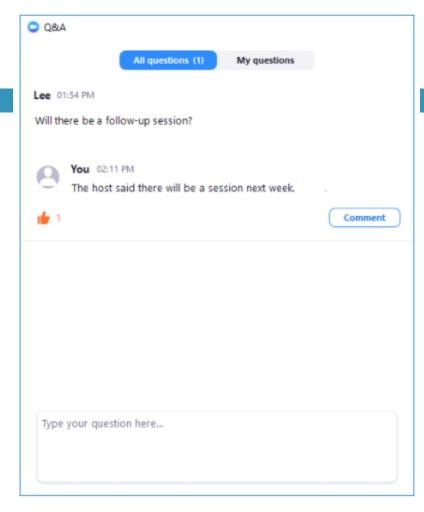


September 30, 2021

Right to Repair Movement and Accessibility

Zoom information

- Type questions into the Q&A box in the bottom dashboard.
- Please feel free to ask questions throughout the presentation.
- Please contact <u>Morgan.Collins@erg.com</u> if you are having technical issues with the webinar.







West Coast Climate and Materials Management Forum

A collaboration of state, local, and tribal governments with the mission to:

- Develop ways to institutionalize sustainable materials management practices.
- Develop tools to help jurisdictions reduce the greenhouse gos emissions associated with materials



Check out the Forum's Resources

- Original Report Connecting Materials/Climate
- Research Summaries
- <u>Turn-key Materials Management Presentation</u>
- Climate Action Toolkit
- Climate-Friendly Purchasing Toolkit
- Food: Too Good to Waste Toolkit
- Webinar Series

www.westcoastclimateforum.com



West Coast Climate Forum Webinar Series Disclaimer

This webinar is being provided as part of the West Coast Climate and Materials Management Forum Webinar Series. The Forum is a collaboration of state, local, and tribal governments. We invite guest speakers to share their views on climate change topics to get participants thinking and talking about new strategies for achieving our environmental goals. Mention of trade names or commercial products does not constitute endorsement or recommendation for use.

Please note the opinions, ideas, or data presented by speakers in this series do not represent West Coast Climate and Materials

Management Forum members policy or constitute endorsement by the forum.

www.westcoastclimateforum.com



Right to Repair and Accessibility: Introduction

Initial context

Addressing multiple barriers

Role of manufacturers

Lower greenhouse gas emissions

Intentionality

Equity





Let's Fix the World

iFixit's mission is to enable everyone to repair every thing they own.

We are an online community of people sharing repair know-how.

iFixit makes it:

Easy for anyone to share repair knowledge

Simple for people to fix their devices

iFixit Member Survey



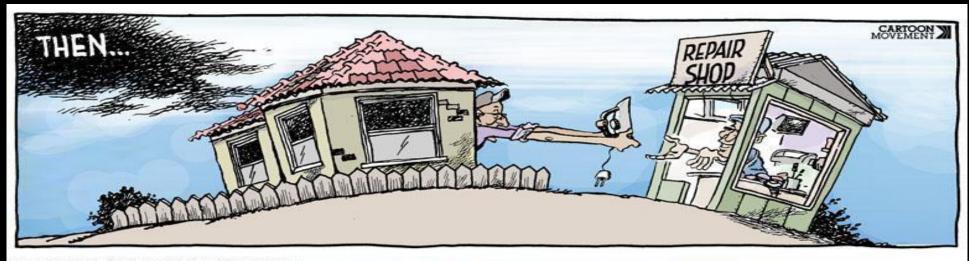
Told us that iFixit has enabled them to perform repairs they wouldn't have done otherwise.



say that a successful repair makes you more likely to buy another product from that manufacturer.



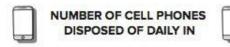
Average number of things people have fixed using iFixit.











CALIFORNIA

E-waste is a huge problem. We're making more gadgets than ever before, and manufacturers are blocking people from repairing them to extend their life.

We could fix this with a bill in California this year! Write or call your representative and tell them you support HB1163.

Support your Right to Repair!

california.repair.org Bill: HB1163 #RightToRepair





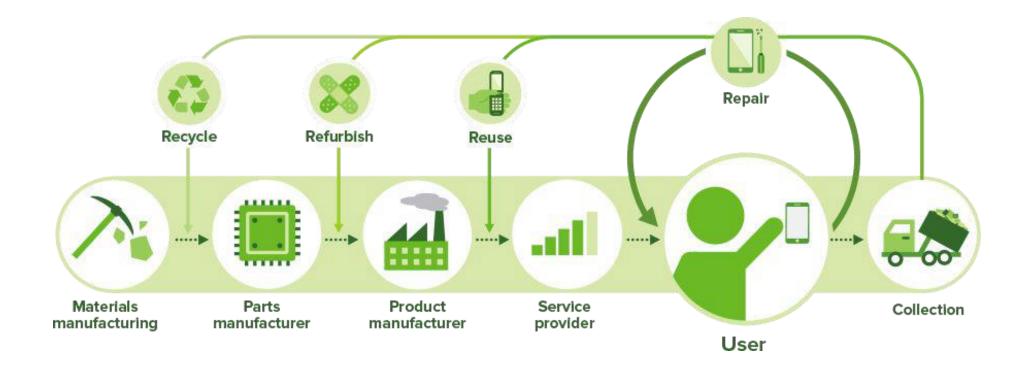
Landfilling creates < 1 job



Recycling creates 15 jobs



Repair creates 200 jobs



>50%		>2	>25%-50%			<25%													
1 H																	2 He		
3 Li	4 Be											5 B	6 C	7 N	8 O	9 F	10 Ne		
11 Na	12 Mg											13 Al	14 Si	15 P	16 S	17 CI	18 A r		
19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 B r	36 Kr		
37 Rb	38 Sr	39 Y	40 Zr	41 N b	42 Mo	43 Tc	Ru	45 Rh	46 Pd	47 Ag	48 Cd	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe		
55 Cs	56 Ba	-	72 Hf	73 Ta	74 W	75 Re	76 Os	77 I r	78 Pt	79 Au	80 Hg	81 TI	82 Pb	83 Bi	84 Po	85 At	86 Rn		
87 Fr	88 Ra		104 Rf	105 Db	106 Sg	107 Bh	108 Hs	109 M t	110 Ds	111 Rg	112 Uub	113 Uut	114 Uug	115 Uup	116 Uuh	117 Uus	118 Uuo		
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	*Lanthanides		57 La	58 Ce	59 Pr	60 Nd	61 Pm	62 Sm	63 Eu	64 Gd	65 Tb	66 Dy	67 Ho	68 Er	69 Tm	70 Yb	71 Lu		
	**Actinides		89 Ac	90 Th	91 Pa	92 U	93 Np	94 Pu	95 Am	96 Cm	97 Bk	98 Cf	99 Es	100 Fm	101 M d	102 No	103 Lr		

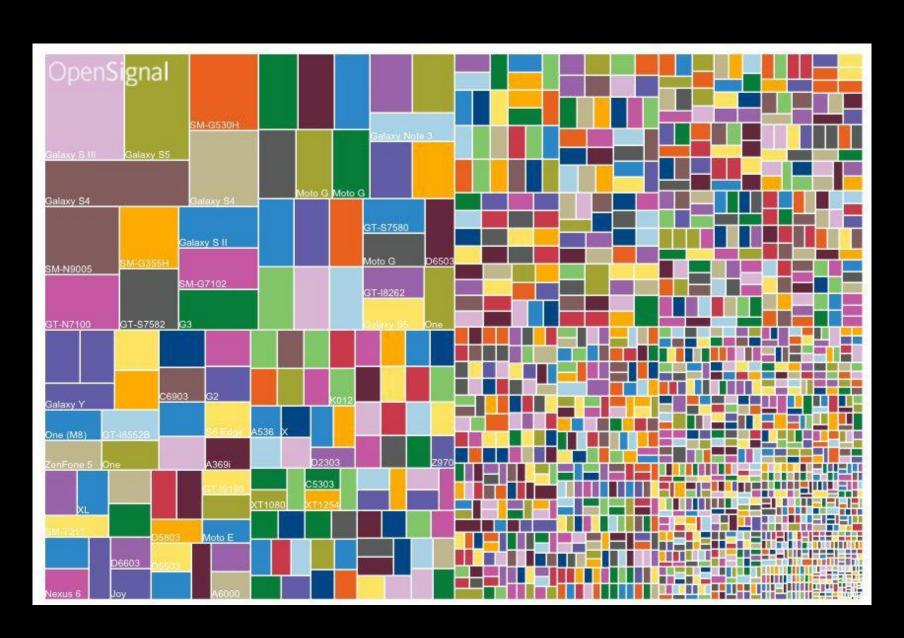


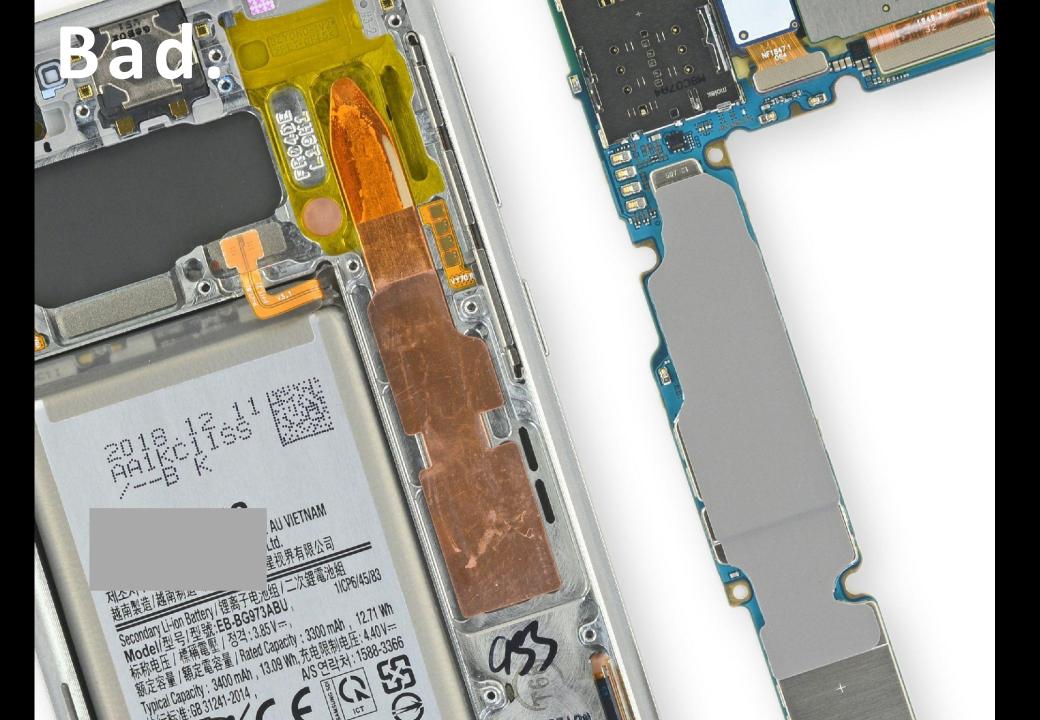


	XR	13.54%			
	7	11.61%			
-	8	11.4%			
	X	10.68%			
	8 Plus	9.26%			
	7 Plus	6.8%			
	6S	6.8%			
	XS Max	6.65%			
	XS	5.63%			
-	11	4.28%			
100	6	3.97%			
	11 Pro Max	3.25%			
	6S Plus	2.62%			
	11 Pro	2.49%			
曹	6 Plus	1.02%			

Source: Localytics December 2019

Smartphone Fragmentation





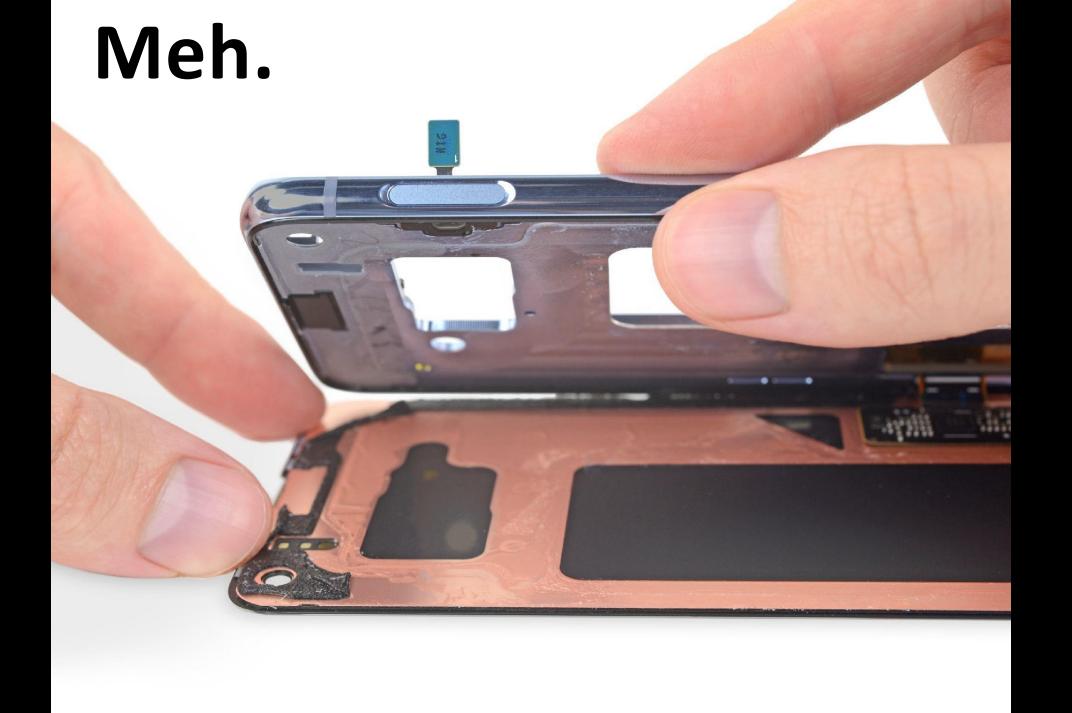


Good.





Bad.



Good.







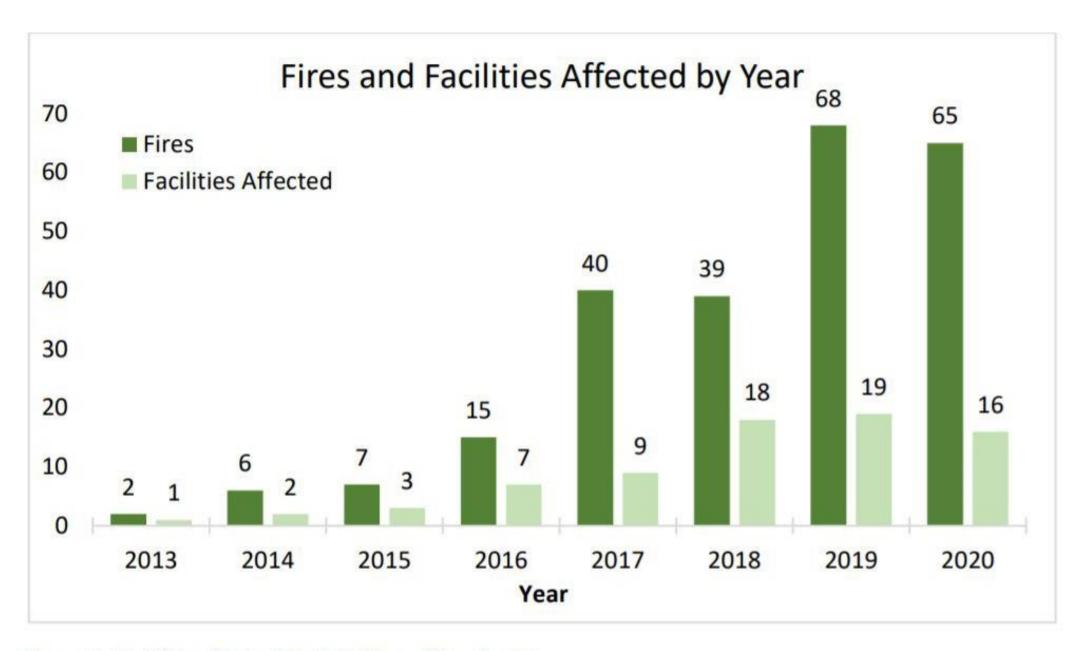
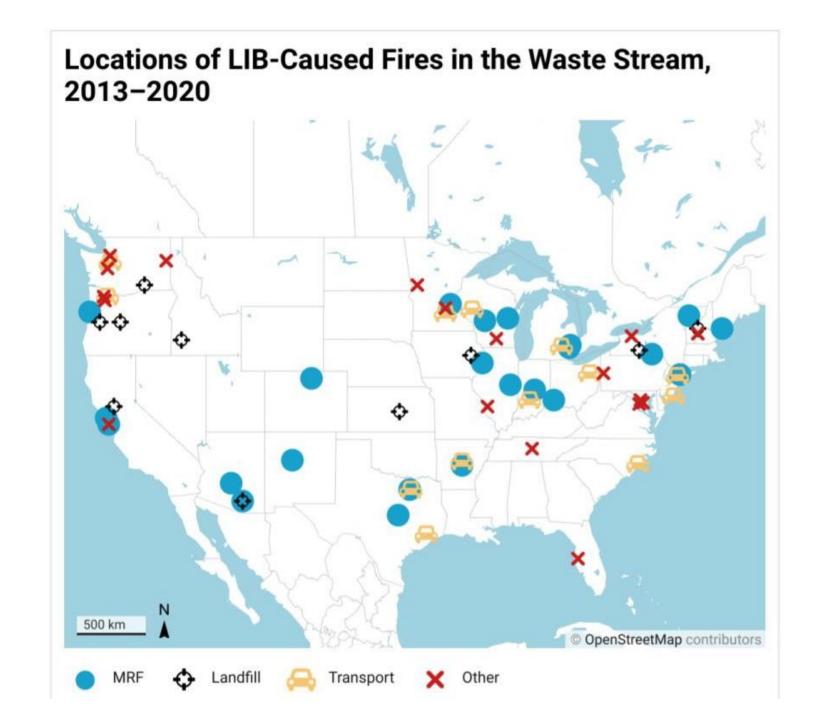


Figure 5: Facilities affected and number of fires by year



NEWS

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Electric goods 'should have repairability rating'

By Justin Parkinson Political reporter, BBC News

3 days ago



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Consumers Want Fixable Tech

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- 80% of >50 y/o, but only 52% of 18-25 y/o have heard about it.
- 86% say that the index impacts their purchasing behaviour.
- 80% would even give up their favorite brand for a more repairable product.





Right to Repair is a Growing Movement







88% of Voters

in Massachusetts overrode the car companies and passed the automobile owners' Right to Repair law in November, 2012.

114,322 Americans

signed a petition to legalize cell phone unlocking. The White House supports cell phone unlocking—but your voice is still needed to convince Congress.

600,000 People

have joined iFixit to teach each other how to repair their own stuff, and thousands more are pitching in every day.

The New York Times

OPINION

It's Your Phone. Why Can't You Fix It Yourself?

When the tools of modern life stop working, people should be able to shop for the best price on repairs.

April 6, 2019



Grace Heejung Kim

By The Editorial Board

The editorial board represents the opinions of the board, its editor and the publisher. It is separate from the newsroom and the Op-Ed section.

A giant tractor and a pocket-size Phone have something important in common: The cost of repairing either one is too high.

The two companies, and many of their peers, use a variety of aggressive tactics, including electronic locks and restrictive warranties, to push customers with broken equipment to seek help from their authorized repair facilities — or to give up and buy a replacement.

Home World U.S. Politics Economy Business Tech Markets Opinion Life & Arts Real E

It Shouldn't Cost the Farm to Fix a Tractor

New ones require software that only authorized dealers are allowed to use.

By Kevin O'Reilly March 23, 2021 6:17 pm ET





MOST POPULA

Melinda Ga Divorce La 2019

376

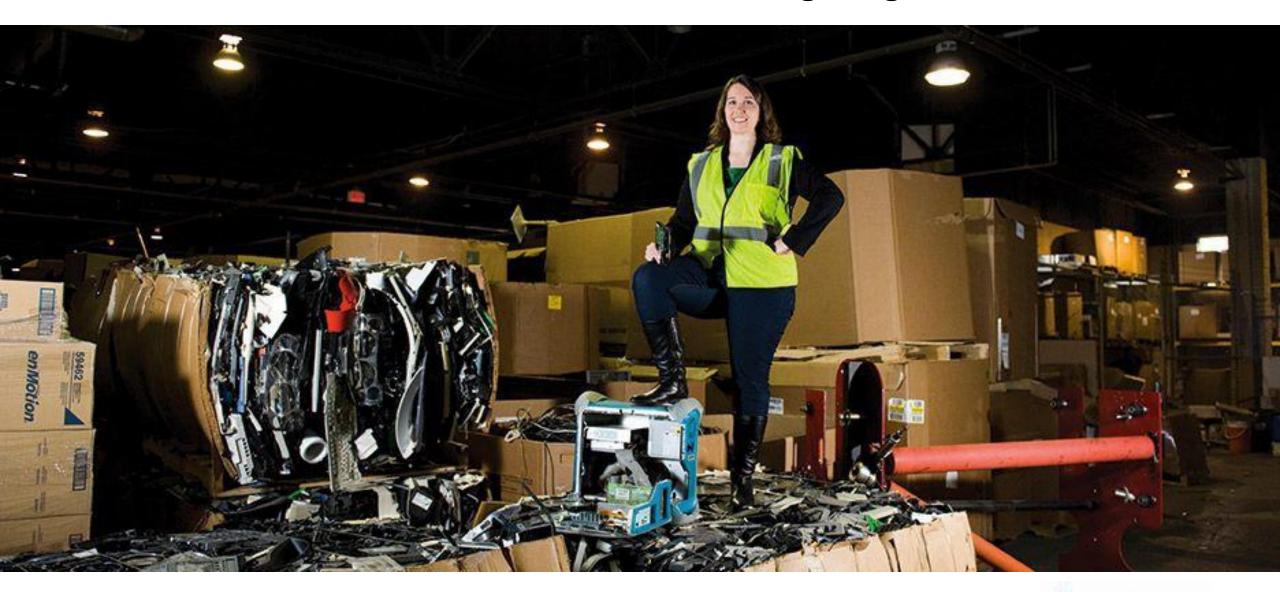
- 2. Catholic So Losing Stu Record Rat
- Breakout C Energize U Economic l
- 4. The Mortg Fading
- 5. Consumers Pinch as Pr

MOST POPULA

O) repair.org



Minnesota: Amanda Lagrange



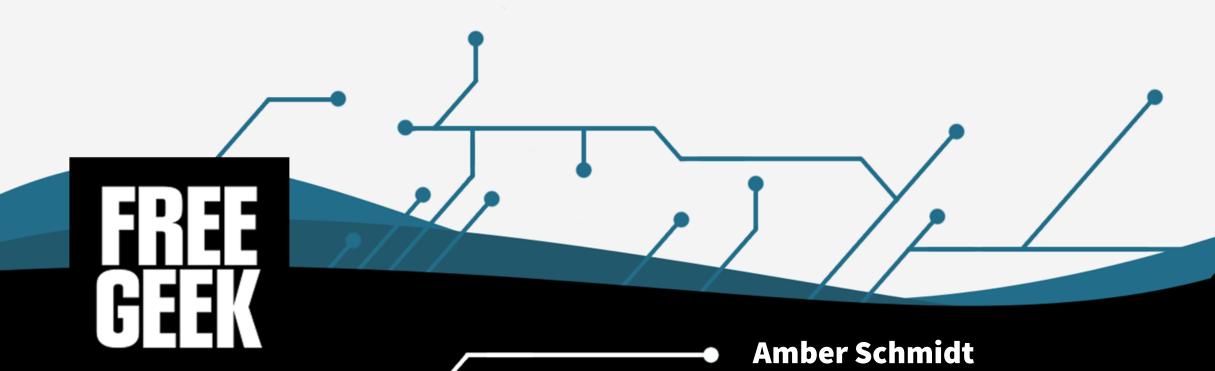


O) repair.org



Kevin Purdy kevin@ifixit.com

Sustainable Technology Reuse



Free Geek - Who are we?

Founded on Earth Day 2000

We divert technology that would otherwise be recycled or thrown away, refurbish and repair it, and give it back to the community at low or no cost!





Mission

Free Geek's mission is to sustainably reuse technology, enable digital access, and provide education to create a community that empowers people to realize their potential.

Impact:

2020

- 5945 laptops, desktops, tablets, and phones refurbished
- 795 computers given (free!) back to community members through one of our programs

2021 (so far...)

- 4578 laptops, desktops, tablets and phones refurbished
- 982 computers given (free!)
 back to community members
 through one of our programs

Digital Inclusion

Digital inclusion ensures that individuals have **access** to, and **skills** to use technology in a way that allows them to participate in today's digital society.



Welcome to Computers

Established in 2016, WtC is a 5-week culturally-specific digital literacy curriculum. Operating in cohorts of 10 people, primarily elderly and immigrant populations who have little to no experience with computers. Classes are offered in English, Spanish, Karen, Somali and Russian.

As of May 2019, we provided 250 individuals education and computers through this program. 86% of participants are women, 87% are people of color, 88% have a household income below \$30,000 per year, and 70% of participants speak a language other than English.





Hardware Grants

Our Hardware Grants program provides qualifying organizations with refurbished tech either for their own infrastructure or for pass-through grants to community member they serve.

- 36.2% Education
- 21.6% Human Services
- 13.6% Community Development
- 9% Arts & Culture
- 5.5% Health

- Black Resilience Fund Mutual Aid
- Roosevelt High School and Mount Hood Community College
- Rehabilitation & Athletic Performance Intersecting Disability
- Native American Youth and Family Center
- HAKI Community Organization
- Unite Oregon/Center for Intercultural Organizing
- Fossil Public Library
- Corvallis Environmental Center 182 computers





Plug into Portland

Plug into Portland was founded in 2014 as a partnership between Portland Public Schools and expanded in 2017 to include other Metro-area school districts, including Vancouver, WA. This program serves specifically K-12 students in these areas.

- 3rd, 6th, and 9th grades are most impacted
- 96% of students have access to the internet, not all have access to technology to use it.
- 64.7% report household income less than \$30,000/year
- 18.7% report household income between \$30,000-\$50,000
- 40.5% White
- 29.1% Black/African American
- 17.3% Hispanic or Latinx
- 8.1% Asian
- Participants speak 28 languages collectively



In 2020 we provided 275 free refurbished computers to students in our community - complete with a full year of free Tech Support



Affordable Tech Program

In March of 2020, we began partnering with organizations looking to fill technology needs at an affordable price.

- 793 machines were provided to partners through this program in 2020
- 458 machines have been provided so far in 2021

- Partnerships included:
 - Portland State
 - Oregon EmploymentDepartment
 - Chicktech

 496 of those machines went specifically to SNAP Program Participants





Reuse & Repair Demand & Challenges

Demand

2016-2017: 98% increase in machines sold

and disbursed

2018-2019: 56% increase in machines sold

and disbursed

Just our Plug into Portland program saw a

58% increase from 2019-2020

COVID times: We currently have over 500 individuals and organizations asking us for 1 or more computer for **just one** of our programs - We do not have the repairable stock to fill those requests.

We expect this type of increase in demand to continue beyond COVID, especially with the rapidly changing landscape of technology and learning.

Challenges

- Consumer grade machines are typically difficult to refurbish
- Lack of ability to find/purchase parts to repair devices
- Cost to refurbish and repair
- Adhesive
- Some devices are simply manufactured to be unrepairable/un-reusable

What makes a device unrepairable?

- FaceID/biometric security/Home button calibration
 - Specialized tools/technology to reset the device
- Adhesive/Glue
- T2 chips and Activation Locks
- Short EOLs (Chrome devices)
- Cost (repair time, parts, re-testing)
- Integrated components (soldered onto motherboard)
- Bonus! Common parts put in silly places.



Free Geek's Role

Our interest is in making sure we can provide as many devices to folks in need as possible, prioritizing reuse and repair over alternatives.

We have testified on several occasions in both Oregon and Washington State.

68% of devices we receive we are unable to reuse.

Half of that percentage is due to lack of ability to find parts, lack of access to specialized tool, etc

We advocate for people the people we serve, for getting them access to the abundance of digital resources.

Thank you!

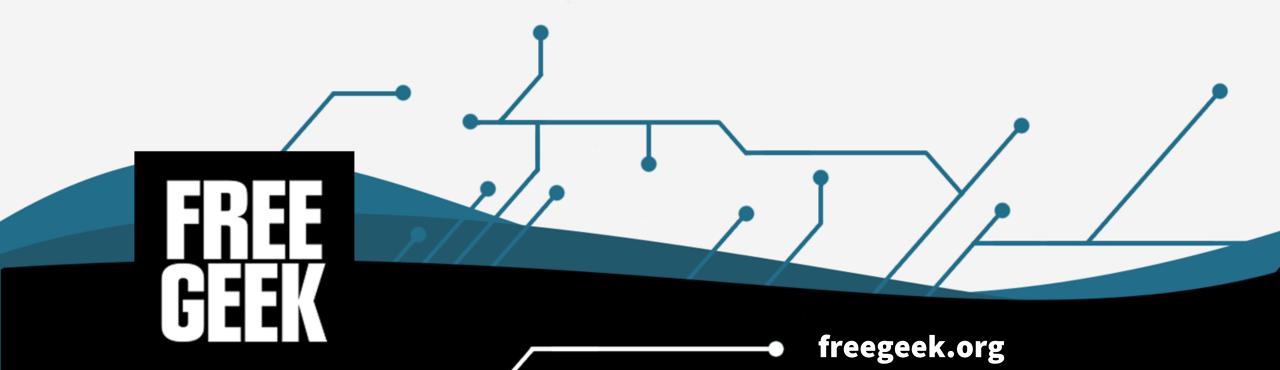
Amber Schmidt Manager of Technology Refurbishment & IT

amber.schmidt@freegeek.org

Resources:

https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/national-overview-facts-and-figures-materials

https://www.pewresearch.org/fact-tank/2021/06/22/digital-divide-persists-even-as-americans-with-lower-incomes-make-gains-in-tech-adoption/





Right to Repair = the right to:



Fix our own things or choose which service shop to use

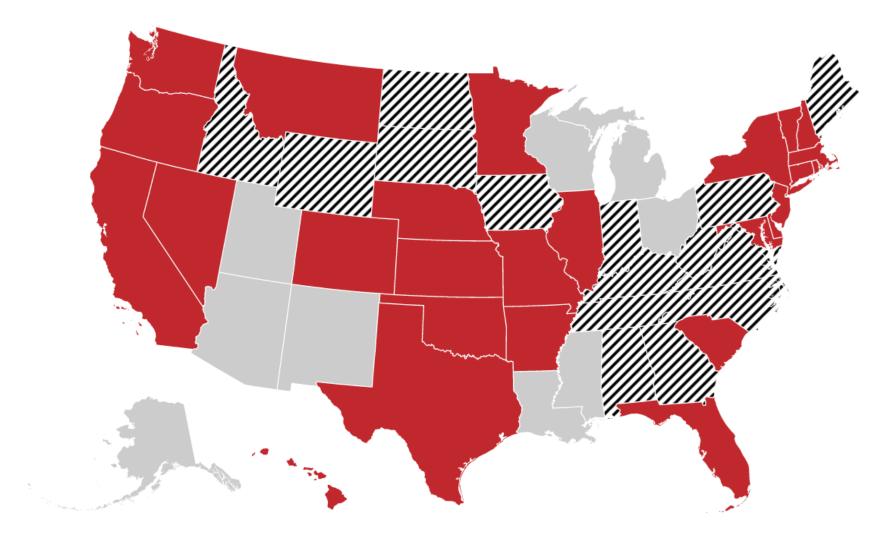


Manuals and diagnostic tools the dealers use



Unlock and jailbreak the software on our devices

- Active Right to Repair Bill 2021
- **%** Right to Repair Bill Introduced Historical
 - No Right to Repair







Massachusetts "Right to Repair" Initiative, Question 1 (2012)

The Massachusetts "Right to Repair" Initiative, also known as Question 1, was on the November 6, 2012 general election ballot in the state of Massachusetts as an initiated state statute, where it was approved. The measure, originally filed four times with the Massachusetts Attorney General, was filed by Arthur W. Kinsman, and was assigned initiative numbers 11-17 . The proposal required automobile manufacturers to provide non-proprietary diagnostic directly to consumers and also the safety information needed to repair their cars.[1][2]

According to reports, on the last day of session, a legislative compromise was confirmed. Although the compromise was enacted, Question 1 remained on the ballot. The measure became a law as well when voters approved it.[3]

Question 1



Type State statute

Origin Right to Repair

Coalition @

Topic Business

regulation

Status 🛩

Election results

BALLOTPEDIA

See also: 2012 ballot measure election results

The following are official election results:

Massachusetts Question 1		
Result	Votes	Percentage
✓ Yes	2,353,603	87.7%
No	392,562	12.3%

Results via the Massachusetts Secretary of State ...

BALLOTPEDIA

SEARCH THE ENCYCLOPEDIA OF AMERICAN POLITICS

Q

Massachusetts Question 1, "Right to Repair Law" Vehicle Data Access Requirement Initiative (2020)

Massachusetts Question 1, the "Right to Repair Law" Vehicle Data Access Requirement Initiative was on the ballot in Massachusetts as an indirect initiated state statute on November 3, 2020. It was approved.

A "yes" vote <u>supported</u> requiring manufacturers that sell vehicles with telematics systems in Massachusetts to equip them with a standardized open data platform beginning with model year 2022 that vehicle owners and independent repair facilities may access to retrieve mechanical data and run diagnostics through a mobile-based application.

A "no" vote <u>opposed</u> requiring vehicles beginning with model year 2022 to be equipped with a standardized open data platform that vehicle owners and independent repair facilities may access to retrieve mechanical data and run diagnostics through a mobile-based application, thereby maintaining that vehicle owners and independent repair facilities may access mechanical and diagnostic data through a personal computer.

Election results

Massachusetts Question 1 Result Votes Percentage ✓ Yes 2,599,182 74.97% No 867,674 25.03%

Results are officially certified.

Source &



National Right-to-Repair Bill Filed in Congress

The Fair Repair act would make it easier for everyone in America to fix their own stuff.



June 17, 2021, 8:58am Share Mare Market Assume Share

On Thursday, Congressman Joseph
Morelle (D-NY) filed national right-torepair legislation with Congress. The Fair
Repair Act would require manufacturers to
provide device owners and independent
repair stores access to the tools, parts, and
information they need to fix electronics. If
it passed, people could fix their own stuff
without having to return their stuff
without going through the people who
made it. Farmers could fix their own
tractors and we could all more easily fix
our own phones.



Thus far, the overwhelming majority of right-to-repair legislation has been introduced at the state level; national legislation would obviously make implementation easier, because it would prevent different states from having different laws about electronics that all Americans own.

Los Angeles Times

START TRIAL 10 FREE wks

Tammie Jo Shults, who calmly landed Southwest Flight 1380, broke barriers as a fighter pilot



Attention women: Your choice of blood pressure medicine may affect your risk of pancreatic...



East Bay fault is 'tect bomb,' more da Andreas, new s

BUSINESS

LA TIMES

Those stickers warning that repairs will void your warranty are nonsense, FTC says

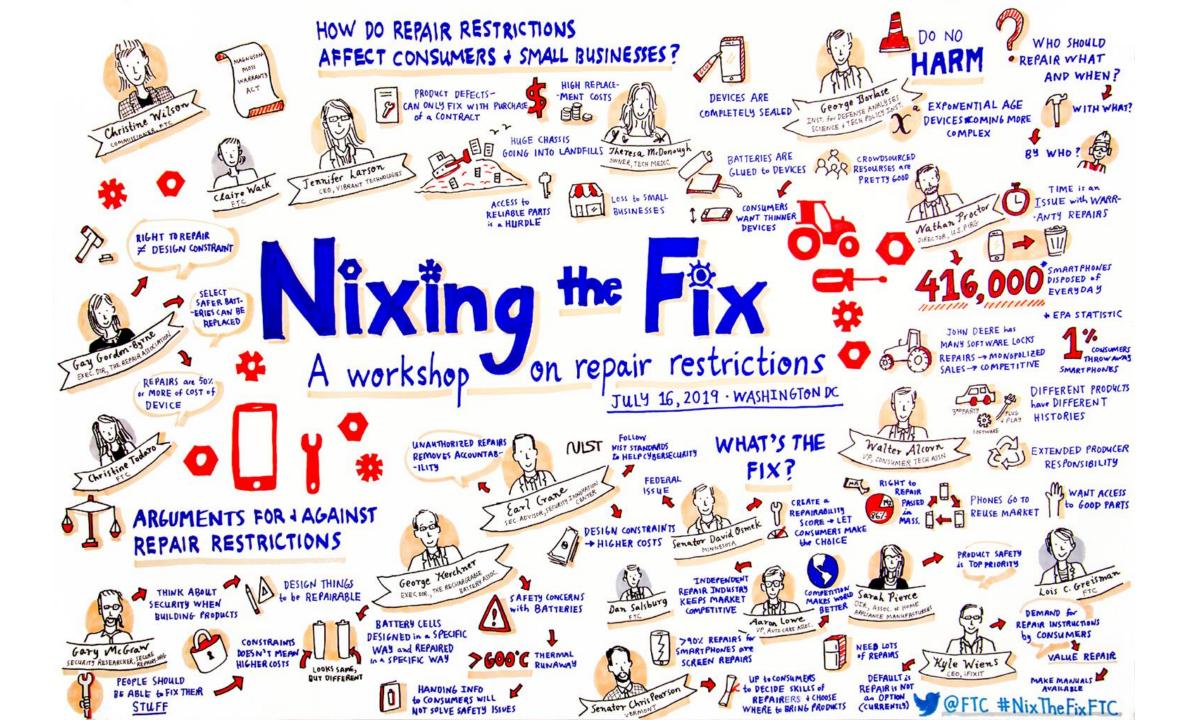


By WASHINGTON POST

APR 11. 2018 | 8:45 AM



If you're told that your warranty was voided or that it will be voided because of independent repair, we want to hear about it. Report it to the FTC at ReportFraud.ftc.gov.



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





May 6, 2021 Filed under: <u>Tech News</u> Comments

Share

C

A just-issued report by the US Federal Trade Commission confirms that anti-repair actions by large companies are hurting small businesses, undermining your ownership rights, and hurting the planet. Of course, these are the very problems that we've been fighting for the past fifteen years—but it's validating to see US government confirmation of the market imbalance.





July 21, 2021 Filed under: Right to Repair 6 Comments

Share [

3

Earlier this year, iFixit, U.S. PIRG, and the Repair Association delivered over 15,000 signatures to the Federal Trade Commission, calling on the agency to take action to protect our right to fix our devices. Today the FTC took an important step towards protecting your Right to Repair, issuing a policy statement committing the Commission to



UNITED STATES OF AMERICA Federal Trade Commission WASHINGTON, D.C. 20580

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

In 2019, the Federal Trade Commission ("Commission") called for public comment and empirical research on repair restrictions, which culminated in the Commission's "Nixing the Fix" report to Congress. The Commission is now issuing this policy statement regarding its enforcement policy with respect to repair restrictions.

Restricting consumers and businesses from choosing how they repair products can substantially increase the total cost of repairs, generate harmful electronic waste, and unnecessarily increase wait times for repairs. In contrast, providing more choice in repairs can lead to lower costs, reduce e-waste by extending the useful lifespan of products, enable more timely repairs, and provide economic opportunities for entrepreneurs and local businesses.





July 9, 2021 Filed under: Tech News 3 Comments

are 🖺

As part of a sweeping executive order to fix unfair markets, President Joe Biden today told the Federal Trade Commission to issue rules against "anticompetitive restrictions on using independent repair shops or doing DIY repairs." It's a landmark day for the Right to Repair.

Before I Can Fix This Tractor, We Have to Fix Copyright Law

BY KYLE WIENS JAN 13, 2016 * 8:57 AM



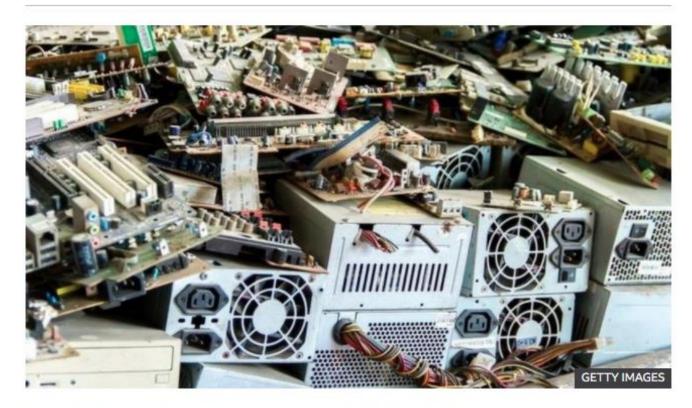
NEWS

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By Justin Parkinson Political reporter, BBC News

3 days ago



The government must look at forcing manufacturers to put "repairability" scores on electric devices, opposition parties have said.



Application field

Mandatory reparability index for all products on sale on 1 January 2021 in the following 5 categories:



All products on sale, not only new models!

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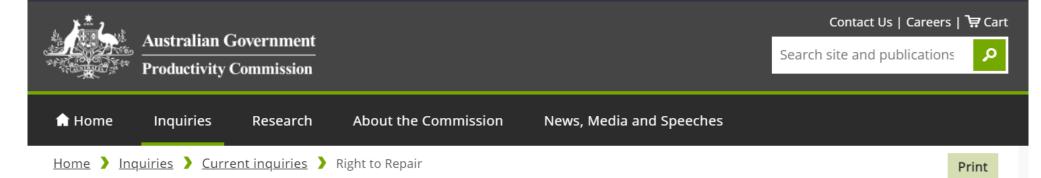




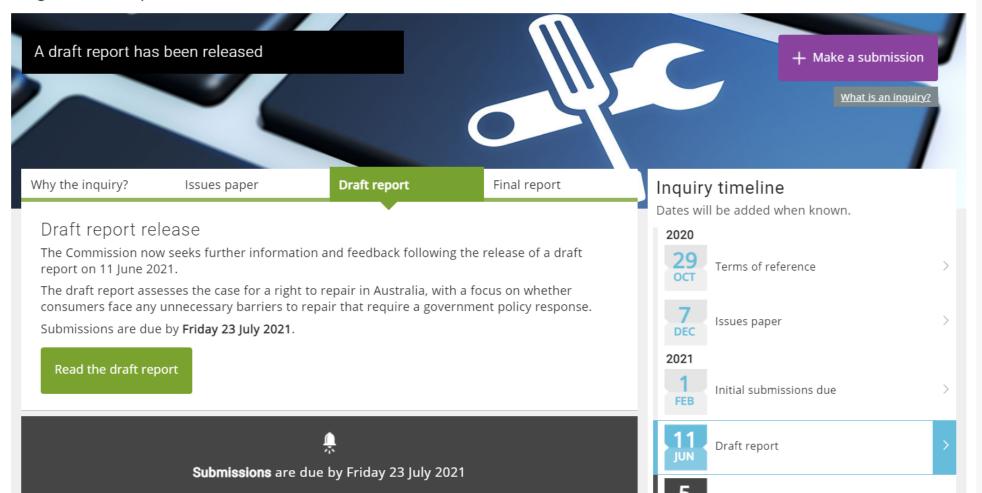
In a landmark move, the European Parliament voted today to support consumers' Right to Repair. The resolution was adopted with 395 in favour and just 94 against, with 207 abstentions.

"By adopting this report, the European Parliament sent a clear message: harmonised mandatory labelling indicating durability and tackling premature obsolescence at EU level are the way forward," said Rapporteur David Cormand, MEP from France.

The vote calls for the EU Commission to "develop and introduce mandatory labelling, to provide clear, immediately visible and easy-to-understand information to consumers on the estimated lifetime and reparability of a product at the time of purchase."



Right to Repair



NATIONAL POST

- News / Canadian Politics / Canada
- Liberal MP's private member's bill seeks to give consumers
 - right to repair' their smart devices

Bryan May's bill would update the Copyright Act to prohibit the use of so-called technological protection measures, or digital locks, to block repairs of devices

Anja Karadeglija

Feb 24, 2021 • February 25, 2021 • 3 minute read • D Join the conversation





- Call or write your state and federal representatives https://www.repair.org/stand-up
- Report unfair repair restrictions and warranty fraud to the FTC https://reportfraud.ftc.gov/
- Join others in your community fighting for Right to Repair
 - o https://www.repair.org/
 - o https://repair.eu/
 - o https://www.canrepair.ca/
- Participate in a Repair Café or Fixit Clinic near you
 - o https://www.repaircafeusa.org/
 - https://fixitclinic.blogspot.com/p/scheduledevents.html
- Write or improve a repair guide
 - https://www.ifixit.com/Contribute
- Buy more repairable products
 - https://www.ifixit.com/Right-to-Repair/Repairable-Products



Links for More Information

https://www.ifixit.com/Right-to-Repair/Intro

https://www.freegeek.org/our-programs

https://www.oregon.gov/deq/filterdocs/wprbackgroundpaperf.pdf (Appendix F)

https://www.repair.org/

https://uspirg.org/feature/usp/right-repair

https://www.techrepublic.com/article/the-digital-divide-not-everyone-has-the-same-access-to-technology/



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Ashley Martinez, Online Sales Associate, Free Geek, <u>ashley.martinez@freegeek.org</u>

Marie Diodati, Grant coordinator, Oregon DEQ, Marie-Helene.Diodati@deq.state.or.us and 503-875-9649





THANK YOU!

Please fill out the survey you receive after the webinar.

For more information, visit <u>www.westcoastclimateforum.com</u>

