

ALTERNATIVES

RESOURCE/ISSUE	1	2	3	4	5
Road improvements	Includes only maintenance improvements.	Additional travel lane and shoulder widening throughout (4-miles), hill cut to improve stopping sight distance, left-and right-turn lanes into Big Horn Hills Estates entrances, tree clearing to reduce shade.			
Wildlife design elements	Portable variable message signs, advisory speed reductions.	Wildlife fence and three wildlife crossing overpass structures.	Animal movement detection and activated driver warning system. No wildlife fencing.	Wildlife fence, one wildlife crossing structure and multiple at-grade wildlife crosswalks.	Same as Alternative 1.
Road improvement cost estimate	One-time construction cost: \$2.5–\$3.0 million.	One-time construction cost: \$13.0–\$16.0 million. Annualized cost including construction, operation, and maintenance: \$725,000.			
Wildlife design elements, annualized cost estimate	\$43,500	\$487,600	\$319,900	\$437,600	\$43,500
Benefit/cost ratio*	0.19	0.14	0.13	0.15	0.19
Construction disturbance, acres	32.4	49.4	44.8	47.6	44.8
Water quality	No change.	9.1 acre increase (54%) in impervious surface within project corridor, but about 1.7% of the watershed. The majority of this watershed does not have impervious cover. Water quality would not be adversely affected by runoff.			
Floodplains	The existing roadway encroaches in 100-year floodplain. Alternatives 2-5: a floodplain permit may be necessary from Fremont County.				
Wetlands	No effect.	0.023 acre permanent wetland impact. Temporary impacts for constructing retaining walls in two locations.			
Stream alteration	No effect.	Replacement of existing 200-foot long culvert at Howard Spring Picnic Site. No other work in the stream channel.			
Habitat loss	No effect.	Conversion of some trees to grass/forb/shrub habitat near the highway. No adverse effects due to nearby available habitat.			
Habitat degradation	Increased traffic noise, ongoing human presence near highway.	Same as Alternative 1 plus additional temporary construction ground disturbance requiring restoration.			
Wildlife-vehicle collisions	No project actions to reliably reduce the rate of wildlife-vehicle collisions.	Reduced by 83-87 percent.	Reduced by 33-97 percent.	Reduced by 83-87 percent.	Same as Alternative 1.
Wildlife movement	Increased effect to migration, dispersal, and daily movements of wildlife.	Net benefit to migration, dispersal, and daily movements of wildlife.	Little or no benefit to improved migratory, dispersal, and daily movements of wildlife.	Net benefit to migration, dispersal, and daily movements of wildlife.	Same as Alternative 1.
Fisheries	All alternatives: no adverse effect.				
National Forest Planning	All alternatives: consistent with general and specific area management direction and the Caribou-Targhee National Forest Travel Management Plan.				
State Wildlife Action Plan and Grizzly Bear Conservation Strategy	Does not address objectives to reduce wildlife-vehicle collisions and improve highway permeability for wildlife movement.	Addresses objectives to reduce wildlife-vehicle collisions and improves highway permeability for wildlife movement.	Addresses objectives to reduce wildlife-vehicle collisions; does not improve highway permeability for wildlife movement.	Addresses objectives to reduce wildlife-vehicle collisions and improves highway permeability for wildlife movement but to a lesser degree than Alternative 2.	Does not address objectives to reduce wildlife-vehicle collisions and improve highway permeability for wildlife movement.



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<p><i>* A benefit/cost ratio of 1.0 indicates that estimated monetary benefit equals estimated monetary cost. If the benefit is higher, the ratio is greater than 1.0; if the cost is higher, the ratio is less than 1.0.</i></p>					
Fremont County and Island Park planning and zoning	All alternatives: The roadway design and accesses are consistent with Fremont County General Plan and Island Park City zoning and would not affect business or residential access.				
U.S. 20 Corridor Plan	Does not address ITD safety and operational goals.	Addresses safety and operational goals of the 2006 U.S. 20 Corridor Plan.			
Access	No changes.	No change in designated accesses to private or public land access. Alternative 2 or 4: Accesses would have cattleguards or wildlife exclusion mats installed; less frequently used accesses may have gates installed.			
Right-of-way and easements	No right-of-way acquisitions or easements.	No right-of-way acquisitions. Alternative 2 or 4: Easements on private land and forest land for wildlife crossing structures and fencing needed.			
Traffic noise	Unnoticeable increase - average increase of 2.0 dBA.	Slightly noticeable increase - average 3.7 dBA increase across project corridor with the greatest residential receptor increasing by 5.6 dBA (a noticeable increase). Abatement was not determined to be reasonable to implement.			
Visual resources	No change to the long-term visual character or visual quality.	Wildlife fencing and three overpass crossing structures would be visible to motorists, residents, and recreationalists. Overall changes would be compatible with the project setting as a travel corridor.	No significant change to the long-term visual character or visual quality.	Same as Alternative 2.	No significant change to the long-term visual character or visual quality.
Recreation resources	No changes to recreation resources in the project corridor.	Wildlife fencing would introduce a barrier and linear structure that does not currently exist although all existing vehicle access locations would be preserved and pedestrian access through the fence would be included at key locations.	No changes to recreation resources in the project corridor.	Same as Alternative 2.	No changes to recreation resources in the project corridor.
Social and economic context	Traffic volume increases without adding turning lanes would increase risk of crashes. No residential takes, no business relocations, no community facilities affected. Community cohesion and social interaction patterns are unchanged.	Positive social and economic effects as a result of transportation improvements that would increase safety and mobility in the area, decreasing risk of crashes and improving access. No residential takes, no business relocations, no community facilities affected. Alternative 2 or 4: Wildlife crossing structures would reduce physical space surrounding travel lanes, affecting a small proportion of oversized load permits.			
Cultural resources	No historic properties affected.	Adverse effect to a prehistoric artifact scatter site. In final design, FHWA and ITD will consult with the Idaho State Historic Preservation Officer, Native American Tribes, and other consulting parties to avoid or mitigate.			

