# UCD Impact Case Study



## Eco-Plan: Upping the game for green spaces in urban planning Professor Mark Scott

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#### **SUMMARY**

Green spaces are not just easy on the eye, they also help to keep urban spaces safe and biodiverse, and they can even safeguard our health.

To increase the awareness of green infrastructure among planners, a team from UCD School of Architecture, Planning & Environmental Policy developed workshops and games to encourage experts to put their heads together and prioritise nature-based infrastructure in plans.

Their workshops with local authorities have encouraged new collaboration and fresh thinking about how to support nature in urban environments and tackle natural and societal challenges.

#### Getting the green message across

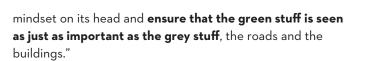
When you think of a city, what springs to mind? Roads? Tall buildings? Shopping centres? It is almost as if the green spaces are an afterthought amid the grey.

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Yet these parks and pitches, hedgerows and ditches are oases and pathways that support life, health and even safety for urban dwellers.

"Green space is not sitting there doing nothing," says Dr Mick Lennon, a Lecturer in Planning and Environmental Policy at the UCD School of Architecture, Planning & Environmental Policy. "**Having green spaces enhances biodiversity** - think about the wildlife, flowers and trees that can live there - and these **spaces can help to manage drainage** because they can slow down pulses of water through the urban environment, so they can alleviate flooding. Add to that the very important function of providing spaces to walk, run, play sports and relax in a natural environment. These activities **help our physical and mental wellbeing**."

The usual course of events in planning urban development is to make provisions for houses, transport, retail and employment, explains Dr Lennon. "The green elements tend to be put into the spaces left over," he says. "We want to turn that



Enter Eco-Plan, a project to increase the awareness of green infrastructure among planners and to integrate it into planning and development strategies. The project, run by Dr Lennon and Professor Mark Scott, with Dr Karen Foley and Dr Marcus Collier at UCD, developed a series of workshops to bring green spaces and corridors to the fore.

"The Eco-Plan project was about getting the Green Infrastructure message through, disseminating and integrating it into the planning system," says Dr Lennon of the Environmental Protection Agency-funded project. "Because controlling the use of land is key to realising the benefits of Green Infrastructure."

The issue was not lack of expertise, but rather that the experts who needed to be talking were not in direct communication on the issue, according to Dr Lennon. "When planners are developing plans, they tend to send out requests for reports from various groups about the locality - maybe on heritage, biodiversity, transport engineering, flooding -



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and then they get the reports back," he explains. "But these inputs are siloed and it does not encourage the kind of joined-up thinking needed to prioritise green spaces."

So rather than simply going into local authorities and providing yet more expertise in isolation, Eco-Plan took a different approach: **workshops to get everyone talking and thinking together**.

"We developed an **interactive framework and a game for the professionals** involved in the planning process," says Dr Lennon. "And it worked very well."



**GI Quest logo** 

#### Workshops lead to impact

In practice, the Eco-Plan team brought their workshop into local authorities around Ireland. They did a short presentation on Green Infrastructure and the need to connect green spaces in an area, and then split the room into groups of people from different backgrounds and disciplines. "We did some ice-breakers, everyone got to know each other a bit better," recalls Dr Lennon.

Then the groups were assigned a task: a fictional planning and development exercise based on an aerial photograph with some constraints. "As an example, it could have been a coastal place with tourism that is experiencing housing pressure," explains Dr Lennon. "The groups then had to identify the Green Infrastructure assets – stream ways, parks, fields – and come up with a local area plan to preserve and use those assets."

That initially got them talking and thinking, but soon there was a new cat among the pigeons: "We presented the teams with challenges," says Dr Lennon. "That might have been a rare snail habitat that needed to be protected, or space for cultural events or pressure for more recreation facilities. The teams had to make the arguments for those needs."

Next, a development got thrown into the mix. "The teams had to work through issues again in light of a new golf course or a hotel being proposed in the area, how were they going to protect the natural reserves."

The workshops featured lots of conversation and laughter at tables, recalls Dr Lennon, as the experts pooled their thinking about greenery. And crucially, the Eco-Plan researchers could see the **participants made the connections with real-life planning and development projects** too.

"They began to see straight away how they could use the information they had on plans they were working on and they exchanged ideas with each other," says Dr Lennon. "The **local authorities we worked with have adopted Green Infrastructure as a core approach** in planning and we have already seen the impact in a number of county development plans that has come out since. The effects were direct and very quick."

The Eco-Plan researchers have published a final report and a 'how-to' guide (on the EPA website) with the aim that the workshops and 'gamified' approach to integrating Green Infrastructure can be used elsewhere. The need for this kind of thinking is growing, notes Dr Lennon, because more and more of us are living in cities where green space can be lacking.

"Cites are growing exponentially," he says. "1960 around one third of the global human population lived in cities, and by 2016 that had surged to more than half of the global human population. By 2030 around 60% of us worldwide are expected to be living in cities and in Ireland we have already surpassed that - 2016 figures show that 63% of our population lives in urban areas."

Adopting and integrating a Green Infrastructure mindset in planning will **sow the seeds for later rewards in world challenged by human population growth and climate change**, notes Dr Lennon. "Green spaces will lead to a more resilient and responsive urban environment, they will give us places to improve our health, help drainage and prevent flooding, plants will dissipate heat and improve air quality, and there is even economic benefit to the feel-good factors: studies show that perceived higher-quality urban environments attract more business investment."



#### (GI QUEST Game Board pictured)

Professor Scott and Dr Lennon are now digging further into the benefits of planning and developing green spaces for human health - their latest project is Eco-Health, funded by both the EPA and the Health Services Executive. "We are looking to figure out ways in which we can **use green spaces to enhance health and wellbeing of populations across the life course**," Dr Lennon explains. "We want everyone to benefit, not just the males aged 15-35 playing football on the local pitches, but the teenage girls, the older people, the mothers with small children, everyone needs those green spaces in urban communities."

### **Research References**

Final Project Report - Integrating Ecosystem Approaches, Green Infrastructure and Spatial Planning: http://www. ecoplanresearch.org/WorkingPapers/EPA%20RR%20188%20 final%20project%20report.pdf

Green Infrastructure: A 'How To' Guide for Disseminating and Integrating the Concept into Spatial Planning Practice: http:// www.ecoplanresearch.org/WorkingPapers/EPA%20182%20 How%20To%20Guide.pdf