



GUILDERLAND
PUBLIC LIBRARY

Cutting the CORD



May 15, 2018

Presenter
Sean Silvernail

What is Cutting the Cord?

The phrase refers to replacing traditional Cable/Satellite TV and Phone Services with OTA (over the air) TV and Internet based solutions.

(OTA) TV Over-The-Air Television is free high-definition local broadcasting. The stations that are included are many of the channels that you currently watch on cable or satellite to view local news and major network shows.

Another way to view content is to Stream it over the internet. This can be pre-recorded content or live broadcasting. The broadcast is streamed through a device and not stored or downloaded.

There are a lot of ways to use the internet to make telephone calls. I am going to demonstrate a couple of ways to replace a traditional home phone using internet based solutions.

The main reason people are Cutting the Cord is to save money. With high-speed internet and a few gadgets you could craft a package that works for you and saves a lot of money.

OTA Antennas

25 mile range antenna



Price Point around \$7

50-60 mile range antenna
With a signal booster



Price Point around \$20-\$40

OTA Exterior Antennas

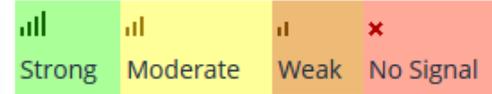


There are other Antennas available that can be mounted to the roof of exterior of your house or apartment. In general these types of Antennas have much greater range. The one shown boosts 150 Mile Radius. It Costs around \$55 online. There are many options available w/ a price point below \$100.

<https://www.fcc.gov/media/engineering/dtvmaps>

DTV Coverage

Signal Legends



Incentive Auction (IA) Information

Mouse over the letter for more details about that callsign.

Callsign	Network	Ch#	Band	IA
----------	---------	-----	------	----

Click on callsign for detail

 WRGB	CBS	6	Lo-V	
 WCWN	CW	45	UHF	R
 WNYT	NBC	13	Hi-V	
 WNYA	MY N	51	Hi-V	R
 WTEN	ABC	10	UHF	R
 WXXA-TV	FOX	23	Hi-V	R
 WMHT	PBS	17	UHF	R
 WYPX-TV	ION	55	UHF	R
 WKTV	NBC	2	UHF	

Channels Received

6-1 WRGB
6-1 TBD
6-3 Comet
10-1 WTEN
10-2 get TV
10-3 Justice
10-4 Escape
13-1 WNYT ME
13-3 WNYT Hi
17-1 WMHT HD
17-2 WMHT Cr
17-3 WMHT Wo
17-4 WMHT Ki
23-1 WXXA HD
23-2 WXXA OT
23-3 WXXA LF
23-4 WXXA BC
45-1 WCWN HD
45-2 Charge
45-3 WRGB
45-4 Stadium
51-1 WNYA HD
51-2 WNYA LT
51-3 WNYA DE

I put in zip code 12084. These channels should be available

I spoke with Paul from Town TV in Rotterdam he said they have antennas Ranging from \$29 - \$49. Also external Mounting style ones in about the \$100 range

You connect these antennas to the Coax connector on your TV select Antenna input on your TV and perform a channel scan.

Streaming Devices

They need high speed internet with a minimum of 3 Mbps. For HD Streaming 5 Mbps and for 4K Streaming or Ultra HD you should have around 25 Mbps internet speed.

You can use a Smart TV, PC or MAC, iPad, Tablet or phone to stream content from many providers.

There are many devices available to stream content. At the library we offer Chromecast, AppleTV, Roku and Amazon Firestick.

Even game consoles like PS4, Xbox, Wii and more. Many DVD and BluRay players have Built in streaming applications.

The devices range in price from around \$30-\$35 for a Chromecast/Roku/Firestick all the way up to \$180 for the 4K 64MB AppleTV.

Sling one of the popular streamlining providers has a deal where you prepay for 2 months of service and you get a Roku Device for free.

I think all of the Online Streaming Services have a “Try Before You Buy” deal, where you can tryout the service for free. As far as I know, all of the streaming providers are on a month to month service plan.

Guiderland Public Library

Cut the Cord Collection

Roku @ \$30



Amazon Fire TV Stick @ \$40



Apple TV @\$180



Google Chromecast @ \$35



25 Mile OTA Antenna @ \$7



PC Magazine "The Best Video Streaming Services of 2018"

Product										
Lowest Price	DIRECTV NOW SEE IT	Sling Media SEE IT	Hulu SEE IT	CBS Interactive SEE IT	fuboTV SEE IT	Amazon SEE IT	iTunes Store SEE IT			
Editors' Rating	●●●●○	●●●●○ EDITORS' CHOICE	●●●●○	●●●●○	●●●●○	●●●●○	●●●●○	●●●●● EDITORS' CHOICE	●●●●○	●●●●○
Best For	Cord Cutters With AT&T	Cord Cutters	TV Fans	CBS Fans	Sports Fans	Bargain Hunters	Premium Content Fans	Original Programming Fans	Cord Cutters With PlayStation	Google Faithful
Starting Price	\$35/month	\$20/month	\$7.99/month	\$5.99/month	\$44.99/month	\$8.99/month	\$14.99/month	\$7.99/month	\$39.99/month	\$40/month
Concurrent Streams	2	1-4	1	2	2-3	2	Yes (undefined)	1-4	1-5	3
Live TV	✓	✓	✓	✓	✓	—	—	—	✓	✓
Original Programming	—	—	✓	✓	—	✓	✓	✓	—	—
Ads	✓	✓	✓	✓	✓	—	—	—	✓	✓

DirecTV Now starts @ \$35 per month

The DirecTV Now streaming service offers dozens of channels of live TV without installing a satellite dish or running cables. The service features excellent picture quality and plenty of connectivity options, and subscriptions start at \$35 per month. You won't find DVR or rewind features, but you can get premium channels like HBO for just \$5 extra per month.

There four plan tiers: Live a Little, Just Right, Go Big, and Gotta Have It.

- Live a Little offers more than 60 channels for \$35 per month, covering the big networks you'd get in a standard cable package.
- Just Right is \$50 per month and includes 80+ channels, adding more niche and spin-off networks.
- Go Big costs \$60 per month, but is available at a promotional price of \$35 during DirecTV Now's opening months, and brings the total number of channels past 100 by adding networks like BBC World News, Discovery Family, Logo, Oxygen, Sprout, and Sundance TV.
- The \$70 monthly Gotta Have It package gives you more than 120 channels, adding Boomerang, Chiller, El Rey, Univision Deportes, and eight Starz channels.

You can add HBO or Cinemax to any package for \$5 each, which includes all live HBO or Cinemax channels and access to the respective networks' on-demand library. Local affiliates include ABC, Fox, and NBC, and their availability depends on your location. CBS and The CW, meanwhile, aren't available on the service.

Sling TV starts @ \$20 per month

Sling TV is probably as close to the traditional TV experience as you can get online. For \$20 per month, Sling TV offers live access to channels like AMC, TBS, The Food Network, CNN, TNT, and more.

As you add more services, though, Sling TV can add up. There's the basic Sling Orange plan with support for one stream at \$20 per month, Sling Blue with support for three simultaneous streams for \$25, or both with support for four simultaneous streams at \$40.

Why would you want both? Some channels on Sling Orange are not available on Sling Blue and vice versa (here's a breakdown). The Disney Channel, for example, is only on Sling Orange, while Fox Sports is only on Blue.

Sling also offers extra add-ons for \$5 per month each. A Comedy extra adds MTV, Spike, Logo, and more, while a Kids extra offers channels like Teen Nick and Disney Junior—none of which are available via Sling Orange or Blue.

Another \$5 extra is cloud DVR, which supports up to 50 hours of content. You can record multiple programs simultaneously and watch on Amazon, Android, Apple TV, Roku, and Xbox One devices. Cloud DVR is not currently supported for Disney and ESPN or on-demand channels like Newsy and Local Now.

Hulu starts @ \$7.99 per month

Hulu has done away with its free, ad-supported tier. For full seasons of current and classic TV series, as well as original content, you have to subscribe for \$7.99 per month.

Unlike Netflix and Amazon, which typically get new TV series months or even a year after their TV debuts, Hulu gets content almost immediately after airing on TV thanks to its big studio backers. One of the drawbacks, however, is that Hulu still includes ads. An ad-free tier costs \$11.99 per month, though some popular shows will have 15-second pre-roll and 30-second post-roll ads.

Hulu (for Android) If you're on the fence, you can get Showtime for \$8.99 per month with a Hulu bundle and save \$2 per month. You can also add HBO or Showtime to your Hulu account for \$14.99 and \$9.99 per month, respectively, but that won't save you any money; it's just convenient to not have to switch apps.

Hulu supports a variety of gadgets, but you can only stream to one device at a time. You can't yet download content for offline viewing, though that is reportedly in the works. Make sure to check out Hulu's latest redesign across all of its platforms; it features elegant navigation menus and a glossy overall aesthetic.

Hulu recently released a live TV option, named simply Hulu With Live TV. It starts at \$39.99 per month and is currently in beta, but already its value and the sheer amount of content available earns it our Editors' Choice for live streaming TV services. Watch on two screens simultaneously or upgrade to unlimited streams for another \$14.99.

CBS All Access

starts @ \$5.99 per month

While it might seem rather limiting to pay for on-demand access to just one broadcast TV channel, CBS does have a popular lineup of TV shows, and CBS All Access is the only place you can watch The Good Wife spin-off The Good Fight and Star Trek: Discovery. You can also watch NFL games that are broadcast in your local market, including Thursday Night Football on CBS (though you can't watch on a mobile phone because of a deal Verizon has with the NFL).

For \$5.99 per month, you can tap into 8,500 episodes; stay up to date with shows currently on the air or catch up with old favorites like The Twilight Zone, Taxi, and every Star Trek you could hope for. New episodes are available the next day, and it supports live TV streams in 185 markets.

Like Hulu, the \$5.99 plan includes commercials, but you can ditch the ads with CBS All Access Commercial Free for \$9.99 per month (with the exception of live TV and select shows). TV classics are ad-free on both plans.

Watch on your mobile device (iOS, Android), PC, or Android TV, or stream to your TV via Amazon Fire TV, Apple TV, Chromecast, Roku, PS4, Xbox 360, or Xbox One.

fuboTV

starts @ \$44.99 per month

fuboTV is a great option for any cord-cutting sports fans. This "sports-first, but not sports-only" service offers extensive live sports and entertainment content for all your devices. Whether you want to watch NFL games on Sunday, catch up on an MLB game that aired during the day, or even stream a movie on-demand, fuboTV has you covered.

Its flagship subscription plan, fubo Premier, does cost \$44.99 per month, but it grants you access to 85 television channels. For the national sports events, there's NBC, CBS, FOX, NFL Network and NBA.TV. For international sports, you get channels from the beIN network and Univision. And if you're ever not in the mood for sports, fuboTV offers a wide variety of entertainment channels such as AMC, BBC America, CNBC, The Food Network, FX, National Geographic, SYFY, and USA, to name just a few. You not only get to watch live events and programs from these channels, but also a ton of on-demand shows and movies.

fuboTV offers some cheaper plans aimed at international markets, including fubo Latino for \$17.99 per month and fubo Portugues for \$19.99 per month. You can also supplement any base plans with add-on content, including the Sports Plus (\$8.99 per month) and Adventure Plus (\$4.99 per month) options.

To top it all off, fuboTV offers excellent DVR capabilities and Lookback, a feature that lets you watch anything you may have missed up to 72 hours after it first aired. fuboTV also recently introduced Startover, which enables viewers to watch currently airing events from the beginning no matter when they tune in. Enjoy solid streaming performance via its web interface or dedicated apps for Android, iOS, Apple TV, Roku, and Fire OS devices.

Amazon Video starts @ \$8.99 per month

Amazon Video will set you back \$8.99 per month, but if you plan to stick with it for more than a year, you might as well swing for Amazon Prime, which includes Amazon Video—not to mention Amazon Photos, Amazon Music, and a number of other Amazon-centric perks—for \$99 per year.

Amazon has about 40,000 titles to stream, but only a fraction of those are included with Prime streaming. Look for the "Prime" banner atop selections that stream for free. Everything else is available to purchase or rent (for Prime and non-Prime members).

Amazon also enables offline downloads, so if you haven't finished watching *Transparent* or want to catch up on some older HBO shows for your next flight, download to your tablet and get watching.

In 2015, Amazon also launched the Streaming Partners Program, which lets you add networks like Showtime and Starz to your Prime account, sometimes for a slight discount (save \$2 per month on Showtime via Amazon vs. buying on its own, for example).

Amazon Video does not work with Google's Chromecast, but it's available on Roku, as well as Amazon's own Fire TV devices, smart TVs, and more. At WWDC, Apple announced it will soon arrive on Apple TV, too. Prime Video supports two concurrent streams, as long as you're watching different videos.



HBO Now Costs \$14.99 per month

The first major premium channel to go out on its own was HBO. The network's content has been available online for awhile via HBO GO, but that requires a pay TV login to watch. For several years, HBO didn't want to rock the boat with its cable partners, but it eventually acquiesced to fans' demands and released an online-only version, dubbed HBO Now, for \$14.99 per month.

Sign up and get a free trial via apps from Amazon, Google Play, and the App Store, or add the HBO Now channel to your Roku player. Those with internet service from Frontier, Google Fiber, Liberty, Optimum, Service Electric, and Verizon can also add HBO Now to their web package. Once you're signed up, you can watch on your PC and other devices. New episodes appear several minutes to an hour after they begin on live TV, and everything on HBO GO is also on HBO Now.



Netflix

starts @ \$7.99 per month

Netflix is the standard-bearer of streaming. There's a solid selection at all times, with new titles exchanged for older ones monthly. And there's Netflix original programming to take into account, too. It's the only place to get your fix of shows like Orange is the New Black, Stranger Things, and Jessica Jones.

The \$7.99-per-month plan is for one standard-definition stream. For two concurrent HD streams (two people watching from the same account at the same time), it's now \$10.99. For \$13.99, you can get up to four concurrent streams and support for 4K content.

Netflix is available on a variety of devices, from your PC and tablet to the Chromecast and game consoles. And you can now download content for offline viewing. The company's DVD service still exists if you want newer releases, but Netflix has long said that streaming is its primary focus going forward.



PlayStation Vue

starts @ \$39.99 per month

If you're a PlayStation fan who's cutting the cord, Sony's PlayStation Vue live-streaming service is a good way to ditch your cable company while keeping plenty of channels. Plans start at \$39.99 per month for live TV with 45+ channels, including Disney and ESPN. Add sports, movie, and premium packages and prices will range from \$45/month up to \$75/month.

Sony PlayStation Vue on iOS/PS Vue started in only a few markets, but went national last year. Channel availability varies by market, though, so check your location before signing up. "In some cases where a live local broadcast channel isn't available, an alternative On-Demand channel will be available in its place," Sony says.

You can DVR PS Vue content, except HBO, Showtime, and Cinemax, though "almost all programs" from the live feed of those channels are available on demand. DVR and on-demand content can be watched inside or outside the home, except CBS shows, which are only accessible inside the home.

The service supports up to five streams at once, but there are exceptions, like only one PS4 or PS3 can stream at a given time (you can't stream from a PS4 in the living room and the bedroom at the same time) and only three streams at once on mobile devices. You can watch on a variety of devices, like your web browser, Apple TV, Android TV, Amazon Fire TV, Roku, Chromecast, and iOS or Android devices—provided you have internet access.

YouTube TV costs \$40 per month

YouTube TV also provides live TV streaming, but check to make sure it's available in your city. With YouTube TV, you get unlimited cloud DVR storage. YouTube will keep your recordings for nine months, and you can stream your content from anywhere in the US, if you're connected to the internet (and you sign in from a home network once every three months to verify your location).

One YouTube TV membership supports up to six accounts, so you can share with family or roommates, though you can only stream from three accounts at once.

Showtime costs \$10.99 per month

In 2015, premium service Showtime went solo with a streaming service of the same name. It's hoping the popularity of hits like *Billions*, *Homeland*, and *The Affair* will persuade fans to pay \$10.99 per month to watch live streams or catch up with episodes on mobile devices.

For now, you can sign up on Amazon, Android, or Apple devices (iOS or Apple TV) as well as Roku and Samsung smart TVs. Amazon Prime, Hulu, Sling TV, YouTube TV, and PlayStation Vue customers can also add Showtime to their accounts.

Starz costs \$8.99 per month

Starz has launched a new standalone streaming app for \$8.99 a month, giving you access to *Outlander* and other Starz content without the need for a pay TV subscription. That includes series like *Power*, *American Gods*, plus movies like *The Good Dinosaur*. As mentioned above, if you have Amazon Prime, you can add Starz streaming to your account, but it doesn't save you any money. Both options are \$8.99 per month.

Free Online Streaming Services

[Guilderland Public Library](#)

We have 631 video titles available online through Overdrive check out our website www.guilderlandlibrary.org and view our Collection [Here](#). We also have over 160,000 DVDs and BluRay discs throughout the UHLS collections.

[Crackle](#)

The great-granddaddy of free streaming services, Crackle is still one of the best. Sony owns the site, meaning that you'll be able to find some of your favorite TV shows and movies, from Seinfeld and Heroes, to The Karate Kid and The Thing. The shows and movies are all available on a rotating basis, so you won't always be able to find exactly what you're looking for, but you'll also never want for new content. You'll also have to watch ads, but it's no worse than sitting through the average network or cable program. There are even a few original shows, like SuperMansion.

Available on: Amazon Fire TV, Android, Apple TV, computers, Google Chromecast, iOS, Nvidia Shield, Roku, PlayStation 4, smart TVs, Xbox One



Continued Free Online Streaming Services

Pluto TV

Streaming individual movies and shows for free is relatively easy; it's much harder to find a way to stream live content. Pluto TV offers more than 75 live channels, and the remarkable thing is that you're probably even familiar with some of them. Pluto TV is particularly useful for news junkies, as you can stream NBC News, CBSN, Bloomberg TV, as well as stations for weather and sports. There's a little something for everyone, whether you want classic TV shows, kids' programming or nonstop B movies. Of course, you'll have to watch on Pluto TV's schedule rather than your own, but that shouldn't be a problem for veteran TV watchers.

Available on: Amazon Fire TV, Android, Android TV, Apple TV, computers, Google Chromecast, iOS, Roku, Smart TV



New York
Public
Library

Continued Free Online Streaming Services

Kanopy

Over 30,000 films entirely free with a library card from participating libraries. Hundreds of new films each month.

Kanopy reaches 3,000 campuses worldwide, including:

Berkeley
UNIVERSITY OF CALIFORNIA

HARVARD
UNIVERSITY

Stanford
University

UNIVERSITY OF
CAMBRIDGE

McGill

Dartmouth

PRINCETON
UNIVERSITY

Yale

THE UNIVERSITY OF
SYDNEY

MIT

10 Free Downloads a month are available to New York Public Library Card Holders.

All NYS residents are eligible to get a [New York Public Library Card online or in person](#).

That's \$20/month or \$240/year worth of content available for living in New York State.

Telephone Options

Magic Jack \$35/Year w/ App

Save hundreds on your phone service.

magicJackGO[®]

\$35

Limited time offer:

- FREE** 12 months of service.
- FREE** magicApp (regularly \$9.99)
- Calls to your home ring on your smartphone.*

Save up to \$381 per year!

[ADD TO CART](#) [30 Day Free Trial for New Customers](#)

Call us: 1-800-MAGICJACK
(1-800-624-4252)



Vonage \$9.99/Month \$120/Year

OUR GREAT PHONE OFFER

Sign up for Vonage North America^{®†} or Vonage World[®] & get an **\$80-value Motorola 3 home-phone kit.**

12-Month Promotion **\$9.99/month**

Plus taxes & fees, with 1-year agreement. High-speed Internet required. FREE activation [View Offer Terms](#)



[Phone Details](#)

*1 year agreement required. Actual device may vary. Terms and restrictions apply.

[ORDER NOW](#)

[LEARN MORE](#)

How Vonage home phone service works

Telephone Options

[Google Voice is free](#)

[Google VOIP Adapter \\$49.88](#)



The END

