



# C&D Waste Diversion and Reuse

## **Federal Agency Success Stories**

**Yes, You Can Do It**

**August 26, 2010**

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# U.S. Environmental Protection Agency

Boston, Massachusetts: John W. McCormack Building — Region 1 Office

- GSA-owned historic renovation completed in December 2009
- LEED-NC 2.2 Gold
- Diverted 9,547 tons (92 percent) of C&D waste:
  - Concrete
  - Masonry product particles
  - Metal
  - Wood
  - Gypsum wallboard
  - Cardboard and paper
- Reused 99 percent of the historic structure
- Salvaged and reused historic features, including marble partitions from restrooms used as pavers on green roof



# U.S. Environmental Protection Agency

Cincinnati, Ohio: Andrew W. Breidenbach Environmental Research Center  
Annex 2

- LEED-NC 2.1/2.2 Gold
- Diverted 981 cubic yards (90 percent) of C&D waste
- Materials recycled included:
  - Concrete
  - Steel
  - Trees and brush
  - Wood
  - Cardboard
  - Plastic



# U.S. Department of State

Brazzaville, Congo: New Embassy Building

- Dedicated January 20, 2009
- Diverted 94 percent of C&D waste
- Recovered materials used to build housing for local residents



# U.S. General Services Administration

Location & Date Completed	Building	LEED Status	C&D Waste Diversion Rate (%)
Eugene, Oregon December 2006	Wayne L. Morse Courthouse	LEED-NC Gold	91%
Lincoln, Nebraska March 2006	Customs and Immigration Service, Nebraska Service Center	LEED-NC Silver	86%
Auburn, Washington August 2006	Social Security Administration Teleservice Center	LEED-NC Silver	Retained 77% of project's structure; Diverted 82% of C&D waste
Omaha, Nebraska October 2005	Department of Homeland Security	LEED-NC Gold	81%



# U.S. Army / U.S. Army Corps of Engineers (USACE)

Fort Myer, Virginia: Building 501, Tencza Terrace

- Facility Reduction Program, contracted by USACE
- Contractor initiated recycling for cost savings
- Salvaged and recycled prior to demolition
- Imploded building and recycled rubble as aggregate
- Total debris diversion: 91 percent
- Contractor saved approx. \$1.1 million:
  - \$100,000 by imploding building
  - \$1 million by reusing materials onsite



# U.S. Army

## Fort Lewis, Washington: Battle Simulation Barracks

- MILCON; demolition separate from construction contract
- USACE specified minimum 50 percent diversion, with contract options for diversion up to 75 percent
- Environmental contractor and deconstruction subcontractor
- “Hybrid” techniques; panelization, tipping
- Total diversion: 95 percent for 52 buildings
- Cost and duration similar to conventional demolition



# U.S. Army

Fort Lewis, Washington: Air Support Operations Squadron

- MILCON new construction
- USACE specified minimum 75 percent C&D waste diversion
- Contractor site segregated materials
- Waste management firm took materials for recycling
- Contractor reported monthly
- Diverted 98 percent (178 tons) of C&D materials from landfill

