, pastoral character of the corridor
 - Support agriculture, ranching, recreation, and economic diversity
 - Encourage only low-impact recreational activities
 - Improve highway safety
 - Protect sensitive areas

RECOMMENDATION: Implement the remaining recommendations from the River Road Corridor Plan. [Grand County]

The Cisco Desert in the northern portion of SR-128 is often neglected in discussions about managing for scenic integrity because its open topography lacks the spectacular red rock cliffs Grand County is famous for, but the area nonetheless forms an important threshold experience for adventurers bound for the canyon depths ahead. The traveler's experience of the byway is unitary, and for many travelers, particularly those from eastern cities or other countries, vast, open spaces are important attractions in their own right. The sense of freedom and release gained from driving across the Rockies, through the canyons and towns of the West Slope, and finally emerging onto the open desert and leaving the interstate at the SR-128 exit is immense, and should not be compromised by inappropriate developments in the Cisco Desert. As the nation becomes more and more developed and the public's aesthetic preferences in landscape evolve, low mudhill badlands are gaining currency with travelers. Significant challenges may face the Cisco Desert: large areas of private and SITLA lands await possible development, with industrial uses the most likely candidates, oil and gas development is resurging, and the area is part of a major national utility corridor.



Morning fog, Cisco Desert



Cisco Desert, land of the long view

RECOMMENDATION: Require standards for mitigation of development effects, including scenic effects and impacts upon air quality and wildlife, for proposed developments and activities in the Cisco Desert. [Grand County; BLM; SITLA]

RECOMMENDATION: Recommend corridor management plans as amendments to the *Grand County General Plan Update* for the SR-279 and SR-313 corridors analogous to the *River Road (SR 128) Corridor Plan* of 1998, in order to document the county's wishes in the event proposals arise for sale, lease, or altered uses of the federal or state lands therein. [Grand County]

Grand County General Plan Update (2004): This county-wide vision for land uses documents the principles upon which zoning regulations and policies should be formed. Relevant examples include:

- The economy should be diversified beyond tourism.
- Rural character, small-town qualities, agriculture, and high-quality open space must be preserved.
- Land use planning and growth management are key concerns.
- The public's values of rural character include low-density, modest residential development; two-lane roads, without urban-level traffic; an absence of bright, unshielded outdoor lighting; protected view sheds to large open spaces; and low levels of population, crime, and traffic.
- Grand County supports the general retention of federal ownership of federal lands in the county.
- The county will obtain NPS input and involvement in decisions and proposed developments that might degrade park resources or park visitors' experiences.
- Mechanized travel should be limited to designated historical roads and trails.
- Federal agencies are encouraged to identify and conserve unaltered vegetation areas through designations such as Areas of Critical Environmental Concern or Research Natural Areas.
- Appropriate federal management of high-use and special-value areas is encouraged, and should include vigorous education and enforcement efforts.
- The unilateral imposition of "demonstration fee programs" on public lands by the BLM is opposed.
- Personal watercraft should be banned from the Colorado River from US-191 to the Utah-Colorado State line, and other upstream motorized boat traffic should be held to historically permitted levels.
- Grand County will work with public land agencies to ensure that dark skies are not compromised on public lands, and encourages these agencies to ensure that the natural quiet of the public lands is not degraded.
- The scenic quality and socioeconomic values of critical view sheds from primary public corridors should be preserved.
- The rural character of the "outback" should be preserved through careful site planning, development clustering, and use of indigenous architectural design and color treatment.
- The county encourages citizens to create a land trust to acquire land and development rights from willing sellers or donors and to manage easements.
- Opportunities for land swaps with public agencies and the purchase of land or development rights funded by open space impact fees should be explored.

Grand County Land Use Code (2008): The *Land Use Code* implements the *Grand County General Plan Update* and its amendments, and establishes the Range and Grazing District (R & G), which covers much of the byway corridor lands. For approved activities as allowed within the *Grand County Land Use Code*, with changes adopted through February 2008, refer to the *Grand County Land Use Code* available in the Community Development Department.

9.2.2 Department of Energy (DOE)

DOE is, through private contractors, beginning the long process of moving the Atlas uranium mill tailings at the Uranium Mill Tailings Remedial Action (UMTRA) site to a safer location near Crescent Junction, 30 miles north. The primary mode of transport for the tailings material will be by rail in sealed containers, using the existing Union Pacific branch line. This requires an at-grade crossing of SR-279. Oversized items that won't fit in the containers will be transported by truck on US-191. Depending upon funding availability, it may take up to 19 years to complete the move.

RECOMMENDATION: In discussions with DOE, ensure consideration is given for the effects upon SR-279. [Grand County]

RECOMMENDATION: Work with DOE to incorporate local suggestions for signage and crossing of SR-279 into DOE's access permit application to UDOT. [Grand County]

DOE conducts environmental air monitoring on the UMTRA site and at off-site locations, and has given assurances that contaminant levels outside the DOE property boundary do not exceed applicable standards, and that contamination at the site does not present a hazard to recreational users of the Colorado River.

Revegetation with desirable native species and control of undesirable species is ongoing, with a hope of returning the site to a park-like setting once cleanup is complete. Interim ground water remediation efforts have been implemented while a long-term remedy is being determined. DOE will comply with its Utah fugitive dust control permit during the tailings removal, and will abide by Grand County's Land Use Code requirements to minimize noise and light pollution.

The UMTRA property occupies a critically important location for Grand County. It is the gateway to the Potash–Lower Colorado River Scenic Byway and also is the gateway to Moab and Spanish Valley for the majority of the county's visitors. It is the first thing visitors see when they leave Moab Canyon and enter the Moab Valley traveling south.

The Atlas site was unusual enough to be designated as a Specially Planned Area District within the Grand County Land Use Plan to reflect the unusual needs for planning the disposition of the property. Upon completion of cleanup, the DOE is obligated first to offer the site to other federal agencies. Should these agencies decline, the property may be offered to the state or county.

RECOMMENDATION: Begin planning for the Specially Planned Area District. Explore options as to who would be the best ultimate recipient of the Atlas property to serve the goals of Grand County and the scenic byway, and work toward that outcome. Document the critical importance of the site, and establish a range of desired possible uses. [Grand County; SBC]

9.2.3 Bureau of Land Management

It is the mission of the Bureau of Land Management to sustain the health, diversity and productivity of the public lands for the use and enjoyment of present and future generations.

—BLM Web site

The BLM's management of public lands is governed primarily by the Federal Land Policy and Management Act of 1976 (FLPMA), although a great many other laws also pertain. FLPMA directs the BLM to manage for balanced multiple uses, including energy and minerals production, forage, recreation, wildlife habitat, wilderness, and cultural site preservation.

The Moab Field Office (MFO) of the BLM manages public lands along the byways under the terms of the Moab Resource Management Plan which specifies policies, plans, and permitted uses of lands within its jurisdiction. The Plan designates lands along the byways as Special Recreation Management Areas. The plan includes decisions improving and constructing sites and facilities along the riverway to enhance the range of recreational opportunities, and to protect its scenic quality and other resource values. Recreation focus areas would be established to enhance opportunities for hiking, climbing, and motorized backcountry touring and to reduce user conflicts.

9.2.4 National Park Service (NPS)

The mandate of the National Park service, established in the *National Park Service Organic Act, 16 U.S.C.1.*, is to "conserve the scenery and the natural and historic objects and the wild life therein and . . . provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." Thus, public use must be balanced against the preservation of the natural and cultural resources in perpetuity.

National park lands and particularly those managed as wilderness, are generally considered to receive the highest degree of protection for intrinsic resources of any lands in the U.S., and thus are most compatible with byway goals of preserving the lands and intrinsic resources in their natural state, while also providing for public enjoyment. Most of the lands in Canyonlands National Park, as well as the portions of Arches National Park within the SR-128 corridor, are managed as wilderness. Motorized vehicles, bicycles, dogs, mining, oil and gas extraction, road building, and permanent structures are prohibited in wilderness areas.

Developed portions of the Island in the Sky, including the visitor center, campgrounds, overlooks, and the immediate highway corridor, are managed as front country, but still with substantial sensitivity to byway goals.

Development and management is guided generally by the 1978 General Management Plan and subsequent more specific plans such as the Backcountry Management Plan (BMP). In addition, NPS uses the environmental impact statement (EIS) or environmental assessment (EA) processes to guide proposed development actions to prevent or minimize detrimental effects.

9.2.5 Utah State Institutional Trust Lands Administration (SITLA)

SITLA manages its lands for the benefit of the state's public school system:

The trust principles impose fiduciary duties upon the state, including a duty of undivided loyalty to, and a strict requirement to administer the trust corpus for the exclusive benefit of, the trust beneficiaries. . . . As trustee, the School and Institutional Trust Lands Administration must manage the lands and revenues generated from the lands in the most prudent and profitable manner possible, and not for any purpose inconsistent with the best interest of the trust beneficiaries. . . . The beneficiaries do not include other governmental institutions or agencies, the public at large, or the general welfare of the state. (From Title 53C—School and Institutional Trust Lands Management Act.)

Virtually all SITLA lands are subject to sale or lease for mining, oil and gas production, commercial and industrial uses, utility easements, or residential use. Because of its mandate, SITLA is constrained in its ability to respond to the range of concerns of the scenic byways and would be unlikely to forego sale or lease of lands within the corridors for the purpose of promoting byway goals.

SITLA periodically engages in cooperative real estate development ventures with private parties, but “always with an eye toward quality planning, preserving open space, and meeting larger community needs.” SITLA leases generally include a clause stipulating that land uses must conform with county law. If SITLA lands within the corridors are sold, they will come under the jurisdiction of the *Grand County Land Use Code*.

The proposed *Utah Recreational Lands Exchange Act* would exchange all SITLA lands within the SR-279 corridor, and all SITLA lands in the SR-128 corridor from US-191 through the Dewey area, for federal lands elsewhere in the state. SITLA would like to move its ownership of lands out of areas that might conflict with recreation uses. The act would consolidate management for these lands into the hands of the BLM, which manages with a wider consideration of byway goals. (SITLA lands in the Cisco Desert area of SR-128 would be retained. SITLA lands along SR-313 would be retained, since they are currently engaged in oil exploration and production.) It appears there is no opposition to the act itself, but passage has been held up due to unrelated politics in Washington.

ACTION: Reaffirm the importance of the Utah Recreational Land Exchange Act to Congressional representatives and urge its prompt passage. [Grand County; BLM; SITLA; SBC]

9.2.6 Utah Division of Forestry, Fire, and State Lands (FFSL)

FFSL manages Utah's sovereign lands in such a manner that the “protection of navigation, fish and wildlife habitat, aquatic beauty, public recreation, and water quality will be given due consideration and balanced against the navigational or economic necessity or justification for, or benefit to be derived from, any proposed use.”

9.2.7 Utah Division of State Parks and Recreation (State Parks)

Utah State Parks and Recreation operates under a mission “to enhance the quality of life by preserving and providing natural, cultural, and recreational resources for the enjoyment, education, and inspiration of this and future generations.”

A 2007 resource management plan directs operations and developments at Dead Horse Point State Park. Among its goals, principles, and objectives are the following:

- Protect and preserve park resources

- Protect the park view shed by supporting land trades and acquisitions and facilitating a cooperative interagency visual management plan
- Improve and expand the park's recreational opportunities while providing a safe, enjoyable visitor experience
- Develop and maintain facilities that offer safe and suitable recreation opportunities for visitors
- Maintain traditional experiences, while also allowing for other appropriate types of nontraditional activities to occur in the park
- Ensure the park has appropriate staff, equipment, and support to execute plans
- Park resources and visitor experiences should not be compromised to increase revenue

RECOMMENDATION: Partner with universities in studies to determine maximum and optimal levels of visitation, balancing income generation, quality of visitor experience, infrastructure and personnel needs, and resource preservation. [State Parks]

9.2.8 Utah Department of Transportation (UDOT)

See Section 11.

9.3 Issue-specific concerns and strategies

9.3.1 Scenic preservation/enhancement

BLM lands

Under Alternative C of the proposed RMP, the BLM would establish Scenic Driving Focus Areas along all three byways, with widths varying between one-half mile total to two miles total. Activities with potential to disrupt scenic qualities would be prohibited or carefully managed in these areas.

Under its visual resources management (VRM) program, the BLM will classify all its lands along the scenic byways as either Class I or Class II lands. VRM Class I lands receive the most protection from disturbances to scenic values, with no changes to vegetation or landforms allowed. Class II lands may receive only minor modifications.

SITLA lands

If SITLA lands are sold or leased, uses of these lands have significant potential to disrupt scenic values, since the agency is generally unable to consider scenic values in its management decisions. As discussed earlier, the best option for lands along the river corridor is to pursue currently proposed land trades with the BLM. Significant risks will still exist from remaining parcels along SR-313 and in the Cisco Desert along SR-128, discussed above under "Agency-specific strategies: Grand County."

Parts of over 30 sections administered by SITLA are visible from one or more of the viewpoints at Dead Horse Point State Park and Island in the Sky. Most of these sections are leased for production of oil, gas, and potash. SITLA also currently administers the mineral estate of approximately 600 acres within Dead Horse Point State Park, and over 3,000 acres of surface and mineral estate adjacent to the park, all of which is subject to surface use necessary for development. SITLA has a limited ability to require lessees to perform or accommodate actions not provided for in the leases, although lessees have often cooperated in minimizing visual impacts.

ACTION: Consult with affected agencies when planning actions that may significantly affect byway view shed lands. Monitor management plans and actions of neighboring agencies that relate to view shed lands, and seek resolutions that maintain existing scenic qualities. [SITLA; BLM; State Parks; NPS; Grand County]

Private lands

Some large parcels of private land in the SR-128 corridor have the potential to negatively affect byway goals if not developed conducive with the corridor plan. Many owners of these lands support the primary citizens' goal of preserving the pastoral character of the byways. The majority of private land in the SR-128 corridor from the Dewey area south has already voluntarily been placed under various conservation easements, which typically limit or prevent various type developments, and may be applied to all or any portion of a parcel. In

return, property taxes are decreased significantly, which encourages the preservation of the ranching/grazing uses typical of these lands and is treasured by visitors.

Several corridor property owners wish to continue the ranching tradition, but as property taxes and land values rise, it becomes more difficult for them to do so. Grand County currently allows significant tax relief for properties demonstrated eligible for “green belt” status, but this may not provide sufficient incentive. Creation of additional conservation easements should be allowed. Easements may be donated, or in some cases it may be necessary to purchase them from willing sellers. Another possibility is to trade private lands from willing owners for lands in less sensitive areas. An equally permanent but more expensive form of protection is outright purchase from willing sellers, perhaps with a lease back to the previous owner under protective restrictions.

RECOMMENDATION: Communicate with corridor private property owners about the reasons for and methods of sensitive development. Continue discussions with owners to establish new conservation easements. Consider options for purchasing easements or properties outright from willing sellers when necessary. Pursue opportunities to acquire sensitive private lands within the corridors by trade for lands elsewhere, or by purchase through community funding, the Land and Water Conservation Fund, or other funding sources. [The Nature Conservancy; FFSL]

Zoning

Under the *Grand County Land Use Code*, any property owner can request a zone change. Some of the criteria the County Council is to consider regarding such requests are, but are not limited to, the following:

- Has there been a change of character in the area (e.g., installation of public facilities, other zone changes, new growth trends, deterioration, development transitions, etc.)?
- Is there a need for the proposed use(s) within the area or community?
- Will there be benefits derived by the community or area by granting the proposed rezoning?
- Is the proposal in conformance with the policies, intents and requirements of the *Grand County General Plan*, specifically the Plan’s zoning map amendment guidelines?
- Is the site suitable for rezoning based on a consideration of environmental and scenic quality impacts?
- Are the proposed uses compatible with the surrounding area or uses?
- Will there be adverse impacts, and if so, can they be adequately mitigated?
- Does the proposed change constitute “spot zoning”?



Commercial development beside SR-128

RECOMMENDATION: Discourage requests for rezoning of byway corridor lands to allow commercial or industrial uses or residential density increases. [Grand County]

ACTION: Enforce the *Grand County Land Use Code* uniformly throughout the corridors, including provisions relating to commercial and PUD developments, shielded lighting requirements, setbacks, and signage requirements. [Grand County]

ACTION: Hire a zoning enforcement officer to help the county zoning administrator and building official enforce the *Land Use Code*. [Grand County]

Experience in other states has shown that river runners don't want to pay to run rivers through landscapes that appear developed. Because river running is important to the Grand County tourist economy and is one of the prime corridor recreational experiences, the integrity of the experience should be protected.

RECOMMENDATION: Consider amending the land use code to establish minimum standards for visual setbacks from the river for new construction. Balance private property owners' desires for river views with the public's desire for a relatively undeveloped riverscape. [Grand County]

9.3.2 Mining and drilling



Drilling near Dead Horse Point

Mining is prohibited on NPS and State Park lands, but is a possible use on BLM and SITLA lands. Mining is a conditional use on private lands in the Range and Grazing zone.

The Three Rivers Withdrawal (2004) prohibits the staking of new mining claims on BLM lands along the Colorado River (rim to rim). This withdrawal would be continued under Alternative C in the proposed BLM RMP. In addition, the BLM proposes to close portions of the Three Rivers Withdrawal area to oil and gas drilling, or impose a no surface occupancy (NSO) stipulation.

Lands outside the Three Rivers Withdrawal and outside the BLM scenic driving corridors (1/4 to one mile from highway centerline, depending upon alternative) will be open to mining claims under the 1872 Mining Law.

Under the BLM proposed RMP, lands outside the Three Rivers Withdrawal would be managed in one of the following manners: open to oil and gas leasing and drilling, subject to standard stipulations; closed to leasing and drilling; open, subject to special stipulations; or open, subject to no surface occupancy.

RECOMMENDATION: Work with BLM and SITLA to minimize visual impacts to the scenic byways from proposed drilling and mining projects. [All]

9.3.3 Recreation management: general

Sections of the byway corridors are currently managed under the Colorado Riverway Special Recreation Management Area (SRMA) and the Labyrinth Rims/Gemini Bridges SRMA. Within these areas, recreation focus areas would be designated to more intensively manage, enhance, and protect recreation values for climbing, hiking, biking, and motorized backcountry touring.

9.3.4 OHVs, bicycles, trails, and recreational conflicts

In the national parks, all vehicles are restricted to designated routes, and vehicles that are not street legal (e.g., ATVs, ATCs, unlicensed dirtbikes) are prohibited. On BLM lands on the byways, all vehicles would be restricted to designated trails.

This is an off-byway activity that impacts trails that aren't on the scenic byways. With close to 3,500 miles of OHV trails designated throughout the Moab BLM's planning area, ample OHV driving opportunities exist outside of the byway corridors, with some trailheads inside the byway corridors. The confined canyon sections of the scenic byways are not considered for increased OHV use.

Grand County is justifiably famous as an OHV paradise and OHV use will remain a popular activity and an important segment of the tourism industry. Efforts should be made to find ways to keep OHV use impacts proportionate to the actual percentage of users, and work to reduce impacts overall. ATV sales in Utah have increased 400 percent over 12 years, and four-wheel-drive SUVs seem to be rapidly replacing passenger cars as the family vehicle of choice. The number of bicyclists in the area has grown exponentially over the last 10 years, as has the sales in the bicycle industry. Because Moab is a mountain bike mecca with the famous Slick Rock Trail, many riders come to Moab, and after riding the Slick Rock Trail they come back to ride all the others. Some bicyclists and OHV riders commit the error of going off-trail on occasion, creating wider trails and erosion issues. Other issues are the creation of parallel tracks to roads that are off-limits to legal riding, and the creation of hill challenges. The BLM is poised to perform expeditious remediation of any new tracks, hill climbs, and parallel tracks, and they work in tandem with Grand County to educate the visitor about avoiding this kind of activity.

RECOMMENDATION: Devise and implement new strategies for keeping bicycles and OHVs on existing tracks of designated routes. Clearly delineate trail sections crossing slickrock where possible. [BLM; NPS; State Parks; Grand County]

RECOMMENDATION: Enlist the cooperation of jeep and ATV rental services and bike tour guides to encourage customers to stay strictly on trails. [BLM; NPS; MIC; State Parks; Moab Area Travel Council]

9.3.5 Camping

Vehicle camping along the byways is restricted to designated campsites to maintain sanitation and minimize impacts.



Wood collecting in riparian camping area

Many campsites along SR-279 and SR-128 are built in scarce groves of cottonwood, oak, and hackberry trees. Foot traffic, clearing tent footprints, and unauthorized but continuing camper behavior such as wood collecting, chopping on trees, and erecting tents out of bounds can create cumulative impacts that may come to threaten these high-value groves.

RECOMMENDATION: Devise long-term plans for rehabilitation, rest, or replacement of campsites in high-value riparian groves. [BLM]

9.3.6 Climbing

At the Wall Street climbing area along SR-279 climbers can drive right up to the base of the climbs and literally belay off of their bumpers. Unfortunately, there is little to no clear zone between the highway lanes and the cliff faces, large truck traffic to and from the Intrepid Potash plant is high, and some vehicles, spectators, and/or belayers stand or lie on the white lane markings or out in traffic lanes, creating a significant safety hazard for climbers, spectators, and drivers alike.



Pedestrian hazards at Wall Street on SR-279

ACTION: Work to create a culture of cooperation among climbers at Wall Street on SR-279 to keep vehicles, belayers, and spectators outside marked highway boundaries. Talk with climbing representatives, climbing instructors, climbing shop operators, and climbers on-site. Ask climbing guidebook and brochure publishers to include mentions of parking and highway hazard concerns at Wall Street. [Moab Area Travel Council; MIC; BLM; Grand County Sheriff; UHP]

ACTION: Sign SR279 with signs that suggest "slow truck traffic, climbers ahead". [Intrepid Potash]

RECOMMENDATION: Increase enforcement of speed regulations at Wall Street. Communicate with climbers and spectators placing themselves in hazard's way. [Grand County; UHP]

RECOMMENDATION: Improve highway markings at Wall Street to more clearly delineate parking/no parking areas. [UDOT; Grand County]

9.3.7 Special events

The byway corridors are frequently used for special events such as adventure races, marathons, bicycle races, competitive and noncompetitive OHV events, and road rallies. Special events organizers must obtain Special Recreation Permits (SRPs) for events held on BLM lands. SRPs have use stipulations designed to minimize adverse event impacts. Among the factors considered by the BLM when issuing permits are:

- Season: less desirable (March, April, May, October) or more desirable (off seasons)
- Use of lands and facilities off of public lands for overnight accommodations
- Whether the organization will promote the Canyon Country Minimum Impact Practices
- Choice of sites and areas capable of withstanding repeated use
- The degree of possibly conflicting public uses of proposed locations

While special events can be a valid and important use of the byways, events creating inappropriate circus-styled atmosphere, those conflicting with byway goals, or those which could just as appropriately be held in less sensitive areas should be discouraged.



Monitoring highway closure for special event, SR-128

Many special events are designed to create profits for sponsors. The BLM charges fees to help defray costs associated with events on public lands. Citizens of Grand County should not subsidize special event profits by paying for external costs.

RECOMMENDATION: When reviewing applications for additional special events, consider requirements for road closures of the byways. [Moab Area Travel Council]

9.3.8 Wild and scenic rivers

The BLM has inventoried streams along the byways for possible designations under the Wild and Scenic Rivers Act of 1968. Wild, Scenic, or Recreational designations would afford these streams with additional long-term protection for scenic, recreational, and natural values, and give them added stature in the eyes of the river-running public. It would serve the corridor to promote an image of unspoiled nature, and increase the area's prestige and profile nationally.



Rafters seek wild and scenic rivers

RECOMMENDATION: Support Wild and Scenic River status for the Colorado River.
[BLM]

9.3.9 Wilderness designations

On roadless lands legally designated as wilderness under the Wilderness Act of 1964, mining, drilling, roads, mechanized transportation (including bicycles), and permanent structures are prohibited. Wilderness designation can be a valuable resource management tool to preserve primitive recreational values, ecosystems and wildlife habitat, scenic resources, scientific research areas, soundscapes, and watersheds, and is generally in keeping with byway goals. However, such designations conflict with resource extractive industries and future developments of roads and motorized recreation facilities, and commonly lead to disputes with OHV users and mountain bikers over what constitutes a valid roadless area. In fact, such designations are among the most hotly disputed issues in Utah politics, and, with one minor exception, no BLM land or NPS land wilderness designations have yet been made in Utah even after more than 30 years of debate.

Large portions of Canyonlands National Park and a smaller portion of Arches National Park are managed as wilderness, pending final Congressional disposition. Public lands designated by the BLM as "wilderness study areas," including Negro Bill Canyon (along SR-128), abut the byway corridors and are managed by the BLM to protect their wilderness character. Other roadless areas in or adjacent to the byway corridors have been proposed for wilderness designation by Congressional legislation and conservation groups.

ACTION: Support wilderness designation, at a minimum, for Negro Bill Canyon.
[BLM; SBC]

9.3.10 Ecosystems and wildlife

In general, management approaches that minimize human impacts will also benefit wildlife, wildlife habitat, and healthy ecosystems. Some strategies are discussed in the sections on Recreation Management, Interpretation and information services, Air quality, Mining and drilling, Wilderness and Wild and Scenic designations, Dark night skies, and Law enforcement. The control of invasive species, discussed in the next section, and post-control remediation, are also critically important.

The BLM RMP designates the following areas of critical environmental concern (ACECs): Highway 279/Shafer Basin/Long Canyon. ACEC designation would carry extra prescriptions to protect important resource values.

The Long Canyon/Shafer Basin areas off of SR-279 are currently designated as protected habitat, critical for bighorn sheep lambing and rutting. These areas have become high-volume OHV routes. While some herds have adapted to human presence even to the extent that they may graze beside the highway, evidence indicates that such adaptation to vehicle traffic and other human activities stresses the sheep, impairs health, and reduces reproductive success. High levels of traffic in these areas are undesirable.

Slickrock potholes are a unique habitat that is very easily disturbed. Pothole organisms are sensitive to sudden water chemistry changes, temperature changes, sediment input, being stepped on, and being splashed out onto dry land. Human use of pothole water by swimming, bathing, or drinking may change the salinity or pH of a pool, or introduce toxic chemicals such as sun lotions. Hikers and bikers should therefore avoid using water in potholes as well as walking or riding through wet or dry potholes.

ACTION: Include illustrations and messages in interpretive materials, trailhead/campground information boards, and relevant promotional materials to discourage damage to wet and dry potholes. [BLM; NPS; State Parks; MIC; CNHA; Moab Area Travel Council]

Riparian ecosystems are exceptionally important repositories for biodiversity. Although riparian areas comprise only 0.5–1.0 percent of the overall Western landscape, a disproportionately large percentage (approximately 70–80 percent) of all desert, shrub, and grasslands birds and other animals depend on them. The BLM seeks to manage riparian areas for properly functioning condition and to “avoid or minimize the disturbance, loss, or degradation of riparian, wetland, and associated floodplains,” particularly in relation to grazing practices.

RECOMMENDATION: Place a high priority on preservation of riparian and other critical wildlife habitats when considering development and management options. [BLM; NPS; Grand County; UDOT; SITLA; FFSL]

ACTION: Develop maps of sensitive areas for wildlife habitat, plants, soils, and ecosystems. Consult these maps when contemplating new actions or developments. Distribute maps to local information centers to inform interpreters on where to most appropriately direct visitors and activities. [NPS; BLM; State Parks; MIC]

A major designated utility corridor runs along the northern part of the SR-128 corridor through a part of the Cisco Desert that is important habitat for Bald Eagles, Golden Eagles, and other raptors. In the event new electrical transmission lines are erected here, they should be designed to protect raptors.

RECOMMENDATION: Stipulate that all new energy corridor electrical transmission towers be equipped either with raptor safe perches or raptor excluders. [Grand County; BLM; SITLA]

9.3.11 Invasive species

Few issues have such great potential in the near term to dramatically affect byway scenic values, wildlife, and ecosystems as invasive species. The most immediate problems are tamarisk (salt cedar) and Russian olive.

Tamarisk

Tamarisk is a Eurasian native established in the Colorado River drainage in the late nineteenth or early twentieth century. It forms vast, dense, woody thickets along streambanks and in wetlands, restricting access to recreation, forcing out native plants, and offering poor food and habitat for native animals. With leaves of a high surface to volume ratio and volatile oils, tamarisk presents an extreme fire hazard. If burned, it can regrow six to nine feet in the first year. Tamarisk tends to prevent riverside beach formation and causes

channelization, impeding water temperature regulation and preventing formation of braided channels important for native fish. Tamarisk transpires vast quantities of water, causing large cumulative water losses significant to downstream metropolitan users, and causing some wetlands to lose all surface water.



Tamarisk (defoliated by leaf beetle) and Russian knapweed Manual control efforts for tamarisk

On the other hand, tamarisk helps stabilize banks along local highways, preventing erosion from the river, and forming a safety net for errant vehicles. Tamarisk, as a dominant riverside plant, is currently a source for campground shade and wind shelter.

NPS has a policy of removing exotic species from the park and a long-standing program of tamarisk control, concentrating on sidestreams of the Colorado River. FFSL progressively works with the Grand County Weed Department clearing tamarisk, and the BLM is now clearing large areas along SR-128 and SR-279, including campgrounds. Recently the biological control agent tamarisk leaf beetle (*Diorhabda elongata*) was released along the Colorado River. The beetle's effectiveness in controlling tamarisk has dramatically exceeded most scientists' expectations. After only few years, the beetles have spread in dense clouds along the entire Colorado River in Grand County, with resulting cycles of near-complete foliage browning and loss, regrowth, and loss again. Complete control is not expected.

The Southeast Utah Tamarisk Partnership (SEUTP) has been formed in cooperation with the Tamarisk Coalition in Grand Junction, Colorado, to research best procedures for removing tamarisk and Russian olive, revegetating as necessary, monitoring results, conducting follow-up weed control, and obtaining control project resources. SEUTP is composed of land management agencies, scientists, governments, interested citizens, weed control boards, and nonprofit conservation/revegetation organizations.

RECOMMENDATION: Collaborate with and work within the framework established by the Southeast Utah Tamarisk Partnership (SEUTP) to restore the structure and function of ecosystems within the byway corridors that have been damaged by tamarisk and Russian olive infestations. Help develop and implement best available science and techniques to control tamarisk, Russian olive, and other invasives, following SEUTP's *Woody Invasive Species Management Plan* of 2007 for beginning guidelines. Prioritize tamarisk control and revegetation plots, and pool management resources. Institute follow-up maintenance and monitoring to ensure success of natural and manual revegetation, and to prevent invasion of new exotic species. [Grand County; BLM; NPS; FFSL; SITLA; Nature Conservancy]

Post-tamarisk revegetation

For many years tourists driving along the Colorado River have been frustrated by the dense tamarisk growth that has screened their view of the river. At the same time, canoeists, kayakers, and rafters have enjoyed the rather thorough visual isolation from highway traffic. Now, with what seems likely to be a high tamarisk mortality from the tamarisk beetle infestations and with large tracts of tamarisk being cleared by land managers, the tide is turning. Drivers will enjoy mostly unimpeded views of the river, while boaters will feel exposed. Careful revegetation planning can moderate these effects.

RECOMMENDATION: Avoid monoculture revegetation plantings where possible. Use the widest available variety of appropriate native species (e.g., cottonwood, larger willow species, box elder, gambel oak, and hackberry for upper story). Use nursery stock grown from local genotypes where possible. Work with the Lone Peak State Nursery to grow native plant stock from local genotypes. Consider establishing local native plant nurseries or enlisting help from community members willing to grow plots of local genotype seedlings in their gardens. Seek naturalistic placements instead of row plantings. [BLM; NPS; FFSL; SITLA; Grand County; Nature Conservancy; local nonprofit organizations]



Tamarisk clearcut in need of revegetation

RECOMMENDATION: Consider developing an AmeriCorps crew to help with revegetation following tamarisk removal and related tasks such as coordinating and prioritizing revegetation plots, planting and maintaining native species, nursery cultivation of native plant stock, and long-term monitoring. [BLM; Grand County; local nonprofit organizations]

RECOMMENDATION: Consider developing an Adopt-A-Grove program (akin to the Adopt-A-Highway litter control program) for revegetation. [BLM; SEUTP; FFSL; Grand County; local nonprofit organizations]

ACTION: Publicize the Adopt-A-Grove program nationally to build the Grand County brand as a "green" community that cares. Include information on the exotic species control and revegetation on area Web sites. [Moab Area Travel Council]

Other invasive species

The Russian olive is an invasive tree or large shrub with a potential to be an even greater threat than tamarisk in certain habitats. These thorny trees form dense thickets that block recreational access, shade out native plants, and eventually become fire hazards. If cut without being poisoned, they resprout vigorously with multiple trunks and even longer spines. Russian olives are generally destroyed along with tamarisk when mechanical or manual methods are used, but no biological controls are available. Careful monitoring and follow-up work to tamarisk removal will be necessary to assure that Russian olive and other invasive species such as knapweeds and thistles do not take over.

The Grand County Weed Control Supervisor currently has no staff to assist in his county-wide duties, which include control of many exotic species besides tamarisk and Russian olive, but works closely with FFSL to eliminate invasive species (see Section 5.0.6).

RECOMMENDATION: Support funding for raft and equipment rentals or provide in-kind resources to enable the Weed Control Supervisor to lead volunteers on weed survey and eradication tours of the river. [Grand County; BLM; FFSL; SEUTP]

Very worrisome potential invasive animal species include the zebra mussel, which has already begun a severe infestation of the lower Colorado River in Nevada, California, and Arizona, and the quagga mussel. If these species are introduced to the upper Colorado River, effects on endangered fish species could be severe. These species are known to spread as hitchhikers in bait wells and other equipment on motor boats.

RECOMMENDATION: Encourage relevant agencies to sign the Moab Dock and Potash launch ramps to alert boat owners of the hazards of aquatic hitchhikers and ask for cooperation. [FFSL; State Parks; Grand County; DWR]

9.3.12 Soil crusts

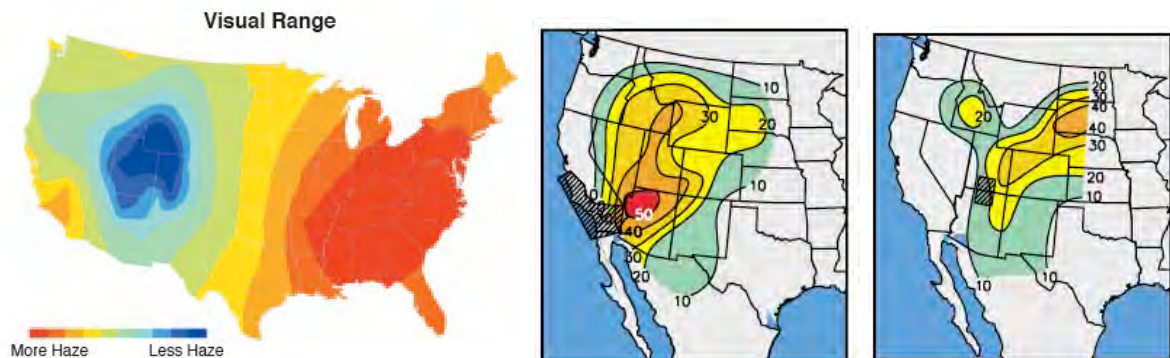
The conservation of soil crusts is critical to proper functioning of plant ecosystems in this region. The greatest threats to biological soil crusts are hikers, bicycles, OHVs, and livestock grazing. Estimates are that, depending upon underlying soil type, regeneration time can be between 50 and 100 years or more for damaged crusts. Confining vehicles to designated routes, as discussed elsewhere in this CMP, is the single most important strategy for preserving soil crusts, while uncontrolled foot traffic is an increasing problem.

ACTION: Employ varied and creative new methods to educate all byway users about the importance of soil crusts and of the importance of staying strictly on designated trails. Include relevant messages prominently in all area publications and on promotional Web sites. [BLM; NPS; State Parks; MIC; Moab Area Travel Council; CNHA]

9.3.13 Air quality

An economy such as Grand County's that is significantly based upon scenic tourism is an economy based upon clean air. Clean air should be considered by the county and byway managers as a natural resource of primary importance to the community.

Under the mandate of the Clean Air Act the EPA has established National Ambient Air Quality Standards (NAAQS). These are minimal standards designed to protect human health and safety. The byways region has to date not been in violation of these, although the standard for ozone is being approached during some periods.



The byways still have some of the cleanest air in the nation (left), but it is under threat from pollution from distant sources such as the southern California urban area (center) and Arizona's Navajo Generating Station (right). (Courtesy NPS)

RECOMMENDATION: To existing or future interpretive displays, add a small panel discussing the value of clean air, the regions relatively unspoiled state, and ways to advocate clean air. [MIC; BLM; State Parks]

The Cisco Desert, at the north end of SR-128 and stretching eastward, consists primarily of plains and low badlands of clay soils upon which little vegetation grows. Particularly during drought years, severe dust storms arise here and become a safety hazard for arriving visitors, since the storms have at times obstructed visibility to the extent of causing traffic collisions on I-70. Additionally, the dust can linger in the region for

days, obscuring scenic vistas. Cattle grazing and off-road driving contribute to dust storm formation by breaking roots and fragile mineral and biological crusts that usually hold the soil surface together.

9.3.14 Noise pollution

Many citizens have expressed concerns that the natural quiet of the desert be preserved in the byway corridors. For those willing to experience it, relative silence—the absence of machine- and human-generated noise—is a critical attribute of the byway experience and of the byway brand identity.

RECOMMENDATION: Encourage respectful levels of noise while in the byways canyons. [MATC]

9.3.15 Dark night skies

Grand County's byways offer a much-treasured but increasingly rare experience: spectacularly clear, dark night skies and views of the cosmos. An estimated two-thirds of Americans live where they cannot see the Milky Way. Many visitors come to our desert lands expecting to view the night sky under pristine conditions and "sleep under the stars." The byways host increasing numbers of devotees of amateur astronomy and nighttime photography. Dark night skies should be recognized and managed as an amenity for byways visitors and residents alike.

NPS considers dark night skies to be a park "vital sign"—an element of a park that represents the overall condition or is a particularly valuable attribute. Increasingly, tour operators are interested in night sky tours. Lights from nearby towns, highways, industrial developments, and resorts can degrade the night sky. In dark, natural areas, even a single light can disrupt the essence of night. While one light may not affect the entire night sky, a bright point source could reduce night vision; reduce perceptions of solitude, naturalness, and space; and confuse nocturnal animals and migrating birds.

The loss of the dark night sky is unnecessary. The Town of Castle Valley has an ordinance requiring full cutoff lighting fixtures and a prohibition on direct illumination past individual property lines. The *Grand County Land Use Code* (2008) specifies that all new outdoor light fixtures installed in county zones shall be full cutoff.



This diagram shows a lighting fixture that throws light upwards and sideways.



This diagram shows a lighting fixture that directs light downward.

RECOMMENDATION: Implement and enforce section 4.2.8 of the General plan. (Support Quality Outdoor Lighting) [Grand County]

9.3.16 Archaeological resources

The byways region contains a wealth of unmarked, unexcavated archaeological sites and unprotected rock art panels. These are protected by the Antiquities Act of 1906, Native American Graves Protection and Repatriation Act, and the Archaeological Resources Protection Act, but all remain likely targets for vandalism. Education and a palpable law enforcement presence, discussed elsewhere, are deterrents to vandalism and theft, but unfortunately, simple nondisclosure is still needed to defend some sites. Under the guidance of the National Historic Preservation Act and the Archaeological Resources Protection Act, both the NPS and the BLM have policies restricting disclosure of sensitive and unprotected archaeological site locations, including some rock art panel locations. The policies have established three site categories:

- Category I sites are usually already well-known, publicized, interpreted, signed, stabilized, monitored, patrolled, or otherwise protected from visitor impacts or harm. Visitors should be directed only to Category I sites.
- Category II site locations may be divulged only if visitors ask specifically about a particular site and demonstrate that they already have significant information about it.
- Category III sites are especially sensitive or high-value sites. The locations of these sites may not be divulged to the general public, even upon request.



A Category I granary site, Island in the Sky

ACTION: Follow NPS and BLM policies for cultural resource site information disclosure. Become aware of which locally known sites are in disclosable categories and which are not. Publicize and direct visitors only to Category I sites in oral communications, written materials, maps, and Web sites. Disclose Category II sites only upon specific request. Vet all free and sales publications for compliance; reject those out of compliance and communicate with authors to request compliance. [NPS; BLM; MIC; CNHA; Moab Area Travel Council; State Parks]

The current popularity of guidebooks and Web site area guides has encouraged some explorers to publicize their discoveries of sensitive sites, with explicit directions and even GPS coordinates. While there is no prohibition on such divulgence and the genie can't be put back in the bottle, managers should be alert for the worst such cases. When all significant and special places are catalogued, with well-beaten paths to them, and many are vandalized, we begin to lose the opportunity for individual discoveries that help make this region a place of true adventure.

ACTION: Communicate with authors publicizing sensitive sites to educate and ask for restraint. [NPS; BLM; MIC; CNHA]

ACTION: Support application for inclusion of the petroglyphs on SR-279 in the National Register of Historic Places. [BLM; Grand County]

ACTION: Install new interpretive signage at SR-279 petroglyphs, in conformance with byway interpretive plans and designs. [BLM, in cooperation with Utah Rock Art Research Association; SBC]

ACTION: Work with guidebook publishers to include messages requesting that climbers climb at least the recommended 50 feet from SR-279 petroglyphs. [CNHA; MIC; BLM; SBC]

9.3.17 Paleontological resources

Unmarked dinosaur trackways should generally be afforded the same disclosure protections as archaeological resources.

9.3.18 Historical resources

Historical resources are protected by the Antiquities Act of 1906. Education, appropriate signage, and a palpable law enforcement presence are the best deterrents to vandalism of historic artifacts.

9.3.19 Litter control

Roadside littering remains a problem beside all of the corridor highways. Litter cleanup is the responsibility of UDOT and is achieved in part by an Adopt-a-Highway program in which volunteer individuals or groups commit to cleaning two-mile stretches of highway three times per year in return for signs recognizing their contributions. To the extent that this is not adequate, local UDOT maintenance funds must be used for litter cleanup.

ACTION: Seek community sponsors for any sections of corridor highways that lack Adopt-A-Highway sponsorships. [UDOT; Grand County; BLM]

9.3.20 Law enforcement

BLM law enforcement officers are, in theory, the prime defense against resource damage offenses on public lands, such as driving off of designated trails, vandalism, illegal camping, and violation of fire restrictions. A visible ranger presence on-site is among the most effective ways to promote compliance with rules, regulations, and best practices designed to protect byway resources and quality visitor experiences for others. It makes a strong statement that “these places are cared for.” Uniformed rangers help deter would-be rule breakers, are a welcomed, reassuring presence to travelers, recreationists, and campers, and are a trusted source of information and assistance.

Two BLM officers serve the entire Moab Field Office area of almost two million acres.

The Grand County *General Plan Update* (2004) includes an implementation action to “lobby the state and national BLM offices for . . . more funding to help handle the increased impacts from the rapidly growing number of people using the public lands.”

ACTION: Lobby state and national BLM officials and Congressional representatives for patrol ranger funding to supplement locally generated facilities fees. Seek funding commensurate with need and the value of the resources under threat. Explore opportunities for alternative funding, such as grants or resource use passes. [Grand County]

9.3.21 Scientific research

Good science will be critical to the ongoing success of management choices. Baseline studies are needed to determine change over time from impacts of recreation and other land uses, and the results of management decisions. Visitor demographics and attitude studies are needed. Managers should develop contacts with colleges and universities in Utah and other states and invite partnerships with researchers.

RECOMMENDATION: Encourage and facilitate the use of corridor intrinsic resources for scientific research. Continue to invite collaboration with university researchers for ongoing surveys of visitor demographics, needs, and attitudes. [BLM; NPS; State Parks; Grand County; SBC]

9.4 Project funding priorities

1. Informational materials and signage
2. Trail delineation and maintenance
3. Exotic species control and native plant revegetation (assistant weed supervisor; woody invasives coordinator; specific project funding)
4. BLM patrol rangers, particularly during special events
5. Scenic and other conservation easements and/or land purchases
6. Scientific research and resource monitoring

10. Interpretation and information services

Byway managers hope visitors will experience the byways physically (through activities), sensually (experiencing what it feels like just to be in this unique place through sights, sounds, smells, and touch), intellectually (through acquiring knowledge and understanding), and inspirationally (through feelings of renewal and aroused desires to protect special places). Interpretation can facilitate and encourage this involvement by revealing meaning and relationships, supplying information in provocative and inspiring ways, and challenging visitors by offering new perspectives.

Three categories of needs must be met for interpretation to be effective:

- *Orientation*: Basic orientation to location, facilities, services, accommodations, and activities
- *Information*: General area information, including points of interest and facts about intrinsic resources
- *Interpretation*: Information in the context of significance, relationships to larger issues, and relationships to the visitor's own life experience or self-interest

10.1 Goals

- Provide necessary orientation information about emergency services, regulations, visitor facilities, attractions, and recreational activities
- Educate visitors about safe and responsible recreational use
- Educate visitors about the byways' intrinsic resources
- Interpret the intrinsic resources to provide context, stimulation, inspiration, and motivation
- Inform visitors of the resource management activities and issues of the byways to foster dedication to the area and support for byway management goals
- Create a unified visual and thematic presentation with minimum visual intrusion
- Promote byway identity

10.2 Guidelines

Citizens have expressed concern that the following interpretive guidelines be followed:

- If the "Moab" brand is about adventure, keep the adventure in the experience. Strive to inspire the experience of discovery and adventure rather than that of a guided tour.
- Keep interpretive waysides to a small number to minimize the traffic disruption caused by vehicles stopping and starting, minimize visual impact from displays and signs, and to retain some of the outback flavor.

Other interpretive guidelines include the following:

- Relate the subject or location to the bigger picture.
- Keep messages short, and stick to the most important and interesting ideas. Ask: What key image, idea, information, or experience of this site do we want the visitor to go home with?
- Assure that interpretive signs capture the most interesting aspects of the byways and create pullouts to help the visitor experience them.
- Provoke interest in the beauty and resources along the byway.
- Seek ways to inspire visitors to get out of their vehicles and experience the byway corridors first-hand. The more intimate their experience, the more favorably they will perceive the byways' intrinsic resources and the more likely they will be to support byway goals.
- Avoid seeking to impose a unifying theme where one is not genuinely present. Don't assume one theme carries through all the byways. Be specific.

10.3 Existing facilities, services, and products

As discussed under Section 8.0.1, visitor centers at the Moab Information Center, Island in the Sky, and Dead Horse Point provide a wide range of informational and interpretive services, displays, and products. The Island in the Sky Visitor Center is currently being doubled in size and will have new exhibits.

Dead Horse Point leads other Utah state parks in revenue generation from sales of interpretive materials. The visitor center is the only interpretive center contact for many visitors to the byways, particularly tour bus travelers.

RECOMMENDATION: To increase interpretive opportunities and generate more revenue, increase inventory size of interpretive materials for sale at Dead Horse Point State Park. Include additional titles related to the region in general and to other regional parks. [State Parks]

NPS staff interpreters and State Park rangers staff visitor centers, present a variety of talks and walks, and rove popular viewpoints to answer questions. The BLM has no field interpretive staff.

Ample commercially published products serve the Grand County area in general, including topographical recreation maps; roadside guides; guides to hiking, biking, and OHV trails; children's books; photo essays; and guides to subjects such as history, geology, archaeology, ecology, and plants and animals. Web sites discussed in Section 8.0.1 also cover many of these topics.

Free brochures are available on Dead Horse Point State Park, Canyonlands National Park, and Island in the Sky. The BLM distributes free brochures on auto tours, campgrounds, OHV and mountain bike trails, filmmaking, rafting, and rock art. NPS distributes park brochures on hiking and four-wheel-drive trails, geology, cultural history, and natural history, as well as species lists and an Island in the Sky newspaper, which combines essential information with interpretation. The Moab Area Travel Council distributes a brochure entitled "Don't Die Out There" to educate visitors on backcountry readiness.

The only byway-specific publication available is a map and interpretive road guide to SR-128. Similar guides for the other byways are in production.

NPS and State Parks maintain an assortment of roadside interpretive panels. The NPS panels are scheduled and funded for complete update in the near future. The BLM has interpretive displays at two points along SR-128, two points along SR-279, and four points along SR-313. The BLM also maintains information boards at all campgrounds, major trailheads, and boat launches.



BLM roadside interpretive displays

Appendix D describes existing roadside interpretive resources and tentative recommendations for new developments.

Canyon Country Outdoor Education is a cooperative venture between NPS, the Grand County School District, and nonprofit organizations. NPS rangers lead a series of educational outings designed to acquaint children with the area's intrinsic resources and management issues, and to expose them to a range of environmentally responsible outdoor activities.

10.4 Themes

Possible interpretive themes relevant to portions of the byways are suggested in Appendix C.

10.5 On-site interpreters

NPS and State Parks have interpretive staff on the ground. The Grand County community has a wealth of knowledgeable people enthusiastic about the byway environment. Many have prior experience working for the NPS, BLM, historical societies, and similar agencies. The BLM is using volunteers for on-site interpretation, and campground hosts receive materials to help them give information that is accurate and supportive of byway goals.

10.6 Recommended new electronic and print products

10.6.1 Guidelines

- Free materials should be rudimentary such that they do not compete with sales items.
- Include prominent messages to promote byway goals and canyon country minimum impact practices in all written and audiovisual material. Integrate the messages with the presentation where possible.

10.6.2 Products

- A free OHV brochure, targeted especially to ATV users, written in a manner that ATV users will relate to, perhaps with a humorous slant, and should gently emphasize responsible riding, the concerns of non-ATV users about ATV use, backcountry safety tips, and equipment requirements and suggestions. Such a brochure would find a wide market among land managing agencies across the state and even region wide, and could be wholesaled as a profit item, or published cooperatively.
- A new, free Leave No Trace/Canyon Country Minimum Impact Procedures brochure in a more accessible form that doesn't look or sound bureaucratic. Aim for a product that will attract and amuse readers, rather than being a chore to read.
- Foreign language translations of free brochures and sales items: International visitation is substantial, particularly on SR-313, with up to 50 percent of visitors to Dead Horse Point being international visitors. International visitation is increasing steadily on all three byways. The predominant non-English languages spoken by visitors are in this approximate rank: German, French, Italian, Japanese, Spanish, Dutch, Korean, Mandarin, and Hindi.
- Audio auto tours of the three byways: Auto tours can take the form of podcasts. The audio can be keyed to specific locations or regions along the byway, and can include stories, anecdotes, and quotes. Consider one version with a general focus, and other versions with specific foci, such as geology or history and culture. The tours should be designed to work from either end of each byway, and should include gentle messages promoting byway goals.
- Investigate the suitability of the GPS Ranger, a device that plays prerecorded audio and images keyed automatically to locations based upon GPS reception. Content can be flexible, with frequent updates or foreign language version. The GPS Ranger is a rental item and can become a profit center for the visitor centers. GPS reception may be problematic in the canyons. See <http://www.gpsranger.com>.

10.7 Roadside facilities

10.7.1 Guidelines

- Leave the highway experience mostly open and undeveloped. Create interpretive displays at locations where they are already established, at developed areas such as campgrounds, and at a very few additional logical stopping points.
- Create consistent physical design.
- Design interpretive displays to be low (two to three feet), minimally obtrusive, UV-resistant, replaceable, and, to the extent possible, of native or natural materials that compliment the surrounding landscape.

- Site displays and signage off center or angled such that they do not obstruct scenic views for passing motorists.
- Develop sites with aesthetic, parking, and safety standards in mind. Encourage pull-thru parking for vehicles with trailers where feasible.
- Interpretive displays must adhere to federal accessibility standards.
- Develop a unique and consistent design format for interpretive messages. Use consistent font types, sizes, colors, textures, and layout styles. Develop elements that can also be used on brochures.
- Design interpretive messages with consistent voice and within a framework of varied but consistent treatments and lengths, with the goal that as visitors tour the byway interpretive stops they feel that they are reading successive chapters in a book.

10.7.2 Facilities

Scenic byway gateways provide a sense of arrival and establish byway identity and character. Gateways should welcome and orient the travelers, introduce the byway theme, and provide safety information.

RECOMMENDATION: Establish gateway orientation centers at the four byway entrances. Provide essential information on directions, facilities, services, and primary recreation destinations. Include regulatory information and minimum impact information, but refrain from including substantial interpretive messages, as these will be developed at other sites. [BLM; SBC]

Suggested locations for interpretive and gateway facilities are listed in Appendix D.

10.8 Funding priorities

1. Comprehensive, integrated plan and development of roadside displays and signage, including gateway displays, interpretive text, and site development
2. Foreign language translations of free brochures and sales items
3. A free, attractive, OHV brochure
4. A free, attractive, Leave No Trace/Canyon Country Minimum Impact Procedures brochure
5. Audio tours
6. GPS Ranger program and equipment

10.9 How a National Scenic Byway would be interpreted

Should National Scenic Byway or All-American Road status be obtained, no significant changes to the above program would be necessary.

11. Highway design, operation, maintenance, and improvements

11.1 Goals: That balance intrinsic values of the Byways with the need to protect them.

- Facilitate traffic flows of differing speeds
- Provide a relaxed and pleasurable driving experience
- Minimize driver frustration
- Provide ample opportunities for slow traffic to yield
- Provide ample opportunities for emergency and recreational parking
- Maintain the current character of the three highways
- Minimize environmental and scenic impacts of highway improvements
- Improve visibility and reduce the possibility of hazardous traffic surprises

- Improve opportunities for passing
- Improve safety of shoulders, clear zones, and cliff edges

During this and previous planning processes, a large majority of citizens and managers have stated a strong desire to avoid changing the essential character of the existing highways and corridors. For example, citizens don't want to see SR-128 widened or straightened in an effort to accommodate longer vehicles or to increase overall traffic volumes or speeds. Rather, they prefer to see the highway made safer within the limitations of the current character and the nature of the canyon confines. Working within the limitations of rustic highways in extremely challenging terrain, it is appropriate to reduce expectations for safety and speed from what we might demand of a more modern highway in open terrain.

RECOMMENDATION: Preserve the current rustic nature of the byways within the limits of potential funding and terrain, while understanding all safety risks cannot be addressed. [UDOT]

11.2 Introduction

All three byway state routes are owned, managed, and maintained by UDOT, while the road from SR-313 to Grand View Point in the Island in the Sky District of Canyonlands National Park is managed and maintained by NPS. The highways are of diverse ages, history, terrain, facilities, and deficiencies. They were designed to the standards that applied at the time they were built. Much different standards would apply for new roads being built to today's standards along SR-128 and SR-279. Most of the topography that these roads traverse would make building a similar road to today's standards cost prohibitive, and in many cases would require prohibitive environmental damage.

While funding for highways has historically been a high priority for the Utah legislature, most of that funding is reserved for the highest volume, metropolitan highways, and little trickles down to rural highways such as Grand County's. UDOT personnel are to be commended for their continuing commitment to maintaining the byways in a safe and serviceable state, given limited funding for maintenance and improvements and given the many extreme historical and topographical limitations of the roadways. Suggestions for improvements that follow are not intended as criticism of UDOT's dedication and performance, but rather are intended to shape and encourage a community vision of what the next steps are to take in highway improvements and to suggest where any available discretionary funds or new funding sources might be channeled. Managers will continue to collaborate with UDOT to promote highway developments in the best interests of Grand County.

11.2.1 SR-313



SR-313 is of modern design and construction, with wide lanes, large clear zones, and paved shoulders designed to serve as bike lanes to the Knoll. Aside from a fairly short section of switchbacks with a mild grade easily serviceable for large motor homes, trailers, and tour buses, the highway travels through mostly level, open country with no problematic corners, drop-offs, or cliffs. Visibility is excellent and passing opportunities are frequent. Aside from a need for repaving from the junction of the Island in the Sky Road to Dead Horse Point, and the desired addition of paved shoulders designed as bike lanes in that section, SR-313 is generally agreed to have good geometrics.

11.2.2 Island in the Sky road



The Island in the Sky road, from the junction of SR-313 to its end at Grand View Point, is similar to SR-313 but with narrower paved shoulders and a more winding course within Canyonlands National Park.

11.2.3 SR-279



SR-279 an older highway than SR-313. Lanes are narrower than those of SR-313, and shoulders and clear zones are narrower to occasionally absent in one cliff section. SR-279 has some commercial, low level commuter traffic and moderate industrial (semi-truck) traffic to and from the Intrepid Potash plant at its end (The truck ADT (average daily traffic) is 18.08). Passing opportunities are generally good at current use levels. Recreational conflicts with highway traffic are significant along the Wall Street climbing wall and adjacent petroglyph panel sections, and will be discussed later. Because SR-279 is situated between the cliffs and the Colorado River, improvements to shoulders and clear zones or for the installation of bike facilities would be very costly.

11.2.4 SR-128



SR-128 is the county's problem child in terms of highway facilities and safety concerns. While the incidence of accidents on SR-128 is not high at current traffic levels, there is, nevertheless, a widespread sentiment among residents that it is unsafe, or at a minimum, that it requires some experience with the road to drive it safely. Deficits of SR-128, and distinctions between it and SR-279 and SR-313, include the following:

- Oldest construction and lowest highway design level, as an historic highway originally built to minimal standards and upgraded in piecemeal fashion
- Traverses the most varied and difficult terrain. Most curving and hilly, with stretches of limited visibility and slow curves.

- Narrowest lanes
- Several blind hills and other areas with poor sightlines
- Many pavement edge drop-offs
- Near-complete lack of adequate shoulders
- Long stretches of zero clear zones, including sheer cliffs rising above the road's edge.
- Sheer drop-offs lacking guardrails
- Frequent rock falls and occasional seasonal flooding and mudflows
- Long stretches with no or very limited passing opportunities
- Substantial shading, causing persistent icing in winter
- Lack of slow traffic or emergency parking pullouts, and large vehicle pullouts, especially rim side
- Highest traffic volumes
- Open range cattle grazing
- Heavy bicycle traffic
- Highest number and concentration of points of ingress and egress with many recreational sites, resorts, campgrounds, ranches, and side roads; virtually no channelization to mitigate
- Commercial resort, restaurant, and winery traffic, including traffic from establishments serving alcohol
- Highest recreational traffic, with many motor homes and trailers
- Heavy traffic of large, slow raft shuttle buses
- Increasing tour bus traffic
- The only through-route, with substantial and increasing traffic between Moab and I-70 and around the La Sal Mountain Loop Road
- The only route with school bus traffic
- Currently proposed for heavy hauling of uranium ore
- Significant commuter and residential traffic, as the only route upon which a community (Town of Castle Valley) depends

The community consensus is that SR-128 has serious safety and traffic-handling limitations, most of which cannot be comprehensively remediated without unacceptable changes to the character of the highway and corridor (e.g., extensive blasting and filling, widening and straightening, change to a higher speed design etc.) and without causing excessive damage to intrinsic resources (e.g., riparian habitat, cliff formations). Citizens and managers alike do not want to see SR-128 brought up to modern standards similar to those of SR-313.

RECOMMENDATION: Avoid changes to SR-128 that would significantly increase speeds or change its basic character as a two-lane, moderate-speed, winding highway. [UDOT; Grand County]

Nonetheless, significant improvements can be made. Programs and funding to improve safety and maintain high service levels on SR-128 are citizens' highest priority for this CMP, with the caveat that improvements should only be made to the extent that is possible without changing the character of the highway and without significant harm to natural resources.

Community members in the planning process have strongly and repeatedly voiced a desire to avoid significantly increased traffic on SR-128. While increased visitation may bring desired increases in economic revenue to the community, citizens agree that it is of primary importance to maintain safety on this relatively hazardous road, and to maintain the current level of service and quality of experience that distinguishes the corridor now and upon which a quality tourism business depends.

This message has come through clearly: At a minimum, we should not seek to increase traffic on a road with substantial known safety issues without first correcting those hazards.

UDOT has often pondered the "what to do about Highway 128" question, given the highway's many limitations and its current high rate of traffic growth. One option that has been discussed is to designate it as a one-way highway (of unspecified direction), with a return via US-191/I-70 or the La Sal Mountain Loop Road. Obviously this would impose substantial and unacceptable difficulties for Castle Valley residents, school buses, residents of the river corridor, and recreational users (e.g., consider the difficulties for raft shuttle buses). Managers should seek to avoid the necessity for such dramatic measures by improving highway conditions, moderating traffic demand, and developing alternative transportation. Specific

recommended improvements and management strategies for SR-128 will be discussed in the following subsections, in later sections on Multimodal transportation, Signage, and Marketing, and in Appendix B.

11.3 Maintenance

UDOT managers inspect the highways at least twice a year. Because of funding limitations, their work is primarily oriented toward pavement preservation, with a regular program of chip sealing, overlays, crack sealing, bar ditch and culvert clearing, preventing pavement edge breakdown, snow and ice removal, rock fall and flood debris removal, and vegetation management.



Icing hazard are common along SR-128



Persistent rockfall zone, SR-128

Specific maintenance issues include the following:

- *Flash flooding:* It is fairly common during the monsoon season in late summer for flash floods or mud flows to cross various points on SR-128 and a limited zone on SR-279. In one location during hard rains, a waterfall empties directly onto the fog line of SR-128. Flows are not sufficient to endanger vehicles, but do deposit mud and rocks on the highway and disrupt traffic. A regular schedule of clearing culverts and bar ditches helps reduce debris accumulation.
- *Flooding:* For a period during the high-water snow melt period of 1984, a portion of SR-128 was submerged beneath the Colorado River. With the coming loss of the tamarisk trees that help stabilize the banks at this location, this section of SR-128 should be monitored.
- *Rock fall:* Several sections of SR-128 are regularly subjected to rock falls from spalling cliff faces or rain-loosened talus. On rare occasions, fallen boulders are large enough to require blasting to remove.
- *Pavement edge breakdown:* Many areas of SR-128 have no paved shoulders or shoulders of less than one foot width with abrupt drop-offs beyond, causing a significant rollover hazard and pavement edge breakdown. Creation of wider shoulders where possible or a regular program of filling drop-offs will prevent pavement loss and reduce safety hazards.
- *Loss of roadbed/cliff sloughing:* At the narrows below Dewey Bridge on SR-128, around milepost 28.5, pavement narrows to 20 feet, with zero shoulder width, a near-vertical cliff on upper side, and a sheer drop-off into the river on the lower side. To repair loss of portions of the roadbed here due to landslides would likely require a piling wall retaining structure costing millions. It would effectively reduce the road to one lane. This area should be carefully monitored ongoingly.
- *Sightlines and vegetation management:* On narrow, two-lane highways, long, unimpeded sightlines are of prime importance to allow for relaxed driving and for preventing head-on collisions. They allow drivers to prevent surprises by anticipating oncoming traffic and become aware of vehicles that may be crossing the line into the wrong lane. Some curves along SR-128 have sightlines impeded not by hills or rocks but simply by periodic vegetation overgrowth. UDOT conducts an integrated roadside vegetation management program. This includes roadside mowing, done once a year, but additional work is sometimes needed.

ACTION: Conduct semi-annual or more frequent highway inspections for sightline maintenance and vegetation control. Remove vegetation as necessary by mowing, or pruning or removing trees to provide the longest sightlines reasonably achievable. [UDOT]

11.4 Roadway design standards and deficiencies

11.4.1 Traffic statistics

Year-round average daily traffic (ADT) figures are as follows:

- SR-313: 750
- SR-279: 380
- SR-128: 850 from US 191 to Castle Valley turnoff, 770 from Castle Valley turnoff to I-70

It should be remembered that ADT figures are year-round averages, and do not reflect the extreme seasonal and day-of-the-week fluctuations in traffic in Grand County, given that the largest portion of byway use is recreational. It is safe to assume that seasonal variation on the byways approximates that of US-191 through Moab, which has this pattern:

- May is the highest volume month, 38 percent higher than the average
- January is the lowest volume month, 45 percent lower than the average
- The highest daily volumes occur on Friday and Saturday, 15 percent higher than average
- The lowest daily volumes occur on Tuesday, 15 percent lower than the average

Since 1985, traffic volume on US-191 has increased about 3 percent per year. If this trend continues, traffic will nearly double over the next 30 years even without additional promotion.

UDOT accident statistics are subject to Government Records Access and Management Act (GRAMA) restrictions and were not available.

11.4.2 Levels of service

Level of service (LOS) is a description of driving conditions, based on service measures such as percent of time spent following, speed and travel time, freedom to maneuver, traffic interruptions, comfort, and convenience:

- *LOS A*: free flow. Drivers are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds is extremely high, and passing opportunities are ample. The general level of comfort and convenience provided to the motorist or pedestrian is excellent.
- *LOS B*: other users in the traffic stream begin to affect individual behavior.
- *LOS C*: individual drivers become significantly affected by interactions with others. Selection of speed is now affected by the presence of others, and maneuvering requires substantial vigilance. The general level of comfort and convenience declines noticeably.
- *LOS D*: high-density, but stable, flow. Speed and freedom to maneuver are severely restricted, and the driver experiences a generally poor level of comfort and convenience. Passing demand is high but passing opportunities approach zero. Small increases in traffic flow will generally cause operational problems.
- *LOS E*: at or near maximum capacity. Maneuvering within the traffic stream is extremely difficult, and is generally accomplished by forcing a vehicle to “give way.” Comfort and convenience are extremely poor, and driver or pedestrian frustration is generally high.
- *LOS F*: forced or breakdown flow (stopped or stop-and-go).

The achievable LOS depends upon several factors:

- Design level of the highway
- Terrain: winding, curvy reduces roadway capacity
- Traffic volume
- Lane width. Lack of adequate shoulders, clear zones, and guardrails where necessary creates a psychological effect to further slow traffic.
- Percentage of road mileage with passing opportunities
- Mixture of vehicle types
- Number of points of ingress/egress

SR-128 is deficient or problematic in all seven categories above, and thus is much more likely to experience lower levels of service than SR-279 or, especially, SR-313.

When drivers experience delays due to reduced travel speeds and lack of passing opportunities, the LOS deteriorates, driver frustration increases, unsafe choices of passing opportunities increase, and opportunities to use the roadway for pleasurable sightseeing decrease. When large or heavy vehicles are mixed in, such as large motor homes, raft buses and trailers, large tour buses, or semi-truck traffic serving local communities and resorts, speeds and passing opportunities are decreased disproportionately to the number of additional vehicles, thus reducing the level of service.

UDOT has listed Grand County's byways at LOS D or better. LOS D is generally considered to be the lowest tolerable level of service for roadways. Roadway designs attempt to operate at LOS D in only the worst case situations and preferably at higher levels of service. From a review of the definitions above, it is apparent that LOS D, and probably also C, represent a driving experience unbecoming a quality scenic byway and incompatible with the type of experience we wish to provide for our visitors and residents. None of the byways are currently operating at LOS D, and we don't want them to get to the point where they are. In some peak periods SR-128 already approximates LOS C. Due to the nature of the road; SR-128 will most likely never get to a LOS A or B.

RECOMMENDATION: Strive to provide a LOS of B or A for the scenic byways. [Grand County; UDOT]

It should be emphasized that the effective LOS is to some extent discretionary: to improve the LOS, either add or improve facilities (e.g., extra lanes, wider lanes, passing lanes, shoulder widening, curve straightening etc.), or limit or reduce traffic volumes and/or adjust mixtures of vehicle types.

Improvements to facilities will be discussed throughout this section and in Appendix B. Opportunities for facilities improvements are limited by terrain, financing, and by citizens' strongly expressed desire to not cause significant environmental disruption, change the basic character of the byways, or encourage even higher traffic levels.

UDOT does not attempt to regulate user volumes, nor discriminate by vehicle types except in relation to safety or overt limitations of facilities (thus, the restriction on vehicles over 55,000 gvw on SR-128). However, in the interest of maintaining the high-quality driving experience and intrinsic resources of the scenic byways, scenic byway managers can and should seek to influence user types and volumes, not by regulatory means, but simply by means of who is encouraged to use the byways. This will be discussed in greater detail below in the subsection on "Traffic accommodation," and in the Signage and Marketing sections.

11.4.3 Rights-of-way

UDOT holds right-of-way easements through BLM lands of 100 feet from centerline on all three main highways, except that the northernmost two miles of SR-128 (old US-6) and an adjacent stretch through SITLA lands have only prescriptive easements. Only prescriptive easements are held in areas where Utah sovereign lands impinge upon what would otherwise be the 100 feet from centerline BLM easement. Most highway sections passing through private lands have only prescriptive easements.

The Federal Highway Administration holds the right-of-way on the Island in the Sky Road from SR-313 to the national park.

11.4.4 Length

- SR-313: 23 miles
- SR-279: 15 miles
- SR-128: 45 miles
- Island in the Sky Road: 19 miles

11.4.5 Pavement widths

For perspective, a cross section for a road built to today's standard, posted at 50 mph, and an ADT of 1,500 could have two 12-foot lanes, two five-foot shoulders, and a clear zone of 15 feet.

Lane widths:

- SR-313: 12–13 feet
- SR-279: 12 feet
- SR-128: ±10 feet
- Island in the Sky Road: 10–13 feet

Paved shoulder widths:

- SR-313: ± 8.5 feet
- SR-279: 0–4 feet; ± 2 feet average
- SR-128: 0–4 feet; ± 1 foot average

- *Island in the Sky Road: 0–6 feet*

Paved shoulders support safe shared use of the highway by motorists, pedestrians, and bicyclists. They serve the same safety function as a recoverable slope clear zone, plus emergency and recreational parking. According to AASHTO (2001), a vehicle stopped on the shoulder should clear the edge of the traveled way by at least one foot and preferably by two feet. With most motor homes now eight feet wide, it is apparent that, in the absence of recoverable slope clear zones beyond the shoulders, only the shoulders of SR-313 are up to modern standards for clearances and emergency or recreational stopping. The other highways must rely on clear zones or the occasional pull-outs to serve stopping and parking needs, pedestrians, and bicycles.

SR-128 is particularly in need of widened paved shoulders. It has the narrowest lane width of the three highways, the most bicycle and vehicle traffic, and the narrowest paved shoulders, which range from zero to one foot in width over long stretches of road. A broad-scale effort to substantially widen shoulders throughout the corridor would alter the highway's visual character and cause considerable environmental damage. Citizens have expressed a clear desire to maintain the character of the byways, avoid blasting and filling, and avoid environmental damage, but at the same time are concerned about improving highway safety and providing a better margin of safety and comfort for motorists, bicyclists, and pedestrians alike.

Compromise is in order. Acknowledging the practical difficulty and potentially unacceptable adverse effects of creating shoulders in many areas, and the practical inability to create even a two-foot shoulder in some areas, a target of creating at least two- to three-foot shoulders is suggested where possible.

RECOMMENDATION: Create or widen shoulders along SR-128 where feasible without causing unacceptable aesthetic or environmental damage. Strive for a width of two to three feet, while evaluating each section on a case-by-case basis and acknowledging that shoulder construction may not be advisable in some locations, particularly if it would require scaling back cliffs. [UDOT]

11.4.6 Pavement edge drop-offs

Abrupt pavement edge drop-offs, common along SR-128, cause pavement erosion, prevent drivers from using unpaved pullouts, and are prime contributors to rollover accidents. These are addressed at least twice a year by placing and grading gravel in problem areas. A regular maintenance program of filling eroded edges, paving pullouts, and extending shoulders will help correct these problems, but resources for SR-128 don't typically amount to enough to do too much.

11.4.7 Clear zones, cliffs, and drop-offs



Many sections of SR-128 lack clear zones and railings

Clear zones are “the total roadside border area, starting at the edge of traveled way, available for safe use by an errant vehicle.” The clear zone may consist of a shoulder, a recoverable slope (a slope on which the driver of an errant vehicle could theoretically guide the vehicle back onto the roadway), nonrecoverable slope (a

slope on which the driver of an errant vehicle probably could not guide the vehicle), or a clear run-out area. Lack of an adequate clear zone, as from gullies, drop-offs, cliffs, or other obstructions can be mitigated by the installation of a barrier in the form of a guardrail, concrete barrier, or earth berm.

With a target of 15 feet, only SR-313 is up to modern standards. Along SR-128, and to a lesser extent SR-279, in some zones cliffs extend to the edge of the pavement or within one to two feet. Unprotected sheer drop-offs of great height—in some cases leading directly into the waters of the Colorado River—exist along SR-128 and should be considered for guardrail installation. The eventual removal or death of tamarisk may make the need for guardrail installation more urgent in a few locations, since tamarisk growth has in the past kept many errant vehicles from ending up in the river. Guardrail installation may not be possible in some areas without extreme expense and/or unacceptable environmental and aesthetic damage.

RECOMMENDATION: Where feasible and aesthetically and environmentally acceptable, and as funding allows, install guardrails in the most hazardous zones, such as curves, sections of narrow pavement, or along the most abrupt drop-offs. Guardrails should be nonreflective. Solid concrete barriers should be avoided in favor of natural materials such as wood or stone if certifiable, and designs that completely block low-angle views should be avoided when possible. (Suggested sites are listed in Appendix B.) [UDOT]

11.4.8 Acceleration/deceleration lanes

SR-128 has turn lanes only at the existing two destination resorts. Big Bend Campground is the most likely site to need future turn lane construction.

11.4.9 Signals

No signals are currently in place on any of the highways. With increases in traffic, it may become necessary to consider installing a signal at the intersection of SR-128 and US-191.

11.4.10 Curves

SR-128 has approximately 20 miles of very winding roadway and much of the remainder of the route is moderately winding. Advisory speeds posted for these curves range as low as 25 mph and are calculated based upon tolerable degrees of lean experienced by large vehicles such as motor homes, trailers, or semi-trucks. Smaller vehicles routinely travel at faster than advisory speeds.

Citizens recognize the limitations this curving nature imposes upon traffic, but are adamant that they do not wish to see SR-128 blasted, widened, or filled to straighten curves, especially not to accommodate larger vehicles. However, some citizens have suggested one possible exception to this principle: the curve at the top of the hill opposite Salt Wash, at milepost 10.9. This outside curve occurs on a moderately steep grade at a point with narrow pavement width, almost nonexistent outside shoulder, and an unguarded sheer drop of approximately 80 feet to the Colorado River, which causes large vehicles on the outside lane and drivers inexperienced with the highway to cut the corner. At the same time, visibility is limited by a cliff set back by only a one-foot shoulder and virtually no clear zone on the inside. Rock falls on the highway are fairly common. One suggested remedy is to cut the hill down to route the highway straight through the old gravel pit at the top of the hill, bypassing the old curve and possibly turning it into a one-way scenic overlook. A much less damaging remedy might be to cut back the cliff line approximately 5–15 feet to partially straighten the curve, improve visibility, and enable installation of a guardrail. The latter remedy might allow construction of a view pullout along the river side of the highway. Construction of a separate turnaround viewpoint/interpretive site at the old gravel pit above this curve could be considered.

RECOMMENDATION: Submit the community's desire to have curves addressed to UDOT for determination of future projects, particularly along SR-128. [Grand County]



Abrupt vertical curves, such as this on SR-128, can hide oncoming traffic

Abrupt vertical curves (hills) create substantial hazard of head-on collisions in at least three locations along SR-128 by obstructing sightlines. Locations are listed in Appendix B.

RECOMMENDATION: Seek safety improvement money to address some of the more abrupt horizontal and vertical curves on SR-128. [UDOT; Grand County]

11.4.11 Centerline rumble strips

Driver drowsiness, intoxication, cutting tight corners, or driver distractions (e.g., watching the scenery instead of the road) can cause head-on accidents, the most deadly type. SR-128 in particular would benefit from centerline rumble strips (alert strips) due to its very winding nature, corners with poor visibility, narrower lanes, the presence of facilities serving alcoholic beverages, and through traffic coming off the interstate.

RECOMMENDATION: Create centerline rumble strips on SR-128. [UDOT]

11.4.12 Passing lanes and zones

None of the three highways in question have dedicated passing lanes, nor do citizens generally wish to have any built, due to the expense, and the resulting environmental damage and undesirable change in highway character. Citizens prefer to rely on an enlarged and improved system of slow traffic pullouts, and on improved marking of passing zones.

Passing zones are in short supply in the canyon sections of SR-128. At least one prohibited zone might be remarked to a permitted zone. See Appendix B for location.

RECOMMENDATION: Reevaluate passing/no passing pavement markings on SR-128 for safety and traffic facilitation, and remark if appropriate. [UDOT]

11.4.13 Pullouts

The most frequently suggested safety improvement for SR-128 may also be one of the less expensive: improvement of existing slow vehicle pullouts and construction of new ones.

Improvements in road handling abilities of modern passenger cars have lead to increased speed expectations at the same time as the number of motor homes, travel trailers, and other slow-moving vehicles on the byways has increased. As a result, the potential for conflict and driver frustration has increased. Well-constructed and appropriately spaced slow traffic pullouts facilitate traffic flows of widely differing speeds by allowing slow vehicles and recreational drivers to easily yield to faster commuter traffic with minimal interruption to their own progress. Driver frustration and unsafe passing incidents are reduced, and the visitor experience is improved for all.

Pullout construction is preferred by citizens over passing lanes due to the greatly reduced cost and environmental and scenic impacts. Pullouts can be built in the most suitable locations, leaving more sensitive areas intact. Pullouts can serve for emergency roadside parking and are also widely valued in the corridor for recreational use, as they allow impromptu stopping in quiet areas away from the crowds. The essence of the many small pullouts is the opportunity for self-guided and more personal discovery of the corridors.

Due to its wide lanes and shoulders and many passing opportunities, SR-313 does not generally need new pullout construction. UDOT and the BLM have created some pullouts along SR-128 and SR-279. Drivers have created de-facto pullouts at various locations where clear zones allow; some are suitable for improvement, while use of others should be discouraged due to limited sightlines for reentering traffic. Pullout construction is most urgently needed along SR-128 between the Castle Valley turnoff and US-191 to help deal with the heavy recreational and commuter traffic in this very winding canyon zone. Pullouts are in particular needed on the uphill side of SR-128, where pullout opportunities are largely lacking compared to the river side, with its various recreational facilities.

Where feasible, pullouts should be made wide enough and long enough to accommodate motor homes and vehicles with trailers. These larger sites should be signed and should receive advance signing to alert drivers to use them. Smaller pullouts can still be of valuable service to smaller vehicles or for emergency or recreational parking.

To be most effective as slow traffic “pressure relief valves,” pullouts should be paved or filled with rotomill. Spray-on emulsion stabilizers over roadbase could be considered for use as an alternative to asphalt paving. Graveled pullouts can also serve, but the pavement-gravel interface must be maintained or erosion will create sudden drop-offs, which will discourage use. Graveling is adequate for recreational or roadside parking use.

Extension of existing pullouts or new construction will require archaeological and other scientific clearances. Pullout construction must be requested by the affected land management agency, which in virtually all cases would be the BLM.

RECOMMENDATION: Create an appropriately spaced series of new paved and unpaved slow traffic/multiuse pullouts along SR-128, with particular attention to the uphill side, where pullouts are currently generally lacking. Where possible, size pullouts to allow vehicles to pull over and be passed without the need to completely stop. Taper transition sections to guide traffic. Allow for a mixture of pullout sizes to serve smaller vehicles as well as larger vehicles. [UDOT; BLM]

RECOMMENDATION: Improve existing user-created pullouts where sightlines are adequate by paving or filling with rotomill road base. Maintain to prevent erosion and sudden drop-offs, which can discourage use. [UDOT; BLM]

RECOMMENDATION: Install “Slow traffic pullout ahead” signage to alert drivers to the distance to next major slow traffic pullout. [UDOT]

RECOMMENDATION: Seek safety spot improvement funds or grant funding for a comprehensive program of slow-traffic pullout planning, rehabilitation, construction, and signing along SR-128. [UDOT; SBC; BLM; Grand County]

RECOMMENDATION: Survey de-facto, user-created pullouts for adequacy of sight distances for safe reentry to traffic flow. Retain existing pullouts to the maximum extent practicable. Discourage use of unsafe sites by restoring and revegetating portions beyond shoulder widths and placing reflector posts or other nonhazardous obstructions. [UDOT; BLM]

RECOMMENDATION: Strive for no net loss in vegetated areas from pullout construction, and revegetate at least as much area as is claimed by new construction. [UDOT; BLM]

11.4.14 Parking

Outside of Canyonlands National Park and Dead Horse Point State Park, parking along the byways is generally permitted wherever vehicles can safely pull off the highway and park clear of the traffic lane and shoulder, where it exists. Prohibitions on parking are generally inappropriate unless safety concerns are

evident. A program of improving existing pullouts and creating new ones, as described above, will increase parking and recreational opportunities.

RECOMMENDATION: Do not restrict parking except in locations where safety concerns are paramount. Encourage visitors to stop and explore with a sense of freedom according to their own needs, in keeping with the byways brand. [UDOT; Grand County; BLM]

11.5 Traffic accommodation

11.5.1 Commercial/industrial traffic



The 55,000-pound weight limit on SR-128 is an important byway protection

Because a safer, more modern, higher speed alternate route to Moab is available via I-70 and US-191, UDOT and Grand County have established a weight restriction of 55,000 pounds on SR-128. Citizens prefer that this highway be used primarily for recreational, residential, and local traffic.

RECOMMENDATION: Maintain the current signed weight restriction of 55,000 pounds on SR-128. [Grand County; UDOT]

In light of continued support for the weight restriction and the relative lack of commercial development along SR-128, substantial additional commercial traffic is not expected here and will not be encouraged. Heavy industrial hauling may occur on SR-128 if plans to transport uranium ore down the La Sal Mountain Loop Road from Colorado are approved. Suggested safety improvements will help handle such traffic.

Industrial traffic on SR-313 may increase to serve oil and gas fields and mining operations, and the highway is well equipped to handle such increases.

Around 6,600 semi-trucks make the round trip down the length of SR-279 to Intrepid Potash each year and are well-served by the roadway. No additional commercial/industrial traffic seems likely on this highway, with one very large exception, as previously discussed: truck transport of UMTRA tailings, either by truck to an adjacent rail siding, or by truck directly to the final repository.

RECOMMENDATION: Endorse the construction of an overpass on SR-279 and/or US-191 at the UMTRA site to prevent tailings truck traffic from interfering with recreational traffic. [Grand County; SBC]

11.5.2 Tour buses



SR-128 presents many difficulties for tour buses

Highway facilities on SR-313 are capable of handling more than the current moderate tour bus traffic to Dead Horse Point. The road to Grand View Point is slower and narrower, but still serviceable.

SR-279 can adequately serve tour buses, but has only two good turnaround points for such large vehicles, at Gold Bar and at the highway's end.

While SR-128 is passable to large tour buses, and such buses fall below the existing 55,000-pound weight limit, this highway should be considered sub-optimal for such traffic, due to its narrow lanes (10 feet), many tight curves creating radii difficult for tour buses to negotiate, hilly terrain, unprotected sheer drop-offs, general lack of shoulders, relative lack of parking places for large vehicles (especially northbound), sheer or overhanging cliff faces at lanes' edges, school bus traffic, heavy bicycle traffic, and heavy traffic of large RVs and large raft shuttle buses with wide trailers. While the suggested highway improvements will in some ways improve safety for tour buses, the majority of these limitations will persist.

Encouraging tour bus traffic on a road with such known inherent limitations may create a liability hazard for the county, and if a bus were to wind up in the river or force another vehicle into the river it could cause considerable damage to the area's reputation for tourism.

11.5.3 Commuter traffic

Commuter traffic from destination resorts along SR-128 and from the town of Castle Valley is significant and steadily increasing as these areas become more built-up. Commuters typically want to travel faster than tourists. Conflicts between these two traffic types will be reduced by improvements previously discussed, particularly slow-traffic pullout construction and passing zone improvements. Development of public transportation, as discussed in the Multimodal transportation section, is perhaps the best solution to serve commuters and reduce traffic.

11.5.4 Bicycles

See Section 12.

11.5.5 Recreational vehicles

Movement of RV traffic along SR-128 will be facilitated by proposed safety improvements, particularly slow-traffic pullouts, passing zone improvements, widened shoulders, and improved sightlines.

11.6 Context-sensitive design

UDOT is committed to the practice of context-sensitive solutions (CSS) for highway improvements. The CSS approach seeks transportation solutions that recognize and incorporate factors that are part of the larger context, such as physical, social, economic, political, and cultural impacts. The protection of scenic, aesthetic, historic, environmental and other community values are high priorities. Core principles of CSS include the following (also see Appendix E):

- One size does not fit all; unique solutions are sometimes called for.
- Seek the least intrusive strategies to meet the need.
- Develop projects in a manner that enhances the environment and mitigates impacts.
- The local community is part of the context and should be an active partner in decision making.

ACTION: Engage the public in context-sensitive solutions discussions during design phases for highway improvements beyond the scope of normal maintenance. [UDOT]

RECOMMENDATION: Where possible, avoid standard highway solutions and design elements associated with freeways and urban settings. As funding will allow, use designs, surfaces, and materials that blend with or are in character with the natural environment, such as etched or pre-weathered steel, nonreflective guardrails, textured or colored concrete, and similar-source earth and rock. Give preference to natural materials where possible. [UDOT]

Some cuts and fills may be necessary to accomplish desired safety improvements along SR-128, but are expected to be small and few, in light of the community's desire to maintain the current slow-speed character of the highway.

11.7 Project funding

Some improvements, such as improved signage, passing zone reevaluation, and vegetation management, can likely be accomplished with normal UDOT staff and routine funding. Some larger projects, such as adding shoulders, improving or creating pullouts etc., could be done incrementally with regular maintenance crews and monies; however, planning and implementation of such projects might be more effectively accomplished with specific funding for package-coordinated improvements.

No improvement projects for any of the three scenic byways are included in the UDOT Statewide Transportation Improvement Plan (STIP). Some funding may be available for projects up to one million dollars under UDOT and federal safety spot improvements programs, with federal program funding on a three- to four-year cycle and state projects on a two- to three-year cycle. Safety projects for both state and national scenic byways are also eligible for funding under the National Scenic Byways Grant Program.

UDOT has indicated that safety spot improvements may receive higher prioritization when local communities demonstrate commitment by providing a portion of resources to accomplish the project, either funding or in-kind contributions.

RECOMMENDATION: Establish a more detailed list of desired improvements based upon CMP recommendations. Delineate which projects can be accomplished with existing routine maintenance resources, which can be funded through UDOT or federal safety spot improvement programs, and which will require outside grant funding. [UDOT; SBC]

RECOMMENDATION: Seek grant funding for highway safety improvements. [UDOT; Grand County; Town of Castle Valley; SBC]

UDOT can identify projects on the byways and the funding sources they qualify for, but obtaining funds will be challenging, as the byways will have to compete with higher priority roads in the state.

11.8 Project priorities

Upon considering the public's wishes, known accident types, and hazard zones along the byways; balancing interests in safety (given highest priority), traffic facilitation, recreational benefits, and environmental protection; and considering likely cost/benefit ratios for investments of differing magnitudes, the following are community recommended priorities for highway improvement projects:

1. Bikeways: complete the bikeway along SR-128 from US-191 to the Porcupine Rim trailhead
2. Slow traffic/multi-use pullouts: many locations along SR-128
3. Centerline rumble strips on SR-128
4. Shoulders extensions and guardrails: several sections along SR-128

5. Bikeways: SR-313: complete the wide paved shoulders to Dead Horse Point and Island in the Sky Visitor Center
6. Vertical curve (blind hill) remediation: three locations along SR-128
7. Curve remediation and guardrails at Salt Wash (mile 10.8), SR-128

12. Multimodal transportation

As gasoline prices rise and demands to forestall global warming increase, the successful tourism communities of the future will find creative ways to decouple automobile use from recreational use, both in terms of getting visitors to the area and having activities for them to partake of once they arrive. Few things would do as much to improve Grand County's image as a desirable destination—and not simply a pretty place to drive through—and as a desirable place to live and invest in, as would a visible, effective public transportation system designed to serve both residents and tourists. To the greatest extent possible, Grand County, land managers, and the scenic byways should seek to serve people, not simply vehicles.

12.1 Goals

- Improve access to recreation
- Accommodate increasing visitation without increasing vehicular traffic overall
- Reduce energy consumption and pollution impacts of byways visitation
- Improve highway safety
- Provide alternatives and opportunities for byway enjoyment by those who prefer to travel without private vehicles or who lack such vehicles
- Project an image of a forward-looking community
- Create a people-friendly environment not dominated by vehicles

12.2 Private shuttlebus services

Private shuttle bus services in Moab are available to transport bicyclists and hikers to and from trailheads. These services provide multiple benefits: overall traffic is reduced; tourism is facilitated; and drivers can provide valuable area information and promote safety awareness.

Shuttle bus service could be facilitated by the completion of the Lions Park Transit Hub at the SR-128/US-191 intersection.

ACTION: Promote use of private tourist/bicycle shuttle bus services by distributing lists of providers through motels, bike shops, Web sites, and information centers. [Moab Area Travel Council; MIC]

12.3 Commercial tour buses

Commercial tour buses are a valued mode of mass transportation, particularly among senior citizens and international tourists, and are an important contribution to the local economy.

12.4 Public bus services

A public bus service along the byways—in particular, SR-128—could benefit the byways by relieving traffic, improving highway safety, minimizing air and noise pollution, reducing fuel consumption, and to provide mobility to a wider variety of visitors. A shuttle bus system on SR-128 running on a seasonally varied schedule from downtown Moab as far as Castle Valley, Sorrel River Ranch, or Hittle Bottom could allow visitors to hike in Negro Bill Canyon, stop along the river or visit a resort for lunch, see some of the best sites such as the canyon of the Colorado River, Castle Rock, and Fisher Towers, and perhaps help facilitate private river running shuttles.

RECOMMENDATION: Encourage discussion between Grand County, the City of Moab and the town of Castle Valley to investigate possibilities of a public bus system, and locating funding sources to implement a service. Research possibilities for state or federal grants and subsidies, partnerships with NPS, or private/public partnerships such as subsidized franchises. [Grand County, Town of Castle Valley]

12.5 Bicycle accommodations



Recently completed bike path at Goose Island, SR-128, and bicycle/pedestrian bridge at Lions Park

Grand County citizens want more bicycle accommodations along the byways. In discussions with citizens and key persons, the only concern mentioned more often was highway safety, and the two concerns are generally seen as interdependent. Bicycle paths are seen as a means to reduce highway traffic, avoid bicycle/vehicle conflicts, increase transportation options for locals and visitors alike, raise the profile of the community and byways as an environmentally conscious destination recreation area, and as a way to increase tourism by offering world-class, family-friendly bicycling opportunities.

As discussed earlier, opportunities for mountain biking in the corridors abound. For road biking, all three byways will soon be nearly connected by a paved, mostly separated bikeway system following US-191 from Moab to SR-313. Paved shoulders from seven to eight feet wide on both sides of SR-313 extend to the Dead Horse Point–Canyonlands junction, but the lack of wide shoulders from there to Dead Horse Point and to Island in the Sky creates hazards for bicyclists and prevents these highways from becoming the world-class bicycling opportunity they could be. To extend these shoulders would require importation of extensive fill material and might need to be done along with a general resurfacing of the roadways. A connector from the bottom of SR-313 to the Gemini Bridges access trail would complete the experience.

ACTION: Estimate costs, feasibility, and impacts of completing wide paved shoulders to the end of SR-313 at Dead Horse Point, as well as to the Island in the Sky Visitor Center. Consider possible UDOT or grant funding opportunities. [UDOT; Grand County; State Parks; BLM; NPS]

The nonprofit organization Moab Trails Alliance works with the Grand County Nonmotorized Trail Mix Committee to plan for the county's trail needs. These groups obtained Transportation Enhancement funding for engineering and partial construction of the planned four-mile bikeway along SR-128 from US-191 to the Porcupine Rim Trailhead, including the new bicycle/pedestrian bridge recently completed across the Colorado River at Lions Park. If additional funding can be obtained to complete the route, it could relieve the largest portion of bicycle traffic from SR-128, significantly reduce associated hazards, and provide a premier recreational amenity.

RECOMMENDATION: Seek FHWA National Scenic Byways grant funding or other sources to complete the SR-128 bikeway to the Porcupine Rim Trailhead. [Grand County; BLM; UDOT]

ACTION: Engage the public in context-sensitive solutions discussions during the design phase for all bike improvements. [Grand County; UDOT; State Parks; BLM; NPS]

More northerly sections of SR-128, from the Porcupine Rim Trailhead to Hittle Bottom or beyond, face technical, environmental, scenic, and financial impediments to bikeway extension, particularly in the canyon sections.

Citizens on the whole have not felt the need for bikeway construction along SR-279, with its wider lanes, wider shoulders, long sightlines, and lesser traffic in comparison to SR-128, but encourage a bike underpass from US-191 connecting with SR-279.

Planners acknowledge that not all bicyclists will use bikeways or paved shoulders where available. In particular, road bikers in search of a fast, smooth ride may tend to avoid more meandering bikeways populated by slower bikers and pedestrians or more prone to accumulating hazardous debris or thorns damaging to their smaller tires. Gravel debris from highway chip sealing accumulates along the shoulder and creates a strong deterrent to bicycle use. To maximize the potential benefits of bikeways and paved shoulders as bike lanes these areas must be well maintained. The Moab Trails Alliance is currently considering purchase of a sweeper for volunteers to use in maintaining county bikeways.

ACTION: Support acquisition and operation of a sweeper to maintain county bikeways. Consider possible sweeper use to maintain bike shoulders along SR-313. Publicize the fact that Grand County maintains clean bike trails through bike stores, motels, Web sites, and information centers. [Grand County; Moab Area Travel Council; MIC]

ACTION: Monitor bicycle use of bikeways. If a significant number of bicyclists aren't using them, determine why and how use can be encouraged. [SBC; Grand County]

12.6 Project priorities

1. Complete the bikeway along SR-128 from US-191 to the Porcupine Rim Trailhead.
2. Create or widen paved shoulders along SR-128, as described under Section 11.4.5.
3. Extend the wide shoulders along SR-313 to the Dead Horse Point Visitor Center and Island in the Sky Visitor Center.
4. Complete the bike lanes from the bottom of SR-313 to the bottom of the Gemini Bridges access trail.
5. Study feasibility of providing public transportation in the Moab Valley, with eventual connections to Castle Valley and the scenic byways.

13. Signage plan

This section will discuss official, informational, and advertising signs for highway portions outside the national and state parks, which maintain their own standards. Interpretive signing is discussed in Section 10 and Appendix D.

13.1 Authority for sign placement

Outside the national and state parks, authority for erecting signage along the byways rests with UDOT, which permits the BLM to erect signs relating to recreational facilities. Installation and maintenance of signs within the highway right-of-way are subject to national standards found in the *Manual of Uniform Traffic Control Devices* (MUTCD) and the *AASHTO Roadside Design Guide*.

13.2 Goals

- Facilitate highway safety
- Communicate effectively
- Keep visitors well oriented and well informed
- Protect scenic values
- Establish scenic byway identity

13.3 Guidelines

- Care should be taken so that sign placement does not obstruct sightlines, cause distractions in critical safety locations, or obstruct key scenic views.
- Signs should be as small and as low as possible to serve their function, and in compliance with MUTCD.
- International sign symbols should be used as appropriate.
- Informational signs should be consolidated where possible, and redundant signs should be eliminated.

13.4 Existing signage

Signs within the MUTCD include regulatory signs (e.g., speed limits, weight limits, passing zones, bicycles ride single file), safety warning signs (e.g., rock fall zones, winding road, road narrows, bicycles on road, open range, curve advisory speeds), and guide/directional signs (e.g., direction signs, highway route numbers, mileposts, miles-to-destination signs, byway logo signs).

Information signs include facilities and services signs (e.g., camping, phone, gas, food, and lodging) and recreational and cultural site signs.

Destination signs include attractions (e.g. Arches National Park, Dead Horse Point State Park)

Commercial signs are almost completely lacking along the byways, as the scenic byway signage policy allows only on-premise signs.

13.5 Recommendations

13.5.1 Scenic byway identification and promotion

- Install Utah scenic byway logo signs at the entrances to all three routes. These may be installed as part of the proposed gateway displays discussed in the Interpretation section. Logo signs may also be placed as route markers along with UDOT route designation signs at infrequent intervals. [UDOT; SBC]
- Maintain additional logo signs 1) at the exits to Dead Horse Point State Park and Canyonlands National Park; 2) beside the northbound lane of SR-279 at the potash plant; and northbound and southbound near the Castle Valley/La Sal Mountain Loop intersection. [UDOT; SBC]
- Signage will be consistent with scenic byway policy.

13.5.2 Safety and advisory

- Install advance approach signs to alert travelers of upcoming slow traffic pullouts and primary passing opportunities in zones where such opportunities are few (primarily along SR-128). [UDOT]



- To warn drivers of bicycle traffic, at ends of each corridor and at intervals, install the new MUTCD signs that illustrate the required three-foot separation between cars and bicycles. [UDOT]

13.5.3 Recreational

- Recreation site approach/directional signs: Install small, half-height signs (e.g., tent symbol, boat ramp symbol, or camera symbol) to alert visitors to distance to upcoming recreation sites or a selected few photo pullouts. These, and the site destination signs discussed below, may be designed and installed as part of the coordinated interpretive display plan proposed in the Interpretation section. [BLM; NPS; State Parks]
- Recreation site destination signs should be maintained at all trailheads, campgrounds, and boat ramps. [BLM; NPS; State Parks]

13.5.4 SR-128

As part of the anticipated Lions Park redesign, place a sign to direct travelers to the park for water, in an effort to help relieve congestion at the nearby Matrimony Spring. [UDOT, Grand County]

13.5.5 SR-279

- More clearly delineate where the "designated" parking is along Wall Street with double white striping and signs. [UDOT]

13.5.6 SR-313

- The blue "Viewpoint" directional signs at the Lone Mesa and Plateau viewpoints are inappropriately large (12 feet high, with 5 x 6 foot placards) in relation to their importance, and do not reflect a desirable look for the corridor. Replace these with smaller signs. [BLM]



Some signs are self-defeating

RECOMMENDATION: Work within the MUTCD sign plan to improve signage.

13.6 Multilingual needs

The byways have significant and growing visitation by non-English-speaking people. However, in part because people of so many different languages are visiting, managers feel it would be impractical to attempt multilingual signage. Instead, they feel it is preferable to rely upon English combined with standardized international symbols.

13.7 Outdoor advertising control

The *Grand County Land Use Code* establishes limits on number, size, and illumination of on-premise advertising and prohibits new off-premise commercial signs (billboards) along county highways. The byways are in compliance with the off-premise ordinance.

Title 23, United States code, Section 131 (s), which prohibits new outdoor advertising signs along certain scenic byways, does not apply to the three byways under discussion because they are not within the Interstate Highway System or National Highway System, and are not among the Federal-Aid Primary highways.

13.8 Adopt-A-Highway program

Adopt-A-Highway litter control sponsorship signs are placed by UDOT to honor volunteer sponsors of this valuable litter control program. This can be an expression of civic pride and for many is a valuable form of advertising for sponsoring businesses. However, some citizens feel the many sponsorship signs are themselves a form of visual clutter and a distraction from the scenery.

13.9 Internet and other virtual signage

Physical road signs are not the only means to inform and assist visitors. Internet and other forms of virtual signage (such as low-power radio signals, internet mapping, and GPS-correlated messaging) are less visually imposing, more flexible, and can give more detailed information than physical signs. These methods may be particularly well suited to help with recreational way finding and providing supplemental information. An example would be placing point-of-interest and scenic photograph markers on Google Earth or Google Maps, or contacting publishers of electronic maps.

RECOMMENDATION: Investigate and take advantage of technologies and opportunities for dispersing virtual signage about the byways. [Moab Area Travel Council; MIC]

14. Marketing, promotion, and Grand County economic development

For Grand County, it is neither practical nor desirable to separate the topic of tourism marketing from that of general economic development, nor is it practical to discuss marketing the byways separately from marketing the county in general. Hence, these topics will be considered jointly here, in relation to the following principles, goals, and objectives.

14.1 Principles, goals, and objectives

14.1.1 Market in accord with byways goals and citizen desires

The Moab Area Travel Council is and will remain the primary marketing organization for the byways. The mandate of the council is to “promote tourism and improve the local economy—recreation, tourism, and conventions—in a manner that protects the beauty and scenery of the natural environment.”

Marketing, like all other aspects of byway management, should be congruent with byway goals and objectives. Education about byway goals should be considered a major component of byway management and promotion. Particularly important is the need to stress canyon country minimum impact practices,

regulations requiring bicycles and motor vehicles to stay strictly on designated routes, and regulations restricting camping and campfires to designated sites.

ACTION: Include environmental responsibility messages in varying forms as appropriate in all advertising, promotions, brochures, Web sites, and other publications related to tourism and outdoor recreation, to promote compliance with canyon country minimum impact practices and other key byway goals. [Moab Area Travel Council; MIC; BLM; NPS; State Parks; Grand County; CNHA; SBC]

14.1.2 Continue efforts to diversify the economy while protecting the resource

Economic diversification options should be explored, with particular emphasis on low-impact industries such as education, vocational training, scientific research, cultural events, reinvigorated commercial filming, the arts, health care, light manufacturing, niche-marketed diversified agriculture, government, information technology, “green” technology directed at making Moab more environmentally and economically self-sufficient, and an emphasis on attracting as residents people with independent incomes, such as retirees, or those with portable home-based/Internet-based businesses.

14.1.3 Promote an appropriate volume and type of tourism to sustain Grand County’s current tourism industrial base

While the Moab Area Travel Council has no immediate plans for promoting the byways specifically, the Travel Council will integrate scenic byway marketing with the existing marketing meeting the mandate of the Travel Council, marketing that compliments “Where Adventure Begins” while considering the goals of the byways.

14.1.4 Develop the brand

Branding is the act of creating a specific impression of our byways in the minds of our target audience; it is, in effect, a promise about what visitors will find. A successful brand creates customer interest and builds visitor loyalty. As discussed earlier in Section 7 (Visitor experience), the byways region—identified with the Grand County region as a whole—already has aspects of an innate “brand.” Visitors who know the county know what they can expect to find: an *authentic* American West experience in the way of a rustic, rugged, uncrowded, clean landscape that offers ample opportunities for *genuine* adventure.

A byways brand can be defined and promoted in marketing through the use of a distinctive name, a logo, and a consistent theme—something easily recognized and associated with the area. The Moab Area Travel Council has successfully used the theme of “adventure.” “Adventure” bespeaks riding roiling rivers, biking challenging slick rock, surmounting the Moab Rim in your jeep, exploring hidden canyons. The Moab Area Travel Council also understands that “adventure” for each person is defined differently and just simply venturing out is an “adventure” for some. The innate brand of the byways is broader and deeper than adventure activities alone, and includes the many tangible qualities discussed earlier under Section 7 and many quieter pursuits, including simply “relaxing”—an activity that is gaining increasing prominence in national surveys of favorite recreational pastimes.

It is suggested that marketing efforts give more attention to the wider concept of the “Moab” brand. “Adventure” may still be the motto, but other opportunities and intrinsic qualities should be invoked more often in order, first, to attract a broader audience; second, to suggest “Moab” as a destination for additional activities and experiences, ones with less impact upon resources than what predominates now; and third, to help local citizen and managerial thinking shift to a broader concept about what we have to treasure here.

14.1.5 Encourage more profitable tourism visits

Seek new or renewed ways to make longer visits more appealing through more in-depth experience of the backcountry and through more rounded offerings in Moab itself. Enhanced cultural and educational events, more diversified retailing (perhaps with an emphasis on enticing more visitors to venture off of Main Street), and enhanced urban recreational facilities (e.g., an indoor pool/fitness center) will complement outdoor adventure activities. When visitors get sunburned and worn out on the trails, they will be ready to relax and return to more civilized activities if they find a welcoming community.

14.1.6 Maintain international appeal

Like a diversified financial portfolio, a diversified tourist “portfolio” can help stabilize a tourist economy. Downturns in one part of the national or global economy are often counterbalanced by upturns in other parts. The byways and the county are fortunate to already have significant international renown and appeal. This should be maintained and, if possible, increased, through continued participation in travel conventions, contacts with foreign travel writers, cooperative marketing with other areas with higher foreign visitation, providing more foreign language services, and an increased Internet presence.

RECOMMENDATION: Encourage web visitors to use web translation programs to view German and French versions of the DiscoverMoab.com Web site. [Moab Area Travel Council]

14.1.7 Make visitors feel welcome

The best investment in tourism promotion is that which increases the number of repeat “customers.” When visitors have satisfying experiences and feel welcomed into a community they are apt to visit again and support the goals of the community. Important ways to achieve this have been discussed in the earlier section on “Visitor experience” on providing a quality experience and meeting visitor expectations. The other half of the coin is the local community’s reception of visitors.

Service employee knowledgeability about the area and customer-friendly business practices are important to customer satisfaction and in enlisting customers as allies for achieving byway goals. The majority of visitors may never meet a park interpreter or visit an information station; for them, commercial establishment employees may be their only personal contacts.

RECOMMENDATION: Reinstitute and redesign a hospitality training program, with an emphasis on educating and gaining support first from business owners and managers, and secondarily from employees. [Moab Area Travel Council]

RECOMMENDATION: As an extension of the hospitality program, seek to educate community members involved in serving the visiting public (e.g., OHV rental agencies, shuttle services, motels, and restaurants) about the byways, recreational opportunities, minimum impact practices, and about appropriate and less appropriate locations for various recreational activities. [Moab Area Travel Council; MIC]

14.1.8 Communicate responsible messages

Many recreational visitors are very susceptible to images and messages, overt or subtle. Vet all marketing text and images for environmental and behavioral appropriateness. Incorporate aspects of Leave No Trace or Tread Lightly principles or other interpretive information and objectives in marketing materials wherever possible.

RECOMMENDATION: Develop awareness among advertisers, promoters, and publishers of the region to encourage responsible messaging about the byways region. Develop simple informational materials to explain key byways goals and how irresponsible messaging works against them. [SBC; Moab Area Travel Council; MIC]

14.1.9 Seek potential allies

Tourism promotion is akin to inviting someone into your home—you wouldn’t invite just anyone inside, even if for a price. To the extent that we are spending to put out the welcome mat through advertising and promotions, we have the luxury of being able to be somewhat selective.

This CMP and other planning efforts have documented citizen preferences for low-impact visitation and for visitors who will have the willingness and ability to become partners in good stewardship of the byways because they appreciate how special these places are. A few such visitors can be worth many drive-through visitors to the community.

To reach such prospective visitors with potential for high area devotion will likely require a more targeted, and more expensive, niche-oriented marketing approach.

14.2 Reaching target populations

14.2.1 Maintain a strong Internet presence

The Moab Area Travel Council has one of the finest sites anywhere on the Internet (www.discovermoab.org), with well-organized, comprehensive information on activities, locations, and visitor resources. The site will become all the more important as travelers increasingly rely on advance Internet research to locate destinations and plan their activities. Consider adding reciprocal links with appropriate commercially driven sites such as MapQuest.com that can provide free visitor services.

NPS maintains a webpage on Island in the Sky: www.nps.gov/cany/planyourvisit/islandinthesky.htm, and on Arches: www.nps.gov/arch. Dead Horse Point State Park maintains a webpage as part of the Utah State Parks Web site: <http://stateparks.utah.gov/parks/dead-horse/>. The BLM maintains a webpage at www.blm.gov/ut/st/em/fo/moab.html. Canyonlands Natural History Association has a website at www.cnha.org.

RECOMMENDATION: Implement the Interpretation/Education objectives in the Dead Horse Point State Park RMP of including links to other area websites and installing a webcam. [State Parks]

RECOMMENDATION: Make the information and graphics of the Dead Horse Point State Park brochure into integral parts of the webpage, rather than allowing access only through a PDF link. [State Parks]

14.2.2 Cooperatively link with related Web sites

Establish links with other Moab, Grand County, and regional marketing agencies, including other Utah and Colorado state and national scenic byways.

RECOMMENDATION: Enlist the cooperation of the Utah Office of Tourism to broaden their advertising to include key state parks such as Dead Horse Point along with the national parks. [State Parks; Moab Area Travel Council; SBC]

14.2.3 Develop cooperative marketing partnerships

Consider initiating theme-driven mutual marketing relationships with other byways, for example: National Park Byways; Colorado Plateau Byways; Desert Byways; Adventure Byways; Biking Byways etc.

14.2.4 Develop byway-specific publications

Develop byway-specific publications such as a brochure/guide, map of key sites and recreational resources, and rack cards.

14.2.5 Facilitate media coverage

Create a media/writer's kit that includes itineraries, background notes, story ideas, photographs and camera-ready maps of the area and route. Initiate contacts with travel and lifestyle editors and writers to suggest possible stories.

14.2.6 Conduct press FAM tours focused on the byways

Press familiarization tours (FAM tours) are a good way to obtain low-cost publicity, develop enthusiasm for the region, help assure that area information in the press is accurate, and encourage inclusion of needed interpretive messages such as Leave No Trace and Tread Lightly ethics. Consider seeking financial help from the Utah Travel Region and Utah Office of Tourism. Consider combined tours with other scenic byways, such as The Energy Loop or the Dinosaur Diamond.

14.2.7 Take advantage of free advertising

Investigate and take advantage of technologies and opportunities for dispersing virtual signage about the byways, such as placing point-of-interest and scenic photograph markers on Google Earth or Google Maps, or contacting publishers of electronic GPS-guided road maps.

If National Scenic Byway or All-American Road designation is achieved, promptly contact the National Scenic Byways Program to supply information and text to assure the byways receive full coverage under the America's Byways program, including their byways directories and Byways.org Web site.

14.2.8 Promote during off-peak seasons

Remember to schedule advertising and promotions during off-peak seasons. Since the byways are destinations unto themselves, visitors will be researching and planning ahead, savoring their anticipation.

14.2.9 Advertise in multisport publications

Get the best return per dollar by advertising in regional and multisport magazines to attract aficionados of the many niche sports opportunities the byways afford.

15. Byway management

As previously discussed, byway management authority ultimately resides with managers of the several individual agencies in charge of byways lands: UDOT, Grand County, BLM, NPS, State Parks, FFSL, SITLA, and the many private property owners. Agencies such as the Moab Area Travel Council and CNHA, standing committees such as Trail Mix and SEUTP, and private groups such as The Nature Conservancy, Canyonlands Field Institute, Moab Trails Alliance, and Plateau Restoration, will continue to exert varying degrees of guiding and supporting influence.

The Scenic Byway Committee partners, acting in accordance with the Grand County Board policy, shall continue to meet annually or as necessary to share agency plans and perspectives, to formulate decisions to promote byways goals and CMP compliance, and to fulfill the goals of the CMP. The Scenic Byway Coordinator shall prepare an annual report to the SBC on progress toward goals and what is needed to facilitate further progress. The SBC shall release the report to the general public and continue to involve the public in planning and executing byway improvements.

The National Scenic Byways Discretionary Grants Program (FHWA) offers funding for CMP implementation sufficient to hire a part-time byway manager. A manager could

- raise public awareness of the byways, their resources, and issues and opportunities facing them
- prioritize byway improvements
- become the primary responsible party for promoting CMP compliance—the byway advocate and watchdog
- build strong byway-supportive interagency relationships
- become the public's contact person for byway concerns and information, and act as liaison between the public and managers
- coordinate volunteer efforts in support of byway goals
- seek funding opportunities for byway improvements

RECOMMENDATION: Consider possible byway management strategies and whether to seek FHWA grant funding to hire a byway coordinator. [SBC]

16. Partnerships

The existing Scenic Byway Committee, composed of 13 managing agencies, will continue to be the most important partnership overseeing and promoting byway goals and objectives. The SBC should seek to build upon this by increasing individual and group participation in byway planning and improvement projects. Think nationally as well as locally.

RECOMMENDATION: To Grand County, Moab Area Travel Council, CNHA, NPS, BLM, and State Parks Web sites, add information and links to Web sites regarding local educational and volunteer opportunities offered by each agency as well by such groups as Canyonlands Field Institute, Plateau Restoration, Adopt-A-Highway, Adopt-A-Grove, Utah colleges and universities, etc. [Grand County; Moab Area Travel Council; NPS; BLM; CNHA]

17. Implementation plan

17.1 Implementation priorities

Policy and action item recommendations, along with a listing of responsible agencies, are summarized in Appendix G.

Ongoing public consultations, administrative planning, and consideration of funding realities may change priority rankings. The following criteria can help set community and agency priorities in accomplishing tasks:

- Is it able to be implemented immediately or in the near-term? (High priority)
- Does it correspond with the community's felt sense of urgency? (High priority)
- Does it promote health and safety? (Highest priority)
- Does it promote the preservation and enhancement of the intrinsic resources?
- To what degree does it improve the quality of the visitor's experience?
- How cost effective is it and how available is the funding?
- How many competing projects could be accomplished for the same expenditure?
- How much coordination is required or desired with other projects?

17.2 Project funding priorities

The following are suggested funding priorities. Funding for these projects will be sought according to their priority. However, the implementation process needs to be flexible enough to allow for the development of projects if a specific funding source becomes available.

1. Complete the bikeway along SR-128 from US-191 to the Porcupine Rim Trailhead.
2. Slow traffic/multi-use pullouts: many locations along SR-128
3. Exotic species control and native plant revegetation (assistant county weed supervisor; woody invasives coordinator; specific project funding)
4. Shoulder extensions and guardrails: several sections along SR-128
5. Extend the wide shoulders along SR-313 to the Dead Horse Point Visitor Center and Island in the Sky Visitor Center
6. Comprehensive, integrated plan and development of roadside displays and signage for byway corridors, including gateway displays, interpretive text, and site development
7. Vertical curve (blind hill) remediation: three locations along SR-128
8. Scenic and other conservation easements and/or land purchases
9. Curve remediation and guardrails at Salt Wash (milepost 10.8), SR-128
10. Scientific research and resource monitoring
11. Bikeways: SR-128: consider sections of bikeway extensions between the Castle Valley turnoff and Hittle Bottom.
12. Audio auto tours

17.3 Monitoring compliance and evaluating effectiveness

As described above under Section 15 (Management), the Scenic Byway Committee will be responsible for seeking timely and effective implementation. Committee member agencies will be held nonbinding and will participate at the level consistent within their agency.

To a large extent, mechanisms are already in place to guide development and maintain the byways' intrinsic qualities. Grand County and the various federal and state agencies will continue to implement existing and revised management plans and development codes, and to comply with environmental and other regulatory requirements.

As described in Section 15, the SBC shall continue to meet annually and shall ongoingly record and evaluate progress toward goals, discern what is needed to make further progress, and revise implementation priorities if necessary. The SBC shall prepare an annual report on progress toward goals and what is needed to facilitate further progress and will submit a copy to the Grand County Council.

18. Potential funding sources

Funding sources to accomplish byway projects will be of the following general types:

- General fund allocations, Grand County
- Agency funds: operations and special projects
- Grants and assistance programs: primarily federal, some state
- Public-private ventures
- Donations from the public
- Sponsorships
- Volunteering
- In-kind services

Some of the following potential funding sources for byways projects can be found within the Catalog of Federal Domestic Assistance at <http://www.cfda.gov/> by the DFDA catalogue number given.

Transportation Enhancement Activities (TEA-21) Funding

National Scenic Byways Program

<http://www.bywaysonline.org/grants/>

Interpretation; access to recreation; highway safety; facilities; resource protection; marketing

USDI–National Park Service (NPS)

www.cfda.gov/public/viewprog.asp

For: outdoor recreation development and planning

Eligible: state agencies and partners

CFDA catalogue number 15.916

\$150–\$5,000

Public Lands Highway Funding

www.dot.ca.gov

For improvements to any public road accessing federal lands

Eligible: state departments of transportations

BLM, Cultural and Recreation Group

202/452-0330

www.blm.gov

For promotion of heritage management, education, interpretive signs, training associated with BLM lands

CFDA catalogue number 15.224

\$100–\$10,000

National Park Service

www.cr.nps.gov/nr

For public education, tourism efforts, kiosk information

Eligible: nonprofit organizations; federal, state, and local governments
National Register of Historic Places
CFDA catalogue number 15.914
\$230,000–\$1,400,000

National Park Service
Chief, Recreation Programs
202/565-1200

For: acquisition and development of public facilities, such as picnic areas, campgrounds, bike trails; assist states in planning
CFDA catalogue number 15.916
\$150–\$68,000

Federal Highways Administration, Department of Transportation (FHWA)
www.fhwa.dot.gov/environment/rectrail.htm

Recreation Trails Program

For: maintenance and restoration of existing trails; development and rehabilitation of trailhead facilities and trail linkages

Eligible: private organizations, county, state, or federal agencies
CFDA catalogue number 20.219
\$400,000–\$700,000

Federal Transit Authority
www.fta.dot.gov/research

For: assessing and improving local transportation conditions, such as bus routes

Eligible: state and local governments, private organizations, universities

CFDA catalogue number 20.514
Up to \$50,000,000

National Highway Safety Administration

For: pedestrian and bicycle safety

Eligible: states

CFDA catalogue number 20.600
\$340,000–\$13,000,000

Environmental Protection Agency Office of Water

www.epa.gov/owow/wetlands

For: protection, management, and restoration of wetlands

Eligible: states, government agencies, nonprofit organizations

CFDA catalogue number 66.461
\$1,500–\$490,000

AmeriCorps, Corporation for National and Community Service
(202) 606-5000, ext. 474

For: creation of environmental and public service programs for any private, state, or federal property that qualifies

Eligible: states, federal agencies, nonprofit organizations

CFDA catalogue number 94.005

Project grants. Matching funds for living allowance for the volunteers and operating expenses.

National Park Service, Technical Preservation Services

www.cr.nps.gov/nr/

For: preservation of historic properties on any state or federal property that qualifies (State Historic Preservation Office [SHPO] makes official determinations of what is an historic property)

Up to \$380,000 plus matching funds

National Park Service, National Register of Historic Places

www.cr.nps.gov/nr/

For: kiosk and interpretive funds for historic places

National Park Service Rivers, Trails, and Conservation

www.nps.gov/rtca

For: development of trails and greenways

Eligible: nonprofit, federal, state, and local agencies and communities

Save America's Treasures and Preserve America grant programs (through NPS)

<http://www.nps.gov/history/hps/hpg/PreserveAmerica/index.htm>

Endangered Species Financial Assistance Partnerships

<http://endangered.fws.gov/grants/section6/grants.pdf>

Federal Aid in Wildlife Restoration Program

<http://federalaid.fws.gov/wr/fawr.html>

Federal Lands Highway Programs

<http://www.fhwa.dot.gov/flh/flhprog.htm>

Highway Safety and Operations Research Program

<http://www.tfhr.gov/site/active.htm>

National Recreational Trails Grant Program

<http://www.fhwa.dot.gov/environment/rectrails/links.htm>

Stewardship Incentive Program

<http://www.nrcs.usda.gov/programs/sip/>

Wildlife Habitat Incentive Program

<http://www.fs.fed.us/spf/coop/programs/loa/whip.shtml>

Appendix A: Planning participants

Grand County Scenic Byway Committee:

Jerry McNeeley, Grand County Council
Marian DeLay, Moab Area Travel Council
Tim Smith, State Parks and Recreation
Lee Sjoblom, State Parks and Recreation
Russ von Koch, Bureau of Land Management
Katie Stevens, Bureau of Land Management
Steve Ogden, Utah Department of Transportation
Wayne Jager, Utah Department of Transportation
Dave Wood, National Park Service
Laura Joss, National Park Service
Paul Henderson, National Park Service
Bryan Torgerson, School and Institutional Trust Lands Administration
Alison McCluskey, Forestry, Fire, and State Lands
Bruce Keeler, Town of Castle Valley
Cindy Hardgrave, Canyonlands Natural History Association
Chuck Schildt, Moab Information Center
Sue Bellagamba, The Nature Conservancy
Rick York, Intrepid Potash
Robbie Levin, corridor land and business owner
Randolph Jorgen, CMP author and consultant

Key persons consultations:

Gael Hill, Utah State Scenic Byways Coordinator
Carlos Machado, Federal Highway Administration
Jennifer Jones, BLM
Allysia Angus, BLM
Jeff Troutman, NPS
John Lewis, NPS
Nancy Holman, NPS
Daniel Dranginis, State Parks
Peter Jager, UDOT
Patrick McGann, UDOT
Rick Torgerson, UDOT
Justin Sceili, UDOT
Dale Stapely, UDOT
Shawn Warnke, Grand County Administrator
Marcus LaFrance, Grand County Planning Commission
Gene Ciarus, Grand County Council
Jim Lewis, Grand County Council
Bob Greenberg, Grand County Council
Audrey Graham, Grand County Council
Dorothy Gough, Grand County Assessor
Dave Vaughn, Assistant Grand County Road Supervisor
Tim Higgs, Grand County Weed Control Supervisor
Merlene Mosher, Grand County Recorder
Jim Nyland, Grand County Sherriff
Curt Brewer, Grand County Sherriff's Office
Rex Tanner, Grand County Search and Rescue
Leigh Von der Esch, Utah Office of Tourism
Stacey Clark, Utah Office of Tourism
Chad Davis, Utah Office of Tourism

Kim Schappert, Moab Trails Alliance; Grand County Trail Mix Committee
Damian Bollerman, Mayor, Town of Castle Valley
Jim Lindheim, Town Council, Town of Castle Valley
Ken Davey, Moab City Economic Development Specialist
Todd Peterson, Station Chief, Utah Highway Patrol
Floyd Stoughton, Castle Valley Fire District
Dave Early, climbers' representative
Kitty Calhoun, climbers' representative
Sam Lightner, Moab Area Climbers Association
Jason Keith, Access Fund
Dale Pierson, historian
Jeanine, Pagan Mountaineering
Trisha Solberg, USGS
Sue Phillips, USGS
Jim Adamson, SEUDHD Sanitarian
Eleanor Bliss, Southeast Utah Tamarisk Partnership
Bill Hedden, Grand Canyon Trust
Clark Tate, Tamarisk Coalition
Bonnie Hundrieser, America's Byways Resource Center
Dennis Adams, America's Byways Resource Center
John Holland, Scenic Byway 12 Coordinator
Sally Pearce, Colorado State Scenic Byways Coordinator
Skip Ambrose, consulting scientist
Joe Cresto, wildlife biologist
Don Metzler, Department of Energy
Ed Baker, Energy Solutions
Nick Eason, Lions Club
Gary Cornell, ret. Forestry, Fire, and State Lands
Karla Vanderzanden, Canyonlands Field Institute
Don Oblak, Canyon Voyages
Kirsten Petersen, Rim Tours
Preston Paxman, Canyonlands by Night
Mark Wright, Grand County Planning Department
Kristine Kilroy, Grand County Planning Department
Mary Hofhine, Grand County Planning Department

Corridor landowners:

Dale Harris
Jeff Wade
Don Policaro
Harold Lance
Diana Lance
Colin Fryer
Robbie Levin
Petenia Pfnister
Margaret Southards
Reed Slingerland
Richard Johnston
Rosemarie Glas
John Gould
Jennifer Speers
Anne Wilson

Other residents and interested public:

Greg Halliday

Ron Mengel
Jennifer Mengel
Lisa Carter
Nancy Orr
Ron Drake, *Times-Independent*
Ron Georg, *Times-Independent*
Howard Trenholme, KZMU Radio
Bette Stanton
Mindy Cassingham
Rob Cassingham
Laura Cameron
Lee Shenton
Michael Ashcraft
John Gould
Sue deVall
Rick Berry
Pamela Baker
Quentin Baker
Dan Kent
Sally Rains
Sam Lightner
Alice Drogen
Doug Bohn
Trisha Hedin
Theresa Nash
Jeffrey Parkin
Sue Dalton
Tim Harkwright
Michael Smith

Appendix B: Public Comments

Public comments for CMP (not including comments from key persons, i.e., managers, specialists, scientists etc.)

- There is something that could (and should) be added to all three routes that would make them accessible to a wider range of visitors...safe bicycle lanes.
- . . . not!safe or relaxing to ride any of these routes.! It wouldn't take a great deal of asphalt to make the routes (especially the River roads) less suicidal.! If fact, the addition of wide, "bikeable" shoulders would turn these scenic routes into world-class attractions.
- Highway safety/bike safety are his priorities.
- More signage to warn motorists of bikes.
- The new 128 bikeway looks bad: inappropriate; too wide; an aesthetic disaster.
- Speeding enforcement
- Shuttle bus to CV and points in between
- Don't straighten and widen 128, except to make bike lanes
- Bike paths should be dirt single tracks
- Priorities: 128: Public transportation; law enforcement for speed; weed control
- 128 has serious problems.
- Need more bike accommodations.
- Need "Use pullouts" signs
- Need shoulders
- Need places to pull off

- !Some campgrounds with no campfires. It's like a form of handicap access for people with respiratory concerns.
- Attract more people who walk lightly. Don't promote to the motorheads.
- The reconstruction at Negro Bill was poorly designed. Can't see to the sides because of vertical curve.
- One person's priorities:
Highway safety
Law enforcement
Maintain what is there already
- Need a lot more law enforcement
- One person's priorities:
128:
Highway safety
Interpretation/education
Pullouts
Resource protection
- 279:
Highway safety
Interpretation/education
Pullouts
Resource protection
- 313:
Interpretation/education
Pullouts
Resource protection
Highway safety
- No more marketing
- Two people's priorities:
279:
Bike lane
Highway safety
- 313:
Highway safety
- 128:
Bike lane
Highway safety
- Route 128,!I would like to see it stay as close to what it is now as possible. In 25 years I would hope for the same thing.
- Bicycles should have their own path as has been constructed and they have to use it.
- It would be great to have a bus route running from Castle Valley.
- There could be signage that says if a vehicle is holding up more than three vehicles it must pull out. More signage that it is a narrow,curvy road.
- •!A high priority: encourage nonmotorized transportation
- Need outhouse at 191 & 313
- Semi trucks are going too fast on Potash. If kids run out . . .
- Literature should emphasize the preciousness of rock art
- Not interested in promoting 128.
- 128 is maxed out already.
- Road can't be widened in many places.
- Growth will increase anyway without promotion.
- The road is maxed out in the summer.
- You can add so many signs that things aren't pristine.
- Concerned about more scenic byway designations causing more traffic.

- The tamarisk cutting (e.g., near Red Cliffs) has left the side of the road bare and people can now slide into the river. Need vegetation there as a safety net.
- Tamarisk cutting in campgrounds and Sandy Beach leaves no place for people to get shade.
- Need guard rails where tamarisk was, but many places can't anchor one.
- Bike paths! either dedicated or sufficient shoulder, on 128 to provide safe passage.
- Availability of potable water along 128
- Turnouts on 128 are inadequate.
- 128 needs to be upgraded if it is to handle more tourists
- Coordinate with tamarisk removal
- Want corridor to maintain current character.
- For highway upgrades, use context sensitive design
- People come here for the scenic views
- Commercial development would make them stay away
- Essence of the byway character we should strive to create or preserve is: maintain its wilderness appearance
- In 25 years, would like to see corridor safe for vehicles, bicycles, hikers etc.
- Encourage non-motorized tourism!
- Create interpretive center at Lions Park
- Leave remainder of 128 undeveloped
- Further development will drive them away
- Hold on to the natural wilderness character of the land.
- In 25 years, would like to see: Wild and natural. A balance with the increased tourism.
- Bike trail on 128: expand it where you can beyond Porcupine trailhead. Maybe add benches
- Photo pullouts are critical.
- The parking area above Sandy Beach would be a great place for picnicking.
- Build bike lanes from CV turn to Hittle Bottom
- Facilitate commerce by creating and preserving a quality visitor experience.
- Are close to limits on outfitters.
- limit the size of launches.
- Paint lines on the takeout ramp at Takeout Beach.
- Some companies launch at Onion Creek with large groups. Don't need to develop ramp more, just widen it a bit.
- Don't need to pave upper Hittle ramp. Maybe just widen it a bit.
- White Sneak: don't widen it (would encourage unsafe U-turns). Can get 6-8 cars there.
- Consider construction of an additional shade shelter at Rocky Rapid.
- Parking at Takeout Beach is a huge issue. People even pass on the right in the parking area.
- Buy the Harley Bates [Margaret Southards] property. It's a huge question for future development. Would hate to see any more resorts in the River corridor.
- Wider bike lanes and shoulders along highway would be a huge improvement.
- Public transportation: we get asked about it.
- Would be nice to see bike racks on busses going to the CV turnoff, but not the priority.
- National Recreation Area: We don't need that. Don't support it.
- Would support Wild and Scenic River designation
- 279: Need "ride single file" signs. Bike lanes would be good.
- Would like to see a resource pass: pay for use of the lands.
- Private launch fee?
- Need better enforcement. See trailers full of OHVs; it's huge. Need controls.
- Slow the traffic on 279 to suit the conditions around climbing wall. Slow the trucks.
- Make signs more visible.
- Enforce the speed limits on 279
- Mark the parking places better
- Reevaluate the speed limit.
- Rumble strips.

- Talk with climbing guides to enlist cooperation
- Need bike lanes
- Potash area is popular with climbers from around the world. Excellent place for beginners.
- Create a sign for designated parking
- Wall street definitely has pedestrians
- County: sign for lower speed. Now says 45 one direction, 55 other.
- Better designate the designated parking sites at Wall Street.
- Wants to remove the bolts around the petroglyphs.
- Someone recommends climb at least 50 feet from petros
- Most heavily climbed area in Utah in April and October. People come to the area from worldwide and many go to Wall Street as part of that experience
- If you want more people on the roads, #1 priority is highway safety, at least on 128 & 279.
- Need bike lanes. Need pullouts. May not be fixable. #1 priority is highway safety
- #2 priority: interpretation & facilities maintenance
- Fast, hard-core bikers/racers vs. slowpokers. Don't like to mix. The racers will likely stay on the highway anyway, not use bike lanes. Mountain bikers will use bike lanes
- Diversify tourism.
- We are replacing one group of tourists with a less desirable one. Beware of what you get.
- Steamboat, CO, finally got fed up and cancelled all their motorhead events; people told them it would be tourist town suicide, but now they are thriving as a recreation mecca.
- Big tamarisk kill at Goose Island, Sandy Beach etc. was not what was recommended by SEUTP. Too sudden and drastic. They had a bunch of money and had to spend it, but could have spread it over a larger area. Some of it was for firebreaks.
- 128: highway safety; wider roads; bike routes; more biker signs; more law enforcement; public transportation
- The rural winding character of the roads should be preserved. Safety can be improved through the creation of designated pullouts that are appropriately signed. At either end of 128, for example, motorists could be told there are pullouts and encouraged to use them, or told to use them if there are X number of cars behind them.
- Opposed to a lot of widening and straightening of the road, because this would make it like any other road and would infringe upon the scenic qualities.
- I think there are a few places that could use guardrails and that would help increase the safety, especially in the winter with icy roads.
- I feel strongly that pullouts for passing or interpretive signing should have good lines of sight.
- If NSB status increases traffic, need to upgrade the safety of 128. Hard to fix the safety.
- Wants to preserve private property rights.
- Wants to prevent federal interference.
- Separate the three highways in the way you treat them; different circumstances
- Safety is #1 concern for 128. If you increase traffic, need for safety improvements will be even higher.
- #2: to NOT market. Road can't handle the traffic.
- Tamarisk removal/reveg
- Interpretation signs at each end of highway to know what you're seeing
- a few areas need to be looked at in regard to transportation safety. These should require that the utmost care be taken to keep such improvements in harmony with that of the byway character.
- A major commercial development and associated signage is probably not desirable since the byway does not connect to any significant urban center. However, there is a need along the byway where travelers could obtain a few supplies
- facilities are stretched to the limit during peak use periods.
- There is a real need for improved signage including interpretive and informational signage. It would be a great asset to the byway to adopt a uniform design of such signage and that would have a design theme guiding the appearance.
- livestock grazing is a historic use along the byway and should continue.

- All too often the trend to mass market a scenic byway once it has been recognized and designated. The call is given to the public, “y’all come!” in websites, audio and visual media mailings. This often has had negative consequences as the highway and associated facilities are not capable of handling a large influx of people. It can become crowded all too soon. In my estimation this is NOT what we want.

There are examples of Scenic Byways that have chosen purposely to “de-market” the byway, as the potential for overcrowding is real. Two examples are the Trail Ridge Road in Rocky Mountain National Park Byway and the San Juan Skyway. In essence, the thought is that the “word-of-mouth” has its own marketing and promotion results and fits the desires of the byway objectives and goals.

- desirable to improve the type and amount of interpretation along the byway. Designed interpretive exhibits on the wayside below Dewey Bridge could be improved and informational kiosks could be provided at both ends of the byway. The existing information kiosk at Colorado Riverway Recreation Area could be improved both in its location and content. There is a need to locate “information or interpretation ahead” signs for both directions so travelers could anticipate them and make decision to stop or continue.

It would be wise to develop a comprehensive interpretive plan for the byway and implement it over time as funding and opportunities evolve. As this is one major component that directly enhances the travelers experience.

- Given the limited capacity of the highway and also the limited facilities along the byway it would be desirable to adopt a very low key marketing strategy. I would submit that the “demarket” strategy would meet what is wanted on the byway.
- Colorado River is largest riparian zone. Take care with pace of tamarisk removal. Tamarisk is still being used. Make sure we’re able to revegetate. Don’t need to assault. Approach it as an experiment. Don’t do it all at once; monitor. Use river grass, salt grass.
- Jet skis; motorboats.
- National Recreation Area would be more money to manage increased impacts caused by designation; would be a spiral, and the resource would suffer.
- As an outfitter, would like to see no development, e.g., stores, gas stations, resorts, because they use the byways to transport clients to the wilderness; the byway experience is part of the backcountry experience, as an undeveloped buffer. That’s what they are coming for and paying for.
- Retain the character: little or no commercial development.
- Set very strict standards, e.g., for lights, visual impacts
- Along the river itself (for boaters), shield development.
- Don’t develop the place as a tourist destination so much that tourists don’t want to come. To develop a lot would seriously impact EXISTING businesses. They would be supplanted with a different character of business and visitors.
- Moab community is waffling on which way it will go—developed, motorized, or current character of primitive and adventure based.
- No more tourist facilities in the corridors.
- Their tours access CNP through 313 and Potash. ON 128, Kokopelli, Onion Creek, Porcupine Rim
- 279 doesn’t have enough traffic to require bike lanes. But need better signs on 279 to warn of bikes.
- Don’t require bikes to use bikeways; fast riders will want to still use highway
- Could market the area to road cyclists. Skinny Tire festival uses all three byways.
- Don’t promote 128 for Tour Busses!
- Support: no hindrances to private property owners
- Oppose federalization of anything. No more!
- Don’t make the county rely on only one industry (tourism).
- Road to Fisher Towers is poorly maintained.
- Film industry did more to market the county than anything (people see the films worldwide and

want to know where they were made)

- Make the lands more filming friendly
- Don't seek federal money for public transportation; they will just control it.
- Balance economy and environment
- Minimal property tax is generated in Grand County because such small percentage is private land. Small private land tax base is being made to finance infrastructure for millions of tourists.
- Once a byway is made a "federal scenic byway," there WILL BE further federal regulations. This is a time proven fact. How will this affect private landowners in corridor?
- Support the property owner's freedom to develop their property as they see fit, in so long as it is done in a manner that will enhance the economy, community environment, and safety of the people.
- Our tourist business is doing just fine with the state byway designation,
- Our economy needs greater diversification
- Concerned we are relying too much on tourism; could bust with another oil crisis
- Film industry is one of the cleanest and most profitable industries a community could pursue.
- We're selling our souls. No federal SB designation!
- Protect private property rights
- People are skeptical of more federal controls about the road.
- No federal designation.
- We can handle our needs with just the state designation.
- 313 is not maxed out.
- Don't put in shielding requirements. It's your property. Don't want to see 50' wall.
- Need more Sheriff Deputies to enforce existing laws.
- Don't we already have enough tourists without making more scenic byways and bringing more traffic?
- If you make it a federal scenic byway, the feds will use that as an excuse to interfere locally sometime down the line.
- BLM camps wound up increasing traffic. Wound up in campground books so more people came.
- But we don't want the county to dictate to us.
- Things are too focused on tourism.
- Too much recreational impact.
- 313 is a destination. We're dealing with three separate roads, should treat them separately.
- Bike path: they could have gone farther if they had made it narrower. Too wide.
- It's all about tourists. The county doesn't care about the people who live here.
- No National SB designation unless certain things are addressed.
- Concerns about increased traffic, and the fact that tourism is already naturally going to increase even without extra promotion.
- Designation would contribute to more traffic.
- Would make safety hazards worse.
- Feels like the county has already made up its mind and has decided to do this designation.
- Need to balance increased traffic and increased damage against any new protections national designation might bring.
- Don't want to see us have to make a lot of improvements to the highway to accommodate more traffic; no net gain in safety, while resources get worse.
- When you get the Feds involved, you get a lot more signage. Signs are objectionable; don't want to see them. e.g., stop here to take a picture. Visually unattractive.
- re tourism and recreation promotion: Don't promote.
- re what should the byway corridors look like in 25 years? Just the same; don't change a thing.
- re how can we protect byway resources: reduce visitorship
- re visitor facilities and interpretive developments: None.
- 128 is very dangerous, especially with its mixture of bikes.
- Against any form of development.

- The new bikeway looks like hell. Way too wide.
- Pedestrian bridge to nowhere. If this is a county match, it's preposterous to invest so much county money while schools are deteriorating. How did the decision get made?
- Any development increases traffic.
- Especially 128 is dangerous: rock falls, long cliff slab sections. Can't fix it.
- Increasingly dangerous with an increase in tourist traffic. They want to go 35, others want to go 65; the two don't mix.
- Development increases safety hazard.
- Don't level blind hills; consider cost-benefit ratios.
- The Negro Bill "fix" didn't fix much: it's just as blind a turn in; the turn is still 90 degrees.
- 313: Leave it alone.
- 279: Safety; no interpretation; no enforcement
- DON'T alter the character!
- Ranches and sheep: open range issues on the highway. Don't get so much traffic on 128.
- No more federal involvement. No Federal SB designation—it might be invoked to create further federal controls.
- Few places to put a road.
- 128 is too fast a road. Avoid abrupt transitions in speed, eg fast good road, narrow slow parts.
- Concerned about the way the county runs; gets and considers no public input.
- e.g., Marian says "We ARE going to apply for Federal SB designation without consulting public."
- I like the county and community the way they are; don't make it too crowded
- Should allow NO big trucks on 128
- No more businesses along 128
- Build bike trails, then require bikes to use them
- Allow NO big tour busses
- Don't encourage more tourists
- I hate to see all the advertising to attract tourists. Don't do it, or do less.
- Should spread out the tamarisk eradication, don't do it all at once.
- Bob Jones has offered for years to give free public transportation in Moab, but city wouldn't give him places to pick up passengers on Main street
- More tourist appeal automatically adds more traffic concerns
- Ranching tradition is most important
- Protect the ranching heritage.
- Improving access degrades the resource
- Keep it as natural as it is practical
- Protect the rock art
- Improve safety of Highway 128: pullouts, wider where heavily used by bikes, improve sightlines
- Climbers are willing to work with scenic byway committee to make Potash safe
- Maintain recreational value
- Could be better and more information out there
- Our concern is that present property rights may be infringed upon or changed as a result of any recommendations that are presented in your CMP
- No more recreational development
- I would not like any additional traffic on highway 128. I don't think the road and associated resources (or lack of) can handle additional traffic. I have seen too many accidents and mishaps on this 40 mile stretch of road.
- For the additional glamour and tourist dollar of being an official federal scenic byway I do not think it is worth it. To manage the additional traffic, the supporting turn offs, gas stations (I supply gas to stranded motorist (mostly tourists) on the average of once a month, because of the lack of gas stations between Moab, Thompson, or G.J.), etc. the very character of the area we trying to preserve would turn into another Provo canyon four lane interstate.
- I am against turning #128 into a sanctioned scenic byway.

- Regarding #279 and #313, since these two roads/areas are more of a destination route I would not be opposed looking into the idea of those becoming scenic byways. But based on conversations at the meeting I got the impression it is an "all or none" for the federal government.
- We have to share 128. It doesn't have the facilities.
- Too much highway development defeats the purpose.
- Will change the character if we improve it too much.
- Keep 128 quaint. Don't streamline and commercialize.
- Like the idea of limiting lights and shielding development
- Scenic byways should remain slow highways—45 mph. 313 might have higher speeds because of better road and more space.
- Potash speeding may be solved when an accident occurs and insurance companies notice the situation
- Interpretation on 313 is already adequate.
- 279 could use a kiosk at junction with 191; otherwise is adequate
- 128 interpretation: kiosks at Lions Park, junction with old 6/50, and Castle Valley junction
- Need scenic byway signs to identify the highways
- Interpretation: don't get carried away and try to tell the whole story. Keep it short and brief, to pique interest.
- County zoning should be directed at the aims of the byway
- 128 safety problems: Salt Wash, and narrows just before Dewey. Widen later and install guard rail.
- Road to Fisher Towers needs paving
- Need ad hoc committee working with county council to look after the roads.
- Maintain ranch/cowboy and uranium mining culture, through interpretation, and through zoning.
- Don't overbuild or oversign: this detracts from experience.
- Commercialism at a minimum
- We want to protect wildlife as corridor changes. Last year an antelope was run over.
- People who are camping, recreating in bicycles travel fast. They are in a hurry. Safety is a concern.
- Bicycles need to stay on bike paths, not in traffic lanes.
- Need turn lanes to campgrounds.
- Things will get worse: bikers, people working to and from lodges
- Don't promote 128 as an alternate route to 191.
- Byway character strive to create or preserve?! A safe travel corridor to view the scenic and other qualities along the route. Adequate recreational facilities/opportunities, informational needs and interpretive facilities for the corridor.! Try to maintain a sustainable, predominately naturally vegetated corridor along the byway.
- Byway corridors in 25 years?! I think they should have vegetation that is predominately natural and sustainable.!
- Accommodate development while preserving intrinsic qualities! I believe a combination of methods may be needed including zoning, easements, economic incentives and enforcement.
- I would say design and safety are major concerns for getting people to come more often.
- I would say that effective signing could help get people to come more often.
- Educate visitors that a variety of experiences are desired by people all of which are valid uses! Develop facilities to provide a variety of experiences, so people may choose a facility which best meets their desires.
- Any corridor management for SR 128 has to envision significant investments to improve the safety of the highway for the intense tourist and local traffic it is already bearing. Such a plan should also try to restrict further major tourist developments along the route (e.g. new resort hotels) since the road's value is its natural scenic beauty and, even with improvements, it can only bear so much traffic before it loses its scenic values.
- 1. SR 128 (The River Road) is fundamentally different from Potash Road and Dead Horse

Point Road and will need a corridor management plan that is completely different

- a. It is a through highway – it is the road between two towns and a road regularly used between Grand Junction and Moab
 - i. Some 350 people live in Castle Valley; many commute to work; all have to drive to Moab for food, fuel, etc.
 - ii. All services provided to the residents of CV (construction, fuel, mail and package deliveries, etc.) must go up and down the road
 - b. It is used for school bus transport
 2. The River Road is regularly used as a road for tourist activity above and beyond its scenic value
 - a. Both commercial and private daily **raft excursions** shuttle up and down often with big loads, buses, etc; hitchhikers as well; there are several boat ramps
 - b. The lower part of the road is critical for **biking** (Porcupine Rim), involving shuttles, parking and, of course, bikers on the road
 - c. **Jeep** safaris travel the road to get to areas of interest
 - d. There are innumerable **camp sites** both on the road (Big Bend, Hite, Dewey) and off the road, creating trailer traffic
 - e. Several **OHV** routes are accessible off the road
 - f. There are two very popular **trailheads** (Negro Bill Canyon, Fisher Towers) as well as numerous other hiking opportunities
 - g. The two largest **resort hotels** in SE Utah are on the road. This creates traffic not only for hotel visitors, but also for employees and for visits to the resorts' restaurants, horse-riding, winery, spa, etc. Also numerous events are held at these locales (weddings, concerts, etc) that result in concentrated traffic
 - h. **Canyonlands by Night** uses the road with blinding lights during the spring, summer and fall seasons
 - i. It provides access to the **Loop Road**
 - j. It provides access to the **Dewey Bridge** historical site
 - k. It provides access to the **Kokopelli Trail**
 - l. It is used by the **Moab Half Marathon** and **The Other Half** races
 3. As a popular scenic route, The River Road is also attracting a large number of campers, trailers, cars and jeeps for “just looking”
 - a. Tourists pull off in both small and large turn-offs – often quite unexpectedly
 - b. Tourists wander into the road to “get the perfect shot”
- Occasionally, tourists just stop their cars in the middle of the road

Current Road Safety Issues

1. Even though the road is quite windy and occasionally very close to cliffs, there are hardly any guardrails
2. There is no organized system of turn-offs and no signage to encourage the use of turnoffs (and discourage random stopping for views)
3. There is no cell-service or emergency phone system
4. In many places there is no shoulder – or no mowing to provide a shoulder
5. There is no system of alerting drivers to upcoming passing opportunities
6. There is inadequate parking/ stopping opportunities for large vehicles
7. There are regular rock slides in certain portions of the road
8. There are numerous blind curves and curves that drivers regularly “cut”
9. The canyon area just south of Dewey Bridge is extremely narrow and subject to icing in the winter
10. The Cisco Desert part of the road often is impacted by grazing animals or antelope herds

A Vision

1. The road is widened in many parts and characterized by well-maintained shoulders wherever possible; there are many more guardrails
2. There are well marked and appropriately graded turn-offs for tourist parking and boat

- ramp parking, and many of the casual turn-offs are gone
3. No passing zones and passing zones are well-marked and signage gives info about distances to passing zones
 4. There are no interpretive facilities except in Lion's Park and at Dewey Bridge
 - a. Possibly, a new attraction could be the two (?) petroglyph sites along the road but only with adequate pull off parking
 5. There is bike lane from Negro Bill Canyon to Rt. 191
 6. There is a hiking/ running path of 5 – 6 miles somewhere along the river with appropriate parking at both ends
 7. There is cell phone service or emergency phones
 8. There is a development plan that forbids additional resorts or additional camp sites along the road corridor

Appendix C: Recommended highway improvements by milepost, SR-128

A critically important strategy for SR-128 will be improving and maintaining existing pullouts, which are generally not listed below. As agency operating funds or grant funds become available for improvements, pullouts can be studied and prioritized for receiving road base or paving and new pullouts can be constructed, with first priority going to rim-side pullouts between Moab and the La Sal Mountain Loop Road. These can serve as traffic “pressure relief valves” for this most crowded and winding stretch of the highway. At a minimum, pullouts should be graded and maintained to prevent abrupt drop-offs at the edge of the pavement. See Section 11 for more discussion of SR-128.

- 1.1: Construct new pullout on rim side.
- 1.5: (Goose Island Campground entrance) Widen and round the entrance for those turning right to require less speed reduction.
- 2.4: Consider installation of rock net.
- 3.1: (Negro Bill Canyon parking lot entrance) Broaden and pave entrance on the downstream side to the end of guardrail to allow faster and easier entrance for those turning right. Relocate sign.
- 3.8: Place sign “Passing zone ahead _____ yards.”
- 4.0: This small curve and MP 4 sign obstruct sightlines at a critical point, reducing safety and utility of what is otherwise the best passing opportunity on SR-128 between Moab and Castle Valley. Move sign up against the cliff; remove brush. Consider scaling back the rock behind MP 4 sign.
- 5.0: (Jackass Canyon) Construct new pullout on rim side.
- 6.7 or 6.8: (Before or after box culvert by Hal Canyon Campground exit) Rim side: move reflector posts outward; widen shoulder to create paved pullout.
- 7.6: (Rim-side entrance to camp opposite Big Bend) Pave the turnoff to allow easier exits for those turning right.
- 7.6: (Big Bend entrance) Broaden entrance at turn-in to require less speed reduction for those turning right.
- 7.8: (Big Bend bouldering area) Pave pullout shoulder to enable use as a slow traffic pullout and to allow quicker and safer transitions for those stopping here.
- 7.9: Place sign “Passing zone ahead _____ yards.”
- 8.5: Construct new pullout on rim side.
- 8.7: Place sign “Passing zone ahead _____ yards.”
- 8.7: Extend and pave pullout on rim side.
- 8.9: This guardrail, while helpful on the curve, extends further downstream than is necessary, and obstructs river views and parking. Future guardrail installations should be confined to highway sections most in need.
- 9.0: Extend guard rail upstream along this icy stretch of road perched above the river.
- 9.4: Construct new pullout on rim side.

10.0: Construct new pullout on rim side.

10.3: Trim or remove sight-obstructing small oaks on curve upstream from restrooms at Takeout Beach.

10.5: (At 30 mph sign) Construct new pullout on rim side.

10.7: River side: Pave one small pullout and one large pullout above Salt Creek wash eddy.

10.8: Pave large pullout at summit above Salt Creek.

10.8: Construct new pullout on rim side.

10.9: (Salt Wash Hill) See Section 11.4.10.

10.9-11.0: (Salt Wash Hill curve) Install guardrail.

10.9: Create pullout on rim side at entrance to the old gravel pit.

11.1: Pave pullout on rim side.

11.3: Reduce vertical curve at this blind hill: excavate and remove a portion of hill to create sightline and prevent head-on collisions.

11.8: Improve the more upstream of two pullouts on river side.

11.9: Reduce vertical curve at this blind hill: excavate and remove a portion of hill to create sightline and prevent head-on collisions.

12.0: Construct new pullout on rim side.

12.5: Construct a long pullout on rim side in previously disturbed area.

13.2: Close pullout on rim side (poor sightlines for reentering traffic).

13.7: Consider redoing lane markings to allow short passing zone.

13.8: Pave pullout on rim side to allow stopping for river views and to facilitate passing.

13.9: (On curve downstream from Castle Creek crossing) Widen shoulder and pave to enable use as slow traffic pullout. Set reflector posts back.

14.6–14.7: Inspect and consider scaling back overhanging cliffs. Layers appear to have shifted, possibly presenting rock fall hazard. Appearance of overhanging causes operators of large vehicles to cross lane markings.

15.6: La Sal Mountain Loop Road turn: Improve paving for those turning right to require less speed reduction.

16.5: (Ida Gulch) Pave pullout on rim side.

16.6: (Rocky Rapid turn) Enlarge turn-in radius for those turning right to require less speed reduction.

22.8: Reduce vertical curve: take down hill somewhat to create sightline at this hazardous 35 mph curve.

28.0: Construct pullout on rim side.

28.2: Improve pullout on river side.

28.45–28.6: (“The Narrows”) Install guardrail.

Appendix D: Potential interpretive topics

- Transportation development: King’s Toll Road; SR-128; ferries; Dewey Bridge; river barges; US-6/50; Cisco as railroad town
- Uranium industry: Atlas mill site; region’s significance in national defense and atomic energy industry; uranium occurrence and geology; White Rim Trail; Shafer Trail; network of jeep trails
- Potash mining: uses; mining methods; evaporation ponds
- Energy production, oil and gas drilling: geology of oil and gas occurrence; Frank Shafer No. 1 well; Cisco oilfields; current wells on Big Flat
- Prehistoric cultures: rock art; cave shelters; area cultures
- Historic Native Americans: Ute and Navajo tribes
- Dinosaur legacy

- Geology: landforms; rock forms; erosional processes; time; rock layers
- Wilderness: history; significance; purposes
- Whitewater rafting: Moab Daily; Cataract Canyon launch site at Potash
- Wildlife and watchable wildlife: bighorn sheep; herons; river otters; beaver; endangered species habitat; prairie dogs
- River ecology
- Riparian ecology
- Plant adaptations: juniper pruning; phreatophytes; xerophytes; soil influences; pinyon pine seed cycles; seed dispersal
- Invasive species: ecological damage; river channel effects; revegetation; control efforts; zebra mussels; quagga mussels; cheatgrass; tamarisk and tamarisk leaf beetle; Russian olive; Russian knapweed; alert public to other potential newcomers
- Rock climbing: methods and techniques; clean climbing; history
- Air quality: regional air quality influences; visibility studies; pollution sources; each generation's lowered expectations from incremental deterioration; ecosystem effects
- Cisco Desert and the Poison Strip: selenium soils; geology of Mancos shale badlands; sheepherding; prairie dog and eagle habitat; uranium mining; oil and gas drilling
- Filming history: cultural significance; important sites; cultural evolution in landscape tastes; icons of the American West
- Ranching: open range grazing; the genuine West; ecological legacy
- Old Spanish Trail: significance; routes and river crossings
- Colorado Plateau physiographic province
- Microenvironments: overhangs; seeps; shaded alcoves; pothole ecology
- History of mountain biking; environmental effects
- Leave no trace/tread lightly ethic
- Don't Die Out There preparedness
- Dark night sky: light pollution; air pollution; the Milky Way; star watching
- Topographical feature identification
- Cryptogamic soil: importance to plant ecology and erosion control; symbiosis; nitrogen fixation; weed control

Appendix E: Proposed roadside interpretive developments

Following is a preliminary concept plan for proposed roadside interpretive and informational facilities. Facilities will require an integrated plan for text, structure design, and signage. Installation must be coordinated with UDOT, right-of-way owners, and proposals to widen shoulders and create slow traffic pullouts.

In addition to the sites listed below, information and limited interpretation signage will be provided at campgrounds and other recreational sites.

SR-128:

Lions Park Transit Hub (south side of SR-128 at junction with US-191):

- Information panels to be installed at transit hub shelter
- Central orientation to all three scenic byways
- Byway entry sign, monument type

Lions Park (north side of SR-128 at junction with US-191):

- Byway interpretive information panels
- Possible duplication of central orientation to all three byways

Goose Island Overlook pullout (existing):

- Advance signage on highway
- Byway orientation information for SR-128

- Interpretive panels
- Bicycle path below may have its own interpretive signage

Big Bend:

- Construct pullouts on both sides of highway
- Construct orientation and interpretive information kiosks

Salt Wash Overlook (Deadman's Curve):

- *Alternative 1:* Cut the highway straight through the old gravel pit to bypass hazardous corner; use old highway as a one-way scenic and interpretive pullout overlooking the river, with advance signage.
- *Alternative 2:* Cut back the existing highway slightly as it rounds the curve to improve sightlines and allow installation of guard rail. Consider feasibility of installing view/interpretive area at old gravel pit.

Sandy Beach:

- Dedicate a corner of existing pullout for interpretive signage and photo pullout, with advance signage

Lot upstream from Sandy Beach (created during culvert construction):

- Possible trail to river, with interpretive panels

Castle Valley turnoff:

- Replace existing Historical Society sign with panel consistent with byways interpretive plan
- Photo pullout with advance signage, if right-of-way permits
- Byway orientation kiosk if right-of-way permits

East of Professor Valley turnoff (mile 18.6):

- Construct photo pullout, with advance signage

Hilltop east of Onion Creek (mile 21.4):

- Construct photo pullouts both sides of highway, with advance signage

Hittle Bottom/Amphitheater Trail trailhead (existing):

- Photo pullout, with advance signage
- Byway orientation kiosk

Fisher Towers view site north of Hittle Bottom (existing):

- Photo pullout on river side
- Advance signage for approach from north only
- Interpretive panels identifying landmarks

Dewey Bridge Recreation Site (existing):

- Byway orientation kiosk

Dewey Bridge:

- Photo pullout signage for existing turn to Dewey Bridge site
- Existing Historical Society trail and signage
- Revise existing Dewey Bridge signage

Near highpoint approaching Cisco junction:

- Upgrade existing photo pullouts, with advance signage

Junction of SR-128 and old US-6/50 to Cisco:

- Byway entry sign, monument type

- Byway orientation sign

SR-279:

Near turnoff from US-191:

- Byway entry sign, monument type, on north side
- Possible interpretive kiosk on south side, overlooking tailings pile

Shortly before entering The Portal:

- Construct pullout on north side
- Byway orientation kiosk for SR-279 only

Wall Street rock art panels viewpoint (existing):

- Photo pullout, river side, with advance signage
- New interpretive panels

Gold Bar Group Campground:

- Photo pullout with advance signage
- Byway orientation information kiosk
- Interpretive panels

Jug Handle Arch:

- Photo pullout at existing pullout on river side of highway near base of arch, with advance signage

Potash Plant:

- Construct designated turnaround for RVs, vehicles with trailers, and buses
- Interpretive/informational panel

SR-313:

NPS kiosks (existing):

- Redo for multiagency byway orientation information, for SR-313 only

Cliffline Viewpoint (existing):

- Photo pullout, with revised advance signage
- Byway entry sign, monument type, at or before viewpoint turn
- Interpretive signage

Monitor and Merrimac Viewpoint (existing):

- Photo pullout, with revised advance signage
- Photo/interpretive trail (existing)
- Interpretive signage

Lone Mesa (Big Mesa) Viewpoint (existing):

- Photo pullout, with revised advance signage
- Interpretive signage

The Meadow Viewpoint (existing):

- Photo pullout, with advance signage
- Interpretive signage

Plateau (La Sal Mountain) Viewpoint (existing):

- Photo pullout, with advance signage
- Interpretive signage

The Knoll (just north of “T” in highway):

- Construct photo pullout, west side, with advance signage
- Signage/indicators for landmarks in view
- Highway orientation map

Exits from Dead Horse Point State Park and Canyonlands National Park:

- Byway identification signs for outbound traffic

Appendix F: Context-sensitive solutions in highway design

Relevant excerpts from Context Sensitive Solutions.org:

Grading, earthmoving, major vegetation removal and other landform alterations within public view corridors are to be minimized. Where feasible, contours of the finished surface must blend with adjacent natural terrain to achieve a consistent grade and natural appearance.

The qualities that characterize excellence in transportation design—that is, of the physical end product of the CSS process—are:

- The project satisfies the purpose and needs as agreed to by a full range of stakeholders. This agreement is forged in the earliest phase of the project and amended as warranted as the project develops.
- The project is a safe facility for both the user and the community.
- The project is in harmony with the community, and it preserves environmental, scenic, aesthetic, historic, and natural resource values of the area, i.e., exhibits context sensitive design.
- The project exceeds the expectations of both designers and stakeholders and achieves a level of excellence in people’s minds.
- The project involves efficient and effective use of the resources (time, budget, community) of all involved parties.
- The project is designed and built with minimal disruption to the community.
- The project is seen as having added lasting value to the community.

The characteristics of the process that will yield excellence in transportation design are:

- Communication with all stakeholders is open, honest, early, and continuous.
- A multidisciplinary team is established early, with disciplines based on the needs of the specific project, and with the inclusion of the public.
- A full range of stakeholders is involved with transportation officials in the scoping phase. The purposes of the project are clearly defined, and consensus on the scope is forged before proceeding.
- The highway development process is tailored to meet the circumstances. This process should examine multiple alternatives that will result in a consensus of approach methods.
- A commitment to the process from top agency officials and local leaders is secured.
- The public involvement process, which includes informal meetings, is tailored to the project.
- The landscape, the community, and valued resources are understood before engineering design is started. A full range of tools for communication about project alternatives is used (e.g., visualization).

Approach and core principles of CSS design:

For each potential project, designers are faced with the task of balancing the need for the highway improvement with the need to safely integrate the design into the surrounding natural and human environments. In order to do this, designers need flexibility. There are a number of options available to state and local highway agency officials to aid in achieving a balanced road design and to resolve design issues. These include the following:

- Use the flexibility available within the state standards.
- Recognize that design exceptions may be optional where environmental consequences are great.

- Be prepared to reevaluate decisions made in the planning phase.
- Lower the design speed when appropriate.
- Maintain the road's existing horizontal and vertical geometry and cross section and undertake only resurfacing, restoration, and rehabilitation (3R) improvements.
- Consider developing alternative state standards, especially for scenic roads.
- Recognize the safety and operational impact of various design features and modifications.

An important concept in highway design is that every project is unique. The setting and character of the area, the values of the community, the needs of the highway users, and the challenges and opportunities are unique factors that designers must consider with each highway project. Whether the design to be developed is for a modest safety improvement or 10 miles of new-location rural freeway, there are no patented solutions. For each potential project, designers are faced with the task of balancing the need for the highway improvement with the need to safely integrate the design into the surrounding natural and human environments.

This Guide illustrates the flexibility already available to designers within adopted state standards. These standards, often based on the AASHTO Green Book, allow designers to tailor their designs to the particular situations encountered in each highway project. Often, these standards alone provide enough flexibility to achieve a harmonious design that both meets the objectives of the project and is sensitive to the surrounding environment.

When faced with extreme social, economic, or environmental consequences, it is sometimes necessary for designers to look beyond the “givens” of a highway project and consider other options. The design exception process is one such alternative. In other cases, it may be possible to reevaluate planning decisions or rethink the appropriate design.

For existing roads, sometimes the best option is to maintain the road as is or make only modest 3R improvements. Since the passage of ISTEA, states also have the ability to develop new standards outside the Green Book criteria for all roads not on the NHS. It is important, however, to recognize that the Green Book criteria are based on sound engineering and should be the primary source for design criteria. When the impact of the proposed action is evaluated and flexible design considerations are appropriate, they should be investigated.

All these options may give designers flexibility to use their expertise and judgment in designing roads that fit into the natural and human environments, while functioning efficiently and operating safely.

The ultimate decision on the use of existing flexibility rests with the state design team and project managers. Each situation must be evaluated to determine the possibilities that are appropriate for that particular project. Managers are encouraged to allow the designers to work with staff members from other disciplines to aid in exploring options, constraints, and flexibilities.

Appendix G: Demonstration of compliance with Federal Highway Administration requirements for corridor management plans

The essential components of a CMP that must be included for a route to be considered for National Scenic Byway or All-American Road designation, with applicable sections of this CMP, include the following:

1. A map identifying the corridor boundaries and the location of intrinsic qualities and different land uses within the corridor. [Pages 1 and 2]
2. An assessment of such intrinsic qualities and of their context. [Section 6]
3. A strategy for maintaining and enhancing those intrinsic qualities. [Section 9]
4. A schedule and a listing of all agency, group, and individual responsibilities in the implementation of the CMP, and a description of enforcement and review mechanisms, including a schedule for the continuing review of how well those responsibilities are being met. [Section 15; Section 17; Appendix G]
5. A strategy describing how existing development might be enhanced and new development might be accommodated while still preserving the intrinsic qualities of the corridor. [Section 8; Section 9]

- 6.** A plan to assure ongoing public participation in the implementation of corridor management objectives. [Section 3; Section 15; Section 16; Section 17]
- 7.** A general review of the roads' or highways' safety and accident record to identify any correctable faults in highway design, maintenance, or operation. [Section 11; Appendix B]
- 8.** A plan to accommodate commerce while maintaining a safe and efficient level of highway service, including convenient user facilities. [Section 11]
- 9.** A demonstration that intrusions on the visitor experience have been minimized to the extent feasible, and a plan for making improvements to enhance that experience. [Section 9; Section 10; Section 11; Section 12; Section 13; Appendix D]
- 10.** A demonstration of compliance with all existing local, state, and federal laws on the control of outdoor advertising. [Section 13]
- 11.** A signage plan that demonstrates how the State will insure and make the number and placement of signs more supportive of the visitor experience. [Section 13]
- 12.** A narrative describing how the byway will be positioned for marketing and for National Scenic Byway status. [Section 14]
- 13.** A discussion of design standards relating to any proposed modification of the roadway, including an evaluation of how the proposed changes may affect the intrinsic qualities of the byway corridor. [Section 11; Appendix B]
- 14.** A description of plans to interpret the significant resources of the scenic byway. [Section 10]
- 15.** A narrative on how the All-American Road would be promoted, interpreted, and marketed to attract travelers, especially those from other countries. The agencies responsible for these activities should be identified. [Section 10; Section 14]
- 16.** A plan to encourage the accommodation of increased tourism, including a demonstration that the roadway, lodging and dining facilities, roadside rest areas, and other tourist necessities will be adequate for the number of visitors attracted by the byway's designation as an All-American Road. [Section 8; Section 11]
- 17.** A plan addressing multilingual information needs. [Section 10; Section 13]
- 18.** A demonstration of the extent to which enforcement mechanisms are being implemented in accordance with the CMP. [Section 15; Section 17]
- 19.** A discussion of current and potential partnerships and the needs and opportunities for development of new partnerships. [Section 16]
- 20.** A description of an organizational structure for handling byway management. [Section 15]
- 21.** A conceptual physical master plan to integrate strategies and prioritize projects for investment in interpretation, resource protection and enhancement, signage, and infrastructure improvements. [Section 17; Appendix G]
- 22.** A strategic plan for monitoring and evaluation of the compliance with responsibilities and of the effectiveness of byway activities, including marketing and resource management and protection. [Section 17]

Appendix H: Compilation of recommendations and action items by responsible agency

UDOT: Utah Department of Transportation
BLM: Bureau of Land Management
State Parks: Utah State Parks
FFSL: Forestry, Fire, and State Lands
SITLA: School and Institutional Trust Lands Administration
Town of C.V.: Town of Castle Valley
Moab Area T.C.: Moab Area Travel Council
MIC: Moab Information Center
CNHA: Canyonlands Natural History Association
TNC: The Nature Conservancy
SBC: Scenic Byway Committee

Section	Recommendation or action item	UDOT	Grand County	BLM	NPS	State Parks	FFSL	SITLA	Town of C.V.	Moab Area T.C.	MIC	CNHA	Intrepid Potash	TNC	SBC
8.0.2	RECOMMENDATION: Maintain community and financial support for SAR services. Acknowledge their essentiality to Grand County's outdoor tourism-based economy by publicizing their work and accomplishments.		X							X	X				
8.0.2	RECOMMENDATION: Consider options for providing more incentives for SAR volunteering.		X												
8.0.4	RECOMMENDATION: Keep development to a scale appropriate with limited byway resources. [NPS; State Parks; Grand County]		X		X	X									
8.0.4	RECOMMENDATION: In general, if a needed public service is available in the Moab area, don't develop it on public lands. Keep the backcountry in the byways.		X	X	X	X									
8.0.8	RECOMMENDATION: Discourage construction of additional commercial facilities along the byways, with the exception of the commercial development node at the intersection of SR-313 and US-191 or in Cisco.		X												
8.0.9	ACTION: Secure title to water rights to Matrimony Spring.		X												
8.0.9	ACTION: Improve access at Matrimony Spring by slope paving the gravel area surrounding the spring, taking care not to cover the dinosaur track way on the sandstone slab under the spring outlet.	X	X												
8.0.9	RECOMMENDATION: Consider seeking an agreement with the Lions Club to use a portion of Lions Club Spring to develop a public water supply, and place signs identifying the location.		X												X
9.2.1	ACTION: Implement the remaining action plan items from the <i>Highway 191 North Corridor Plan</i> .		X												
9.2.1	RECOMMENDATION: Implement the remaining recommendations from the River Road Corridor Plan.		X												
9.2.1	RECOMMENDATION: Require standards for mitigation of development effects, including scenic effects and impacts upon air quality and wildlife, for proposed developments and activities in the Cisco Desert.		X	X				X							
9.2.1	RECOMMENDATION: Recommend corridor management plans as amendments to the <i>Grand County General Plan Update</i> for the SR-279 and SR-313 corridors analogous to the <i>River Road (SR 128) Corridor Plan</i> of 1998, in order to document the county's wishes in the event proposals arise for sale, lease, or altered uses of the federal or state lands therein.		X												

Section	Recommendation or action item	UDOT	Grand County	BLM	NPS	State Parks	FFSL	SITLA	Town of C.V.	Moab Area T.C.	MIC	CNHA	Intrepid Potash	TNC	SBC
9.2.2	RECOMMENDATION: In discussions with DOE, ensure consideration is given for the effects upon SR-279.	X													
9.2.2	RECOMMENDATION: Work with DOE to incorporate local suggestions for signage and crossing of SR-279 into DOE's access permit application to UDOT.	X													
9.2.2	RECOMMENDATION: Begin planning for the Specially Planned Area District. Explore options as to who would be the best ultimate recipient of the Atlas property to serve the goals of Grand County and the scenic byway, and work toward that outcome. Document the critical importance of the site, and establish a range of desired possible uses. [Grand County; SBC]	X													X
9.2.5	ACTION: Reaffirm the importance of the Utah Recreational Land Exchange Act to Congressional representatives and urge its prompt passage.	X	X				X								X
9.2.7	RECOMMENDATION: Partner with universities in studies to determine maximum and optimal levels of visitation, balancing income generation, quality of visitor experience, infrastructure and personnel needs, and resource preservation.				X										
9.3.1	ACTION: Consult with affected agencies when planning actions that may significantly affect byway view shed lands. Monitor management plans and actions of neighboring agencies that relate to view shed lands, and seek resolutions that maintain existing scenic qualities.	X	X	X	X		X								
9.3.1	RECOMMENDATION: Communicate with corridor private property owners about the reasons for and methods of sensitive development. Continue discussions with owners to establish new conservation easements. Consider options for purchasing easements or properties outright from willing sellers when necessary. Pursue opportunities to acquire sensitive private lands within the corridors by trade for BLM lands elsewhere, or by purchase through community funding, the Land and Water Conservation Fund, or other funding sources.												X	X	
9.3.1	RECOMMENDATION: Discourage requests for rezoning of byway corridor lands to allow commercial or industrial uses or residential density increases.	X													
9.3.1	ACTION: Enforce the <i>Grand County Land Use Code</i> uniformly throughout the corridors, including provisions relating to commercial and PUD developments, shielded lighting requirements, setbacks, and signage requirements.	X													
9.3.1	ACTION: Hire a zoning enforcement officer to help the county zoning administrator and building official enforce the <i>Land Use Code</i> .	X													
9.3.1	RECOMMENDATION: Consider amending the land use code to establish minimum standards for visual setbacks from the river for new construction. Balance private property owners' desires for river views with the public's desire for a relatively undeveloped riverscape.	X													
9.3.2	RECOMMENDATION: Work with BLM and SITLA to minimize visual impacts to the scenic byways from proposed drilling and mining projects.	X	X	X	X	X	X	X							
9.3.4	ACTION: Devise and implement new strategies for keeping bicycles and OHVs on existing tracks of designated routes. Clearly delineate trail sections crossing slick rock.	X	X	X	X										
9.3.4	ACTION: Enlist the cooperation of jeep and ATV rental services and bike tour guides to encourage customers to stay strictly on trails.			X	X	X				X					

Section	Recommendation or action item	UDOT	Grand County	BLM	NPS	State Parks	FFSL	SITLA	Town of C.V.	Moab Area T.C.	MIC	CNHA	Intrepid Potash	TNC	SBC
9.3.5	RECOMMENDATION: Devise long-term plans for rehabilitation, rest, or replacement of campsites in high-value riparian groves.			X											
9.3.6	ACTION: Work to create a culture of cooperation among climbers at Wall Street on SR-279 to keep vehicles, belayers, and spectators outside marked highway boundaries. Talk with climbing representatives, climbing instructors, climbing shop operators, and climbers on-site. Ask climbing guidebook and brochure publishers to include mentions of parking and highway hazard concerns at Wall Street.		X	X						X	X				
9.3.6	ACTION: Sign SR279 with signs that suggest “slow truck traffic, climbers ahead”. [Intrepid Potash]												X		
9.3.6	RECOMMENDATION: Increase enforcement of speed regulations at Wall Street. Communicate with climbers and spectators placing themselves in hazard’s way.		X												
9.3.6	ACTION: Improve highway markings at Wall Street to more clearly delineate parking/no parking areas. [UDOT; Grand County]	X	X												
9.3.7	RECOMMENDATION: When reviewing applications for additional special events, consider requirements for road closures of the byways.									X					
9.3.8	RECOMMENDATION: Support Wild and Scenic River status for the Colorado River.		X	X											
9.3.9	ACTION: Support wilderness designation, at a minimum, for Negro Bill Canyon.			X											X
9.3.10	ACTION: Include illustrations and messages in interpretive materials, trailhead/campground information boards, and relevant promotional materials to discourage damage to wet and dry potholes.			X	X	X				X	X	X			
9.3.10	RECOMMENDATION: Place a high priority on preservation of riparian and other critical wildlife habitats when considering development and management options.	X	X	X	X	X	X	X							
9.3.10	ACTION: Develop maps of sensitive areas for wildlife habitat, plants, soils, and ecosystems. Consult these maps when contemplating new actions or developments. Distribute maps to local information centers to inform interpreters on where to most appropriately direct visitors and activities.			X	X	X					X				
9.3.10	RECOMMENDATION: Stipulate that all new energy corridor electrical transmission towers be equipped either with raptor safe perches or raptor excluders.		X	X				X							
9.3.11	RECOMMENDATION: Collaborate with and work within the framework established by the Southeast Utah Tamarisk Partnership (SEUTP) to restore the structure and function of ecosystems within the byway corridors that have been damaged by tamarisk and Russian olive infestations. Help develop and implement best available science and techniques to control tamarisk, Russian olive, and other invasives, following SEUTP’s <i>Woody Invasive Species Management Plan</i> of 2007 for beginning guidelines. Prioritize tamarisk control and revegetation plots, and pool management resources. Institute follow-up maintenance and monitoring to ensure success of natural and manual revegetation, and to prevent invasion of new exotic species.		X	X	X		X	X						X	
9.3.11	RECOMMENDATION: Avoid monoculture revegetation plantings where possible. Use the widest available variety of appropriate native species (e.g., cottonwood, larger willow species, boxelder, gambel oak, and hackberry for upper story). Use nursery stock grown from local genotypes		X	X	X		X	X						X	

Section	Recommendation or action item	UDOT	Grand County	BLM	NPS	State Parks	FFSL	SITLA	Town of C.V.	Moab Area T.C.	MIC	CNHA	Intrepid Potash	TNC	SBC
	where possible. Work with the Lone Peak State Nursery to grow native plant stock from local genotypes. Consider establishing local native plant nurseries or enlisting help from community members willing to grow plots of local genotype seedlings in their gardens. Seek naturalistic placements instead of row plantings.														
9.3.11	RECOMMENDATION: Consider developing an AmeriCorps crew to help with revegetation following tamarisk removal and related tasks such as coordinating and prioritizing revegetation plots, planting and maintaining native species, nursery cultivation of native plant stock, and long-term monitoring.		X	X											
9.3.11	RECOMMENDATION: Consider developing an Adopt-A-Grove program (akin to the Adopt-A-Highway litter control program) for revegetation.		X	X			X								
9.3.11	ACTION: Publicize the Adopt-A-Grove program nationally to build the Grand County brand as a "green" community that cares. Include information on the exotic species control and revegetation on area Web sites.									X					
9.3.11	RECOMMENDATION: Support funding for raft and equipment rentals or provide in-kind resources to enable the Weed Control Supervisor to lead volunteers on weed survey and eradication tours of the river.		X	X			X								
9.3.11	RECOMMENDATION: Encourage relevant agencies to sign the Moab Dock and Potash launch ramps to alert boat owners of the hazards of aquatic hitchhikers and ask for cooperation.		X			X	X								
9.3.12	ACTION: Employ varied and creative new methods to educate all byway users about the importance of soil crusts and of the importance of staying strictly on designated trails. Include relevant messages prominently in all area publications and on promotional Web sites.			X	X	X				X	X	X			
9.3.13	RECOMMENDATION: To existing interpretive displays, add a small panel discussing the value of clean air, the regions relatively unspoiled state, and ways to advocate clean air.			X		X					X				
9.3.14	RECOMMENDATION: Encourage respectful levels of noise while in the byways canyons.									X					
9.3.15	RECOMMENDATION: Implement and enforce section 4.2.8 of the General plan. Update (Support Quality Outdoor Lighting)		X												
9.3.16	ACTION: Follow NPS and BLM policies for cultural resource site information disclosure. Become aware of which locally known sites are in disclosable categories and which are not. Publicize and direct visitors only to Category I sites in oral communications, written materials, maps, and Web sites. Disclose Category II sites only upon specific request. Vet all free and sales publications for compliance; reject those out of compliance and communicate with authors to request compliance.			X	X	X				X	X	X			
9.3.16	ACTION: Communicate with authors publicizing sensitive sites to educate and ask for restraint.			X	X						X	X			
9.3.16	ACTION: Support application for inclusion of the petroglyphs on SR-279 in the National Register of Historic Places.		X	X											
9.3.16	ACTION: Install new interpretive signage at SR-279 petroglyphs, in conformance with byway interpretive plans and designs.			X											
9.3.16	ACTION: Work with guidebook publishers to include messages requesting that climbers climb at least the recommended 50 feet from SR-279 petroglyphs.			X							X	X			X

Section	Recommendation or action item	UDOT	Grand County	BLM	NPS	State Parks	FFSL	SITLA	Town of C.V.	Moab Area T.C.	MIC	CNHA	Intrepid Potash	TNC	SBC
9.3.19	ACTION: Seek community sponsors for any sections of corridor highways that lack Adopt-A-Highway sponsorships.	X	X	X											
9.3.20	ACTION: Lobby state and national BLM officials and Congressional representatives for patrol ranger funding to supplement locally generated facilities fees. Seek funding commensurate with need and the value of the resources under threat. Explore opportunities for alternative funding, such as grants or resource use passes.		X												
9.3.21	RECOMMENDATION: Encourage and facilitate the use of corridor intrinsic resources for scientific research. Continue to invite collaboration with university researchers for ongoing surveys of visitor demographics, needs, and attitudes.		X	X	X	X									X
10.3	RECOMMENDATION: To increase interpretive opportunities and generate more revenue, increase inventory size of interpretive materials for sale at Dead Horse Point State Park. Include additional titles related to the region in general and to other regional parks.					X									
10.7.2	RECOMMENDATION: Establish gateway orientation centers at the four byway entrances. Provide essential information on directions, facilities, services, and primary recreation destinations. Include regulatory information and minimum impact information, but refrain from including substantial interpretive messages, as these will be developed at other sites.			X											X
11.1	RECOMMENDATION: Preserve the current rustic nature of the byways within the limits of potential funding and terrain, while understanding all safety risks cannot be addressed.	X													
11.2.4	RECOMMENDATION: Avoid changes to SR-128 that would significantly increase speeds or change its basic character as a two-lane, moderate-speed, winding highway.	X	X												
11.3	ACTION: Conduct semi-annual or more frequent highway inspections for sightline maintenance and vegetation control. Remove vegetation as necessary by mowing, or pruning or removing trees to provide the longest sightlines reasonably achievable.	X													
11.4.2	RECOMMENDATION: Strive to provide a LOS of B or A for the scenic byways.	X	X												
11.4.5	RECOMMENDATION: Create or widen shoulders along SR-128 where feasible without causing unacceptable aesthetic or environmental damage. Strive for a width of two to three feet, while evaluating each section on a case-by-case basis and acknowledging that shoulder construction may not be advisable in some locations, particularly if it would require scaling back cliffs.	X													
11.4.7	RECOMMENDATION: Where feasible and aesthetically and environmentally acceptable, and as funding allows, install guardrails in the most hazardous zones, such as curves, sections of narrow pavement, or along the most abrupt drop-offs. Guardrails should be nonreflective. Solid concrete barriers should be avoided in favor of natural materials such as wood or stone if certifiable, and designs that completely block low-angle views should be avoided when possible.	X													
11.4.10	RECOMMENDATION: Submit the community's desire to have curves addressed to UDOT for determination of future projects, particularly along SR-128.	X													
11.4.10	RECOMMENDATION: Seek safety improvement money to address some of the more abrupt horizontal and vertical curves on SR-128.	X	X												

Section	Recommendation or action item	UDOT	Grand County	BLM	NPS	State Parks	FFSL	SITLA	Town of C.V.	Moab Area T.C.	MIC	CNHA	Intrepid Potash	TNC	SBC
11.4.11	ACTION: Create centerline rumble strips on SR-128.	X													
11.4.12	RECOMMENDATION: Reevaluate passing/no passing pavement markings on SR-128 for safety and traffic facilitation, and remark if appropriate.	X													
11.4.13	RECOMMENDATION: Create an appropriately spaced series of new paved and unpaved slow traffic/multiuse pullouts along SR-128, with particular attention to the up-hill side, where pullouts are currently generally lacking. Size pullouts to allow vehicles to pull over and be passed without the need to completely stop. Taper transition sections to guide traffic. Allow for a mixture of pullout sizes to serve smaller vehicles as well as larger vehicles.	X		X											
11.4.13	RECOMMENDATION: Improve existing user-created pullouts where sightlines are adequate by paving or filling with rotomill road base. Maintain to prevent erosion and sudden drop-offs, which can discourage use.	X		X											
11.4.13	RECOMMENDATION: Install "Slow traffic pullout ahead" signage to alert drivers to the distance to next major slow traffic pullout.	X													
11.4.13	RECOMMENDATION: Seek safety spot improvement funds or grant funding for a comprehensive program of slow-traffic pullout planning, rehabilitation, construction, and signing along SR-128.	X	X	X											X
11.4.13	RECOMMENDATION: Survey de-facto, user-created pullouts for adequacy of sight distances for safe reentry to traffic flow. Retain existing pullouts to the maximum extent practicable. Discourage use of unsafe sites by restoring and revegetating portions beyond shoulder widths and placing reflector posts or other nonhazardous obstructions.	X		X											
11.4.13	RECOMMENDATION: Strive for no net loss in vegetated areas from pullout construction, and revegetate at least as much area as is claimed by new construction.	X		X											
11.4.14	RECOMMENDATION: Do not restrict parking except in locations where safety concerns are paramount. Encourage visitors to stop and explore with a sense of freedom according to their own needs, in keeping with the byways brand.	X	X	X											
11.5.1	RECOMMENDATION: Maintain the current signed weight restriction of 55,000 pounds on SR-128.	X	X												
11.5.1	RECOMMENDATION: Endorse the construction of an overpass on SR-279 and/or US-191 at the UMTRA site to prevent tailings truck traffic from interfering with recreational traffic.		X												X
11.6	ACTION: Engage the public in context-sensitive solutions discussions during design phases for highway improvements beyond the scope of normal maintenance.	X													
11.6	RECOMMENDATION: Where possible, avoid standard highway solutions and design elements associated with freeways and urban settings. As funding will allow, use designs, surfaces, and materials that blend with or are in character with the natural environment, such as etched or pre-weathered steel, nonreflective guardrails, textured or colored concrete, and similar-source earth and rock. Give preference to natural materials where possible.	X													
11.7	RECOMMENDATION: Establish a more detailed list of desired improvements based upon CMP recommendations. Delineate which projects can be accomplished with existing routine maintenance resources, which can be funded through UDOT or federal safety spot improvement	X													X

Section	Recommendation or action item	UDOT	Grand County	BLM	NPS	State Parks	FFSL	SITLA	Town of C.V.	Moab Area T.C.	MIC	CNHA	Intrepid Potash	TNC	SBC
	programs, and which will require outside grant funding.														
11.7	RECOMMENDATION: Seek grant funding for highway safety improvements.	X	X						X						X
12.2	ACTION: Promote use of private tourist/bicycle shuttle bus services by distributing lists of providers through motels, bike shops, Web sites, and information centers.								X	X					
12.4	RECOMMENDATION: Encourage discussion between Grand County, the City of Moab, and the Town of Castle Valley to investigate possibilities of a public bus system, and locating funding sources to implement a service. Research possibilities for state and federal grants and subsidies, partnerships with NPS, or private/public partnerships such as subsidized franchises.		X						X						
12.5	ACTION: Estimate costs, feasibility, and impacts of completing wide paved shoulders to the end of SR-313 at Dead Horse Point, as well as to the Island in the Sky Visitor Center. Consider possible UDOT or grant funding opportunities.	X	X	X	X	X									
12.5	RECOMMENDATION: Seek FHWA National Scenic Byways grant funding or other sources to complete the SR-128 bikeway to the Porcupine Rim Trailhead.	X	X	X											
12.5	ACTION: Engage the public in context-sensitive solutions discussions during the design phase for all bike improvements.	X	X	X	X	X									
12.5	ACTION: Support acquisition and operation of a sweeper to maintain county bikeways. Consider possible sweeper use to maintain bike shoulders along SR-313. Publicize the fact that Grand County maintains clean bike trails through bike stores, motels, Web sites, and information centers.		X						X	X					
12.5	ACTION: Monitor bicycle use of bikeways. If a significant number of bicyclists aren't using them, determine why and how use can be encouraged.														X
13.5.1	ACTION: Install Utah scenic byway logo signs at the entrances to all three routes. These may be installed as part of the proposed gateway displays discussed in the Interpretation section. Logo signs may also be placed as route markers along with UDOT route designation signs at infrequent intervals.	X													X
13.5.1	ACTION: Maintain additional logo signs 1) at the exits to Dead Horse Point State Park and Canyonlands National Park; 2) beside the northbound lane of SR-279 at the potash plant; and northbound and southbound near the Castle Valley/La Sal Mountain Loop intersection.	X													X
13.5.2	ACTION: Install advance approach signs to alert travelers of upcoming slow traffic pullouts and primary passing opportunities in zones where such opportunities are few (primarily along SR-128).	X													
13.5.2	ACTION: To warn drivers of bicycle traffic, at ends of each corridor and at intervals, install the new MUTCD signs that illustrate the required three-foot separation between cars and bicycles.	X													
13.5.3	ACTION: Recreation site approach/directional signs: Install small, half-height signs (e.g., tent symbol, boat ramp symbol, or camera symbol) to alert visitors to distance to upcoming recreation sites or selected few photo pullouts. These and the site destination signs discussed below may be designed and installed as part of the coordinated interpretive display plan proposed in the Interpretation section.			X	X	X									

Section	Recommendation or action item	UDOT	Grand County	BLM	NPS	State Parks	FFSL	SITLA	Town of C.V.	Moab Area T.C.	MIC	CNHA	Intrepid Potash	TNC	SBC
13.5.3	ACTION: Recreation site destination signs should be maintained at all trailheads, campgrounds, and boat ramps.			X											
13.5.4	ACTION: As part of the anticipated Lions Park redesign, place a sign to direct travelers to the park for water, in an effort to help relieve congestion at the nearby Matrimony Spring.	X	X												
13.5.5	ACTION: More clearly delineate where the “designated” parking is along Wall Street with double white striping and signs.	X													
13.5.6	ACTION: SR-313: The blue “Viewpoint” directional signs at the Big Mesa and Plateau viewpoints are inappropriately large (12 feet high, with 5 x 6 foot placards) in relation to their importance, and do not reflect a desirable look for the corridor. Replace these with smaller, signs.			X											
13.5.6	RECOMMENDATION: Work within the MUTCD sign plan to improve signage.	X	X												
13.9	RECOMMENDATION: Investigate and take advantage of technologies and opportunities for dispersing virtual signage about the byways.								X	X					
14.1.1	ACTION: Include environmental responsibility messages in varying forms as appropriate in all advertising, promotions, brochures, Web sites, and other publications related to tourism and outdoor recreation, to promote compliance canyon country minimum impact practices and other key byway goals.		X	X	X	X			X	X	X				X
14.1.6	RECOMMENDATION: Encourage web visitors to use web translation programs to view German and French versions of the DiscoverMoab.com Web site.								X						
14.1.7	RECOMMENDATION: Reinstitute and redesign a hospitality training program, with an emphasis on educating and gaining support first from business owners and managers, and secondarily from employees.								X						
14.1.7	RECOMMENDATION: As an extension of the hospitality program, seek to educate community members involved in serving the visiting public (e.g., OHV rental agencies, shuttle services, motels, and restaurants) about the byways, recreational opportunities, minimum impact practices, and about appropriate and less appropriate locations for various recreational activities.								X						
14.1.8	RECOMMENDATION: Develop awareness among advertisers, promoters, and publishers of the region to encourage responsible messaging about the byways region. Develop simple informational materials to explain key byways goals and how irresponsible messaging works against them.								X	X					X
14.2.1	RECOMMENDATION: Implement the Interpretation/Education objectives in the park RMP of including links to other area Web sites and installing a webcam.					X									
14.2.1	RECOMMENDATION: Make the information and graphics of the park brochure into integral parts of the webpage, rather than allowing access only through a PDF link.					X									
14.2.2	RECOMMENDATION: Enlist the cooperation of the Utah Travel Council to broaden their advertising to include key state parks such as Dead Horse Point along with the national parks.					X			X						X
15.0	RECOMMENDATION: Consider possible byway management strategies and whether to seek FHWA grant funding to hire a byway coordinator.														X

Section	Recommendation or action item	SBC	TNC	Intrepid Potash	CNHA	MIC	Moab Area T.C.	Town of C.V.	SITLA	FFSL	State Parks	NPS	BLM	Grand County	UDOT
16.0	RECOMMENDATION: To Grand County, Moab Area Travel Council, CNHA, NPS, and BLM Web sites, add information and links to Web sites regarding local educational and volunteer opportunities offered by each agency as well by such groups as Canyonlands Field Institute, Plateau Restoration, Adopt-A-Highway, Adopt-A-Grove, Utah colleges and universities etc.				X		X					X	X	X	