GPS Dos and Don'ts for GIS Staff

Do

A. Use a consistent coordinate system for each project. (Datum, Projection, Zone, Units) Unless a specific coordinate system is needed, please leave the GPS unit on the WGS 84 (lat/long) coordinate system.
B. When finished with unit, if coordinate system has been changed from WGS84, please return it to this coordinate system.
C. Import shapefiles to Pathfinder with defined coordinate systems (typically WGS84). Background files must match the coordinate system displayed on the gps unit – they cannot be re-projected by the unit like data files.
D. Differentially correct and download correction base station data closest to where fieldwork occurred (within 150 miles) [Note: base station data must be downloaded within 30 – 90 days].
E. Copy all imported or exported Pathfinder .ssf, .cor, .imp., etc. files to the Data\GPS directory of the GIS project folder. Creating a Upload subfolder for all imported files helps organize the directory.
F. Exported shapefiles can be placed in the Data\Shapes\GPS directory of the GIS project folder.

Don't

A. Import undefined projection shapefiles to Pathfinder
B. Forget to define projections of exported shapefiles in ArcCatalog (the exported shapefiles will be undefined).
C. Forget to Differentially Correct and download correction data (within 30 – 90 days) closest to where fieldwork occurred (within 150 miles).
D. Work with GPS targets or actuals outside a projects agreed upon coordinate system.

Other Notes:

- GIS staff should send differential correction report (.txt) file to field manager so they are aware of gps error across the data set.
- Data dictionaries should be approved by project manager prior to use.
- All projects with background files should have a QC check in GIS before being added to Pathfinder
- When exporting files (output to GIS), use autogenerated subfolders to avoid overwriting previous data.