A Search for the Design Team for the Lighting Framework Plan for Chicago
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INVITATION
On behalf of The City of Chicago, we invite you to participate in this search for a Design Team for the Lighting Framework Plan (LFP) for Chicago and to respond to our Request for Qualifications and Design Proposals for creating and implementing a unique and revolutionary lighting framework for a major US city. This design competition provides the opportunity for a team of designers to have a profound impact on one of the most important and visible public places in Chicago. Design Teams interested in participating in this search process should be comprised of representatives from lighting design, landscape architecture, architecture, urban design, communication and graphic design, art and art curation, engineering, manufacturing and other relevant disciplines. These self-organized teams will be asked to submit creative solutions for the Chicago public spaces, further explained in this document. The search will culminate with the selection in late summer 2014 of a design Team to work with the City of Chicago to implement the new LFP for the city.

The LFP design team search is an important part of the larger Choose Chicago and City of Chicago initiatives. The goal of this framework plan is to elevate Chicago to be a truly iconic and world-class destination for tourists as well as an example of how forward looking cities integrate art, design, technology and sustainability into its built environment. We are confident that the design of the framework plan that we have put together is visionary, practical, and achievable and the LFP design should follow suit so that it is inspirational, feasible, and gets built.

It is our hope that inspired and visionary design professionals will form well organized, talented, and experienced teams to undertake this seminal project. We encourage innovative and compelling design proposals that offer the best vision and aspiration for Chicago’s public spaces.

It is now time to revisit Chicago’s iconic elements and envision their potential through a contemporary lens.
Section Two

OVERVIEW
A Global Destination

Goal

This competition seeks to find a team of designers who will design and oversee the implementation of the LFP of Chicago. As elaborated later in this document, the LFP includes several elements that together, have the opportunity to transform the experience of the city. Chicago has a rich history of innovation, events, architecture, museums, and festivals yet these are not reflected in how the rest of the world views Chicago.

A world class lighting installation has the potential to change this perception of visitors as well as elevate the daily experience of Chicago residents. Such an undertaking is more than a single year round installations or a series of temporary events. Instead, it is an overall framework that does include these types of interventions but also allows for growth and change over time. In addition, it is not simply a flexible implementation but rather it is more of a cultural and ephemeral intervention that connects via Chicago’s unique infrastructure across the city.

Ultimately, these goals should aid in boosting Chicago’s international tourism through strengthening Chicago’s reputation on a global scale. Increasing tourism will create new permanent jobs, increase tourist spending, thus increasing tax revenue to the City. Incorporating a LFP is key to achieving this goal. Building on the strength of the successful tourist elements of the city and improving the quality of the public realm will broaden the appeal of Chicago as a global tourist destination and will also improve the experience of resident Chicagoans.
Objectives

Successful proposals achieve these goals in a coherent and unique manner that is unlike anything else that exists in the world.

By establishing the LFP, the City of Chicago seeks to accomplish a series of objectives that are imperative to increasing Chicago's visibility in the global tourism market.

The city currently has many successful tourist experiences. The Lighting Framework Plan intent is to create connections between these elements that encourage tourists to go explore further in the city - to help them in navigating and extending their tourist experience - establishing Chicago as a place to spend a few days not just a few hours.

A significant part of the task of creating a lighting framework will be focused on re-imagining and enhancing existing elements of the city infrastructure, landscape and waterscape and iconic elements within the city to broaden the appeal of Chicago as a tourist destination. There is a tipping point to tourism decisions, there must be many opportunities strategically choreographed throughout the visit to make the decision to visit and to stay an extra day worthwhile. In addition to helping tourism, such enhancements have the opportunity to improve the experience and life of resident Chicagoans.

Increasing Chicago’s Visibility
June 2013  |  A Lighting Framework Plan for Chicago

Vision

The life of our cities after dark is becoming increasingly important as the world becomes more urbanized and tourism becomes vital to economic success of our cities. The LFP calls for a transformation that enriches both the visitor’s and resident’s experience of Chicago. This competition seeks the best and most innovative proposals to develop and implement this transformation that engages and enhances both the tourist and resident user experience.

This competition is a contemporary opportunity to change how people light urban areas and how people experience the city after dark.

The overall vision seeks to incorporate the existing valuable opportunities within architecture, urban infrastructure, and natural elements and letting these elements guide and shape the design moves. With so many existing impressive attractions in varied markets, such as culture, sports, food, and entertainment, there appears to be a missing link, a connective tissue that guides tourists through the city to create a continuous holistic experience.

This vision is about a change in approach and a change in attitude. The world is refocusing on the urban as many cities reclaim and revitalize their urban centers. By the middle of the century nearly 70% of the world’s population will be living in cities. There is a robust global trend to re-assess and rethink aspects and elements of cities that were never considered before and forever alter the urban experience.

Chicago showcases all of these urban and elemental conditions together and it is up to the design teams to realize this vision in the most fantastic manner.

Enrich both
Tourist and
Resident
Experience
All successful design entries should integrate the following aspects into their design. This list is not exhaustive, instead it creates the backbone of elements that will make the proposals successful for the city and its residents.
An iconic design is ground-breaking - one that sets a new standard in its field. It is a design that other designers follow and it becomes a benchmark for other similar items. Iconic design is one that stands up to the test of time, remaining a good design, despite the passing of years, decades and even centuries.

It is innovative in the way it is engineered and in the way it solves a design problem. It is revolutionary in the features and functions it offers. It becomes an icon of its time.
In January 2013, the city of Paris passed legislation to require nighttime light reduction on most buildings.

**Light Needs Darkness**

Based on the concept that you must separate the important from the unimportant – light needs darkness in order for us to focus and provide contrast between elements competing for our attention. Thus, there is a qualitative, not quantitative, aspect of the amount of light used and the value.

- Light is also used to tie together diverse elements, such as creating a cohesive plaza space or a lighting pattern along a series of sidewalks connecting elements or attractions.
In neuroscience, a biological synaptic network is a series of interconnected neurons whose activation defines a recognizable linear pathway. The strength or amplitude of a connection between two nodes relates to the amount of influence the firing of one neuron has on another: the synapse.

A network of elements such as streets, pathways, bridges, pedways, tunnels create opportunities for mobility and connectivity. The strength of the connection of these elements can affect the level of success of the holistic tourist experience. These linear elements form a network that connects the urban tourist attractions. They also have the potential to affect the experience of the Chicago resident, who moves across the city on a daily basis.
In addition to an iconic, cohesive, and holistic intervention, creating culturally and environmentally sensitive installations is paramount. LFP designs must seamlessly integrate the goals of Chicago’s 2015 Sustainable Action Agenda (which can be found at http://www.cityofchicago.org/content/dam/city/progs/env/SustainableChicago2015.pdf), and additionally also must be sensitive to wildlife, avoiding light pollution, and minimizing energy use. Employing innovative technologies is also encouraged.

The 2015 Sustainable Chicago Action Agenda “offers concrete initiatives, metrics, and strategies aimed at advancing Chicago’s goal of becoming the most sustainable city in the country.” It aims to “secure Chicago’s global competitiveness we must invest in our future in a manner that creates economic and job opportunities now.”

Tying into the 2015 Sustainable Chicago Action Agenda

Goal 1 – Economic Development and Job Creation
• New technologies, education

Goal 8 – Make Chicago the Most Bike and Pedestrian Friendly city in the country
• Pedestrian master plan to improve health and safety

Goal 15 – Transform the Chicago River into Our Second Waterfront
• Create connections where there are gaps in the riverfront trail
• New recreational opportunities along the river
• Collaborate with key stakeholders to advance river revitalization efforts

Goal 16 – Protect Water Quality and Enhance Access to Lake Michigan
• Create better lakefront access

Goal 17 – Increase the Number of Public Spaces and Parks Accessible for Chicagoans
• Invest in innovative new public spaces, create open active streets
• Support the access to, integration and promotion of cultural elements in public spaces

Goal 22 – Reduce Carbon Emissions from All Sectors
• Data driven, community based, greenhouse gas tracking

The Lighting Framework Plan aligns with many of the goals of the 2015 Sustainable Chicago Action Agenda.
There are new lighting technologies that can be incorporated into the LFP that are advancing energy efficient lighting research and education while engaging the spectator and enabling them to interact with the installation.

Low energy usage installations such as OVO by ACT Lighting Design use less energy than a tea kettle and incorporate other ecological aspects such as natural materials, no waste production while inviting the spectator to interact with the structure.

New technologies such as light-emitting and luminescent materials take external energy molecules and excite them to a higher state thus emitting light.

The quality of light offered, security, and visual comfort are also aspects that contribute to the well-being of the spectator which is an important consideration for sustainability. Biggest and brightest does not mean best and the LFP recognizes the importance of minimizing the energy use impact.
Bird Migration

Five million birds from 250 species fly through Chicago on their biannual migration in the spring and fall. Building lights can disorient nocturnal migrants causing them to circle and become exhausted or crash into structures. Tens of thousands of birds are killed from nighttime lights each season.

Incorporating strategies to reduce direct upward light reduce spill light and optimize useful light can reduce the effect on the nocturnal environment for migratory birds. Reducing light pollution, in general is a goal for the LFP. It is not the aim to brighten Chicago’s already overly bright sky. As previously mentioned, in order for the impact of lights to work, there is a need for darkness. All design proposals should be sensitive to the importance of avoiding light pollution and their ultimate aim should be to improve the overall condition of the city’s night sky.

The successful LFP design will incorporate the principles of the Lights Out program which encourages the owners and managers of tall buildings to turn off or dim their decorative lights. The Chicago Audubon Society manages the Lights Out program along with the Building Owners and Managers Association, the National Audubon Society, and the City of Chicago. Since 1995, Chicago’s tall buildings in the Loop have served as an example to the nation as they save thousands of birds’ lives annually by participating in the Lights Out program.

The guidelines promulgated by Lights Out include: a) using timers effectively to ensure light is only used when needed, if at all; b) installing motion-sensitive lighting; c) using lower-intensity lighting where possible; d) in outside public areas where light is needed for public safety, avoiding “light trespass” by using light fixtures that direct the light down where it is needed, instead of horizontally and/or upward; e) using desk lamps or task lighting for security desks/work stations rather than overhead lights; f) scheduling cleaning crews to work during daylight or early evening hours rather than after 11 pm; g) avoiding illuminating interior plants or fountains that are attractive to birds; h) using “zone capable” interior lighting systems that allow selected rather than all areas of an interior space to be illuminated; and i) drawing curtains or blinds to reduce any light escaping.

A “tall building” is defined for the purposes of this program as buildings over 40 stories or over 20 stories if they are not immediately adjacent to other tall buildings. Since a number of iconic Chicago buildings fall within this category, this is a matter of particular importance to the City and the successful LFP designs. More information on the Lights Out Program can be accessed online at http://www.chicagoaudubon.org/lightsout.shtml
These Flickr tourist intensity images show very clear paths in other cities where tourists go. The six examples shown are all in the top 100 global tourist destinations (their ranking is noted above). They all have very defined tourists paths. Chicago mapping, on the other hand, shows a series of approximately seven disconnected clusters – Navy Pier, The John Hancock, Michigan Avenue and the River, Millennium Park, Willis Tower, Buckingham Fountain, and the Museum Campus.