Maragement Area Date Hazard Rockfall Plant Wedge Topple Trail Containe Defenential Erosion Point Plant Interminate Rock Failures Differential Erosion Point Plant Interminate Rock Statum Erosional Failure Erosion Erosional F	SITE INFORMATION ITALICIZED DATA CATEGORIES REQUIRED FOR CALCULATED SCORES										
Hazard Type Rockfall Planar Wedge Topple Landslide Above, Below, or Across Route Failures Differential Erosion Rocad/Trail No.	Management Ar	ea						Date			
Road/Trail Class Rater Beginning Mile Marker Ending Marker Side Weather Begin Lat. Coord. Long. Datum AADT Length of Affected Road/Trail (tr) Slope Height (rock) / Axial Length (slide) (tr) Slope Angle (*) Slope Angle (*) Sight Distance (tr) Roadway/Trail Width (tr) Solpe Access Route * Yes \> No Fixes Present * Yes \> No Bik Size (tr)/Volume (cy) moontain (tr)	Hazard Rockf Type Ravell Failur	all Planar W ing Rock Ava es Differentia	/edge Toj anche Ir I Erosion	ople Ideterminate F	Rock	Landslide Translatio Shallow sl	Above, Below, or nal Rotational ump Erosional Fa	Across Route Debris Flow iilure			
Beginning Mile Marker Ending Marker Side Weather Begin Lat. Coord. Long. End Lat. Coord. Long. Datur ADT Length of Affected Road/Trail (ft) Slope Height (rock) / Axial Length (slide) (ft) Slope Angle (*) Slope Angle (*) Sight Distance (ft) Roadway/Trail Width (ft) Roadway/Trail Width (ft) Speed Limit (mph) Ditch Depth (ft) RANGE Ditch Depth (ft) RANGE <th>Road/Trail No.</th> <th>Trail Road</th> <th colspan="4">Road/Trail Class</th> <th colspan="2">Rater</th>	Road/Trail No.	Trail Road	Road/Trail Class				Rater				
Begin Lat. Coord. End Lat. Coord. Datum AADT Length of Affected Road/Trail (ft) Slope Angle (*) Slope Angle (*) Slope Angle (*) Sight Distance (ft) Roadway/Trail Width (ft) Sope Alle (*) Speed Limit (mph) Ditch Vidth (ft) RANGE Ditch Depth (ft) RANGE Bitch Slope (H:V) RANGE Bitch Slope (H:V) RANGE Bitch Slope (H:V) RANGE Bitch Slope (H:V) RANGE Ditch Vidth (ft) RANGE Bitch Slope (H:V) RANGE Bitch Slope (H:V) RANGE Bitch Slope (H:V) RANGE Bitch Slope (H:V) RANGE Ditch Vidth (ft) RANGE Bitch Slope (H:V) RANGE Slope (H:V) <td< th=""><th>Beginning Mile N</th><th>Aarker</th><th></th><th colspan="2">Ending Marker</th><th colspan="2">Side</th><th colspan="2">Weather</th></td<>	Beginning Mile N	Aarker		Ending Marker		Side		Weather			
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Annual Rainfoll (in) RANCE Sole Access Route In Yes In No Photo # Range Comments PRELIMINARY RATING PRELIMINARY RATING Category Rating 3 9 27 81 Score A. Landslide – Roadway Width 0-5 Percent 6-25 Percent 26-50 Percent 51-100 Percent B. Landslide – Side/Erosion Effects Visible crack or slight deposit of minor erosion 1 inch offset or inch deposit of material / major erosion will affect travel in < 5 yrs 225 ft 400 ft CALC D. Rockfall – Roadway Length Affected 25 ft 100 ft 225 ft 400 ft CALC D. Rockfall – Rockfall History Few Falls Occasional Falls Many Falls Constant Falls Constant Falls F. Rockfall – Block Size or Volume per Event 1 ft 3 yd ² 2 ft or y d ² 3 ft or y d ² 4 ft or y d ² CALC G. All - Impact on Use 1 ft 3 yd ² 2 ft or y d ² 3 ft or y d ² 4 ft or y d ² CALC H. All - AADT / Usage / Economic or Recreational Importance (highest rating applies) Son CaLC CaLC Constant yused Noderate Constant yused Noderate Constanty used Significant economic / rec. importance Constanty used Significant ec	Ditch Width (ft) ROCKFALL	RANGE	Ditch Dep ROCKFALL	ch Depth (ft) RANGE			e (H:V) RANGE	Blk Size (ft)/Volume (cy)			
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H. All - AADT / Usage / Economic or Recreational Importance (highest rating applies) 50 200 450 800 CALC Winor economic / rec. importance Ninor economic / rec. importance Frequently used Significant economic / rec. importance Significant economic / rec. importance Constantly used Significant economic / rec. importance Significant economic / rec. importance CALC Examples Examples Examples Examples CALC Constantly used Significant economic / rec. importance CALC Examples Examples Examples Examples CALC Examples CALC Preliminary Rating Good (15-21 pts) Fair (22-161 pts) Poor (>161 pts) Sites rated as Fair or Poor receive detailed evaluation (complete back page) Examples Examples Examples Examples	G. All - Impact o	Full (with	Il use continues Partial use ith minor delay Use modi required, mi/30 min availa		use remains odification ed, short (3 min.) detour railable	Use is blocked – long (>30 min) detour available or less than 1 day closure	Use is blocked – no detour available or closure longer than 1 week				
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	Preliminary Rating Good (15-21 pts) Fair (22-161 pts) Poor (>161 pts) Sites rated as Fair or Poor receive detailed evaluation (complete back page)										

SLOPE HAZARD RATING										
Category Rating			Rating	3 9		27	81	Score		
I. All - Slope Drainage			ge	Slope appears dry or well drained; surface runoff well controlled	Intermittent water on slope; mod. well drained; or surface runoff moderately controlled	Water usually on slope; poorly drained; or surface runoff poorly controlled	Water always on slope; very poorly drained; or surface water runoff control not present			
J. /	All - Ar	nn	ual F	lain	fall	0-10" 10-30"		30-60"	60"+	
K. All - Slope Height (rock)/ Axial length (landslide)			t (rock)/ Axial	25 ft 50 ft		75 ft	100 ft	CALC		
Select One Unstable Slope Type	ion		L. Thaw Stability (Cold Climates)			Unfrozen/Thaw Stable	Slightly Thaw Unstable	Moderately Thaw Unstable	Highly Thaw Unstable	
	s/ Eros B, C)		M. Instability-Related Maint. Frequency		bility-Related . Frequency	Every 10 years	Every 5 years	Every 2 years	Every year	
	Landslide (add A	•	N. Movement History		ement History	Minor movement or sporadic creep	Up to 1 inch annually or steady annual creep	Up to 3 inches per event, one event per year	>3" per event, >6" annually, more than 1 event per year (includes all debris flows)	
	Rockfalls (add D, E, F)		O. Rockfall-Related Maint. Frequency		all-Related . Frequency	Normal, scheduled maintenance	Patrols after every storm events	Routine seasonal patrols	Year-round patrols	
		•	er	Case 1	P. Structural Condition	Favorable	Random	Adverse Discontinuous	Adverse Continuous	
			Charact		Q. Rock Friction	Rough/ Irregular	Undulating	Planar	Clay infilled/ Slickensided	
		•	Geologic	Geologic Case 2	R. Structural Condition	Few differential erosion features	Occasional differential erosion features	Many differential erosion features	Major differential erosion features	
			Ŭ		S. Diff. in Erosion Rates	Small difference	Moderate difference	Large difference	Extreme difference	
	T. LANDSLIDE HAZARD TOTAL (A+B+C+I+J+K+L+M+N)									CALC
						U. ROCKFAL	L HAZARD TOTAL (D-	+E+F+I+J+K+O+(gre	atest of P+Q or R+S))	CALC
RISK RATING										
V. Route Width or Trail Width				36 ft 14 ft	28 ft 20 ft 10 ft 6 ft		12 ft 2 ft	CALC		
W. Human Exposure Factor			e Factor	12.5% of the time	25% of the time	37.5% of the time	50% of the time	CALC if AADT avail		
X. % of Decision Sight Distance			sht Distance	Adequate, 100% of	Moderate, 80% of	Limited, 60% of	Very Limited, 40% of	CALC for		
Y. Right of Way (R/W) Impacts (If Left Unattended)			W) Impacts (If	No R/W implications	Minor effects beyond R/W	Private property, no structures affected	Structures, roads, RR, utilities, or Parks affected	10802		
Z. Environmental/Cultural Impacts if Left Unattended			Cultural Impacts ed	None/No Potential to Cause Effects	Likely to Effect/No Hist. Prop. Affected	Likely to adversely Affect/Finding of No Adverse Effect	Current adverse effects/Adverse Effect			
AA. Maintenance Complexity			Complexity	Routine Effort/In- House	In-house maint./ special project	Specialized equip./ contract	Complex/ dangerous effort /location/contract			
BB. Event Cost				\$0-2k	\$2-25k	\$25-100k	>\$100k			
		-					CC. R	ISK TOTALS: (G+H+	V+W+X+Y+Z+AA+BB)	CALC
						TOTAL U	JSMP SCORE: LAND	OSLIDES (T+CC) OF	R ROCKFALL (U+CC)	CALC

For the directly measurable categories, use the following formulas to calculate the exponent value (x) for the scoring formula $y = 3^x$. This will allow the calculation of a precise score for the category measurement and development of category scoring tables.

C. Length of roadway affected exponent:

$$x = \sqrt{\frac{\text{length affected}}{25}}$$

F. Block size or the volume exponent formula:

block size
$$x = block$$
 size
volume $x = \left(\frac{yds^3}{3}\right)$

H. AADT exponent formula:

$$x = \sqrt{\frac{AADT}{50}}$$

K. Slope height/axial slide length exponent formula:

$$x = \frac{slope \ height}{25}$$

V. Width exponent formula:

$$x = \frac{44 - Road \ width \ (ft)}{8}$$
 for vehicles, or $x = \frac{18 - Trail \ width \ (ft)}{4}$ for trail traffic

W. Human exposure factor exponent formula for roads and trails:

$$x = \frac{\left(\frac{AADT}{24} \times slope \ length \ (miles) \times 100}{speed \ limit \ or \ walking \ speed}\right)}{12.5}$$

X. Percent decision sight exponent formula:

$$x = \frac{120 - \left(\frac{measured \ sight \ distance}{AASHTO \ decision \ sight \ distance} \times 100\right)}{20}$$