Business Models for Deconstruction and Building Materials Salvage

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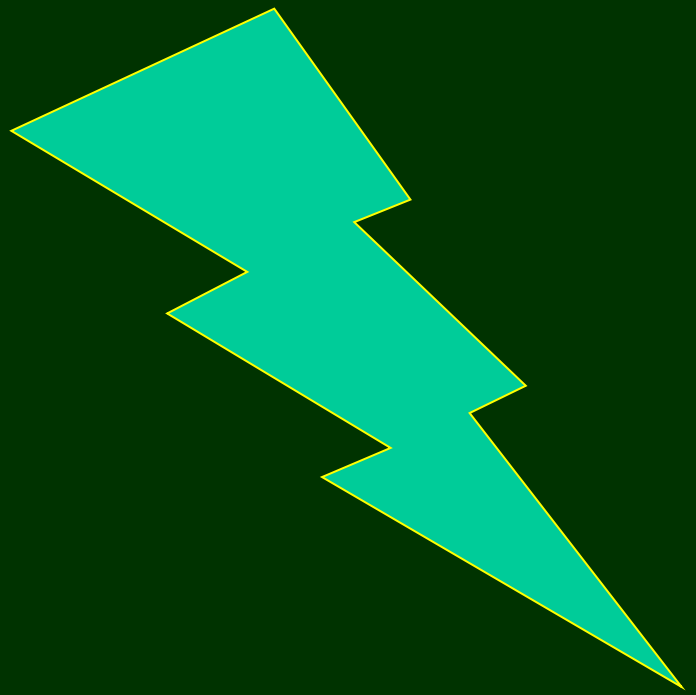
Why Salvage Building Materials?

Improves the Environment

Saves Embodied Energy



Provides Green Jobs Training

Improves the Standard of Living

How Much Can Be Diverted?

- Average house is 2,000 sq. ft. & weighs 80 tons*
- 250,000 single family residences are demolished each year*
- That represents 20,000,000 tons
- Between concrete recycling and materials reuse we can divert from our landfills about 90 to 95%
- Only 5 to 10% (5 to 8 tons) need to be landfilled

*USEPA statistics

What Materials Can Be Salvaged?

- Appliances
- Bricks
- Cabinets
- Doors
- Flooring
- Hardware
- Heating & Cooling
- Lighting fixtures
- Lumber
- Plumbing fixtures
- Roof tiles
- Sinks
- Trim
- Windows
- Vanities

Appliances

Bricks and Pavers

Cabinets

Doors


DOORS
The ReUse
BAZAAR
ED BUILDING
MATERIALS
UMBER
OORS
WINDOWS
VINTAGE & PERIOD
MATERIALS

Flooring

Hardware

Heating and Cooling

Lighting

Bulk Lumber

Self-Service Lumber Rack

Plumbing Fixtures

Roof Tile

Windows

Vanities

Solution

Deconstruction

and

Distribution

Symbiotic Relationship

- With deconstruction only – we would have above ground landfills
- With distribution only – there would be no supply

Existing Models

Deconstruction

- Primarily residential
- Some commercial
- Most are for profit
- Nonprofit – most are formed to fund other activities
- Complete deconstruction
- Soft-strip not considered
- Typically very localized
- Small - 1 to 5 people

Distribution

- Primarily residential
- Very few commercial
- For profit – architectural salvage
- Nonprofit – most are used to fund other activities
- Most offer only higher grade materials
- Most are very localized
- Small – 1 – 5 people and less than $500,000

Business Considerations

- Deconstruction or Resale?
- Commercial or residential?
- For profit or nonprofit?
- Brick and mortar or virtual?
- Variable costs or fix costs?
- What is local business & political climate?
- State of the local economy?

Personal Considerations

- What are your personal goals?
- Do you enjoy detail or are more big picture?
- Do you want a family business?
- What would you like your business mission to be?
- How much money do you have to invest?
- Do you need outside investors?
- How long is your planning horizon?

Summary of Environmental & Economic Benefits

- Saving landfill space
- Retaining embodied energy
- Providing green jobs and green job training
- Improving the standard of living
- Knowing that you are doing the right thing

What do the following mean?

250,000

.001

Economics – Environment – Economics
Environment – Economics - Environment


SALVAGING THE BUILT ENVIRONMENT
888-588-9490
The ReUse People™
www.thereusepeople.org

Benefits to Owner

The Benefits to a Private Owner (residential, commercial/industrial, developer)

- Eligible for tax donations
- Reduces overall project costs
- Reduces disposal costs
- Improves the local standard of living
- Extends the life of local landfills
- Knowing you have done the right thing

Actual Donation Values

City	Sq. Ft.	Donation Value
San Diego (remodel)	2,100	$ 57,000
Los Angeles	2,800	$ 97,321
Oakland	1,650	$ 63,690
Seattle	1,400	$ 41,000
Boulder	5,800	$232,000
Kansas City	3,000	$121,300
Chicago	2,100	$102,900

Cost-Benefit Analysis

- A 2000 s.f. San Francisco Bay Area home
- 3 Bedrooms & 2 ½ baths
- Raised foundation
- Composite (asphalt) shingles
- Single paned wood windows with divided lights
- Redwood siding
- Carpeting & 5/8” hardwood flooring
- 12 x 20 redwood deck
- The following does not include removal of concrete or asphalt

	Deconstruction	Demolition
Lowering of house	$21,738	$ 6,000
Disposal	4,100	4,100
Appraisal cost	2,500	0
Total costs	28,338	10,100
	=====	=====
Donation value	84,000	0
Cash Value (after tax value of donation at 35%)	29,400	0
Total cost (from above)	28,338	10,100
After Tax Benefit (Cost)	$ 1,062	$(10,100)
	======	=====

Types of Projects

- Residential deconstruction and salvage
- Commercial deconstruction and salvage
- Specialty deconstruction and salvage
- Green jobs training, consulting & project management

Types of Projects

Residential Deconstruction & Salvage

Commercial Deconstruction & Salvage

Specialty Deconstruction & Salvage Matrix Freeway Overpass

Specialty Deconstruction & Salvage
Is the overpass a railroad car or a is it a bridge

Specialty Deconstruction & Salvage
Matrix Freeway Walls

Specialty Deconstruction & Salvage
Matrix Freeway Walls

Walls on a Truck

Walls on a Roof

Matrix Metrics

95.2% of all materials were diverted from the landfill, representing 10% of the City of Alameda's annual solid waste

- 31 Tractor-trailer loads of lumber salvaged for reuse
- 1,500 Tons of steel salvaged for reuse
- 1,000 cubic feet of EPS salvaged for reuse
- 7,000 tons of concrete recycled as base rock

Thank You

TRP
The ReUse People