

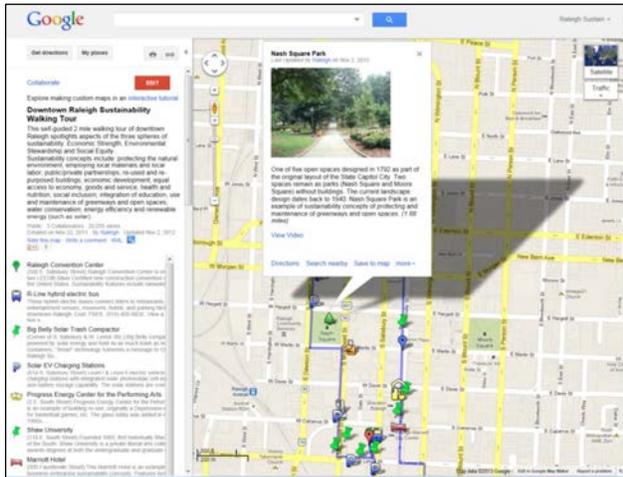
## PTI 2012-2013 SOLUTIONS AWARDS

City of Raleigh

Population C: 350,000-749,999

Category: GIS

Title: Downtown Raleigh Sustainability Walking Tour / JouleBug



Screen Shot of Walking Tour Google Map



JouleBug mobile app



QR Code

### ABSTRACT:

Downtown Raleigh boasts numerous sustainability features that have garnered the City widespread recognition. The City attracts national conferences and convention focused on sustainability, technology and smart grid. Raleigh was featured in an international report because of its electric vehicle infrastructure, developed in preparation for the national roll out of electric vehicles, and was the first east coast city to host an Electric Power Research Institute (EPRI) conference. Raleigh has become a national model for Big Belly solar trash compactors based on the overwhelming success and savings realized from the installation of 38 units throughout the downtown area. Major corporations such as Red Hat are relocating to downtown Raleigh because of opportunities for economic development and partnerships. The City's partnership with Cree, Incorporated to install light emitting diodes fixtures (LEDs) in a downtown Raleigh parking deck garnered Raleigh the title of "First LED City in the World."

Raleigh residents and visitors curious about the successful efforts made to make Raleigh "green" can take an approximately 2-mile, one-hour, self-guided walking tour of Downtown Raleigh using their mobile smart phone as a guide. The City developed the Downtown Raleigh Sustainability Walking Tour Google map spotlighting 28 sustainability concepts such as protecting the natural environment, employing local labor and local materials, repurposed architecture and construction, access to health and nutrition, the use of greenways and open spaces, and renewable energy. The map includes information, photos and video. The tour can be also easily accessed on any smart phone using a QR (quick response) code.

### STATEMENT OF THE PROBLEM:

Information on the great "green" strides Raleigh is making was available in printed pieces that spotlight singular efforts at various locations and on their separate websites. However, nothing existed that combined the sustainability concepts into one marketing piece that was readily available to the public.

Raleigh residents, students and visitors contacted the City looking for information on sustainability. They wanted information in a user-friendly format. They wanted physical, tangible examples they could see and touch; they wanted to understand how sustainability impacts their daily lives. The City wanted to help residents understand that sustainability was not only about environmental stewardship, but that it also includes economic strength and social equity.

The challenge was how to bring the various aspects of sustainability together, educate the public and showcase examples in an easy-access format using finger-tip technology.

#### **RESPONSE:**

In addition to developing the Sustainability Walking Tour, the City of Raleigh created printed and online, downloaded versions of the tour and map as accompaniments. The tour spotlights features in downtown Raleigh that residents, students and visitors can visit to understand how the three spheres of sustainability touch and impact their daily lives.

The online version is the Downtown Raleigh Sustainability Walking Tour Google map that can be accessed and/or downloaded via smart phones using a short code (<http://g.co/maps/v6rtv>). The map employs various aspects of technology to make the walking tour an interactive adventure. It features information, the walking trail, photos, video vignettes and walking distance calculations.

A QR (quick response) code was also developed for the Downtown Sustainability Walking tour Google map. It was the first QR code developed for the City of Raleigh.

#### **RESULTS:**

The Downtown Sustainability Walking Tour online Google map received positive media attention on numerous online sites/blogs, in several newspapers and magazines. The online map also registered more than 6,000 hits in the first two months.

The Downtown Raleigh Sustainability Walking Tour also inspired several mobile apps based on its features. Because of the positive media attention and popularity of the Walking Tour and its online accompaniment, the City was approached by JouleBug, a local technology entrepreneur that created a mobile app that encourages users to improve their sustainability habits at home, work and play. Raleigh became the first municipality in the nation for which JouleBug developed a sustainability gaming app, allowing players to earn points for engaging in activities based on the City's sustainability features, including taking the Downtown Raleigh Sustainability Walking Tour (<http://joulebug.com>).

The success of this partnership spurred the first City of Raleigh JouleBug Buzz-Off Challenge, a contest that encouraged City employees to download the JouleBug app and earn points for their sustainable behavior, including taking the Sustainability Walking tour. The next iteration of our partnership with JouleBug is the creation of a contest currently open to all City of Raleigh residents to download the app, earn points and win prizes for their sustainable behavior, including taking the Sustainability Walking Tour.

Another opportunity resulting from the Downtown Sustainability Walking Tour and online Google map was a partnership with NC State University's Computer Science program. The Office of Sustainability was contacted by Benjamin Watson, Director of NC State University's Design Graphics Lab and Associate Professor of Computer Science. Several of his students had selected the Walking Tour and Google map as the project for which they wanted to develop an augmented reality tour app.

#### **Other results:**

- The City of Raleigh Office of Sustainability has received numerous requests from local organizations, public schools and universities, and visitors from national organizations for the Walking Tour
- The City of Raleigh Office of Sustainability regularly receives requests for information on the Walking Tour from NC Visitors Bureau across the state

**KEY PARTICIPANTS:**

City of Raleigh Office of Sustainability  
JouleBug  
NC State University  
North Carolina Convention & Visitors Bureau

**CONTACT INFORMATION**

Paula Thomas,  
Office of Sustainability Manager  
919-996-4658  
[Paula.Thomas@raleighnc.gov](mailto:Paula.Thomas@raleighnc.gov)

Donna-maria Harris  
Office of Sustainability Communications Coordinator  
919-996-4259  
[Donna-maria.Harris@raleighnc.gov](mailto:Donna-maria.Harris@raleighnc.gov)

**LINKS:**

Google map - <http://g.co/maps/v6rtv>  
Revamped map by COR GIS dept. - <http://maps.raleighnc.gov/sustainabletour/>  
JouleBug Sustainable Raleigh app -  
<http://www.raleighnc.gov/business/content/AdminServSustain/Articles/JouleBugLaunchInRaleigh.html>  
Article on NewRaleigh.com - <http://www.newraleigh.com/article/downtown-raleigh-sustainability-walking-tour-google-map/>  
JouleBug - <http://joulebug.com>  
JouleBug City of Raleigh contest - <http://joulebug.com/raleighcontest>