

Charles River Link GPS Data Collection and Processing

Collection

GPS: Garmin GPSMAP 60

Datum: WGS 84

WAAS: Enabled

GPS Antenna: Garmin GA 27C, mounted on 30" wooden pole carried in backpack.

Track Collection Method: Walked the trail at 3-4 mph.

Track Data Recording Rate: 1 sample every 3 seconds.

Waypoint Collection Method: Single measurement while stopped.

Processing

Garmin MapSource: Ver 6.13.7, used for assessing data quality, editing and combining data, generating GPX files, and exporting to Excel.

MapSource GPX Filtering: For medium resolution, used Automatic; for low resolution, used Maximum Points = 250.

Nat'l Geo TOPO: Ver 4.3.4, used for checking location data, map generation, and cumulative distance measurements to waypoints.

Waypoint Numbering: Waypoints 1-99, Dedicated trail; 101-199, Temporary trail; 201-299, Proposed trail; 301-399, Off Trail.

GPX Waypoint Comment Subfields:

Comma delimited order: Type, Map, Point, Parking, Trail, Description.

Type: D = Dedicated trail, T = Temporary trail, P = Proposed trail, O = Off-trail.

Map: Trail Guide map number.

Point: Trail Guide location point (A, B, C, etc).

Parking: P = Public parking available.

Trail: T = Off-road trail from this waypoint to the next waypoint. Off-road defined as not accessible by public vehicles.

Description: Road intersections, trail intersections, points of interest, town lines, etc.

Waypoint Mileage Calculations:

Distance: Cumulative mileage from beginning of track, taken from downloaded track to TOPO.

Leg: Mileage between this waypoint and next waypoint.

Off-Road: If Trail = T, value is the leg mileage.