# Tips for Using WayFinder and

# Avoiding Common Errors Creating Routes or Choosing Incorrect User Settings



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# Avoiding Common Errors with WayFinder

WayFinder is a specialized app for enabling independent travel by individuals with cognitive disabilities. Each person with cognitive disabilities is unique and has different support needs. Routes should be created with the needs of the particular traveler in mind when using WayFinder to maximize the ability for individuals to gain the self-confidence and skills needed to travel independently in the community. The settings and features of WayFinder have been developed following years of research specifically relating to providing successful travel experiences for individuals with cognitive disabilities. It is important to match the settings within WayFinder to the specific needs of the traveler and this document is designed to help avoid common mistakes made when creating routes or modifying user settings in WayFinder. This document is a living document and will be revised periodically with additional information. Check the AbleLink website (www.ablelinktech.com) for the latest version. In addition, to understand all the features of WayFinder, be sure to review the entire *WayFinder User Manual* for a complete set of instructions for using WayFinder and understanding its functionality.

Please contact AbleLink to discuss any problems or questions you have while using WayFinder. Oftentimes a short conversation between AbleLink staff and the travel support professional can help overcome obstacles that are experienced. We are here to help, so please contact us so we can help you get the most out of WayFinder. Support for WayFinder can be obtained generally within 24 hours by:

Emailing support@ablelinktech.com
Calling AbleLink at 719-592-0347, Select Option 2

# I. Device Settings Needed to Enable full WayFinder Functionality

a. <u>Unable to Record Audio or Use Camera Upon First Use</u> – This issue is due to failure to give WayFinder permission to access the audio recorder or camera. When first starting WayFinder, it will ask for permission to access the audio recording and camera features on the device; failure to provide these permissions will prevent recording of audio prompts and obtaining image cues during route creation.

b. <u>Device Not Receiving GPS Signals Frequently</u> - For Android users, the default GPS Setting is often set to a Battery Saving mode which often causes the device to lose GPS connectivity frequently.  Be sure to set the device to High Accuracy in settings to minimize loss of GPS signal during use (see figure to the right).  This setting is a Location Mode setting in Android and may have different specific wording depending upon the version of Android on the device.
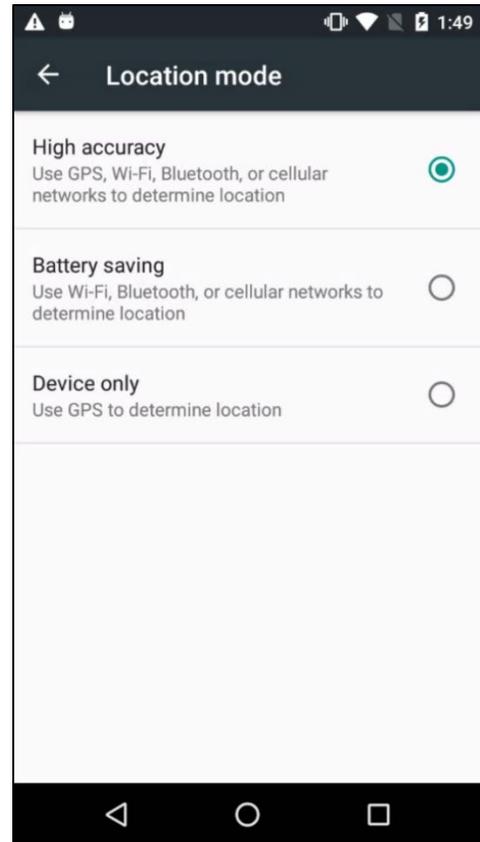
# II. Route Creation Errors: Errors that may be encountered when creating travel routes

a. <u>Creating Routes Without Corridor Data Cannot Detect Off Route Events</u>  - If a route is created with the WayFinder Route Editor (on the device) when the "Use Corridor Data" setting is turned off, then when travelers take those routes, the system will NOT be able to detect when individuals are off route.  The Use Corridor Data setting is turned on by default in WayFinder version 3.5 and higher.

Corridor Data is required for a WayFinder route to be able to notify the traveler when he or she is off route and to send messages indicating that the traveler is Off Route.

b. <u>Routes Created with Web Based SMART Route Builder Do Not Include Corridor Data</u> - Routes created with the online SMART Route Builder web site require corridor data to be added to the route to be able to detect Off Route events for travelers.  After a route is created online, it should then be downloaded to the WayFinder device.  Before the route is used to track On Route/ Off Route events, Corridor Data needs to be added to the route.  To add Corridor data to a route, select the route in the Route Editor and turn on the option "Capture Corridor Data."  Then travel the route from beginning to end, being sure to stay in the normal travel corridor while traveling the route.  This activity will capture and save corridor data for a previously created route.  After Corridor data has been added to a route in this way, On Route/ Off Route events will be able to be detected while the route is traveled.

c. <u>GPS Signal Loss During Route Creation</u> WayFinder provides an icon indicating the strength of the GPS signal.   If the GPS signal is lost during route creation, GPS coordinates may not be captured properly while the signal is low or lost.   If GPS coordinates are not captured when the route is created, affected waypoints along the route will not play back correctly.  To avoid this error, pay attention to the GPS signal icon to make sure there is sufficient GPS signal before creating the route.  Use the Route Editor in WayFinder to recapture the GPS coordinates for any waypoints that do not appear at the location as expected.

d. <u>Digital Photos Captured from Within WayFinder are not Available in the Photo Album on the Device</u> - Digital photos obtained during route creation are not saved to the device—The result is that users are unable to edit images (such as cropping) taken during route building.  To avoid this error, images may be obtained outside of the Route Builder application that can be edited if needed and integrated into the route using the Route Editor.  Images captured during route creation can be copied to a connected computer, edited as needed, and then copied back over to

route folder on the mobile device.  This is only recommended for users familiar with file transfer between Android devices and a desktop or notebook computer.

e. <u>Walking vs. Vehicle Routes</u> -  WayFinder routes will typically involve both walking segments and segments traveling on public transit.   It is good practice to create a single route for individuals for the entire route (including both walking segments and bus or train travel) so the individual can follow a single set of route instructions for his or her entire trip.  For these types of routes, do not select the setting "On Foot Travel" in WayFinder, as this setting is not appropriate to use when a portion of the trip will be completed on a faster moving vehicle, such as a bus or train.  The walking routes setting in WayFinder should only be selected when the ENTIRE route is a walking route.

f. <u>Tips for Creating Waypoints for Walking vs. Vehicle Routes</u>  - For walking routes, waypoints should be set fairly closely to the intended action point (e.g., "you are at the corner of 4th and Elm, turn right and proceed down Elm Street"); for vehicle routes, waypoints should be set well in advance of an action point (e.g., "You are one block away from work, so pull the cord to indicate that you will be getting off the bus.")

g. <u>Failure to Provide Next-action Audio Prompts</u>  - Primarily on walking routes, the audio message should provide both information and direction (e.g., "you are at the corner of 4th and Elm, turn right and proceed down Elm Street.").  Information about where the individual is alone may be insufficient to direct a needed action by the traveler.

h. <u>Audio Messages that are Excessive in Length</u> -  Primarily on vehicle routes, audio messages must be short enough to allow them to play completely before encountering the next waypoint; if audio messages are too long and waypoints are too close, the audio message may not play completely before the next waypoint message is triggered.

## III. Route Playback Errors: Errors that may be encountered when traveling a route

a. <u>Failure to Provide Clear Direction at the End of a Route</u>—Users may be unsure of what to do once they arrive at the end of a route; this can be addressed by adding walking route (i.e., 'last mile') waypoint directions; by adding a general end-of-route message (e.g., "You have reached the doctor's office. Go in the glass doors and Dr. Smith's office is on the right in office number 112"); or through training and practice.

b. <u>Device Volume while in a Noisy Environment</u>—Some buses, for example, can be very loud when crowded; the use of earbuds or Bluetooth headphones can alleviate loud environments and also serve to help users to focus on travel directions.

c. <u>General Inattention to Waypoint Instructions</u> - For users that may be more easily distracted, using WayFinder's vibration setting on devices that support vibration provides a tactile cue to attend to the instruction. Earbud use can also help with distracted travelers. Another useful strategy is to include additional waypoint instructions throughout the route ("Out the window, you can see Washington Park now," "You are about half-way to work now", "You are doing great. Just a few more minutes and it will be time to get off the bus."). These additional messages serve to help the traveler pay attention to the device to receive important instructions.

d. <u>Understanding the Show Waypoint Preview Setting</u> - Normally, the Waypoint preview setting is turned off for most users. This is the default setting. Only turn on the Waypoint Preview feature for users that are needing a visual cue of what to look for NEXT when they are traveling, (i.e. before the traveler has arrived at the next waypoint location). When Waypoint Preview is turned on, a timer icon shows with a faded picture of the next waypoint for the user to know what to expect next. Turn Waypoint Preview off if this seems to be distracting and cause confusion to the traveler. When Waypoint Preview is turned off, the traveler will simply be notified when they reach the next waypoint and the picture and audio

instructions associated with that waypoint will be presented at that time.  Please note that when the Waypoint Preview feature is turned on, the system will show the not-your-stop image even if the bus does not stop (i.e., if no one is there); this may be confusing to some users.

e. <u>Leaving WayFinder to Open a Text Messaging App</u> - If the device has the feature that allows a text message to drop down and be responded to without fully going to the messaging app, WayFinder will continue to run even if the rider responds to the message in the drop-down interface.  However, navigating to the full text message app will shut down WayFinder and the rider will have to manually return to it.  If this happens, when restarting WayFinder the traveler will be provided the opportunity to continue the route he or she was on, or to quit the route and return to the route menu in WayFinder.

f. <u>In Range Distance Setting too Small</u> – The default In Range Distance setting is 50 feet. This is a good value for travelling in a vehicle.  The capability is available to reduce this value to as low as 10 feet.  That is useful when walking routes are being used.  If the waypoint instructions do not launch at the waypoint location as expected, this can be because this setting has been reduced below 50 and may be too low for the speed of vehicle travel.  Waypoint instructions may be missed due to the speed the vehicle is traveling as the user enters and exits the region for the waypoint too quickly.  To eliminate this potential problem, increase the In Range Distance setting to 50 or higher.  Faster traveling vehicles (such as a train) require this setting to be increase above the default of 50 to 75 or 100.