Mapping Minnesota Dads at Home

By Hugh Phillips, MDAH Membership Coordinator

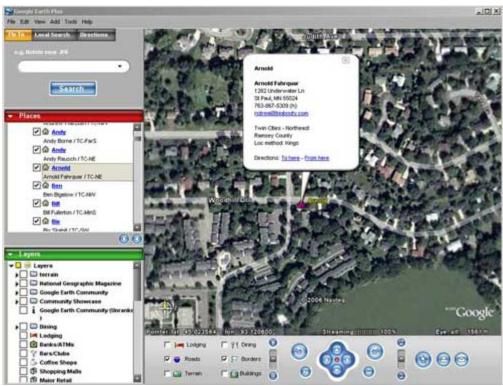
Minnesota Dads at Home (MDAH, www.mdah.org/) is a group of approximately 130 dads who stay home with their children - some part-time and some full-time. The group has been in existence since 1997 and gained recent national exposure on ABC's 'The View.' The organization provides support for its members by way of a dedicated email list on Yahoo!, a newsletter, a directory, monthly Dad's Night Outs, and 'playgroups.' MDAH dads are scattered throughout Minnesota and western Wisconsin but concentrated mainly in the Twin Cities metro area. The group is subdivided into regional 'playgroups' that meet weekly at defined locations winter and summer where the dads and their children can mingle, commiserate, share advice, and play. The group has recently completed a Google Earth (GE) map indicating the locations of member dads and playgroup meeting sites.

New MDAH members like to know where the playgroups meet and if there are any nearby MDAH dads. The membership directory lists addresses for members but it is difficult from that information to get any sort of idea how proximal other member dads are and if they are scattered or clustered. Until recently, only the person who maintained the member database had a good idea where all the individual members were located - he plotted them by way of stick-on dots on a Plexiglas-encased hardcopy city map. That map afforded a simple way to assign new members to regional playgroups. However, the database maintainer was eager for alternate means to map member locations that was more portable, easier to maintain, readily copied to backup the original work, and that could be disseminated for the use of members and the MDAH Planning Committee. The solution was a digital map in a GIS.

Early work toward the GIS map focused on identifying applications and datasets that could be used to geocode member locations and that could be used to view and query the resultant data. Several applications and datasets were used for the initial bulk geocoding, but one application outshone all the others for display of the data - that was Google Earth. Manifold GIS was used as the geocoding engine against MapPoint 2004 data for most addresses; unmatched addresses were resolved with Google Map and King's Companion online. Now that the bulk geocoding is completed, new members are geocoded one at a time as they join using the geocoding tools in Google Earth.



Locations of MDAH members displayed in Google Earth



GE zoomed in to display location and contact information for a selected (fictitious) MDAH member.

The final map consists of point icons over the approximate position of each MDAH members' home, colored according the members' assigned MDAH playgroup region and superimposed on the background imagery and themes of Google Earth. The icons can popup a limited amount of

contact information for each member. Processing an extract from the member database with an awk script creates the Google Earth .kml file. MDAH is concerned about the privacy concerns of its members and the safety of members' children. As a consequence, the MDAH Google Earth map is only available to eligible MDAH members.

The April 2006 MDAH Newsletter www.mdah.org/docs/MDAH News 04-06.pdf contains links to documents describing the development of the map. For more information contact Hugh Phillips, hugh@mdah.org.

http://www.mngislis.org/newsletter/issue45/Mapping_MN_Dads_at_Home.htm