Webinar Housekeeping

• Audio is available through your computer’s mic and speakers, or by phone.

• All attendees have been muted to reduce background noise.

• Keep your camera off to ensure best video quality.

• Questions or comments?
  • Type them into the Chat Box
  • Raise your Hand
  • Unmute yourself when called upon

• If you experience any technical difficulties, enter in the Chat or email katz.john@epa.gov

• Slides: The slides are available at the link placed in the Chat function and in the calendar invitation for the meeting
Bay Area (& Beyond) Deconstruction Workgroup

• **Started by learning about Portland’s Mandatory Deconstruction Ordinance** (late 2017)

• **Quarterly meetings to learn from each other**
  - Policies, results, barriers
  - Share opportunities for collaboration and ideas

• **Workgroup Members**
  - Now national & international participation
  - Focusing on issue of interest in the San Francisco Bay Area & beyond

• **Website & Contact Us:**
  https://www.stopwaste.org/DeconstructionWorkgroup
Welcome and Introductions – Angela Sandoval, Manager, Zero Waste Section, U.S. EPA Region 9

Speakers
- Eden Brukman, SF Environment
- Nicole Tai, Reuse Alliance & GreenLynx
- Timonie Hood, U.S. EPA Region 9
- Krista Kuehnhackl, San Mateo County
- Max Wechsler, Urban Ore
- Emily English, All for Reuse
- Michael Chambers, The Reuse People
- Nicholas Harvey, Bay Area Redwood
- Doug Ware, Renera, Inc.
- Meri Soll, StopWaste

Q&A
Disclaimer

This document does not constitute EPA policy. Mention of trade names or commercial products does not constitute endorsement or recommendation of use. Links to non-EPA websites do not imply any official EPA endorsement of or a responsibility for the opinions, ideas, data or products presented at those locations or guarantee the validity of the information provided. Links to non-EPA servers are provided solely as a pointer to information that might be useful to EPA staff and the public.

Any information shared is for informational purposes only as every building and deconstruction project is different.
Program Updates: Building Product Reuse in San Francisco
Proposed Infrastructure to Support Policy & Programs

Network of Suppliers and Receivers

Virtual Inventory/Asset Management

Physical ‘Laydown’ Space
Online Exchange for Building Products
Repurposing Infrastructure: The B.R.I.C.
Construction Surplus & Material Redistribution
Report Contents

Context

Research Approach

Typical Reasons for Surplus

Strategies to Address Surplus
  Surplus Prevention
  Surplus Redistribution

Role of Local Government

Appendices
A. Survey: “San Francisco Surplus Construction Materials Survey (2020-21)” ("Contractor Survey")
B. Survey: “Construction Surplus Study - Designers & Specifiers Survey (2020-21)"
C. Questions: Interviews with San Francisco Bay Area Reuse Retailers
D. Results: Abridged Data from Contractor Survey Respondents
E. Results: Abridged Data from Specifier Survey Respondents
Typical Reasons for Surplus

- **Procurement:** 68%
- **Installation:** 39%
- **Estimation:** 21%
- **Price:** 4%
- **Other:** 4%
- **Change:** 14%
- **Attic Stock:** 14%
- **Specifications:** 15%
- **Aesthetic:** 1%
- **Unsatisfactory:** 3%

**Onsite Activities:** 17%
Strategies for Surplus Redistribution

- Discard: 22%
- Redirect: 14%
- Return: 4%
- Sell, Donate End User: 0%
- Store: 29%
- Own Transfer: 17%
- Donate Intermediate: 5%
- Take Back: 9%
Strategies for Surplus Redistribution

- Discard: 22%
- Redirect: 14%
- Return: 4%
- Sell, Donate End User: 0%
- Take Back: 9%
- Owner Transfer: 17%
- Store: 29%
- Donate Intermediate: 5%

18% with highest likelihood of use
Strategies for Surplus Redistribution

- Discard: 22%
- Redirect: 14%
- Return: 4%
- Sell, Donate End User: 0%
- Store: 29%
- Owner Transfer: 17%
- Take Back: 9%
- Donate Intermediate: 5%
- 31% aren’t even being used once
- 18% with highest likelihood of use

Role of Government

Programs (26%)

Incentives (16%)

Requirements (5%)

Market Infrastructure (53%)
Role of Government

Market Infrastructure (53%)

Incentives (16%)

Requirements (5%)

Programs (26%)
Role of Government

Programs (26%)

Incentives (16%)

Requirements (5%)
Role of Government

Programs (26%)

Incentives (16%)

Requirements (5%)

Market Infrastructure (33%)
Waste Prevention
Embodied Carbon Reductions Strategies Checklist

<table>
<thead>
<tr>
<th>Embodied Carbon Reduction Strategy</th>
<th>Schematic Design Checklist</th>
<th>As-Built Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>0. Process and Tools</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.1 Identify Embodied Carbon as a Priority</td>
<td>Add a brief explanation here about how the project may incorporate this strategy into the project and any special considerations necessary</td>
<td>Pursued?</td>
</tr>
<tr>
<td>0.2 Commit to Using Whole Building Life Cycle Assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.3 Set a Project Embodied Carbon Reduction Target</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.4 Identify project-specific EC reduction strategies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.5 Use EPDs during Procurement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1. Increase Building Efficiency</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Reuse Existing Buildings (Adaptive Reuse)</td>
<td>Will pursue?</td>
</tr>
<tr>
<td>1.2 Reduce [New] Floor Area</td>
<td>Will pursue?</td>
</tr>
<tr>
<td>1.3 Reduce Below-Grade Construction</td>
<td>Will pursue?</td>
</tr>
</tbody>
</table>
Thank You!

Eden Brukman
Sr Green Building Coordinator
SF Department of the Environment
(415) 355-3710
Eden.Brukman@sfgov.org
CHALLENGES & OPPORTUNITIES

- Space
- Staffing
- Funding

- Internal growth
- Deconstruction
- Investors/Branches
ReuseAlliance

Return to our Roots

Focus on:
Sonoma County, Networking, Advocacy and Education for Reuse Practitioners, Board Recruitment
U.S. Environmental Protection Agency
Region 9 Updates

Bay Area Deconstruction Workgroup
November 2, 2021

Timonie Hood
Zero Waste & Green Building Coordinator
Resiliency and Natural Disaster Debris - 2021

Region 9 – San Francisco/Pacific Southwest
Region 5 – Chicago/Great Lakes states

R9 Focus Areas
Environmental Justice & Deconstruction/Reuse
Highlights

• 75 Expert Participants Very Engaged – MANY IDEAS

• Closing Executive Session
  • U.S. EPA Deputy Assistant Administrator Carlton Waterhouse Remarks
  • Shared Video Highlights & Polls

• EJ, Sea-Level Rise & BADWG Member Presentations
• **EPA priorities**
  - Environment Justice
  - Disaster-resilient building
  - Deconstruction for safe reuse + recycling & composting

• **FEMA Funding & Policy**
  - Large demolition contracts that reduce payments if there’s any reuse or recycling material value
  - No reimbursement for deconstruction
Post-Disaster Deconstruction by Rutgers University Students

Photos: Tobiah Horton
Resilient Floodplain Pocket Park

- Graded to reduce future flooding
- Reclaimed concrete, wood walkway and bench
- Native plants

Photo: Tobiah Horton
Deconstruction - Alachua County, FL

- 1970’s home, modern materials, graded lumber

- **Floodplain Buyout**

- Mechanical Panelization
  - Reduced labor
  - Working more on the ground

Credit: Brad Guy
Affordable Housing Made from the Deconstructed FL Home

- New HUD Section 8 home designed and built using the reclaimed lumber
- Current building code allows reuse under alternative materials and methods
- OR & WA building codes explicitly allow reclaimed lumber for structural purposes
- Lumber stayed in the community not in the landfill
• More Frequent Disasters

• Sea-Level Rise

*Buildings often not damaged*

• Potential to reuse buildings & building materials locally & create local jobs

Pacifica, CA
2021
Federal leadership needed to tackle Climate Crisis debris impacts

- **Target funding/resources where need is greatest** (Environmental Justice, Tribes, Islands)
- **Sea Level Rise**: High potential for reuse

Prevent “dumping on” disadvantaged communities – engagement and siting guidance

Federal guidance and investment to reimburse and incentivize equitable deconstruction and reuse

- **Circular Economy**: Policies to reduce waste & conserve embodied carbon
- **Infrastructure investments** in reuse facilities (warehouses, storage yards)

Quick Win: Explicitly list deconstruction and reuse as eligible activities for grants -- Infrastructure, Mitigation, Job Training, etc.
Recommendations

State & Local Planning

- Federal guidance, advance planning and exercises, model plans and scopes of work, etc. (*Forest Service Zero Waste Fire Camps*)
- Support federal reimbursement for landfill diversion - even with higher first cost (*Northridge Earthquake*)

Deconstruction Job Training/Certification – 6x more jobs vs. landfill

Federal purchasing requirements to drive reuse/low embodied carbon markets

Build Back Better: More resilient, affordable housing
How should the federal government advance deconstruction and safe reuse in resilient disaster planning and actions?
(Vote for up to three)

- Infrastructure (Facility) Investments: 22%
- Policy Development: 19%
- Procurement Requirements: 16%
- Job Training/Certification: 16%
- Set Disaster Recovery Goals: 15%
- Partnerships/Collaboration: 11%
Federal Funding and Comment Opportunities

FEMA Hazard Mitigation Assistance & Building Resilient Infrastructure in Communities Grants (due Jan. 28, 2021)
https://www.fema.gov/grants/mitigation


Open for Public Comment EPA Draft Strategy to Reduce Lead Exposures and Disparities in U.S. Communities (due Jan. 26, 2022):
https://www.epa.gov/lead/draft-strategy-reduce-lead-exposures-and-disparities-us-communities
Salvage Center and Deconstruction Trainings
Salvage Center RFP

- Released a RFP in July 2019 to provide funding to increase capacity for salvaged building materials
- Awarded contract to PlaceMakers Inc. in November 2019
PlaceMakers Inc. Improvements
PlaceMakers Inc. Improvements

Donations
• Accepting salvaged materials from the public
• Partnering with The Reuse People to provide tax deduction receipts

Operating Hours
• Went from appointment only to open 5 days a week including Saturdays

Staffing
• Hired a yard manager

Marketing
• Increased outreach and social media
• Selling on Craigslist (search for PMI)
Deconstruction Trainings

- 3 deconstruction overview trainings
  - 2 day training for C&D professionals and city staff
  - 1 day training for the general public
  - 4 hour training for inmates
- 12 day intensive training for the general public
  - 9 days in the field
  - 3 days in the classroom with a test
San Mateo?
Next Training in December
2022 Changes to Building Regulations

Deconstruction survey

- Single family residential dwelling units to be required to obtain a demolition permit
- Deconstruction is not required

Add Waste Management Plans to renovations with a building permit fee of $2,145 ($50,000) or over
Questions?

Krista Kuehnhackl
kkuehnhackl@smcgov.org
650-559-1405
URBAN ORE
COVID UPDATE
In 5 Minutes!

For BADWG
November 2, 2021
GROSS REVENUE

2010 – 2019 = ~$2.6M
COVID GROSS REVENUE

2020 = $2,741,565.84

2021 = ~$3.5M (!!!)
COVID = BINGO’S CLOSED
COVID = FINANCIAL HARDSHIP
COVID = PEOPLE MOVING
COVID SUPPLY SIDE TRENDS

• BUSINESSES CLOSING
• GARAGE/BASEMENT CLEAR OUTS
• DEATH
COVID DEMAND SIDE TRENDS

- Home Improvement Projects
- New Hobbies
- Less Entertainment Options
- Thrifting Trending
COVID = GREAT RESIGNATION

Why Millions Of Employees Plan To Switch Jobs Post-Pandemic

Caroline Castrillon  Contributor  Careers
I write about career, entrepreneurship and women's advancement.

Listen to article  5 minutes

As The Pandemic Recedes, Millions Of Workers Are Saying 'I Quit'

June 24, 2021 - 6:01 AM ET

URBANORE
To End the Age of Waste
GROWTH

• HIGHER WAGES
• NEW ROOF AND SOLAR SYSTEM
• NEW TRUCK(S)
• NEW ADMINISTRATIVE MANAGER
RENEWED SALVAGE CONTRACT

• $47.74 / TON SALVAGE SERVICE FEE
• EPA BERKELEY ZERO WASTE STUDY:
  • https://www.epa.gov/transforming-waste-tool/zero-waste-case-study-berkeley
• EPA WEBINAR ABOUT CONTRACT:
  • https://youtu.be/1xId5lumXgw?t=1724
• CONTRACT WITH CITY OF BERKELEY:
THANK YOU!

MAX WECHSLER
OPERATIONS MANAGER
MAX.W@URBANORE.COM
510-841-7823 EXT. 303
ALL FOR REUSE

BADWG - November 2, 2021
rationale

No demand = no reuse businesses = no waste diversion
goals

Environmental Impact
- Reduce Carbon
- Reduce Waste
- Protect Resources

Ecosystem of Circular Enterprises
- Create jobs in deconstruction, warehousing, remanufacturing & resale

Scale up Quickly!
- Be a viable strategy to reach climate & carbon goals
We recognize that an enormous volume of commercial TI materials are landfilled prematurely and that increasing reuse of these building products can reduce waste, save embodied carbon, and preserve natural resources and ecosystems. Realizing such benefits will require a paradigm shift in how commercial spaces are fit out, requiring change across the entire value chain. As building owners, developers, and tenants, we recognize the need to take the first step in overcoming this challenge and will request our design and construction teams to incorporate reclaimed materials in building fitouts. Such actions include:

- Locate deconstruction, salvage and reuse partners
- Consider specific reclaimed material options within the material palette
- Understand how to adapt the design process to maximize reuse
- Creating the infrastructure needed to facilitate reuse
workshops

#1 - January
Establish SF Bay Area Owners Alliance
Agree vision and objectives
Present All for Reuse pledge

#2 - May
Confirm common understanding of the actions required from the Owners Alliance
Demonstrate AFR support and resources

#3 - November
Implement with concrete actions and commitments
Share action plans
ACTION PLAN WORKSHEET: GETTING STARTED

General All for Reuse Pledge:

We recognize that an enormous volume of commercial TI materials are landfilled prematurely and that increasing reuse of these building products can reduce waste, save embodied carbon, and preserve natural resources and ecosystems. Realizing such benefits will require a paradigm shift in how commercial spaces are fit out, requiring change across the entire value chain. As building owners and tenants, we recognize the need to take the first step in taking on this challenge and will request our design and construction teams to incorporate reclaimed materials in building fitouts. Such actions include:

- Identifying deconstruction, reclamation, and resale partners
- Considering specific reclaimed material options within the material palette
- Beginning to adapt the design process to maximize reuse
- Creating and supporting the infrastructure needed to facilitate reuse

EXAMPLE: SPECIFIC MATERIAL FOCUS

PROMPT: How can projects start to source specific materials as reused instead of new?

ACTION:

Example: Require our design and construction teams to seek salvaged materials first for all [ancillary furniture, casework, doors, light fixtures, other]

This action would be in support of:

- Identifying deconstruction, reclamation, and resale partners
- Considering specific reclaimed material options within the material palette
- Understanding how to adapt the design process to maximize reuse
- Creating the infrastructure needed to facilitate reuse

Making the case...

WHY CONSIDER REUSE?

- How big is the opportunity if this material came from reuse?
- What are the benefits?

WHAT NEEDS TO CHANGE?

- What is the current process for selection and procurement of this material?
- What are the current expectations for this product type (e.g. aesthetics, durability, etc.)?
- What from these might present a barrier to sourcing reused instead? (circle which apply)

Examples: Tried and true brands/products

Vendor relationships limit the choices

What are some ideas for overcoming these barriers?
solutions charrette

Timing & awareness

Storage, handling, logistics

Breaking down silos

Brand, warranties, leases
<table>
<thead>
<tr>
<th>Actions Wall</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>We are currently conducting a deconstruction inventory across our approx 60 acre site with intention to salvage and reuse as much as possible, instead of leaving the existing buildings for the contractor to demo.</strong></td>
</tr>
<tr>
<td><strong>We are investigating online platforms to improve management and access to the inventory of items in our warehouse and expansion of them to include building materials, not just furniture and equipment.</strong></td>
</tr>
<tr>
<td><strong>We will co-facilitate meetings of the Bay Area Owners Alliance to ensure we and our peers continue to maximize reuse opportunities within our influence.</strong></td>
</tr>
<tr>
<td><strong>We commit to reaching out to reuse partners (deconstruction contractors, take-back programs, furniture brokers, etc.) as soon as a renovation project is identified, as opposed to waiting till near the time of our move out.</strong></td>
</tr>
<tr>
<td><strong>We are seeking language to add to our Technical Specifications, Requests For Proposals, and Owner’s Project Requirements on all new projects to require future project teams to prioritize reuse.</strong></td>
</tr>
<tr>
<td><strong>We are adding and prioritizing reuse and deconstruction in our organization's climate action plans because we recognize the connection between reuse and carbon emissions reductions.</strong></td>
</tr>
</tbody>
</table>
Where TRP is headed…..

• TRP is currently predicting that education is an essential priority to reducing waste associated with the demolition or deconstruction of buildings. Education is two-fold, with the public, and with government.

• TRP is expanding its involvement and assistance with municipalities in not only education, but implementation of public mandates necessary to reduce waste.
Education

• Training staff of contractors and municipalities alike on how to deconstruct a building.
  – Increases recovery yield
  – Provides a higher quality product that has a higher propensity to be re-used in future construction
  – Provides for increased employment
  – Increases tax revenue
  – Increases public awareness of the benefits
Municipal Assistance

• Consultation on the trials and tribulations that other municipalities, and deconstructors, experience today.
  – Implementation issues
  – Accountability/Measurement
  – Enforcement
Time for Change

• TRP is predicting a change in the commercial market, and will be a part of that process as it has in the residential arena
  – Predicting many Covid-19 attributes will become substantially permanent.
  – Commercial properties will either be subject to a change in use or revitalized/refreshed through upgrade.
Expansion

• TRP is looking to expand into the commercial deconstruction and reuse market.
  – Expansion into other locations to facilitate the collection and resale of used commercial building materials as well as residential
  – Expanding into social media to facilitate greater visibility of available products.
Thank You

Michael Chambers
Executive Director
The ReUse People of America, Inc.
9235 San Leandro Street
Oakland, CA 94603
michaelchambers@TheReUsePeople.org
Office: 510.383.1983
Copyright Materials

This presentation is protected by US and International Copyright laws. Reproduction, distribution, display and use of the presentation without written permission of the speaker and The ReUse People of America, Inc. is strictly prohibited.

The ReUse People of America, Inc. 2021
Urban Wood Definition

Urban wood can be defined as any wood that was not harvested for its timber value and was diverted from or removed from the waste-stream and developed or redeveloped into a product. Urban wood can come from 3 sources: deconstruction, fresh cut urban trees, and salvaged trees.

https://urbanwoodnetwork.org/