

# Bay Area Deconstruction Workgroup Meeting

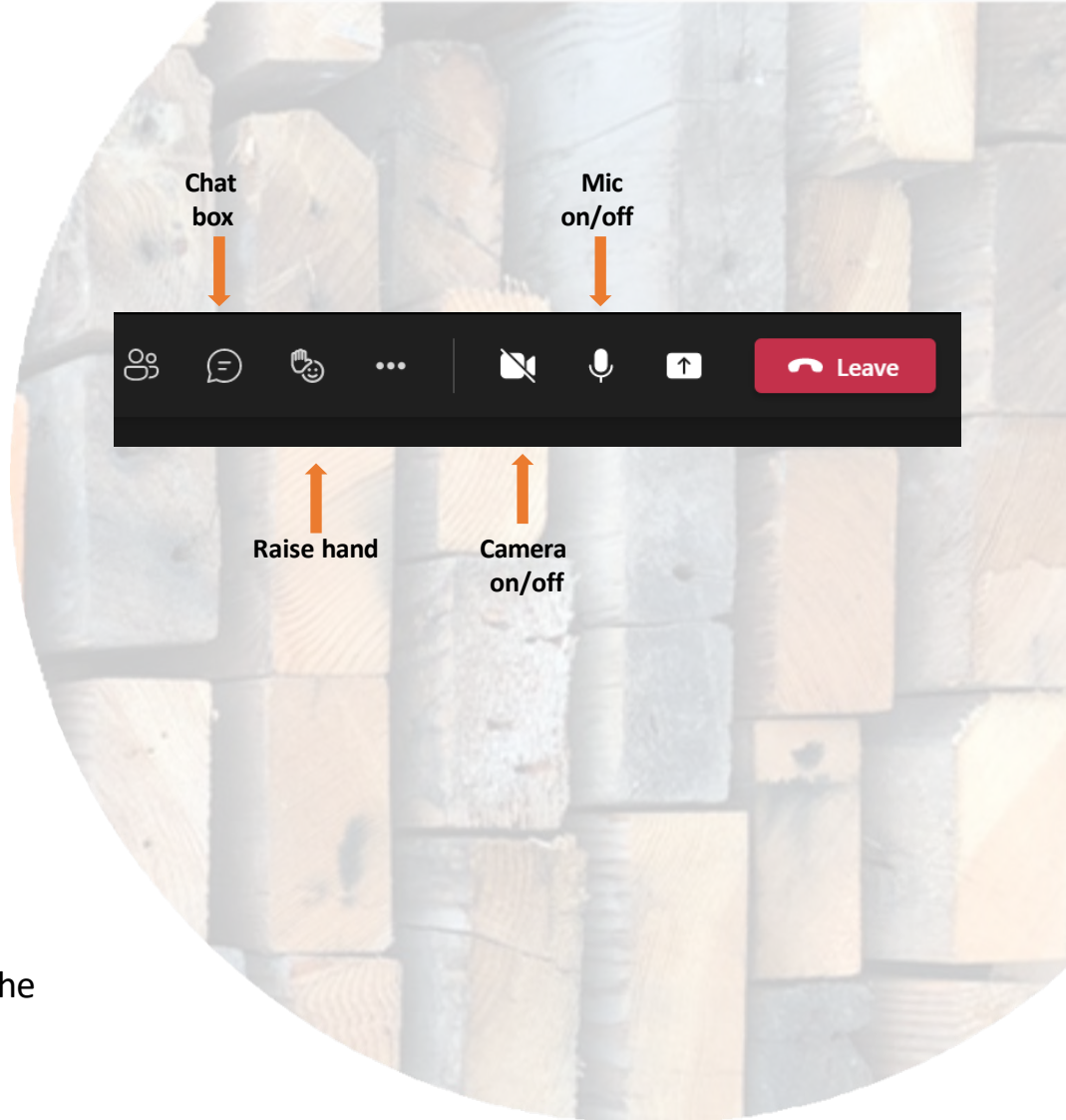
May 17, 2022



Urban Ore Tour

# 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](mailto: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





## Disclaimer

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Any information shared is for informational purposes only as every building and deconstruction project is different.

# Bay Area Deconstruction Workgroup Meeting

May 17, 2022



Urban Ore Tour



# Unprecedented Congressional Support for Waste Reduction

- 25 national legislative proposals related to **solid waste reduction**
- EPA directed to:
  - Develop recycling strategy (2020)
  - **Issue grants** and undertake other efforts to support recycling in communities (Infrastructure Bill - 2021)
    - **Solid Waste Infrastructure for Recycling Grant Program** - \$55 million/year FY22-26
    - **Recycling Education and Outreach Grant Program** - \$15 million/year FY22-26



# EPA is Seeking Input on Grant Program Development

- **Background Information**

<https://www.epa.gov/rcra/bipartisan-infrastructure-law-transforming-us-recycling-and-waste-management>

- **Upcoming EPA National Feedback Sessions (Virtual):**

- **May 18, 24, 25, June (TBD):** <https://www.epa.gov/rcra/feedback-sessions-bipartisan-infrastructure-law-solid-waste-and-recycling-programs>

- **Sign up to *Stay Connected* to learn more about grants, future strategies and reports**

<https://www.epa.gov/recyclingstrategy/forms/stay-connected>

- **Email: [SMMPartners@epa.gov](mailto:SMMPartners@epa.gov)**



# 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>



# Agenda

**10:00 – 10:10** **Welcome** - Angela Hendrichsen Sandoval, Manager, Zero Waste Office, U.S. EPA Region 9

## Right to Repair/Warranties

- **10:10 – 10:20** Daniel R. Salsburg, Chief Counsel, Federal Trade Commission, Office of Technology Research and Investigations
- **10:20 – 10:30** Nicole Tai, President, GreenLynx and Board Member, Reuse Alliance
- **10:30 – 10:40** Dr. Greg Lavery, Founder and Managing Director, Rype Office
- **10:40 – 10:50** Jackie Kirouac-Fram, Ph.D., Executive Director, Rebuilding Center
- **10:50 – 11:00** Ellie Holmes, Sustainability Coordinator, Crown Workspace
- **11:00 – 11:15** Nathan Proctor, Senior Director, Campaign for the Right to Repair, U.S. PIRG
  
- **11:15 – 11:35** Q&A

## Disaster Debris/Sea Level Rise Planning and Deconstruction

- **11:35 – 11:50** Timonie Hood, Zero Waste & Green Building Coordinator, U.S EPA Region 9
- **11:50 – 12:00** Q&A/Open Discussion



# Executive Order 14036: Promoting Competition in the American Economy

[Executive Order on Promoting Competition in the American Economy | The White House](#)

## **Nixing the Fix:**

An FTC Report to Congress on Repair Restrictions

[https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf)

Policy Statement of the Federal Trade Commission on Repair  
Restrictions Imposed by Manufacturers and Sellers

[https://www.ftc.gov/system/files/documents/public\\_statements/1592330/p194400repairrestrictionspolicystatement.pdf](https://www.ftc.gov/system/files/documents/public_statements/1592330/p194400repairrestrictionspolicystatement.pdf)



**GREENLYNX**

UN/BUILDING FOR A SUSTAINABLE WORLD

## Reclaimed Materials and Warranties

Bay Area Deconstruction Workgroup

May 17, 2022

Nicole Tai, CEO GreenLynx

[ntai@greenlynx.net](mailto:ntai@greenlynx.net)

## Warranties Encountered:

Windows - uninstalled

Appliances - refurbished

## Who backs the Warranties?

Original Manufacturers

Repair/Refurbishers

**FLEETWOOD CERTIFIED PROPOSAL**  
**GOLDEN STATE WIN & DOOR-SAN R** Phone: [REDACTED]  
**PROPOSAL [REDACTED], DETAIL REPORT version 1** GOLDENSTATELUMBER.COM  
(Prices honored if a Confirmed Order before the end of 2021) ver: 1  
**Quote# [REDACTED]** 

**Market Leadership:** (For more details, visit our homepage ABOUT/Market Leadership)

- \* Family owned & operated
- \* Elite luxury fit & finish standards
- \* QC standards 2x more stringent than ASTM's
- \* Lifetime TRANSFERABLE Warranty
- \* Patented hardware & designs



**Certified Proposal Review Legend**

This Certified Proposal highlights Proprietary Features (legend below), each of which has a deeper story that can be read on the homepage of our website. The preferences are noted in each line item's OPTIONS and listed below each line item's options in the Premium Features segment.

**All Products**

- (FPA) Finish Pre-Treatment - Anodize
- (FPP) Finish Pre-Treatment - Paint

**Windows**

(ABH) Archetype Butt Hinges

**Sliding Glass Doors**

(ADC) Archetype Door Collectors



# Bay Area Deconstruction Working Group

## Circular Economy Warranties and Liabilities

Dr Greg Lavery, MD of Rype Office

17 MAY 2022

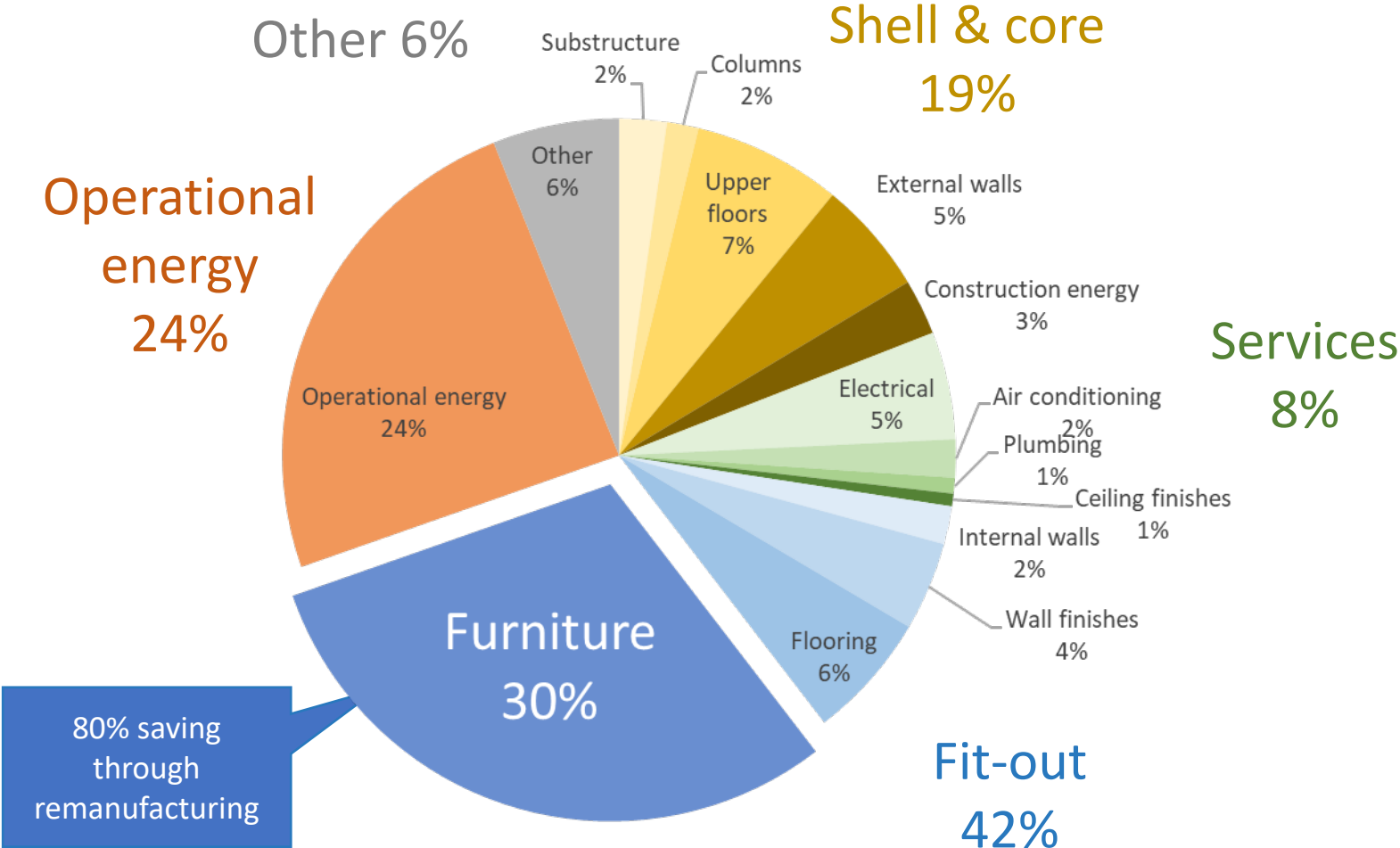
# Where are the carbon emissions in a building?



Office furniture is the **single biggest** source of greenhouse gas emissions over the lifetime of a commercial building



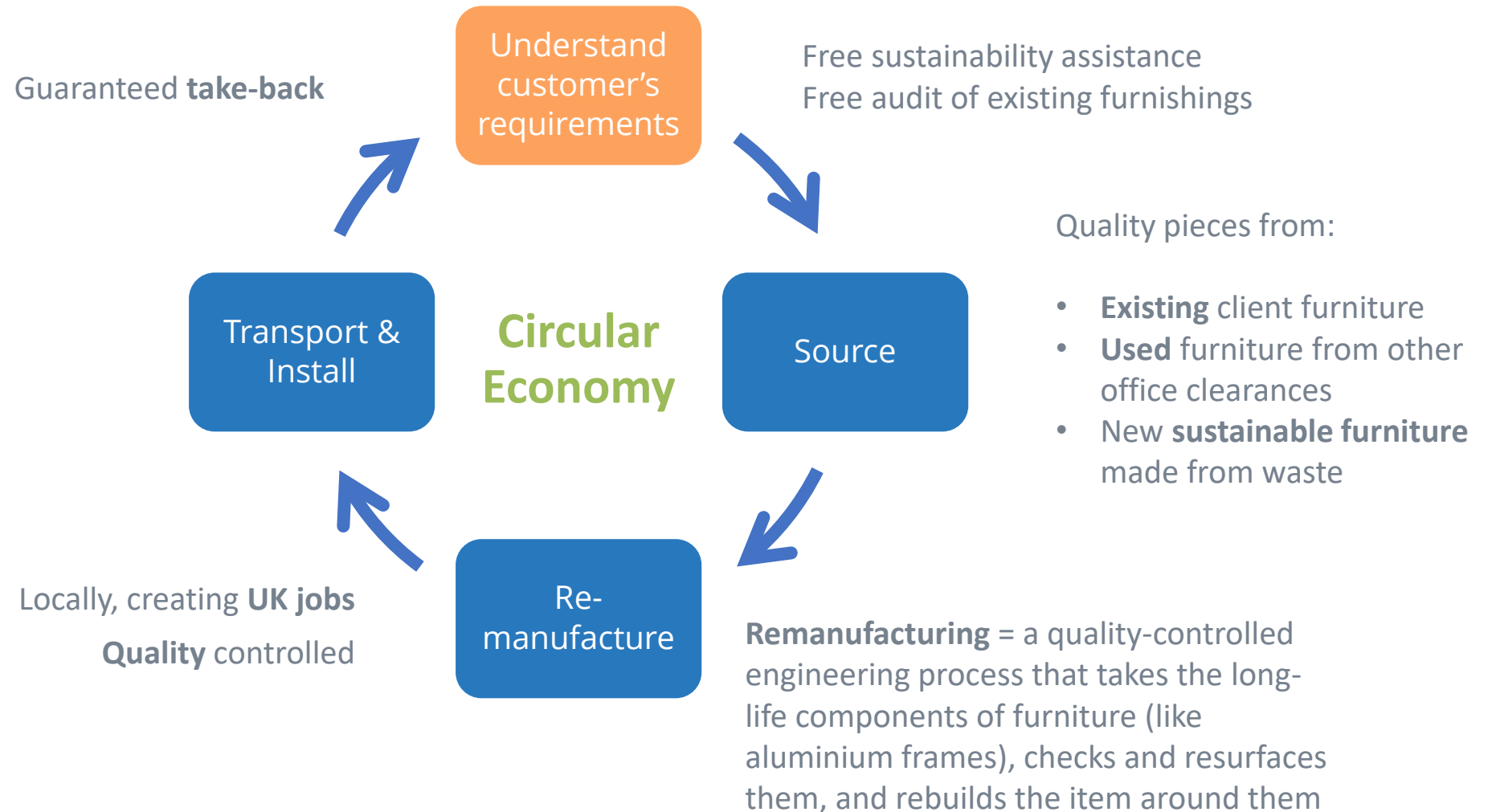
## Commercial Building Lifetime Greenhouse Gas Emissions



80% saving through remanufacturing

Source: Treloar, G.J. et al, 1999, *Embodied energy analysis of fixtures, fittings and furniture in office buildings*, Facilities, Volume 17, Number 11, pp. 403-409 (Accessed on 14 June 2019 at [https://www.academia.edu/18481731/Embodied\\_energy\\_analysis\\_of\\_fixtures\\_fittings\\_and\\_furniture\\_in\\_office\\_buildings](https://www.academia.edu/18481731/Embodied_energy_analysis_of_fixtures_fittings_and_furniture_in_office_buildings))

# We use the Circular Economy to reduce furniture emissions (and cost)













rypeoffice





**THE  
HOWARD  
deWALDEN  
ESTATE**



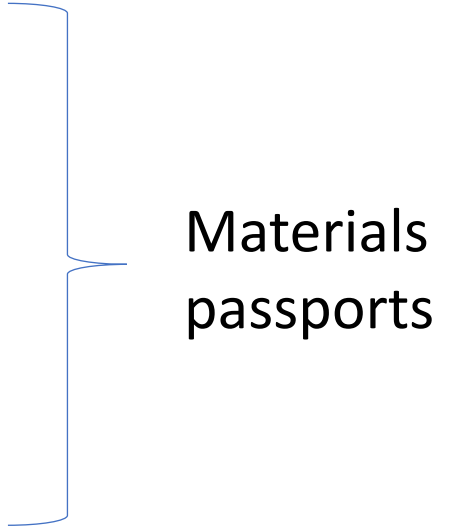


**THE  
HOWARD  
deWALDEN  
ESTATE**



1. Our standard warranty is:
  - 12 months for our workmanship covering the work that we do on an item
  - Pass-through warranties for remanufacturing materials (e.g. 10 years for fabrics, 5 years for replacement gas lifts)
  - We do not warrant other aspects of a client's existing furniture, which is initially covered by the initial new furniture warranty and after that is the responsibility of the client as if the furniture was not refurbished
2. However, we are happy to include a longer warranty or additional coverage for an additional cost
  - This is detailed to the client in our proposals so they understand what is covered
  - Usually clients prefer the up-front cost saving

- For construction materials, INFORMATION is the key:
  - Condition inspections and testing
  - Knowledge of the original composition, strength and manufacturer
  - History of the materials' usage
  - Maintenance history
  - Statistical failure rates

A blue bracket on the right side of the slide groups the five sub-points of the first bullet point. To the right of the bracket, the text "Materials passports" is written in a bold, sans-serif font.

**Materials  
passports**



Sign up to our newsletter at [www.rypeoffice.com](http://www.rypeoffice.com) or the QR code to the left to receive updates on our events, the circular economy, net zero design and much more.





Contact us:

033 3358 3330

[contact@rypeoffice.com](mailto:contact@rypeoffice.com)

[www.rypeoffice.com](http://www.rypeoffice.com)

# Reuse + Repair: Cornerstones of Climate Justice

Jackie Kirouac-Fram  
Executive Director, ReBuilding Center  
[jackie@rebuildingcenter.org](mailto:jackie@rebuildingcenter.org)



**ReBuilding Center is a climate justice nonprofit in Portland, Oregon.**  
Our mission is to build community resilience through reuse and repair.



# Reuse: The Store

Sells donated reclaimed and new building and home improvement materials at deeply discounted prices to make reuse a viable option for everyone.





We partner with deconstruction firms, contractors, developers, material distributors and manufacturers, and individual donors to accept more than 3 million pounds of donated materials annually.

# Repair: Education Programs

160+ classes annually in carpentry, electrical, plumbing repair wall framing, tools, and more, to build skills and confidence.

Average tuition for a 3-hour class is \$75.



## Our 2021 Exploration:

Is it enough to keep material out of the landfill?

What are we doing with it?

Who are we aiming to serve?

What impact do we want to create?



What is affordable housing?



For every affordable housing unit that we build, two others are lost to abandonment, deterioration, or conversion to more expensive housing.

*Source: Urban Land Institute, "Preserving Multifamily Workforce and Affordable Housing," 2015.*

It costs an average of 26 times more to build a new affordable home than to repair an existing one.

*Source: Urban Land Institute, "Preserving Multifamily Workforce and Affordable Housing," 2015.*

45% of homes built before 1940 are in need of repair

33% of all occupied homes have structural, plumbing, electrical, and/or heating problems, leaks, and/or pest infestations. Even more homes have poor indoor air and water quality or lead contamination.

Most substandard homes are occupied by people who need physical and/or financial assistance with repairs, especially since the cost of some lumber products has increased by nearly 500% in one year.

*Source: Joint Center for Housing Studies of Harvard University, "The State of the Nation's Housing," 2021.*

The CDC has identified investing in home repairs for low-income households as a high-impact strategy for addressing root causes of poor health due to dampness, mold, and inadequate temperature control.

Every \$1 spent on urgent home repairs can save \$19 in Medicare/Medicaid costs.

# More importantly:

Home repair improves occupants' physical and mental health.

Home repair keeps homes from falling into significant disrepair and abandonment or sale to predatory purchasers.

Home repair increases property value sustainably, which benefits the whole neighborhood.

## **HOW does ReBuilding Center support home retention through repair? Starting in 2022:**

Securing higher-quality, code-compliant materials.

Offering free delivery to transit-dependent customers.

Offering free classes that better address home repair and maintenance needs.

Donating materials directly to individuals and install them in the home.

...and more to come.



## EPA-Funded Project: From Excess to Access

Partnering with the City of Portland to:

1. Increase material donations, preserving more carbon and natural resources
2. Provide free materials to people who have code violations and can't afford the materials to do the repairs



## How can you help?

Provide connections to material manufacturers and distributors who may have overstock to donate.

Make sure your clients know they can donate reclaimed materials to us.

Support this work through a financial contribution to our ReBuilding for Justice Fund.

Anything else?







# Crown Workspace

Sustainable Workplace Services

*Inspiring places and performance*

**CROWN**   
WORKSPACE

# Introduction



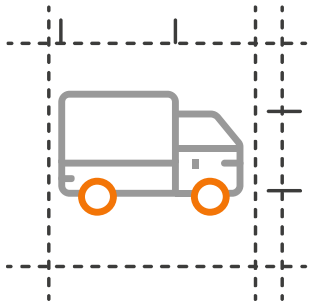
## Who we are



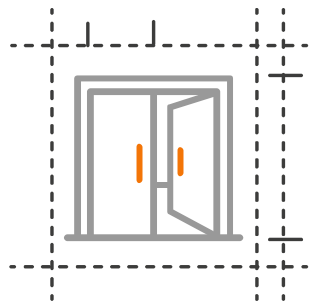
## Who we work with



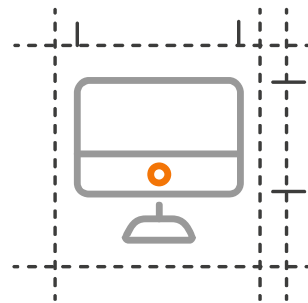
# Our services



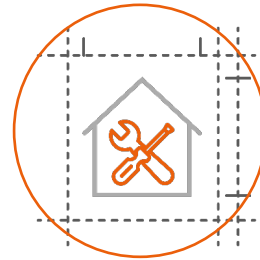
Move Management



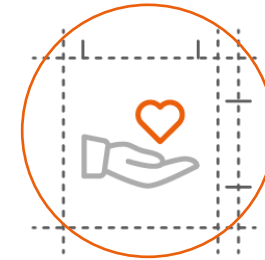
Moves and Changes



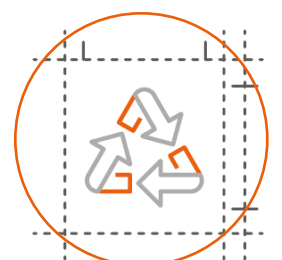
IT Services



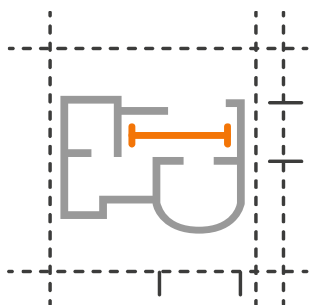
Renew Centre



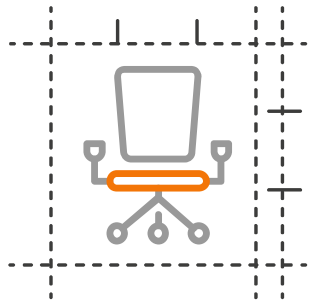
Giving Back Project



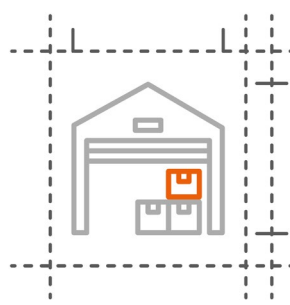
Renew IT



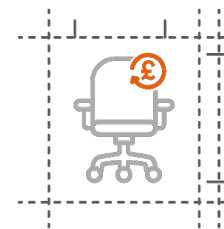
Interiors



Furniture



Storage

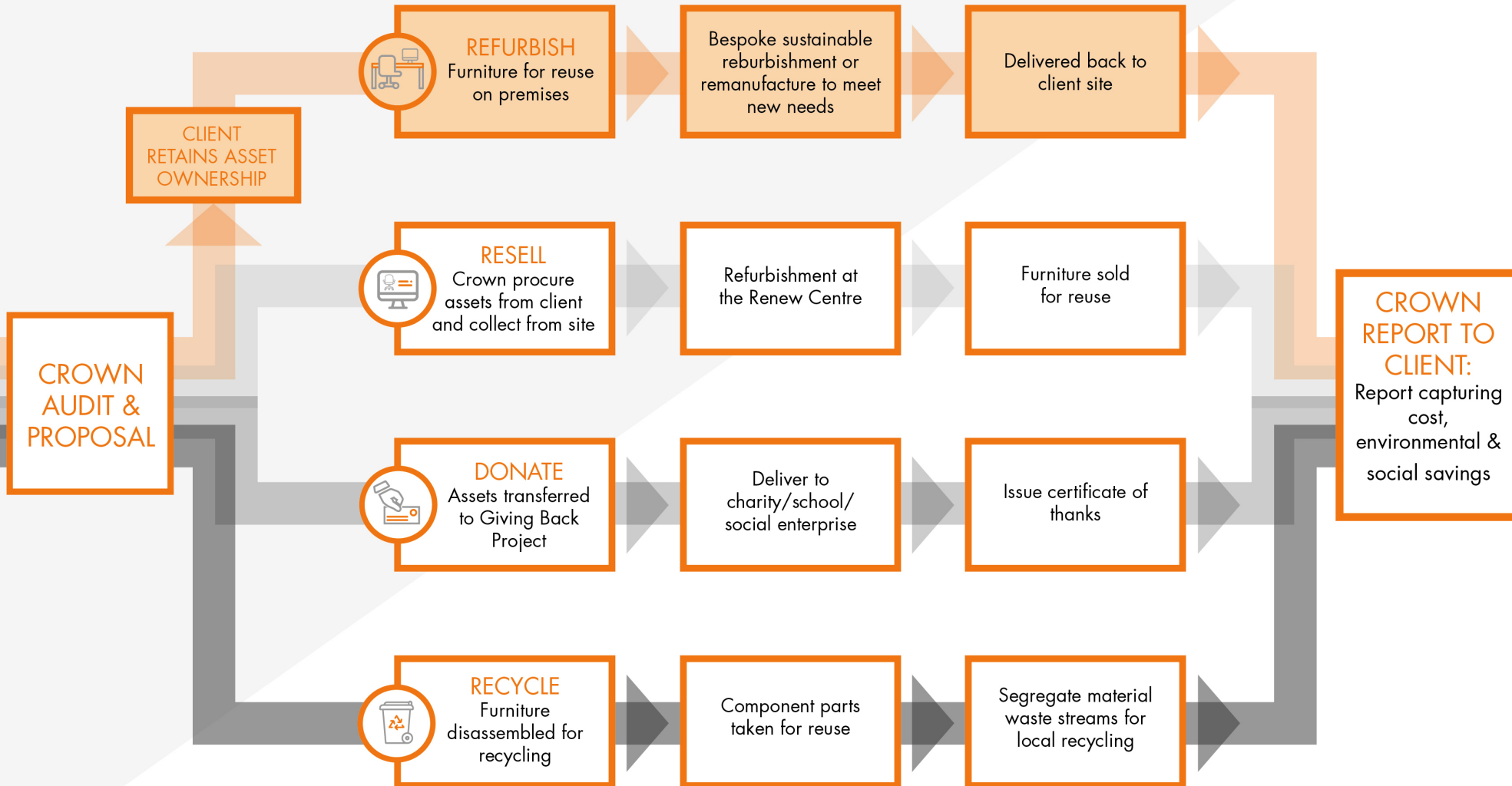


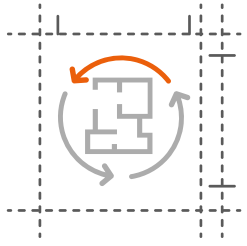
Office Resale



IT Resale

# Reuse services





# Renew Centre

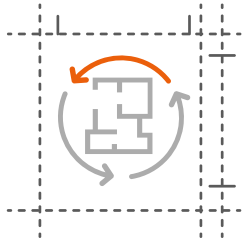


- 12 years of refurbishing time-worn items to be ‘as good as new’ – resizing office desks, refurbishing chairs, reconfiguring storage and shelving.
- Resale of redundant assets via Office Resale to maximise reuse and return market value.



**HermanMiller**

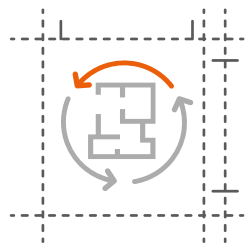
Authorised Refurbishment Partner



# Renew Centre



**HermanMiller**  
Authorised Refurbishment Partner



# Renew Centre



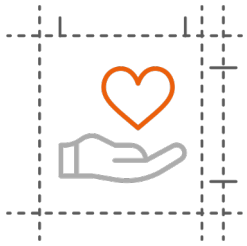
**HermanMiller**  
Authorised Refurbishment Partner



# Renew IT

- Market-leading sustainable solutions for all end-of-life IT and AV equipment
- Maximise financial, environmental and social value of items through resale and donation
- Since 2018, have allowed over **50,000** IT and AV assets to be reused through our Renew IT services





# Giving Back Project

- Operating for over 10 years, donating in excess of 30,000 assets
- Network of 100+ charities, schools and social enterprises –working with client’s preferred charities where viable.
- Saved **843 tonnes** of CO2(e) since 2015 through donation, enough to power 100 homes for a year



# 2021



Through our **Renew Centre** for furniture remanufacture, **Renew IT** workshop for IT refurbishment and **Giving Back Project** for charitable donations.



# Right to Repair Overview

## Model Policy and Warranty Implications



**Nathan Proctor**  
Senior Director  
Right to Repair Campaign

# I WILL SPEAK TO:

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- The problem
- The model policy
- State of play
- How Right to Repair intersects with warranties

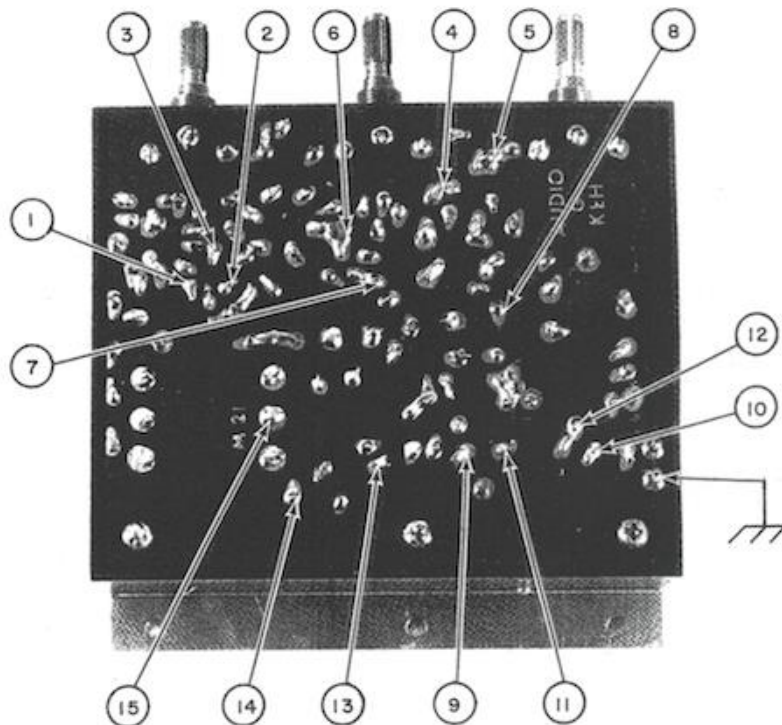




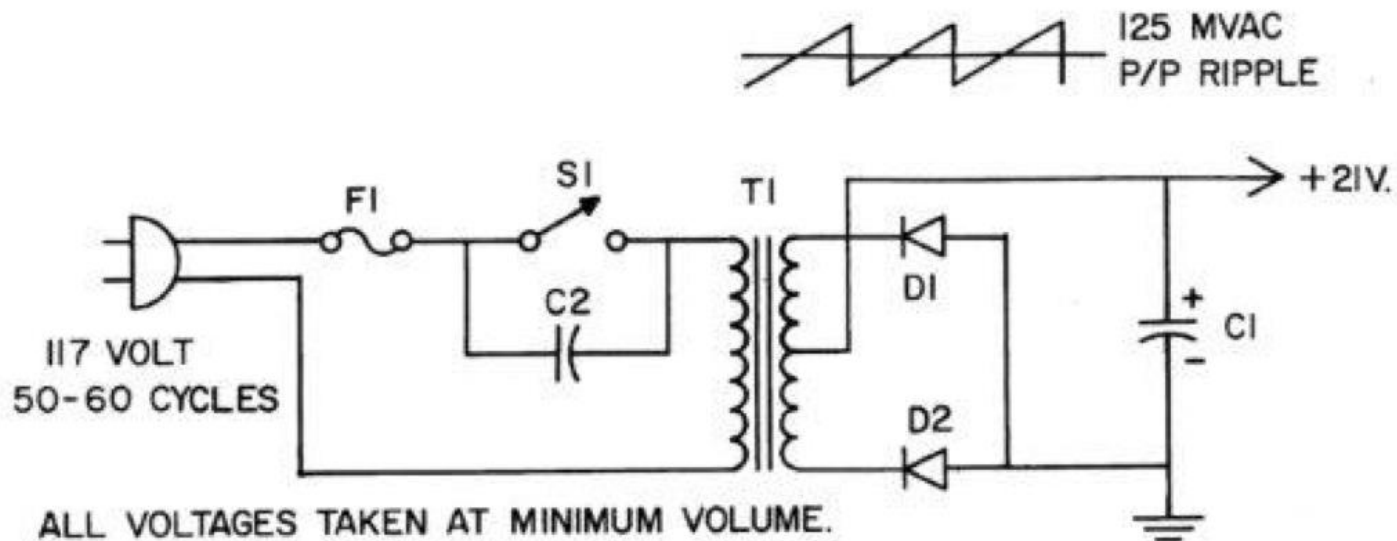
BOTTOM VIEW

	+ D.C. VOLTS	RESISTANCE TO GROUND
1	1.36 Volts	8.5K ohms
2	.72 Volts	2.2K ohms
3	9 Volts	23K ohms
4	.615 Volts	1.25K ohms
5	.038 Volts	240 ohms
6	3.6 Volts	325 ohms
7	3.08 Volts	330 ohms
8	18.6 Volts	130K ohms
9	21.8 Volts	1.3K ohms
10	10.4 Volts	1K ohms
11	22 Volts	1.25K ohms
12	10.48 Volt	950 ohms
13	11.5 Volts	1K ohms
14	10.95 Volt	1K ohms
15	21.8 Volts	1.5K ohms

## KLH MODEL 21 AUDIO AMPLIFIER BOARD



## M-21 POWER SUPPLY



F1 = 1/4 AMP SLOW BLOW FUSE.

S1 = OFF-ON (VOLUME).

C1 = 2000  $\mu$ F / 30 VOLT.

C2 = .005  $\mu$ F / 1400 VOLT (U.L.).

D1 & D2 = 1N2859.

T1 = KLH PART NO. E01093.



12

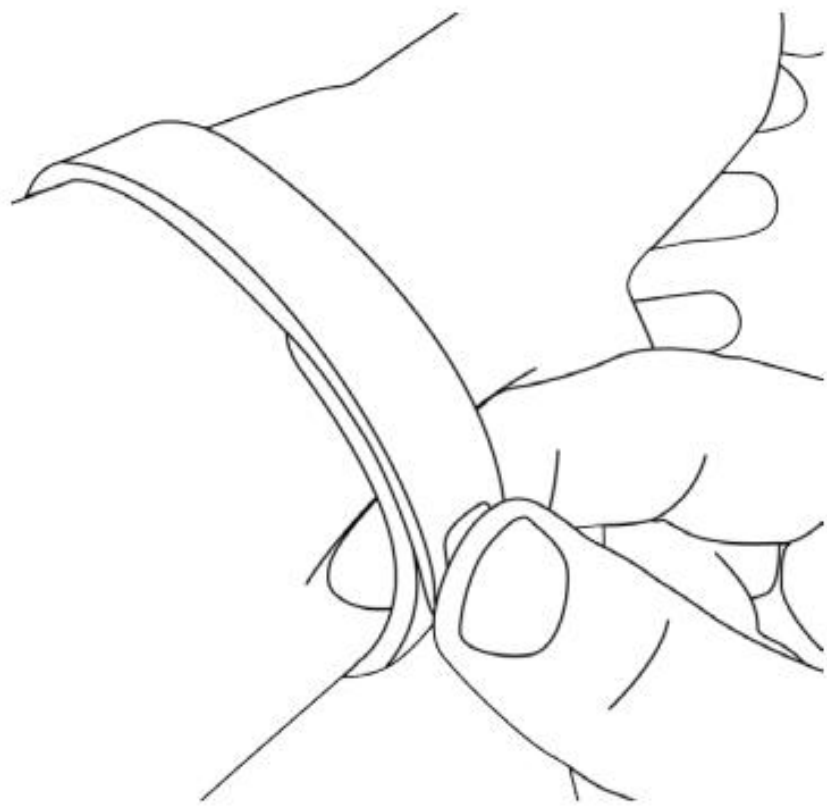
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fitbit









Exclusive

# Nikon Is Killing Its Authorized Repair Program

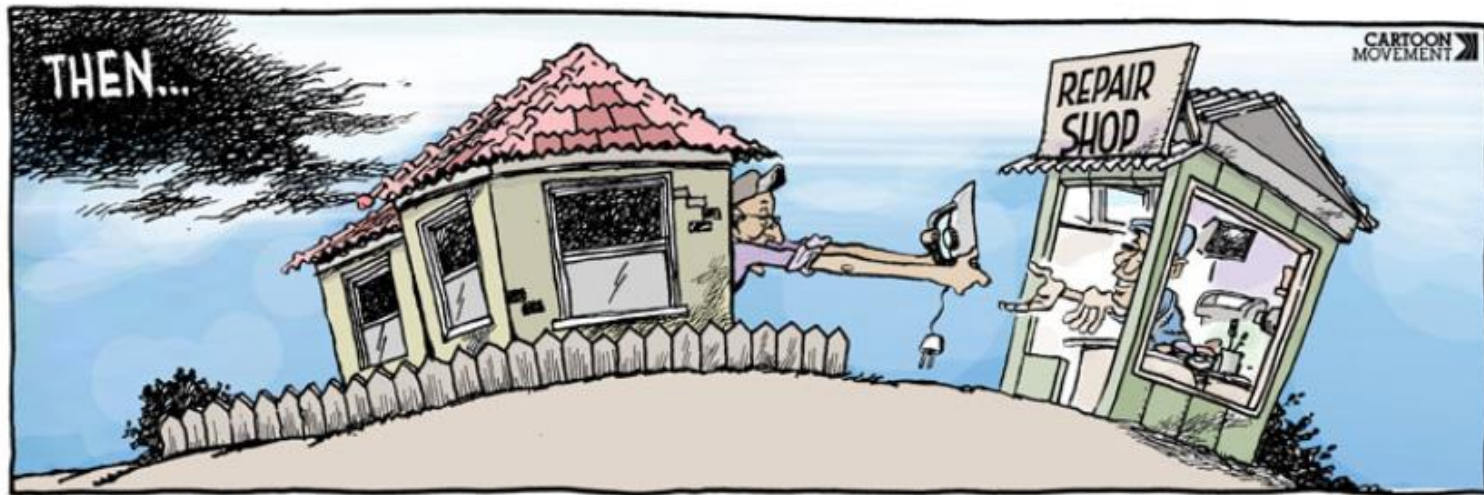


Article by:  
Kevin Purdy  
[@kpifixit](#)

December 9, 2019  
Filed under: Exclusive  
38 Comments

Share

Nikon is ending its authorized repair program in early 2020, likely leaving more than a dozen repair shops without access to official parts and tools, and cutting the number of places you can get your camera fixed with official parts from more than a dozen independent shops to two facilities at the ends of the U.S.



# Model Legislation

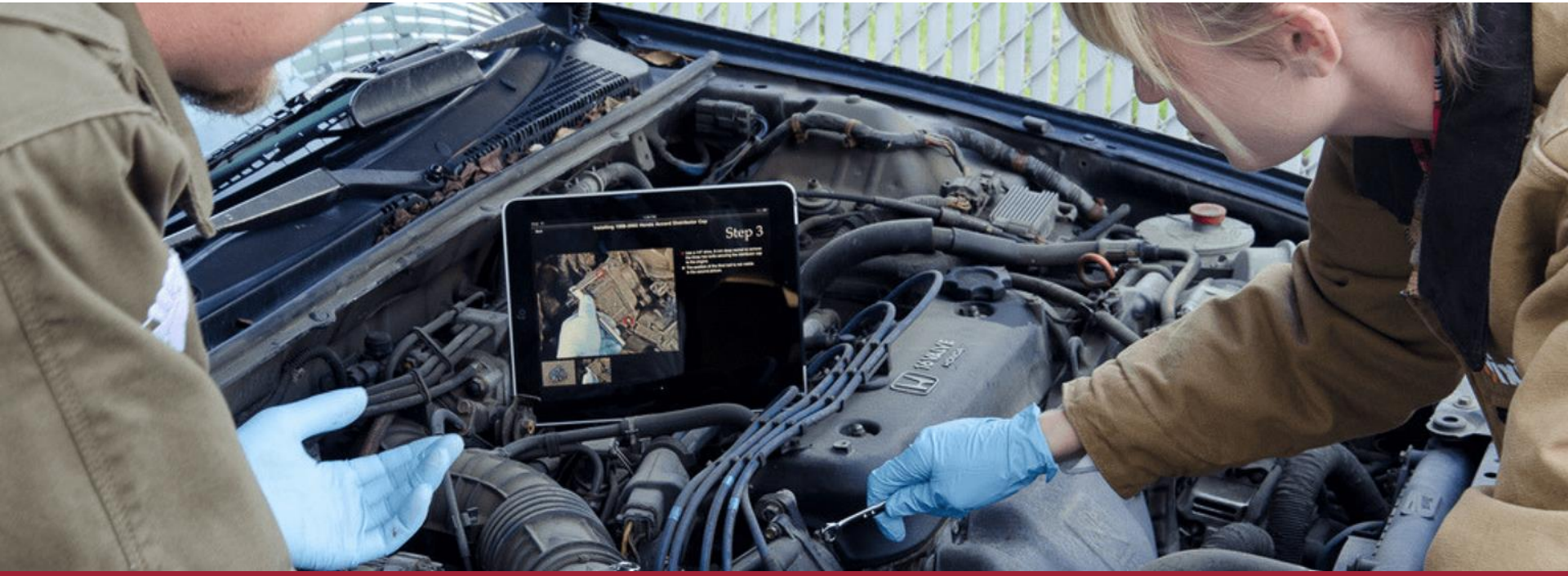
Require original equipment manufacturers (OEMs) to provide access to whatever materials are providers to their own “authorized” repair services. Namely:

- Parts: Whatever parts the manufacturers makes available to authorized providers
- Repair Tools: Including software tools needed to diagnose, calibrate or reset equipment post-repair
- Repair Documentation: Such as repair manuals, schematics, diagrams, etc.

On “fair and reasonable” terms.

# Based on principles of automobile Right to Repair

- In MA, Voters (86% to 14%) voted to approve automotive Right to Repair, Legislature also passed bill
- Parties reached national agreement for industry in 2014







# Colorado set to become first state with right-to-repair wheelchair law

Repairing powered wheelchairs can be a long and costly process. But a new bill would require manufacturers to make it easier for owners and independent repairers to make fixes.



**Margaret Fleming** 4:05 AM MDT on May 10, 2022



Julie Jennings testified last month in support of House Bill 1031, which would require electric wheelchair manufacturers to make parts, software, firmware, tools and repair documentation available to their owners. (Olivia Sun, The Colorado Sun via Report for America)



**On July 9, the president signed a sweeping executive order “promoting competition in the American economy,” which makes Right to Repair an official executive policy.**

## 2 YEARS OF FTC INVESTIGATIONS

Since 2019, the FTC has been investigating Right to Repair. In July of 2019, the Commission hosted a workshop which featured testimony and evidence from proponents and detractors of Right to Repair.

Speaking on panels were state lawmakers, Repair.org, iFixit, SecuRepairs and U.S. PIRG, as well as supportive business owners. Speaking against Right to Repair were all the same opposition groups which oppose state laws. The result was a report, “Nixing the Fix.”



*Panel at FTC's workshop featuring (from left) a Vermont repair shop owner, CPSC expert and your truly.*

- All four commissioners unanimously supported the report;
- Found manufacturers could not justify their restrictions against repair, either offering “scant evidence” or no evidence;
- Included a statement that “the Commission notes that it stands ready to work with lawmakers” to protect repair

## Nixing the Fix: An FTC Report to Congress on Repair Restrictions



FEDERAL TRADE  
COMMISSION

May 2021

## FTC ISSUES NEW POLICY STATEMENT

A pledge to “devote more enforcement resources to combat” any “unlawful repair restrictions.”

A plan to investigate repair restrictions as violations of antitrust and consumer protection laws that would be targets for enforcement.

Also, “the Commission will consider filing suit against violators” of warranty law meant to protect consumers and repair competition.



*“The F.T.C. has a range of tools it can use to root out unlawful repair restrictions, and today’s policy statement would commit us to move forward on this issue with new vigor.”*

LINA KHAN, FTC CHAIRWOMAN

# Apple, Google, Samsung, Microsoft all adjust

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## Bowing to investors, Microsoft will make its devices easier to fix

In a first-of-its-kind agreement, the company has committed to increasing access to spare parts and repair documents.



## APPLE SELF SERVICE REPAIR

- Service information available to users for the first time in decades.
- Will sell parts directly to consumers, as well as service tools.
- Beginning with newer devices, adding more over time.
- Parts are pre-paired with device, can't stock spare parts or use in any other device.

### The shareholder fight that forced Apple's hand on repair rights

*'The timing is definitely no coincidence,' says shareholder group*

By Maddie Stone | Nov 17, 2021, 1:27pm EST



SHARE





# Warranty issues

- Companies threaten to void warranties for independent repair, even if it generally illegal to do so.
- In 2018, the FTC warned 6 companies their “Warranty Void if Seal is Broken” stickers broke federal law
- As manufacturing costs dropped, companies started replacing most if not all warranty requests
- Shorter warranties, more loopholes, less enforcement

- In 2018, we found 45 of 50 appliance companies would void warranties in the case of independent repair.
- We resurveyed those 45 companies in 2020. 43 remained unchanged, and the other 2 did not return requests for information.
- The FTC is requesting people submit fraud reports if they experience a manufacturer denying a warranty claim for these reasons.



## **WARRANTIES IN THE VOID II**

An Updated Survey Of Warranties From 43 Companies  
Finding All Tell Customers They Void Warranties For  
Independent Repair

**U.S. PIRG** | Education  
Fund

# Unique Approach in California

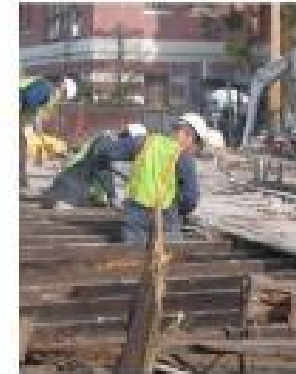
Senate Bill 983 amends the states leading Song-Beverly Consumer Warranty law to require the manufacturer of a warrantied consumer product “to make available, on fair and reasonable terms, sufficient service literature, at no charge, and prescribed functional parts and tools, including documentation, tools, software and parts needed to disable the lock or function during the course of the diagnosis, maintenance, or repair of a product, to owners of the product, service and repair facilities, and service dealers.”

# EPA Resiliency and Natural Disaster Debris Workshops

- EPA Headquarters, Region 5 and Region 9
- Spring/Summer 2021 Interactive Virtual Workshops
- Closing Executive Session with **EPA Deputy Assistant Administrator Carlton Waterhouse**
- **Over 100 experts participated**

**U.S. EPA Resiliency and Natural Disaster Debris Report**

<https://www.epa.gov/homeland-security-waste/resiliency-and-natural-disaster-debris-workshops>



Resiliency and Natural  
Disaster Debris  
Workshop  
Final Summary Report



**EPA**  
United States  
Environmental Protection  
Agency

December 2021

EPA 530-R-22-001

**Many thanks to our  
Workshop expert  
presenters and  
participants,  
including BADWG  
members**

**Federal Agencies:** FEMA, HUD, NOAA, GSA, USDA, Naval Facilities Engineering Systems Command Southwest, National Renewable Energy Lab (NREL), U.S. Army Corps of Engineers, Presidio Trust, EPA–Office of Environmental Justice, Office of Research and Development and Pacific Islands Office

**Tribal Governments:** Mille Lacs Band of Ojibwe, Saginaw Chippewa Indian Tribe, Red Cliff Band of Superior Chippewa, Sault Ste. Marie Tribe of Chippewa Indians

**State Agencies:** Arizona Department of Emergency and Military Affairs, Arizona Department of Environmental Quality, CalEPA, CalRecycle, California Coastal Commission, California Department of Toxic Substances Control, Hawaii Emergency, Minnesota Pollution Control Agency, Nevada Tribal Emergency Coordinating Council, Ohio EPA, Wisconsin Department of Natural Resources

**Local Governments:** Calumet County, WI; Chippewa County, WI; County of Alameda, CA; County of San Mateo, CA; Kenosha County Sheriff's Division of Emergency Management, WI; Indianapolis, IN; Los Angeles County Public Works, CA; San Francisco Department of the Environment, CA; San Antonio, TX; San Francisco Department of Emergency Management, CA; StopWaste, CA; Portland, OR; Saint Paul, MN; Toledo, OH; Waushara County, WI

**Nongovernmental Organizations/Businesses:** American Red Cross, Los Angeles Region; Bay Area Deconstruction Workgroup; California Resiliency Alliance; Climate Xchange; Development Center for Appropriate Technology; Enterprise Community Partners, Inc.; Green Advantage, Inc.; GreenLynx; Illinois State Water Survey; International Code Council; Journey Disaster Response Team; Material Reuse; National Institute of Building Sciences; Pacific Institute for Climate Solutions; Resilient Design Institute; Resource Recycling Systems; Reuse Alliance; ReUse Hawai'i; San Francisco Federal Executive Board; Resilient Design Institute; Virtual Plant Technologies, LLC; Zanker Recycling

**Academic Institutions:** Colorado State University, Middlebury Institute on International Studies, Rice University, University of Louisiana at Lafayette

# Region 9 Workshop Focus

- **Climate Crisis**
  - **Sea Level Rise & More Frequent Disasters**
  - **Highest and Best Use of Materials**
- **Equity/Environmental Justice**



EPA Non-Hazardous Materials and Waste Management Hierarchy  
<https://www.epa.gov/smm/sustainable-materials-management-non-hazardous-materials-and-waste-management-hierarchy>

“The report published today has important implications for our Pacific Southwest region, especially for communities in coastal areas in California and Hawaii and the Pacific Islands,” said **EPA Pacific Southwest Regional Administrator Martha Guzman**.  
“**Planning now to reduce disaster debris through resilient design, reuse, recycling, and composting can better protect vulnerable communities, support equitable disaster recovery and reduce greenhouse gas emissions.**”

# Environmental Justice Impacts

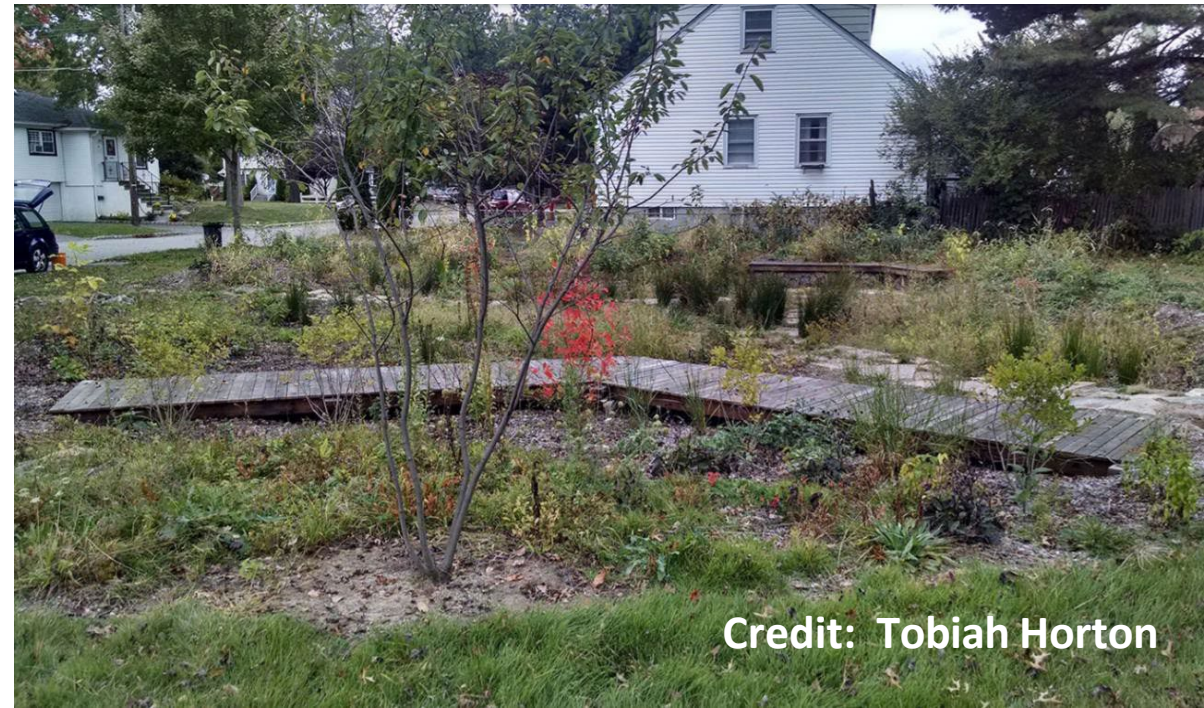
- **Prevent dumping on disadvantaged communities**
  - Temporary and permanent disaster debris landfills
  - Illegal dumping is common after disasters
  - Associated truck traffic
- **Sea Level Rise community impacts**
- **Reduce the spread of toxics in the community from demolition dust (lead, hidden asbestos)**
- **Opportunities to provide meaningful, local recovery jobs & job training**
- **Low-cost rebuilding materials**



Credit: Dr. Juliano Calil

# Hurricane Irma Resilient Floodplain Park

- Rutgers University student project
- Flooded home vacant for 6 years
- **Nature-Based Solution**
  - Pocket park
  - **Site graded to reduce future flooding**
- Reused
  - On-site: concrete, walkway, bench
  - Sold additional materials
- Native plants



Credit: Tobiah Horton



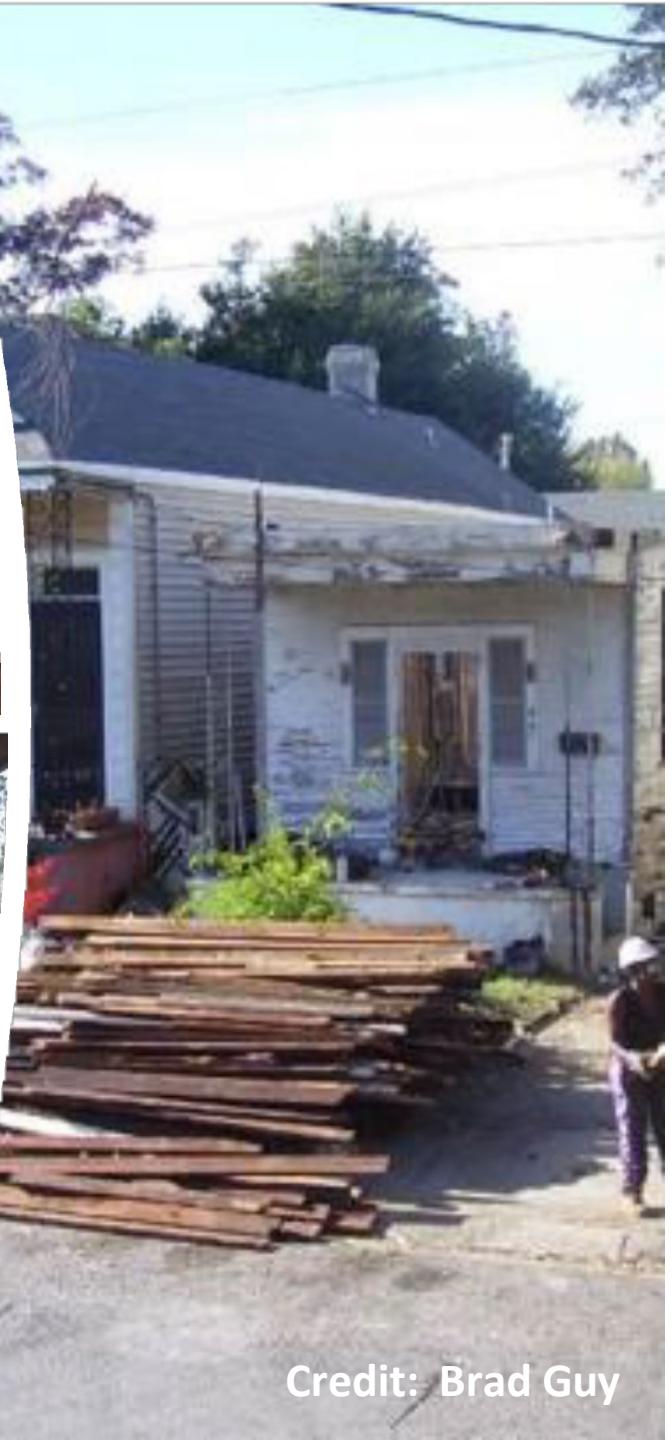
# Hurricane Katrina Nonprofit Deconstruction Projects

- Provided low-cost, local rebuilding material to repair and rebuild
- Disaster recovery sheds (everything reclaimed except metal roofs)
- 4 home study: Reused 44 tons of materials, including 32,342 board feet of lumber
- **Supported recovery of people impacted by the disaster through deconstruction job training**

EPA Recorded Webinar:

After Disaster - Deconstruction, Rebuilding and Resilience Lessons from Hurricanes Katrina and Irene  
<https://www.epa.gov/smm/sustainable-materials-management-smm-web-academy-webinar-after-disaster-deconstruction>

Hazel Denhart, Deconstructing disaster: Economic and environmental impacts of deconstruction in post-Katrina New Orleans  
<https://www.sciencedirect.com/science/article/abs/pii/S0921344909001712>



Credit: Brad Guy

Pacifica, CA  
2021

# Climate Crisis: Sea Level Rise

- **Potential to reuse buildings & building materials locally to rebuild inland**
  - *Buildings often not damaged*
  - Requires planning and reuse infrastructure
  - Communities with deconstruction and reuse policies are more prepared for disasters
- **Current policy > “Buyout” reimbursement**
  - CURRENT DEFAULT: Demolition and disposal (no reimbursement option for deconstruction, recycling or composting)
  - Rarely - moving or raising buildings
- **Virtual Reality can change community decision-making**



# New HUD Section 8 Affordable Housing Built from Reclaimed Lumber

- **Florida Floodplain Buyout** –  
undamaged 1970's home
- Efficient, mechanized deconstruction
- **Current building code allows reuse**  
alternative materials and methods
- OR & WA codes explicitly allow use of  
undamaged reclaimed lumber for  
structural purposes



Credit: Brad Guy



**Federal Center South, U.S. Army Corps,  
Seattle District HQ**

**Reused nearly 300,000 board feet of lumber from adjacent warehouse**

**Carbon Leadership  
Forum Recorded  
Webinar:**

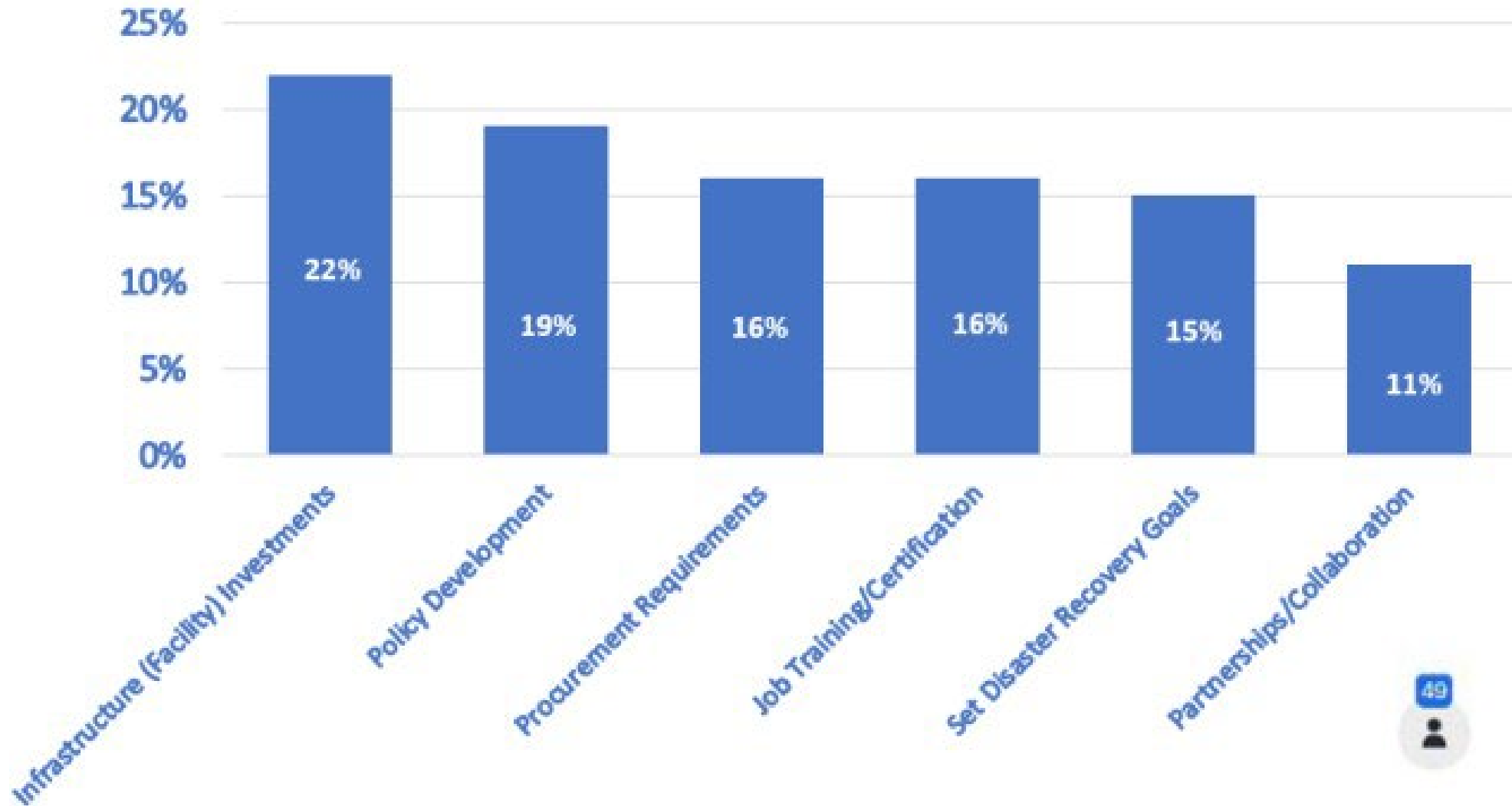
<https://www.youtube.com/watch?v=1PvOZc5x1vw&list=PLDbGF6y67Tj1h2m5RBAFzeltppRPJtVxO>

**Project Report:**

[https://www.gsa.gov/cdnstatic/GSA\\_FCS\\_Press\\_Book\\_email.pdf](https://www.gsa.gov/cdnstatic/GSA_FCS_Press_Book_email.pdf)

# How should the federal government advance deconstruction and safe reuse in resilient disaster planning and actions?

(Vote for up to three)



# Recommendations



## Federal leadership needed to tackle Climate Crisis debris impacts

- **Target funding/resources where need is greatest** (EJ, 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**

# **Next Steps: Build on Workshop Recommendations *Together***



## **EPA Resiliency and Natural Disaster Debris Follow-Up Meeting *Inviting Your Ideas and Suggestions***

**Tuesday, May 24<sup>th</sup> (10:00 -11:30 am Pacific Time)**

**Register: <https://usepa.zoomgov.com/meeting/register/vJIsceqhrj4qHn8HwI16YIIfmSisCEkwNHw>**

## **New EPA Guidance Documents under development**

**Contacts: Timonie Hood & Richie Donahou, EPA Region 9; Dolly Tong & Susan Vescovi, EPA Region 5;  
Melissa Kaps, EPA Headquarters**