
hin&weg – unveiling migration patterns using an analytical visualisation approach

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Keywords: software application, residential patterns, migration patterns, urban and regional data, analysis, visualization

Cities and regions in Germany see new residential patterns emerging that blur traditional urban and suburban distinctions. The dynamics of migration at the level of the inner city (city districts) and the surrounding city regions generally are still only known from the official statistical records and basic graphics on migration, inner-city movements and commuting.

Despite their potential in offering valuable insights into processes of neighbourhood up- and downgrading (such as gentrification, marginalisation, segregation or ageing of city quarters), municipalities often lack the tools to begin to analyse and visualise this complex data.

Hin&weg, an application developed since 2000 in various formats for this purpose, in its current iteration addresses this need and help local government with an analysis and visualization tool to break down the increasing complexity of municipal and regional changes. Users can enter their own data in hin&weg and use it for various types of spatio-temporal analyses. The current version of the software (built around electron.js, node.js and d3.js) was developed over the last three years with 18 German communities using a participatory approach to software development. This was significant to assure the functionality and user interface best supports community needs considering the various contexts of analysis and visualization.

The software works with existing registry data in tabular and list forms. It supports the static and interactive visualisation of patterns and changes to communicate with political decision makers and the interested public. This opens the door to innovative interactions and exchanges that can help promote transdisciplinary problem-solving.

Hin&weg is provided at no cost when the final version is released in 2022 in both an English and German version and available through github (<https://github.com/ifl-geovis/hin-und-weg>).

Cities and regions can benefit from the new hin&weg application, which merges analysis and visualization. This application is simple enough for elementary uses, yet can also facilitate the visualizations and more complex analysis of diverse urban and regional data.