Peavine Trail/Road 39 Public Comment Summary

Following the September 24, 2009 Peavine Trail Crossing Alternative presentation at the Prescott Armory, the public was given the opportunity to provide the city with comments regarding the "Peavine Trail Crossing Design Report" and recommendations dated September 23, 2009. The report was distributed at the September 24th meeting and was also available for download on the City of Prescott website. The public comment period was open between September 24 and October 30, 2009. At the request of the city, Lyon Engineering has assembled the comments and prepared this summary recitation to be included as an appendix in the final report. All of the comments have been inserted into this document in their original form, and have been read by both City of Prescott and Lyon Engineering staff. Below is a list of the categories used to help catalog the comments as to their subject nature.

Safety (8):

Several of the comments were placed under the "safety" category due to statements regarding the wellbeing of the trail users. All of the comments in this category favor a grade-separated option over an at-grade option because of the perception that the at-grade option is less safe than the other alternatives. Some comments showed concern for young children and a potential inability for them to safely navigate an at-grade crossing option.

Functional Design Criteria (19):

Many of the comments provided input regarding the actual design parameters, trail users, and constraints that should be considered in the design of the crossing. Although all of the comments in this category supported a grade-separated crossing alternate, there was a wide range of input regarding the appropriate grade-separated alternative to be implemented.

Community Asset (11):

This group of comments expresses the importance of the Peavine Trail to the trail users and the community as a whole. The Peavine is a National Recreation Trail, and is perceived to be a valuable community asset in the comments. Some of the comments state the importance of preservation the trail's character when selecting a crossing solution. Other comments focus on the financial value of the trial to the surrounding developers and community. Some comments state that the trail adds to property values and adds to the tax revenues collected by the City of Prescott due to tourism.

Revised Matrix and Analysis of Report Contents (3):

The comments located in this category conducted a critique of the report and/or matrix contents, and provided a revised analysis based on their interpretation of the available information. All of the comments in this category recommend a grade-separated crossing as the preferred alternative.

Miscellaneous Comments and Correspondence (4):

The comments and correspondence in this category do not fall into any of the other general categories listed above. Some of the comments list an opinion, but do not go into detail regarding the reasons for the alternate desired. Other items in this category are general correspondence that does not provide an opinion regarding a desired alternate.

Safety

Attention: Scott Tkach
Dear Mr. Tkach, Thank you for accepting comments from the public regarding the Peavine crossing. I appreciate your commitment to the citizens. I would like to comment on three points: safety, economic impact, and health. Safety is a primary concern for all Prescott citizens. Since the September presentation of the Peavine Crossing Study, I have been paying close attention to various users of the Peavine Trail. I share the Peavine with about 20 other people during my 1 hour bike ride out and back on the trail. I believe that a separated grade crossing is warranted for adequate safety of all trail users, but there are a few users for whom an at-grade crossing (even with a refuge zone) would be grossly unsafe. These users include groups of children supervised by a few adults as exemplified by a young family or the local Girl Scout Troop of 16 girls and 3 adults. Another user is the adult riding a bike towing trailer containing small child. The trailer is a little over 4.6 feet long in addition to 5 foot length of the bike. An at-grade refuge could not safely accommodate these users. My second point is regarding economic impact. Please see this link http://americantrails.org/resources/economics/index.html for a myriad of studies and articles regarding positive economic impact to communities who support trails. People who use trails consume food and drink, purchase recreation clothing, stop for lunch and coffee along the trail, and need lodging if they are from out of town. This benefits not only the community, but also commercial development near the trail and trailheads. My final comment is about health and well-being of a community. According to the demographics cited on the City of Prescott website at http://www.cityofprescott.net/_d/demographics_20.pdf of citizens within a 20-mile radius, 28% were aged 60 and over in 2008 with a projection of 30% aged 60 and over by 2013. Physical activity is a major contributor to "aging well." The booklet "Growing Smarter, Living Healthier: A Guide to Smart Growth and Active Aging" published by the EPA Aging Initiative defines Active Aging concepts as "activities that increase endurance, strength, flexibility, balance, and the principles of injury prevention." These concepts may be included in community design and development with parks and trails that encourage walking, biking, and active use so that people of all ages may get exercise. I urge you and others making the decision regarding the Peavine crossing to consider these comments. Elders and children are the "canaries in the coal mine" of a community. If we make Prescott a safe and healthy place for our oldest and our youngest, we will all benefit. Thank you again for reading my comments. I look forward to enjoying Prescott for many years in the future. Sincerely, Susie Hehlen 1380 E Valley View Rd Prescott AZ 771-8182

From: Susie Hehlen

Attention: Scott Tkach
1. I am appalled that the City of Prescott would allow ANY road crossing of this trail. Just say NO. Have some guts to do the right thing. 2. Since this is Prescott, I'm sure you will be saying YES. Given that , PLEASE pay for a crossing that completely optimzes continued safe use of the trail for equestrians, bicycles, family groups with young children, etc. This is not a time to be cheap. You can't re-create natural spaces once they have been obliterated by "progress". Thank you for taking my comments.

From: Allison Dixon

Attention: Scott Tkach
There is no doubt in my mind that Options 2 through 4 with trail users being separated from traffic are the only one that should be in consideration for this crossing or any future crossings. This decision sets the precedence, so the possibility of five at-grade crossings relatively close together is very disturbing. I ask that you do what\'s best for our quality of life and send a strong message that those that come after need to respect the public users who came first and develop accordingly. No matter the safety

mechanism in place for an at-grade crossing, the known impatiences and carelessness of motorized traffic combined with their ability to do major bodily harm is insufficient to retain the health, well being and user experience that Peavine recreationalists deserve. Jim Craig

From: James Craig

Attention: Scott Tkach

Please consider my comments on the Peavine/Road 39 crossing issue. As a citizen of Prescott, it is my opinion that any actions that may impact the Peavine Trail deserve greater care than usual, owing to the Peavine Trail's status as an asset to the community, and for the amount of investment our community has poured in to this facility. As a member of the Prescott Bicycle Advisory Committee, my perspective is skewed towards insuring the safety of our bicyclists and pedestrians. In short, I believe that any of the "separated grade crossings" would prove superior in protecting the safety of our trail users. I do believe that it would be possible to construct a reasonably safe "at grade crossing", but I don't think the provisions described in "Option One" go far enough in protecting the trail users. Among the problems I see, are that it not a crossing that is controlled by a signal. Cross traffic does not have to stop, or even slow when approaching the crossing, and there is no indication pedestrians as well as equestrians will be crossing at the location. The bike route and striped crosswalk may only give trail users a false sense of security, and actually encourage them to take a greater risk when attempting to cross the road. I believe design tools exist to make an at grade crossing much safer than proposed. Add a personal opinion on aesthetics, and my choice would be "Option Two" as safest and best. Sincerely, Jim Knaup

From: Jim Knaup

Attention: Scott Tkach

As a 16 plus year resident of Prescott and volunteer who worked on making the Peavine trail a premier destination for trail and bicycle visitors and residents alike, I am disappointed in the preferred recommendation for the at-grade crossing at Road 39 and any other future crossings in the development. This community asset was here long before any development was ever envisioned in this area. The criteria for minimizing impact to this recreational trail should have been in place so that all future property owners would know that they would be responsible for creating grade separated crossings that will keep the trail user experience intact. Although there are many safety enhancement design variations for an At-Grade Crossing, the non-urban settings with the elderly or children on bikes creates a dangerous situation for the pedestrian not represented by the general national pedestrian/vehicular accident statistics. This area is zoned for up to 65% residential which could mean a much greater volume of Peavine pedestrian use than the current south end where there is not a close residential component. I also doubt the ability of drivers to slow down in a timely fashion so accidents are minimized. This is a liability nightmare waiting to happen and though the at-grade cost is cheaper, the long term cost is not only monetary but perhaps at the expense of a human life. The liability is greatly reduced using a grade seperated road crossing. The four other separated-Grade crossing using a pedestrian overpass bridge or pedestrian box culvert will safely and completely separate the vehicular and pedestrian cross traffic. This eliminates the risk of a pedestrian/vehicular collision and create a more positive experience for both the vehicle and trail users. This is a road project with funding available to do the right thing and going for the at-grade choice sends a message that our quality of life is not second class to that of the convenience of drivers and the whims of the proposed development plan. It violates the intent of the city's general master plan. We the taxpayers should not be bearing the majority of this ingress and egress cost into a private development. The developer should be bearing the difference. Why was this not made part of the initial PAD? Of all the studies and statistics that your consultant

placed before you the biggest most obvious omission is is the lack of input by the actual people who will be the most greatly affected. A survey should have been part of the RFP process when you hired Lyon engineering. Why was it not? Public meetings have been lacking in their inability ability to really ask questions and have any menaingful dialoge. The City of Prescott services departments and citizens all agreed that the Peavine Trail portions owned by the City, would be constructed and maintained to provide a single safe and pleasant experience. This has always been identified as a special and unique area, which Prescott would provide to the residents, visitors, and tourists as a destination for families, the elderly, and those with disabilities. I am asking that grade separated options 2, 3 and 4 be considered acceptable with the choice of Option 2 being the preferred design for the greatest benefit. Safery should come before construction dollar costs. Respectfully, Charlene Craig

From: Charlene Craig

Attention: Scott Tkach
I am a runner (one of Gerald Brownlowe's runners)and I use the Peavine Trail regularly. It and Thumb Butte are top tourist and resident attractions. As a runner, safety is paramount. I can't imagine the City selecting an alternative that didn't provide the highest level of safety. In the 10 years that I have used the trails I have observed thousands of users of all ages and capabilities from the very young on bikes with training wheels to the very old. Peavine has been an ideal trail because of its safety. Please don't consider compromising safety for cost or aesthetics.

From: Lucy McMillan

Attached are national 2007/2008 fatality data for pedestrians and bikes. Some information may be helpful to support safety issues for the Peavine.
From: Rob Hehlen

NOTE: THE ATTACHMENT INCLUDED IN THE CORRESPONDENCE ABOVE IS SHOWN ON THE FOLLOWING PAGE

NHTSA
www.nhtsa.gov

DOT HS 810 994

Pedestrians

"In 2007, 4,654 pedestrians died in traffic crashes — a 13-percent decrease from the number reported in 1997."

A pedestrian is defined as any person not in or upon a motor vehicle or other vehicle.

In 2007, 4,654 pedestrians were killed in traffic crashes in the United States — a decrease of 13 percent from the 5,321 pedestrians killed in 1997.

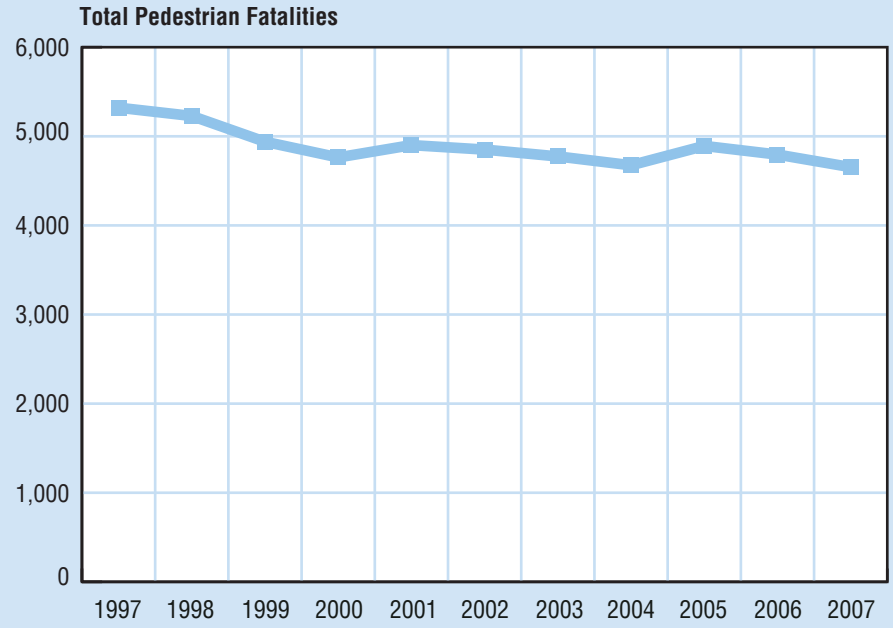
On average, a pedestrian is killed in a traffic crash every 113 minutes and injured in a traffic crash every 8 minutes.

There were 70,000 pedestrians injured in traffic crashes in 2007.

Most pedestrian fatalities in 2007 occurred in urban areas (73%), at non-intersection locations (77%), in normal weather conditions (90%), and at night (67%).

More than two-thirds (70%) of the pedestrians killed in 2007 were males. In 2007, the male pedestrian fatality rate per 100,000 population was 2.19 — more than double the rate for females (0.91 per 100,000 population). In 2007, the male pedestrian injury rate per 100,000 population was 26, compared with 20 for females (see Table 5).

Figure 1
Total Pedestrian Fatalities by Year 1997-2007



Age

Pedestrians (age 70+) accounted for 16 percent (721) of all pedestrian fatalities and an estimated 6 percent (4,000) of all pedestrians injured in 2007.

"In 2007, the fatality rate for pedestrians (age 70+) was 2.66 per 100,000 population – higher than for any other age group."

In 2007, one-fifth (20%) of all children between the ages of 5 and 9 who were killed in traffic crashes were pedestrians. Children age 15 and younger accounted for 8 percent of the pedestrian fatalities in 2007 and 23 percent of all pedestrians injured in traffic crashes.

"In 2007, nearly one-fifth of the children between the ages of 5 and 9 killed in traffic crashes were pedestrians."

Table 1

Pedestrians Killed and Injured by Age Group, 2007

Age Group (Years)	Total Killed	Pedestrians Killed	Percentage of Total Killed
<5	508	106	21
5-9	470	93	20
10-15	1,044	155	15
16-20	5,338	287	5
21-24	4,530	296	7
25-29	3,932	341	9
30-34	2,864	265	9
35-39	3,022	354	12
40-44	3,060	400	13
45-49	3,261	469	14
50-54	2,869	447	16
55-59	2,384	306	13
60-64	1,717	188	11
65-69	1,334	182	14
70-74	1,268	200	16
75-79	1,247	192	15
80+	2,083	329	16
Unknown	128	44	34
Total	**41,059**	**4,654**	**11**

Age Group (Years)	Total Injured	Pedestrians Injured	Percentage of Total Injured
<5	56,000	2,000	4
5-9	65,000	5,000	7
10-15	108,000	9,000	8
16-20	391,000	8,000	2
21-24	267,000	6,000	2
25-29	256,000	6,000	2
30-34	214,000	4,000	2
35-39	194,000	3,000	2
40-44	182,000	5,000	3
45-49	192,000	6,000	3
50-54	155,000	4,000	3
55-59	126,000	3,000	2
60-64	89,000	2,000	2
65-69	66,000	2,000	2
70-74	47,000	1,000	2
75-79	41,000	1,000	3
80+	42,000	2,000	5
Total	**2,491,000**	**70,000**	**3**

The above numbers are not actual counts, but estimates of the actual counts. The estimates are calculated from data obtained from a nationally representative sample of crashes collected through NHTSA's General Estimates System (GES). Estimates should be rounded to the nearest 1,000.

Estimates less than 500 indicate that the sample size was too small to produce a meaningful estimate and should be rounded to 0.

Table 2
Nonoccupant Traffic Fatalities, 1997-2007

Year	Pedestrian	Pedalcyclist	Other	Total
1997	5,321	814	153	6,288
1998	5,228	760	131	6,119
1999	4,939	754	149	5,842
2000	4,763	693	141	5,597
2001	4,901	732	123	5,756
2002	4,851	665	114	5,630
2003	4,774	629	140	5,543
2004	4,675	727	130	5,532
2005	4,892	786	186	5,864
2006	4,795	772	185	5,752
2007	4,654	698	152	5,504

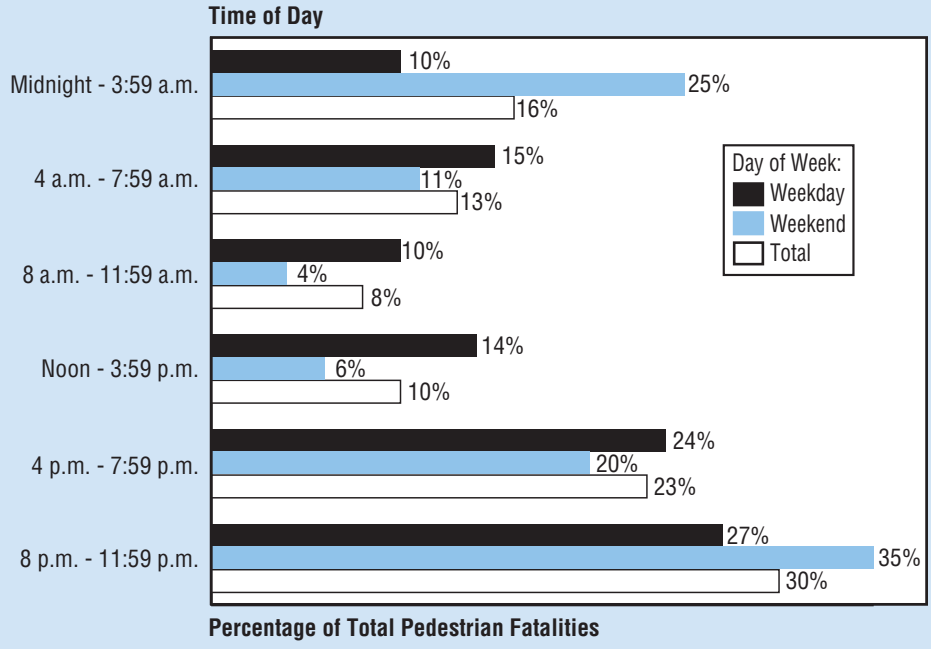
Pedestrian fatalities accounted for 85 percent of all nonoccupant fatalities in 2007. The 698 pedalcyclist fatalities accounted for 13 percent, and the remaining 3 percent were skateboard riders, roller skaters, etc.

Time of Day and Day of Week

Thirty-six percent of the 354 young (under age 16) pedestrian fatalities occurred in crashes between 3 p.m. and 7 p.m.

Nearly one-half (48%) of all pedestrian fatalities occurred on Friday, Saturday, and Sunday (16%, 17%, and 15%, respectively).

Figure 2
Pedestrian Fatalities by Time of Day and Day of Week, 2007



"Thirty-six percent of all young (under age 16) pedestrian fatalities occurred between 3 and 7 p.m."

Important Safety Reminders

- Drivers are required to yield the right-of-way to pedestrians crossing streets in marked or unmarked crosswalks in most situations. Pedestrian need to be especially careful at intersections where the failure to yield right-of-way often occurs when drivers are turning onto another street and a pedestrian is in their path.
- When possible, cross the street at a designated crosswalk. Always stop and look left, right, and left again before crossing. If a parked vehicle is blocking the view of the street, stop at the edge line of the vehicle and look around it before entering the street.
- Increase visibility at night by carrying a flashlight when walking and by wearing retro-reflective clothing that helps to highlight body movement.
- It is much safer to walk on a sidewalk, but if you must walk in the street, walk facing traffic.

"Alcohol involvement — either for the driver or the pedestrian — was reported in 49 percent of all pedestrian fatalities."

Alcohol Involvement

Alcohol involvement — either for the driver or for the pedestrian — was reported in 49 percent of the traffic crashes that resulted in pedestrian fatalities. Of the pedestrians involved, 35 percent had a blood alcohol concentration (BAC) of .08 grams per deciliter (g/dL) or higher. Of the drivers involved in fatal crashes, only 14 percent had a BAC of .08 g/dL or higher, less than one-half the rate for the pedestrians. In 6 percent of the crashes, both the driver and the pedestrian had a BAC of .08 g/dL or higher.

Table 3

Alcohol Involvement in Fatal Pedestrian Crashes, 2007

	No Driver Alcohol Involvement		Driver Alcohol Involvement, BAC = .01-.07		Driver Alcohol Involvement, BAC = .08+		Total	
No Pedestrian Alcohol Involvement	51%		3%		7%		2,775	61%
Pedestrian Alcohol Involvement, BAC .01 – .07 g/dL	3%		0%		1%		198	4%
Pedestrian Alcohol Involvement, BAC ≥ .08 g/dL or Greater	27%		2%		6%		1,605	35%
Total	**3,694**	**81%**	**240**	**5%**	**644**	**14%**	**4,578**	**100%**

Note: The alcohol levels in this table are determined using the alcohol levels of the involved pedestrian fatalities and all the involved drivers (fatality and other)

Table 4

Alcohol Involvement for Pedestrians Killed in Fatal Crashes by Age, 1997 and 2007

Age (Years)	1997					2007				
	Number of Fatalities	% With BAC = .00	% With BAC = .01-.07	% With BAC = .08+	% With BAC = .01+	Number of Fatalities	% With BAC = .00	% With BAC = .01-.07	% With BAC = .08+	% With BAC = .01+
16-20	301	71	4	25	29	287	69	5	26	31
21-24	253	48	7	45	52	296	43	5	51	57
25-34	762	41	4	55	59	606	45	5	51	55
35-44	932	43	4	53	57	754	47	6	47	53
45-54	700	55	5	40	45	916	47	4	49	53
55-64	499	68	4	28	32	494	66	4	30	34
65-74	507	82	2	15	18	382	80	4	16	20
75-84	465	91	3	6	9	387	89	2	9	11
85 +	202	92	3	5	8	134	90	5	5	10
Total*	**4,621**	**61**	**4**	**35**	**39**	**4,256**	**58**	**5**	**37**	**42**

*Excludes pedestrians under 16 years old and pedestrians of unknown age.

Table 5

Pedestrians Killed and Injured and Fatality and Injury Rates by Age and Sex, 2007

Age (Years)	Male			Female			Total		
	Killed	Population (thousands)	Fatality Rate*	Killed	Population (thousands)	Fatality Rate*	Killed**	Population (thousands)	Fatality Rate*
<5	62	10,603	0.58	44	10,121	0.43	106	20,724	0.51
5-9	59	10,149	0.58	34	9,701	0.35	93	19,850	0.47
10-15	99	12,582	0.79	56	11,997	0.47	155	24,579	0.63
16-20	204	10,966	1.86	83	10,411	0.80	287	21,378	1.34
21-24	229	8,711	2.63	67	8,152	0.82	296	16,863	1.76
25-34	449	20,683	2.17	157	19,908	0.79	606	40,591	1.49
35-44	552	21,619	2.55	202	21,543	0.94	754	43,161	1.75
45-54	667	21,595	3.09	249	22,280	1.12	916	43,875	2.09
55-64	344	15,775	2.18	150	16,937	0.89	494	32,712	1.51
65-74	253	8,887	2.85	129	10,465	1.23	382	19,352	1.97
75-84	217	5,313	4.08	170	7,711	2.20	387	13,024	2.97
85 +	84	1,777	4.73	50	3,735	1.34	134	5,512	2.43
Unknown	40	0	0	4	0	0	44	0	0
Total	**3,259**	**148,659**	**2.19**	**1,395**	**152,962**	**0.91**	**4,654**	**301,621**	**1.54**

Age (Years)	Male			Female			Total		
	Injured	Population (thousands)	Injury Rate*	Injured	Population (thousands)	Injury Rate*	Injured	Population (thousands)	Injury Rate*
<5	1,000	10,603	12	1,000	10,121	9	2,000	20,724	10
5-9	3,000	10,149	32	2,000	9,701	17	5,000	19,850	25
10-15	4,000	12,582	33	5,000	11,997	40	9,000	24,579	37
16-20	3,000	10,966	27	5,000	10,411	50	8,000	21,378	38
21-24	3,000	8,711	39	3,000	8,152	34	6,000	16,863	37
25-34	7,000	20,683	33	3,000	19,908	17	10,000	40,591	25
35-44	5,000	21,619	21	4,000	21,543	17	8,000	43,161	19
45-54	7,000	21,595	30	3,000	22,280	15	10,000	43,875	23
55-64	3,000	15,775	18	2,000	16,937	14	5,000	32,712	16
65-74	2,000	8,887	17	1,000	10,465	12	3,000	19,352	14
75-84	2,000	5,313	34	1,000	7,711	15	3,000	13,024	23
85 +	0	1,777	13	0	3,735	7	0	5,512	9
Total	**39,000**	**148,659**	**26**	**31,000**	**152,962**	**20**	**70,000**	**301,621**	**23**

* Rate per 100,000 population
** Includes 44 fatalities of unknown sex
Note: Injuries fewer than 500 are rounded to zero.
Totals may not equal sum of components due to independent rounding.
Source: Population - Bureau of the Census projections

For more information:

Information on traffic fatalities is available from the National Center for Statistics and Analysis, NVS-424, 1200 New Jersey Avenue SE., Washington, DC 20590. NCSA can be contacted at 800-934-8517. Fax messages should be sent to 202-366-7078. General information on highway traffic safety can be accessed by Internet users at www.nhtsa.gov/portal/site/nhtsa/ncsa. To report a safety-related problem or to inquire about motor vehicle safety information, contact the Vehicle Safety Hotline at 888-327-4236.

Other fact sheets available from the National Center for Statistics and Analysis are *Overview, Alcohol, African American, Bicyclists and Other Cyclists (formerly titled Pedalcyclists), Children, Hispanic, Large Trucks, Motorcycles, Occupant Protection, Older Population, Race and Ethnicity, Rural/Urban Comparisons, School Transportation-Related Crashes, Speeding, State Alcohol Estimates, State Traffic Data, and Young Drivers.* Detailed data on motor vehicle traffic crashes are published annually in *Traffic Safety Facts: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System.* The fact sheets and annual Traffic Safety Facts report can be accessed online at www-nrd.nhtsa.dot.gov/CATS.

Table 6

Pedestrian Traffic Fatalities and Fatality Rates by State, 2007

State	Total Traffic Fatalities	Resident Population (thousands)	Pedestrian Fatalities	Percent of Total	Pedestrian Fatalities per 100,000 Population
Alabama	1,110	4,628	69	6.2	1.49
Alaska	84	683	14	16.7	2.05
Arizona	1,066	6,339	154	14.4	2.43
Arkansas	650	2,835	45	6.9	1.59
California	3,974	36,553	640	16.1	1.75
Colorado	554	4,862	58	10.5	1.19
Connecticut	277	3,502	31	11.2	0.89
Delaware	117	865	16	13.7	1.85
Dist of Columbia	44	588	19	43.2	3.23
Florida	3,214	18,251	531	16.5	2.91
Georgia	1,641	9,545	153	9.3	1.60
Hawaii	138	1,283	27	19.6	2.10
Idaho	252	1,499	17	6.7	1.13
Illinois	1,249	12,853	171	13.7	1.33
Indiana	898	6,345	59	6.6	0.93
Iowa	445	2,988	23	5.2	0.77
Kansas	416	2,776	20	4.8	0.72
Kentucky	864	4,241	44	5.1	1.04
Louisiana	985	4,293	107	10.9	2.49
Maine	183	1,317	10	5.5	0.76
Maryland	614	5,618	116	18.9	2.06
Massachusetts	417	6,450	61	14.6	0.95
Michigan	1,088	10,072	131	12.0	1.30
Minnesota	504	5,198	33	6.5	0.63
Mississippi	884	2,919	58	6.6	1.99
Missouri	992	5,878	79	8.0	1.34
Montana	277	958	15	5.4	1.57
Nebraska	256	1,775	8	3.1	0.45
Nevada	373	2,565	52	13.9	2.03
New Hampshire	129	1,316	13	10.1	0.99
New Jersey	724	8,686	149	20.6	1.72
New Mexico	413	1,970	52	12.6	2.64
New York	1,333	19,298	278	20.9	1.44
North Carolina	1,675	9,061	171	10.2	1.89
North Dakota	111	640	5	4.5	0.78
Ohio	1,257	11,467	107	8.5	0.93
Oklahoma	754	3,617	66	8.8	1.82
Oregon	455	3,747	48	10.5	1.28
Pennsylvania	1,491	12,433	151	10.1	1.21
Rhode Island	69	1,058	13	18.8	1.23
South Carolina	1,066	4,408	106	9.9	2.40
South Dakota	146	796	7	4.8	0.88
Tennessee	1,210	6,157	69	5.7	1.12
Texas	3,363	23,904	387	11.5	1.62
Utah	299	2,645	32	10.7	1.21
Vermont	66	621	4	6.1	0.64
Virginia	1,027	7,712	88	8.6	1.14
Washington	568	6,468	60	10.6	0.93
West Virginia	431	1,812	27	6.3	1.49
Wisconsin	756	5,602	58	7.7	1.04
Wyoming	150	523	2	1.3	0.38
U.S. Total	**41,059**	**301,621**	**4,654**	**11.3**	**1.54**
Puerto Rico	452	3,941	144	31.9	3.65

Note: Totals may not equal sum of components due to independent rounding.
Sources: Fatalities — Fatality Analysis Reporting System, NHTSA. Population — Bureau of the Census.

NHTSA
www.nhtsa.gov

DOT HS 811 156

Bicyclists and Other Cyclists

"The 716 bicyclist deaths in 2008 accounted for 2 percent of all traffic fatalities during the year."

Bicyclists and other cyclists include riders of two-wheel nonmotorized vehicles, tricycles, and unicycles powered solely by pedals. Throughout the remainder of this fact sheet the term pedalcyclists will be used to identify these cyclists.

The first automobile crash in the United States occurred in New York City in 1896, when a motor vehicle collided with a pedalcycle rider (Famous First Facts, by Joseph Kane). About 53,000 pedalcyclists have died in traffic crashes in the United States since 1932 — the first year in which estimates of pedalcyclist fatalities were recorded. The 350 pedalcyclists killed in 1932 accounted for 1.3 percent of the 27,979 persons who died in traffic crashes that year.

In 2008, 716 pedalcyclists were killed and an additional 52,000 were injured in traffic crashes. Pedalcyclist deaths accounted for 2 percent of all traffic fatalities, and pedalcyclists made up 2 percent of all the people injured in traffic crashes during the year.

The number of pedalcyclist fatalities in 2008 is 6 percent lower than the 760 fatalities reported in 1998. The highest number of pedalcyclist fatalities ever recorded in the Fatality Analysis Reporting System (FARS) was 1,003 in 1975. Pedalcyclists accounted for 14 percent of all nonoccupant traffic fatalities in 2008.

Figure 1
Total Pedalcyclist Fatalities, 1998-2008

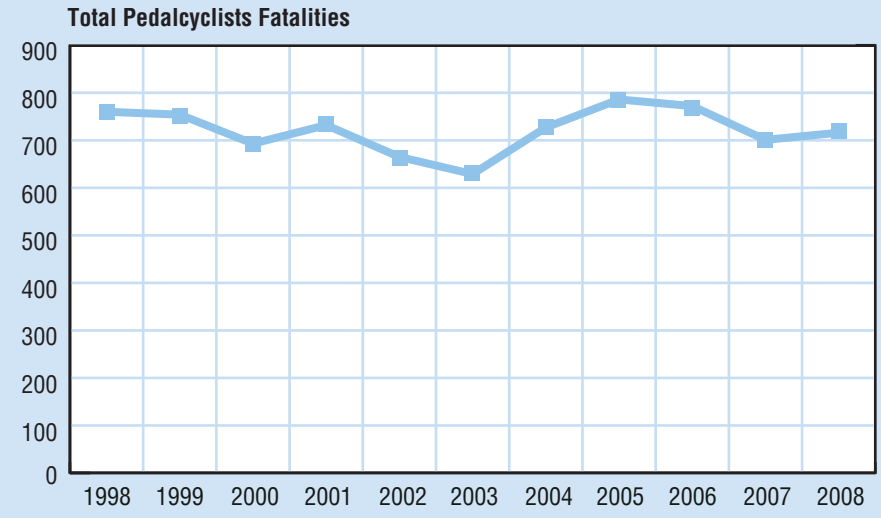


Table 1
Nonoccupant Traffic Fatalities, 1998-2008

Year	Pedalcyclist	Pedestrian	Other	Total
1998	760	5,228	131	6,119
1999	754	4,939	149	5,842
2000	693	4,763	141	5,597
2001	732	4,901	123	5,756
2002	665	4,851	114	5,630
2003	629	4,774	140	5,543
2004	727	4,675	130	5,532
2005	786	4,892	186	5,864
2006	772	4,795	185	5,752
2007	701	4,699	158	5,558
2008	716	4,378	188	5,282

Pedalcyclist fatalities occurred more frequently in urban areas (69%), at non-intersection locations (64%), between the hours of 5 p.m. and 9 p.m. (28%), and during the months of June (9%) and September (12%).

"One-seventh of the pedalcyclists killed in traffic crashes in 2008 were between 5 and 15 years old."

Age

In 1998, the average age of pedalcyclists killed in traffic crashes was 32; in 2008 the average age of those killed was 41. In contrast, in 1998 the average age of those injured was 24 and the average age of those injured in 2008 was 31.

Table 2
Average Age of Pedalcyclists Killed and Injured, 1998-2008

Year	Pedalcyclists Killed Average Age	Pedalcyclists Injured Average Age
1998	32	24
1999	33	24
2000	35	25
2001	36	26
2002	37	28
2003	36	27
2004	39	29
2005	39	29
2006	41	30
2007	40	31
2008	41	31
1998-2008	**37**	**28**

Pedalcyclists under age 16 accounted for 13 percent of all pedalcyclists killed and 25 percent of those injured in traffic crashes in 2008. By comparison, pedalcyclists under age 16 accounted for 30 percent of all those killed and 44 percent of those injured in 1998.

Pedalcyclists age 25 and older have made up an increasing proportion of all pedalcyclist deaths since 1998. The proportion of pedalcyclist fatalities age 25 to 64 was 1.3 times higher in 2008 as in 1998 (64% and 50%, respectively).

About one-seventh (12%) of the pedalcyclists killed in traffic crashes in 2008 were between 5 and 15 years old. The pedalcyclist fatality rate for this age group in 2008 was 2.01 per million population — about 14 percent lower than the rate for all pedalcyclists (2.35 per million population). The injury rate for this age group was 293 per million population, compared with 172.3 per million population for pedalcyclists of all ages.

Alcohol-Related Data

Alcohol involvement — either for the driver or the pedalcyclist — was reported in more than one-third (37%) of the traffic crashes that resulted in pedalcyclist fatalities in 2008. In 31 percent of the crashes, either the driver or the pedalcyclist was reported to have a blood alcohol concentration (BAC) of .08 grams per deciliter (g/dL) or higher. Lower alcohol levels (BAC .01 to .07 g/dL) were reported in an additional 8 percent of crashes. Over one-fourth (28%) of the pedalcyclists killed had a BAC of .01 g/dL or higher, and nearly one-fourth (23%) had a BAC of .08 g/dL or higher.

"Alcohol involvement was reported in more than one-third of all pedalcyclist fatalities in 2008."

Gender

Most of the pedalcyclists killed or injured in 2008 were males (87% and 79%, respectively), and most were between the ages of 5 and 44 (48% and 77%, respectively).

In 2008, the pedalcyclist fatality rate per capita was eight times higher for males than for females, and the injury rate per capita was more than four times higher for males.

Table 3

Pedalcyclists Killed and Injured and Fatality and Injury Rates by Age and Sex, 2008

Age (Years)	Male			Female			Total		
	Killed	Population (thousands)	Fatality Rate*	Killed	Population (thousands)	Fatality Rate*	Killed	Population (thousands)	Fatality Rate*
<5	5	10,748	0.47	1	10,258	0.10	6	21,006	0.29
5-9	13	10,259	1.27	10	9,806	1.02	23	20,065	1.15
10-15	55	12,415	4.43	11	11,839	0.93	66	24,255	2.72
16-20	47	11,039	4.26	5	10,492	0.48	52	21,531	2.42
21-24	37	8,681	4.26	5	8,162	0.61	42	16,842	2.49
25-34	61	20,900	2.92	13	20,032	0.65	74	40,932	1.81
35-44	77	21,314	3.61	13	21,187	0.61	90	42,501	2.12
45-54	161	21,853	7.37	19	22,519	0.84	180	44,372	4.06
55-64	103	16,251	6.34	9	17,436	0.52	112	33,686	3.32
65-74	34	9,265	3.67	2	10,858	0.18	36	20,123	1.79
75-84	21	5,336	3.94	3	7,689	0.39	24	13,025	1.84
85+	5	1,864	2.68	2	3,858	0.52	7	5,722	1.22
Total	**623**	**149,925**	**4.16**	**93**	**154,135**	**0.60**	**716**	**304,060**	**2.35**
Age (Years)	**Male**			**Female**			**Total**		
	Injured	**Population (thousands)**	**Injury Rate***	**Injured**	**Population (thousands)**	**Injury Rate***	**Injured**	**Population (thousands)**	**Injury Rate***
<5	0	10,748	8.01	**	10,258	3.49	**	21,006	5.80
5-9	2,000	10,259	235.8	1,000	9,806	54.56	3,000	20,065	147.2
10-15	7,000	12,415	579.7	3,000	11,839	221.9	10,000	24,255	405.1
16-20	7,000	11,039	601.1	2,000	10,492	150.9	8,000	21,531	381.7
21-24	4,000	8,681	409.4	2,000	8,162	203.7	5,000	16,842	309.7
25-34	5,000	20,900	239.1	2,000	20,032	93.13	7,000	40,932	167.7
35-44	5,000	21,314	237.5	2,000	21,187	103.0	7,000	42,501	170.5
45-54	5,000	21,853	232.0	1,000	22,519	40.20	6,000	44,372	134.7
55-64	4,000	16,251	218.4	**	17,436	17.42	4,000	33,686	114.4
65-74	1,000	9,265	127.7	**	10,858	3.71	1,000	20,123	60.80
75-84	1,000	5,336	141.7	**	7,689	7.12	1,000	13,025	62.24
85+	**	1,864	47.48	**	3,858	0.00	**	5,722	15.46
Total	**41,000**	**149,925**	**270.8**	**12,000**	**154,135**	**76.54**	**52,000**	**304,060**	**172.3**

* Rate per million population.
** Less than 500 injured.
Source: Population — Bureau of the Census projections.

Table 4

Pedalcyclist Traffic Fatalities and Fatality Rates by State, 2008

State	Total Traffic Fatalities	Resident Population (thousands)	Pedalcyclist Fatalities	Percent of Total	Pedalcyclist Fatalities per Million Population
Alabama	966	4,662	4	0.4	0.86
Alaska	62	686	1	1.6	1.46
Arizona	937	6,500	19	2.0	2.92
Arkansas	600	2,855	5	0.8	1.75
California	3,434	36,757	109	3.2	2.97
Colorado	548	4,939	12	2.2	2.43
Connecticut	264	3,501	5	1.9	1.43
Delaware	121	873	6	5.0	6.87
District of Columbia	34	592	1	2.9	1.69
Florida	2,978	18,328	125	4.2	6.82
Georgia	1,493	9,686	20	1.3	2.06
Hawaii	107	1,288	2	1.9	1.55
Idaho	232	1,524	2	0.9	1.31
Illinois	1,043	12,902	27	2.6	2.09
Indiana	814	6,377	18	2.2	2.82
Iowa	412	3,003	5	1.2	1.67
Kansas	385	2,802	6	1.6	2.14
Kentucky	826	4,269	6	0.7	1.41
Louisiana	912	4,411	11	1.2	2.49
Maine	155	1,316	4	2.6	3.04
Maryland	591	5,634	6	1.0	1.07
Massachusetts	363	6,498	10	2.8	1.54
Michigan	980	10,003	25	2.6	2.50
Minnesota	456	5,220	13	2.9	2.49
Mississippi	783	2,939	4	0.5	1.36
Missouri	960	5,912	3	0.3	0.51
Montana	229	967	3	1.3	3.10
Nebraska	208	1,783	0	0	0
Nevada	324	2,600	7	2.2	2.69
New Hampshire	139	1,316	2	1.4	1.52
New Jersey	590	8,683	20	3.4	2.30
New Mexico	366	1,984	7	1.9	3.53
New York	1,231	19,490	42	3.4	2.15
North Carolina	1,433	9,222	32	2.2	3.47
North Dakota	104	641	1	1.0	1.56
Ohio	1,190	11,486	18	1.5	1.57
Oklahoma	749	3,642	4	0.5	1.10
Oregon	416	3,790	10	2.4	2.64
Pennsylvania	1,468	12,448	8	0.5	0.64
Rhode Island	65	1,051	1	1.5	0.95
South Carolina	920	4,480	14	1.5	3.13
South Dakota	119	804	0	0	0
Tennessee	1,035	6,215	7	0.7	1.13
Texas	3,382	24,327	53	1.6	2.18
Utah	275	2,736	4	1.5	1.46
Vermont	73	621	0	0	0
Virginia	824	7,769	13	1.6	1.67
Washington	521	6,549	9	1.7	1.37
West Virginia	380	1,814	2	0.5	1.10
Wisconsin	605	5,628	9	1.5	1.60
Wyoming	159	533	1	0.6	1.88
U.S. Total*	**37,261**	**304,060**	**716**	**1.9**	**2.35**
Puerto Rico	399	3,954	12	3.0	3.03

* Totals may not equal sum of components due to independent rounding.
Sources: Fatalities — Fatality Analysis Reporting System, NHTSA. Population — Bureau of the Census.

Important Safety Reminders

All bicyclists should wear properly fitted bicycle helmets every time they ride. A helmet is the single most effective way to prevent head injury resulting from a bicycle crash.

Bicyclists are considered vehicle operators; they are required to obey the same rules of the road as other vehicle operators, including obeying traffic signs, signals, and lane markings. When cycling in the street, cyclists must ride in the same direction as traffic.

Drivers of motor vehicles need to share the road with bicyclists. Be courteous – allow at least three feet clearance when passing a bicyclist on the road, look for cyclists before opening a car door or pulling out from a parking space, and yield to cyclists at intersections and as directed by signs and signals. Be especially watchful for cyclists when making turns, either left or right.

Bicyclists should increase their visibility to drivers by wearing fluorescent or brightly colored clothing during the day, dawn, and dusk. To be noticed when riding at night, use a front light and a red reflector or flashing rear light, and use retro-reflective tape or markings on equipment or clothing.

For more information:

Information on traffic fatalities is available from the National Center for Statistics and Analysis, NVS-424, 1200 New Jersey Avenue SE., Washington, DC 20590. NCSA can be contacted at 800-934-8517. Fax messages should be sent to 202-366-7078. General information on highway traffic safety can be accessed by Internet users at www.nhtsa.gov/portal/site/nhtsa/ncsa. To report a safety-related problem or to inquire about motor vehicle safety information, contact the Vehicle Safety Hotline at 888-327-4236.

Other fact sheets available from the National Center for Statistics and Analysis are *Overview, Alcohol, African American, Children, Hispanic, Large Trucks, Motorcycles, Occupant Protection, Older Population, Pedestrians, Race and Ethnicity, Rural/Urban Comparisons, School Transportation-Related Crashes, Speeding, State Alcohol Estimates, State Traffic Data*, and *Young Drivers.* Detailed data on motor vehicle traffic crashes are published annually in *Traffic Safety Facts: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System.* The fact sheets and annual Traffic Safety Facts report can be accessed online at www-nrd.nhtsa.dot.gov/CATS/index.aspx.

It's obvious that the matrix can be interpreted in many ways with much different outcomes. I think it is a great tool, however, the numbers (and the item weighting) should be based on as much factual data as possible, rather than subjective 'guessing'. I worked on it as well and the only 'facts' I had were the cost estimates for the construction. So I based the numbers on those costs. We should also us what facts we have for users and their weighting (ie – based on item weight, maintenance vehicles are 1 out of every ten users). We should survey the trail users to find out usability and aesthetics numbers. Safety may have to be subjective, although I found some accident data for bicycles and roads (however the bikes were on roads as well). One interesting fact was that in accidents resulting in death where a bike crossed a road at an intersection, 38% of the accidents the cyclist has STOPPED at the intersection before proceeding. Also, 1 in 8 deaths were children between 5-15 years of age. I put lower numbers for the at grade crossing and higher ones in the separated. I attached my version as well. Like I said, more facts should be gathered to be less subjective, but it is a good tool.

Rob Hehlen

George – sorry you are getting this twice.

Functional Design Criteria

Dear Scott,

Attached is a MSWord document with my comments on the proposed Peavine Trail - Road 39 interchange. I support Option 2 (Peavine Trail Overpass), but without the bypass road. I oppose Option 1 - at-grade crossing.

In reviewing the documents through the link on the City's website, I noticed that there is not a direct link to send you comments on the proposal. The link that asks for comments goes to Steve Graber and is for bicycles. Placing the Peavine Trail/Road 39 documents in this area might confuse people trying to comment on the proposal by sending comments to Steve. You should have your own area for the plan and a direct link to you for public comments.

Sincerely,

Bruce McKeeman
3075 Cabezon Lane
Prescott, AZ 86301
928.771.0784

Peavine Trail Crossing Design Alternatives for Granite Dells Estates Proposed Road 39.

In review of the published proposal, I have several comments and concerns.

Page 7/8 - Number of Users: states that Road 39 traffic would be at a minimum on weekends due to the nature of commercial/industrial businesses.

The Granite Dells Estates Preliminary Land-Use Plan shows that 60% of the acreage is residential and 15% is commercial/industrial. A residential development will not have limited traffic on weekends when trail use is the highest. In fact, the road traffic will be much higher on weekends with this level of development.

The next paragraph states that since the parking area at near SR 89A will have fewer parking slots than the Sundog trailhead, there will be fewer users at this end of the trail.

This assumption does not account for the 60% residential development of Granite Dells Estates or for the residents in Pinon Oaks, the golf course development and other residential areas at the north end of Prescott that would likely use the new trailhead once it is developed. There is no basis of fact to support your contention that this trailhead will see less use simply because it has fewer parking slots.

Page 10 – Vertical Clearance: states that the underpass should match the existing underpass at SR 89A to maintain a consistent experience for users.

This point is immaterial. The trail users will not notice any difference if the culvert is 12 feet or 15 feet in height. Only if the Road 39 culvert were to be much larger would there be any noticeable difference and even then it would not affect the trail experience. If you need to justify the size of culvert you chose, you should simply state that you made them the same size or you should cite the standard used to make this decision.

Page 11 – Traffic Volumes: states that these volumes are based on a commercial/industrial development.

> The Granite Dells Estates Preliminary Land-Use Plan shows that 60% of the acreage is residential and 15% is commercial/industrial. The traffic study and report are based on a commercial development and do not account for the increase in traffic volume that the much larger residential development will bring to this road and crossing. This makes the stated volumes inconsistent with the proposed development. Since this report projects traffic to the year 2030, the entire development must be included which will present a much greater hazard to trail users for an at-grade crossing. This may change the level of service requirements.

Page 12 – Option 1 – At-Grade: states that this option requires users to use good judgment to avoid conflicts.

> This does not take into account young trail users or teenagers all of whom generally do not think about possible dangers or hazards or use good judgment in their activities. This may be appropriate for adults, but will not work with youth. This point on the trail will be the first major hazard trail users will encounter as they travel north on the trail. It is not appropriate to place this level of hazard on the trail users.

Page 13 – Impacts: states that trail users will be required to stop … before proceeding, similar to the Storm Ranch Road at-grade crossing.

> This statement is absolutely FALSE in regards to the stop requirements at the Storm Ranch crossing. If you look at your picture on page 6, you will see stop signs for BOTH trail users AND vehicles. The Storm Ranch at-grade crossing is a 4 WAY STOP!!! This would be appropriate for this crossing as well. In fact this is the safest means of handling any at-grade crossing of this trail. The comparison to the Storm Ranch crossing is inappropriate since Storm Ranch is a dirt road with minimal traffic and slow speeds. It certainly is not a 50 foot wide paved roadway with a speed limit of 35 mph which means traffic is traveling at least at 45 mph creating a much greater hazard to trail users.

Page 14 – Option 2 – Grade Separated-Peavine Overpass: includes a bypass alternative to access Road 39.

> The bypass/access ramp to Road 39 is completely extraneous and adds over $28,000 to the cost of the option. Since this intersection is less than a mile from the Centrepoint East intersection which includes an at-grade component for ADA and equestrian users, an additional access at this point is not necessary. In addition, the bridge is being designed to allow maintenance vehicles to cross it. This should be sufficient for any maintenance or emergency needs to access areas south of this point.

Page 15 – Key Components: states that the separate bypass trail “had to be” included in the design.

> The City and Lyons may have wanted to include the bypass as a convenience, but there is nothing in the statutes, laws, or standards that REQUIRES the bypass to be included. This is not a

requirement, but an option of the designers. Please cite the legal statute which requires this to be included. Again, at-grade trail access is available less than one mile from this location.

Page 16 – Phasing: states the bridge and abutments could be built in the future without negatively impacting the functionality of Road 39.

This may in fact be true, but why haven't you considered the impacts on the trail users. The trail is currently in use and available to the public. This is a nationally acknowledged trail and the functionality of it for trail users deserves an equal consideration. Phasing will negatively affect trail users and increase the inherent danger of at-grade crossings.

Page 26 – Maintenance: states that regular trail maintenance should be completed …

Please explain what this entire paragraph has to do with the proposed alternatives for the Road 39/Peavine Trail crossing. The purpose of the report is to present the crossing alternatives. The status of maintenance on the rest of the trail is not germane to the purpose of the report.

Page 29 and Appendix D – Matrix Values: An at-grade crossing is the recommended solution.

The assignment of weighting is understood and accepted. The subjective nature of the scores raises concern and possible deception of the selected preferred alternative. It is disconcerting that the City and Lyons did not openly state that Lyons is also the engineer for the developer and thus has a conflict of interest in making a recommendation that is favorable for the developer and is not providing an unbiased review of the possible options to resolve concerns of all users.

The scoring for the at-grade option should be adjusted as follows:

Safety of trail users – 6. The adjusted weight should be 18. This is a major roadway with a high rate of speed of vehicles (35 to 45 mph) and is a major safety hazard for all trail users, but particularly for youth. It is not a marginally less safe option as indicated by a score of 1 less than a grade separated crossing.

Usability for bicycles – 7. This should be the same as for other trail users. The at-grade crossing is not any more usable for bicycles than for any other user. In fact it may be less usable for bicyclists than for other users. It certainly is not any more usable placing a 50 foot wide 35 mph roadway in the path of trail users.

These two adjustments provide a total score of 78.7 and it could arguably be less.

The scoring for the grade separated overpass should be adjusted as follows:

Usability for bicycles – 7. The proposed incline to make the overpass ADA compatible does not incur a reduction of 3 points from other trail users. The minor inconvenience for bicyclists should only drop the score by a point in comparison to other users.

This adjustment provides a total score of 78.1 which is on par with Option 1. Minor adjustments to either option would make either one on par with the other.

Appendix F – Cost Estimates

> Option 2 should be presented with and without the bypass option. As stated earlier, the bypass is completely unnecessary and thus presents an added cost that makes comparison with other options more difficult. The fact that the City or Lyons wanted a bypass, which is not required by law, it should not be presented as part of the basic option. The bypass should be split out as option 2A so that the public can compare options on an equitable basis. The bypass appears to add an extra $28,036 to option 2. Thus the basic cost for option 2 should be $325,179

In summary, I request that Option 2 – Peavine Trail overpass be the selected option to deal with issues at the Peavine Trail/Road 39 intersection. This option provides the safest intersection for both trail and road users. This option should not be phased and it should not include the additional expense of the bypass. In addition, the City Council needs to adopt a policy to prohibit any at-grade crossing of the Peavine Trail. As development agreements and annexations continue in proximity to the Peavine Trail, it should be made explicitly clear that there will not be any at-grade crossing permitted.

Bruce McKeeman
3075 Cabezon Lane
Prescott, AZ 86301

Attention: Scott Tkach
I am a frequent user of the Peavine trail, both walking and horseback riding. From that perspective, Option 2 is the best alternative for the Rd. 39 crossing. It also is efficient for vehicular traffic on the road.

From: Susan Brook

Attention: Scott Tkach
Scott, my husband and I bike the Peavine, Iron King, Side Road trails up to 5x a week. We have come to know a good number of like enthusiasts over a 3 year period. There is now a wonderful community feel when out there getting exercise. It is a unique feature in Prescott. My preference to any extension or crossing is the "overpass" type for three reasons. "At grade" crossings will have accidents. Culverts have drainage issues such as the one under Glassford Hill Rd to the designated parking lot which no one uses. Thirdly, I prefer being out in the open and a raised crossing creates different views. If a culvert becomes the best option for cost and implementation, its design for drainage needs to be carefully considered. Otherwise it is a collection point for debris and mud. Thank you and good luck with improving and especially extending the trail. Diane Flannery

From: Diane Flannery

Tara. Would you be able to provide the budgetary costs of components requiring additional bridge resources? When you did the initial site survey we looked at the damaged trestle over Granite Creek that has been damaged and out of service since about 1984.There must have been a reason why that put crushed rock along the track area. if if is !8" thick and 12 ft wide, then the rock would weigh 1 ton per foot.Does this level of weight actually help to stabiliize the bridge?

The budget items from Contech-cpi. I measured the remaining wooden portion to be about 420 feet. What would the cost be for 900 feet of side rail for the platform to elevate 8 feet in height and has an

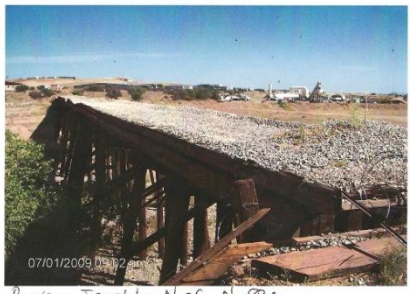
arched railraod theme appearance? With Equiestrian riders, starting at an 8 feet height should be considered if the rider is remaining on the horse. I would assume with the 8 foot height you would have side angled supports for the 8 foot uprights, which would be bolted through the heavy wooden platform.

Next cost item would span the 100' open space between end of the remaining bridge and the Peavine. We can use existing componenet pricing to estimate this cost. The Trucks will require the minimum bridge clearance to b 17'. As a result of 'compatibility' design the steel truss bridge would likely include may of the design elements in the others.

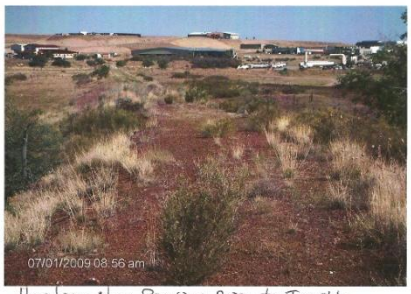
G

Eric. Do we have measurements for the length of the remaining trestle and then from the trestle north to the Peavine by the horse doctor? We can price out the side rails which should be at least 60" and preferably 6' or higher for the equestrian riders. Tom Devereaux thought the road to Hanson Cement could be lowered and drainage routed toward Granite Creek, so the Steel Truss bridge connector would not need to be raised above the level of the trestle for the industrial traffic below. We can also price out a truss bridge and cement abutments, which should be around $200K total. There shouldn't be much dirt fill needed since the Peavine and Trestle are already high compared to the road below.

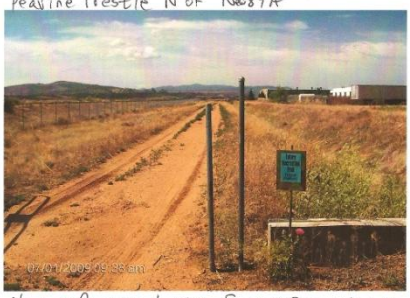
George



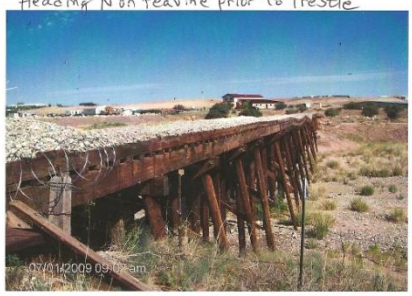
Peavine Trestle N of New 89A



Heading N on Peavine Prior to Trestle



Nend of Peavine Looking S. E of Cossairt Melville



Peavine Trestle N of New 89A

The attached photo shows the west box culvert looking south which passes under Highway 89A. It is a 12' X 12' cement box culvert that is approximately 440 feet in length. I does appear to have electrical lighting. There are vehicle an cattle tracks in the culvert. The south end of the tunnel had 4 bulls hoping I would venture into their space! I guess the ranch and area wildlife are able to use the culvert. It appears to be in very good condition and able to provide the connection so the Peavine to be connected and improved to the north as was originally planned.

George Sheats

Peavine Crossings Engineering Team. The attached are various Truss Bridge cost estimates provided by Big R Bridge from Colorado. As we know the abutment and associated costs are the larger portions of a pedestrian bridge project, however these costs can be carefullly managed to fit the application. By lowering the street passing under the bridge and applying ADA packed surface guidelines consistent with the rest of the Peavine Trail, the installation costs can be reduced significantly. The 3 truss bridge companies contacted can design the abutments and associated support structure after a geotech soil survey is provided, and certify the strengths and future stability.

Thanks.

George Sheats

NOTE: THE ATTACHMENT INCLUDED IN THE CORRESPONDENCE ABOVE IS SHOWN ON THE FOLLOWING PAGE

P.O. Box 1290
Greeley, Colorado
80632-1290
Phone. 970-356-9600
Toll Free. 800-234-0734
Fax. 970-356-9621
www.bigrbridge.com

Budget Estimate

Quotation Date:	7/1/2009
Bid Date:	_____
Expiration Date:	8/1/2009
Opportunity No.:	2009-02418

PROJECT: Peavine Trail 75' - Prescott, AZ

George Sheats
City of Prescott
1242 Crown Ridge Dr
Prescott, AZ 86301

Phone: (602) 361-7857
Email: gsheats@aol.com

Item	Description	Quantity	Unit Price	Total Price
1	**12' Wide Douglas Fir Deck Option.** 75' long by 12' wide (clear between structural members); one-piece prefabricated Weathering Steel Truss - H Section pedestrian bridge superstructure. Design is for a 12,000 LBS. vehicle or an 85 PSF live load with a single diagonal per panel. Bridge design in accordance with AASHTO Guide Specification. Bridge includes Horizontal Rails 54 INCHES high with 4" maximum openings, and a steel toe plate. Treated Douglas Fir bridge decking will be shop-installed prior to delivery. Superstructure with the Douglas Fir deck weighs approximately 35,000 lbs.	2 ea.	$58,730.00 Includes Freight	$117,460.00
2	**12' Wide Concrete Deck Option.** Same design/features as item one above except that: Deck forms will be shop-installed ready to receive a field-poured reinforced concrete deck by others in lieu of the Douglas Fir Decking. Superstructure without the concrete weighs approximately 23,500 lbs.	2 ea.	$48,220.00 Includes Freight	$96,440.00
3	**16' Wide Douglas Fir Deck Option.** 125' long by 16' wide (clear between structural members); two-piece prefabricated Weathering Steel Truss - H Section pedestrian bridge superstructure. Design is for a 12,000 LBS. vehicle or an 85 PSF live load with a single diagonal per panel. Bridge design in accordance with AASHTO Guide Specification. Bridge includes Horizontal Rails 54 INCHES high with 4" maximum openings, and a steel toe plate. Treated Douglas Fir bridge decking will be shipped loose to be field installed by others. Superstructure with the Douglas Fir deck weighs approximately 52,500 lbs.	2 ea.	$92,105.00 Includes Freight	$184,210.00
4	**16' Wide Concrete Deck Option.** Same design/features as item one above except that: Deck forms will be shop-installed ready to receive a field-poured reinforced concrete deck by others in lieu of the Douglas Fir Decking. Superstructure without the concrete weighs approximately 35,500 lbs.	2 ea.	$77,750.00 Includes Freight	$155,500.00

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5	**Powder Coated Mesh Panels.** For 2" x 2" powder coated mesh panels 6' high shop installed prior to shipping in lieu of horizontal rails and toe plate; add to above numbers.	1 ea	Lump Sum Per bridge	$14,145.00
6	**Abutment Design:**	1 ea	Lump Sum	$8,000.00

AASHTO Bridge Specifications require steel fabricators to be certified under the AISC Quality Certification Program. Big R Bridge is certified for Simple and Major Steel Bridges with a Fracture Critical and Sophisticated Paint Endorsement.

The following items are not included with this bid:

- third-party inspection of bridge during fabrication,
- design, excavation and construction of bridge abutments,
- anchor bolt supply and installation,
- unloading and assembly of bridge at the project site,
- supply and placement of reinforced concrete deck (if applicable).

Prices are FOB: Trucks, **Prescott, Arizona.** Delivery will be to a common stockpile accessible by standard highway tractor-trailer, buyer to unload and assemble. Shop drawings will be provided, signed and sealed by a Professional Engineer registered in the state of manufacture. Prices do not include sales tax (if applicable).

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Toll Free. 800-234-0734
Fax. 970-356-9621
www.bigrbridge.com

Budget Estimate

Quotation Date:	7/1/2009
Bid Date:	_____
Expiration Date:	8/1/2009
Opportunity No.:	2009-02417

PROJECT: Peavine Trail 100' - Prescott, AZ

George Sheats
City of Prescott
1242 Crown Ridge Dr
Prescott, AZ 86301

Phone: (602) 361-7857
Email: gsheats@aol.com

Item	Description	Quantity	Unit Price	Total Price
1	**12' Wide Douglas Fir Deck Option.** 100' long by 12' wide (clear between structural members); two-piece prefabricated Weathering Steel Truss - H Section pedestrian bridge superstructure. Design is for a 12,000 LBS. vehicle or an 85 PSF live load with a single diagonal per panel. Bridge design in accordance with AASHTO Guide Specification. Bridge includes Horizontal Rails 54 INCHES high with 4" maximum openings, and a steel toe plate. Treated Douglas Fir bridge decking will be shop-installed prior to delivery. Superstructure with the Douglas Fir deck weighs approximately 46,000 lbs.	2 ea.	$81,450.00 Includes Freight	$162,900.00
2	**12' Wide Concrete Deck Option.** Same design/features as item one above except that: Deck forms will be shop-installed ready to receive a field-poured reinforced concrete deck by others in lieu of the Douglas Fir Decking. Superstructure without the concrete weighs approximately 35,000 lbs.	2 ea.	$71,950.00 Includes Freight	$143,900.00
3	**16' Wide Douglas Fir Deck Option.** 100' long by 16' wide (clear between structural members); four-piece prefabricated Weathering Steel Truss - H Section pedestrian bridge superstructure. Design is for a 12,000 LBS. vehicle or an 85 PSF live load with a single diagonal per panel. Bridge design in accordance with AASHTO Guide Specification. Bridge includes Horizontal Rails 54 INCHES high with 4" maximum openings, and a steel toe plate. Treated Douglas Fir bridge decking will be shipped loose to be field installed by others. Superstructure with the Douglas Fir deck weighs approximately 66,500 lbs.	2 ea.	$123,740.00 Includes Freight	$247,480.00
4	**16' Wide Concrete Deck Option.** Same design/features as item one above except that: Deck forms will be shop-installed ready to receive a field-poured reinforced concrete deck by others in lieu of the Douglas Fir Decking. Superstructure without the concrete weighs approximately 50,000 lbs.	2 ea.	$113,655.00 Includes Freight	$227,310.00

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Fax. 970-356-9621
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5	**Powder Coated Mesh Panels.** For 2" x 2" powder coated mesh panels 6' high shop installed prior to shipping in lieu of horizontal rails and toe plate; add to above numbers.	1 ea	$18,865.00 Lump Sum per bridge	$37,730.00
6	**Abutment Design:**	1 ea	Lump Sum/per bridge	$8,000.00

AASHTO Bridge Specifications require steel fabricators to be certified under the AISC Quality Certification Program. Big R Bridge is certified for Simple and Major Steel Bridges with a Fracture Critical and Sophisticated Paint Endorsement.

The following items are not included with this bid:

- third-party inspection of bridge during fabrication,
- design, excavation and construction of bridge abutments,
- anchor bolt supply and installation,
- unloading and assembly of bridge at the project site,
- supply and placement of reinforced concrete deck (if applicable).

Prices are FOB: Trucks, **Prescott, Arizona.** Delivery will be to a common stockpile accessible by standard highway tractor-trailer, buyer to unload and assemble. Shop drawings will be provided, signed and sealed by a Professional Engineer registered in the state of manufacture. Prices do not include sales tax (if applicable).

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Toll Free. 800-234-0734
Fax. 970-356-9621
www.bigrbridge.com

Budget Estimate

Quotation Date:	7/12009
Bid Date:	_____
Expiration Date:	8/1/2009
Opportunity No.:	2009-02411

PROJECT: Peavine Trail 125' - Prescott, AZ

George Sheats
City of Prescott
1242 Crown Ridge Dr
Prescott, AZ 86301

Phone: (602) 361-7857
Email: gsheats@aol.com

Item	Description	Quantity	Unit Price	Total Price
1	**12' Wide Douglas Fir Deck Option.** 125' long by 12' wide (clear between structural members); two-piece prefabricated Weathering Steel Truss - H Section pedestrian bridge superstructure. Design is for a 12,000 LBS. vehicle or an 85 PSF live load with a single diagonal per panel. Bridge design in accordance with AASHTO Guide Specification. Bridge includes Horizontal Rails 54 INCHES high with 4" maximum openings, and a steel toe plate. Treated Douglas Fir bridge decking will be shop-installed prior to delivery. Superstructure with the Douglas Fir deck weighs approximately 70,500 lbs.	2 ea.	$115,850.00 Includes Freight	$231,700.00
2	**12' Wide Concrete Deck Option.** Same design/features as item one above except that: Deck forms will be shop-installed ready to receive a field-poured reinforced concrete deck by others in lieu of the Douglas Fir Decking. Superstructure without the concrete weighs approximately 60,500 lbs.	2 ea.	$113,055.00 Includes Freight	$226,110.00
3	**16' Wide Douglas Fir Deck Option.** 125' long by 16' wide (clear between structural members); four-piece prefabricated Weathering Steel Truss - H Section pedestrian bridge superstructure. Design is for a 12,000 LBS. vehicle or an 85 PSF live load with a single diagonal per panel. Bridge design in accordance with AASHTO Guide Specification. Bridge includes Horizontal Rails 54 INCHES high with 4" maximum openings, and a steel toe plate. Treated Douglas Fir bridge decking will be shipped loose to be field installed by others. Superstructure with the Douglas Fir deck weighs approximately 98,500 lbs.	2 ea.	$171,710.00 Includes Freight	$343420.00
4	**16' Wide Concrete Deck Option.** Same design/features as item one above except that: Deck forms will be shop-installed ready to receive a field-poured reinforced concrete deck by others in lieu of the Douglas Fir Decking. Superstructure without the concrete weighs approximately 77,500 lbs.	2 ea.	$160,455.00 Includes Freight	$330,910.00

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5	**Powder Coated Mesh Panels.** For 2" x 2" powder coated mesh panels 6' high shop installed prior to shipping in lieu of horizontal rails and toe plate; add to above numbers.	1 ea.	Lump Sum per bridge	$23,940.00
6	**Abutment Design:**	1 ea	Lump Sum	$8,000.00

Bridge Delivery – Please allow 4 to 6 weeks for shop drawings and 9 to 11 weeks for delivery after receipt of approved drawings.

AASHTO Bridge Specifications require steel fabricators to be certified under the AISC Quality Certification Program. Big R Bridge is certified for Simple and Major Steel Bridges with a Fracture Critical and Sophisticated Paint Endorsement.

The following items are not included with this bid:

- third-party inspection of bridge during fabrication,
- design, excavation and construction of bridge abutments,
- anchor bolt supply and installation,
- unloading and assembly of bridge at the project site,
- supply and placement of reinforced concrete deck (if applicable).

Prices are FOB: Trucks, **Prescott, Arizona.** Delivery will be to a common stockpile accessible by standard highway tractor-trailer, buyer to unload and assemble. Shop drawings will be provided, signed and sealed by a Professional Engineer registered in the state of manufacture. Prices do not include sales tax (if applicable).

Excel is another steel truss bridge supplier contacted about 4 weeks ago, previous to contech-cpi coming to Prescott for the Peavine site visit. All 3 bridge manufacturers can assist in providing the abutment designs to meet the long term requirements of the specific design. The abutment, excavation/material buildup, drainage, etc. are the larger portion of the cost of the bridges.

Thanks.

George Sheats

Hi All,
I like Nigel's solution. I would think it would be acceptable to all involved. I was here when the trains were still running. I also thought Contech had some great bridge designs.

Joyce

Attention: Scott Tkach
Rather than an at-grade crossing I am in favor of an overpass at the same location as the proposed at-grade crossing. While the former might be an adequate (although I disagree) solution for the present, what about the future? If, however, the at-grade crossing is decided upon, could a traffic light be installed at the crossing?

From: Nancy Seaman

I forgot to mention that my solution allows Fann to choose the location of where Road 39 crosses the Peavine, and avoids any extra cost of a bridge or underpass. Nigel

---

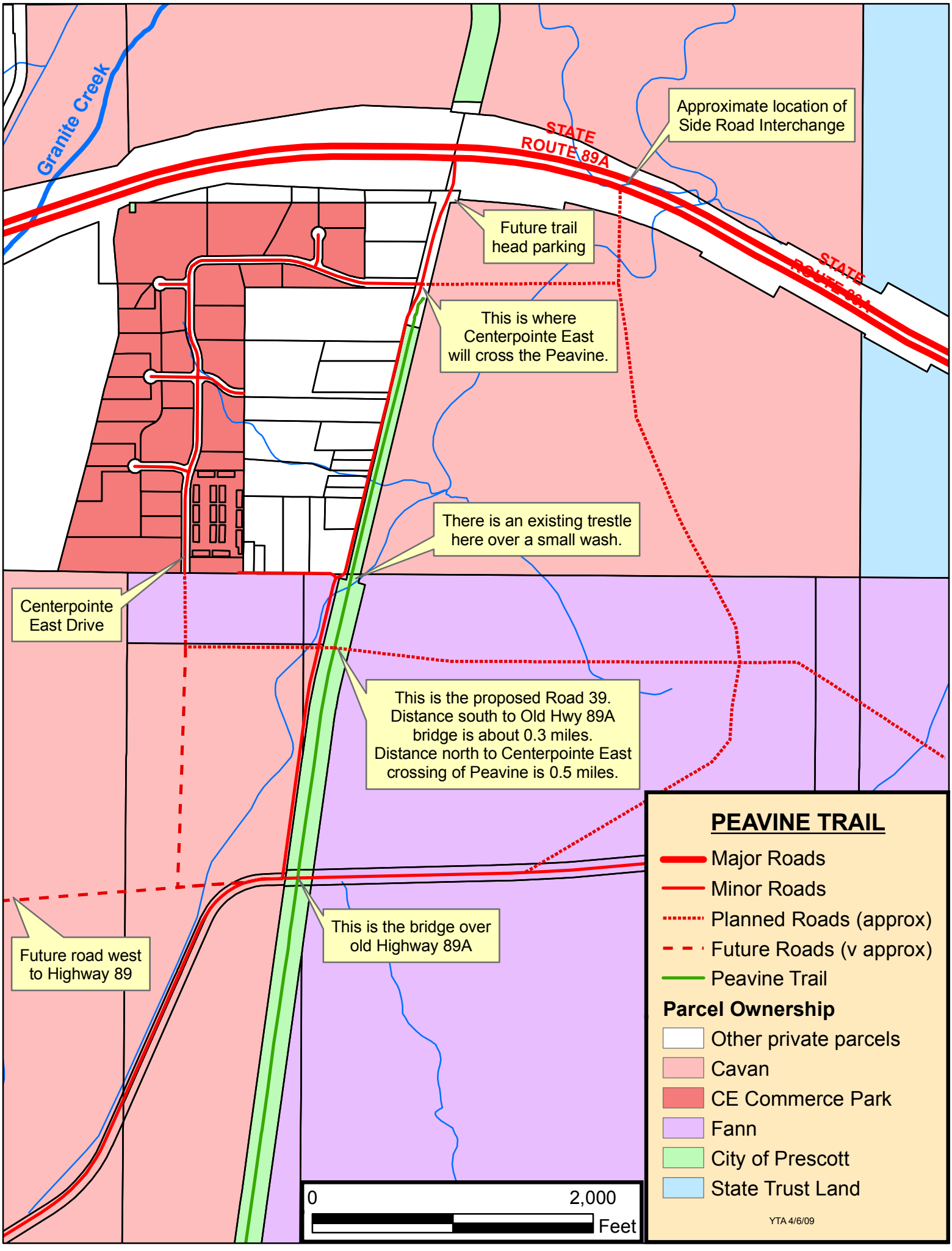
Attached are the two maps I provided to the Prescott City Council for their April 7 2009 meeting (paper copies) to show the planned road crossings of the Peavine Trail at Centerpointe East and Road 39. As it turned out, they postponed the relevant agenda item, but these maps were used at the City Council Workshop on June 12.

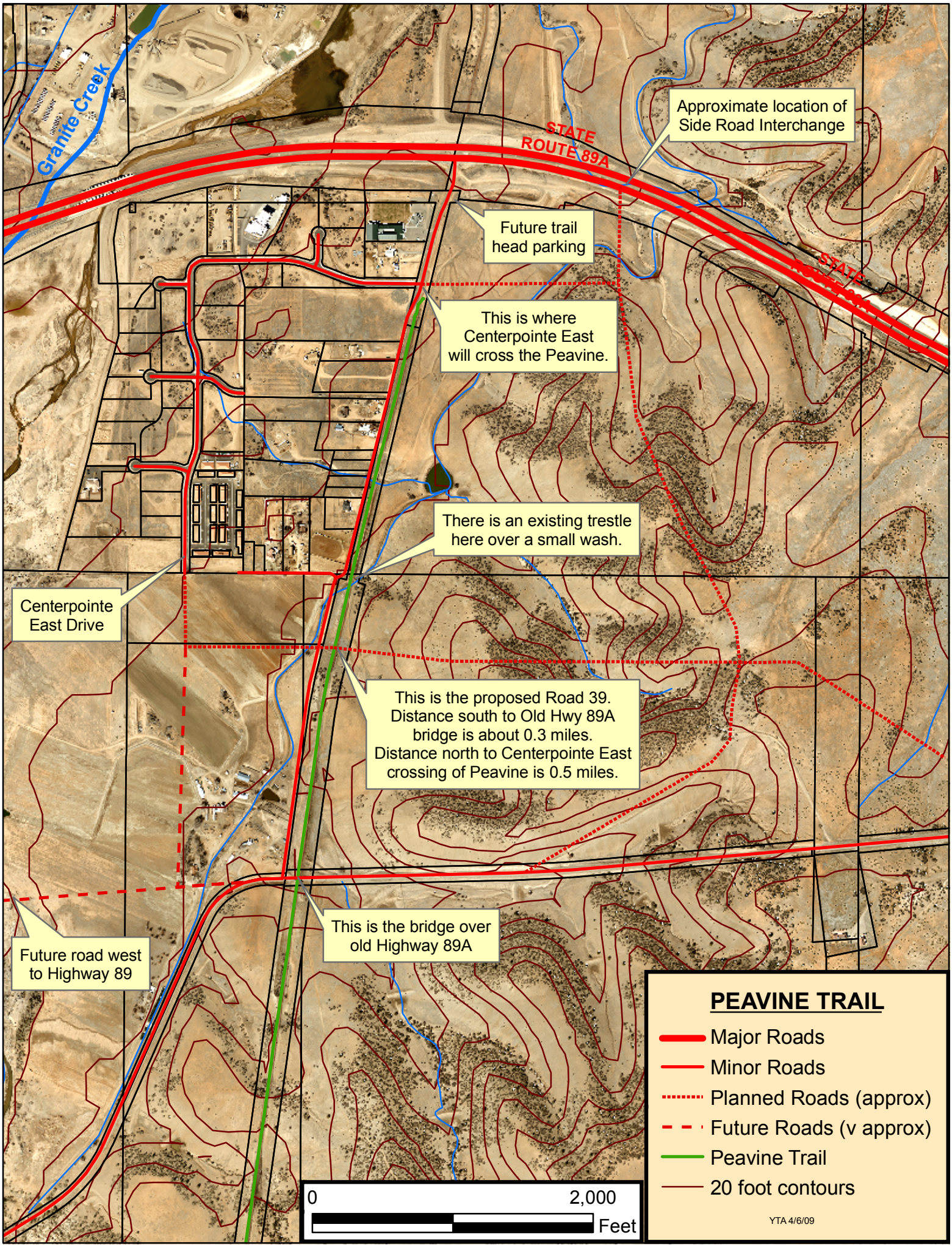
The two maps show the same area and items; one shows who owns the land while the second shows an aerial view and contours.

Regards, Nigel Reynolds

Yavapai County MIS
1015 Fair St., #326
Prescott, AZ 86305
928 442-5661

NOTE: THE ATTACHMENT INCLUDED IN THE CORRESPONDENCE ABOVE IS SHOWN ON THE FOLLOWING PAGE


Granite Creek
STATE ROUTE 89A
Approximate location of Side Road Interchange
Future trail head parking
This is where Centerpointe East will cross the Peavine.
There is an existing trestle here over a small wash.
Centerpointe East Drive
This is the proposed Road 39. Distance south to Old Hwy 89A bridge is about 0.3 miles. Distance north to Centerpointe East crossing of Peavine is 0.5 miles.
This is the bridge over old Highway 89A
Future road west to Highway 89
0
2,000
Feet
PEAVINE TRAIL
Major Roads
Minor Roads
Planned Roads (approx)
Future Roads (v approx)
Peavine Trail
Parcel Ownership
Other private parcels
Cavan
CE Commerce Park
Fann
City of Prescott
State Trust Land
YTA 4/6/09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This is the bridge over old Highway 89A
Future road west to Highway 89
0
2,000
Feet
PEAVINE TRAIL
Major Roads
Minor Roads
Planned Roads (approx)
Future Roads (v approx)
Peavine Trail
20 foot contours
YTA 4/6/09

Scott,

Thanks for your prompt and honest reply. I have some more thoughts but need to see the minutes of the May 26 Council Workshop first. They won't be available for a few days.

On traffic volumes, I'm not sure how precise they are. For example, would there just be one estimate for the full length of Road 39 from Centerpointe East at the west end to the Parkway, or would there be separate estimates for Road 39 between Centerpointe East & the Peavine, and another for Road 39 east of the Peavine? Similarly, would Centerpointe East be broken into traffic segments north of Road 39?

Regards, Nigel

Scott,

Here is another option in place of the culverts (see attached picture – from Park City Utah). Using the abutments and the road bridge (which at 12 feet would be really short) it has these advantages:

1) The portion of the trail under the road would only be the width of the road and be more comforting to users
2) The amount of fill for the road would be less because of not needing cover over the culvert.
3) Lighting may not be required due to shorten length.

Rob Hehlen

Scott,

I think I have a solution to Fann's Road 39.

The attached map (the same one I have used before) shows two routes from the Side Road Interchange to where Road 39 crosses the Peavine. The "south" route goes south on the Parkway and then west on Road 39 to the Peavine. The "west" route goes south on the Parkway for a short distance and then west & south on Centerpointe East Drive before turning east on Road 39 to the Peavine. The distance to the Peavine via either route is essentially the same. The reason given to justify the road 39 crossing of the Peavine is because there must be two access routes into/out of an area, in case one route is blocked due to some emergency.

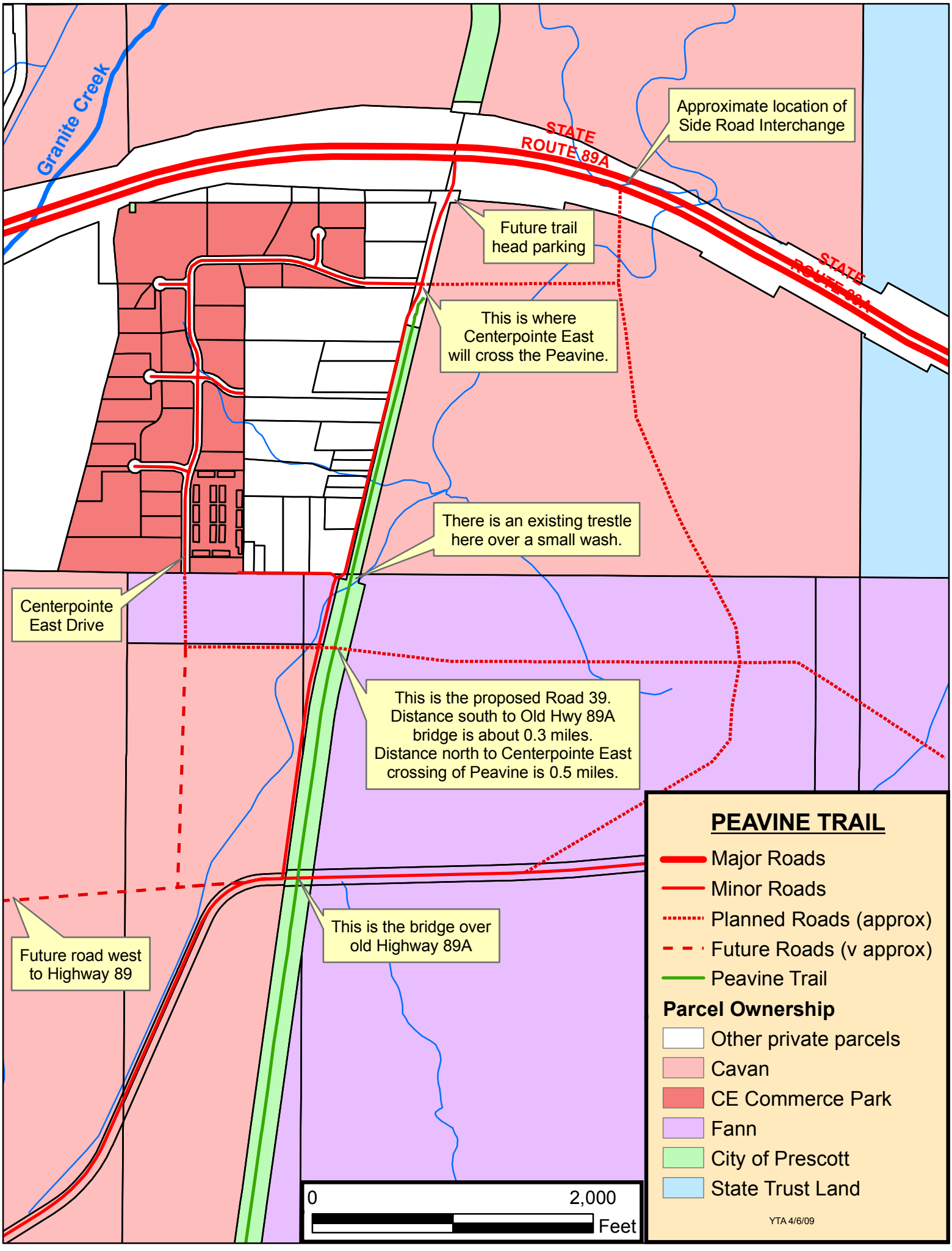
So, the solution is to define the actual crossing by Road 39 of the Peavine as an emergency access route, and have "crash gates" on both sides of the Peavine on Road 39 so there is no every day traffic across the Peavine using the "south" route. These gates are ONLY used in the event of an emergency that closes the "west" route. I think this should meet the "two access route" requirement – please comment. At some future time, if Centerpointe East is extended south to meet the proposed connector road from Highway 89 at the Phippen Museum to the bridge over old Highway 89A, this Road 39 crossing can be permanently closed.

I think this solution would be acceptable to trail users, and should be acceptable to Fann and the City Council. If Fann doesn't like it, he will need to come up with some strong reasons why he needs both a "south" route and a "west" route on an every day basis.

I'd prefer this solution is not shared with others until you respond with reasons why it might not work, so I have a chance to improve the solution before it is shared with City Council and Fann.

Regards, Nigel

NOTE: THE ATTACHMENT INCLUDED IN THE CORRESPONDENCE ABOVE IS SHOWN ON THE FOLLOWING PAGE


Granite Creek
STATE ROUTE 89A
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This is the bridge over old Highway 89A
Future road west to Highway 89
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2,000
Feet
PEAVINE TRAIL
Major Roads
Minor Roads
Planned Roads (approx)
Future Roads (v approx)
Peavine Trail
Parcel Ownership
Other private parcels
Cavan
CE Commerce Park
Fann
City of Prescott
State Trust Land
YTA 4/6/09

Attention: Scott Tkach
Comments on preferred alternative crossing of the Peavine Trail at Road 39 Pages 7-8 The anticipated use of the Road 39 trail crossing suggests that trail use and vehicular use will not coincide. Road 39 will carry much more than commercial traffic especially on weekends. This road is a major arterial through a huge residential development. Page 14. The separated grade overpass should be the favored option. 1. Unanticipated increases in vehicular traffic on Road 39 will not have an effect on trail traffic. Interactions between vehicles and trail users will not be a concern for decades to come. Thus, increased costs of a bridge overpass can be virtually amortized over decades. An at-grade crossing is quite likely to require many modifications particularly if safety issues become acute over time. Page 15. The bypass roads proposed as part of option #2 are unnecessary and appear to be added only to further inflate the costs of the bridge overpass and further compromise it's acceptance because of the inflated costs. 1. There are plans for an elaborate trailhead only ½-mile to the north having parking stalls, kiosk and trail access. Why do we need to further convenience residents of Granite Dells Estates with convenient access exists within that short distance. 2. This same argument applies to the stated justification of access off of Road 39 to the trail for maintenance vehicles. 3. Since when in the long history of public trails has a 5% grade been considered a major disadvantage to trail users? 4. Why should sight distance across the bridge span be a major disadvantage? Trail traffic even for bicycles is still relatively slow especially when bicycles are forced to slow for even a mild 5% grade. Page 30. Discard the option of a phased approach to a possible bridge overpass. 1. Building a bridge overpass sometime in the future adds costs to that of the original at-grade crossing. 2. The decision matrix used to "confirm" the preferred solution was a very subjective process. Even given that, the bridge alternative scored only 11 percent below the preferred alternative. Given the subjective nature of this process, one can only wonder to what extent the existing business relationship between the contracted engineering firm and the developer of Granite Dells Estates has affected that decision matrix. The preferred alternative is exactly what they wanted and at not cost to them. Is it not time for the City of Prescott to begin favoring the attributes of a nationally recognized public trail rather than simply being facilitators for developers?

From: Ron Smith

Attention: Scott Tkach
Priority must be given to the absolute safety of trail users and the preservation of the existing high quality trail experience. All design decisions must follow one standard above all others: A child that runs ahead on the trail will never be endangered at any Peavine Trail crossing. To ensure this standard is met, here are some design specifics for each proposed type of crossing: AT-GRADE: • Trail grade is not altered at crossing, i.e., no curb ramps for trail users. • Trail users do not stop. • Motor vehicles must come to a complete stop. • Only one motor vehicle lane to cross the trail, holding area on each side to allow vehicle in the other direction to wait. • Motor vehicles must mount a steep ramp to cross the trail after coming to a complete stop. • Design ensures motor vehicles cannot exceed more than 5mph when crossing the trail. OVERPASS: • Trail grade must not exceed 3% in order to preserve the existing high quality trail experience and ensure the trail accommodates the least able-bodied trail users. The ADA 5% maximum is meant only for extreme situations and does not apply here. • At-grade crossing that includes the above design specifics must still be provided to accommodate trail access and any trail user who chooses not to climb the overpass. UNDERPASS: • Trail grade must not exceed 3% in order to preserve the existing high quality trail experience and ensure the trail accommodates the least able-bodied trail users. The ADA 5% maximum is meant only for extreme situations and does not apply here. • A less than 3% grade will also help to prevent dangerous bicycle and wheelchair speeds within the confinement of the underpass. • At-grade crossing that includes the above design specifics must still be provided to accommodate trail access and any trail user who chooses not to descend into

the underpass. • Natural light must be ample and visible through the entire length of the underpass in order to avoid the perception of entering a dangerous place. • Lighting must be provided for times that natural light is not enough. • Drainage treatment must ensure no water or debris accumulates on the trail surface inside the underpass. Again, all design decisions must follow one standard above all others: A child that runs ahead on the trail will never be endangered at any Peavine Trail crossing. If you have any questions, please email or call me at: 928-541-9841. Thank you for this opportunity to comment on this precedent-setting trail crossing design.

From: Sue Knaup

Gents,

Since I'm familiar with separated grade crossings for trails from different cities in AZ (i.e., from personal use, and from being the State Trails Coordinator in the 90's), I can provide examples to see for your benefit if you like. Every design we're discussing are already in use elsewhere, and some are working very well. While they can be more expensive, they remove most risk of injury or fatality, and will give us the piece of mind we may desire to ensure the safety on our National Recreation Trail. I'll be glad to help with any information on examples that you may need.

Thanks for all your efforts.
Eric.

Also consider design factors. An at-grade four or more lane road crossing is one of the most dangerous crossing configurations for bicyclists and pedestrians because the near car might stop and wait thus blocking the sightline of a car driver in the next lane who might not even see the bicyclist or pedestrian. Comparing such a dangerous at-grade crossing to a well-designed at-grade crossing is paramount to this process and could result in a crossing design for some of the Peavine crossings that is superior to any grade-separated option with an enormous cost savings to boot.

I've attached photos of such a well designed at-grade trail crossing in Bremen, Germany. Take note of these particular features that could work well for the Peavine:

*single-lane approach for motor vehicles

*trail is raised, requiring motorized vehicles to climb the hump; also note use of textured paving materials for increased awareness

*street traffic must stop, trail users do not even have to slow down. This equates to safety down to the most vulnerable users including children who like to run or bike ahead.

Sue
Sue Knaup
Executive Director
One Street
+1-928-541-9841
Skype: sueknaup
www.onestreet.org (please add our link to your web site)
P.O. Box 3309

Community Asset

Attention: Scott Tkach
Consideration of at-grade crossings of the Peavine Trail is completely unacceptable to me and to everyone who uses this trail. It is apparent, that in haste to appease and please developers, the City of Prescott failed to require developers to pay for an overpass where the highway will cross the trail. This is no reason to put the integrity of the trail at risk as well as the safety of those who use it. The Yavapai Trails Association endorses a trail overpass option, where the Peavine will cross the road at a 5% grade to avoid any crossing of the trail by vehicles. I think this is the best option at this point. Unfortunately, traffic noise and pollution will significantly diminish the quality of this trail, but this seems to be inevitable. The city council needs to consider the value of this trail to everyone who uses it. More vehicles passing nearby or, the worst case scenario, ACTUALLY CROSSING THE TRAIL is poor judgement indeed. This trail belongs to you – the citizens of Prescott. It is the City of Prescott's most important and prestigious trail, being listed in many outdoor recreation magazines as a destination unto itself as a grade-separated trail. It is the City's longest and most rewarding trail. The City has recognized its importance by investing close to a million dollars acquiring rights of way, improving the trail and putting in a great trailhead at Sundog Ranch Road. It is a trail with historic significance. It is a National Recreation Trail and is part of the nationwide Rails to Trails. It is a State of Arizona trail. It is a connecting trail. Together with the Iron King from Prescott Valley and the Peavine in Chino Valley, the tri-cities will be joined once the gap north of Highway 89A is completed. This makes it an excellent commuter trail for bicyclists. It is a scenic trail that goes past Watson Lake and through the beautiful Granite Dells. It provides access to exciting new trails through the spectacular rock formations of the Dells. It is nationally known and is already an attraction to tourists who visit Prescott, and spend their money here. This attraction is bound to grow as more and more people look for what is called ecotourism. It is a very popular trail for hikers, mountain bikers, equestrians, families, people with dogs, bird watchers, and runners. It is a well-used trail – on average, over 100 trail users per day, and this traffic is steadily growing. It is a safe trail for families with their children and for equestrians – no vehicular traffic for 5 miles! At the moment, most users access the trail from its southern end, Sundog Ranch Road. In the future, with major existing and new residential communities farther north, this same high level of traffic can be expected from the planned new trailhead next to the Side Road interchange on Highway 89A. Mr. Cavan and associates, one of the major land developers in this area, have generously donated Land for this purpose. New trails, connecting to Fann's planned residential development, will add to this traffic, and increase the value of his lots. If the city (and Fann and Cavan) want high tech companies to move into the commercial developments, the pristine Peavine is a big plus for these future employees – a trail at their back door and the ability to commute to work on their bikes. It is an asset not only to the community but also to the city and to developers – don't ruin it with an at-grade crossing. So, the Peavine is a unique trail. The Peavine is NOT a trail to be messed with. It is a jewel in Prescott's crown!

From: Rita Carey, MS, RD

Rob. This is a frequent argument in the 'financial justification/benefits' arena. I've always taken the approach to 'talk to the perceived opposition' and make their 'Vested Interest' out weigh the 'Conflict of Interest'. The preservation and enhancement of the Peavine can be a big moneymaker for Fann and Cavan, especially since it is already there, as low hanging fruit. They have a real opportunity here to step up and do something special. Besides the increased property values and increased rate of sales, there will be a huge marketing/image opportunity that can become a legacy.

George

-----Original Message-----
From: Rob Hehlen <prescottrob@qwest.net>
To: 'Rob Hehlen' <rob@cragmania.com>
Cc: nigelaz@commbreed.net; susie@cragmania.com; joycemackin@gmail.com; gsheats@aol.com; eric.smith@prescott-az.gov; debbie.horton@prescott-az.gov; chris.hosking@prescott-az.gov; lisa@prescottbikeped.org; info@paulkatan.org
Sent: Mon, Sep 28, 2009 4:11 pm
Subject: Conflict of Interest?
I was browsing through City documents looking for Fann's development agreement to see who would pay for at grade crossings. I haven't found it yet, but I think Fann was to pay for at grade. which if that is the case, if there wasn't an at grade crossing could we expect Fann to 'pitch in' his cost if not used for a grade separated crossing?

Perhaps more important is who the City hired to do the crossing study (I assume the City hired Lyon). I believe there is a conflict of interest here as Lyon was Fann's Engineer for developing his preliminary plat:

PP09-001, Preliminary Plat for Granite Dells Estates Commercial PAD. APN: 103- 04-001L, 103-04-001M, 103-04-001Q, 103-04-002A, 103-04-003B, 103-04-009C and totaling ± 206 acres. Located South of State Route 89A, East of the Peavine Trail. Owner is Granite Dells Estates Properties Inc. Engineering is Lyon Engineering. Community Planner is Steve Gaber (928) 777-1206.

No wonder the matrix, objective as the numbers are, seem skewed in favor of grade separated crossings.

Rob

Ed Fuller, and engineer here in Prescott Lakes went through the Peavine Crossing Alternatives matrix and applied his ratings. With only a few minor changes the Pedestrian Bridge alternative came out on top. He did not change the categories such as adding the fact an at grade crossing does not fit within the City General Plan directives or agreement with the original Grant to acquire the Rails to Trails resource. Since the Peavine became City 'Open Space/Preserve in Perpetuity' many additional parcels of adjacent Open Space have been added in the Granite Dells, which has increased the value of the Peavine 10 fold. With the development plans along the Peavine both south and north of Hwy 89A, the preservation and enhancement of the Peavine will offer a quick return. Railroad themed pedestrian bridges will make this area a magnet for residential and commercial growth.

George Sheats
Prescott Lakes Landscaping, Parks, and Trails
Member, Over the Hill Gang

George,
Attached is my revision to the Peavine matrix. I increased the Aesthetics weight to 10% and decreased the Property Owners impact to 5%. I changed visual impact and Usability/Convenience for Option 1 and 2 to favor Overpass above At Grade. I also reduced the Safety Score for the At Grade option because as a biker or a pedestrian I see a greater safety risk with cross traffic on the trail. The result favors substantially the Overpass (option 2) above the At Grade (option 1) by 81.3 to 69.3.

Ed Fuller

Attention: Scott Tkach
As a frequent user of the Peavine Trail and a new (2 year) resident of Prescott I feel strongly that an at grade crossing would detract from the great asset that this trial is to our community. Like me, many of our new residents will be drawn here by the great out door recreation opportunities of this area. A grade separated crossing will continue to add to our recreation assets that are so important to our quality of life here in Prescott. Best Regards, Jim Gray

From: Jim Gray

Attention: Scott Tkach
I\'m an avid bicycle rider. I ride the Peavine and Iron King on an average of 5/6 days a week. I have reviewed the documents and strongly choose options 2 or 3. Grade level Peavine with an elevated Road 39. I don\'t like the idea of a dark 12 X 12 X 100 ft. tunnel but this is much better than stopping for cross traffic. I hope you, in your long range vision that option 1 is not selected. The Peavine and Iron King trails were part of reason for moving into this area. Please don\'t look at the $$\'s only. Let\'s look long term and keep safety in mind. Thanks for allowing my input. My wife would also like to recommend the same options. Her name is Lawshe\' Ballard address- 4545 Rustler\'s Canyon, Prescott 2 votes for options 2 or 3. Please acknowledge this email. jb

From: JB Ballard

Attention: Scott Tkach
The Peavine Trail must be preserved. From the Lyon Engineering Options, only Option 2 supports users of the trail. I hike and bike this trail and always see many families with small chilren on the trail...let us not ruin the best asset this city has in order to accommodate a developer! We are really sick of ignorance along these lines.

From: Virginia Ingram

Attention: Scott Tkach
I have reviewed the analysis of the Yavapai Trails Association regarding the road crossings for the Peavine Trail and agree that option #2 is best. The Peavine must be preserved and not have an at grade crossing. Leah Gilbert Member, Prescott Outings Club & Prescott Hiking Club

From: Leah B. Gilbert

Attention: Scott Tkach
I would like to state that I fully support a grade-separated crossing for the Peavine Trail at Road 39. This beautiful trail is heavily traveled and is an indispensable asset to the Prescott area. A grade-separated intersection will help preserve the integrity of the trail and allow trail users access without interruption. I feel that this project is well worth the expense! thank you for considering my comments. -Ron Harvey Dean of Students Kestrel High School

From: Ron Harvey

Attention: Scott Tkach
Any at grade crossing of the Peavine Trail should be avoided. The Trail is a community resource which should not be degraded merely to save a developer costs. Public ROW such as the Peavine Trail should never be given away. As a traffic and highway engineer with many years of experience, I suggest you recognize that in twenty years there will be serious conflicts between the pedestrian traffic and vehicular traffic at the proposed crossing. A grade separated crossing paid for by the developer is best for the community. The developer wants to build his improvements which will bring a direct profit to only him. He should be made to pay for all improvements to the Peavine Trail, so it continues to function as a separated trail structure far into the future.

From: Bill Robertson

Attention: Scott Tkach
To Whom it may concern- I have lived in this area and have enjoyed the many benefits that Yavapai county has to offer its citizens for 16 years. One of the benefits is the many hiking and biking trails in our beautiful area. I bike the Peevine/Iron King trail 3 to 4 times a week. I have seen many forms of wildlife on my rides including, bobcats, antelope, deer, snakes and quail. I love that trail so much, my spirit soars when I ride through the pristine countryside. I consider it one of our counties jewels and it would be a damn shame to put a road through it and disrupt this incredible ecosystem. Any roads and traffic will have a direct negative impact on that trail. Please, please, please do not destroy our trail. Kathy Kent- Peevine Trail Lover

From: Kathy Kent

Revised Matrix and Analysis of Report Contents

Mayor and Prescott City Council
RE: Peavine Trail Crossing Design Alternative Analysis for Granite Dells Estates
Proposed Road 39

Yavapai Trails Association would like to thank Scott Tkach , Lyon Engineering and the City of Prescott for the time and effort spent in preparing the Peavine Trail options presented to various trail advocates at the September 24 meeting.
Lyon Engineering presented 5 possible options for the Proposed Road 39 crossing of the Peavine Trail. Yavapai Trails Association supports a Grade Separated Peavine Crossing. We support options 2 and 3, but prefer option 2. However, we have addressed all of the possible options in our analysis and have included an alternative decision matrix. Our analysis document includes an appendix stating our reasons why the Peavine is unique and should be treated as a valuable asset. These documents are attached for Council's review.
Yavapai Trails Association urges the council to form a policy of no at-grade crossings on the Peavine Trail.
Thank You,
Christina Jan, Secretary, on behalf of:
Joyce Mackin, President
Yavapai Trails Association Board and Members

YTA's Analysis

These comments apply to the Peavine/Road 39 Document produced by Lyon Engineering for the City of Prescott.

This YTA analysis document only addresses Options 1 - 4. We don't think Option 5 is feasible due to the flood problems and having the highest cost.

Our main comments on the Decision Matrix are in a separate document.

Before commenting specifically on Options 1 - 4, we think the following principles need to be emphasized.

1. The Peavine Trail was there first – before developers decided to do development.
   a. Give priority to the Peavine. If it's a matter of convenience, put the inconvenience on the road traffic not the Peavine traffic.
   b. This is a road project, not a trail project – the trail existed long before any roads were contemplated. The City has a fund for road projects, approved and paid for by taxpayers – use this fund for any costs associated with Road 39 crossing the Peavine.
   c. YTA recommends that the City be very careful in the future about its contracts with developers. In that the Peavine trail was there first, all crossings with any significant vehicular traffic should be grade separated, and the cost of any overpass or underpass across the Peavine should be born by the developer (the cost of the Centerpointe East crossing is an exception as it is a City responsibility). This observation needs to be included in the Road 39 Document to avoid continual rehashing of this issue.

2. The Peavine Trail is a unique community asset – see Appendix A for reasons why trail users and others consider it to be special.
    a. Since there will soon be new members on the City Council, YTA believes it to be most important that these reasons be included in the Road 39 Document for their benefit.
    b. Preserving the integrity of the Peavine is an investment, and any expenditure for road crossings should be considered as a one-time cost to maintain this irreplaceable asset.

OPTION 1: AT-GRADE CROSSING

1. An at-grade crossing will reduce the integrity of the Peavine trail and the free passage of trail users. At-grade crossings should be avoided on this special trail (see Appendix A for reasons why this trail should be given special treatment).

2. An at-grade crossing raises serious safety issues. The greatest safety concern is young children walking or riding bikes along the Peavine, who may be oblivious to warning signs and the danger of vehicular traffic. It should be noted that Peavine users have traveled about 4 miles from the Sundog trailhead to reach Road 39 without crossing any road (except Storm Ranch Road, which has virtually no traffic, and has a four way stop). No significant roads cross the Peavine at-grade now, and this condition should remain unchanged.

3. The current proposal, which specifies a 35 mph speed limit at the crossing, is unsafe. Many drivers routinely exceed the speed limit, so speeds of 45 mph will not be uncommon. The adjusted weight for Safety in the matrix is almost identical for Options 1 and 2 (24 and 27 respectively). This makes no sense. If the numbers in the matrix are revised to show the additional safety provided by a bridge or culvert, the value of an at-grade crossing decreases significantly.

4. Due to several federal transportation enhancement grants provided to the City for purchase of rails-to-trails right-of-way, at-grade crossings may not be sanctioned under the terms of these grants. Our analysis of provisions in various grants leads us to believe at-grade crossings will not be acceptable. Any delay in the ruling on this issue by the federal authorities could affect preparation work on Road 39. On this basis, Option 1 should be discarded.

OPTION 2: GRADE SEPARATED PEAVINE OVERPASS

1. This option is best for trail users, both for reasons of safety and to avoid disruption of the integrity of travel on the Peavine. Integrity for this trail is defined as having no at-grade crossings, which is what attracts trail users now, and will do so in the future.

2. This option is also best for vehicular traffic on Road 39 as drivers won't have to slow down for trail users, nor contend with rumble strips, medians and other devices.

3. The 5% grade for overpasses or underpasses is acceptable to all types of trail users and has minimal impact. It you have traveled a number of miles to reach this proposed crossing, a slight grade for a short distance due to an overpass or underpass is considered irrelevant to the vast majority of trail users. It is a much better alternative than the disruption to free traffic flow caused by an at-grade crossing. In our opinion, the Road 39 Document should NOT mention a 5% grade as being a negative quality. It should only be included because it is an Americans with Disabilities Act (ADA) requirement. It should also be noted that most trail users enjoy the view an elevated bridge provides.

4. In YTA's opinion, the need for an at-grade bypass crossing next to the overpass bridge is unnecessary. Our reasons are as follows:
    a. Almost all equestrians prefer a properly designed bridge to a road crossing.
    b. The overpass bridge can carry vehicles from the north, such as city maintenance pick-ups and emergency vehicles like police cars and Life Line ambulances.
    c. No trail access from Road 39 is provided in Options 3 - 5.
    d. To require access for heavy fire engine type vehicles at Road 39 is unreasonable, and is not included in Options 3-5. If it is absolutely necessary, a single gated access ramp on the west side of the bridge going south would solve this issue and could also be used for trail access.
    e. This single-direction-access option avoids the dangers resulting from trail users crossing Road 39 here.
    f. Road 39 does not have a sidewalk, so pedestrian traffic is not expected.

5. If the bypass would significantly increase the cost of the Option 2 for various reasons, including encroachment on private land, it should be included as a separate option.

OPTION 3: GRADE SEPARATED PEAVINE UNDERPASS

1. This option is acceptable to trail users as it avoids interaction between vehicles and trail users.

2. Removing the center turn lane where the road goes over the culvert could shorten the length of the culvert, indicated as 87 feet in the Document. This would save cost as well as being better for trail users.

3. Appendix F (Cost Estimate) shows the cost of Option 3. The first two lines show a cost of $86,400 for the Box Culvert and $52,000 for installation, making a total of $138,400. However, Appendix E1 (Underpass Crossing) shows two alternatives, namely a Precast Underpass and a Multi-plate Underpass. The Multi-plate underpass has a lower cost, with a total of $62,444 for the culvert and installation, which is about $76,000 less. Why was the higher figure used? By using the lower cost alternative, Option 3 becomes cost competitive.

OPTION 4: GRADE SEPARATED PEAVINE UNDERPASS, ALTERNATE LOCATION

1. This option is acceptable to trail users as it avoids interaction between vehicles and trail users.

2. Removing the center turn lane where the road goes over the culvert could shorten the length of the culvert, indicated as 98 feet in the Document. Perhaps the bike lanes could be eliminated also (see paragraph 4 below), resulting in an even shorter culvert. This would save cost as well as being better for trail users.

3. To reduce the cost of this option, Road 39 could make a 90-degree bend to the north immediately after crossing the culvert, and then another 90-degree bend to the west onto the original alignment of Road 39. This would minimize encroachment onto Cavan's property on the west side of the Peavine, and maybe eliminate encroachment entirely as the Peavine right-of-way at this point is about 200 feet. This would be less convenient for vehicular traffic, but remember Principle 1a on page 1.

4. Access to the Peavine at Road 39 could be provided on the west side through a narrow opening from the road onto the Peavine. By providing a narrow access ramp on the east side of the Peavine, leading from Road 39 down to the Peavine at the original alignment, bikes could get across the Peavine, thus avoiding the need for bike lanes on top of the culvert.

5. The length of the culvert in Option 4 is 98 feet whereas the length of the culvert in Option 3 is only 87 feet. Regardless, the same comments as given above for Option 3 (paragraph 3) also apply to Option 4.

Appendix A

PEAVINE TRAIL: A SPECIAL TRAIL

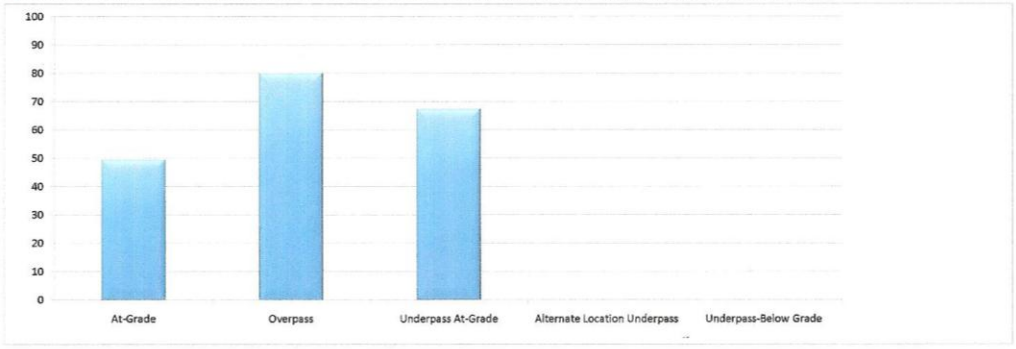
The Peavine Trail is not just "any old trail," it is a unique community and regional asset. I suspect that many members of the City Council have not walked the full length of the Peavine, so let me remind you and others why it is so special.

- This trail belongs to you – the citizens of Prescott.
- It is the City of Prescott's most important and prestigious trail, being listed in many outdoor recreation magazines as a destination unto itself as a grade-separated trail.
- It is the City's longest and most rewarding trail.
- The City has recognized its importance by investing close to a million dollars acquiring rights of way, improving the trail and putting in a great trailhead at Sundog Ranch Road.
- It is a trail with historic significance.
- It is a National Recreation Trail and is part of the nationwide Rails to Trails.
- It is a State of Arizona trail.
- It is a connecting trail. Together with the Iron King from Prescott Valley and the Peavine in Chino Valley, the tri-cities will be joined once the gap north of Highway 89A is completed. This makes it an excellent commuter trail for bicyclists.
- It is a scenic trail that goes past Watson Lake and through the beautiful Granite Dells. It provides access to exciting new trails through the spectacular rock formations of the Dells.
- It is nationally known and is already an attraction to tourists who visit Prescott, and spend their money here. This attraction is bound to grow as more and more people look for what is called ecotourism.
- It is a very popular trail for hikers, mountain bikers, equestrians, families, people with dogs, bird watchers, and runners.
- It is a well-used trail – on average, over 100 trail users per day, and this traffic is steadily growing.
- It is a safe trail for families with their children and for equestrians – no vehicular traffic for 5 miles!
- At the moment, most users access the trail from its southern end, Sundog Ranch Road. In the future, with major existing and new residential communities farther north, this same high level of traffic can be expected from the planned new trailhead next to the Side Road interchange on Highway 89A. Mr. Cavan and associates, one of the major land developers in this area, have generously donated Land for this purpose.
- New trails, connecting to Fann's planned residential development, will add to this traffic, and increase the value of his lots.
- If the city (and Fann and Cavan) want high tech companies to move into the commercial developments, the pristine Peavine is a big plus for these future employees – a trail at their back door and the ability to commute to work on their bikes.
- It is an asset not only to the community but also to the city and to developers – don't ruin it with an at-grade crossing.
- So, the Peavine is a unique trail.
- The Peavine is NOT a trail to be messed with. It is a jewel in Prescott's crown!

Peavine Trail Road 39 Crossing Weighted Decision Matrix

	Category Total Weight	Item Weight	At-Grade		Overpass		Underpass At-Grade		Score Range	Comments
			Option 1		Option 2		Option 3			
Safety	30		Score[1] (1-10)	Adjusted Weight[2]	Score[1] (1-10)	Adjusted Weight[2]	Score[1] (1-10)	Adjusted Weight[2]	1=Least Safe 10=Most Safe	
Trail Users-Peavine		30	3	9	9	27	9	27		Using a bridge above an intersection with vehicles is far safer Vehicle safety is also increased without pedestrian traffic
Aesthetics	5									
Visual Impact		5	3	1.5	8	4	5	2.5	1=Least Aesthetic 10=Most Aesthetic	Overpass bridge retains historic character of the SF,P&P, Railway Overpass bridge sends pedestrians welcome message to users
Usability and Convenience	30									
Pedestrian		10	3	3	8	8	9	9	1=Less Usable 10=Most Usable (Current Condition)	Pedestrians don't need to do anything but enjoy scenery
Equestrian		7	4	2.8	7	4.9	5	3.5		Equestrians do not have to deal with vehicles if trained for bridges
Bicycle		10	3	3	9	9	9	9		Bikes can enjoy a short increase n grade for a safe crossing
Maintenance Vehicle		3	6	1.8	6	1.8	6	1.8		Maintenance vehicles pay extra attention either way
Cost	25									
Structure/Foundation		7	9	6.3	5	3.5	5	3.5	1=High Cost 10=Low Cost	Either alternative will be engineering constrcuted/certified
Earthwork		4	8	3.2	4	1.6	2	0.8		
Maintenance		4	7	2.8	6	2.4	6	2.4		Bridges mostly maintenance free. At grade high-tech monitoring
Energy Usage		2	8	1.6	7	1.4	7	1.4		More visibility when vehicles mix with various pedestrian types
ROW Impact		8	10	8	10	8	2	1.6		Unknown
Adjacent Property Owner Impact	10									
Encroachment onto Property		5	3	1.5	8	4	3	1.5	1=High Impact 10=Low Impact	Dangerous encroachment on Rails-to-Trails user experience
Usability/Access to Land		5	10	5	9	4.5	7	3.5		Land owner has access to Granite Dells via Peavine
Total	**100**			**49.5**		**80.1**		**67.5**		

(1) - Option's "score" is based on a 1-10 range
(2) - Option's "adjusted weight" is calculated by multiplying the "item weight" by the "score" divided by 10
(*) - Option 5 scores in this area are lower than Option 3 and 4 due to the possibility of standing water and muddy conditions following a rain or snow event



Lyon Engineering

Mayor and Prescott City Council

RE: Peavine Trail Crossing Design Alternative Analysis for Granite Dells Estates

Prescott Lakes community views the Peavine Trail as a valuable asset to our community with frequent use of the Peavine by our residents including retirees and their grandchildren. We also view the Peavine Trail as a key part of the overall Prescott Lakes trails system and Community amenities. This asset attracts potential homeowners to Prescott Lakes, with the Peavine's unique flat and protected terrain.

Prescott Lakes Trails System would like to thank Scott Tkach, Lyon Engineering and the City of Prescott for the time and effort spent in preparing the Peavine Trail options presented to various trail advocates at the September 24 meeting.

Lyon Engineering presented 5 possible options for the Proposed Road 39 crossing of the Peavine Trail including a decision analysis matrix. Presscott Lakes supports a Grade Separated Peavine Crossing in contrast to that supported by the presented matrix. Attached is our proposed modified matrix which favors option 2, the Grade Separated Overpass.We place a much lower rating on User Safety, Aesthetics, and Useability and Convenience for the At-Grade crossing than the proposed analysis matrix presented. We also provided a higher Category Weight for Aesthetics and lower Category Weight for Adjacent Property Owner Impact. We have not contested the Cost Evaluation nor the Cost Category Total Weight. Our matrix however demonstrates that the other less tangible factors out-weigh the cost differential in favor of a separated grade crossing.

Presscott Lakes Trail System urges the council to form a policy of no at grade-crossings on the Peavine Trail.

Sincerely

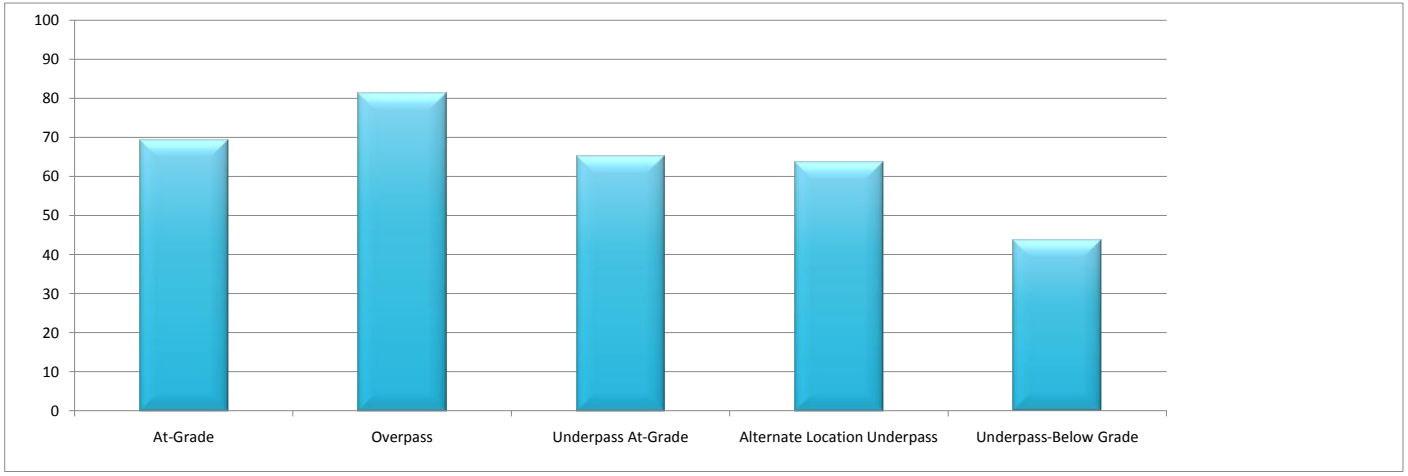
Ed Fuller, representing the Presscott Lakes Trails System

NOTE: THE ATTACHMENT INCLUDED IN THE CORRESPONDENCE ABOVE IS SHOWN ON THE FOLLOWING PAGE

Peavine Trail Road 39 Crossing Weighted Decision Matrix

	Category Total Weight	Item Weight	At-Grade		Overpass		Underpass At-Grade		Alternate Location Underpass		Underpass-Below Grade		Score Range
			Option 1		Option 2		Option 3		Option 4		Option 5		
Safety	30		Score[1] (1-10)	Adjusted Weight[2]	Score[1] (1-10)	Adjusted Weight[2]	Score[1] (1-10)	Adjusted Weight[2]	Score[1] (1-10)	Adjusted Weight[2]	Score[1] (1-10)	Adjusted Weight[2]	1=Least Safe 10=Most Safe
Trail Users-Peavine		30	6	18	9	27	9	27	9	27	4	12	
Aesthetics	10												
Visual Impact		10	5	5	7	7	5	5	5	5	7	7	1=Least Aesthetic 10=Most Aesthetic
Usability and Convenience	30												
Pedestrian		10	5	5	9	9	9	9	9	9	2 *	2	1=Less Usable 10=Most Usable (Current Condition)
Equestrian		7	5	3.5	9	6.3	5	3.5	5	3.5	4 *	2.8	
Bicycle		10	5	5	9	9	9	9	9	9	2 *	2	
Maintenance Vehicle		3	10	3	8	2.4	8	2.4	8	2.4	2 *	0.6	
Cost	25												
Structure/Foundation		7	10	7	2	1.4	2	1.4	2	1.4	2	1.4	1=High Cost 10=Low Cost
Earthwork		4	10	4	3	1.2	2	0.8	3	1.2	4	1.6	
Maintenance		4	10	4	8	3.2	6	2.4	6	2.4	1	0.4	
Energy Usage		2	9	1.8	9	1.8	7	1.4	7	1.4	4	0.8	
ROW Impact		8	10	8	10	8	2	1.6	1	0.8	10	8	
Adjacent Property Owner Impact	5												
Encroachment onto Property		2.5	10	2.5	10	2.5	3	0.75	1	0.25	10	2.5	1=High Impact 10=Low Impact
Usability/Access to Land		2.5	10	2.5	10	2.5	4	1	1	0.25	10	2.5	
Total	**100**			**69.3**		**81.3**		**65.25**		**63.6**		**43.6**	

(1) - Option's "score" is based on a 1-10 range
(2) - Option's "adjusted weight" is calculated by multiplying the "item weight" by the "score" divided by 10
(*) - Option 5 scores in this area are lower than Option 3 and 4 due to the possibility of standing water and muddy conditions following a rain or snow event



Peavine Trail Crossing Road 39 Comments

Rob Hehlen
Trails Specialist – Prescott National Forest

First off I would like to thank the City of Prescott for putting this report together. It shows commitment to the residents of this area and their concern for this trail. The design work on the 5 options and cost estimates are extremely helpful and the matrix is an excellent way to summarize the findings. However, I believe the way the costs for many of the options were put together had flaws and using subjective ratings in the matrix doesn't result in properly rating the options. Here are my suggestions.

1. Option Costs

   Option 2 – This is actually a combination of a bridge option and option 1 which adds additional cost that isn't required to build the bridge. If this option was asked for by the COP, then I suggest adding an Option 2a that would remove all costs associated with the at grade portion of this estimate. Items that could be removed for and Option 2a:

Street Lights	$24,000
Vertical Curb and Gutter – Rd 39 Island	1,836
Island Landscaping	500
Sidewalk Ramps with Detectible Warnings	4,000
12' wide bypass Road	20,200
Bollards/Access Gate	500
Striping	1,000
Subtotal Savings	52,036
20% Contingency	10,407
Savings	62,443
Cost of Option 2a (353,215-62,443)	**290,077**

   Option 3-5 – In Appendix E Contech Bridge Solutions gave estimates for two different types of underpasses. The costs used for options 3-5 used the most expensive of the two options. $166,080 vs $74,932 (this adds the 20% contingency to the cost estimates from Contech). Using the lower price, the cost of the underpass options would be reduced by $91,147.

2. Matrix Items

   Property Owner Impact: I think this should be thrown out. The cost estimates compensate the owners for encroachment onto their property, so it wouldn't be 'their' land anymore. Take the 10 points and add it to "Usability and Convenience – Rd 39 Vehicles" (see next paragraph)

   One item should be added to the matrix is Usability and Convenience – Rd 39 Vehicles. The reason for this is that Option 1 where vehicles as large as a semi-truck would have to slow down from 35 plus MPH to go over the raised trail crossing (usually to 20 MPH or slower). This would be a major inconvenience to motor vehicle traffic and should be addressed.

3. Matrix Weighting

   This is somewhat subjective, but overall I think the weighting of the major categories is good. However, the weighting breakdown for "Usability and Convenience" and "Cost" need to be changed based on actual figures. Here's my recommendations.

Usability and Convenience: Base the Item Weight on percentage of use. On a weekly basis there are 1,413 users. Bikes and hikers are split about 50/50. Maintenance vehicles go on the trail about twice a week and there are perhaps two horses per week. Using percentage of use, the items weights should be adjusted as such:
Pedestrian: 14.95
Equestrian: 0.05
Bicycle: 14.95
Maintenance Vehicle: 0.05
Even though it would skew the numbers towards horses and maintenance vehicles, I'd suggest 14, 1, 14, 1, respectively.

Cost: Splitting the costs into the 5 different items isn't necessary. What matters are only two costs. Cost of construction and cost of maintenance/energy use. I'd split the category weight 20 for construction and 5 for maintenance.

4. Matrix Score

Where possible, actual facts should be used to come up with the matrix scores. All items should be rated 1-10 with the least desirable being a 1 and most desirable being a 10.

Safety: This will probably be subjective as data on trail bridge crossings and underpasses are probably non existent. I would say, however, that is will be much safer not to cross with vehicles than to cross with vehicles. If the 5 options are rated on a scale of 1-10 with the least safe option being a 1 and the most save being a 10, I would rate Option 1 a 1, Options 2-4 a 10 and Option 5 a 7. Again, subjective.

Aesthetics and Usability. To be accurate, a survey should be made of trail users to get actual figures to create the scores. I think you will find that Option 1 is over rated.

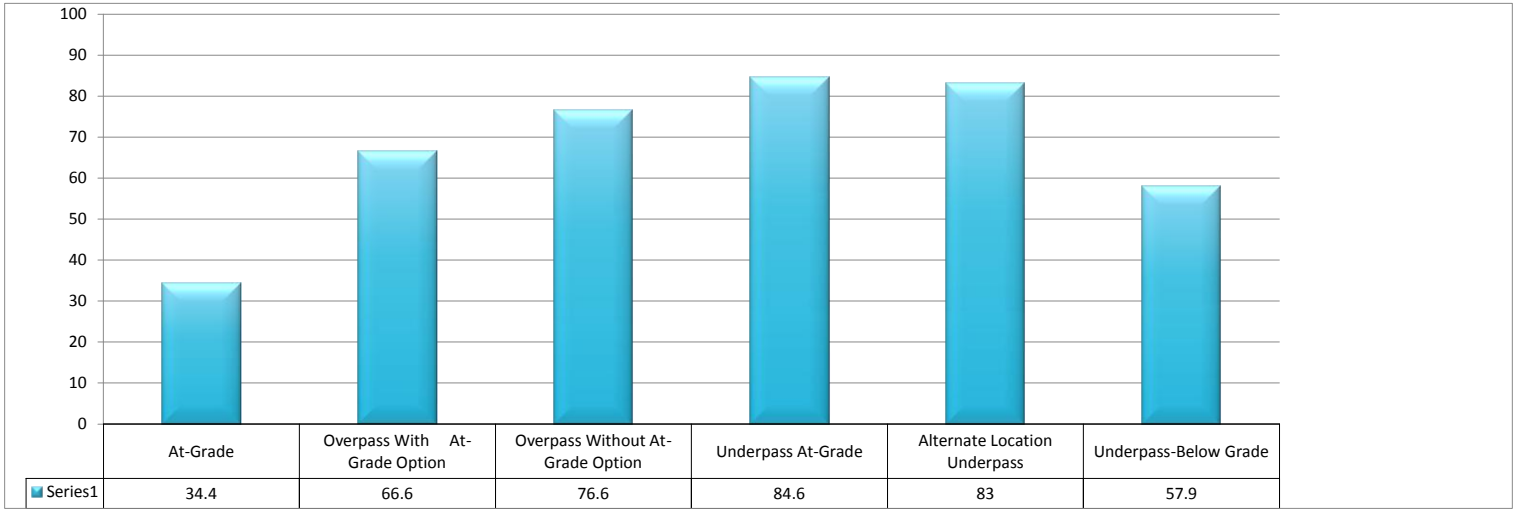
Cost: Actual figures from the cost estimates should be used to come up with the score, not subjective numbers that are currently used now. Taking the most expensive option (after adjusting for the lower underpass cost) as a 1 and the lowest cost option as a 10, then dividing the difference between the two into 9 equal parts (506,664-46,225/9 = 51,160) , the item score can be calculated. Example: Option 2 (353,215/51,160=6.9) Since the scale is reversed (10 being lowest cost) subtract 6.9 from 10 and the score for Option 2 is 3.1. Score for Option 2a is 4.3. Same holds true for maintenance/energy costs. Should be based on a 10-20 year average to come up with the figures.

NOTE: THE ATTACHMENT INCLUDED IN THE CORRESPONDENCE ABOVE IS SHOWN ON THE FOLLOWING PAGE

Peavine Trail Road 39 Crossing Weighted Decision Matrix

	Category Total Weight	Item Weight	At-Grade		Overpass With At-Grade Option		Overpass Without At-Grade Option		Underpass At-Grade		Alternate Location Underpass		Underpass-Below Grade		Score Range
			Option 1		Option 2		Option 2a		Option 3		Option 4		Option 5		
Safety	30		Score[1] (1-10)	Adjusted Weight[2]	Score[1] (1-10)	Adjusted Weight[2]	Score[1] (1-10)	Adjusted Weight[2]	Score[1] (1-10)	Adjusted Weight[2]	Score[1] (1-10)	Adjusted Weight[2]	Score[1] (1-10)	Adjusted Weight[2]	1=Least Safe 10=Most Safe
Trail Users-Peavine		30	1	3	6	18	9	27	10	30	10	30	7	21	
Aesthetics	5														
Visual Impact		5	7	3.5	10	5	10	5	6	3	6	3	7	3.5	1=Least Aesthetic 10=Most Aesthetic
Usability and Convenience Trail Users	30														
Pedestrian		14	1	1.4	8	11.2	7	9.8	10	14	10	14	7	9.8	1=Less Usable 10=Most Usable (Current Condition)
Equestrian		1	1	0.1	10	1	8	0.8	7	0.7	7	0.7	6	0.6	
Bicycle		14	1	1.4	8	11.2	7	9.8	10	14	10	14	7	9.8	
Maintenance Vehicle		1	10	1	10	1	6	0.6	8	0.8	8	0.8	7	0.7	
Usability and Convenience Road 39 Vehicles	10														
Road 39 Vehicles		10	1	1	10	10	10	10	10	10	10	10	10	10	1=High Impact
Cost	25		$46,225		$353,215		$290,077		$292,759		$331,330		$506,664		
Construction/ROW		20	10	20	3.1	6.2	4.3	8.6	4.3	8.6	3.5	7	1	2	1=High Cost
Maintenance/Energy Use		5	6	3	6	3	10	5	7	3.5	7	3.5	1	0.5	
Total	**100**			**34.4**		**66.6**		**76.6**		**84.6**		**83**		**57.9**	

(1) - Option's "score" is based on a 1-10 range
(2) - Option's "adjusted weight" is calculated by multiplying the "item weight" by the "score" divided by 10



Miscellaneous Comments and Correspondence

Attention: Scott Tkach
There shall be no at grade crossing allowed across the peavine trail. The developer shall pay for the grade separation, an overpass or tunnel, not the taxpayer of the city of prescott.

From: alfred hoeger

Hi Scott,

Just wanted to make sure you received our comments on Rd 39 Options. I dropped them off at Engineering yesterday. Please let me know if you received them.

Thanks,
Joyce

Scott,

I'm sorry I didn't see you e-mail below until today -- I normally only work at the County GIS dept. on Monday mornings, Tuesdays and Wednesdays. I am replying from my home e-mail, as Road 39 is my personal activity and doesn't involve YC GIS.

I think you are probably referring to the e-mail that George forwarded to a large audience on Sept 28, with Ed Fuller's comments on the Decision Matrix. That resulted in various responses from Rob Hehlen, Sue Knaup and maybe others. At the YTA meeting last Thursday, we agreed to gather all the comments from the YTA Board, keeping our correspondence internal to the Board. Once we have reviewed all of our internal comments, we will send them to you in a simple format. I hope that will be completed in the next couple of weeks.

I have no control over comments from people other than the YTA Board.

Regard, Nigel

~~~~~~

From: Tkach,Scott [mailto:scott.tkach@prescott-az.gov]
Sent: Thursday, October 01, 2009 4:27 PM
To: Nigel Reynolds (GIS)
Cc: Tkach,Scott
Subject: RE: Road 39

Nigel per our conversation after the presentation can you please work with your group try to get a consensus regarding the revised matrix. In order to have a meaningful dialog during the comment resolution it would be tremendously helpful if the Trail Advocates were all on the same page. I have received several versions of the revised matrix and would prefer you folks to provide a unified front regarding your direction rather than having me interoperate the groups collective ranking.

Thanks and have a good weekend.

Regards, -Tkach

Attention: Scott Tkach
I guess my vote would be any option EXCEPT option 1. I Prefer an overpass to an underpass.

From: Roy Willey
~~~~~~

The Peavine is a huge tourist destination. Does the city want a headline reading, MN parents and children hit while trying to cross highway!

The Peavine is popular with individuals and local families (including young kids) on bikes, runners, walkers, hikers, moms and dads with kids in strollers. Is the city willing to deal with multiple lawsuits because of grade level street crossings & the resulting pedestrian accidents as the Peavine is extended?

Based on the uproar created by giving a contractor the ability to let a contract on a city street in the Peavine area and the legal battle created by the city's management (or mis-management) of the current election, why is Prescott opening itself up to lawsuits that are avoidable by creating underpasses or overpasses for Peavine users.

How about common sense-save the taxpayers money-avoid lawsuits!

Sharon Arnold
1891 Timber Point East
Prescott, AZ 86303

778-3958

rails-to-trails
conservancy

Western Regional Office
26 O'Farrell Street, Suite 400
San Francisco, CA 94108

tel 415.397.2220
fax 415.397.2228

www.railstotrails.org

11 February 2009

Prescott City Council
City Council Office
201 S. Cortez Street
Prescott, AZ, 86302

Re: Peavine Trail

Dear Members of the Prescott City Council:

We are writing to encourage you to preserve the continuity of the Prescott Peavine Rail-Trail.

Rails-to-Trails Conservancy is a national non-profit organization dedicated to enriching America's communities by creating a nationwide network of trails from former rail lines and connecting corridors to build healthier places for healthier people. In the past 23 years, we have worked with communities to create nearly 15,000 miles of rail-trails across the nation.

The Prescott Peavine Rail-Trail is one of the gems in the national rail-trail network. This trail has been nationally recognized as one of the country's outstanding rail-trails. It was featured as a Destination Trail in our national magazine Rails to Trails in winter 2007; it has been designated a National Recreation Trail, part of a system of trails envisioned in 1988 by the President's Commission on American Outdoors; and the connecting Iron King Trail was featured as the Trail of the Month in our national magazine in January 2005. In addition, we highlighted the Prescott-Peavine Trail in a press release last year as an affordable vacation destination, in light of the high gas prices (see attached).

This scenic trail network is not only a recreational asset for local families, but a route for commuters, and a tourist destination that benefits the local economy. Preserving the continuity of the Peavine and Iron King trail network, without at-grade crossings, is important for a number of reasons, including safety, convenience and popularity as a tourist destination. As a national trails organization working with communities across the country on trail planning and design, we know that an uninterrupted trail experience is a critical factor in attracting local families and commuters, as well as tourists who come to experience the trail and the landscape.

Therefore, we strongly urge you to include underpasses or overpasses to accommodate the trail where new roads or highways will cross the route. Rails-to-Trails Conservancy has documented

many different designs of trail underpasses and bridges that we would be happy to share with you, and can provide other planning resources as you continue to develop your outstanding rail-trail network.

Thank you for your consideration.

Sincerely,

Laura Cohen

Laura R. Cohen
Director, Western Region
Rails-to-Trails Conservancy

cc: President, Joyce Mackin and Board Members, Yavapai Trails Association

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Rails-to-Trails Conservancy Press Release: 05/12/2008

GOT THE GAS PRICE BLUES? TRY RAIL-TRAILS FOR AN ALTERNATIVE VACATION

Families Across America Turn to Rail-Trails for Cheap, Healthy Fun

WASHINGTON, D.C.—As gas prices lean toward $4 a gallon this summer, Rails-to-Trails Conservancy encourages families to turn to rail-trails as an alternative way to vacation. Rail-trails, pathways converted from old railroad lines, span America, connecting the nation in the same way that that railroads once did. With more than 15,000 miles of rail-trail in America connecting rural landscapes, suburban communities and major metropolitan areas, families can explore the nation without ever having to hop in a car.

"With gas prices at an unprecedented high, vacationers need alternative ways to travel, and rail-trails are a fun, healthy and affordable way to see different parts of the country," says Keith Laughlin, president of Rails-to-Trails Conservancy.

Travelers looking for an urban vacation can turn to rail-trails that showcase cities from unique vantage points, like the Minuteman Bikeway in Boston, the Monon Trail in Indianapolis, or the Burke-Gilman Trail in Seattle. The Monon Trail, for example, begins at in the heart of Indianapolis and ends in the small and eclectic town of Carmel. Along the 15-mile trail tourists can visit cafes, the State Fairgrounds and community staples such as Bubs Burgers and Ice Cream shop—and all without ever needing a car.

More rural trails, such as the Prescott-Peavine Trail in Arizona, provide families with a more outdoors-focused vacation. Rural rail-trails offer plenty of activities to do along the trail, from canoeing to picnicking and fishing, and can tailor accommodations from tent-camping to bed-and-breakfasts to suit their needs or interests.

Rail-trails are also ideal for the family looking for an affordable but fun and easy get-away. Tucked into many suburban towns around the country, trails like the Washington & Old Dominion Rail-Trail Regional Park in Virginia allow vacationers to hit the trail with minimal effort. Families can explore their own backyard and create vacation memories without the standard vacation hassles.

To start planning your vacation around a rail-trail, visit Rails-to-Trails Conservancy's TrailLink.com. Users can search by state, zip code or county to discover rail-trails in their area. Trail profiles feature descriptions, photos and user reviews. Register for free and access detailed trail maps when available. Nearly half of the more than 1,500 rail-trails have been mapped and more are being added every day.