1 PRIORITIZATION GOALS

The goal of this stage in the process is to prioritize the potential projects such that the most effective and beneficial projects will be built first. The approach and results are described below.

2 THE LIST OF POTENTIAL CROSSINGS

Through the previous stage of the process, the design team developed a list of about 50 potential wildlife crossing locations that were organized into seven geographic groups, and qualitatively screened them down to 12 potential crossings (one overpass, eight underpasses, and using three existing interchanges as wildlife crossings). The screening process and the results were presented to the Raton Pass Steering Committee. Based on the evaluation and analysis from the Steering Committee, two additional locations (at MP 6.9 and 9.5), were retained for potential wildlife crossings to provide uniform spacing of crossings in the corridor, which is a common recommendation in prevailing wildlife mitigation literature (FHWA Wildlife Crossing Structure Handbook Design and Evaluation in North America, 2011).

During the screening process, it was not clear if a crossing at MP 1.6 or at MP 1.9 would be more favorable. The location at MP 1.6 will advance for the following reasons:

- McBride Creek drainageway is at MP 1.6. Creeks are landscape features that are used by wildlife.
- Heavy wildlife activity (tracks in the snow) was observed at MP 1.6 during a recent site visit.
- There is a planned Fishers Peak State Park equestrian training facility close to MP 1.9. The heavy human use could potentially deter wildlife from using a crossing at MP 1.9.

Similarly, during the screening, it was unclear whether a crossing at MP 8.0 or at MP 8.2 would be more appropriate. These two crossings were also discussed in a Steering Committee meeting. MP 8.2 was ranked higher in the screening matrix than MP 8.0 and provides more uniform spacing, so the crossing at MP 8.2 will advance.

Using the existing low-volume interchanges (Exits 2, 6, and 8) as wildlife crossings was advanced through the screening. While using a low-volume interchange as a wildlife crossing would reduce WVC's on I-25, it is not intended to be a long-term solution due to the potential interaction of the wildlife with vehicles in the interchange area, and the potential for traffic growth. In the same groups, near the interchanges, underpasses were advanced at MP 1.9, 5.6, and 8.2. This prioritization will evaluate the underpasses, as CDOT is seeking the ultimate long-term permanent solution for the corridor. Using the existing interchanges as wildlife crossings may be considered if there is insufficient funding to build the separate crossings.

The net result of the additions and eliminations described above is that nine crossings have advanced for prioritization, each spaced about a mile apart. The list is summarized in Table 2-1.

During the project development and screening process, the potential crossings were divided into seven geographic groups, depending on their proximity to the CSU hotspots. The groups were all about a mile long, except that group 7 was about two miles long. There were short gaps between most of the groups, but groups 2 and 3 overlapped with each other. To fairly compare the projects to each other, it was necessary to have the groups all similar in length. And to ensure a corridor-wide wildlife fencing plan with no gaps, it was necessary to eliminate all gaps between the groups. Therefore, the previous group limits have been modified so that each is

about a mile long and has a crossing near the middle of it, and there are no gaps between the groups. The revised list of crossings and groups is summarized in Table 2-1 below.

TABLE 2-1 – LIST OF CROSSINGS AND GROUPS

Group Number	Group Limits (by MP)	CSU Hotspot at MP	MP of crossing	Description of crossing
1	0 to 1.1	#10 at 0.6	0.4	Overpass
2	1.1 to 2.5	#6 at 2.1	1.6	Underpass
3	2.5 to 3.9	#8 at 2.6	3.3	Underpass
4	3.9 to 5.0	#4 at 4.5 and #11 at 4.7	4.5	Underpass
5	5.0 to 6.2	#7 at 5.6 and #9 at 6.0	6.1	Underpass
6	6.2 to 7.3	Not within ½ mile of a hotspot	6.9	Underpass
7	7.3 to 8.7	#3 at 8.0	8.2	Underpass
8	8.7 to 9.9	Not within ½ mile of a hotspot	9.5	Underpass
9	9.9 to 11.0	#5 at 10.5, #2 at 10.6, and #1 at 11.0	10.4	Underpass

Each line in Table 2-1 above represents a project. In addition to the crossing, each proposed project is a complete system of wildlife mitigation measures comprising:

- Fencing on both sides of I-25 through the limits of the group. Fencing should end at natural wildlife barriers such as steep slopes, boulder fields, cliff faces, or crossings, if possible. The exact location and termination points of the fence will be determined during final design.
- Escape ramps are assumed to be three per side per mile.
- Deer guards are included at driveways and where the fence crosses frontage roads.
- Dynamic warning systems at the ends of fencing.

In some of the groups, there are existing culverts (including concrete box culverts and corrugated metal pipes) aside from the proposed wildlife crossing. Some of the culverts are in the size range that they presently serve and will continue to serve as wildlife crossings for bears or mountain lions, but not for deer or elk. Some of the culverts need repair or maintenance and could be modified to enhance wildlife permeability. The fencing will tie into these existing structures.

Figure 2-1 on the next page shows the locations of the potential proposed new crossings and the limits of the groups.

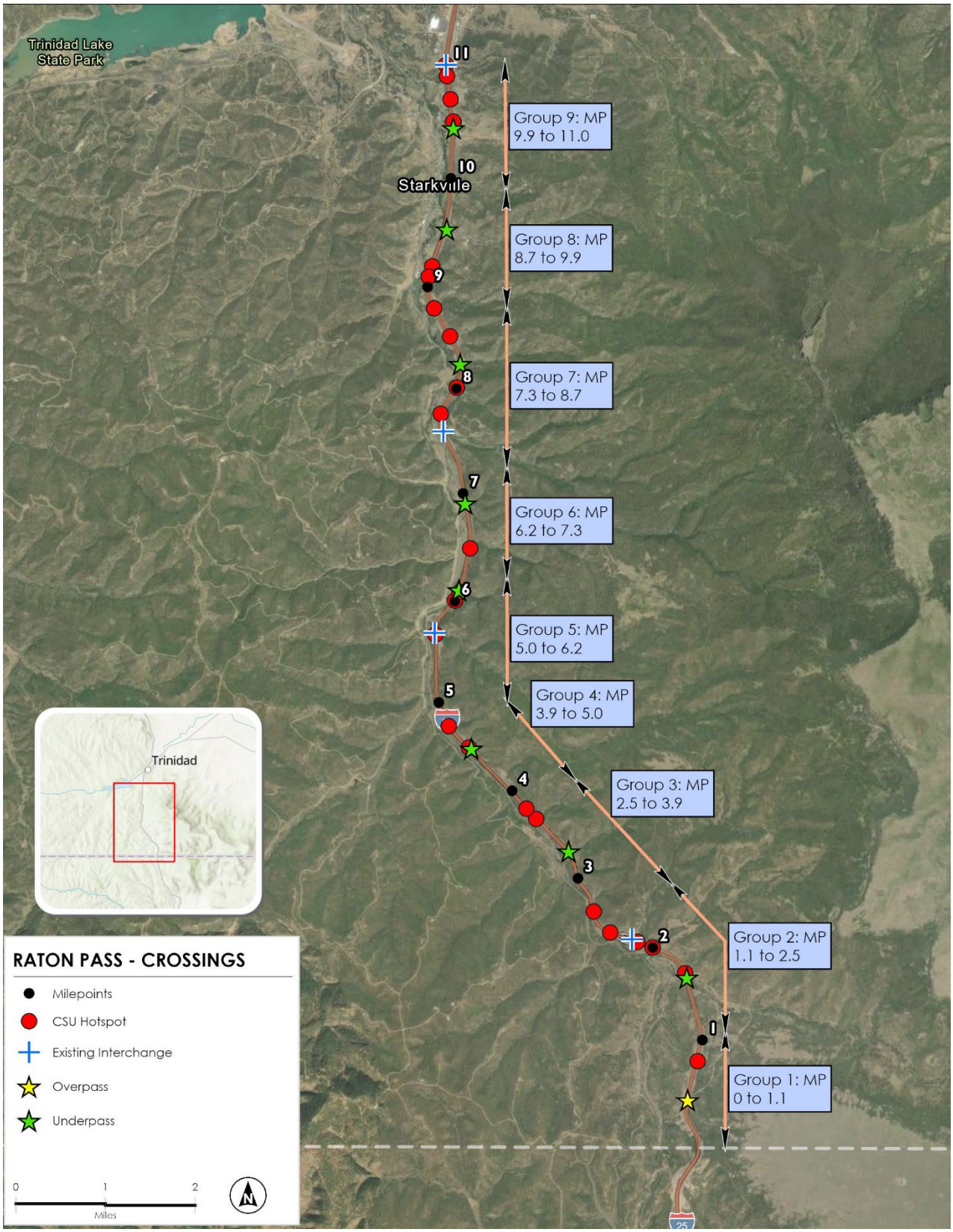
Trinidad Lake State Park
11
Group 9: MP 9.9 to 11.0
10
Starkville
Group 8: MP 8.7 to 9.9
9
Group 7: MP 7.3 to 8.7
8
7
Group 6: MP 6.2 to 7.3
6
Group 5: MP 5.0 to 6.2
5
Group 4: MP 3.9 to 5.0
Trinidad
4
Group 3: MP 2.5 to 3.9
3
2
Group 2: MP 1.1 to 2.5
1
Group 1: MP 0 to 1.1
RATON PASS - CROSSINGS
Milepoints
CSU Hotspot
Existing Interchange
Overpass
Underpass
0
1
2
Miles
N
25

FIGURE 2-1

3 PRIORITIZATION CRITERIA

The projects were compared to all the others in a matrix using the following criteria: WVCs, benefit/cost ratio, cost, environmental impacts, disruption to traffic, ROW impacts, maintenance access, and compatibility with development. Scores were color-coded and were assigned to each project for each criterion.

Because the goal of these proposed projects is to reduce wildlife/vehicle collisions (WVC's) in the most cost-effective way, weighting factors were added to WVC's, benefit/cost, and cost so they will influence the ranking more than factors such as right-of-way impacts or maintenance access.

Wildlife/Vehicle Collisions (WVC's) – weighting factor = 3
The number of WVC's within the group, from 2008 to 2023.

2	Over 28 WVCs.
1	20 to 28 WVCs.
0	Less than 20 WVCs.

Cost – Weighting factor = 2
Major items such as earthwork, pavement, structures, and fencing were calculated from a preliminary Civil3D design model. Other quantities were accounted for as percentages of the major items.

2	Under $10 million
1	$10 million to $15 million
0	Over $15 million

Benefit/Cost – weighting factor = 2
The monetary benefit of a wildlife crossing project is the savings due to reduced WVC's. To calculate the value of the benefits, two elements were considered:

- The human costs, which are property damage, injuries, and fatalities.
- The estimated value of the wildlife to society.

The value of the benefits is divided by the cost to get a benefit/cost ratio. Detailed explanation is provided in Section 3.

2	The benefit/cost is 0.28 or higher
1	The benefit/cost is between 0.15 and 0.28
0	The benefit/cost is less than 0.15

Environment
Based on field reconnaissance and database searches, potential impacts to resources such as wetlands, cultural and sensitive habitat were evaluated.

2	No environmental resources in the project area
1	Possible environmental resources in the project area
0	Very clear environmental resources in the project area

Disruption to traffic

Traffic will be disrupted during the construction of the wildlife crossings. The amount of disruption will depend on the phasing and traffic control methods used.

2	Extensive delays due to construction
1	Moderate inconvenience during construction
0	No delays

ROW Impacts

A conceptual model was developed in Civil 3D using Colorado Hazard Mapping LIDAR data as a base. A shape file of the existing ROW was acquired from Las Animas County and was referenced into the conceptual models. ROW impacts have been measured from the models.

2	The project has no ROW impact
1	The project has minor ROW impact
0	The project has significant ROW impact

Maintenance Access

Potential maintenance access to the proposed structures and projects was evaluated.

2	The location has existing maintenance access
1	The maintenance access must be constructed but would not impact ROW
0	Maintenance roads must be constructed and would result in additional ROW impacts

Compatibility with Development

This criterion considers how the crossing would be influenced by existing and planned development, especially the plan for Fishers Peak State Park.

2	The project is compatible with existing and known planned development.
1	The project has minor conflicts with existing or planned development.
0	Existing or planned development would make the crossing unfavorable for wildlife.

4 EVALUATION OF CRITERIA

The group numbers in the tables below are the same groups as defined in Table 2-1.

4.1 WVC's

Wildlife-vehicle collision data from two sources was used to assess the historic WVC's, both datasets cover from 2008 to the fall of 2023.

1. Colorado Parks and Wildlife/CDOT maintenance staff roadkill data.
2. Colorado State Patrol data,

Table 4-1 below summarizes the data in terms of crash type: property damage only (PDO), injury, or fatality. If the crash type was not documented, it was assumed to be PDO.

TABLE 4-1 – SUMMARY OF WVC'S BY PDO/INJURY/FATALITY

Summary of WVC's by PDO/Injury/Fatality

	Colorado State Patrol			CPW/ CDOT	Totals			
Group	PDO	Injury	Fatality	PDO	PDO	Injury	Fatality	All
1	11	1	0	11	22	1	0	23
2	24	2	0	5	29	2	0	31
3	13	2	0	8	21	2	0	23
4	10	1	0	1	11	1	0	12
5	19	1	0	9	28	1	0	29
6	9	0	0	12	21	0	0	21
7	17	2	0	10	27	2	0	29
8	11	3	0	13	24	3	0	27
9	25	3	0	14	39	3	0	42
Totals	139	15	0	83	222	15	0	237

Table 4-2 below summarizes the wildlife-vehicle collision data according to the species. The totals match Table 4-1 and have been color-coded to indicate how they were ranked in the matrix. The colors are defined in Section 3.

TABLE 4-2 – SUMMARY OF WVC'S BY ANIMAL SPECIES

Summary of WVC's by Animal Species

	Colorado State Patrol					CPW/CDOT					Totals					
Group	Deer	Elk	Bear	Lion	Other	Deer	Elk	Bear	Lion	Other	Deer	Elk	Bear	Lion	Other	Total
1	8	1	2	0	1	7	0	3	0	1	15	1	5	0	2	23
2	9	5	9	2	1	1	2	2	0	0	10	7	11	2	1	31
3	7	2	3	2	1	2	2	1	0	3	9	4	4	2	4	23
4	7	1	1	2	0	0	0	0	1	0	7	1	1	3	0	12
5	14	3	1	1	1	3	2	4	0	0	17	5	5	1	1	29
6	4	2	2	1	0	3	4	3	0	2	7	6	5	1	2	21
7	12	2	5	0	0	4	4	1	0	1	16	6	6	0	1	29
8	9	2	2	1	0	5	3	4	0	1	14	5	6	1	1	27
9	25	2	1	0	0	7	4	3	0	0	32	6	4	0	0	42
Totals	95	20	26	9	4	32	21	21	1	8	127	41	47	10	12	237

The WVC's in Group 9 are mostly deer, and the number is significantly higher than the other groups. This may be caused by a couple of factors: Raton Creek is very close to I-25 through the southern half-mile of Group 9, and there is a white-tailed deer concentration area to the west of I-25 just north of Exit 11.

Group 2 had the secon-highest number of WVC's, spread rather evenly between bears, elk and deer.

The WVC's in Group 1 at the state line are average compared with all the other groups. The data was collected before New Mexico constructed the wildlife fence. With the fence now in place up to the state line, wildlife may cross I-25 north of the end of the fence. One of the goals of Phase 2 of the CSU Pueblo study is to evaluate how the fence affects WVC's in Group 1; this potential effect should continue to be monitored.

4.2 Cost

A conceptual cost estimate was developed for each group. The cost estimates include:

- The structure, earthwork, and pavement, which were all measured from conceptual Civil3D models, which were developed on aerial imagery and existing terrain data from the Colorado Hazard Mapping and Risk Map Portal.
- Wildlife fencing through the limits of the group, along with deer guards and escape ramps. Driveways and frontage roads were counted in each group to estimate the number of deer guards. Escape ramps were assumed at three per mile per side.
- Guardrail, repairs to existing structures, traffic control, and other minor items such as clearing and grubbing, removals, landscaping, drainage, signing, and pavement marking were counted as percentages of the major items.

The total estimated costs for each group are summarized in the Table 4-3 and have been color-coded, as defined in Section 3, to indicate how they were ranked in the matrix.

TABLE 4-3 – COST SUMMARY

Group	MP of Crossing	Description of Crossing	Construction Cost Estimate
1	0.4	Overpass	$24,323,070
2	1.6	Underpass	$9,936,074
3	3.3	Underpass	$7,968,480
4	4.5	Underpass	$7,458,528
5	6.1	Underpass	$8,857,407
6	6.9	Underpass	$7,691,911
7	8.2	Underpass	$8,322,755
8	9.5	Underpass	$13,462,494
9	10.4	Underpass	$12,405,755

The overpass in Group 1 is very expensive because even though the location is topographically appealing for an overpass, the structure would be very long, and overpass structures are generally more costly than underpasses.

The underpasses in Groups 8 and 9 cost more than the underpasses in the other groups because in addition to crossing under I-25, they also cross under the frontage road east of I-25.

4.3 Benefit/Cost

The monetary benefit of a wildlife crossing project results from the savings due to the reduced WVCs. Two elements were considered in the calculation of benefits: 1) human cost, which includes property damage, injury or fatality, and 2) the value of wildlife.

The goal of the benefit/cost analysis in this study is to compare the potential projects to each other, so anything that would affect all the projects the same, such as inflation, depreciation, and traffic growth, was disregarded. The benefit calculations assume the following:

- A 75-year life span. This matches the typical design life of structures.
- The number of future WVCs was calculated by taking the yearly average from 2008 to 2023 multiplied by 75 years.
- Elk are valued at $2,537 each and other species are valued at $2,178 each.
- The cost of crashes is valued according to the CDOT Traffic & Safety Engineering Branch, 2023.

Crash Severity	Value
PDO	$11,100
Injury	$101,800
Fatality	$1,820,600

- Fencing was assumed to be 100% effective to reduce WVCs, regardless of its length. According to the BCA Tool, fencing that is less than 5 kilometers (3.1 miles) in length is 52.7% effective and segments over 5 kilometers in length are 87.0% effective. All the segments of fencing in this study are less than 3.1 miles, so they will all reduce WVCs by 52.7%. Since the effectiveness factor would reduce the benefits of all the projects the same, it was ignored.

The benefit/cost ratio is simply the estimated benefit divided by the construction cost estimate. The projects with high benefit/cost ratios offer the best benefit to reduce WVC's relative to their construction cost. Table 4-4

summarizes the results, which are colored, as defined in Section 3, to indicate how the groups were ranked in the matrix.

TABLE 4-4 – BENEFIT/COST SUMMARY

Group	MP of Crossing	Description of Crossing	Estimate of Benefit	Construction Cost Estimate	Benefit/Cost
1	0.4	Overpass	$1,887,141.00	$24,323,070	0.08
2	1.6	Underpass	$2,755,635.00	$9,936,074	0.28
3	3.3	Underpass	$2,246,045.00	$7,968,480	0.28
4	4.5	Underpass	$1,212,141.00	$7,458,528	0.16
5	6.1	Underpass	$2,267,565.00	$8,857,407	0.26
6	6.9	Underpass	$1,311,296.00	$7,691,911	0.17
7	8.2	Underpass	$2,632,160.00	$8,322,755	0.32
8	9.5	Underpass	$2,964,363.00	$13,462,494	0.22
9	10.4	Underpass	$3,895,618.00	$12,405,755	0.31

Depending on the project, and funding agency, a more detailed benefit calculation will likely be warranted as part of a future grant application and must be done according to the requirements of the funding agency.

The results of the benefit/cost analysis generally mirror the WVC analysis. Groups 2 and 9 have high WVC's and they also have relatively high benefit/cost ratios. Group 1 has a very low benefit/cost ratio because it is an expensive structure and there was only an average number of WVC's in that area.

4.4 Environment

Environmental resources were documented during a site reconnaissance visit and through completing resource database searches. The resources are summarized in Table 4-5.

As described in Section 3, a score of 1 (yellow) in Table 4-5 indicates that either a wetland or a cultural resource is possibly present in the project area. The data is not accurate enough to assess whether the construction would directly impact the environmental resources. That assessment will be done as part of final design.

TABLE 4-5 – ENVIRONMENTAL RESOURCES

Group	MP of Crossing	Environmental concerns	Matrix score
1	0.4	None	2
2	1.6	None	2
3	3.3	Possible wetlands. Historical archaeological site west of I-25	1
4	4.5	Possible wetlands.	1
5	6.1	Possible wetlands.	1
6	6.9	Possible wetlands. Archaeological resource west of I-25	1
7	8.2	Archaeological site east of I-25	1
8	9.5	Archaeological sites west of I-25	1
9	10.4	Archaeological sites east and west of I-25	1

4.5 Disruption to Traffic

There are existing crossovers at MP 3.5 and 10.35. A crossover is an area where the median is paved so that northbound traffic can switch over the southbound side and vice versa. All projects between these crossovers (groups 4 through 8) can be built half at a time with opposing traffic running head-to-head on either side. For example, during the first phase of construction, northbound traffic would switch over to the southbound side using the crossover at MP 3.5, and traffic would run head-to-head until the other crossover at MP 10.35. The east half of the underpass can be built with no traffic on the road. During the second phase of construction, southbound traffic would switch to the northbound side and the west half of the underpass would be built. Drivers wanting to use Exits 6 and 8 during construction may have to go past their exit and turn around. Prior to using this head-to-head configuration, guardrail must be modified to accommodate the wrong-way traffic. Upon completion of the project, the guardrail must be returned to normal.

One-lane detours or new crossovers must be built to accommodate traffic when building wildlife crossings outside the limits of the existing crossovers (groups 1, 2, 3, and 9). Whether a one-lane detour or crossover is used, traffic would be constricted down to one lane each way for the duration of construction, which is the same disruption as using the existing crossovers. Therefore, the disruption to traffic will be about equal for all the crossings.

The difference will be the additional cost to build the new crossover or shoofly detour, which has been accounted for in the cost estimates.

4.6 ROW Impacts

The ROW impacts were measured from the Civil 3D models, and the results are summarized in the Table 4-6 along with the color-coded matrix scores, which are defined in Section 3.

The areas in Table 4-6 indicate the amount of ROW that would need to be purchased by CDOT to build and maintain the wildlife crossing. Temporary, permanent, or conservation easements were not considered.

The overpass in Group 1 requires a significant amount of ROW because a slope down to the west would be needed to tie the overpass into the existing ground, and the top of the cut slope to the east, where the overpass ties into, is outside of CDOT's current ROW.

TABLE 4-6 – ROW IMPACTS

Group	MP of Crossing	ROW impact (square feet)	Matrix score
1	0.4	30,685	0
2	1.6	None	2
3	3.3	None	2
4	4.5	None	2
5	6.1	1000	1
6	6.9	1750	1
7	8.2	None	2
8	9.5	None	2
9	10.4	4520	1

4.7 Maintenance Access

After the wildlife crossings are built, CDOT maintenance crews will need to access them for maintenance. The maintenance access for each wildlife crossing was evaluated on the Civil 3D models and aerial imagery. In some cases, there is an existing frontage road at the proposed wildlife crossings. In other cases, a short maintenance access road will need to be built. In these cases, they are part of the Civil3D models and are included in the ROW impacts.

All the proposed wildlife crossings have feasible maintenance access, so none received a zero in the matrix. The locations and scoring are shown in the table below.

TABLE 4-7 – MAINTENANCE ACCESS

Group	MP of Crossing	Description of maintenance access	Matrix score
1	0.4	Existing road on east side	2
2	1.6	Maintenance access must be built into embankment	1
3	3.3	Existing road on west side	2
4	4.5	Maintenance access could be built on east side with no ROW impact	1
5	6.1	Maintenance access could be built on east side with no ROW impact	1
6	6.9	Maintenance access could be built on east side with no ROW impact	1
7	8.2	Existing frontage road on east side	2
8	9.5	Existing frontage roads on both sides	2
9	10.4	Maintenance access from driveway to the north	2

4.8 Compatibility with Development

Development of the land near a wildlife crossing may deter animals from using the crossing. The analysis considered existing and known planned development, including the Fishers Peak State Park plan. Only planned development adjacent to I-25 was considered. As described in Chapter 3, the Santa Fe Trail Ranch, spans the western side of I-25 between MPs 0 and 8.5. The lots are all 35 acres or greater to preserve ranching use and atmosphere. Human activity levels in the Santa Fe Trail Ranch are relatively low; therefore, this area was generally not considered a negative factor.

TABLE 4-8 – EXISTING OR PLANNED DEVELOPMENT

Group	MP of Crossing	Description of existing or planned development	Matrix score
1	0.4	None	2
2	1.6	None	2
3	3.3	None	2
4	4.5	None	2
5	6.1	None	2
6	6.9	None	2
7	8.2	None	2
8	9.5	Proposed trailhead	1
9	10.4	Existing development to the west	1

5 PRIORITIZATION MATRIX

5.1 Matrix

The potential projects were scored and then ranked according to the criteria described in Section 3. The projects are ranked 1 through nine, with one being the most favorable. They are ranked according to the weighted score. In the case of a tie, then the project with the higher benefit/cost ratio is ranked higher. The rankings are color-coded so dark green is the highest priority and light green is the lowest.

TABLE 5-1 – PRIORITIZATION MATRIX

				Prioritization Criteria												
			Weight	3	2	2	1	1	1	1	1					
Group	Limits of Group and Fencing (MP)	MP of crossing	Description of crossing	WVC's	Cost	Benefit/Cost	Environment	Disruption to traffic	ROW Impacts	Maintenance Access	Compatibility with development	Score	Weighted score	B/C Ratio	Cost	**Rank**
1	0.0 to 1.1	0.4	Overpass	1	0	0	2	1	0	2	2	8	10	0.08	$ 24,323,070	**9**
2	1.1 to 2.5	1.6	Underpass	2	2	2	2	1	2	1	2	14	22	0.28	$ 9,936,074	**2**
3	2.5 to 3.9	3.3	Underpass	1	2	2	1	1	2	2	2	13	19	0.28	$ 7,968,480	**3**
4	3.9 to 5.0	4.5	Underpass	0	2	1	1	1	2	1	2	10	13	0.16	$ 7,458,528	**8**
5	5.0 to 6.2	6.1	Underpass	2	2	1	1	1	1	1	2	11	18	0.26	$ 8,857,407	**5**
6	6.2 to 7.3	6.9	Underpass	1	2	1	1	1	1	1	2	10	15	0.17	$ 7,691,911	**7**
7	7.3 to 8.7	8.2	Underpass	2	2	2	1	1	2	2	2	14	22	0.32	$ 8,322,755	**1**
8	8.7 to 9.9	9.5	Underpass	1	1	2	1	1	2	2	1	11	16	0.22	$ 13,462,494	**6**
9	9.9 to 11.0	10.4	Underpass	2	1	2	1	1	1	2	1	11	18	0.31	$ 12,405,755	**4**

5.2 Summary

Group 1

The overpass in Group 1 is the most expensive project of all, costing almost twice as much as the next lowest group. Moreover, it does not have a very high number of WVC's to merit such an expensive wildlife crossing, so its benefit/cost ratio is very low. The New Mexico Department of Transportation recently completed the fence up to the state line, which may increase the number of WVC's, and make this wildlife crossing location more favorable in a future analysis. Phase 2 of the CSU Pueblo study will count the number of WVC's in the area now that the fence in New Mexico is complete.

Group 2

Group 2 is tied for first place per the weighted score but was ranked in 2nd place because it has a slightly lower benefit/cost ratio than the 1st place Group 7. Group 2 has 31 WVC's whereas Group 7 has 29, so really the two groups are equal in almost every way, and either one would be a good top priority. The crossing in this group is in the McBride Creek drainageway. This group has the second-highest number of WVC's of all the groups, and the highest number of bear collisions of all the groups. Exit 2 is in this group and it could be used as a wildlife crossing if funding is not available to build the wildlife underpass. However, using the interchange as a wildlife crossing is not intended to be the final long-term plan.

Group 3

Group 3 is ranked 3rd. It has an average number of WVC's compared to the other groups and ranks favorably in most of the criteria. Given that Groups 2 and 3 are adjacent to each other, rather than building two closely spaced crossings, CDOT may consider building a crossing at either Group 2 or Group 3 until the whole corridor is fenced, and crossings have been added at a few other high-priority groups like Groups 9 (ranked 4th) or Group 5 (ranked 5th).

Groups 4, 6, and 8

Groups 4, 6, and 8 are all ranked low because they have a low number of WVC's, and thus also have low benefit/cost ratios. CDOT may consider initially fencing across these groups, tying into existing structures, and building the wildlife crossings in the future as the last projects in the corridor. Groups 6 and 8 were added to provide more uniform spacing and are not within a half-mile of any hotspot.

Group 5

Group 5 has a relatively high number of WVC's. However, its cost was relatively high compared to the other underpasses, so it had an average benefit/cost ratio. It also had some minor ROW impacts required to build maintenance access, so the ROW and maintenance access categories both received scores of 1. Exit 6 is in this group and it could be used as a wildlife crossing if funding is not available to build the wildlife underpass. However, using the interchange as a wildlife crossing is not intended to be the final long-term plan.

Group 7

This location and Group 2 have the same weighted score, but the benefit/cost ratio is slightly better in Group 7, so it is ranked first. Group 2 also has two more WVC's than Group 7, so either group could be considered the top priority. Exit 8 is in this group and it could be used as a wildlife crossing if funding is not available to build the wildlife underpass. However, using the interchange as a wildlife crossing is not intended to be the final long-term plan.

Group 9

Group 9 had 42 WVC's whereas the next highest group 2 had 31 WVC's. Due to the limited number of scoring options, the extremely high number of WVC's was not captured in the matrix. Therefore, even though this group is ranked 4th, CDOT could consider prioritizing this group to address the highest number of WVC's.

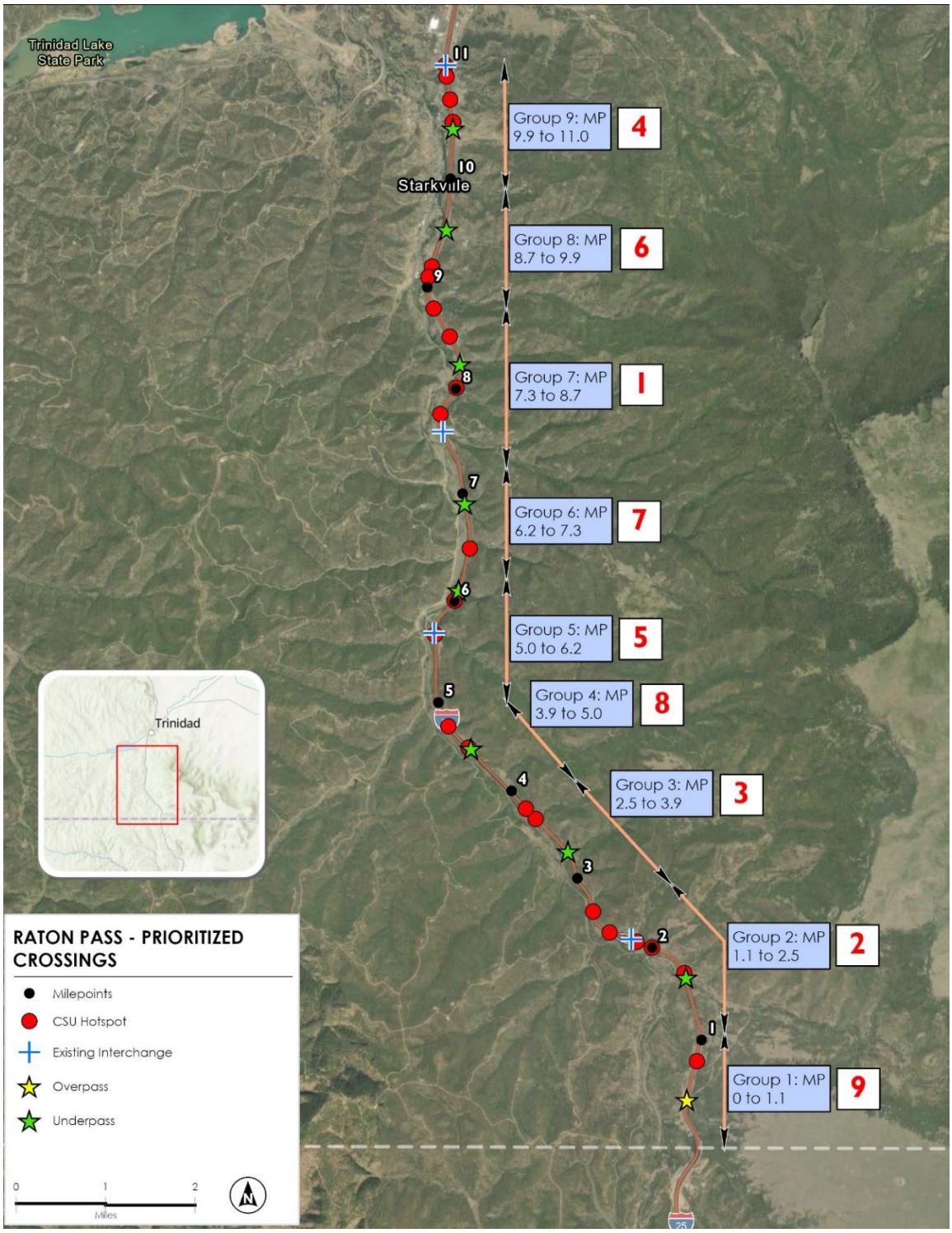

FIGURE 5-1

Figure 5-1 is the same as Figure 2-1 except that it has the rankings listed in large red numbers next to each group. The map provides a visual geographical reference to see the spacing and prioritization of all the groups. The wildlife crossings are shown as starts and the existing interchanges are shown as plus signs.