



# THRIVE *in Perpetuity*

2012 Sustainability Report



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This report covers fiscal years 2010 and 2011 unless otherwise noted. Any references to dollar amounts are to U.S. Dollars. Information in this document is subject to change without notice. The Yellow Pages Integrated Media Association is a Delaware not-for-profit corporation dba Local Search Association, formerly the Yellow Pages Association.

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# **THRIVE** *in Perpetuity*

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Sustainability is more than meets the eye.

The mission of the Local Search Association is to lead, serve, grow and advocate on behalf of companies that help businesses get found and retained through results-driven marketing and media solutions.

The Local Search Association is the largest trade organization of print, digital, mobile and social media that connects local businesses with ready-to-buy consumers. We work to grow local business through these connections, and that is why our membership includes U.S. and international companies in 29 countries.

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# Letter *from the President*



For the last two years we have produced a sustainability report that outlined the success of our members at fostering a healthy environment by being sustainability leaders. We recognized that sustainability comprises several parts that must work in concert for all parties for sustainability to work.

We are a dynamic organization that comprises many companies who themselves are dynamic organizations. Accordingly, we are constantly adapting to the changing needs of our members and our members are responding to the needs of their customers.

Adaptability is one of the core components of sustainability. As we learn about the impact of our actions on the natural world, we must act on that information and pass it on to others so that they in turn can adapt to changes in the marketplace.

Information is the key to making decisions that support sustainability. With it, our stakeholders can make knowledgeable, responsible decisions about everything that they do, and in turn, reduce our impact on our environment. To that end, we have reported on the environmental impacts that our print and digital formats have on the world in general.

We have also shared some great success stories about our members' efforts at sustaining the environment. In this

report you will find out more about how using your local Yellow Pages, in whatever form that you choose, contributes to the economic and cultural wellbeing of our society.

During our research, we learned more about what we do well, and we are addressing how we can improve. As a matter of practice, we will communicate our findings to you in this and future reports.

In our 2012 Sustainability Report, you will see the continuation of our ability to adapt to a changing world in difficult economic times. We have updated our vision of sustainability and incorporated a more modern definition that includes social, economic, environmental and cultural impacts.

In 2011 the Sustainability Committee established the use of the Global Reporting Initiative (GRI) performance metrics for our reports. We continue to utilize this as the basic framework for this report.

We will continue to adapt and update our standards and sustainability performance in order to accomplish our vision and thrive in perpetuity.

A handwritten signature in black ink, appearing to read 'Neg Norton'.

Neg Norton, President  
Local Search Association

# **Vision** of Sustainability

We recognize that the concept of improving business through sustainable practices is not a new idea. We also recognize that the technology used to meet our stakeholders' needs must adapt to the times in order for our industry to remain sustainable.

Technology was once viewed as the engine that would drive economic growth forever. In 1994, the National Science and Technology Council (NSTC) pointed out that technology has been responsible for as much as two thirds of the economic growth in the United States since the Great Depression.

However, to sustain long term economic growth that creates jobs while improving and sustaining the environment, we must reconcile the needs of growth while thinking about the needs of future generations. Eighteen years ago, NSTC recognized this very dilemma and noted that, "the challenge is to use technology in such a way that it does not lead simply to short-term advances in productivity at the expense of long-term resource viability."

Our Sustainability Standards Committee was focused on the following components:

**ENVIRONMENTAL   ECONOMIC   SOCIAL**  
**A SUSTAINABILITY SEAL OF COMMITMENT**

This was a good starting point; however, the directory publishing industry is committed to meeting the needs of all stakeholder groups including government leaders,

advertisers, and directory users for the long-term.

Accordingly, our vision is adapting to recognize both the benefits of technology and the cost of that technology. We are looking at the total impact of what we do in a more holistic fashion, thus moving our vision to include a more comprehensive strategy.

As Adam Werbach outlined in his work, "Strategy for Sustainability," we must go beyond the classic definitions for sustainability of the 80s and early 90s and realize that true sustainability has four coequal elements comprised of SOCIAL, ECONOMIC, ENVIRONMENTAL AND CULTURAL IMPACTS.

Accordingly, with the 2012 Sustainability Report, we are presenting our efforts within this framework.

Simply put, we are attempting to meet the real world definition of sustainability in such a way so as to identify how our technologies interact with sustainability's elemental parts. After all, our expertise is using print and digital technology to put buyers and sellers together.

Werbach stated that being a sustainable business means thriving in perpetuity.

We adopted this concept as the theme of our report by stating that our **Vision of Sustainability** has a goal of helping all of our stakeholders **THRIVE IN PERPETUITY**.



## The National Science and Technology Council (NSTC)

...is a cabinet level advisory body that coordinates federal science and technology policy. It is chaired by the President, and is made up of the Vice President, the Director of the Office of Science and Technology Policy, Cabinet secretaries and agency heads with significant science and technology responsibilities, and other White House officials.

# Executive Summary

In 2012 we have continued to use the basic format of the Global Reporting Initiative (GRI). As outlined in the GRI guidelines, “Sustainability reporting is the practice of measuring, disclosing, and being accountable to internal and external stakeholders for organizational performance towards the goal of sustainable development.” Indeed, as we have learned more, we are able to report more to you, our stakeholders about what we have are doing right and where we can do better.

In 2012 we are looking at these standards as they relate to other metrics that have also been updated. These include changes to the Environmental Protection Agency 2010 Municipal Solid Waste Report Findings & Paper Facts, data on the environmental impacts of paper and digital technologies, and the local economic benefits of utilizing your Local Search Association media. We are also working with government officials at all levels to better explain our sustainability efforts and the real value of our members’ products.

Print directories are now properly categorized within the newsprint category by the U.S. Environmental Protection Agency. This is appropriate since print directories are essentially made of the same fiber as your local newspaper, and our printers have modified the glues that bind these pages together making used directories easily recyclable.

Today your Yellow Pages can technically be recycled in more than 9,000 curbside recycling programs around the country. In fact, according to the Paper Industry Association, 87 percent of all Americans have access to a community-recycling program. We are continuing to educate the public about the recycling opportunities available with regard to out-of-date Yellow Pages.

Due to global economic concerns, we also know that the use of recycled fiber in our directories is down from prior years. This is unfortunate, but it is the result of forces that we cannot by ourselves control. Our members are trying to maximize the use of recycled fiber in all our directories. Today, print directories contain an average of at least ten percent post consumer fiber and in many areas our members have been able to use much more post consumer fiber. And of course, at the end of their useful life, we can recycle print directories into any number of new paper based products including new directories.

Where recycled fiber is not available we have been working with our members to use sustainably harvested raw materials. Print directories are made from an environmentally renewable resource. Most paper is made from a combination of recycled pre- and post-consumer fiber and forest resources. Most virgin fiber is made from forestry byproducts called wood residue. In today’s environment, it is unusual to cut down a tree to make directory paper.

The forest resources used for paper manufacture have also become more sustainably managed over the past 20 years. This means that where virgin fiber is used, it is generally sourced from North America in well-managed forests. The Union of Concerned Scientists estimates that 275 million acres of industrial and private forestland in the United States is certified by either the Forest Stewardship Council (FSC), the Sustainable Forestry Initiative or as a Tree Farm.

In addition, today's paper mills tend to utilize renewable energy resources rather than fossil fuels. Over 60 percent of the energy used to make paper is based on biomass sources versus fossil fuels. Much of this biomass also comes from sustainably managed forest resources.

This is in contrast to electronic search devices that contribute to massive energy consumption by data centers and servers. Data centers and servers use as much as two percent of the global energy supply! Much of this energy comes from non-renewable fossil fuels.

Further, the manufacture of electronic search devices (computers, tablets and smart phones) utilizes non-renewable resources when they are made. These devices are only now starting to be recycled in any meaningful way and cannot be recycled easily nor can they be recycled in as many places as a print directory.

According to the EPA, only 20 percent of all electronic search devices were recycled in 2010 compared to the 71 percent of newsprint (that now includes directory paper) that was recycled in the same time period.

The single most important finding of this report is that all communication methods impact the environment. The question that each consumer must answer is: how does my use of a technology contribute to sustainability in its entirety, or in the alternative, what can I do to minimize my impact on the environment?

The Local Search Association notes that our findings support the premise that print directories are not the environmental bogeymen as often portrayed, but rather are an information resource that has only moderate impact on our natural resources.

Finally, we have examined two often overlooked but critically important components of sustainability: the economic and cultural contributions of your local directories to the overall social well being of the community. In 2010, Burke Media found that more than 74 percent of U.S. consumers have used print Yellow Pages in the past year. According to CRM Associates, these same consumers have contributed between \$413 billion and \$1.03 trillion to the local economy. That amounts to as much as five percent of the Gross Domestic Product (GDP).

This economic contribution means that local businesses can continue to thrive and create local jobs, reduce the environmental footprint associated with the transportation of goods, and help to maintain a diverse local culture.

**Sustainability is built upon the four coequal elements of SOCIAL, ECONOMIC, ENVIRONMENTAL AND CULTURAL IMPACTS. The members of the Local Search Association are working to meet these standards.**

Questions and feedback are welcome and may be emailed to [yellowisgreen@localsearchassociation.org](mailto:yellowisgreen@localsearchassociation.org)

# ➤ The Sustainability *Model*

In this report, we have adopted a more modern definition of sustainability. The four coequal elements are comprised of social, economic, environmental and cultural impacts. Another way of stating this vision is to say that **we are all responsible for our efforts to maintain the viability of natural resources and ecosystems over time as well as working to maintain humane living standards and foster economic growth.** For the remainder of this report, we will simply use the term sustainability to identify our efforts at meeting this goal.

The Local Search Association and its members have embraced sustainability in many aspects of their daily business activities at a time of tremendous economic chal-

lenge. In addition, our members are engaged in a constant effort to educate all of our stakeholder groups - government leaders, advertisers, and directory users - about the value of our products as well as the contribution that using these products makes towards sustainability overall.

From the extraction of raw materials to the printing process to the recycling of directories, we must attempt to meet our goals while facing recycled paper shortages at our members' paper mills and misunderstandings as to how directories can be recycled.

We must overcome misperceptions about electronic versus paper media while developing new and innovative means to meet the needs of stakeholders.



Whether you would like to choose to receive only the directories you need, or prefer not to receive any Dex® directory, the choice is yours.

Print directories are just one of many ways Dex provides you with complete local info. Get the same information and more by visiting [DexKnows.com](http://DexKnows.com)® online or on mobile.

**dex**

Please indicate which directory return this card **no later than Jan 15, 2012**

Dex Yellow Pages  
 Dex Plus®  
 Dex Neighborhood Edition

**dex one**

Name   
 Address   
 City   
 Telephone   
 Email

You may also make your choices at [DexKnows.com/Choice](http://DexKnows.com/Choice) or by calling **866-211-9940** weekdays between 8am - 5pm local time. If we don't hear from you, you will continue to receive all directories.

**dex**

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## Sustainability Highlight: Consumer Choice

**Dex One** has been a leader in offering consumers a choice about directory delivery for several years. Now Dex One is turning its attention to proactively identifying the consumers who no longer use print directories. Dex One believes it is important for consumers to know they have a choice of print, online or mobile search options – and that they have the choice to reduce quantities or opt out of print directories if it meets their changing needs.

In 2011, Dex One trialed several methods to educate consumers about their choices, including direct mail, e-mail direct messaging, news releases and door hangers. Dex One placed door hangers in Denver, Chicago, Minneapolis and Phoenix, and will continue to expand this program throughout its major markets in 2012.

Dex One's proactive consumer choice outreach is proving to be effective in reducing the amount of unwanted directories that are delivered.



## Sustainability Highlight: Source Reduction

**SuperMedia** is an advocate for local business committed to powering regional economies while reducing its environmental impact. SuperMedia has implemented programs focused on resource reduction, environmental manufacturing practices, recycling and sourcing sustainable materials when possible.



The company's paper reduction initiatives are an integral part of its printing and distribution process. It has implemented internal programs to limit the amount of paper used by focusing on printing and distribution models and making appropriate modifications. By minimizing residential white pages, SuperMedia decreased its use of paper by 12 percent.

Paper reduction does more than decrease the amount of paper used; the program limits the amount of ink used. It also impacts the amount of fuel consumed in the distribution of the product by both freight partners and vendors.

In addition to reducing paper use through residential white pages minimization, SuperMedia also works diligently to develop accurate projections of the number of books that will be used by consumers. By carefully managing projections for use of the phone books, SuperMedia has significantly less waste and fewer in-stock books to recycle between publications: 1.2 percent salvage in 2010 to 0.6 percent salvage in 2011.

Also, SuperMedia works with state and local governments to educate communities and promote directory delivery opt-out. Together, these initiatives help to foster a community of stewardship and recycling to minimize impact on the environment while balancing the needs of consumers and small- to medium-sized businesses.

To thrive, we must keep adapting while continuing to reduce our environmental footprint.

In 2010, the industry introduced a customer choice program that allows consumers to opt out of receiving print directories. This program has been continuously enhanced to ensure ease of use. Our member publishers participate in the national consumer choice web site at [www.YellowPagesOptOut.com](http://www.YellowPagesOptOut.com).

Two of the results of this program have been a decrease in the total demand on paper for use in directories and a total reduction in the number of directories delivered. This program helps us to meet each of our sustainability points. We increase society's choice as to what method it wants to use for its search for products and services; we reduce our environmental footprint by decreasing unwanted directories that in turn helps us in a positive economic way by reducing costs. Finally, since we respect the privacy of our customers that utilize the opt out service, we help ensure the privacy of the users' information.

In other words, as reported in the Lowell Sun in February of 2012:

**"... they (Yellow Pages) understand what it means to make a green product; perhaps more importantly that delivering unwanted directories doesn't benefit anyone."**

# ▲ Sustainability 2011 *The Year in Review*



From a production/recycling standpoint, our members have long subscribed to the **Reduce, Reuse, Recycle** motto.

This model holds that the most environmentally beneficial method of resource management is to reduce the demand on that resource i.e. source reduction. If we must use a resource in the production of our Yellow Pages, we should try to minimize the resource impact of manufacture as much as possible using recycled and sustainably harvested materials. At the end of Yellow Pages useful life, we should try to reuse that product. If we cannot reuse it, we should do our best to recycle that product into a new product that starts the cycle over again.

## Recycling 1 ton of paper...

- Saves enough energy to power the average American home for six months.
- Saves 7,000 gallons of water.
- Saves 3.3 cubic yards of landfill space.
- Reduces greenhouse gas emissions by one metric ton of carbon equivalent (MTCE).

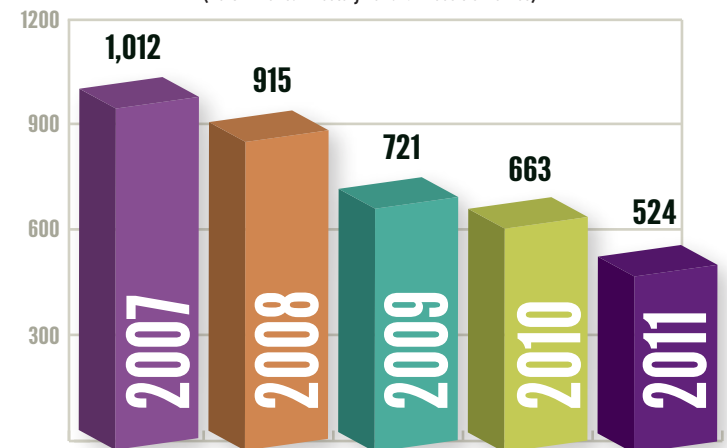
## REDUCE

Since our 2011 report was prepared, total paper use in the production of the Yellow Pages has decreased by nine percent. This means that since 2007, our total consumption of paper used in the production of your directories has been **source reduced** by more than fifty percent! This dramatic change has been driven by changes in directory size, thinner pages, more efficient manufacturing methods, reduction in residential white pages and the [www.YellowPagesOptOut.com](http://www.YellowPagesOptOut.com) program.

All of this has been accomplished while continuing to encourage local economic growth. The results are dramatic.

## Reduction in Directory Demand = Source Reduction

(North America Directory Demand in 000's of Tonnes)



Source: Pulp and Paper Products Council

## REUSE

As for the reuse of Yellow Pages, there are really two elements to this story. First, Yellow Pages are a product with a fairly long useful life. The average directory stays in use for at least one year. This is a much longer life cycle than a newspaper or a magazine. Secondly, innovative reuse of Yellow Pages can be found everywhere. People use old Yellow Pages for craft projects, artwork, the construction of buildings and a myriad of other uses. These include up-cycling directories into products like coffee-cup trays, egg cartons, cereal boxes as well as Green Fiber (fire-resistant cellulose) insulation, packaging material, mulch, compost and animal bedding.



*"New York Buddha" by Long-Bin Chen (2008) is one of many works sculpted by the artist from Yellow Pages.*

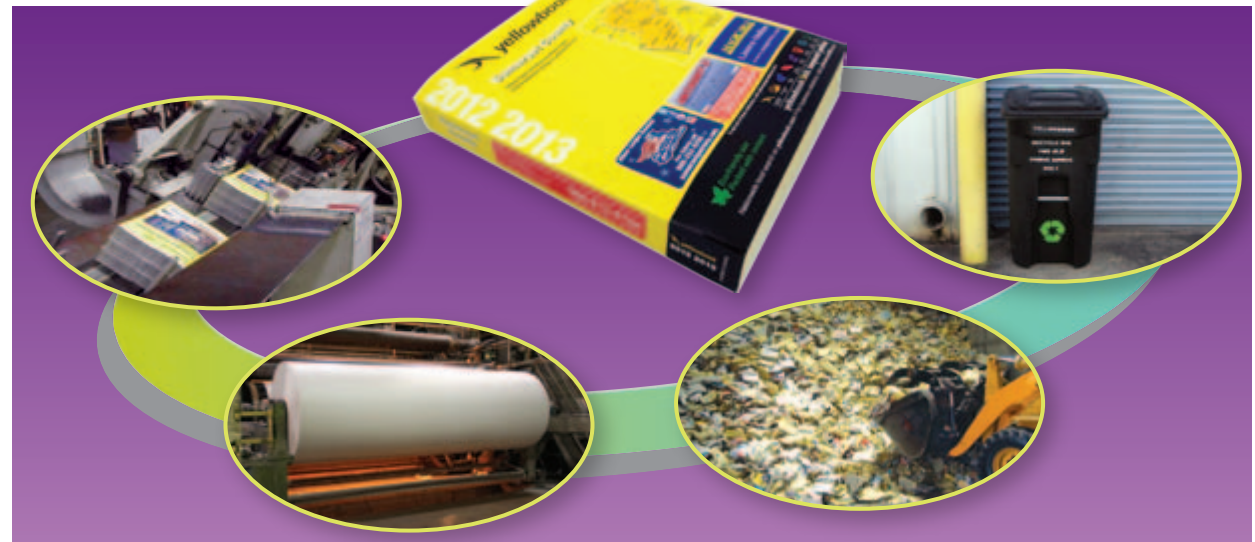
Photos courtesy of Art Touch Collection, Greenwich CT

## RECYCLE

Finally, like most paper products, Yellow Pages directories can be recycled when the new edition arrives. Paper is one of the most recycled materials on the planet. In fact, paper may also be one of the oldest materials recycled on the planet. Paper has been in the recycling stream since its introduction over 2,000 years ago in Egypt and since about 105 A.D. in China.

Paper recycling may not look pretty to start with, but the result is a product that can be used again for its original purpose.

### Yellow Pages Recycling



*The **entire life cycle** of a Yellowbook directory is based on **environmentally responsible products and partnerships.***

Source: Recycle Yellowbook

## Sustainability Highlight: Recycling



Snowflake Mill, located in the foothills of the White Mountains in northeastern Arizona, manufactures 100 percent recycled directory paper from reusable waste paper. Its products are sold to printers for a variety of uses. The plant uses treated effluent to irrigate feedlot crops and diverts waste sludge to an energy facility for use as a renewable fuel. This facility is chain-of-custody certified to the Forest Stewardship Council standard. In 2012 the mill is expected to produce more than 20,000 tons of 100 percent FSC certified Telephone Directory Paper at this plant.

**FSC CoC:** The Forest Stewardship Council (FSC) is an international not-for-profit organization that seeks to promote environmentally appropriate, socially beneficial, and economically viable management of the world's forests. FSC developed the first independent labeling system for forest products. The Chain of Custody (CoC) process is defined by the FSC as "the path taken by raw materials harvested from an FSC certified source through processing, manufacturing, distribution, and printing until it is a final product ready for sale to the end consumer." COC certification allows companies that manufacture and market forest products to label them with the FSC brand consistent with FSC policies. This allows consumers to identify products that provide an assurance of social and environmental responsibility on the part of the producer. The FSC system requires that material be tracked from the certified source through the CoC.

In our earlier reports, we noted that the EPA defined print directories as a separate category of paper from newspaper. Even when measured in that way, print directories accounted for less than one half of one percent of the Municipal Waste Stream. For the first time with the 2010 Municipal Solid Waste Report, the EPA has recognized that print directories belong in the same category as newspaper.

This is appropriate since print directories are fundamentally newsprint. As a result of our printer members' efforts over the years, the binders in directories are no longer an issue for recycling. That means that our users can recycle their directories at any one of nearly 9,000 curbside recycling programs around the country as well as the many community-recycling centers that exist. In fact, according to the Paper Industry Association, 87 percent of all Americans have access to a community recycling program whether curbside or at a drop off location.

**Therefore, it is safe to say that we are a part of the 71% of newsprint paper that is being recycled in the United States!**

Since directories are paper, our members' environmental footprint is tied directly to paper. That means that the raw materials that we use, the way that we make the paper and the end result of that use all have an impact on the

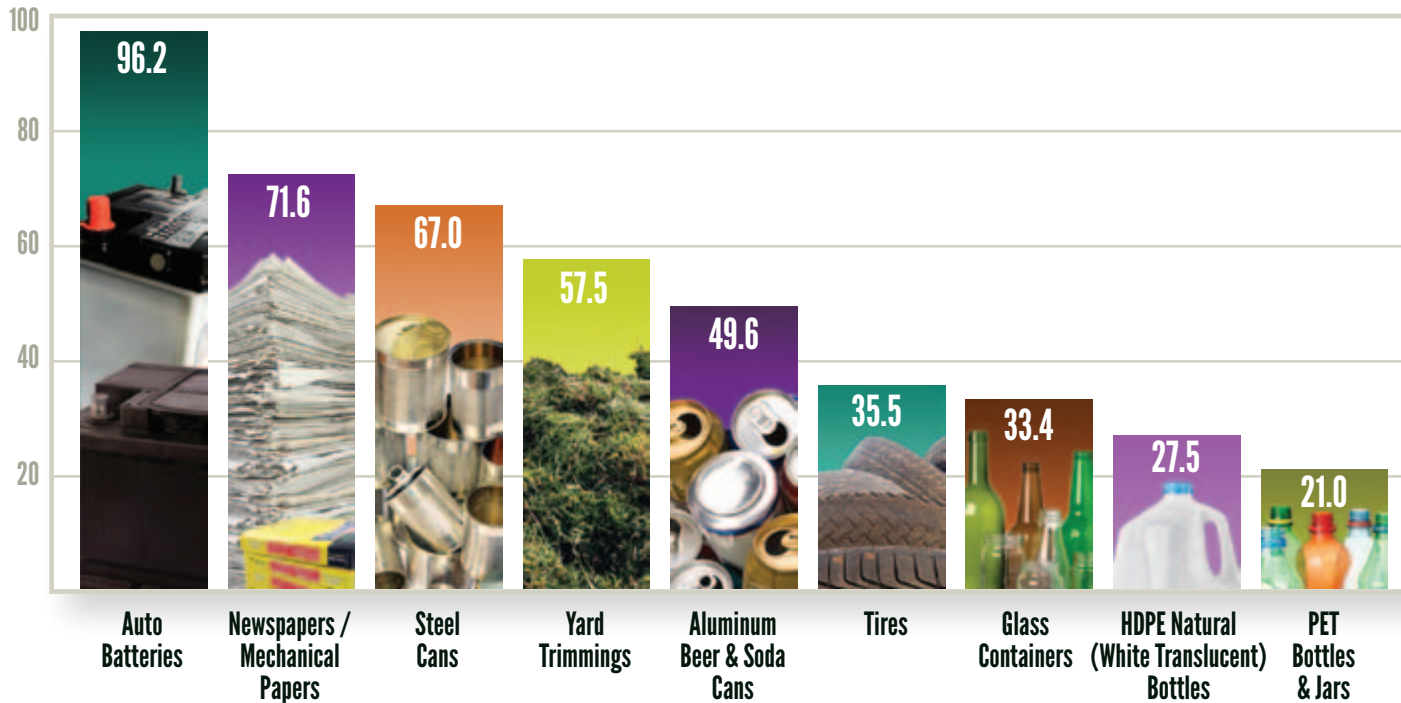
environment. However, having an impact on the environment can be consistent with sustainability.

Directories are made from a number of fiber sources including ground wood sourced from the lumber industry, old phone books and recycled newspapers. Unfortunately due to global economic concerns, we also know that the use of recycled fiber in our directories is down from prior years. This is the result of forces that we cannot by our-

selves control. However, our members are trying to maximize the use of recycled fiber in our directories. Today, print directories contain an average of at least 10 percent post-consumer paper. In some areas our members have been able to use more recycled content. And of course, at the end of their useful lives, we can recycle print directories into any number of new paper based products including new directories.

## 2010 Recycling Rates of Selected Products

Source: U.S. EPA 2010 Municipal Solid Waste Report



## Not Certain How to Recycle your Yellow Pages?

Many of our members provide recycling information in their directories or online. For example, at [www.recycleyellowbook.com](http://www.recycleyellowbook.com), you will find the following information:

### Recycle My Outdated Book

Your out-of-date Yellowbook directory is 100% recyclable. It is printed with soy-based ink, bound with vegetable-based glues, and in many cases can be placed directly in your curbside recycling bin. To find additional recycling options near you, please call our recycling experts at **1.800.YB.YELLOW.**

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## Sustainability Highlight: Green at Every Level

**RR Donnelley** has taken sustainability to heart in all aspects of its operations. As printers they have incorporated sustainability practices into their production processes. In 2011, the company continued to accelerate its use of vegetable-based inks; recycle a host of direct and indirect materials in order to minimize the waste stream; and produce a wide variety of products on paper certified as sustainable by the Forest Stewardship Council.



Not only has the company encouraged sustainability of resources in the printing process, their corporate offices in Chicago are housed in the first speculative high rise office building in the world to be awarded LEED®-CS Gold Certification and one of only a handful of buildings to achieve dual LEED® Gold Certification by obtaining LEED®-EBOM. LEED® (Leadership in Energy and Environmental Design) is a whole building approach that encourages and guides a collaborative, integrated design and construction process through its Core and Shell criteria (CS) as well as building operations through its Existing Building: Operations and Maintenance (EBOM) criteria that optimizes environmental and energy factors.

Note that this building has both Core and Shell and Operations and Maintenance Gold certifications! One of the unique features of this building is its green roof that helps to reduce building temperatures and controls water runoff.

For more information on our Corporate Social Responsibility efforts, please visit our webpage at [www.rrdonnelley.com](http://www.rrdonnelley.com).

**RR DONNELLEY**



### What is Recycled Content?

International Standards Organization (ISO)  
Recycled Content is defined by ISO 14021:

#### Recycled Content

Proportion, by mass, of recycled material in a product or packaging. Only pre-consumer and post-consumer materials shall be considered as recycled content, consistent with the following usage of the terms:

#### Pre-Consumer Material

Material diverted from the waste stream during a manufacturing process. Excluded is reutilization of materials such as rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it.

#### Post-Consumer Material

Material generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose. This includes returns of material from the distribution chain.

### The International Standards Organization

**ISO14001 Certification** is designed to provide a tool to allow a site to control the environmental impact of its activities, products or services, and to continuously improve its environmental performance. This distinction means this site has exemplary environmental, health and safety programs.

## Sustainability Highlight: Upcycling

Since April 2009, **Yellow Pages Group** has participated in the Changing the World, One Step at a Time program, developed in collaboration with Équiterre, a leading environmental organization in Canada. Through this program, YPG committed to improving its environmental performance both internally and externally over a three-year period.

At the end of 2011, YPG had successfully completed 25 out of its 31 environmental initiatives including recycling 531 metric tons of paper by doing business with the Green Fiber Company which repurposes paper to make cellulose housing insulation.

Yellow Pages Group also had a third party conduct a

Life Cycle Assessment revealing that a YPG directory generates 1.3 kg CO<sub>2</sub>e of greenhouse gases (GHG) per directory on average, which is less GHG emissions than washing 2 loads of laundry or only a quarter of the emissions related to the life cycle of a pair of jeans.



**YellowPagesGroup™**

Where recycled fiber is not available we have been working with our members to use sustainably harvested raw materials. Print directories are made from an environmentally renewable resource. Most paper is made from a combination of recycled pre- and post-consumer fiber and forest resources. Most virgin fiber is made from forestry byproducts called wood residue. It is unusual to have a tree cut down today to make paper.

The forest resources used for paper manufacture have also become more sustainably managed over the past 20 years. This means that where virgin fiber is used, it is generally sourced from North America in well-managed forests. The Union of Concerned Scientists estimates that 275 million acres of industrial and private forestland in the

United States is certified by either the Forest Stewardship Council (FSC), the Sustainable Forestry Initiative or as a Tree Farm.

Today, the manufacturing process for our papers and printing includes the use of mechanically pulped paper (versus chemically manufactured), vegetable based inks and non-toxic binder glues. Each of these steps helps to reduce our total environmental footprint.

Further, partnerships between publishers and companies have resulted in up-cycling directories into products like coffee-cup trays, egg cartons, cereal boxes and Green Fiber (fire-resistant cellulose) insulation, packaging material, mulch, compost and animal bedding.

### Did You Know

**More than 39 percent of all paper collected for recycling in the United States is exported** because other countries are driving up the cost of that paper to domestic paper mills. This makes it very hard for our paper mills to get the raw materials they need to make more post-consumer paper. But they keep trying!



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# Comparing *Life Cycles*

## Print Directory Life Cycle

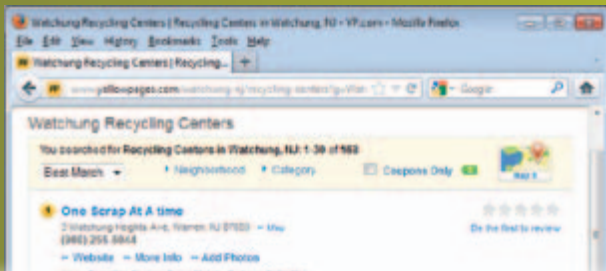
There has been a good deal of misinformation regarding print directories as being considered environmentally harmful but very little discussion of the environmental impacts caused by electronic search devices. The popular belief is that the lifecycle impact of print directories is somehow greater than the use of electronic search devices.

Lifecycle assessments are very complicated. However, let's look at some of the elements that go into a lifecycle impact comparison between print media and the use of electronic search devices.





## Electronic Search Device Life Cycle



Extract heavy metals, rare earths and other metals from mines

Extract petroleum to make plastic

Ship multiple raw materials to many manufacturers around the world

Ship all parts to final assembly point, typically overseas

Assemble electronic device

Ship to retail store via a warehouse

Consumer purchases device

Data centers and network server locations operate 24 hours per day

Consumer uses device

Consumer disposes of device



Approximately 20% of devices are recycled. Not all of the device can be recycled.

Note that the two lifecycle outlines are very different. The print directory fits within the Mobius strip that symbolizes recycling. However, the electronic search device is essentially a straight line with many, many steps that consume more raw materials and more energy. Although the recycling of electronics is growing, it is a long way from being a sustainable system.

According to the EPA, only 20 percent of all electronic search devices were recycled in 2010 compared to the 71 percent of newsprint (which now includes directories) that was recycled in the same time period.



**1 billion watts** is  
**enough energy**  
to **light up**  
**10 million**  
**100-watt light bulbs.**



So what does this mean? As a measure of lifecycle impact, print directories and electronic search devices both have the same basic steps. They both require that resources be extracted, shipped, manufactured, used and disposed in some way. This means that they both use energy and can create pollution.

However, **print directories not only use fewer raw materials than electronic search devices, they consume less energy overall!**

The U.S. Department of Energy estimated that U.S. paper

manufacturers used more than 75 billion kilowatt hours in 2006. According to the International Computer Science Institute and the U.S. Department of Energy, data centers and servers used 60 billion kilowatts while it has been estimated that the Internet uses between 170 and 307 billion kilowatt hours of electricity - as much as two percent of the global energy supply. That means that electronic search devices require up to 307 billion more kilowatt-hours per year than using paper directories.

One must also consider the fact that most of the power



### Did You Know

Gary Anderson designed the original recycling symbol in 1970. He submitted his design as part of a nationwide contest for high school and college students sponsored by the Container Corporation of America. The recycling symbol represents a Mobius loop consisting of three chasing arrows in the shape of a triangle. The three arrows chase each other. The mathematician August Ferdinand Mobius discovered the Mobius loop itself in 1858.

## Sustainability Highlight: Cogeneration

used to manufacture paper is from renewable sources, nearly 60 percent. Most sources of power that are used for Internet searches are from fossil fuels.

Based on the findings of a report by Peter Arnfalk as reported by Two Sides U.S., Inc., the trade-off between electronic and print directories depends on conditions such as use frequency, sources of energy and end-of-life management of the products. From a sustainability standpoint, we must also include the social and economic impacts of each.



*August Ferdinand Mobius' "Mobius Loop"*



*Artist's Rendering*



**Nippon Paper Industries USA** (NPI-USA) has recently received the final approvals necessary to build its Co-Gen facility in Port Angeles, Washington. This plant will result in:

- A capital investment of 71 million dollars
- The production of 20 megawatts of electricity
- Enough steam to process and dry 160,000 tons of paper per year
- A reduction in fossil fuel consumption of 99.9 percent
- And the plant will exceed 2013 EPA air pollution guidelines

# Contributions to Local Economic Security

We have all heard the phrase “Think Globally but Act Locally.” Well, the Yellow Pages put that idea into action. The Yellow Pages are locally distributed, focus on local businesses and help to stimulate the local economy.

More than 74 percent of U.S. consumers have used local print Yellow Pages in the past year to find a local business. These same consumers say that the Yellow Pages are the easiest, most convenient means for finding information on local businesses.

According to CRM Associates, this translates to an economic impact of between \$413 billion and \$1.03 trillion in U.S. commerce as it relates to personal consumer expenditures.

Since most Yellow Pages are local, that means that this huge dollar impact is fundamentally directed at the local economy. A number of studies support the concept that choosing locally owned and operated businesses help to:

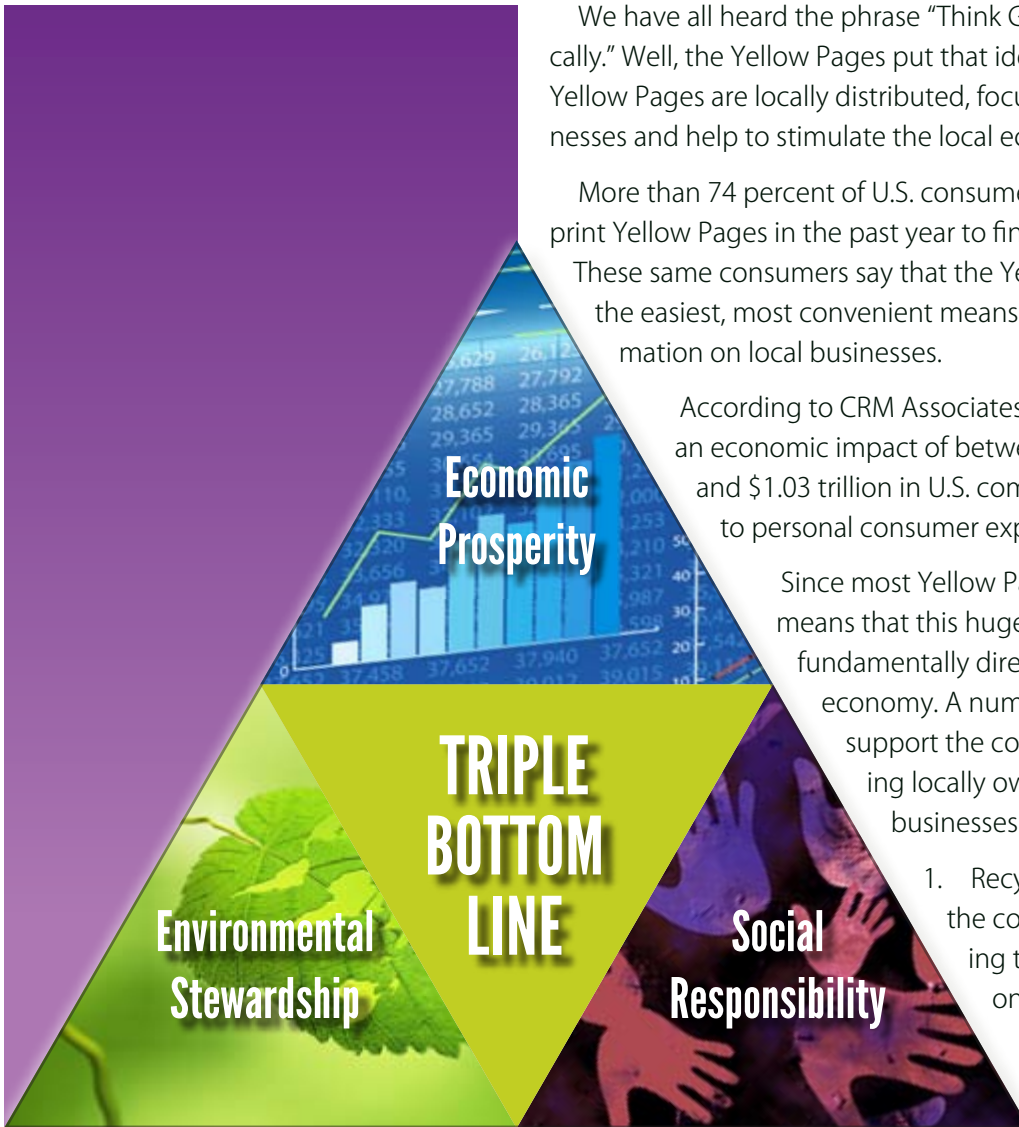
1. Recycle dollars within the community by having that money spent on other local busi-

nesses, service providers and farms, thus strengthening the local economy and tax base.

2. Reduce the environmental footprint since this allows more local purchases and requires less transportation. Indeed, the Green Building Certification Institute (GBCI)<sup>™</sup>, the evaluation arm of the U.S. Green Building Council (USGBC)<sup>®</sup>, gives credit for product purchases made within 500 miles of a job site in its determination process for a green building.
3. Secure better service since local businesses tend to hire local people who know more about their community.
4. Encourage local prosperity since community entrepreneurs are actively supported.

In other words, the use of the Yellow Pages helps foster economic sustainability and cultural sustainability in the local community while reducing the environmental footprint of commerce and strengthening the social fabric of our hometowns.

**When a business or a process contributes to the economic prosperity of a community while exhibiting environmental stewardship and respecting social responsibility, this is often referred to within economic circles as contributing towards the Triple Bottom Line.**



# Looking Ahead

Clearly, our choices have impacts on the environment. At the Local Search Association, our members are aware that the best choice you can make is an informed choice. We hope that this report shows how far that we have come in the past three years, and that it indicates our dedication to continuously improve in the future.

We have demonstrated some outstanding successes in relation to source reduction. Our paper use has declined by nearly 50 percent over the past five years. The number of unwanted directories has continued to decline each year as well.

Our paper suppliers have reduced their energy footprint,

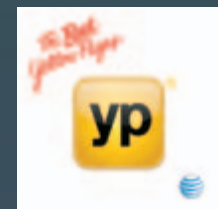
decreased their use of fossil fuels and increased their use of renewable resources. Some of our members have constructed office buildings that meet the LEED standards for sustainable buildings.

Environmental sustainability includes more than the obvious “green” measures. To be truly sustainable, a business must contribute to our social, cultural and economic well-being as well as our environmental well-being.

Our members continue to make a significant contribution to each of these components of sustainability. We support local businesses that operate within our local communities. We help local trades people and suppliers to

## Sustainability Highlight: Community Involvement & Education

In 2011, there were 64 AT&T Project ReDirectory programs conducted across the country. In addition to collecting outdated directories for recycling purposes, these programs offer an opportunity to communicate to the public that print directories continue to be relevant and valuable to the local economy and are produced using environmentally responsible methods. These programs also serve to promote [www.YellowPagesOptOut.com](http://www.YellowPagesOptOut.com), permitting consumers to choose which directories they receive.



*Northside Intermediate School in Opelika, Alabama recycled the most Yellow Pages in the 2011 Opelika City Schools Redirectory project, which was sponsored by AT&T.*



thrive and contribute hundreds of billions of dollars to the economy.

More importantly, this local support of business has a synergistic effect on the environment. By encouraging local purchases of local products from farm produce to t-shirts, we help decrease the environmental transportation cost of moving goods and services to markets.

However, there is still more to be done. The Local Search Association realizes that we have seen a decrease in the use of post-consumer recycled paper in the production of our print directories. As we have outlined within this report, there are availability, geopolitical and economic reasons for this decrease in post-consumer fiber use. However, that does not negate the fact that we could reduce our environmental footprint further by increasing the collection and recycling of out-of-date directories and using more post-consumer paper in our print directories.

As more recycled paper becomes economically and physically available, we will begin to increase our use of post-consumer fibers.

Further, we recognize that more can be done to encourage our members to use vegetable-based inks on a more exclusive basis. This would also reduce our environmental footprint. The good news is that many of our members have already moved in this direction.

More importantly, as pointed out in a report issued by

Bull and Bull in 2010 for Two Sides Facts, we are on the path to sustainability with print directories. Their report speaks for itself.

“It’s clear that the best case scenario in each industry [paper and IT] is dependent on several things: a transparent and measured supply chain; research and development of new technologies to avoid hazardous materials and waste streams; a robust end-of-life management strategy that recovers the value embodied in a product and avoids releasing hazardous waste into the biosphere; and an effort to identify and mitigate the variables that have most influenced the environmental burden of a media product. We find that forestry has the potential to be a self-sufficient and renewable industrial system, and that best-case scenarios that exist with today’s technology and management are very ‘green’ relative to the benchmarks of industrial ecology. (Emphasis added) IT (Information Technologies), on the other hand, faces a greater challenge given its dependence on non-renewable e-sources, the pace of innovation and product replacement, and the difficulties associated with E-waste.”

**Yes, there is more to be done. But, we have come a long way and we believe that our members’ work should be recognized for their successes at encompassing the four primary components of sustainability: the Social, Economic, Environmental and Cultural.**

## ENVIRONMENTAL PARTNERS

The Local Search Association and its members are proud supporters of many national, state, county and municipal recycling associations in their operation locales, including:

National Recycling Coalition	Colorado Association for Recycling
Solid Waste Association of North America	Illinois Recycling Association
Keep America Beautiful	Indiana Recycling Coalition
Northeast Recycling Council	Iowa Recycling Association
Municipal Waste Management Association	North Dakota Solid Waste & Recycling Association
National League of Cities	Recycling Association of Minnesota
Équiterre	Recycle Montana
Arizona Recycling Coalition	Nebraska State Recycling Association
Association of Ohio Recyclers	New Mexico Recycling Coalition
Association of Oregon Recyclers	South Dakota Solid Waste Management Association
California Resource Recovery Association	Recycling Coalition of Utah
Carolina Recycling Association	Washington State Recycling Association

## CONTRIBUTORS

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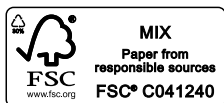
Photos of *New York Buddha* courtesy of Art Touch Collection, Greenwich CT.

CHEN, Long-Bin. *New York Buddha*, 2008. Manhattan Yellow Pages, 14 x 9 x 10 in. Art Touch Collection, Greenwich CT.





 **The Yellow Pages.** Use the Information Resource that Helps Protect Natural Resources and Supports Our Local Economy and Cultural Diversity.



This report is printed on 30 percent post-consumer content. U.V. printing technology was used in the creation of the report, producing no de-gassing or VOCs.

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