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Alternative Transportation: SIUC Campus BikeWay and Extended City of Carbondale Bike Routes

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Geography and
Environmental Resources
Southern Illinois University Carbondale

Alternative Transportation: SIUC Campus BikeWay and Extended City of Carbondale Bike Routes

Carissa Bedi and Luke Orr

Class of 2009, GEOG 433: Field Methods

Introduction

Southern Illinois University-Carbondale (SIUC) and the surrounding community of Carbondale are currently working towards a more sustainable local environment. Promoting alternative transportation, with a focus on bicycle and pedestrian traffic on the SIUC campus and within the city boundaries will increase environmental awareness, reduce fossil fuel use, and encourage healthy living practices.

This project's aim is to bring awareness to the campus and surrounding community highlighting alternative transportation as a means of furthering our sustainable culture.

Materials

Materials needed for points of interest (POI's) and route creation included: GPS unit, bicycles, ArcGIS, Google Earth, digital camera, Carbondale Bikeway Map shape file and field notebook.

Methods

Campus Bikeway Map

- Located ten POI's for potential bike routes throughout SIUC campus.
- Rode bicycles to each POI and took coordinates with GPS unit.
- Photographed each POI.
- Uploaded POI's into Google Earth.
- Mapped out three bike routes on SIUC campus in relation to POI's.
- Inserted pictures and text associated with individual POI's.

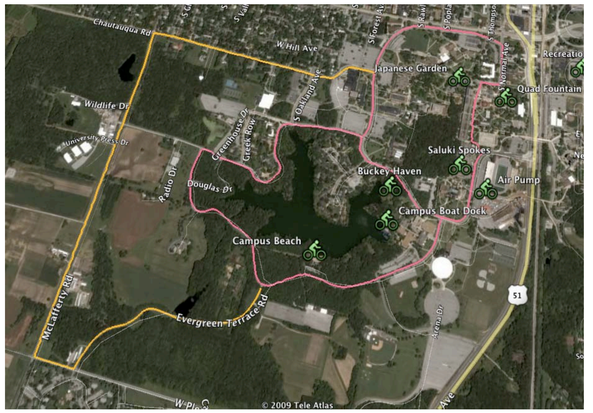
Carbondale Bikeway Map

- Uploaded Carbondale shape files onto ArcGIS.
- Edited original BikeWay route using ArcGIS snapping tool.
- Extended preexisting routes while closing gaps present in original map.
- Used color to represent changes made to original map.

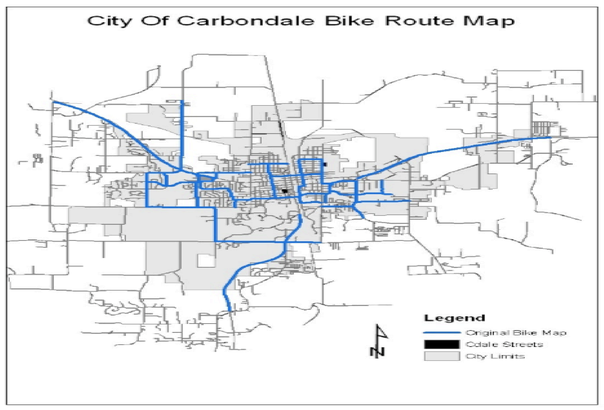
Results

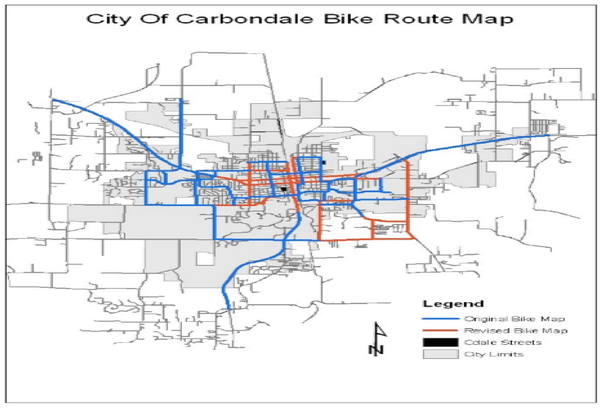
SIUC Campus Bikeway Map Including POI's

City View of Bikeway Routes and POI's



Campus Bike Routes With Street Names





Japanese Garden POI

Rent-A-Bike and Bike Repair Shop

Campus Beach POI

Transit Air Pump

Results - con't

As a result of the proposed City of Carbondale Map a possible increase in bike lane usage and awareness may result. The Campus Bikeway map strives to bring attention to the campus environment through appreciation for its natural and social features. Both of these maps are potential foundations for future research and development projects in the promotion for alternative transit.

Discussion

The goal in creating an SIUC campus bike way route is to promote and create awareness for the campus community. Both the revised city map and the campus bike routes promote the use of bicycles as a transportation method for the community. A reduction in vehicular use would not only benefit the bicyclists but also the motorists because of the potential decrease in traffic congestion and increased environmental quality.

The close proximity of key areas in the community, such as SIUC campus, historic downtown Carbondale , and large-scale shopping centers make it suitable for most to cycle or walk. In order to improve the weaknesses found in the pre-existing bike map for the city of Carbondale it was necessary to make all practical connections between the routes.

References & Acknowledgements

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