

Mainline Screening Matrix Legend

LEGEND		Mainline Highway Alternatives		
		Most Desirable	→	Least Desirable
		○	◐	●
QUANTITATIVE SCREENING ANALYSIS				
Congestion / Delay				
1	Minimize congestion on C-470 from Kipling to I-25.	all movements LOS D or better	any movement LOS E, but no movements LOS F	any movement LOS F
2	Provide a reasonable balance between arterial interchange operations and freeway operations.	optimal balance	acceptable balance	no balance
3	Minimize delay over a limited timeframe (peak period).	0 to 15 minutes	16 to 30 minutes	31 or more minutes
Reliability				
1	Provide predictable travel times.	either high LOS and high active management; or high LOS and some active management; or moderate LOS and high active management	either moderate LOS and some active management; or high LOS and no active management; or poor LOS and high active management	either poor LOS and no active management; or poor LOS and some active management; or moderate LOS and no active management
2	Manage capacity.	flexible capacity	some flexible capacity ; some fixed capacity	fixed capacity
3	Manage incidents.	more incident management	some incident management	no incident management
4	Provide reliable choices to most users.	Provides most choices to most users.	Provides moderate amount of choices to moderate amount of users.	Provides limited choices to limited users.
5	Inform users of system status.	more means to deliver information	some means to deliver information	no means to deliver information
Implementation				
1	Implement in a timely fashion.	no funding needed or presently can be funded	majority of funding identified	minimal funding identified
2	Minimize total project costs.	\$0 M - \$100 M (high end of range)	\$101 M - \$300 M (high end of range)	\$301 M or more (high end of range)
Environment				
1	Minimize impacts to adjacent bicycle and pedestrian trail system.	0 to 1.0 miles	1.1 to 2.0 miles	2.1 or more miles
2	Minimize noise impacts to the built environment.	0 to 20 receptors	21 to 40 receptors	41 or more receptors
3	Minimize traffic diversion on to local road network.	no to minimal diversion	some diversion	more diversion
4	Compatibility with local land use plans.	yes	in some places	no
5	Minimize visual impacts to neighboring communities.	no impact	minor impact	major impact
6	Minimize acquisition of additional Right of Way.	0 to 50 partial parcels ; 0 - 10.0 acres	51 to 100 partial parcels ; 10.1 to 20.0 acres	101 or more partial parcels ; 20.1 or more acres
7	Ensure conformity with regional air quality standards.	0 to 20 intersections	21 to 40 intersections	41 or more intersections
8	Minimize floodplain impacts.	meets FEMA regulations	---	does not meet FEMA regulations
9	Minimize impacts to wetlands and Waters of the U.S. (acres of wetlands)	0 to 2.3 acres total	2.4 to 6.8 acres total	6.9 or more acres total
	Minimize impacts to wetlands and Waters of the U.S. (acres of Waters of the U.S.)	0 to 2.3 acres total	2.4 to 6.8 acres total	6.9 or more acres total
10	Minimize impacts to critical water sources that degrade surface and ground water quantity and quality.	0 to 200 acres	201 to 400 acres	401 or more acres
11	Minimize impact to potential Threatened or Endangered habitat. (acres of Threatened or Endangered habitat)	0 to 4.1 acres	4.2 to 12.4 acres	12.5 or more acres
	Minimize impact to potential Threatened or Endangered habitat. (acres of Colorado Species of Special Concern habitat)	0 to 4.1 acres	4.2 to 12.4 acres	12.5 or more acres
12	Minimize encroachment on hazardous material sites. (value dependent on site type ; assumes reasonable mitigation is possible)	0 to 2 sites with high impact	3 to 5 sites with high impact	6 or more sites with high impact
13	Minimize impacts to cultural resources. (historical, archaeological, and paleontological)	no adverse impacts, or diminish integrity by indirect effects such as visual or noise impacts	alter resource or change character by a direct physical impact	obliteration of part of resource or relocation of resource to alternative site
14	Minimize impacts to recreation and parkland resources.	0 to 0.9 acres	1.0 to 3.0 acres	3.1 or more acres
15	Minimize impacts to riparian habitat.	0 to 5.5 acres total	5.6 to 16.4 acres total	16.5 or more acres total
16	Enhance the opportunity for wildlife movement across the corridor.	increases opportunities or decreases restrictions	no additional opportunities or restrictions	decreases opportunities or increases restrictions
17	Minimize impacts to minority and low-income populations.	no impact	minimal impact	moderate impact
18	Minimize economic impacts to local businesses and residencies.	no impact	minimal impact	moderate impact
Ease of Movement				
1	Provide <i>appropriate</i> access to C-470.	access to C-470 improves	access to C-470 does not change greatly	access to C-470 worsens
2	Provide <i>appropriate</i> access across C-470.	access across C-470 improves	access across C-470 does not change	access across C-470 worsens
3	Integrate multi-modal solutions.	convenient connections to much more efficient transit services	connections to some level of new transit service	no new transit service
4	Provide transportation choices to most users.	new transit choice within the C470 corridor for many users	some level of new choice within the C470 corridor	no new transit service
5	Provide a transportation system that is consistent with regional transportation plans.	consistent with intent of regional plans; may include new services	may include transit service changes outside of regional plans	includes services inconsistent with the intent of regional plans
Safety				
1	Address pavement condition deficiencies.	will rehabilitate deficient pavement areas	won't rehabilitate deficient pavement areas	worsens pavement condition from existing condition
2	Address existing mainline safety problems.	will meet all project design criteria	won't meet all project design criteria	won't meet any project design criteria