

# The Big Idea

## Harvesting Used Cellular Phones for the Benefit of Charities



Developing Michigan's e-Cycling Infrastructure

The Cellular Contribution Program is a new environmental initiative sponsored by REAP2. REAP2- Recycling Electronics and Pollution Prevention- is a forward-looking project aiming to develop a private sector electronics recycling infrastructure in Oakland County, Michigan. A joint effort of a team of public and private sector partners, REAP2 was initiated by the Oakland County government and Automation Alley, the Midwest's premiere consortium of high-technology businesses.

## The Challenge of Cellular Phone e-Waste

The electronic technologies that have transformed the world over the last four decades have brought with them new environmental challenges. Electronic devices like cellular phones that we now depend on every day contain a range of toxic materials. The toxins include lead, cadmium, beryllium, mercury, and chromium. The e-waste stream is growing rapidly in volume, and it is projected that it will make up 10 percent of solid waste in the near future. The number of Americans using cell phones has surged from 340,000 in 1985 to 128 million in 2001. On average, cell phones are used for only 18 months before being replaced. On average, 40% of cell phone users "churn" their cell phones, which means purchasing a new one when the current phone is still functional.

Very little of this waste stream is recycled currently, and disposal is becoming more difficult. Legal liability hazards from both domestic and overseas disposal are rising, and legal mandates covering the disposal of e-waste are increasing. In the United States, municipalities increasingly require that e-waste be separated from the general waste stream. Several municipalities and states have already implemented landfill bans on much e-waste, and many more will do so in the future.

## The Opportunities of the Future

The challenge of e-waste brings with it opportunities. The REAP2 project is designed to realize these opportunities by responding to the evolving waste stream through a market-based approach. The REAP2 partnership of governmental bodies and private-sector businesses and institutions is driving the creation of

a private-sector Electronics Handling Campus in Michigan for the processing and recycling of e-waste and electrical equipment. The Electronics Handling Campus would bring many benefits to both consumers and businesses throughout the region. By creating a supply of used cell phones, The Cellular Contribution Program will help make the handling campus a reality.

### Environmental improvement

- Development and adoption of best practices e-waste disposal
- Reduction of local waste and pollution
- Increase utility value of cell phones
- Create awareness of toxins in cellular phones

### Business performance

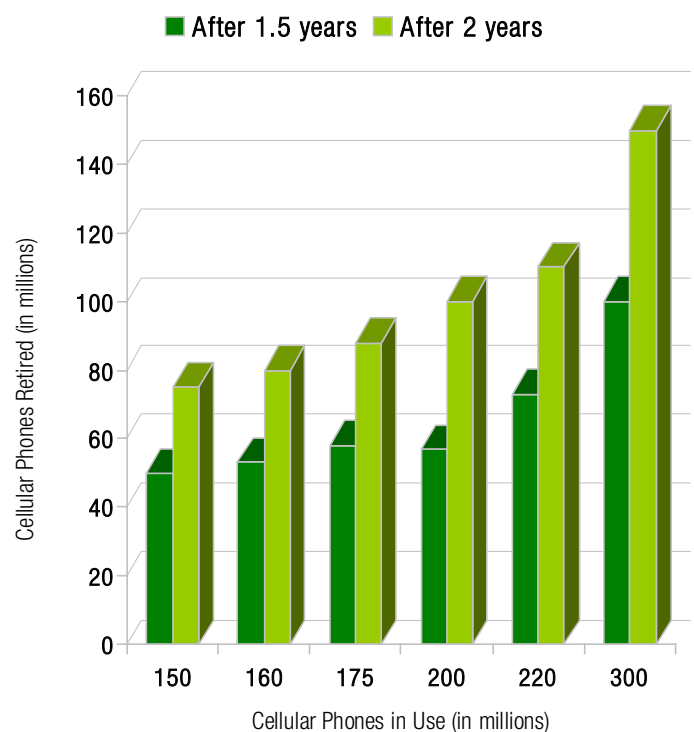
- Positive public relations for companies involved in e-waste recycling
- Secure handling and disposal of cellular phones

### Economic development

- Strengthening of business environment

## Number of Cell Phones Retired Per Year

Research by INFORM



## The Solution

Automation Alley is partnering with Oakland County and The Wireless Source to offer their member companies an opportunity to become involved in this exciting new environmental initiative. The Wireless Source is a company that refurbishes and redistributes used cellular phones. The Cellular Contribution Program will assist Automation Alley companies with disposition of unwanted technology.

Automation Alley is ideally situated to be at the forefront of this program. The consortium offers an abundant supply of e-waste, including cellular phones. The Cellular Contribution Program has established a solid business case through strategic partnerships with collection service providers, consolidators, end users, generators of e-waste, and manufacturers. Automation Alley's concentration of high-technology and manufacturing industries and its skilled high-tech workforce make it an especially advantageous group for e-cycling and e-waste management.

The goal of this program is to recycle used cellular phones that are stockpiled in desks and storage rooms. The recycling will take place in two ways. A working phone will be refurbished and re-introduced in an emerging market such as rural China, India, Latin America or Russia. A non-working phone will be recycled by REAP2 partners, always in compliance, but more importantly—maintaining environmental standards. Each cellular contribution that is made will result in a monetary donation to the company's charity of choice.

Member companies can get involved in several ways. One way is by having a collection bin set up in your lobby for employee and public drop-off. Another way is simple behind the scenes business-to-business trade. Just box the phones up and ship them to The Wireless Source.

Your company can find everything it needs for the program by going to [www.charitablerecycling.com](http://www.charitablerecycling.com). Online, it is possible to print out pre-addressed shipping labels as well as tax donation receipts. There is even a step-by-step web page just for Automation Alley members!



## The Partners

The Cellular Contribution partnership includes:

### **Oakland County Executive L. Brooks Patterson**

Mr. Patterson has made the REAP2 project a pillar of Oakland County's technology initiatives and has provided project funding.

### **Automation Alley**

Automation Alley is REAP2's business partner. The consortium's REAP2 task force is developing the commercial supply of e-waste, and is engaged in assessing the recycling needs of high-tech and automotive companies.

### **Oakland County Community & Economic Development Department**

The Waste Resource Management Division is leading the effort to establish Michigan's e-cycling infrastructure.

### **The Wireless Source**

An integral part of the Charitable Recycling team, TWS refurbishes and redistributes used cellular phones.

### **Municipal Consortium**

The Michigan Recycling Coalition (MRC) coordinates the REAP2 Municipal Consortium and residential supply development, creating a statewide supply network for municipal collection programs.

### **Michigan Department of Environmental Quality**

DEQ has provided grant funding to support the REAP2 initiative by characterizing e-waste, and establishing pilot collections and best management practices.

### **Electronic Product Recovery**

An integral part of the Charitable Recycling team, EPR recycles e-waste into commodities in an environmentally sound manner to be sold for reuse.

## The Connection

For more information on REAP2 or The Cellular Contribution Program contact Lani Morgan, Communications Specialist at 248-858-2071 or [morganl@co.oakland.mi.us](mailto:morganl@co.oakland.mi.us).