A device had been developed that provides tactile spatial information through a belt that is worn around the waist [1]. Using a global positioning device, a 3-axis compass, and an inertial sensor, the belt is capable of locating the position of the wearer and providing tactile cues via small vibrating motors to help them navigate to a desired location. The belt can also be used to locate a lost wearer and its Bluetooth capabilities make it possible for a third party to assist in the navigation via cell phone. A series of experiments were conducted that tested the way-finding efficacy of the device. Healthy adult participants travelled routes of various complexities with either passively-acquired a priori route knowledge, verbally-acquired landmark-associated a priori route knowledge, or with belt assistance but no a priori route knowledge. The results indicated reduced times in navigating the correct route when wearing the belt, thus demonstrating the belt assistance to be an efficient means of providing route information compared to landmark-associated verbal directions. The advantage provided by the belt was further exacerbated as the complexity of the routes increased. Most notably, directional errors were never made when participants travelled the routes with the belt, whereas directional errors were made in the two conditions where the belt was not worn. This system has potential application for the military, hunting and gaming, and tourism industries, and has been shown to be useful for facilitating navigation in blind. We are currently testing this usefulness of this device for people with Alzheimer’s disease.