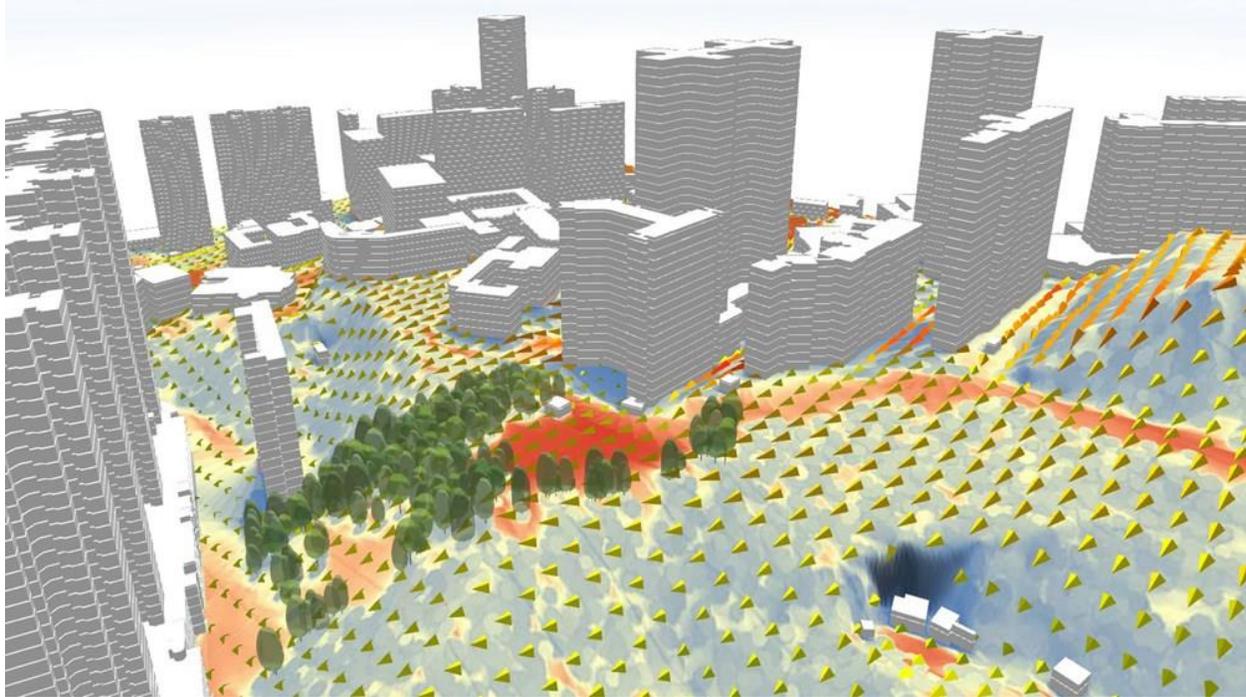


**Changing Our Global Infrastructure:  
Towards a Collaborative Geodesign Research Studio**



Nations around the world face a growing challenge to plan, manage and pay for infrastructure essential to address major demographic changes and weather events accompanying a changing climate. To make this case, we will participate in a multi-institutional, multi-national collaboration, influenced by the 2015 Paris Agreement. Each partner institute in the collaboration will systematically study change in its region, share and compare the results, and produce guidance towards improved decision making on infrastructure investments.

The world is facing serious problems which need complex responses. While each country, province and municipality has its own subset or flavor of these problems, there are many we share, and we will all benefit from sharing our responses. To match the scale of the problems, meaningful responses will have to address and be tested against longer timeframes than normal political and financial cycles. They have to be plausible but not necessarily precisely tuned to current predictions. They are not likely to be directly implementable but they need to identify actions that could lead to implementation. The political processes and public opinion need understandable images and analyses before they will move towards ideas of the size, scope and scales that will be required.

Our goal for this endeavor is bold. We believe that there is a need for a large number of people in the next decade who are educated broadly about the state of the world and specifically about the analytic and synthetic needs in places in order to propose change for the betterment of society and the environment in the face of likely global disaster. The most efficient way is to educate today's university students in these matters and to do it in a manner that enables collaboration and mutual learning inside the university, and across institutions and nations.

For this collaborative project, we will use Charlotte's **North End Smart District** as our "test subject" and analyze it using the Geodesign tools the students will be learning in the studio. The process will require the students to create both the analytical maps and 3D renderings using mainly the software packages that will be covered in this class.