**Survey Questions:**

* **Question #1 – (Jenny & Josh):**

***LA County operates a regional network of multi-use trails and we installed a new signage suite course over the past few years. The signage looks great and is intended to be compatible within natural landscapes, but in some areas there remains the need for additional signage that is more regulatory in nature. One significant challenge is the interface between users, particularly in the way of excessive bike speeds. Equestrian users have requested more signs that include the standard "horses have the right of way.***

***Jenny answered:***My response is I'm involved in a trail marking webinar. Perhaps more the need to apply community based social marketing and go out and talk to the equestrians and talk to the cyclists and determine exactly the needs and motivations and the behavioral and expectations and points of conflict and in that process identify those trusted messengers to represent the cyclists and to represent the equestrian to get the message out about what is appropriate compromising behavior to ensure safety. We've seen this happen in trail systems in Orange County where the cycling community dominated a particular trail system. We did survey work. We did sign development, but it also came down to community based social marketing.

***Josh answered:*** To kind of piggyback off of that. Without knowing the network specifically, what we have seen in the past is always adding signage can be helpful. But sometimes it boils down to the overall design. And some things we've seen that have worked have been directionality to the trails. And or talking to the community and potentially trading off a trail that would become equestrian only or bike only the help mitigate user conflicts.

* **Question #2 – (Scott):**

***How do we avoid sign fatigue to ensure high importance regulatory information isn't missed / ignored?***

***Scott answered:***I guess my input would be that a lot of this is about some of the design stuff that Jenny talked about and Charlie mentioned, too. If you have good sharp contrasting east to read signs you can probably get away with far fewer. It depends on the trail if it's windy and woody. I think a lot of this goes back to design an effective visible sign to start with.

* **Question #3 – (Scott):**

***What is the best way to sign routes that utilize multiple trails with individual numbers?***

***Scott answered:***A lot of this is color coding a little bit like Jenny showed and Charlie showed. It's amazing how color coding trails can be with the different color cap or different vinyl color on there. It's inexpensive and easy for users to find their way and know which trail they're on. Sometimes numbers are awesome. The color is a lot more visible and quit to see. You can use a combination of the number one trail is yellow and number two is blue. Both of those things help a lot.

* **Question #4  – (Scott/Charlie):**

***In general, what advice and general guidelines on setting and communicating trail marking standards [would you offer?]***

***Scott answered:***Charlie and Jenny have better info on this. It's the same kind of anything you have clear simple messages and guidelines and at the trail heads had that one slide in the beginning that had those big massive signs that said -- and sometimes you're trying to be helpful with all this great information but when you put too much in front of people, a lot of people tune out. So clear simple messages that can carry along the system is what I would suggest.

**Charlie answered:** We have several trail systems. At the trail head where people first come in is really the key point to be able to see a map that has a whole trail system. And that the color coding used on the trails is clay clearly identified. One of the things we've done on a lot of sign we have made that when you get off the main trail, the color coding continues on the sign. We'll darn little block or put the little yellow or blue or orange on the sign in addition to the markings. So you always know what that color code what trail you're on and it's important to establish that information at the trail head.

* **Question #5 – (Scott & Steve):**

***I've heard that the QR code system is considered "old technology" and isn't worth using - would you agree? (We are eliminating the QR codes on our trail posts)***

***Steve answered:***I would not agree. For anyone who understands the utility of that item. It can sustain damage. You forget what the compact amount (Indiscernible) up to 06% of au QR code can be gone and still function. Kit connect to a there's a lot of ways that QR codes can be (Indiscernible) assist on a trail system. And another way would be inventory control of items signage or whether. I don't think the old technology as no value.

***Scott answered:***Steve I wanted to add to that. I totally agree. I would also maintain that somebody needs to go out and make sure somebody else hasn't done a plant on those QR codes. Sand ready to surprise your visitors. So be careful -- we've seen it. Be really careful who is doing what with QR code decals.

**Webinar questions:**

**Anna Lee asks Josh:** Has the IMBA rating system (or something similar) ever been applied to equestrian trails?

**Jan Hancock, Hancock Resources, Equestrian Representative**

**Answer: I have worked on the planning and design of many public trail projects that have 'generic' or average trail difficulty ratings appropriate for ALL users, however I have not created a similar trail design system as shown in the IMBA difficulty rating system just for equestrians.**

**I can work on creating one just for equestrians, and others on this email may be aware of a trail difficulty rating system that exists for equestrians.**

**The REAL difficulty is creating a trail difficulty rating for both the riders and their horse or mule!**

**There are such wide variations of equestrian trail difficulty combinations between experienced trail riders and their amazingly dependable 'bomb proof' experienced trail and pack stock animals...and the totally inexperienced equestrians, youth, etc., and truly 'green' trail horses and mules that spin and run from mountain bikes, drones, kites, blowing plastic bags, gun shots, motor bikes...the list goes on and on along the most innocuous, "easy" rated trail!**

**An "easy" rated trail for all other trail users could be perfect everyone except for equestrians who have to dismount to go through a low 7-foot vertical clearance culvert, get off their animal to open gates, or encounter cattle guards with no gates, etc.  These elements would make a trail rating very challenging for youth, seniors, persons with disabilities, etc., that have difficulty in mounting on a horse or mule without the assistance of a mounting block.**

**A perfectly great and simply rated "easy" trail as far as topography and tread characteristics can have very poor distance visibility that can be dangerously difficult if equestrians or their animals cannot see around blind bends due to the density and vegetation character along the trail route, blind rock outcroppings, or other trail characteristics that would cause a huge surprise between equestrians and mountain bikers approaching equestrians at a fast rate of speed that can't see each other until they are literally on top of each other!**

**And finally, there are gates\* that are too narrow for packstock loaded with panniers, but all other trail users can easily pass through these gates....so a difficulty trail rating would need to reflect the lack of adequately designed and built gates\* for equestrian packstock recreationists.**

**\*\*For any of the equestrians who have seen the totally inexperienced (but fun to watch) four young men in the movie "*Unbranded*" with their 12 "green" mustang horses they rode and packed from Mexico to Canada....they discovered all of the Forest Service fenceline gates were built only 4-feet wide along the route of the Arizona National Scenic Trail....so they had to off-load every pannier pack from their animals, lead them through the gate, and then re-load and repack their animals again.  That one "trail difficulty rating" wasn't known to them, and it took them twice as long to ride south to north from Mexico to Utah because of those narrow gates (pack stock with panniers require a minimum of 60" wide clearance (6-feet)!**

**I like challenges, so I can take a stab at creating an equestrian trail difficulty rating system that would look totally different from the typical trail difficulty rating systems for hikers, trail runners, and bikers, especially for long-distance segments of any trail system.  I am visualizing a different layout from the typical trail difficulty rating system signs.**

**Chelle Grald, Horse Farms Forever, Inc., Equestrian Representative**

**Answer:** I love Jan’s answer here. She about covers it. I do think that a rating system is possible but it will probably need 3 layers:

1. Footing- trail surface and features (here is where there is a lot of synergy with IMBA)

2. Activity Level- how many other user types, how crowded is the trail, how many road crossings

3. Amenities- trailer parking, multiple loops of varying lengths, views, water, marked trail, maps, camping.

Equestrian trail riders have to consider a lot of factors before deciding to visit an unfamiliar trail system. We as a community would do a good service if we could come up with a system to help with this. I am happy to help.

**Annette Parsons asks Stephen:** How does the ELM Natl grid coordinate system relate to the UTM system? I can set to UTM in Gaia GPS or OnX Hunt, but do not see an option for MGRS Natl Grid.

**Ben Hubbard asks:** We regularly design trail access information signage which includes the required information for Trailhead Signage under the ABA...this includes trail length, surface type, typical and minimum tread width, typical and max grade, and typical and max cross slope. Though this applies to federal lands, it will eventually be applied to all other trails under the ADA. Anyways, is IMBA specifically incorporating these objective qualities in their trail difficulty rating system? I saw some of these included in one of the slides...but didn't have enough time to see everything.

**Brenda Adams-Weyant asks:** Sign fatigue question - include only the most important regulations to communicate and create attractive sign for trailhead posting. Avoid using the small letter regulation signs.

**Eric Gray asks Josh:** We are making signs for adaptive mountain biking. There are currently 3 levels for rating these trails. We are working on a sign that shows both its accessible with adaptive MTB and the rating. Are there any other trails that are being marked specifically for adaptive MTB?

**Ernest Rodriguez asks:** Do you have best practices for connecting with new trail users?

**Jason Kimenker asks:** Can you recommend how to mark rock faces for directional information. There are no trees to attach to, or ground that will accept a post.

**Lawrence Bloomfield asks Jenny:** Can a Yield triangle sign be included on same post/pole as Bike/Ped diamond with arrow signs on roadway?

**Lucie Lamy asks:** What is the best practice for multi-use trail with different difficulty level depending on the activity. Ex: the trail is an intermediate trail for MTB but easy for hikers and this same trail in the winter is difficult for fatbike and intermediate for snowshoeing”.

Matthew Glynn asks Josh: When looking at a MTB trail on municipal property, how do you balance safety/minimize the risk of litigation with exciting features (especially when there is exposed bedrock throughout.

**Michael Haug asks Jenny:** Would you recommend a map sign always has the arrow pointing up and the trail user facing north while reading the sign? This is a standard in some areas and when trail users enter a trailhead heading south they have to turn 180 degrees and face back towards the entrance to read the sign.

Are there accessibility standards that you apply for trailside signs, even if not required, to improve legibility (i.e. minimum font size)?

**Robert Becker asks Jenny:** Is there a website to get trail icons?

**Steven Blakesley asks Jenny:** Do you consider the effect of the colors and contrasts work differently in different light conditions? I.e. a warning sign in a dark forest vs a warning sign in a treeless area.

**Robert Becker asks Stephen:** Is there a phone app that gives you the nation grid location?

**Steven Blakesley asks Josh:** On jump lines do you often sign the features individually?

**Terre Dunivant asks Josh:** Does the IMBA rating system include or label handicapped access?

**William Bardel asks Josh:** Has there been any effort to standardize ski trail difficulty ratings with objective data like IMBA's efforts?

**William Bardel asks Stephen:** In a world of your standardized ELM system markers, where do you see room for other trail system marker signage standards? Does standardization force out opportunities for marker customization and adaptation?