

GIS-based decision support database and application for Virginia's bikeway and pedestrian infrastructure

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Virginia is so rich in bike and hiking trails, yet there is no seamless statewide database that would ensure efficient planning and public access. But this will change soon as a statewide project is set to create an Internet-based digital repository of existing and planned bicycle and pedestrian infrastructure, including bike lanes, hiking and horseback riding trails. The project is funded by the Department of Conservation and Recreation (DCR) and the Virginia Department of Transportation (VDOT).

The existing database is of limited use in supporting decision making, as the documents are not readily accessible by managers and planners working in disparate locations. The current archive also represents a collection of documents in a variety of formats.

This project is set to facilitate the information retrieval and decision making efforts for VDOT, DCR and other stakeholders with regards to bicycle and pedestrian infrastructure. Some of the activities that will be performed for this project include:

- Develop a GIS data model that will be effectively implemented to support the development of a statewide, non-motorized transportation database;
- Develop a web-based GIS application that will assist managers in their planning responsibilities when utilizing bicycle/pedestrian roadway and trails data;
- Collect and integrate data from other federal sources such as Virginia state parks, national parks, and national forest lands;
- Provide technical and educational training to VDOT managers and decision makers on the GIS data model and the online manager application;
- Facilitate public access, if funding is provided, by way of a web-based GIS application that will allow viewing and querying of bicycle and pedestrian trails, facilities, and other information.