iPhone Household Survey App Troubleshooting

Two very important settings for all iOS devices that must be enabled in order for GPS tracking to properly are: 1) Location Services and 2) Background App Refresh.

Within the iOS Settings App go to:

• iOS Settings App > General > Background App Refresh

Please make sure that the Background App Refresh option is turned on.

[Please Note: If your phone is in "Low Power Mode", Background App Refresh is automatically disabled.]

If the Background App Refresh and Location Services Settings are enabled properly and you are still experiencing tracking issues, please try the following steps:

- Turn location services off/on.
- Restart your cell phone this can sometimes free up memory and restore functionality (turn off and turn back on).

If that doesn't work ...

- Force quit the app and any other open apps, especially processor-intensive ones such as games, GPS tracking apps, etc., as these can cause intense strain on a phone and the available memory. This higher usage often results in error tracking. Relaunch it and see if the problem persists.
- Restart your cell phone (turn off and turn back on).

If that doesn't work ...

- Delete the application from your phone entirely.
- Toggle Airplane Mode on and then off from your phone's settings.
- Navigate to your device's System Settings and from the Date and Time settings enable "automatic time zone." This will prevent GPS points from being reported at an incorrect time when connecting to a GPS signal.
- Make sure you're running the app on an up-to-date Operating System. For iPhones, you can check for a software update by going to your phone's Settings app > tapping "General" > tapping "Software Update" and then updating.
- Turn off Wi-Fi before redownloading the app (data rates may apply). Wi-Fi is known to decrease the accuracy of your GPS and also cause network data transfer conflicts.
- Double-tap the home button or if you don't have a home button, swipe from the bottom of the screen upward to the middle of the screen. This will bring up tile sized images of all currently running apps. Swipe the screens of all apps upwards to close them.
- Some devices may have apps installed that disable GPS services or terminate backgrounded apps in an attempt to reduce battery usage and improve system performance. Examples of apps in this category include "Advanced Task Killer" and "Juice Defender." Please disable or adjust the settings of these apps to allow our app to receive GPS information during long periods of background operation.
- When you have a clear and unobstructed view of the sky reinstall the app from the app store. Wait 15 minutes to see if your location shows up in your stop list.

Android Household Survey App Troubleshooting

If you are having tracking issues when your phone goes to sleep (screen turns off), try disabling Power Saving/Battery Saver/Power Optimizer Mode(s). To do this, go to your phone Settings > Battery > under "App Power Saving" select "Detail" > locate Household Travel Survey app > turn off power saving.

If you are still having issues with the app recording stops properly try the following:

First, ensure that you have enabled GPS on your Android device and for our app. Instructions on how to do this are below.

Enabling GPS Tracking on Your Device

Enter your phone's device's "Settings" app.

Select "Location" and ensure that it is enabled and that you have elected to use GPS, Wi-Fi, and mobile networks. Enabling all three or selecting "High Accuracy" mode is required for accurate tracking.

Next, from the "Settings" app, select the "Date and time" item and ensure the "Automatic date and time" and "Automatic time zone" checkboxes are checked. GPS and our app rely heavily on an accurate time and time zone. Having



your device set to the incorrect time zone or time may prolong the time taken to obtain a GPS fix, and may result in other inaccuracies in your recorded stops.

When you first install the the app, we will ask your permission to use Location Services. Double-check this permission has been granted by:

Enter your phone's "Settings" app.

- Tap "Apps" to view a list of applications you have installed.
- Scroll to the Household Travel Survey app and select the Household Travel Survey app(s) you have installed
- Tap "Permissions"
- Make sure that "Location" is toggled on.

If that doesn't work...

...try these additional steps that are known to resolve almost all issues.

- Restart your phone regularly. Usually holding down the power button and selecting "Reboot" or "Power off" will do this.
- Remember you must be outside with a clear view of the sky when your device is searching for a GPS signal.
- Ensure you have a good internet connection when your device is first searching for a GPS signal. Your device may need to use the internet to obtain hints that will greatly reduce the time it takes to find your location.
- Android only allows our app to turn your device's GPS hardware on and off. Our app does not have permission from Android to diagnose and fix issues. The quality and time taken to find a GPS signal is dependent on your Android device and its manufacturer.