



Trailmaster Guide and Certification Examination

Reading of this enclosed manual, along with the AVA Policy Manual and published event documents found on the AVA website, ava.org, is a basic requirement and a major step forward for earning certification in the American Volkssport Association Trailmaster Program.

Some subject lessons in this manual (pages 1-31) include the art of trail making, how to create interesting routes, effective marking of routes, and skills for obtaining permits and preparing event budgets. The actual examination is found on page 32. You must score 90 points on the test that is administered and graded by your Regional Director. Good luck!

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Preface

Trailmaster certification will make you a knowledgeable resource in the art of volkswalk trail making, whether creating interesting routes, marking them, or writing accurate and informative instructions for them. Each walk is unique, and the chosen start, surrounding area, and distances to be offered influence what you can do. Your job is to apply your skills to make the most out of each situation. Remember, there is no one right way to design and mark or write instructions for a particular route, only more or less better ways depending on the circumstances.

Use the knowledge in this guide to help your club, and others when they ask, create memorable walks. When you lend your talent, do so in a positive way, in the spirit of making walks better. Those who have gone before you tried to do their best; acknowledge that when offering help or constructive criticism.

All AVA sanctioned volkssport events may be co-sponsored and conducted with either for-profit groups or non-profit groups provided all AVA policies and requirements are met prior to sanctioning the event which must be reviewed by the Executive Director.

Inquiries concerning AVA-approved events in non-IVV countries must be addressed to the IVV Head Office.

A Trailmaster Certification Patch will be presented to qualified individuals as determined by various Regional Directors. A certificate is to be prepared by the RD and sent for signature to the AVA President noting the individual is a qualified Trailmaster. Further, the Award will be listed in the Biennial Awards booklet.

Traditional Events

Selecting the Route

The first part of selecting the route is deciding what you want to take your customers (participants) and what you want them to see. Do you want them to see:

- A park,
- a particular building or neighborhood
- something scenic (e.g. a trail, overlook, mountain range)
- something of historical significance (e.g. building, memorial, monument, site)
- Something tied to a special occasion (e.g. convention, meeting, celebratory event, local festival)
- Something tied to an AVA Special Program or Club Challenge. All of these should be considered when selecting the route.

Some or all of these should be considered when selecting the route.

Now that you have decided on what to see, the most important consideration is **safety**. Will your customers have to walk on narrow road shoulders? Are there adequate crosswalks and are they at traffic lights or otherwise controlled? If your event is in the mountains, will the route be over paths that are very narrow? Your route should be as safe as you can possibly make it. If you have a doubt, it is probably unsafe and should be either re-routed or discarded.

Customer comfort is the next consideration. Are there restrooms along the route? Are there restrooms at the start/finish? If the route is in the mountains, will you be able to service a checkpoint? If the route is in the city, are there places to stop and get something to drink? Below are some considerations for identifying customer comfort needs:

- What is the distance between restrooms?
- Will you need to rent a portable restroom for the start/finish?
- Is there shade? (if the weather is hot) – shelter? (if the weather is rainy)
- Handicap/wheelchair access?
- Is the route: dog friendly and stroller accessible?
- Can you service a checkpoint easily?
- Is communication between start point and check point adequate?

Selecting the Start/Finish Area

Parking. Parking is an important consideration. The start/finish must have sufficient parking to accommodate your customers. What constitutes adequate parking is up to you and the club. If your club often sponsors events without adequate parking, participants may stay away. Be sure to plan for enough parking.

Proximity of restroom facilities. This is more important than most people realize. It is very inconvenient if after arriving at your start point, people must rush off to find a restroom located somewhere nearby. Remember convenience for your customers.

Proximity of water. It is much easier if there is already water at your start/finish than having to haul a water jug already filled with water. A full jug is heavy and awkward. Using a water jug also requires that you have cups to drink from and a plastic bag to get rid of the cups. But if there is a water fountain available, it is much easier. You don't have to worry about getting rid of cups or the trash bag to get rid of them, and you don't need to buy the cups or the bag to get rid of them. Whether or not water is already available, you must have water at the start/finish. This is a requirement, but also safety and comfort considerations. Some will want to drink before they start the event; some will want water when they finish. Water must be available to help prevent dehydration among your participants/customers. The wise club will also have a water dish for dogs. This can be incorporated into your club's equipment.

Space. There should be room for at least one start table, one finish table, a New Walker Information table, a table for walk brochures, a table for filling out registration/start cards, and there should also be enough space for people to sit around after the event to talk and/or eat. An aspect of our sport is a social one. If people can sit around and talk, they are more likely to have fun. Here's a good opportunity to have food and/or another liquid drink of some sort, perhaps coffee, perhaps juice, perhaps cookies, or pieces of fruit. Some clubs serve soups or have a contest during the walk. This is an ideal time to sit and talk about the worries of the world that you have just walked out of your system. There should be enough space to avoid bottle necks at the start and finish tables. If a line becomes absolutely necessary, then it should be a short one but not limited by a small start/finish. If the start point is in a park, there might be trash bins/cans nearby, eliminating the need for trash bags, but some trash collecting will be necessary for candy wrappers, paper cups, wasted start cards, Kleenex, etc.

Visibility. Can your start/finish be seen easily by people who are coming to your event? Here is an opportunity to display the IVV banner or the new blue "Come Walk With Us" banner. These will help generate questions from the non-walking public. If your event is coupled with a festival, will your start point be obscured by the festival? Although you might get more questions from the non-participating public, you might lose participants by not being visible enough.

Accessibility. Your event could be very visible, but inconvenient to get to. Direction signs are very important in getting people to your event. A sign directing people from main roads to the parking area, and then one directing them to the start is very helpful.

Will you be able to set up your start/finish easily? Off loading equipment is a concern. If you have to stop traffic to get materials unloaded, you may need to set up the start/finish early (when traffic is not a problem) or have a crew ready to offload the equipment in a short time.

The Checkpoint(s)

IVV says we should have a checkpoint approximately every 5 km, and the checkpoint must have water. This has always been interpreted to mean that on a 10km route, the checkpoint should be somewhere between 4km and 6 km. That means that if you have a 15 km route, you should have two checkpoints. The reason for having checkpoints is not to ensure that the volkssporter doesn't cheat. Rather, it is to supply your customer with the comfort of water, some conversation on the route, assurance that they are on the correct route, and if deemed necessary, restroom facilities. Checkpoints should have a positive method of showing that the customer was there. Examples of a positive method are: a stamp or a punch through the start card. Self-help checkpoints can have something like a punch attached to the water jug, or even a stamp sitting on top of the water jug so the walker can stamp their own card. There have been many creative devices fabricated to accomplish this task. A negative method would be something like a pen so you could put your initials on the card. Positive means that there is some degree of assurance that the person was there. Self-help checkpoints, however, serve no useful purpose other than to get refreshments to your customers. They should be avoided, if possible, at traditional events. Small clubs should solicit help from other clubs, if necessary.

Checkpoint equipment is usually a table capable of holding a water jug, a trash bag attached to the table with tape or tied to a leg so it won't slip down, paper cups to drink from, and a small container for individually wrapped (for sanitary purposes) pieces of candy. The wise club will also have a water dish for dogs. If the checkpoint is in a park, set up near a water fountain and/or trash receptacle to save yourself some effort. Don't forget a chair for each checkpoint volunteer.

One of the considerations for where to place the checkpoint is weather. Will the people who man the checkpoint be in the sun or rain? It would be easier to get workers for the checkpoints if their comfort is considered too. If you don't have a sheltered location, Easy Up 10ft x 10ft canopy shelters are relatively inexpensive, and should be considered appropriate for club property.

For customer safety, checkpoint personnel should have a login sheet with numbers assigned by the starting point table from 1 to as many people as you expect to participate. As your customers pass the checkpoint, your volunteers X out their start number on the number sheet. This is done to be sure that everyone is off the route when it is time to close the checkpoint. Communication with the start point will let them know the final number issued by the start point. If 10-km walkers have not passed the same checkpoint as the 5-km walkers, the checkpoints need to talk to each other so each knows which numbers won't pass through and therefore get X-ed off. Then, when all of the numbers have been verified at the checkpoint, the checkpoint people can break down the checkpoint, and prepare the checkpoint equipment for transport.

Measuring the Route

The **absolutely best way** to measure a route is with a wheel. Every route, no matter how remote, permits you to walk the route. Every route, no matter how rural, permits you to walk the route. The use of cars and GPS devices as well as online measurement methods are only **preliminary** methods to get the distance measured. As a measurement of the route, these preliminary methods are encouraged. But, once you think you have a sufficiently long route, the next step is to use a wheel.

The use of a vehicle as a measurement method. Make a note of the mileage on your vehicle's odometer. For every 6/10 of a mile that you drive, you will have traveled approximately 1 km. This will help you measure route loops, but is very ineffective if you encounter a One Way Street if you are traveling in the opposite direction. If the route is not on a road, this method doesn't work at all. This is the least accurate way to measure a route, and should not be used as the final measurement.

The use of a GPS device. I know a person who has three different GPS devices. When he carries all three with him, they all give a different distance measurement at the end of the route. Further, if you are in the mountains or under tree canopy, GPS may not be able to acquire the signals of the satellites available to your unit. If you are in a satellite shadow, your measurement will be inaccurate.

The use of online measurements. Once again, as a preliminary measuring method, this is acceptable. Online websites such as Google Maps, Mapquest, GMaps pedometer, and MapMyWalk.com do not take into account the changes that are made to the route. These websites, when updated, are usually very accurate, but you can never be certain when the latest update was made.

Let's say that you have approximately 10 km for your walk route distance because you have driven the route or roughed it out using a different method. Now is the time to WALK the route just to be sure that your distance is correct. Now is the time for a wheel. As you walk with the wheel, you may make notes as to where each kilometer is completed. Now is also the best time to write your route instructions because you may note where restrooms or other convenience facilities are located. Now is when you note on the directions where any scenic or historical points are located. Now is the best time to decide where to place your checkpoints. Now is also the best time to make any necessary adjustments to the route.

Let's say that you have approximately 10 km for your rural walk route because you have used MapMyWalk.com. Now is the time to WALK the route just to be sure that the distance is correct. Now is the time for a wheel. The tasks to be performed are the same as the ones for the urban route – notes, write the directions, etc.

Rating the Event

The event brochure including the AVA electronic event listing (Walking Events – Event Details) must identify a trail/route rating for all events except swimming, boating and skating events. In addition, any route obstacles or special conditions must be explained to describe the level of difficulty of the event. Participants need to know about major elevation gains, heavy traffic, narrow road shoulders, construction detours, roaming dogs, cattle guards, and the like along the route.

Although any rating system is somewhat subjective, the two-part numerical/alpha rating system will give event organizers a reliable planning tool. Thus, participants will have an idea about what to expect along a route whether it is for walking, biking, cross-country skiing, or snowshoeing.

Also, a trail/route rating system is a safety issue since an improperly/underrated event could have serious consequences for someone who is not physically prepared for more strenuous route conditions.

The sponsoring club needs to decide on an event rating based on the scale given below. The Regional Director should work with chartered clubs to achieve uniformity in the assignment of all trail/route ratings.

All elevations over 3500 feet must be included in the written description of an event.

	Part 1 – INCLINE/ELEVATION		Part 2 - TERRAIN
1	Very small hills or very little stair climbing. Probably suitable for strollers and wheelchairs. Cumulative elevation gain from Starting Point: up to 200 feet.	A	Almost entirely on pavement.
2	Some moderate hills and stair climbing. Probably suitable for strollers. May not be suitable for wheelchairs. Cumulative elevation gain from Starting Point: 200 - 1000 feet.	B	A significant part of the route is on well-groomed trails with very few obstacles.
3	Some significant hill or stair climbing. Not suitable for strollers or wheelchairs. Cumulative elevation gain from Starting Point: 1000 - 2000 feet.	C	A significant part of the route is on somewhat difficult terrain (rocky/rooted paths or soft sand.)
4	Lots of significant hills or stair climbing. Cumulative elevation gain from Starting Point: 2000 - 3500 feet.	D	A significant part of the route is on very difficult terrain.
5	Many steep hills. Cumulative elevation gain from Starting Point: more than - 3500 feet.	E	The majority of the route is on very difficult terrain.

Examples

When determining elevation gain, if a route goes up for 50 feet and down for 50 feet and back up for another 75 feet, the cumulative gain would be 125 feet.

A route that is mostly on flat pavement would be rated 1A.

A beach walk would be rated 1C.

A route with moderate hills on well groomed trails would be rated 2B.

Obtain Permits

Because people have become so willing to sue, those responsible for where you will have your walk's start/finish and route(s) (namely cities, municipalities, homeowners associations, and land owners) may require permits. Of course, they must understand that the walk or other event is not a political demonstration, and that it is being conducted by a non-profit organization. Some may require permission to mark the route and will have route marking restrictions. Others may open up without any extra permission. It is advisable to ask rather than open your club to litigation.

Some places may require a deposit or even charge a fee for use of the town or facility that will function as your start/finish. For example, you may be using a community center as your start/finish, but you will be walking out in the town. Rather than just go and mark the route, it is a good idea to approach the town authorities with a copy of the route map and the directions so they can let their emergency people (police, etc) know what is happening. Approach the authorities verbally first. The upside to this is that the local merchants may offer discounts or special deals to volkssporters. Another positive effect is that it increases the club's visibility with city officials who are in agreement with our efforts, and who will talk about it with others. Of course, the downside to this is that they can say "no" immediately, thus ending any further discussion.

Ask if there are any special requirements. **Ask** if there is a requirement to apply in writing. If you must apply in writing, it is recommended that the request include the following:

- Date and times of the event
- Start/finish location
- Type of route marking being used
- The number of people expected
- A copy of the route map and directions
- Club and point of contact information

In turn, they may ask you for a copy of the AVA insurance statement. If they ask for a copy of the insurance statement, you may be able to simply copy the general insurance statement. If they ask to be named on the insurance policy, then you must apply through AVA for this information – there is a small fee for the statement. Be sure to let the authorities know that your participants sign a waiver (you may want to supply them a copy of the start card with its waiver) for their general information. If your event is in an area where there are stores (convenience), restaurants, and hotel/motels, let them know that your participants will be spending money in their town. You may even consider approaching the local Chamber of Commerce so that the local merchants will be aware of your presence.

Any AVA sanctioned event being co-sponsored with either a "for-profit" organization or "non-profit" organization must not be in conflict with AVA policies.

Prepare an Event Budget

The majority of event budget preparation belongs to the Event Coordinator. The reason it is included here is that the Trailmaster must know how much equipment and supplies will be needed to make your event a success and should submit a budget to procure that equipment and supplies. Do you already have a sufficient quantity of arrows and trail marking ribbon on hand? Will you need clothespins, wooden stakes, water jugs, portable restrooms on hand? Items that should be included in your calculations include:

- Arrows
- Route marking ribbon
- Clothespins
- Water jugs
- 3 or 4 oz paper cups
- Duct tape
- Zip ties
- Trash bags
- Signs noting “start point” or other similar signs
- Dog water bowl
- Plastic bags to put the instructions in if you are expecting rain
- Tables and chairs for the start point
- Portable cover (tents) if the start/finish will be in the open air
- Slap tacker and/or stapler and extra staples
- Other miscellaneous start/finish/ check point equipment such as rubber bands and string/cord/rope.

Written Directions

The simplest and perhaps the best way to prepare instructions is in a two column format so the sheet can be folded in half lengthwise. Then the sheet can be folded again and once again so that the instructions you are reading are visible and the sheet is now the approximate size of your palm. This can be considered a safety factor, because as we try to walk and read at the same time, it's easier to keep a thumb on the line you're reading. Thus, you don't have to track across the entire sheet of paper. **Helpful hints:** Never write directions in paragraph form with multiple changes of direction. Never ever write in all capital letters. Both make directions more difficult to read.

A couple of considerations for your directions (especially for Year Round Events and Seasonal events) - include the name of your club. Also, thank your customers for coming to your event. Satisfied customers return. If it **is** a YRE or Seasonal, ask your participants to thank the business start point for letting the club have their event there. This helps improve relations with the local business people. All elevations over 3500 feet must be included in written description of an event. All walk directions must include a copyright symbol © and the year.

With the advent of cell phones in common usage, it is advisable to put an emergency cell phone number (usually the event's point of contact) at the top of the instructions. **Be sure this number is one that will be answered on the day of the event. If an alternate cell phone is available, add that number just in case the primary cell phone becomes inoperable.**

The instructions should be numbered – one number, one turn. (For some, it helps keep track of where they are on the sheet.) Sometimes, if it isn't a "clean" left or right turn, a bit of explanation should be included in the same number, especially if you feel that more information is required to guide the walkers. It is **very** inconvenient to see something like "Turn right on State St. Turn left on Johnson Ave, Cross Johnson and turn right on Avenue A." The reason that this is inconvenient is that it is too difficult to follow the instructions. The simpler the better. Done in a columnar format, this is much easier for your customer to follow. If you number individual instructions, consider putting the number on the corresponding spot on the map: if a turn, at the turn; if for a straightaway, on the leg.

A better example of the above would be:

1. RIGHT on State St
2. LEFT on Johnson Ave
3. RIGHT on Avenue A

Whatever you do, do NOT use east, west, north or south. If the sun is not out, it is too difficult to know where north is – unless you are from the area. Remember: your customers may come from out of town. Make it as easy on them as possible. Instead of north, south, etc, use LEFT, RIGHT, and STRAIGHT.

Here are two examples:

1. Leaving start point, continue to street and go LEFT on 1st Avenue
 2. RIGHT on Johnson St
 3. RIGHT on 3rd Avenue
 4. LEFT on Howard St
-
1. Leaving start point, continue to street and go LEFT on 1st Avenue to Johnson St
 2. RIGHT to 3rd Avenue
 3. RIGHT to Howard St
 4. LEFT to...

The first example shows the walker WHERE TO TURN.

The second example means the walker must follow two directions at the same time. The walker must first find Johnson St and then turn RIGHT to 3rd Ave.

If you start the directions using the word “Turn,” then finish the directions the same way. It is easier for your customer to follow the directions.

An improvement to the first example above could say:

1. Leaving start point, continue to street and turn LEFT on 1st Ave
2. Turn RIGHT on Johnson St
3. Turn RIGHT on 3rd Ave

You can do the same thing omitting the word “Turn.”

Another tip for instructions is to add “k” (km) markers. You must measure the route anyway, so when you are measuring, note the place where the “k” (km) marks change.

For example:

1. Turn RIGHT on Johnson St (3 km)
2. Turn RIGHT on 3rd Ave
3. Turn LEFT on Main St (4 km)

When you have a historical route with many points of interest, it is better to use a separate sheet correlating the historical point with the direction number.

An example on the instructions would be:

1. Turn RIGHT on 3rd Ave
2. Turn LEFT on Main St (4 km) (Point of Interest #1)

Then on a separate sheet –

Point of Interest #1. Here you will see St Paul’s Cathedral with its Gothic architecture

Point of Interest #2. Take the time to visit George’s Comic Book Emporium, thought by many to be the finest store of its kind in the nation

Some people like to have their points of interest or historical comments imbedded in the walk directions. If you feel your customers would prefer imbedded comments, you should use italics or a different font, and not numbered.

1. Depart the building and RIGHT past the fountain, RIGHT at the end of the building keeping small garden on left
2. At end of garden, LEFT and then RIGHT on sidewalk leading to parking lot
3. LEFT along sidewalk between parking lot and building
4. Angle LEFT toward rear of Building 9, then RIGHT past 3 black poles
5. LEFT along Building 9 passing the Learning Garden (across road on right)
6. With the flag poles to the left, angle RIGHT to cross road at crosswalk (Bump sign) and cross 2nd crosswalk continuing toward campus exit
7. LEFT on sidewalk at Springville Road
8. LEFT at yellow pole to cross Springville Road CAREFULLY onto 173rd
9. LEFT at Millbrook
10. RIGHT on 172nd
11. LEFT on Crosshaven
12. RIGHT on Lark Meadow to end
13. LEFT onto trail
14. LEFT at "T" to head east on Rock Creek Trail
15. RIGHT at "Y" with large Power Pole to LEFT
16. CROSS road (unmarked) to continue on trail (Morgan's Run Park)
17. CROSS Laidlaw Rd (CAREFULLY)
18. RIGHT on Laidlaw Rd
19. LEFT on NW Argyle Way
20. LEFT at NW 167th, continuing past bushes at end onto grassy pathway
21. LEFT at "T" onto continuing on grass path
22. After rounding corner to left, go RIGHT onto barkchip path and cross small footbridge continuing on pathway
23. Continue onto paved pathway
24. At end of path, continue straight
25. RIGHT on 162nd which curves LEFT to become Centine Ln
26. At end, continue straight through parking lot (along white fence)
27. LEFT at first roadway (keeping Bethany Fitness Center on right)
28. RIGHT on NW Central Dr (not marked, nearby sign reads "Bethany Next Signal")
29. CROSS Bethany Rd at signal light
30. Angle RIGHT to cross through fountain area (off during the winter) up steps to sidewalk
31. Pass along stores (Bliss Bake Shop, Starbucks)
32. At Starbucks, CROSS road at crosswalk and turn RIGHT toward QFC Store
33. Checkpoint at the Starbucks inside/outside (depends on weather) QFC (RR available multiple locations in shopping center including checkpoint)
34. Leaving checkpoint, LEFT along shopping center road
35. LEFT at end of building (Godfather's Pizza)
36. LEFT on first road behind building (153rd not marked)
37. Cross Central Dr and Laidlaw Rd
38. RIGHT on NW Blakely Ln to end
39. LEFT on 151st St
40. RIGHT on NW Decatur Way
41. CAREFULLY cross NW Kaiser Rd
42. Continue straight onto NW Applegate Ln
43. LEFT on NW 146th Terr
44. CROSS and RIGHT on NW Wendy Ln
45. LEFT onto Powerline Path (paved, grass, & gravel sections)
46. At intersection with trail, continue straight onto Powerline Rd (watch footing) passing by Water Treatment Facility on left and grassy area under powerlines on right
47. LEFT onto paved path to enter Kaiser Woods Park pathway
48. Bear RIGHT at playground continuing on pathway
49. Cross Goldweed Rd (not marked) continuing on Kaiser Park pathway
50. Cross NW Keiser Rd CAREFULLY
51. RIGHT on NW Kaiser for short distance
52. First LEFT on NW Graf St (TwoPonds on opposite side)
53. Just before NW Sickle Terr, LEFT onto pathway to Rock Creek Trail (white fences)
54. Walk through playground area following path to left then right
55. At intersection with Rock Creek Trail go RIGHT toward large power pole
56. Just past power pole bear RIGHT to continue on Rock Creek Trail
57. At first trail to right, RIGHT to end of path
58. RIGHT onto Lark Meadow
59. LEFT on Crosshaven
60. RIGHT on 172nd
61. LEFT onto Millbrook
62. RIGHT onto 173rd
63. CROSS Springville CAREFULLY
64. Continue straight along sidewalk with ballfields on right and tennis courts on left
65. At Snackstand building, RIGHT to continue on sidewalk with football fields on right
66. LEFT at road intersection and LEFT entering parking lot passing by Washington County Museum
67. Angle RIGHT toward stop sign, then LEFT to cross road at crosswalk
68. Straight along sidewalk towards Building 5, 7, & 9
69. RIGHT at Bldg 9
70. Continue straight down sidewalk to fountain
71. LEFT into building and finish!

Exercise: Above is an example of very good instructions. Can you suggest ways to improve these directions?

Maps and Map Making

All walk directions must include a copyright symbol © and the year.

Map Sources

- AAA Maps. If you are a member of AAA, you can get free city maps of most large towns. These maps should have enough detail to use for a walk route. For most smaller towns, AAA maps do not have enough detail to be of use.
- Local Phone Books. These are a good source but are being phased out in some areas.
- Maps from Government Sources. Many cities have maps of their town that you can get for free or a small fee. City, County, State, and National Parks/forests also have maps showing the location of trails and roads. In many cases, these are the best maps you can get for a walk, especially if the entire walk is in the park.
- Commercially printed maps. Commercially printed maps can be purchased at many places, including gas stations and retail stores – especially outdoor stores like REI. These normally have a fee, and can only be used one time for a map.

On Line Maps.

- Yahoo, Google, and Mapquest all have maps that can be downloaded and used for route maps. They are free and are updated regularly. They can be more difficult to use in the getting the desired scale, the streets that you want, and being dark enough to make copies. It may be necessary to hand draw arrows and important features on these, but they are a good source, and many volkssport maps are made using them. All three are about the same in ease of use. It is an individual choice usually based on familiarity. Maps produced using a mile scale rather than a KM scale. Sometimes it takes a bit of work to get them dark enough to copy.
- MapMyWalk is another online program, similar to Yahoo, Google, and Mapquest except that it has a very easy way to darken your route by just clicking on the points of interest that you want. It also normally shows the distance walked in miles. They do offer a premium edition that costs \$30-\$60 per year, depending on what you want. Some of the Discovery Walks have used the premium edition for the past two years.
- Rand McNally Tripmaker also has good city maps but they generally are for just one city and mainly the large cities.
- National Geographic USGS Topographical and TOPO USA offer good maps for areas not in cities.
- GMapsPedometer. This is similar to MapMyWalk. Simply darken the route by just clicking on the points of interest that you want. It also normally shows the distance in miles.
- GPS. It is now possible to use Garmin, TomTom, Magellan and other vehicle GPS systems to simply walk the route, plug the GPS unit into your computer, and print out a map of the route you just walked. Like some of the other methods mentioned, it may be necessary to darken the lines by clicking on various points along the route.

Commercial Software.

- For cities and towns, several commercial programs are available for purchase. They have the advantage of being designed for people to use the maps and thus make them very easy to use. The disadvantages are that they cost money and are easily outdated for towns that are growing and adding a lot of streets.

The three major software packages for cities are:

	<u>Microsoft Streets & Trips</u>	<u>Delorme Street Atlas</u>	<u>Fugawi Global Navigator</u>
Ease of Use	Excellent	Excellent	Good
Features	Very Good	Good	Good
Customizing	Good	Good	Very Good
Set Up	Excellent	Excellent	Excellent
Help & Support	Excellent	Excellent	Very Good

Making Walk Maps

Planning for a new map.

- Plan on using a full sheet of paper for a 10km walk and at least a half sheet for a 5km walk. This will allow plenty of room to show your route. Using less paper may be less expensive, but it will be harder to read when you are walking. Try to avoid using two sheets of paper because the transition from one page to the next is very difficult when walking.
- Plan on having the direction “North” at the top of the page. If it is not at the top of the page, then place a “North” arrow on the top of the page. Best practices would have a “North” arrow on all maps.
- Plan on having at least one street named outside the actual route on each side of the page. It is easy to miss a turn and get outside the walk area. If the streets are not shown, it is very difficult to get back on the route.
- If you must draw a map, make it to scale. If this is not possible, make sure that it says very plainly that the map is not drawn to scale or a portion of the map is not to scale. It is a plus to have the scale shown somewhere on the map.
- If possible, show major points of interest on the map. Things to put on the map may be checkpoints, restrooms, water stations, or challenges. You must show start/finish on maps for traditional and YRE events.

Drawing the Map

- Maps can be drawn from many sources (see paragraph 1 above).
- Indicate the route on your map by use of arrows placed on the street in the direction walkers should be going.
- Make sure the map is dark enough to have copies made from it.

- Be sure the names of the streets are correct. Most maps have hidden errors like a misspelled street or wrongly named street somewhere on the map as a copyright check to see if it is being used by another commercial entity.
- Be sure that there is at least one named street outside the route to help walkers who miss a turn.
- Be sure that the map and the directions agree. There is a possibility that when you come to the end of a street, that the street name will change (even while going straight). You will need to note the street name change.
- Have your map reviewed by an independent source.
- Have the map and directions checked to ensure that they are consistent and accurate.

Making Copies

- Ensure that all copies are readable. Don't make copies of a copied copy where half the street names cannot be easily read.
- Save the original map and file it where it will stay fresh and undamaged.
- If you file the map in a 3-ring notebook, make sure the hole punch does not cover an important feature like the name of a street walkers will be using.
- Don't use dark colored paper. It makes maps much more difficult to read.

Marking the Route

AVA requires that you mark your traditional walk routes, and there are many ways to accomplish this. This module offers proven ways to mark routes from across the country; hopefully, you will use one or more of these ways so participants have a consistent experience from walk to walk. Some trail marking materials are available through AVA, and may be ordered to get them to you in a timely manner; other materials may be purchased from hardware stores, home improvement centers, and building supply stores. If you are planning an event, be sure to consider when the event is to be held and whether you have adequate route marking materials already on hand.

Remember that your participants are your customers, and giving them a pleasurable experience is important. If your customers have a difficult time with getting through your route, they will remember and maybe not attend your next event. We want to keep their business, not give them the business.

Organize your trail marking materials in advance. Count right turns, left turns, and turn arounds in directions. Assemble the number needed, plus some extras of each turn, in a bag and label it. Also have a bag containing “k” markers (“k” markers are signs usually placed on wooden stakes that let the participant know how far they have traveled) and one of extra marking supplies.

Placement of arrows and ribbons. If you want your participants to cross the street before turning, place the turn arrow on the corner where you want them to turn. The same is true if you want them to turn right or left before crossing the intersection, place the arrow on the near side. It’s always helpful to put a ribbon or two after the turn to reassure the walker that they made the correct turn. Arrows usually should be placed at 5 feet to 6 feet high so the walker can see them more easily. If this is not possible (perhaps the town won’t let you mark posts/poles), then put the arrow where it is most likely to be seen.

There are a number of ways to mark a route. With cities/municipalities being ever more particular, you should check with them to determine what is acceptable. For example, some towns absolutely do not permit the use of staples in power poles, and some forbid marking traffic signs such as Stop Signs. In this case, it’s better to ask permission than to give your club a black eye over the way trails are marked.



Illustration 1

Trail Marking Equipment (slap tacker, scissors, stapler, wire cutters, duct tape, staples, zip ties).



Illustration 2

Trail Marking Equipment (wooden stakes, hammer).



Illustration 3

AVA Trail Marking Supplies (arrows to mark the route).

Staples. If staples are permitted on power poles, then direction arrows can be stapled to the power pole. An advantage to this method is that it is very easy to affix the arrow to the pole. Generally, use of a slap tacker is easy. Just hold the arrow in place and tack it down, usually a staple on each corner. The disadvantage to this method is the same as with any staple device – you should remove the staples from the pole and dispose of them safely when you strip the trail.



Illustration 4
Placement of arrow with staples.

Zip Ties. Another way to put an arrow on a post of any kind is a zip tie. These can be purchased from most big box home improvement stores such as Home Depot or Lowe's. The advantage to this method is that no staples must be removed; no tape must be retrieved; and it will hold to anything. The disadvantage is that there is a cost associated with the zip ties, nominal, but there is a cost. Another disadvantage is that if you must go around a power pole, you will need two or more zip ties to get clear around it. And you have to cut the ties to take them off. So – to mark a power pole (sometimes called a telephone pole), it may be better to use duct tape. However, zip ties has the least impact on the environment, and if demonstrated to municipalities, easy to obtain permission to use.



Illustration 5
Placement of arrow with zip tie.

Duct tape has unusual trail marking possibilities. If it has rained, the only thing duct tape will stick to is itself. If it has not been raining, duct tape will stick to almost anything. Some people will tear the tape down the middle so that only half of the tape strip is used. Some people use the entire two inches of the tape. Using strips of the duct tape makes it easier to put an arrow up – one strip clear around a telephone pole coming back so that it sticks to itself is an easy way to get it done. Some people will use the entire strip to go around the pole at the top of the arrow and another strip at the bottom. A disadvantage is that duct tape may remove paint and other materials to which it is stuck. Zip ties are more environmentally friendly around trees—you won't pull off bark as duct tape would do.



Illustration 6

Placement of arrow with duct tape.

Use of wooden stakes is another method of putting arrows in place. The plastic can be bent around a stake and stapled front and back. Then the stake can be pounded into the ground. It is usually best to pound the stake into the ground before you attach the arrow. Using 18" stakes is usually best because they can be seen from farther away. Use of a stake with a piece of wood the size of the arrow screwed to the stake, and then the arrow taped to or stapled to the piece of wood is another good way to put out arrows. The advantage to this is that it is a very visible method of putting the arrow out. A disadvantage to this is that it is awkward to get the trail marked. That is, you must carry all of the stakes with you as you go. However, if you have someone in a car following the marking crew, this method makes your turns very visible. Use of a zip tie around a stake is an easy way to transport the arrows, stakes, and zip ties.



Illustration 7

Placement of arrow by using a wooden stake.

Where wood stakes are not practical (how many vampires do you think there are in your area?) a creative method is the use of wire coat hangers. There **is** a way to bend a wire coat hanger five times so that it acts like a paper clip stuck into the ground. The advantage to this is that it recycles old coat hangers to volkswalk use; the disadvantage is that if you are expecting any wind, the arrow may blow away. Of course, this can be remedied by putting a small piece of duct tape on the back of the paper clip.

Similar to the wire coat hanger is wire anchor pins that are usually used to put weed barrier into place so that the wind doesn't blow it away before covering it with mulch. These can be purchased in the garden section of stores such as Lowe's or Home Depot. Just put the anchor pin into place and lean the arrow in front of it. Then put a small piece of duct tape on the back of the arrow to hold the arrow on the anchor pin. If you have lots of old wire coat hangers, cut the two arms off of the coat hanger leaving just the hook. Discard the hook, and each arm looks like an anchor pin. Once again, put a small piece of duct tape on the back of the wire so that it holds the arrow from the back. A disadvantage to wooden stakes and wires that are put into the ground is that if you are marking the downtown area of a city, there is no place/no way to put these into the ground.



Illustration 8

Two wire hoops used to tape arrow in place.



Illustration 9

After placing wire hoops in the ground, place the arrow on one side and tape the opposite side.

A method of putting arrows out without using poles in a city area is the use of construction area flags/wires. (see Illustrations 10 and 11) Take two wires and bend them at the bottom so that when used together, they make a way to put an arrow into place. To accomplish this have one person hold the two wires on the pavement while another person puts a piece of duct tape over the wires. You must still hold the top of the wires until the arrow is leaned against it. Once the arrow is leaned against the two wires, put a piece of duct tape on the back to hold the arrow to the two wires. Of course, the advantage is that you can mark in cities where it is impractical to use other methods of putting out arrows. A disadvantage is that if the wind is blowing, it may be difficult to get the arrow to stay in place. Another disadvantage is that if it has been raining, the duct tape will not stick to the pavement. If you choose this method, be sure the color you choose doesn't match what utilities are using in the same area so you don't confuse your participants, and your crew when clearing the route.



Illustration 10

Use of wires with industrial flags on top. Tape the two bent wires on concrete and tape the wires to the concrete.



Illustration 11

Place arrow on opposite side of wires and tape the back of the arrow to the wires.



Illustration 12

12 gauge wire inserted through corrugated plastic. Tape the arrow to the corrugated plastic and insert into the ground. An advantage is that the arrow can be turned in either direction. A disadvantage is expense.



Illustration 13

Double H wire with corrugated plastic mounted on top. Tape the Arrow to the corrugated plastic. The biggest advantage to this is ease of operation. You can step on the bottom of the H to put it into the ground. This has the same disadvantage as above – expense.

Trail marking ribbon/tape is another method of flagging your walk route. It is recommended that ribbon/tape **not** be the only method of marking a route. It should be used in conjunction with arrows and written maps/directions. Ribbon/tape only as a means of marking the route doesn't allow you to mark turns easily. It should be used mostly on straight stretches and just after a turn. If ribbon/tape is used, there are two ways to put ribbon/tape on your route. The first is just tying it to some object (usually a tree branch, pole, or fence). (see the illustration on how to tie the ribbon/tape so that passing kids have difficulty pulling the ribbon/tape down) This is a good and inexpensive way to mark the route. It also gives your participants comfort to know that they are still on the right route and not lost. Another way to use ribbon/tape is to use clothespins with the ribbon/tape. Take a piece of ribbon/tape and pull it down into the mouth of the clothespin. Then, when you place it, you need only to attach it to a tree branch like you would attach the clothespin to a clothesline. Removal is simple and they can be reused. If the ribbon/tape is long enough, you can wrap it around a post/pole and use the clothespin to attach it by opening up to clip to the ribbon itself. Of course, you must buy the clothespins – however, they are not very expensive. Three or four packages of the clothespins is usually adequate to mark a walk route. There is a method of tying the ribbon to foliage so that when pulled by the long end, it tightens; when ready to strip the route, pull by the short end, and the ribbon comes right off. (see illustrations below)

Helpful hint: Ribbon should be placed on left side of the highway or road because that is where you want your walkers to walk – facing traffic, or on the right side along a trail or sidewalk. However, if for some other reason, you want them to be on the right side, then place the ribbons on the right. Two ribbons should be placed together to indicate that they are approaching a turn.

Helpful hint: If marking a route with ribbon, it is wise to avoid using colors that blend in with its surroundings. For example, orange, yellow, or green ribbon could blend with leaves, especially in autumn. Be sure that your ribbon stands out in **any** season



Illustration 14

Trail marking ribbon attached to clothespins. Trail marking ribbon comes in a variety of colors and may be ordered from AVA HQ or purchased where engineer tape is sold. Be sure the color(s) you choose aren't used by others already.



Illustration 15

Tie trail marking ribbon to the clothespin so that it doesn't come apart easily.

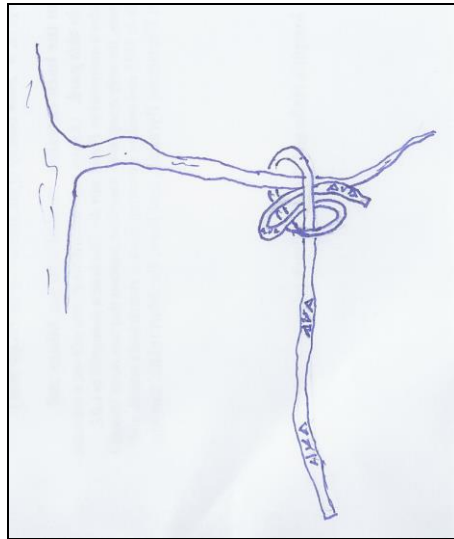


Illustration 16

Trail marking ribbon may be attached to branches so that it will come loose easily. First make a loop with the ribbon. One end should be considerably longer than the other. Cross the short over the long end and make a loop with the long end, pulling the loop up through where the ribbons crossed. Pull this tight. When the neighborhood children pull on the long end, it tightens. When you strip the trail, pull on the short end, and the ribbon comes loose without difficulty.

Chalk is another useful tool in marking a route. A major disadvantage to chalk is that if you are expecting rain or other inclement weather, the chalk will wash away easily. Another disadvantage is that it cannot be seen from very far away.



Illustration 17

Chalk arrow showing a right turn. Note that the head of the arrow looks like two “V”s. Thus, the chalk arrow looks like IVV.



Illustration 18

Again, note that the head of the arrow looks like two “V”s showing an arrow that looks like IVV.

Mark the route shortly before the walk. The less time the markings are up the less likely someone (playful kids) will take them down.

If the number of volunteers permits, have some walk or run the route periodically to check for problems— reattaching or replacing markers that fell, blew, or were taken down; touching up those in need; adding markers where walkers report problems.

Strip the trail as soon as possible after the walk is finished. Your sweeper may go out after the final walkers start as long as they don't pass the remaining walkers who depend on the markers.

Ordering Trail Marking Supplies. Contact Theresa at the National Office at (210) 659-2112 or at theresa@ava.org.

Conduct the Workers Walk

One of the easiest ways to conduct the Workers Walk is to use the walk to mark the route. Usually, this is done a day or two before the event. Be sure to keep track of who helped with the trail marking so that their start cards can be completed, and checked off the list. The Workers Walk is meant to allow your workers who will be working on the day(s) of the event to complete the event. This will also give checkpoint workers a better idea of how far along the walkers will be when they reach the checkpoint. It will give the start/finish workers an idea of what to watch out for when they send the people out on the event. Those who help with the Workers Walk can have their books stamped **on** the day of the event(s). As many workers as possible should participate in the workers walk.

You have already determined what trail marking equipment you will need. At the Workers Walk, assign people to carry trail marking tape, clothespins, hammers, staplers, extra staples, arrows, stakes, whatever equipment you have decided to use. You will supervise the placement of arrows and ribbon. Remember to give your customers comfort ribbons and arrows. Sometimes, on a long straight stretch, it is good to have additional arrows showing that the route is straight ahead. Arrows should be placed (at a minimum) at every turn.

Best practices indicates that it is best to place way finding and checkpoint signs out on the day of the event. If you place the checkpoint signs when you do the Workers Walk, the signs may disappear before the event.

The Workers Walk also encompasses stripping the trail. Those who strip your trail for you are also your event workers. They are just doing something else and they do the event, just as your trail markers did. You should supply your trail strippers with plastic bags for the trail ribbon and arrows. You should supply some type of equipment to remove staples that have been attached. All of this equipment will be returned to you when they complete their tasks.

The AVA Policy Manual and Event Documents

The Policy Manual is located on the AVA website. Click on the Administrative menu tab and then select General Admin from the drop down menu and then select Publications/Policies link and then click on AVA Policy Manual. All Event Documents are on the Administrative menu tab and then select Clubs Only from the drop down menu area of the website. You should know these documents, especially as they apply to conducting an event. There will **not** be portions of these documents repeated here, as they are already kept current on the AVA website and are subject to change.

Year Round/Seasonal Walks (YR/SE)

Selecting the Route

(Much of YRE/SE route selection is the same as for route selection for traditional events. The important parts as they apply to Year Round Events are repeated here.)

The first part of this is deciding what you want your customers (participants) to see. Do you want them to see an urban park, a particular building, something scenic, something historical?

Now that you have decided on what to see, the next most important consideration is **safety**. Will your customers have to walk on narrow road shoulders? Are there adequate cross walks? If your event is in a forested area, will the route be over paths that are very narrow and confusing? Your route should be as safe as you can possibly make it. If you have a doubt, it is probably unsafe and should be either re-routed or discarded.

Customer comfort is the next consideration. Are there restrooms along the route? Are there restrooms at the start/finish? If the route is in a city, will there be places to stop and get something to drink? If the route is in a forested area, should your customers carry their own water?

Selection of the YRE Start/Finish

The business must be willing to let you put a walk box in their establishment where it is accessible. (If the establishment offers an out-of-the-way location for the box, walkers may not be able to find it.)

The business should have good hours, preferably open weekends. The hours affect participation. Since walkers prefer early morning during hot weather, a start that opens close to dawn is better than one that doesn't open until later in the day. For example, coffee shops are good candidates because of their early hours; hospitals are also good candidates as they also stress the healthy aspects of walking; motels and hotels are also excellent. Coffee shops are good candidates because of their early hours. Hospitals are also good candidates as they also stress the healthy aspects of walking. Motels are also excellent.

The days the start is open also may affect participation. If the start is closed on Sunday and/or another day during the week, that means walkers who choose those days can't do your walk.

There should be restrooms available that walkers may use. (Some stores have restrooms for employees only.)

There should be sufficient parking available so that the YRE participants do not interfere with the customers at your start point.

There should be adequate space for your walkers to register without getting in the way of people operating the business.

Never promise to bring in customers to the business that will let you put a walk box there. There are never any guarantees. If your start point is a mini-mart, your walkers may buy there, but again, there is no guarantee.

Recognize the business for their willingness to help on your behalf. An AVA Certificate of Appreciation goes a long way in showing your thanks to the business. If you use the Certificate of Appreciation, be sure to present it in a frame. If you were using something like a coffee shop, it would be good if you talked with the business people to determine if there are problems, so that you can head off difficulties before they get too far.

Never ask the business to be responsible for what happens with your walk box. If there is money missing, it should not be their responsibility to make it up. You assume certain risks when you place your walk box there.

Be sure to service the walk box often. There is nothing more frustrating to the business **and** to your walkers than constant questions about registration pages, an absence of maps/directions, or start envelopes. They are **your** responsibility.

Marking the Year Round Event Route

Very few cities and municipalities will let you mark a YRE route. But it is worth pursuing. If you arrange with your town to mark the route, you will have to ensure that the markings are in good taste. They should not embarrass AVA or the town. Some cities even allow paint markings on the sidewalk. Once again, though, you are responsible for maintaining the marking so that they will be visible and in good repair. You must also replace markings that disappear.

Selecting Year Round Event Checkpoint Locations

Like the traditional event checkpoints, YRE checkpoints should be approximately 4 km to 6 km on a 10 km route. Like the YRE start/finish, the checkpoint could be in a business. If it is in a business, once again, the business must be willing; it should have good hours so that it is open hours when people will be out walking; and if possible, it should have restrooms. However, YRE checkpoints do not have to be at a business. You can have a checkpoint question – such as: What is the color of the house located at 1812 Smith St?

Permits

Seldom are permits required to walk on city streets. However, if your walk goes through any non-public property, you will need permission, and perhaps a permit, so inquire about what is required. State parks may require some type of permission to walk there. If you have any doubts, inquire. It is safer to get the permit than to have your event closed because you didn't get a permit.

Event Budget

If your club is considering a Year Round Event, you must supply the club with an estimate of the equipment required to host the event. Examples of equipment required are: a 2-drawer file cabinet that has a locking drawer, plastic file folder case, printed registration pages, a 3-ring binder to hold the registration pages as well as holding event maps/directions. If too much equipment is required, the club must decide whether it is feasible to host an event in that location.

Year Round Event Maps/Instructions

It is recommended that the “How To” contained in the information about traditional events be the guide and standard for YRE maps/instructions. There are special instructions concerning YREs/SEs contained in the traditional event standards. All elevations over 3500 feet must be included in written description of an event. All walk directions must include a copyright symbol © and the year.

Study Guide

1. How can I help other clubs with my Trailmaster Training?

Traditional Events

Route Selection

2. After deciding where to walk, what should be the most important part of the event?
3. How should I treat my participants?

Selecting the Start/Finish Area

4. What are the 7 things I should take into account as I select the Start/Finish?
5. As you set up the Start/Finish, who is most important in deciding where to position it?
6. Who is least important in deciding where to position the Start/Finish and why?

The Checkpoint

7. Why do we have checkpoints?
8. What kind of equipment will I need at the checkpoint?
9. What should checkpoint personnel do while they are on duty?

Measuring the Route

10. What is the best way to measure a route? Why?
11. What alternative methods can be used to measure a route?
12. What are the pros and cons of the alternate methods?

Ordering trail marking supplies

13. How can I order trail marking supplies from AVA?

Obtain Permits

14. Why should I get permission? A permit?
15. Are permits always required?
16. Who would get a poor reputation if you don't get a needed permit?

Prepare an Event Budget

17. Why is this part of Trailmaster Training?
18. What considerations should there be in preparing the budget?

Directions

19. When writing directions, what kind of things should I do?
20. What should be put in the directions?
21. What should **not** be put in the directions?
22. How can I include points of interest in the directions?

Maps and Map Making

23. What are the 11 best sources of walk maps?
24. What are the 5 things to consider when **planning** a map?
25. What are the 7 things to consider when actually making the map?
26. What are the 4 things to consider when making copies of the map?

Marking the Route

27. Why do we mark our routes?
28. What are the 10 ways to mark a route?
29. What are the 3 ways to get your customers through your walk

Conduct the Workers Walk

30. Who should be included in the Workers Walk and why?
31. Why should signs **not** be placed the day before the event?
32. What is another use of the Workers Walk?

The AVA Policy Manual and Event Documents

33. Where can I find copies of the Policy Manual and Event Documents?

Year Round/Seasonal Walks

Selecting the Route

34. What differences are there between selecting the route for a traditional route and a YRE?

35. What are the similarities between selecting the route for a traditional route and a YRE?

Selection of the YRE Start/Finish

36. What should I consider in choosing a YRE Start/Finish?

37. What should I never do in choosing a YRE Start/Finish?

Marking the Year Round Event Route

Selecting Year Round Event Checkpoint Locations

Permits

Event Budget

Year Round Event Map/Instructions

EXAMINATION FOR CERTIFICATION

1. **Design a walk route.**

Using the seven principles, discuss with your Regional Director how and why you selected this route.

(For RD – Pass/Fail)

2. **Selecting the Start/Finish.**

Using the six principles, discuss with your Regional Director how and why you decided on this location for the Start/Finish

(For RD – Pass/Fail)

3. **Selecting the Checkpoint(s).**

Using the material contained in this Trailmaster Guide and Trailmaster Certification, discuss with your Regional Director why you selected this particular location as the checkpoint.

(For RD – Pass/Fail)

4. **Measuring the Route.**

Explain to your Regional Director how you measured the route and why you chose that method.

(For RD – Pass/Fail)

5. **Mark the Route.**

As you walk the route with your Regional Director, explain how you marked the route and why you chose those methods.

(For RD – 25 points. Add 5 points if something new, creative, and desirable is used. Subtract points if route is not marked well)

6. **Strip the trail.**

(For RD – 25 points. Subtract points if paint is removed where duct tape is used. Subtract points if trail markers are missed. Subtract points if staples are not removed)

7. **Directions.**

Prepare columnar directions and have your Regional Director critique them as you walk the route. (Done at the same time as #5)

(For RD – 25 points. Subtract points for differences between the directions and the actual route)

8. Prepare a map for the route and have your Regional Director critique it as you walk the route. (Done at the same time as #5)

(For RD – 25 points. subtract points for differences between the directions, the map, and the actual route)

90 points required for certification

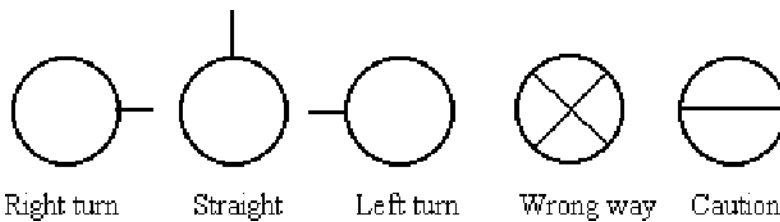
Notes

Bicycle Events

The primary differences between walking events and bike events are that bike riders do not have use of their hands for holding directions; they are moving at a higher speed; they don't like to stop; and typically they have a distance measuring device mounted on the bike.

The biking community has developed a common set of abbreviations for written directions and symbols for on road marking.

For traditional bike events where pavement marking is permitted a common route marking scheme is to use Dan Henrys. These symbols are spray painted onto pavement using a chalk based paint which will fade in a few days and thus is more acceptable to local authorities. As an alternative, chalk could be used but would not be recommended if rain is possible. If spray chalk or spray paint is used, be sure to get permission from the municipality in charge of the area.



Dan Henry Markings

These marking are about 10" in diameter and would be placed about 150' before a turn, 20' before a turn, and 10' after as a confirmation.

For routes where written directions (commonly referred to as Cue Sheets) are used, it is best to use the standard abbreviations, keep the directions as compact and brief as possible, and take advantage of onboard odometers. Cue sheets are mainly focused on turns and the distances between turns. Because of the speed involved, it is imperative to that simplicity be maintained wherever possible. Paragraph form and full page widths should not be used as this can become a safety hazard or inconvenience to the rider.

The most common format is for a single instruction per line giving A) Point to point distance from last instruction, B) Total distance travelled on the route so far, C) Abbreviation for type of turn and D) Added instruction information such as street name, route number, type of intersection (T) or (Y) or light, and any cautionary notes.

A page that can be folded in quarters without obscuring any part of an instruction has the advantage of showing just a few instructions at a time and also of providing a stiffer page that will neither

blow around nor obscure the odometer. A landscape orientation will permit longer instructions.

An alternating shaded/unshaded background is helpful in distinguishing between instructions rather than numbering them as one would do for walk directions.



Cue Sheet Nomenclature

Directions:

- R** Right
- BR** Bear Right
- SR** Sharp Right
- QR** Quick Right
- L** Left
- BL** Bear Left
- SL** Sharp Left
- QL** Quick Left
- U** U turn (at this point)
- S** Straight

Examples:

- R (T) Main Street. Biglerville
- BR (Y) Rockaway Rd. Riverside St. goes Left
- SR Unmarked (Heritage Rail Trail)
- QR Westerville Road
- L Stop. CR 519
- BL (Y) New Dover Road. Cedar Rd goes Right
- SL Light. Pennytown Rd
- QL Hampton Corner
- U (U) turn at Camp David security gate
- S Cross CR 613 becomes Carolina Blvd.

The examples show several ways to identify the type of intersection. Consider using CAUTION for hazards like crossing Interstate on/off ramps or steep downhills.

Cue sheets should also include the usual information like address of start point, POC information, © data, and a list of the abbreviations used.

Distance can be shown in either miles or km, or both if there is space and it would not be confusing. Many cyclometers in the USA are calibrated in miles and many can select either. Just make sure the units used are indicated.

Sample of 1 quarter of a full sheet (landscape, narrow margins):



Downs Park 25K Bike
Start: Our Lady of the Chesapeake Church
 8325 Ventnor Rd. Pasadena, MD

<i>P/P(K)</i>	<i>Total</i>	<i>Turn</i>	<i>Instruction page 1</i>
0.0	0.0	L	Ventnor Rd. Becomes Milburn Cir. at Mountain Rd
2.0	2.0	L	Milburn Cir.
0.4	2.4	R	Mountain Rd
0.6	3.0	BR	(Y) stay on Mountain Rd
3.3	6.3	U	At Gatehouse. CHECKPOINT: What year was Gibson Island Country School established?
3.3	9.6	R	Pinehurst Immediately Enter bike path on right before fence. Continue parallel to Pinehurst
0.6	10.2	L	Park Entry Rd crossing Pinehurst onto park's paved perimeter trail with red mile markers
2.6	12.8	L	Visitor Center. (restrooms) Continue on trail
2.5	15.3	L	Park entry Rd
0.0	15.3	R	Pinehurst Dr becomes Pinehurst Rd