

yet another funding source . . .
or why rehabbing that contaminated building
may be the best solution
for our environment

Kristin E. S. Zapalac, Ph.D.
Missouri Department of Natural Resources
State Historic Preservation Office
(314) 416-2960 x 270
kristin.zapalac@dnr.mo.gov

what does historic preservation have to do with the Department of Natural Resources?

We all diligently recycle our Coke cans. It's a pain in the neck, but we do it because it's good for the environment. Here is a typical building in an American downtown - 25 feet wide and 120 feet deep. Today we tear down one small building like this in your downtown. We have now wiped out the entire environmental benefit from the last 1,344,000 aluminum cans that were recycled. We've not only wasted an historic building, we've wasted months of diligent recycling by the people of your community.

Donovan D. Rypkema, "Economics, Sustainability, and Historic Preservation," 2005

Hartsburg
(pop. 108)







MO: Spacegrove, LLC Granted Tax Credits; Create 18 New Jobs

7 Feb, 2010

The Missouri Department of Economic Development (DED) announced that a St. Louis organization has been approved for remediation tax credits through the Brownfield Redevelopment Program.

Spacegrove, LLC, St. Louis, has been approved for up to \$124,595 in remediation tax credits for the redevelopment of the property located at 4162-4168 Manchester Avenue, St. Louis. The remediation tax credits will facilitate the redevelopment of this property into commercial office space. The applicant is projecting to create 18 new jobs.

The 7,500-square-foot building, which was constructed in 1925, has been used as a variety of commercial businesses, including roofing and siding building products and an appliance service center. The last business to occupy the space was WRM Tape and Label Manufacturing, which closed about 10 years ago. The building has the presence of asbestos and lead-based paint.

The Brownfield Redevelopment Program provides financial incentives for the redevelopment of commercial or industrial sites that are contaminated with hazardous substances and have been abandoned or underutilized for at least three years. Applicants may be approved to receive state tax credits for eligible remediation costs; tax credits provided for jobs and investment; and demolition costs.

Released: Dec 2006
 Next CBECS will be conducted in 2007

Table C3. Consumption and Gross Energy Intensity for Sum of Major Fuels for Non-Mall Buildings, 2003

	All Buildings*			Sum of Major Fuel Consumption			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)
Year Constructed							
Before 1920	330	3,769	11.4	302	917	80.2	99.3
1920 to 1945	527	6,871	13.0	620	1,176	90.3	101.3
1946 to 1959	562	7,045	12.5	565	1,007	80.3	85.1
1960 to 1969	579	8,101	14.0	737	1,272	90.9	84.6
1970 to 1979	731	10,772	14.7	1,023	1,400	95.0	81.2
1980 to 1989	707	10,332	14.6	1,034	1,463	100.1	68.8
1990 to 1999	876	12,360	14.1	1,098	1,253	88.8	67.8
2000 to 2003	334	5,533	16.6	441	1,319	79.7	98.5

Energy Information Administration
 2003 Commercial Buildings Energy Consumption Survey: Consumption and Expenditures Tables



state and/or federal
historic rehab tax credits

In 2000, MO historic rehab projects created...

\$249 million in income

\$332 million in gross state product

\$292 million in in-state wealth

\$70 million in taxes

\$30 million of that in state and local taxes

\$660 million annually in heritage tourism spending

8,060 jobs

-- source: Rutgers University, Center for Urban Policy Research, 2001

Federal HTC (20% of eligible costs; depreciable property only; passive activity rules apply)

- Missouri Department of Natural Resources, State Historic Preservation Office
- U.S. Department of the Interior, National Park Service
- U.S. Department of the Treasury, Internal Revenue Service

State HTC (25% of eligible costs; caps etc.)

- Missouri Department of Natural Resources, State Historic Preservation Office
- Missouri Department of Economic Development

Missouri

25% credit for commercial and owner-occupied residential properties listed in National Register or listed as contributing to a federally certified historic district. Rehab work must meet DOI standards. Qualified rehabilitation expenditures must exceed 50% of total basis in the property. Carry back: 3 years. Carry forward: 10 years. Transfer permitted by direct transfer or disproportionate allocation.

RECENT LEGISLATIVE CHANGES:

1) No owner-occupied single-family residential project receiving preliminary approval after Jan. 1, 2010 can receive more than \$250,000 in credits.

2) Beginning with the fiscal year beginning on July 1, 2010, DED cannot approve in any fiscal year more applications than would in the aggregate result in more than \$140,000,000 in credits. Any project receiving preliminary approval after Jan. 1, 2010, whose eligible costs would be more than \$1,100,000, will be subject to this cap. Projects subject to this cap will be prioritized on first-come first serve basis; where applications received on same day, lottery will be held.

3) Work undertaken prior to DED's receipt of applications not eligible for HTC but may cause project denial if it fails to meet the Standards. Rehab must begin within 2 years of authorization. Credits must be issued within 12 months of completion of rehabilitation.

To start the state process:

Submit 2 copies of complete state application together with before photographs and plans to the Missouri Department of Economic Development BEFORE work begins.

If application is complete DED will forward one copy to the SHPO for review.

Federal

20% credit for depreciable properties listed in National Register or listed as contributing to a federally certified historic district . . . review & work may begin before listing takes place. Rehab work must meet DOI standards. Qualified rehabilitation expenditures must exceed 100% of adjusted basis. Carry back: 1 years. Carry forward: 20 years. No transfer permitted by direct transfer or disproportionate allocation.

To start the process:

Submit 2 copies of complete federal application together with before photographs and plans to the State Historic Preservation Office, preferably BEFORE work begins. If application is complete SHPO will review & provide comments before forwarding one copy to the National Park Service for its review.

Just who is the secretary & what are the secretary's standards ?

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.
6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Released: Dec 2006
 Next CBECS will be conducted in 2007

Table C3. Consumption and Gross Energy Intensity for Sum of Major Fuels for Non-Mall Buildings, 2003

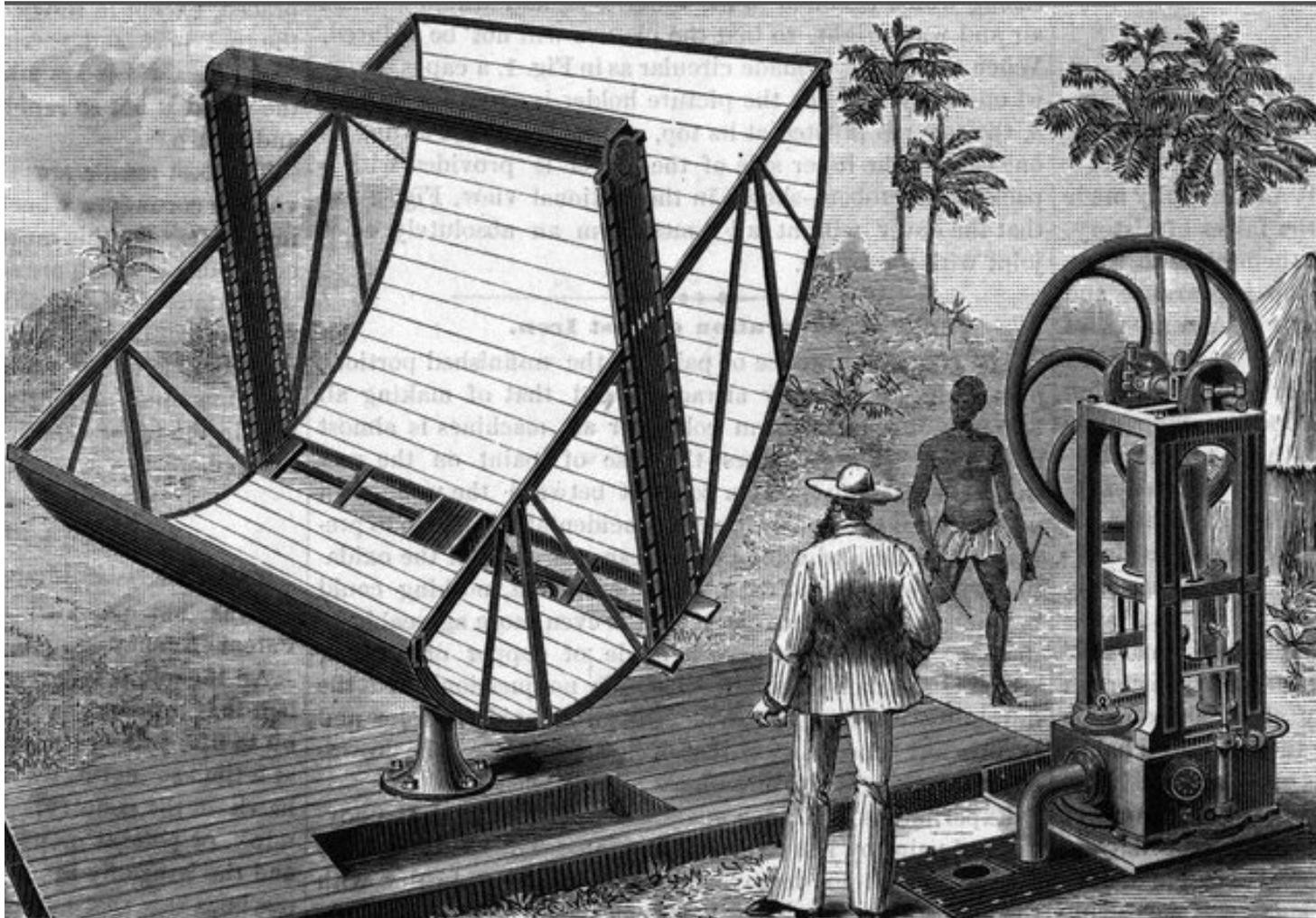
	All Buildings*			Sum of Major Fuel Consumption			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)
Year Constructed							
Before 1920	330	3,769	11.4	302	917	80.2	99.3
1920 to 1945	527	6,871	13.0	620	1,176	90.3	101.3
1946 to 1959	562	7,045	12.5	565	1,007	80.3	85.1
1960 to 1969	579	8,101	14.0	737	1,272	90.9	84.6
1970 to 1979	731	10,772	14.7	1,023	1,400	95.0	81.2
1980 to 1989	707	10,332	14.6	1,034	1,463	100.1	68.8
1990 to 1999	876	12,360	14.1	1,098	1,253	88.8	67.8
2000 to 2003	334	5,533	16.6	441	1,319	79.7	98.5

Energy Information Administration
 2003 Commercial Buildings Energy Consumption Survey: Consumption and Expenditures Tables





John Ericsson, creator of the *Monitor* (ironclad quasi submarine) in 1861





by permission Butti and Perlin

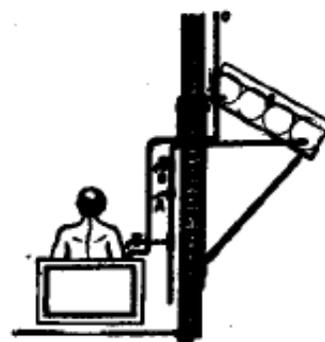
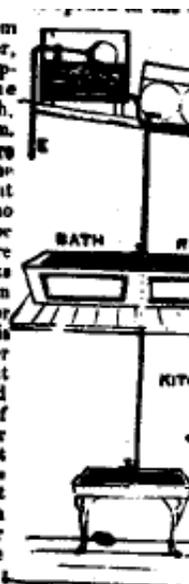


Fig. 8.—Shows a Climax Solar-Water Heater supplied by a tank on the roof.
 A.—In the tank in use when the hot water is wanted. This prevents cold water into the heater, stopping the hot water and forcing it through a dip to the tank full.
 B.—In the drain tank which is used to prevent backflow of air opening which prevents vacuum in the heater and siphons action.

this way the tanks should be filled again in the regular manner, so that the morrow's sun will find water in the tanks to act upon.

water is siphoned from one tank to the other, so that they are all emptied except some small quantity in each, which can do no harm.

There is no pressure on the tanks. If the sun has set and night has come, hence no more hot water can be made, and the entire contents of the tanks is desired—the drain cock can be used for drawing same—this gives all the hot water in the tanks without any admixture of cold water, this manner of drawing the hot water is unnecessary, except where great demand is made on the heater at night. After use in



THE CLIMAX SOLAR-WATER HEAT

Can be used in some states throughout the entire year, in others from the end of October; in the northernmost states from May 1st until October 1st.

During the early Spring and late Fall months, while the temperature is near the freezing point, the heater water has been over 100 degrees, the heater is from 60° to 100° degrees greater than the temperature for the day.

➡ The water at 100° degrees...

Climax Solar-Water Heater

UTILIZING ONE OF NATURE'S GENEROUS FORCES

THE SUN'S HEAT { Stored up in Hot Water for Baths, Domestic and other Purposes.



\$25

drical tanks connected.

adjustable heat.

CLARENCE M. KEMP, BALTIMORE, MD



F. L. WRIGHT.
PRISM LIGHT.

No. 27,977.

Patented Dec. 7, 1897.

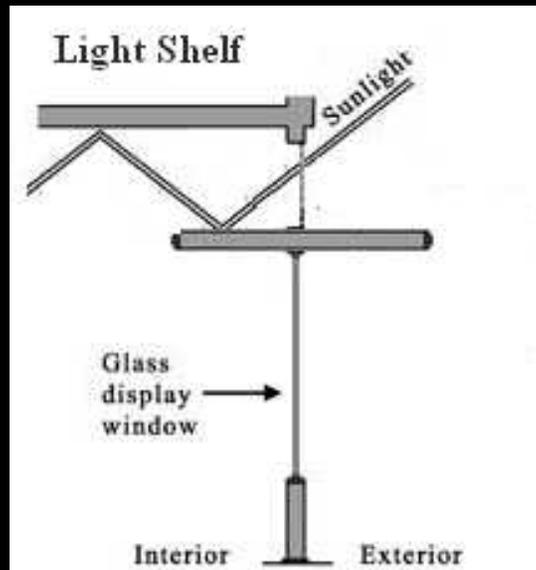
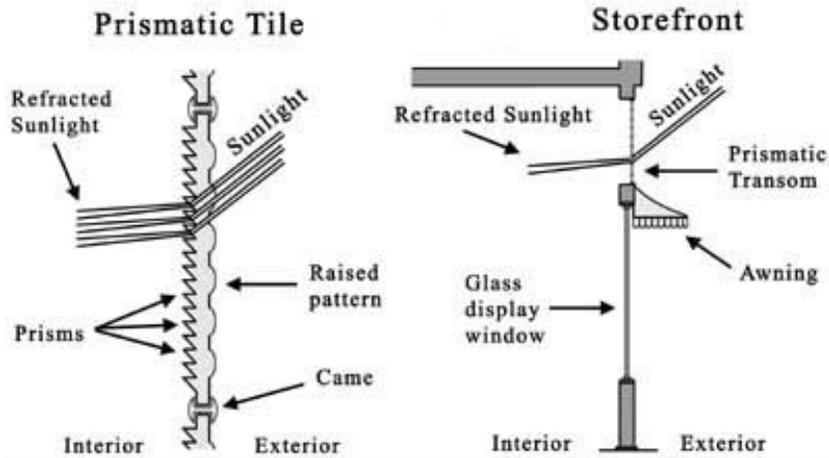


Fig. 2.

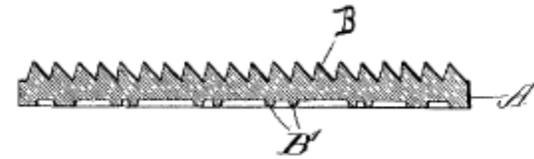
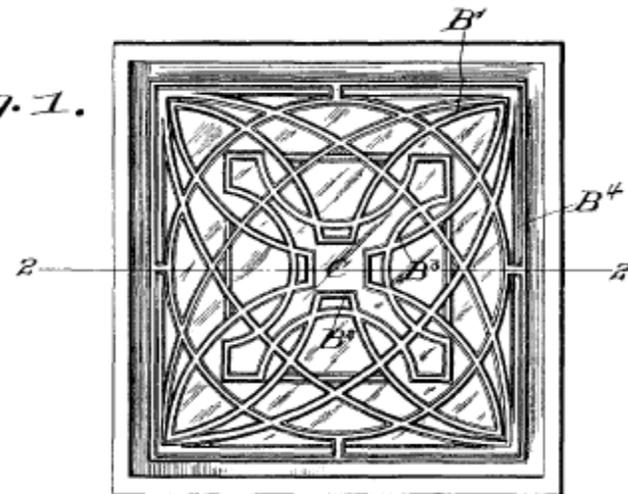


Fig. 1.



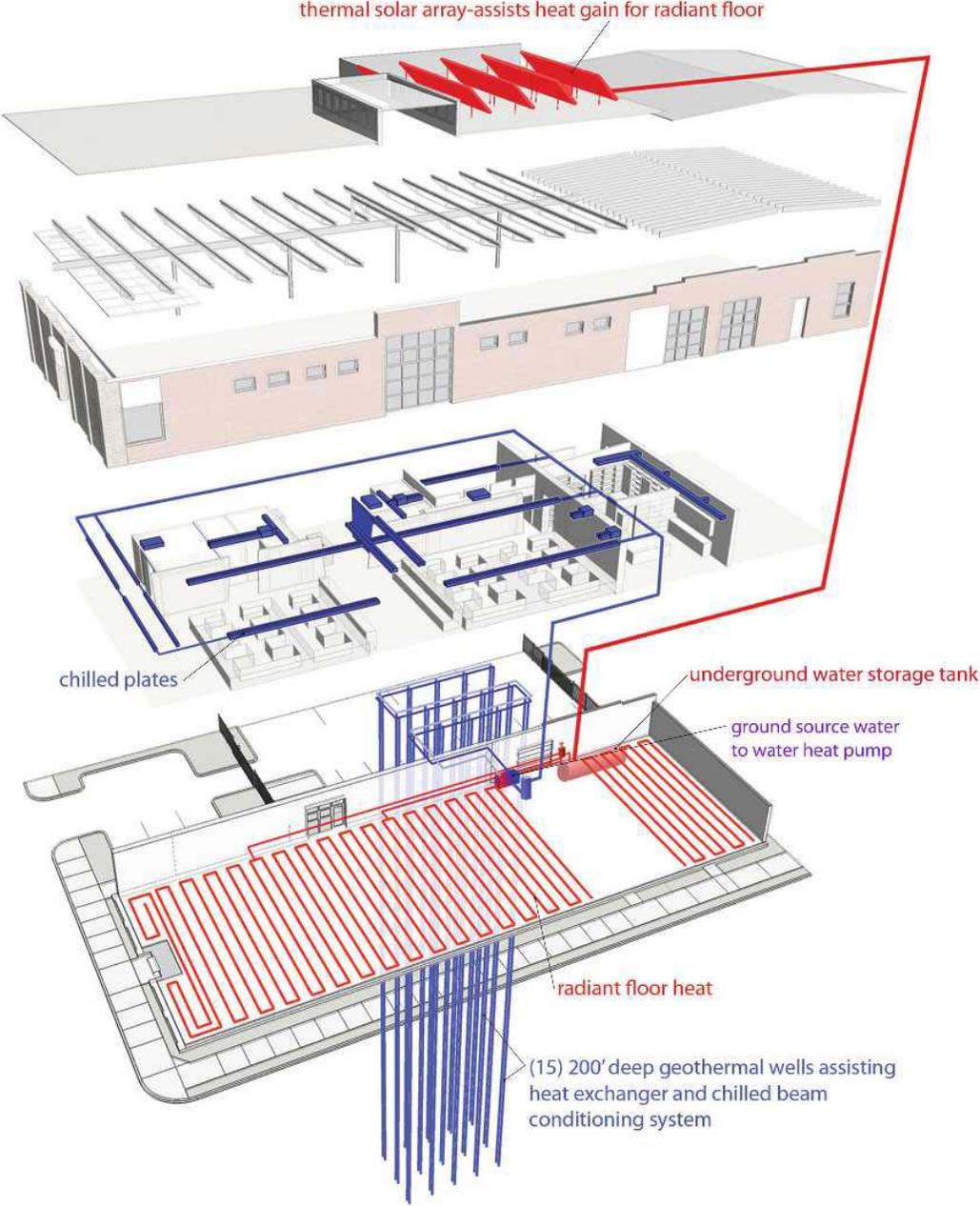
Witnesses:
A. Roy Appeman
Frank L. Wright
Charles W. Casper

Inventor:
 Frank L. Wright.
 By *Charles W. Casper*,
 Atty.





sustainable energy



Razing historic buildings results in a triple hit on scarce resources. First, we are throwing away thousands of dollars of embodied energy. Second, we are replacing it with materials vastly more consumptive of energy. What are most historic houses built from? Brick, plaster, concrete and timber -- among the least energy consumptive of materials. What are major components of new buildings? Plastic, steel, vinyl and aluminum – among the most energy consumptive of materials. Third, recurring embodied energy savings increase dramatically as a building life stretches over fifty years. You're a fool or a fraud if you claim to be an environmentalist and yet you throw away historic buildings, and their components.

The World Bank specifically relates the concept of embodied energy with historic buildings saying, "...the key economic reason for the cultural patrimony case is that a vast body of valuable assets, for which sunk costs have already been paid by prior generations, is available. It is a waste to overlook such assets."

The top priorities for economic development efforts are creating jobs and increasing local household income. The rehabilitation of older and historic buildings is particularly potent in this regard. As a rule of thumb, new construction will be half materials and half labor. Rehabilitation, on the other hand, will be sixty to seventy percent labor with the balance being materials. This labor intensity affects a local economy on two levels. First, we buy an HVAC system from Ohio and lumber from Idaho, but we buy the services of the plumber, the electrician, and the carpenter from across the street. Further, once we hang the drywall, the drywall doesn't spend any more money. But the plumber gets a hair cut on the way home, buys groceries, and joins the YMCA – each recirculating that paycheck within the community.

- Donovan Rypkema, keynote address to Missouri Preservation Conference September 2008.

have a question?
or
want more information?

please call me at (314) 416-2960x270
or email kristin.zapalac@dnr.mo.gov

thank you!

Kris Z