Post-Option Development Workshop Butte Interstate Traffic Study - Phase 2

Minor and Safety Type Project List

Location	Project Type	Deficiency Corrected	Est.Cost	Project Description/Notes
Corridor Wide				
1 Incident Management Plan	Planning	Safety/Operations	\$-\$\$	Specific plan to address incident response across multi-agencies
2 Reduced Speed Limit	Signing	Safety	\$	65 MPH throughout urban area (Continental to Rocker)
3 Narrow Lanes	Stirping	Safety/Bridge	\$	11' or 11.5' lanes throughout corridor to provide added separation at numerous narrow bridges (along with reduced speed limit)
4 Variable Speed Limits	ITS	Safety	\$	Advisory or Enforceable tied to weather or events
5 Speed Display Signs	ITS	Safety	\$	Placed near curvature, bridges or steep grades
6 CCTV Applications	ITS	Safety/Operations	\$\$	Closed Circuit Television applications - Support/enhance statewide sytems
7 DMS Applications	ITS	Safety	\$\$	Digital Message Boards; specifically one just west of Rocker I/C - Support/enhance statewide systems
8 Additional RWIS Data Collection	ITS	Safety	\$\$	Support/enhance statewide systems or other ITS applications
9 Traveler Infromation Elements	ITS	Safety	\$\$-\$\$\$	HAR, Kiosks, DMS
New Landscape Elements	Landscape	Aesthetics	\$-\$\$	Consider landscape elements for all future projects within corridor
Rocker Interchange				
10 Town Pump property	Access	Access Control	\$	Provide curb/delineation to define specific access points
11 Flying J property	Access	Access Control	\$	Provide curb/delineation to define specific access points
12 Eastside of Rockler Rd	Sidewalk	Lack of Pedestrian facilities	\$	Construct a five foot sidewalk on the east side of Rocker Rd from Frontage Rd to Frontage Rd (include curb ramps and marked crossings)
13 EB I-15/90 Bridge over Rocker	Guardrail	Guardrail length	\$	Extend Guardrail on at bridge on inside lane
14 WB I-15/90 Bridge over Rocker	Guardrail	Guardrail length	\$	Extend Guardrail on at bridge on inside lane
Mainline Segment 1				
16 NB/EB I-15/90 (various locations)	Guardrail	Clear Zone	\$	Extend Guardrail to cover non-recoverable sideslopes
17 NB/EB I-15/90 (various locations)	Minor Earthwork	Clear Zone	\$\$	Perform minor grading to flatten fill slopes
19 EB/NB and WB/SB I-15/90 Bridges over RxR	Bridges	Functionally Obsolete Structure	\$\$\$\$	Widen or install new bridge to current standards
New Replace Bridges over abandoned RxR w/Culvert	Structure	Functionally Obsolete Structure	\$\$	Remove bridges and replace with large steel plate culvert. Maintaining rails to trail path
West Butte Interchange				
New Reduced Speed Limit	Signing	Safety	\$	Reduce speed limit and sign for 55 MPH
20 EB I-115 off-ramp	Striping	Ramp Geometry	\$	Restripe leftside exit ramp to a normal single lane width
21 EB I-115 off-ramp	Signing	Safety	\$	Insall new overhead signs that are less confusing
22 Ramps	Lighting	Safety	\$\$\$	Install new lights to bring interchange to a complete lighting standard
23 EB I-115 over WB/SB I-15/90	Guardrail	Guardrail length	\$	Extend guardrail on both sides at bridge
24 EB I-115 over WB/SB I-15/90	Bridges	Functionally Obsolete Structure	\$\$\$\$	Widen or install new bridge to current standards

Post-Option Development Workshop Butte Interstate Traffic Study - Phase 2

Minor and Safety Type Project List

Location	Project Type	Deficiency Corrected	Est.Cost	Project Description/Notes
Mainline Segment 2				
25 EB/NB and WB/SB I-15/90 @ Bridges & Curves	ITS	Functionally Obsolete Structure	\$\$	Install advisory warning signs with flashing beacons triggered by RWIS system
26 EB/NB and WB/SB I-15/90 @ Bridges	Maintenance	Functionally Obsolete Structure	\$\$	Insall anti-icing systems on each bridge
27 EB/NB I-15/90	Minor Earthwork	Clear Zone	\$\$\$	Perform grading to increase runoff area to proper clear zone width
28 WB/SB I-15/90	Minor Earthwork	Clear Zone	\$\$\$	Perform grading to increase runoff area to proper clear zone width
30 EB/NB and WB/SB I-15/90 Bridges (x2)	Bridges	Functionally Obsolete Structure	\$\$\$\$	Widen or install New bridge to current standards
Excelsior Avenue Interchange		.0		
31 WB I-115 @ major draiange crossing	Guardrail	Guardrail length	\$	Extend guardrail on both sides at CBC
32 EB I-115 @ major draiange crossing	Guardrail	Guardrail length	\$	Extend guardrail on both sides at CBC
33 Eastside of Excelsior Road	Sidewalk	Lack of Pedestrian facilities	\$\$	Construct a five foot sidewalk on the east side of Excelsior Rd from Access to residences (just west of EB Ramp Terminal to Platinum St)
Montana Street Interchange				
34 EB off/on-ramps and WB on-ramp	Access	Safety	\$-\$\$	Use curb to change/channelize shared frontage road and ramp, eliminating local access, modify business access as needed
35 EB off/on-ramps and WB on-ramp	Access	Access Control	\$	Eliminate on street parking within Access Control line
36 EB & WB off/on ramp terminals	Pedestrian	Safety	\$	Install ADA compatible curb ramps and cross walk markings
37 EB/NB & WB/SB I-15/90 over Montana Street	Guardrail	Guardrail length	\$	Extend guardrail on both sides at bridge
39 EB/NB & WB/SB I-15/90 over Montana Street	Bridges	Functionally Obsolete Structure	\$\$\$\$	Widen or install new bridge to current standards
Mainline Segment 3				
New Median Barrier	Guardrail	Safety	\$\$	Install a median barrier system
40 EB/NB at Oregon Avenue	Guardrail	Guardrail length	\$	Extend guardrail at bridge on outside lane to appropriate length
41 WB/SB at Lexington Avenue	Guardrail	Guardrail length	\$	Extend guardrail at bridge on outside lane to appropriate length
42 WB/SB between Lexington Ave & Oregon Ave	Minor Earthwork	Clear Zone	\$\$	Perform grading to increase runoff area to proper clear zone width
Harrison Avenue Interchange				
43 EB off-ramp & WB on-ramp (Loop ramps)	ITS	Ramp Geometry	\$\$	Install a Truck Rollover Detection System Speed Reduction system
44 EB on/off-ramps terminals at Harrison	Access	Ramp Geo/Turning Movements	\$\$	Remove/Change hotel sign and OH Sign and improve curb return radiuses, modify gas station access as needed.
45 Harrison Avenue	Maintenance	Safety	\$	Trim bushes along Harrison Avenue to improve sight lines near the EB on/off-ramp
46 Harrison Avenue & Amherst Avenue	Minor Roadway	Safety	\$\$\$-\$\$\$\$	Extend third through lane north from Cornell to Amherst as a right turn lane), modify parking lot of adjacent property as needed.
47 Ramp Terminals and Intersections	Pedestrian	Safety	\$\$	Install ADA compatible curb ramps and cross walk markings
48 WB/SB off-ramp near diverge	Maintenance	Safety	\$	Trim bushes near exit signs to improve visibility
New Restripe Harrison Avenue	Striping	Access/Safety	\$	Restripe Harrison back to 2-lanes with right turn lanes at specific locations. Improve turn radi with striping (Cornell to Mall entrance)

Post-Option Development Workshop

Butte Interstate Traffic Study - Phase 2

Minor and Safety Type Project List

	Location	Project Type	Deficiency Corrected	Est.Cost	Project Description/Notes
49	EB/NB & WB/SB I-15/90 over Harrison Avenue	Guardrail	Guardrail length	\$	Extend guardrail on both sides at bridge
50	EB/NB & WB/SB I-15/90 over Harrison Avenue	Bridges	Functionally Obsolete Structure	\$\$\$\$	Widen or install new bridge to current standards
	Mainline Segment 4			,	
New	Median Barrier	Guardrail	Safety	\$\$	Install a median barrier system
51	Median of I-15/90	Guardrail	Guardrail length	\$\$	Improve Median Guardrail
52	WB/SB at Sheridan Ave	Guardrail	Guardrail length	\$	Extend guardrail at bridge on outside and inside lane to appropriate length
53	WB/SB I-15/90 near draiange crossing	Guardrail	Guardrail length	\$	Extend guardrail at bridge on outside and inside lane to appropriate length
54	WB/SB (west of Sheridan Avenue)	Guardrail	Clear Zone	\$	Extend Guardrail to cover non-recoverable sideslopes
55	WB/SB (west of Sheridan Avenue)	Minor Earthwork	Clear Zone	\$\$-\$\$\$	Perform grading to increase runoff area to proper clear zone width
56	EB/NB (west of Sheridan Ave to Continental)	Guardrail	Clear Zone	\$	Extend Guardrail to cover non-recoverable sideslopes
57	EB/NB (west of Sheridan Ave to Continental)	Minor Earthwork	Clear Zone	\$\$-\$\$\$	Perform grading to increase runoff area to proper clear zone width
	East Butte Interchange				
58	SB I-15 off-ramp to EB I-90 (Loop ramp)	ITS	Ramp Geometry	\$\$-\$\$\$	Install a Truck Rollover Detection System Speed Reduction system Install advisory warning signs with flashing beacons triggered by RWIS
59	SB I-15 off-ramp to EB I-90 (Loop) & Mainline	ITS	Functionally Obsolete Structure	\$\$	system
60	EB/NB and WB/SB I-15/90 @ Bridges	Maintenance	Functionally Obsolete Structure	\$\$	Insall anti-icing systems on each bridge
61	WB/SB at Continental	Guardrail	Guardrail length	\$	Extend guardrail at bridge on outside lane to appropriate length
62	Ramps	Lighting	Safety	\$\$\$	Install new lights to bring interchange to a complete lighting standard
	Mainline Segment 5				
63	WB I-90 at Burlington St.	Guardrail	Guardrail length	\$	Extend guardrail at bridge on outside and inside lane to appropriate length
64	EB and WB I-90 (various locations)	Minor Earthwork	Clear Zone	\$\$	Perform grading to increase runoff area to proper clear zone width
	Continental Interchange				
65					

Notes:

\$ - less than \$50k

\$\$ - \$50k to \$250k

\$\$\$- \$250k to \$M

\$ - greater than \$1M