

# Push and pull assemblages for modeling visitor's flows in complex landscapes

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Visitor flows can be schematically represented as a landscape-recreation-system with six components: entrances, goals, exits, field units, attractors, road segments, road junctions and barriers. To explore the totality of this system, different aspects should be studied. The basic modeling framework is a cost-distance function, to estimate the probability of on- and off-track visit of any location in a nature reserve on deliberate times and in specific terrain conditions. This can be represented by mean of a push-pull concept: some of the components (like entrances) have a push effect, while others, like goals, exits (when determined in advance) and attractors, have a pull-effect. Inputs to the model are data from walking experiments, camera observation, pressure pads, pair-wise photo comparison, experiments about field unit division, the follow up of the landscape by mean of photographs, interviews and questionnaires, GPS surveys and landscape preferences. This model is being developed in marshland nature reserves in central Belgium. Ultimately this system should lead to an impact assessment and decision support tool.