



**Urban Wood
Utilization Webcast:
Implementation Issues
Faced by Local
Governments**

**Sponsored by WERC,
US Forest Service
October 2, 2012**



Cincinnati Parks Department



Cincinnati Public Schools



Participants in Cincinnati Parks-Cincinnati Public Schools Urban Wood Utilization Video



urban timber

Cincinnati's Urban Timber Program is a partnership between Cincinnati Parks, Hamilton County Solid Waste Management, and Cincinnati Public Schools addressing:

- How to handle an abundance of Ash and other hardwood in Cincinnati that would end up in landfills or as mulch
- How the wood can be used to educate about the value of urban timber
- How to provide quality furnishings to Cincinnati Public Schools at reasonable prices

Currently the program is processing logs from Cincinnati Parks and other donations and turning them into **classroom cubbies for students' books and coats; mobile bookcases; and podiums for the schools.**

Each school receiving furniture receives bookmarks for all children that show the process. They also receive a set of wood samples that teach them about different wood species, enabling them to have real hands-on learning. Last, the program is creating tree tags that will identify the species of trees located on school grounds.

This program was piloted in 2008-2009 in Cincinnati, Ohio and continues to be successful in 2010. The application of this program in other cities across the state of Ohio holds much potential.

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Cincinnati Public Schools
For more information contact
CPS Facilities Department
513-363-0777

Produced by CET
Cincinnati, Ohio

LENGTH: 10 minutes

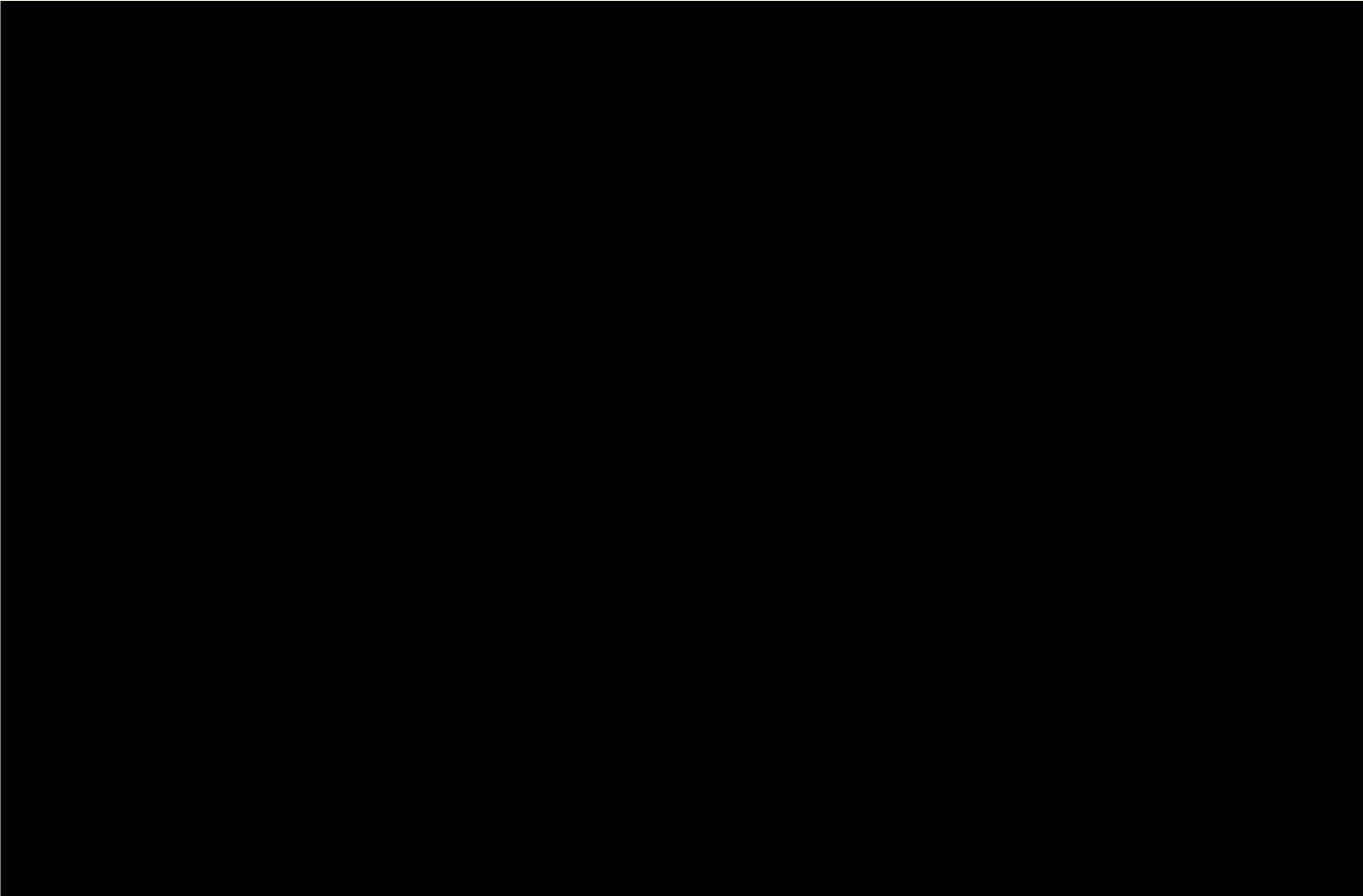
*This DVD funded by the Ohio Department of Natural Resources,
Division of Recycling & Litter Prevention.*

URBAN TIMBER PROGRAM

urban timber

A Community Partnership about
the Environment and Education







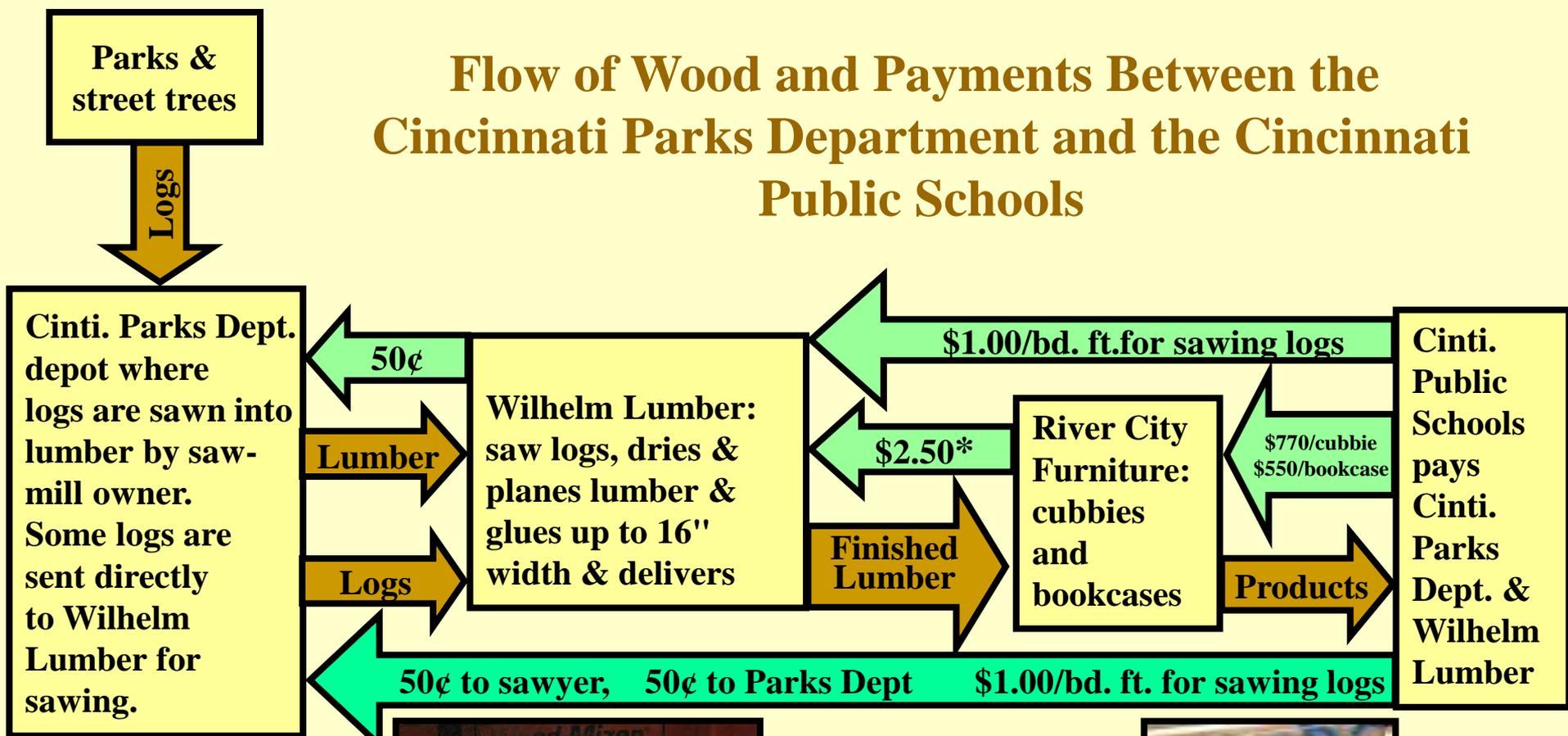
Participants in Urban Wood Furniture Project for Cincinnati Schools

**Wilhelm Lumber
Brookville, IN**

sawyer



Flow of Wood and Payments Between the Cincinnati Parks Department and the Cincinnati Public Schools



Logs

Trees from private property via tree service companies (received 2 logs so far).



*RCF also pays \$2.50/bd.ft. for drying, planing, gluing 16" panels, & delivery.



Cincinnati Parks (CP) - Cincinnati Public Schools Project (CPS):

- 1. First urban tree utilization efforts started in late-90's, sporadic and slow until 2006 - 07.**
- 2. Impetus for urban wood utilization projects arose from discovery of EAB in Hamilton County, OH in 2007.**
- 3. Task Force organized in 2007 by Hamilton County Solid Waste Management to identify ways to utilize EAB ash.**
- 4. Architectural firm GBBN, hired by CPS for renovation of school buildings in LEED conforming way, promoted ash utilization for furniture for schools.
Reinforced by Task Force proposals.**
- 5. CPS-CP with GBBN help agreed to a five-year effort to  annually produce 20,000 bd. ft. of lumber from 2008 - 2012.**

6. CPS buys cubbies from RCF for \$770 (+ about \$50 for 50 bd. ft. of lumber per cubbie).

Outside bid	\$2,100
Total cost to CPS/cubbie	\$ 820
Savings per cubbie	\$1,280 x 130 cubbies =
Subtotal savings	\$166,400

7. CPS buys bookcases for \$550 (+ about \$35 for 35 bd. ft. per bookcase).

Outside bid (est.)	\$1,500
Total cost to CP/bookcase	585
Savings per cubbie	\$ 915 x 75 bookcases =
Subtotal savings	\$68,625

8. Total CPS estimated savings \$235,025



- 9. Scraps/cutoffs used to make wood species chains for students to identify different species of regional trees.**
- 10. Scraps/cutoffs/low quality wood used at CPS Cinti. School for Performing Arts to make stage sets and to**
- 11. students at Woodward Career Tech high school to make furniture.**
- 12. Pencils, pencil holders, and ash bookmarks were made and distributed to schools.**
- 13. Cinti. Reds: baseball bats for team & Little League teams (didn't work -- Reds not interested).**



Observations:

- 1. Must have entrepreneurs willing to undertake the urban forest business as new venture.**
- 2. Long-term success requires businesses that can:**
 - a. acquire and store logs**
 - b. saw logs into lumber/slabs**
 - c. dry the wood**
 - d. manufacture and sell urban wood products.**
- 3. Cooperation of tree service companies and property owners as major log suppliers.**



4. Start-up assistance from local governments via:

- a. workshops/seminars/webinars**
- b. publicity/links on/to governmental websites**
- c. loan of log marshaling yards in exchange for lumber**
- d. provide park/city trees in exchange for lumber**
- e. purchase products, especially those made from public trees.**



5. Think/act regionally. Don't confine efforts to city and surrounding county alone (Cinti. shortcoming).

6. Like individuals, urban areas have personalities. Some more willing to embrace new ideas than others. Have to judge likelihood of success in selected urban areas.

Given history and conservative wait-for-ten years-and-see attitude, Cinti. cannot sustain even a single urban forest products firm.



In closing, three points:

First, to help create demand for urban wood products we must emphasize:

- a. provenance**
- b. history**
- c. personal meaning**
- d. community meaning**
- e. unusual figure, color, and dimensions**
- f. higher value use than fuel, mulch, green waste**
- g. positive environmental impact (reduces CO²e)**



Second, at minimum, over 30 year period products will sequester CO₂e: 124.1 million tons nationwide.

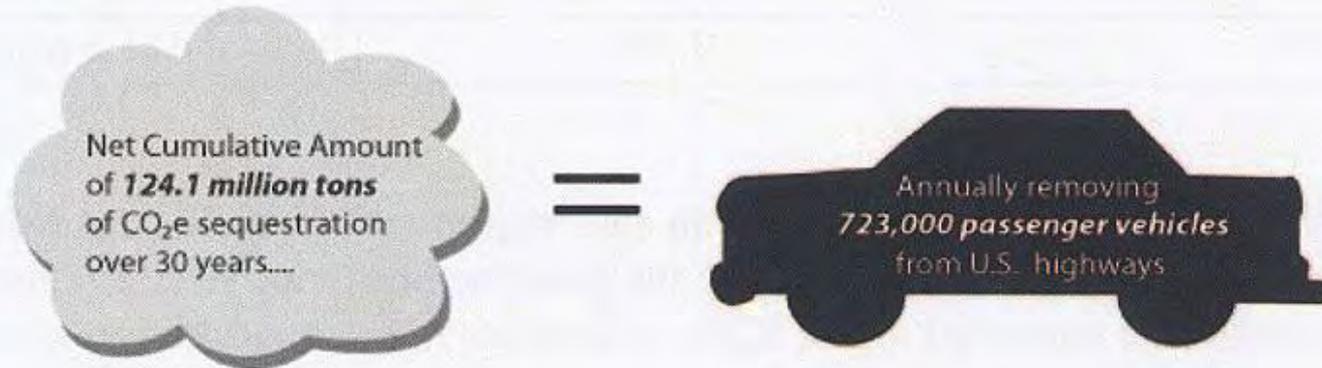
Table 1. Net Cumulative CO₂e Sequestration in Urban Hardwood Products for 30 Years with Fixed Utilization Rate

Change in Size of Urban Forest (Sequestration Capacity)	Utilization Rate (Sequestration Potential) (10% use of 1% annual removal)	Net Cumulative CO ₂ e Sequestration in Urban Hardwood Products (30 years)
0.0%	0.1%	124.1 million tons
1.0%	0.1%	139.3 million tons
2.0%	0.1%	157.2 million tons



This is the equivalent of removing the CO₂ emissions of 723,000 automobiles every year for 30 years.

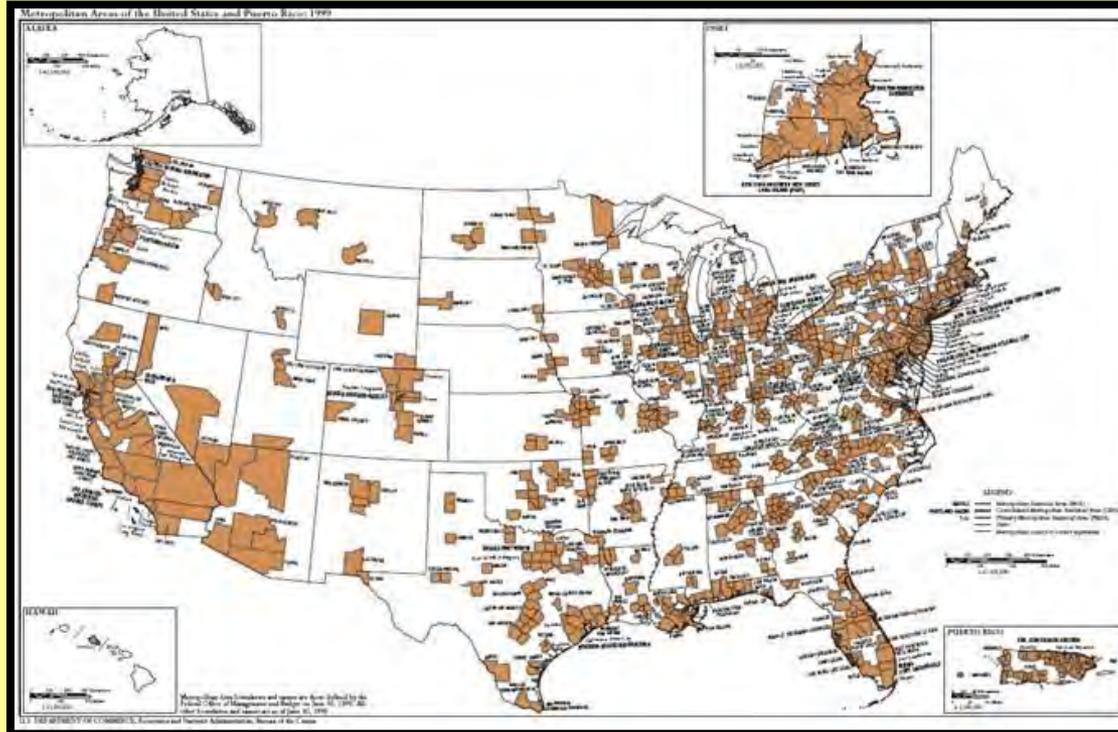
Figure 4.
Urban Forest Products CO₂e Sequestration and Comparison to U.S. Automobiles



For more information see: Bratkovich, Steve and Sam Sherrill. 2011. *Carbon and Carbon Dioxide Equivalent Sequestration in Urban Forest Products*. Dovetail Partners, Inc. Minneapolis, MN. Go to <http://www.dovetailinc.org>



Third, across the U.S., a robust and sustainable urban forest products industry must be created by individual urban entrepreneurs.



Local governments can assist but cannot take on acquisition of urban trees, sawing and drying lumber, and the production and sale of solid urban wood products.



As promised earlier, an unorthodox way to reduce the size of a log to pieces that will fit on a saw mill



QUESTIONS?

