ABSTRACT:

The Pedestrian Walkway Mapping Project was undertaken by the University of New Hampshire’s Facilities Information Technology GIS Division during the spring 2006 academic semester (January to May). The purpose of the project is to obtain data points of various pedestrian walkways throughout the university campus, with a primary goal being to create a more detailed and updated GIS map with various uses being for students and faculty.

The project consisted of three major parts: 1) gathering information on which features to concentrate on and create a geodatabase for those features on the RTK unit’s data collector and ArcMap for post processing (refer to figure 4); 2) obtaining data points through field work using the RTK unit (refer to figure 1); and post process all the field collected data by constructing shape files and geodatabase feature classes in the ArcMap software.

The ABSTRACT section contains an overview of the project, including the main steps and outcomes. It explains the purpose of the project, which is to create a more detailed and updated GIS map of pedestrian walkways on the university campus. It also mentions the main goals of the project, which are to obtain data points of various pedestrian walkways and create a geodatabase for those features using the RTK unit’s data collector and ArcMap for post processing.

The ABSTRACT section also includes a brief description of the project, noting that it was undertaken by the University of New Hampshire’s Facilities Information Technology GIS Division during the spring 2006 academic semester. It also mentions that the project consists of three major parts: gathering information on which features to concentrate on and create a geodatabase for those features, obtaining data points through field work using the RTK unit, and post processing all the field collected data by constructing shape files and geodatabase feature classes in the ArcMap software.

The ABSTRACT section concludes by noting that the main core area of campus should be the main area of focus (refer to figure 1), which consists of major paths along Main Street, College Road, and Williamson Way. The collection of data points would at time prove to be very difficult. The RTK unit is very sensitive in areas where there are trees, chain link fences, and buildings. These features all interfere with the units ability to maintain a link to the satellites. When these setbacks occurred, the Dista Laser measuring tool was used in the field in what is called an offset measurement. The RTK unit was placed in an area where it could maintain a link to the satellites and the Dista unit was used to obtain the distance from the point that was needed to the RTK unit (refer to figures 3 and 4). Using a compass, Northing degree measurements were obtained from the point to the RTK unit or vice-versa. All the measurements were then entered into the data collector and a data point was stored.

The ABSTRACT section also notes that the data that was transferred to ArcMap was originally viewed as points (refer to figure 7). These points allowed the editing features of the software to create construction shape files (refer to figure 8 and 9). The geodatabase allowed for classification between different types of features by using different colors to represent each target.

Having not been able to finish the project, the map is not entirely complete. However, the steps that have been accomplished in the given timeframe have set the foundation for future participants of the walkway project.