Developing Safe Routes to School with GIS

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Safety first!
In cooperation with a secondary school in Schwetzingen, the GIS-Station Heidelberg* started a project for developing a web based map with safe routes to school. The background is the optimization of routes to schools for students who use bicycles or walk to class and back home.
In contrast to other common projects much-frequented ways to school have been evaluated with the goal to make the main routes safer by cooperating with the police department and public administration instead of drawing up guidelines for alternative ways to school, which may be safer than their chosen way.
For creating the map the pupils used ArcGIS Online and the ArcGIS App for mobile devices.
By using mobile phones and action cameras the main routes of the pupils have been evaluated to show the individual safety of the different routes.
The Garmin Virb Elite action camera was used for the evaluation of bicycle routes to school. This way the pupils were able to edit potential danger points from the viewpoint of a cyclist.
After the data acquisition the pupils created a web based map in ArcGIS Online with the much-frequented routes to school and the analysis of danger points. This map is currently embedded in the homepage of the school to disseminate information about safe routes to school. Furthermore a web map application with the same content including more information and tools to "explore" the map was created.
The presentation should give an insight into the development of the web map and the application. Furthermore problems which may occur within such a project will be shown.

*The GIS-Station develops competences in working with digital geomedia in school and out-of-school education. It is an institution for retraining for teaching students, trainees and teachers and an out-of-school place of learning for pupils of primary and secondary schools.