History of the Idaho Trails Application

The Idaho Park and Recreation Board directed staff in 2006 to create an online-mapping application that showed trail designations in Idaho. Between 2006 and 2009, staff collected GIS data from the U.S. Forest Service and the U.S. Bureau of Land Management to show the information on the trails application.

A major hurdle in combining the information was the different attribute (data fields) that the USFS and BLM used in their respective GIS datasets. Also at the time, different forests in Idaho used different attributes to show the same information. Fortunately, the USFS 2005 Motor Vehicle Use Rule standardized the attributes for information. This was the attribute frameworks that the Idaho Trails Application used.

Once the data was collected and edited (to get into a common attribute framework), a software and web contractor was selected to develop the application. The total cost on developing this application was $256,000.

The initial application worked great. It was easy for the public to understand. Visitors had the ability to print maps and download GPS and Google Earth Data. The initial application was based off a Google Mapping Interface which visitors easily understood how to use.

In the falls of 2012, Google Maps changed its product. The change caused the Idaho Trails Application to fail. The only solution was a hard code fix, but, the contractor who developed the application was no longer around.

The Idaho Department of Parks and Recreation and the Idaho Department of Administration worked to get another application up and going. This application used java script and ArcGIS Server Maps and ArcGIS Online Maps. The mapping application was back up and running within a couple of weeks, but not with as many features as the initial application.

In August 2015, an IDPR staff member mentioned that we should consider going to a downloadable pdf map setup. These pdf maps would be georeferenced to work on a smart phone application. After finding out that the maps were already georeferenced, staff decided to give ArcGIS Web App Builder a try.

The Web App Builder is an extremely easy product to use. After 20 minutes, I was able to build an application that had even more abilities than the Version 2 application. Within in a week, the Idaho Department of Administration and the Idaho Department of Parks and Recreation, had the website live available to the public.

Visitor Use to the Idaho Trails Website averages around 9,000 visits a month. These visits make the Idaho Trails Application one of these most visited sites on

Maps.Idaho.gov. Idaho Citizens are its most frequent visitors, followed by California and Washington.

The application has several web widgets from the ArcGIS Web App Builder that allows visitors to create their own maps. These widgets are

Search is the function to find a place or address.

Home Button – this icon zooms out to the full scale of the map.

My Location Button – this icon zooms to where you are currently located on the map.

Base Map Gallery -this icon allows you to select different base maps. The application base map is National Geographic. Visitors have the option of selecting three other base maps (streets, aerial image, or topographic map).

Print – allows you to print a map. The default is set to 11x17 (tabloid) size pdf. You can select a different size to print. You can also retitle the map. Finally you can set the scale of the print of the map that allows you to print a larger or smaller area on the printed copy.

The printed pdfs are georeferenced which means that the pdfs can be saved to a smartphone and opened on the Avenza PDF Maps application. This app will show you where you are located on the map with your smartphone. It uses the phone's gps signal, so cell service is not required to show your location.

Measure – this icon allows you to measure distances, areas, or locations on the map by clicking on the icon, selecting the tool you want to use, and then clicking on a location with the map. The tool is cumulative, so you can measure a series of points to come up with a length of a route or an area or a series of points.

Layer List – this icon allows you to turn on and off different layers of the map.

Draw – the draw icon allows you to draw a variety of features on the map. The draw feature will also measure the length of a line, or the area of a polygon drawn.

Legend – this icon opens up the map legend. The legend shows what items are currently being displayed on the map. If you zoom in, more information does pop up in the legend.

Bookmark – the bookmark icon allows you to save the extent of places on the map. You can then use the bookmark to go to the map extent that you save. You have the ability to delete and add pictures to your bookmarks

Map Overview – click on this icon and a small map will pop up. Move around in this small map, and your main map extent will follow. This is a great tool to move around the map at larger scales.

Attribute Table – this icon opens the attribute table. You can open the various tables on the map.