



PROJECTS

STREETCAR TAMES DESIRE.... TO MOVE AROUND PORTLAND, OR

Portland's [River District](#), is an identified urban renewal area that needed an efficient, non-polluting way to connect residents, visitors, and businesses with the downtown core and activity centers. The electric [Portland Streetcar](#) run on a continuous 7.2-mile loop through the Pearl District, Portland State University, and the South Waterfront District where it also connects with an aerial tram. The vehicles, which can carry a sardine load of 140 passengers each, peak at almost 9,000 riders per weekday, with a ride-free zone in the downtown core. Otak designed the system to fit the scale and traffic patterns of the neighborhoods, with short, narrow cars to allow for greater maneuverability. A unique shallow 12-inch deep track slab design reduced the construction time and utility relocations, and the eight-foot wide track could be fitted to existing grades with limited street and sidewalk reconstruction. The City of Portland also maintains a GPS tracking system that allows riders to check at the streetcar stop reader board and on the Internet to find out when the next streetcar will arrive at its 42 stops. Ultimately, the streetcar reduces short inner-city auto trips, parking demand, traffic congestion, and air pollution. Portland Streetcar [quick facts](#)

PEOPLE



[Ted Udhus](#) is a LEED AP who recently came to Otak's Seattle office as a project manager. He's been in the architecture business for 19 years, most recently managing national rollouts for the past nine years. Ted's interests include exploring the utilization of LEED green building rating programs in less-obvious projects and with clients such as retailers. His current project at Otak is as a Project Manager for Emeritus assisted living project.



[Christina N. Brown](#) is a LEED AP who arrived in Seattle via Honolulu where she obtained her Architecture Doctorate Degree from the University of Hawaii. The focus of her thesis was on affordable housing and sustainability, and included a redevelopment plan for Kuhio Park Terrace, a severely distressed public housing project in Hawaii. She worked with the community and housing authority to develop the final plan, which proposed a series of communal, environmental, and economical systems, and addressed the specific needs of the community largely made up of immigrants and minorities.

Christina looks forward to becoming an active participant of the Seattle sustainable community. In Hawaii she was a speaker at LEED study workshops. She also volunteered for a non-profit organization that focused on the promotion of music and art for young people to help prevent violence in the community. One of Christina's favorite things to do is to shop at thrift stores; she owns more than 30 vintage dresses (her true weakness). She loves riding bicycles on

sunny days and oil painting to help release her creative energy when architecture becomes too technical. Christina's most recent pastime includes designing and silk-screening invitations for her wedding in June.

INVASIVES REMOVED AT RAVENNA WOODS



Doug Gawlik of Otak's survey and mapping group removes invasive plants

Otak employees and friends spent some off-time removing invasive plants at [Ravenna Woods](#) in Seattle last month. Organized by Otak wetlands biologist [Suzanne Bagshaw](#) as part of the [Green Seattle Partnership](#), Doug Gawlik, Laurie Christomos, Adam Braun and his friends, Doug Gresham and Marvin Anderson helped weed more than 6,000 sq. ft. of bindweed and other invasive species. Ravenna Woods is a 1.1 acre open space located in the University District of Seattle adjacent to the popular Burke Gilman Trail. Owned by the City of Seattle, Ravenna Woods is one of the few undeveloped forested areas remaining in the University District. It provides important, but degraded, plant and wildlife habitat and has been dominated by the usual assortment of non-native invasive weeds: Himalayan blackberries, English ivy, clematis, etc. Over the years, Friends of Ravenna Woods have cleared blackberries, and installed more than 500 native trees and shrubs. The next work party is Saturday May 19th from 9 am to 1 pm. [Directions](#)

READING

NEWS FROM LAKE OSWEGO

The Lake Oswego Review recently published an article authored by Cliff Newell about Otak's sustainability charge. [Read more](#)

VIEWING

HOMEGROWN GREEN VIDEOS



A recent [video contest](#) challenged people for solutions to global warming, and it elicited 130 amateur films on green topics. [Karen Price](#), campus sustainability manager for Seattle University, and husband Scott were selected in the Top Ten for their video, ["Chickens Enlighten. Humans Change. World Improves"](#).

RUNNING THE NUMBERS



Jet Trails, 2007 - Detail of actual size. Image copyright by [Chris Jordan](#)

A new art series from [Chris Jordan](#) views contemporary American culture through a unique lens on statistics. Each image portrays a specific quantity of something such as fifteen million sheets of office paper (five minutes of paper use) and 106,000 aluminum cans (thirty seconds of can consumption). These statistics help show the meaning of 3.6 million SUV sales in one year, for example, or 2.3 million Americans in prison, or 426,000 cell phones retired every day. This project visually examines bizarre measures of our society, in large intricately detailed prints assembled from thousands of smaller photographs. The artist recommends that the prints be seen in person to be experienced the way they are intended, but you can view them as JPEGs. To view images [click here](#).

RESOURCES

GREEN PRODUCTS

Consumer Reports devotes a website to "products for a better planets." [Visit website](#).

ECO-LABELS

Search the environmental labels to find out what they mean on many products including wood, pest management, agriculture, and environmental persistence. [Visit website](#).

COUNTERTOP MATERIALS

The online Green Home Guide provides an assessment of different green countertop materials. [Read more](#).

RECYCLED MATERIALS CONNECTION



Do you have a product or material that could be reused or recycled? Is there a market for it? Maybe you need a material to manufacture your product and it can be sourced through recycling, such as glass. In King County, WA, the [LinkUp](#) program works to connect users and suppliers to expand markets for selected recyclable and reusable materials. For example, 2007 LinkUp's priorities for King County include [container glass](#), [asphalt shingles](#), [gypsum wallboard](#), and [urban wood](#). Each year, approximately 40,000 tons of container glass are generated in King County, and about 21,000 tons are being recycled. To view the LinkUp newsletter [click here](#).

GREEN MARKETING

Otak collaborated with King County to present a session on green marketing during the Built Green Conference in Everett. Interested in reading more, or viewing the handouts? [Click here](#) and then click on FTP Site (Outgoing) and then click on the Green Marketing folder.

WHAT MAKES IT GREEN?

PURCHASING LOCAL PRODUCTS



Buying local food and products can provide social, environmental, health and economic benefits. In addition, many non-local products are shipped from overseas - with a hidden cost. According to a recent study by [Germany's Institute for Physics and Atmosphere](#), overseas shipping demands a high price environmentally, not just on fuel consumption but also on toxic emissions. The study suggests that shipping accounts for around 15% of all global anthropogenic nitrogen oxides (NOx) emissions, and for around 8 percent of sulfur dioxide (SO2) emissions, mainly because most marine engines operate at high temperatures and pressures without effective NOx emission reduction technologies and because of high average sulfur content (2.4 percent -2.7 percent) in marine fuels. Additionally, carbon dioxide emissions from ships do not come under the Kyoto agreement and few studies have been made of them. Aviation carbon dioxide emissions, estimated to be about 2 percent of the global total, have been at the forefront of the climate change debate because of the increase in cheap flights, whereas shipping emissions have risen nearly as fast in the past 20 years. Shipping is responsible for transporting 90 percent of world trade, which has doubled in 25 years-with an estimated global fleet of 70,000 ships using approximately 200 million tons of fuel a year. And this is expected to grow to approximately 350 million tons a year by 2020 as there are about 20,000 new ships on order. One way to balance these statistics is to buy local products. Otak had this in mind when we designed the [Broadway](#) housing facility for Portland State University; more than 50 percent of the total materials in the building are from local sources for this LEED Silver project. Find U.S. Trade Statistics [here](#).

NEWS

WHAT'S NEWSWORTHY @ OTAK

SAVING SEA CREATURES IN COSTA RICA



Photo courtesy of [PRETOMA](#)

While Ozone's designer Roy Arauz helps spread the word about sustainability in the U.S. each month with this newsletter, his brother is engaged in a different kind of environmental crusade in Costa Rica. [Randall Arauz](#) is president of [Programa Restauración Tortugas Marinas \(PRETOMA\)](#), a non-profit marine conservation and research organization working to protect ocean resources and promote sustainable fisheries policies in Costa Rica and Central America. The group maintains a large gallery of images of sea creatures on its [website](#). Turtles can be '[adopted](#)' for a donation that provides funding for the turtle protection program.

SUPREME COURT VOTES ON AIR POLLUTION

In a case that was launched four years ago ([Massachusetts vs. EPA](#)), last month, the U.S. Supreme Court ruled that carbon dioxide and other global warming emissions are "pollutants" under the Clean Air Act and that the Environmental Protection Agency has the authority to start curbing those pollutants. Read the [high court's opinion](#).

STATE OF INDIANA SAVES PAPER

[Adam Braun](#), a civil engineer-in-training in our Kirkland office, applauds the State of Indiana for saving paper. It has eliminated city plan reviews for architectural building plans and eliminated the need for paper copies. Reviews are now done [electronically](#).

INTERNAL OPERATIONS AT OTAK

Constantly on the lookout for ways to increase Otak's sustainable building operations, [Jeff Funk](#), who oversees all of our buildings, has recently added new items to the list of our recyclables: batteries, light tubes, ballasts, and monitors. He's also been working on using and reusing the cubicles work surfaces and panel walls, implementing a creative way to cut larger panels down to provide better natural lighting. He's built two satellite offices (Bend and Corvallis) out of just things we had in storage. Out of 13 HVAC units on the Lake Oswego offices, he had three economizers installed that allow more fresh air into the building and use outside temperature to heat or cool the building. He's also attended a green workshop for facilities managers so that he stays on top of the possibilities.

KING COUNTY GREEN TOOLS



Otak is excited to renew its contract with [King County](#), WA to assist with its sustainable building program: [Green Tools](#). We'll provide more details in an upcoming issue of Ozone!

Ozone Web

Developer

[Dana Norwood](#)

Ozone Newsletter Designer

[Roy Arauz](#)

Ozone Newsletter Editor

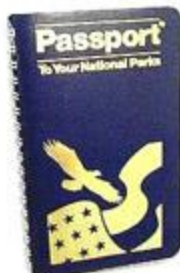
[Robin Rogers](#)

FROM THE EDITOR

OUR NATIONAL PARKS



Yosemite National Park. Photo Credit: Ba'Gamnan



Passport book and an example of a cancellation stamp

One of my favorite ways to appreciate nature is by visiting our national parks - any national park. I know I'll find maps, recreational areas, trails, interpretive signage, historical and cultural exhibits, museums, and nature in all its glory. The [National Park Service](#) cares for about 400 parks in all states and U.S. territories, protected so that everyone can enjoy them. The U.S. was the first country to develop a national park system in 1872 with Yellowstone. Since then, more than 100 other nations have created 1,200 parks and preserves.

An [Interagency Pass](#) is available that is valid for National Park Service, U.S. Fish and Wildlife Service, Bureau of Land Management, Bureau of Reclamation, and U.S. Forest Service sites where entrance or standard amenity fees are charged. (Cost is \$80 for an annual pass and children 15 or under are still admitted free.) While traveling, your kids can collect cancellation stamps when visiting hundreds of national parks via the [Passport to Your National Parks Program](#). The passport books cost \$7.95 from the [online store](#). For a list of parks that offer the passport cancellation stamps [click here](#). Kids have their own [parks website](#).

Find a park by [state](#), by [name](#) or by [search](#) for location, topic, or activity.

[Robin Rogers](#)

Otak is a member of:



PARTING SHOT by Kaitie Warren



The ancient city of Myra in Turkey.