



Modern life can disrupt our connection to nature. Yet research shows that green spaces improve health. The TKF Foundation helps communities heal from the outside. TKF is a private nonprofit that funds publicly accessible urban green space.



# Introduction

he National Open Spaces Sacred Places Awards Program, sponsored by the TKF Foundation, is pleased to announce that it will provide \$4.5 million in funding for six projects of national significance. This grant program is unusual in that each project integrates landscape design and empirical research. The collection of exceptional spaces will demonstrate how nearby nature in the city can provide sacred and spiritual experiences. Each project will combine the creation of tranquil, restorative spaces in urban environments with rigorous study of the impact of such spaces on users' well-being and resilience.

These examples of high quality design and research will elevate public awareness about the necessity and value of tranquil places where people can contemplate, reflect, and be restored. Each of the Open Spaces Sacred Places projects align with the TKF Foundation's mission, treating human health and the environment as an integrated whole. Each project team will create a unique and engaging green space that is designed specifically for a human population having particular needs. Located across the United States, the collection of projects will address the challenges of local populations by creating opportunities for recovery, wholeness and celebration, and contribute rigorous research that confirms the benefits of nature experience in urban settings.

### **Spaces**

As earlier gardens were built the TKF Foundation began to see certain design features emerge across Open Spaces Sacred Spaces. As designers and communities worked together to create their unique sacred spaces certain elements contributed to the experience of sacred:

portal - When one passes through an archway, a gate, a stand of trees, a pergola, or other marker there is a clear movement from the space of everyday life and functioning. One enters a reflective space and encounters the fascinations of nature.

path – Whether linear and well-defined, or more meandering, a path allows one to focus one's attention and achieve a mindfulness about the surroundings. A path can ground one with the earth while offering a sense of connection to a greater reality that is sacredness.

destination – An appealing feature or end point draws in a person to the welcoming space. The sojourn, however brief, is rewarded by a feature that encourages quiet, fascination, joy, and spiritual connection with nature.

surround – Design elements – such as plantings, fencing, or trees – provide an encompassing sense of boundary, safety and enclosure within the Open Space Sacred Space. Portal, path and destination invite one to experience a space; the sense of surround ensures that the one experiences a sense of being away and an emotional separation from the stress and challenges of life.

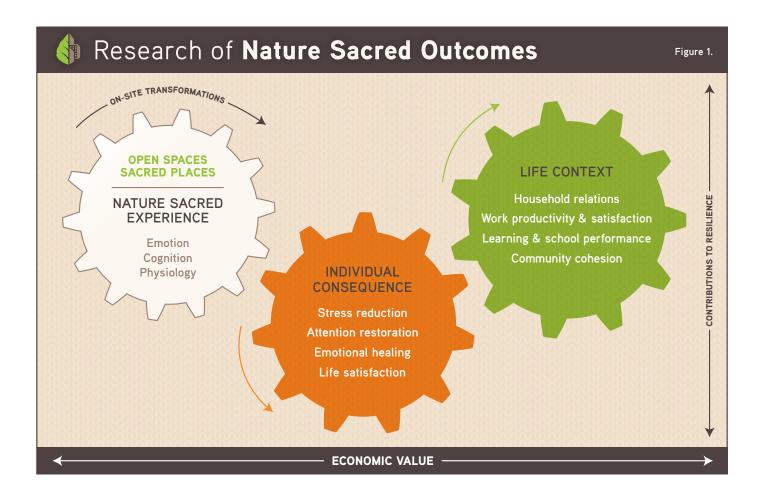
Each of the project gardens includes these four main elements. Yet there is variety within unity as each of the project teams responded to the unique landscape or social conditions within their community. One project is a nearly linear healing garden nestled within a ravine, while another is a totally constructed site within a tornado destruction zone. Most projects also include areas for sitting or walking, with opportunities to tend plants, engage and communicate with other users, and record individual experiences in a journal (required on every site).

#### Users

Each of the six diverse, yet contemplative spaces will target and engage an urban population of need. The expected users include residents within communities. that have experienced natural disasters, wounded warriors struggling through rehabilitation, and members of an inner city community working toward an economic rebound. In all instances communitybased planning was used to explore then determine how the Open Space Sacred Space would reflect the unique resources and needs of the community. Some projects will also attempt to better understand how the process of collaborative planning and stewardship of open and sacred places can improve health and wellness.

#### Research Efforts

Prior to this national grant program the TKF Foundation had funded more than one hundred Open Spaces Sacred Spaces in the Washington D.C. to Baltimore, Maryland region. Once installed these spaces became cherished and beloved by



nearby communities. Each Open Spaces Sacred Place contains a signature bench, and visitors are invited to write a journal entry while seated in the garden. All journal entries are collected and transcribed, and within the thousands of these impromptu comments one finds remarkable, heartfelt testimonials about the power of nature to transform, heal, and bring clarity through reflection. Based on these frank and powerful sharings the TKF Foundation decided to expand the geographic scope of its funding for sacred spaces, and pursue the talents of scientists to more precisely describe how people respond to nearby nature that offers special meaning. A national call for proposals suggested these goals for the research applications summarized in Figure 1:

#### Immediate Experience

Each project has identified a population or group of people that faces particular hardships or challenges. Past research indicates that experiences of nearby nature in cities can initiate immediate positive responses, sometimes noted by a person but often below consciousness. Rapid responses can be of both body (such as stress recovery) and mind (such as improved cognitive ability). Several teams will measure this initial response or experience and the direct effects of real time experiences of Open Spaces Sacred Places.

# Individual Consequence

Immediate response to a nature site may have lingering effects after a person

leaves, or may carry over between site visits. There can be secondary effects or responses of individuals or groups, and may include physical, emotional, and mental well-being of the user due to their site-based experience. Some of the projects will study the durable changes or impacts on a person or small social groups. Some of the reported effects pertain to a general sense of mental or emotional health. Others address how nature experiences may serve as therapy for diagnosed conditions.

#### Life Context

Residual effects of nature experience may have more extensive secondary influences in a person's life. Urban lifestyles are complex, and people are called on to function in a variety of contexts. Some projects proposed research questions about carryover effects in the workplace, home, school, and community.

## **Economic Value**

There has been some effort to translate previously studied benefits of the human experience of nature to economic terms. Many studies have assessed the role of landscape or the presence of trees, and improved property values (known as hedonic valuation). A few have explored reduced health care costs that are a consequence of more active lifestyles and increased physical activity. Some of the projects will apply valuation approaches to their benefits findings to help demonstrate the economic implications of providing high quality green spaces for people in urban settings.

Collectively, the six projects successfully addressed the TKF Foundation's desire to create a community of science intent upon studying and communicating the impact of open, sacred spaces on people's health, well-being, and resilience. The six projects will not only provide tranquil spaces but will also support and confirm the benefits derived by urban residents from immersion in open and natural environments that are programmed for human revitalization. Peerreviewed articles will report the reliable and replicable research about how urban open, sacred spaces contribute to the health and spirituality of people in cities.

## The Bigger Picture

More the eighty percent of the U.S. population lives in urbanized areas, more than fifty percent across the planet. Cities, rather than being regarded as ecological wastelands, are now seen as the most viable and energy efficient way to provide homes and jobs for ever-growing human populations. Once regarded as left over spaces that were waiting to be converted to 'highest and best' economic use, parks and open space are increasingly recognized as essential for urban livability and quality of life.

Urban designers and planners are comprehensively integrating ecology and nature into built environments using systems approaches, such as green infrastructure, low impact development, and urban landscape ecology. Expenses for these efforts are justified by call outs

of better air and water quality, reduced heat island effect, and reduced carbon emissions. Recent research has shown that careful design and maintenance of urban greening facilities can also provide human health and well-being benefits, such as stress recovery, improved mental health, faster healing, and improved community situations, including lower crime rates.

Yet the American experience, perhaps more so than any other nation, includes the recognition and conservation of those grand natural areas that inspire awe and instill a deep, meaningful sense of the power of nature. Once limited to wildland and rural areas, more people who are committed to city living seek to find calm, serenity and

restorative experiences within the city. There is an emergent understanding that even the smallest fragments of nearby nature have the power to engage, fascinate, and satisfy one's senses. The National Open Spaces Sacred Spaces design and research initiative will propel greater community commitments to creating those spaces that satisfy the soul. The research, in particular, may not be able to detect the intangibles of spirituality, but will provide evidence of the health and well-being consequences of nature's sacredness. The results will make a compelling case for how meaningful experiences of sacred should be part of community decision making about the necessary character and qualities of parks and green space investments.