

# Smart TVs and Streaming Video: Trends and Insights for Modern Viewing

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LLI/NOVA (via Zoom)  
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# WHY WE'RE HERE

Television has been and remains an integral part of our daily lives, impacting our entertainment, information, and even our home aesthetics.



# Why We're Here: It's Complicated!

## Not like the old days:

- Bought a TV
- Sat in your living room
- Looked through a paper TV guide
- Watched what the networks (3) were presenting (with commercials)
- When they were presenting it.
- And it was FREE!

## Now:

- Multiple types of TVs (plus phones, tablets, computers)
- Wherever - watch from your living room, in your car, on your phone while shopping
- Whatever - many, many networks and sources of video news and entertainment
- Whenever – can pause live TV, record your favorite shows and movies
- No more TV guides
- Some free but mostly pay

# Why We're Here: Too Many Options

## Technologies:

- TVs (brands, features, sizes, cost)
- Devices (Cable box, modem, router/Wi-Fi, DVRs, streaming devices, cell phones, tablets, computers, gaming consoles)
- Antennas (over-the-air digital TV, satellite)

## Providers:

- Cable TV operators (Fairfax County - Comcast, Cox and Verizon)
- Satellite TV (DirecTV & DISH)
- Internet Service Providers (cable & satellite TV providers, telcos, satellite ISPs (Viasat, HughesNet, EarthLink, Starlink), fixed wireless ISPs (AT&T, T-Mobile, Verizon)
- Over-the-air broadcasters (ABC, CBS, Fox, NBC, The CW, PBS, Univision, Telemundo, etc.)

## Programs & Services:

- Hundreds of channels (Cable TV packages, live TV, on demand)
- Hundreds of services:
  - **Live TV:** YouTube TV, Hulu+Live TV, Sling, Roku Channel, etc.)
  - **On Demand Streaming:** (Netflix, Hulu, Peacock, Roku Channel, Apple TV+, Sling TV, Philo, Amazon Prime Video, HBO, Max, Disney+, YouTube TV, Tubi, Fubo, Kanopy, PBS Documentaries, etc.)

# Why We're here: It's Too Expensive

CABLE TV*	Plans	Cost/month (not including fees, taxes)	Channels/Contract
<b>Comcast</b>	Choice TV	\$58	10+ channels, no cable channels/no contract
	Popular TV	\$95	125+ channels, popular cable channels/no contract
	Ultimate TV	\$129	185+ channels, premium channels /no contract
<b>Cox</b>	Contour TV Starter	\$71	75+ local channels/2 years
	Contour TV Preferred	\$130	140+ local and cable channels/2 years
	Contour TV Ultimate	\$172	250+ local, cable, premium and channel packs/2 years
<b>Verizon</b>	Your Fios TV	\$95	125+ channels/2 years
	More Fios TV	\$119	300+ channels/2 years
	The Most Fios TV	\$139	425+ channels/2 years

SATELLITE TV*	Plans	Cost/month (not including fees, taxes)	Channels/Contract
<b>DISH</b>	America's Top 120	\$92	190 channels/ 2 years includes 2-year price guarantee
	America's Top 200	\$112	240+ channels/ 2 years includes 2-year price guarantee
	America's Top 250	\$122	290+ channels/2 years includes 2-year price guarantee
<b>DIRECTV</b>	Entertainment	\$85	165+ channels/2 years includes 2-year price guarantee
	Choice	\$90	200+ channels/2 years includes 2-year price guarantee
	Ultimate	\$120	270+ channels/2 years includes 2-year price guarantee
	Premier	\$165	340+ channels/2 years includes 2-year price guarantee

\* Plans and pricing subject to change. Fairfax County is not recommending or endorsing any provider.

# Agenda

## 1. Buying a New Smart TV:

- Screen types & Features
- Sizes
- Prices

## 2. Trends in TV Viewing Over the Internet:

- Why “Streaming” is the trend
- How you do it
- Where to find video content
- Another way (Free!)

## 3. Economic & Privacy Considerations

- Choosing a video service provider
- What it costs
- Who’s watching whom?

## 4. Where the Video Industry is Heading

## 5. Q&A

# Buying a New Smart TV

Do you still  
have an old  
standard  
definition  
TV?



CRT (Cathode Ray Tube TV) standard definition TV. Can still work with a cable TV box.

# Buying a New Smart TV

Smart TVs  
have taken  
over the  
marketplace



Flat screen, high definition/resolution, increasing features and **lowering** prices, **Internet-connected**

# Buying a New Smart TV

1. **Type of Screen** (LED & OLED – with many variations)
2. **Picture Quality and Resolution** (HD, Full HD, UHD/4k, 8k)
3. **Features** (HDR, Refresh Rate, Sound)
4. **Screen Size** (measured diagonally in inches)
5. **Price** (\$ - \$\$\$\$)

# Types of Screens

## ○ LED/LCD



LED TVs use light-emitting diodes (LEDs) to backlight an Liquid Crystal Display (LCD) display. Also Quantum Dot LED (QLED).

## ○ OLED



OLED (LG, Sony) (Organic light-emitting diode) uses an organic substance that glows when an electric current is introduced. Independently lights up each individual pixel and can go to **complete blackness**.

## ○ QLED/ QD-OLED



QLED & QD- OLED (Samsung, Sony, Hisense). **Improves brightness** of OLED TVs. LED + Quantum Dots.

## ○ Mini-LED



Mini-LED (LG, TCL Hisense) **Improves contrast**. In 2021 Samsung introduced Neo QLED (8K). Micro-LED was introduced by Samsung in 2021

## ○ ~~CRTs, Plasmas, LCDs~~

GONE!

# Picture Quality / Resolution

Type	Dimensions (Horizontal x Vertical Lines)	Total Pixels	Clarity/ Resolution
SD TV	640 x 480 pixels	0.3 million	1
HD TV 720p	1280 x 720 pixels	0.9 million	3X
Full HD 1080p	1920 x 1080 pixels	2.1 million	7X (1)
UHD or 4K	3840 x 2160 pixels	8.3 million	25X (4)
8K	7680 x 4380 pixels	33 million	110X (16)

# Features: High Dynamic Range (HDR)

HDR greatly increases the range of **color**, **brightness** and **contrast** on a TV to produce a more realistic image.



Pictures courtesy of Best Buy



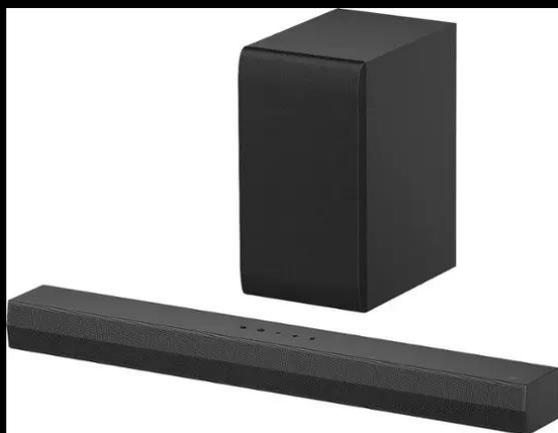
# Features: Refresh Rate

Comparing refresh rates:



# Features: Sound

Sound systems can vastly improve the quality of your viewing experience – latest are Wi-Fi-based systems



LG - 2.1-Channel Soundbar w/  
wireless subwoofer  
\$229



LG – 5.1.1  
Surround Sound w/  
wireless subwoofer  
\$400



Sony BRAVIA  
Theater  
Quad (16  
speakers)  
\$2500



Sonos Arc  
Ultra \$999

# Screen Size

## How Large a Screen Do You Need?

The key is how far away from the screen you'll be sitting:

Seated Distance From TV	4-6 Feet	6-8 Feet	8-10 Feet	11 Feet+
Recommended Size of 4K TV Screen	32" – 49" (65" max)	43" – 65" (83" max)	55" – 75" (86" max)	65" – 85" (100"+)

\*Screen sizes are measured diagonally in inches.

Aspect ratio: An old **32-inch** 4:3 screen is  
Is the equivalent to a digital **43-inch**  
16:9 screen



# Latest TVs and Pricing

Please note: All Prices quoted in presentation are approximate and are used as an example only and may not be current.

Prices are low for 4K TVs (50" prices as of 3/17/2025)



**Hisense QLED - 50" Class QD6 Series HDR 4K Smart Fire TV, 60Hz**  
**Model: 50QD6QF**  
**Price: \$250**



**Roku - 50" Class Select Series 4K LED Smart Roku TV, HDR, 60Hz**  
**Model: 50R4C5**  
**Price: \$280**



**Samsung - 50" Class Q7F Series 4K QLED Vision AI Smart Tizen TV HDR 10+ 60Hz**  
**Model: QN50Q7FAAFXZA**  
**Price: \$400**

*Most TVs of any size now have the ability to be controlled by voice or be controlled by house smart devices such as using Amazon Alexa, Google Assistant, Apple HomeKit, Bixby, SmartThings*

# High End TV Prices are Down

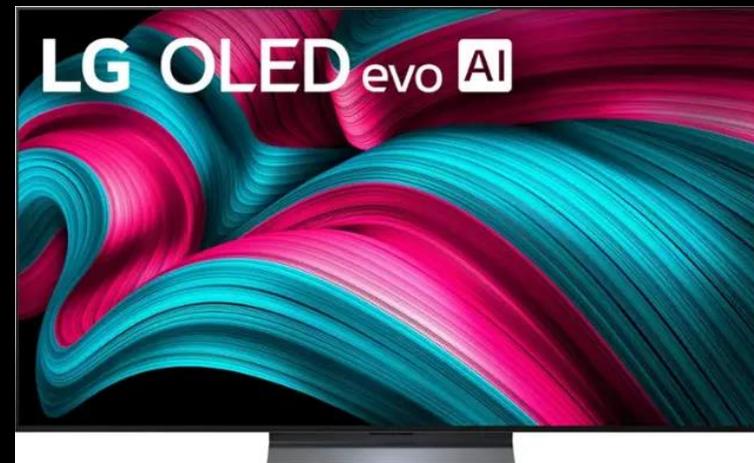
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**Samsung - 65" Class QN90D Series Neo QLED 4K Mini LED HDR 120Hz Smart Tizen TV**  
**Model: QN65QN90DAFXZA**  
**Price: \$1,300 (was \$1,800)**



**Sony - 65" Class Bravia 8 Series OLED 4K HDR 120Hz with Smart Google TV**  
**Model: K65XR80**  
**Price: \$1,700 (was \$2,300)**



**LG - 65" Class C5 Series OLED evo AI 4K HDR 120Hz Smart webOS TV**  
**Model: OLED65C5PUA**  
**Price: \$2300 (was \$2,700)**

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# Trends in TV Viewing: Streaming Video

## Why?

Most people have received video over cable and satellite in the past 30 years

Sources of dissatisfaction with cable and satellite TV:

- High rates
- Customer service
- Packaging of Programs

Therefore, other sources for video have developed, including video over the Internet

# Trends in TV Viewing: Streaming Video

## How do you do it?

### You need 2 Things:

- 1) Internet service (usually from your cable provider) and
- 2) A Smart TV or a “streaming” device connected to a smart TV or a regular digital TV.

### Examples of Streaming Devices:

- Built-in to Smart TVs
- Streaming boxes/sticks
- DVD players and gaming consoles
- Laptops, tablets, cell phones

# Devices That Get You TV Over the Internet

## Streaming Media

### Devices (Boxes & Sticks):

Roku, Apple TV, TiVo, Amazon Fire, Google Chromecast, etc.



## Blu-Ray Players

### & Game Boxes:

Samsung, Sony, LG, PS5, Xbox, Nintendo, etc.



## Smart TVs:

Built in Roku TV, Google TV, Amazon Fire TV, etc.



## Laptops, Tablets, Cell Phones



# Where to Find Streaming Video Content

Package Providers	Best for	Original Content
<b>Acorn TV</b>	Lovers of British fare, murder mysteries.	Happy Valley, Foyle's War, Midsomer Murders, Good Karma Hospital, Murdoch Mysteries, The Cry.
<b>Amazon Prime TV</b>	Anyone who's already paying Amazon prime membership; international titles, original content	Reacher, The Lord of the Rings: The Rings of Power, Jack Ryan, Goliath, Hanna
<b>Apple TV+</b>	Original content; video on demand (\$)	For All Mankind, Severance, The Morning Show, Pachinko, Slow Horses, Sugar.
<b>DirecTV Now</b>	Anyone who wanted DirecTV without a satellite Dish.	None.
<b>Fubo TV Premier</b>	Sport fans (domestic/regional and international). Also live TV.	None.
<b>HBO</b>	Original content; Movies, series and documentaries.	The White Lotus, True Detective, Succession, Game of Thrones, The Sopranos
<b>Hulu or Hulu Live</b>	Movies, series and documentaries	CBS, ABC, Fox, and NBC. Handmaid's Tale, Palm Springs, Solar Opposites, Shōgun, Paradise, American Horror Stories.
<b>Max (fmr. HBO Max)</b>	HBO plus other content from Warner Media	Hacks, And Just Like That..., Peacemaker, The Pitt.
<b>Netflix</b>	Vast library of movies and TV shows; Original Content	Stranger Things, Virgin River, The Witcher, Bridgerton, Ginny & Georgia, The Lincoln Lawyer, The Night Agent, The Diplomat, Black Doves, Beef, Emily in Paris.
<b>Paramount+ (fmr. CBS All Access)</b>	Major network fare. Access to all CBS programming plus some live.	Lioness, Landman, The Good Fight, Star Trek: Strange New Worlds, Tulsa King.
<b>Philo</b>	Live channels, movies, non-sports	None.
<b>Showtime (Paramount+ tie-in)</b>	Cable network without cable	The Chi, The Agency, Yellowjackets, All Access (sports), Dexter: Original Sin, Homeland, The Affair.
<b>Sling TV</b>	Orange – Sports & families Blue – News & entertainment	None.
<b>Starz</b>	Mainly movies, some original content	Outlander, Power, Sweetpea, The Couple Next Door.
<b>Xfinity (Comcast)</b>	TV on the go.	None.
<b>You Tube TV</b>	Some live TV - Cable style package (separate from You Tube)	None.

# Top **Free** Streaming Providers

Roku	Cost	Best for	Content (examples)
<b>The Roku Channel</b>	FREE	Free TV, Roku original series, movies, 24/7 live news, kids' entertainment. Best for Roku devices.	The Handmaid's Tale, Conversations with Friends, The Dropout
<b>You Tube</b>	FREE	Popular platform for free videos	Tutorials, vlogs, reviews, gaming, makers, autos and vehicles, music, pets and animals, sports, travel, news & politics
<b>Tubi TV</b>	FREE	Movies	Perhaps the largest video library. Access to Lionsgate, MGM, Paramount Pictures, Starz
<b>Pluto TV (Paramount)</b>	FREE	Access to 250 streaming networks, live news shows	Dr. Who, Mystery Science Theater 3000, The Walking Dead, The Addams Family.
<b>Hoopla/Kanopy</b>	FREE	Offered by local public libraries - use your library card	Educational and family content, Audio books, ebooks, movies, documentaries, TV, magazines, music
<b>Crackle</b>	FREE	Older TV shows and movies	Bewitched, My Favorite Martian, What's Happening!!
<b>Pluto TV</b>	FREE	Ad supported, owned by Paramount (CBS, Comedy Central, MTV, etc.), 100+ HD channels, over 1000 movies and TV episodes	Movies, entertainment, reality TV, comedy, classic TV
<b>Nosey</b>	FREE	Free app for daytime TV shows	Reality, court TV, talk TV – Jerry Springer, Maury Povich, Family Feud, Judge Judy
<b>Local Now</b>	FREE	Local weather & news	Weather, local news, local channels, movies, TV shows, local PBS channels
<b>Spotify for TV</b>	FREE	Music & podcasts	Artist pages, albums, songs, playlists
<b>Plex</b>	FREE	Movies, TV shows	Create your own private on-demand streaming library.

# Internet Video From The Cable Company

Comcast, Cox, Verizon operate in Fairfax County

**Cox Contour** (in home) and **Cox “tve” TV Everywhere** online

Cox: [https://www.cox.com/residential/tv/tv-apps.html?sc\\_id=cr\\_dm\\_camp\\_z\\_tveverywhere\\_vanity](https://www.cox.com/residential/tv/tv-apps.html?sc_id=cr_dm_camp_z_tveverywhere_vanity)

**Verizon’s “Watch FiOS Now”**

Verizon: [www.verizon.com/tvonline](http://www.verizon.com/tvonline)

**Comcast’s “TVGo”** allow streaming of channels online and on demand

Comcast: <http://tvgo.xfinity.com/watch-live-tv>

# SMART TVS To Watch Streaming Content



# Smart TVs: Graphical Interface

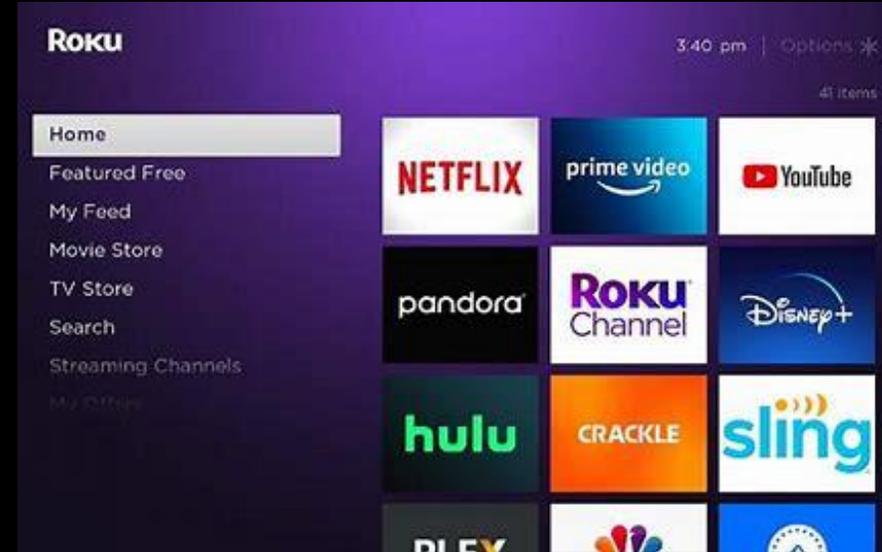
## Cable TV - Guides

## Smart TV - Icons & Apps

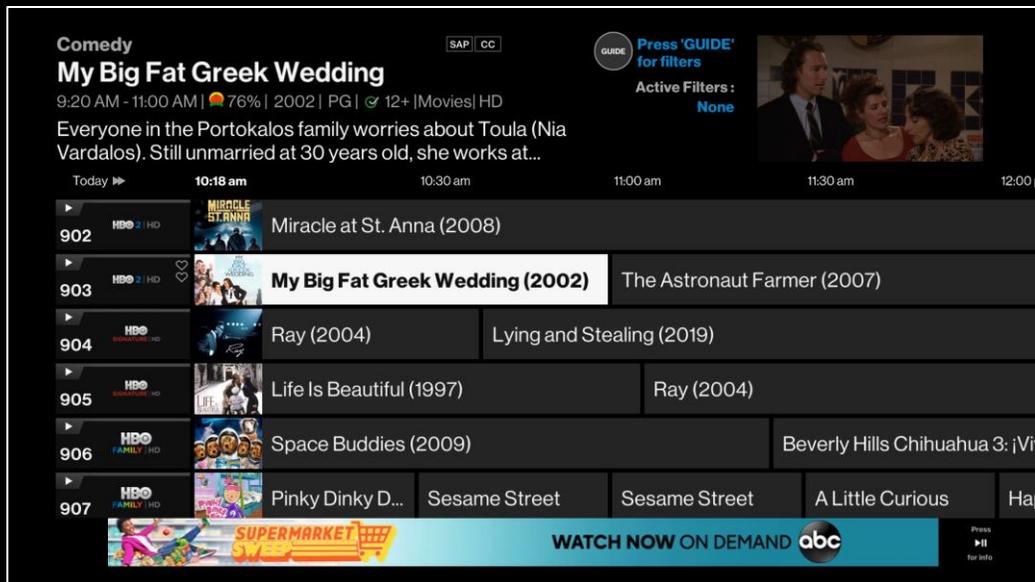


A screenshot of a cable TV guide interface. At the top, it shows the date 'Mon 12/3' and the user 'Hello Sarah'. The main content is a grid of program listings for the current day. The first row highlights 'Passport to Latin America' on channel 735 TRAVHD from 6:00-6:30pm. Below the grid are navigation options like 'Search', 'Change Guide Date', and 'Recommendations'.

Thu 3/5	6:00pm	6:30pm	7:00pm	7:30pm	8:00pm
735 TRAVHD	Passport to La..	Bizzare Food	21 Manly Man Ad..	Bizzare Food	Bizzare Food
736 FOODHD	Quick Fix Meals With Robin Miller	Dine on a dime	Chef Ramsey		
737 HGTVHD	House Hunters	House Hunters	Love It or List It	Property Brothers	Extremem Ho..
738 TBSHD	Local Programmi..	Everybody Loves..	Seinfeld	Seinfeld	Seinfeld
739 BRAVO	Titanic				
740 LIFEHD	Serenity		Snowmageddon	2012: Summer Olympics	
741 LMNHD	Modern Family		CSI Miami		
742 SCIENCE	Factory Made	How Do They Do..	Mythbusters	How It's Made	Dark Matters



A screenshot of the Roku home screen. It features a grid of streaming service icons including Netflix, Prime Video, YouTube, Pandora, Roku Channel, Disney+, Hulu, Crackle, and Sling. The interface is clean and modern with a purple header.



A screenshot of the HBO on-demand menu. It displays a list of movies and TV shows available for streaming. The selected item is 'My Big Fat Greek Wedding (2002)'. The interface includes a search bar, filters, and a 'WATCH NOW ON DEMAND' banner at the bottom.

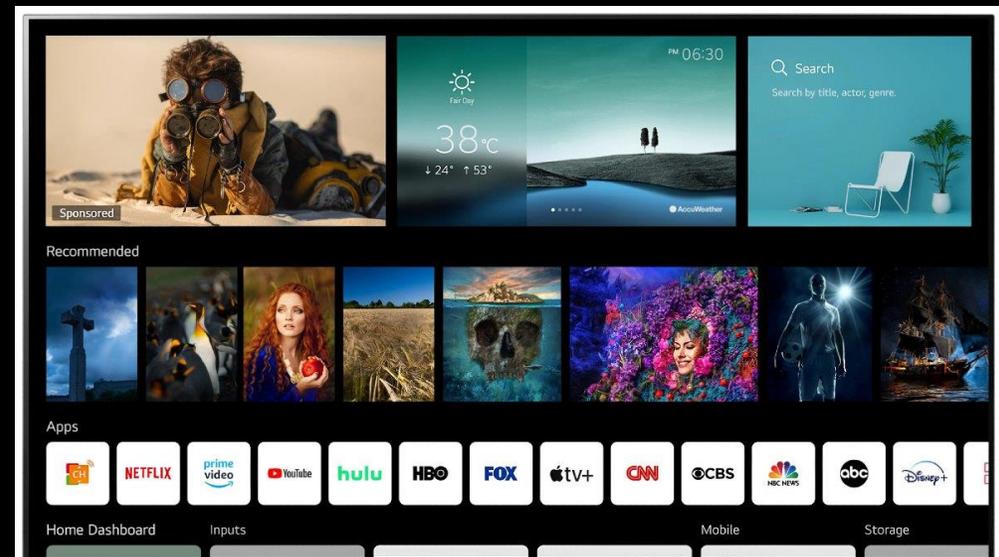
Comedy

**My Big Fat Greek Wedding**

9:20 AM - 11:00 AM | 76% | 2002 | PG | 12+ | [Movies] HD

Everyone in the Portokalos family worries about Toula (Nia Vardalos). Still unmarried at 30 years old, she works at...

Today	10:18 am	10:30 am	11:00 am	11:30 am	12:00 pm
902	Miracle at St. Anna (2008)				
903	<b>My Big Fat Greek Wedding (2002)</b>	The Astronaut Farmer (2007)			
904	Ray (2004)	Lying and Stealing (2019)			
905	Life Is Beautiful (1997)	Ray (2004)			
906	Space Buddies (2009)	Beverly Hills Chihuahua 3: ¡Viva!			
907	Pinky Dinky D...	Sesame Street	Sesame Street	A Little Curious	Ha...



A screenshot of a smart TV home dashboard. It features a weather widget showing 38°C, a search bar, and a 'Recommended' section with various movie and TV show thumbnails. At the bottom, there is a row of app icons including Netflix, Prime Video, YouTube, Hulu, HBO, FOX, Apple TV+, CNN, CBS, NBC News, ABC, and Disney+.

# Example: Smart TV with Roku box or stick



# Example: ROKU TVs

ROKU has also placed its streaming media player directly into TV sets – no need for a separate ROKU box or stick. Manufacturers of the “ROKU TV” include - Hisense, TCL, Sharp & Roku.



# Smart TVs: Operating Systems

- Different TV brands use different built-in operating systems
  - **Android TV:** Older models from Sony, TCL, and Hisense
  - **Fire TV:** Amazon, Panasonic, Toshiba, Insignia, Pioneer, Hisense
  - **Google TV:** Sony, TCL, Hisense
  - **Roku TV:** Roku, TCL, Hisense, Sharp
  - **Vizio Home:** Vizio
  - **Tizen:** Samsung
  - **webOS:** LG

# Example: Netflix Menu

A MARTIN SCORSESE PICTURE  
**THE WOLF OF WALL STREET**

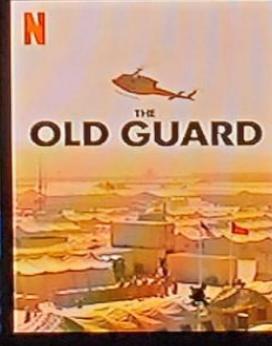
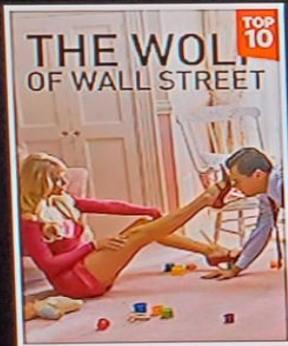
96% Match 2013 2h 59m HD AD R

**TOP 10** #3 in Movies Today

Leonardo DiCaprio gives an "untouchable performance" as a shady stockbroker drowning in cash and debauchery in this Martin Scorsese film. ★★★★★ — Empire.



## Blockbuster Movies



## TV Shows

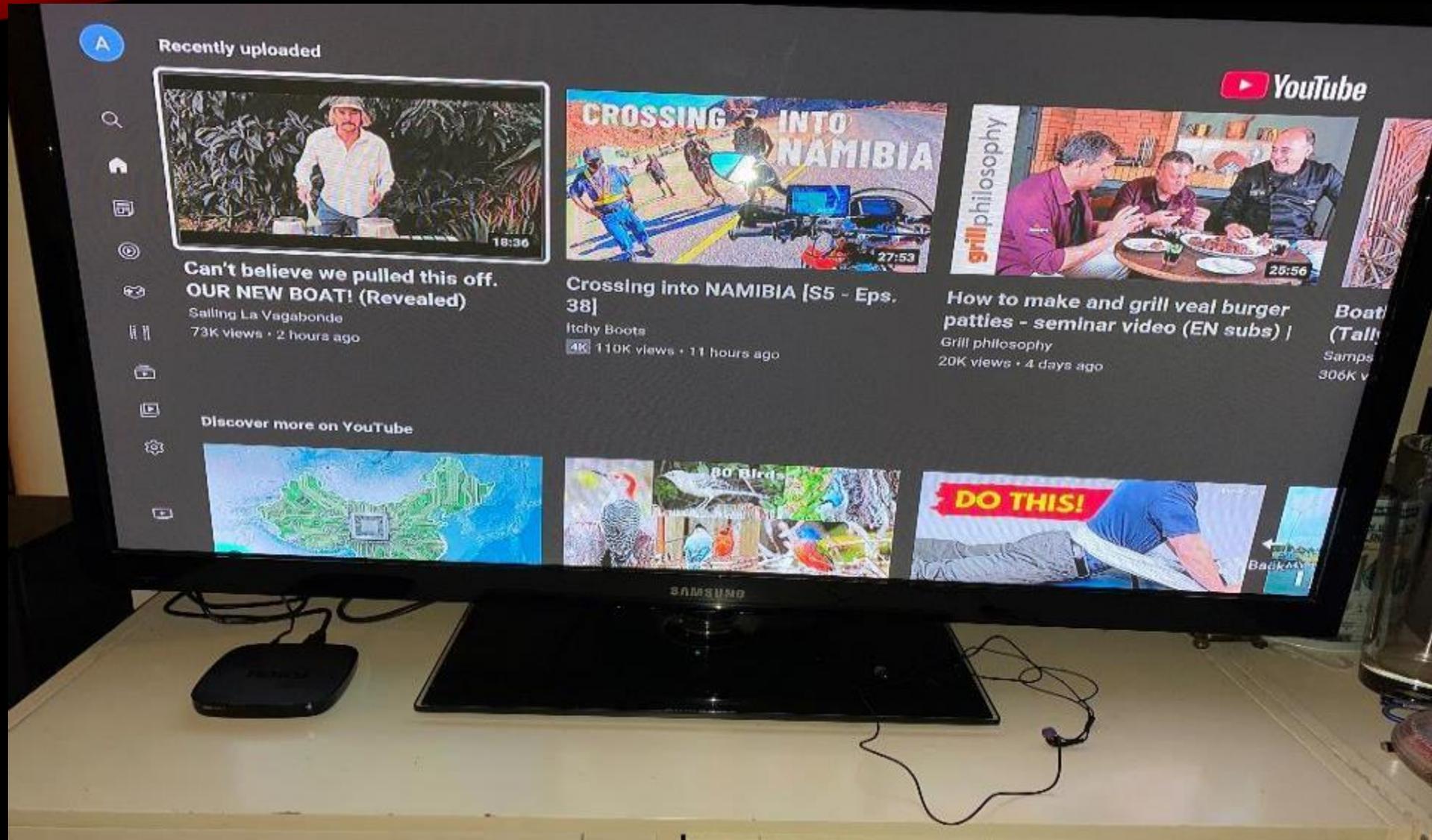


**NETFLIX**  
THE WOLF OF WALL STREET

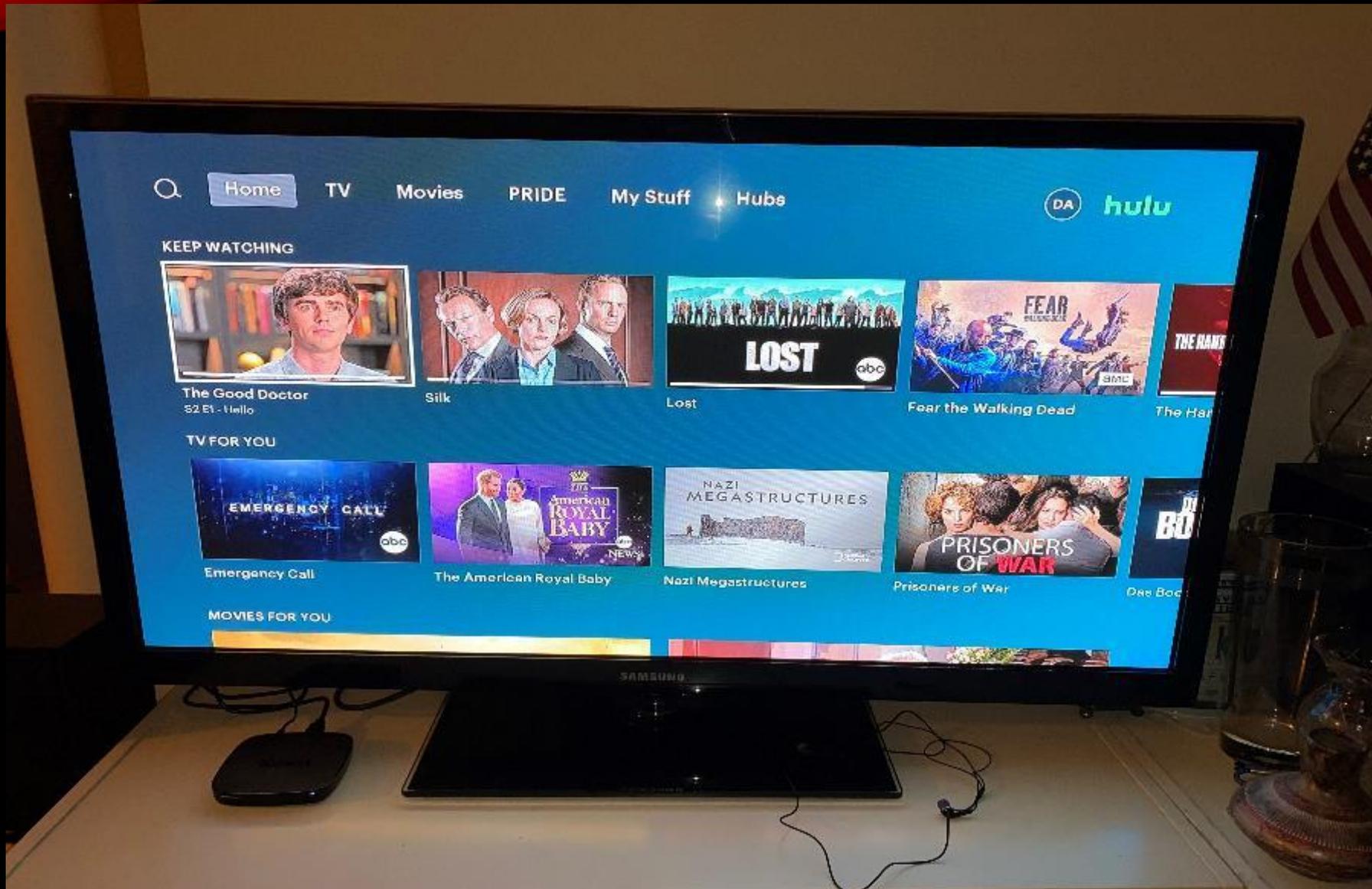
# Example: Peacock Menu – Free TV



# Example: YouTube Menu – Free TV



# Example: Hulu Menu



# Another Way – Old School and Free!

Receive Over the Air (OTA) broadcasts using a digital antenna

Then



Now



# Over the Air TV (using a digital antenna)

(High Definition (HD) and Standard Definition (SD) channels.)

## Channel 4 – WRC-TV, NBC

4.1 (HD) WRC/NBC

4.2 (SD) Cozi TV (Classic TV series from the 1960s – 2000s)

4.3 (SD) LX (Home and lifestyle content)

4.4 (SD) Oxygen (True crime and dramas from NBCUniversal)

## Channel 7 – WJLA, ABC

7.1 (HD) WJLA/ABC

7.2 (SD) Charge! (action-based programming from MGM TV)

7.3 (SD) Comet (Sci-fi, horror, adventure, fantasy)

7.4 (SD) Reserved

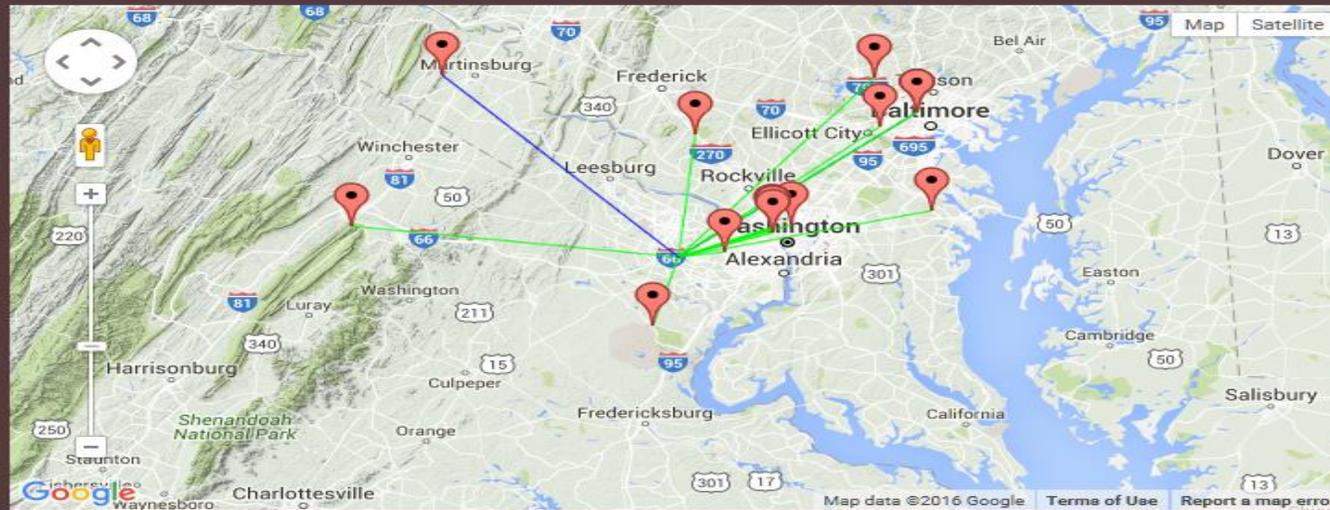
**NOTE - Rooftop  
antennas/masts  
MUST BE  
GROUNDED!!**

**FOR OTA TV Antenna Needed  
The higher the better**



# Antenna should be pointed in right direction

**antennapoint**  
transmitter locator



[Advanced Search Options](#)

Search Results: Found 23 transmitters within 60 miles of 22035

[New Search](#)

Sign	Affiliate	RF Channel	Virtual Channel	Band	Power	City	Distance	Heading
<a href="#">WNVC</a>	ETV	24	56.1	UHF	50.0 kW	Fairfax	7.56 mi	80.11°
<a href="#">WRC-TV</a>	NBC	48	4.1	UHF	1000.0 kW	Washington	16.16 mi	68.76°
<a href="#">WFDC-TV</a>	UNIVISION	15	14.1	UHF	900.0 kW	Arlington	16.16 mi	68.76°
<a href="#">WNVT</a>	ETV	30	53.1	UHF	160.0 kW	Goldvein	16.26 mi	194.95°
<a href="#">WDCA</a>	MY NETWORK	35	20.1	UHF	500.0 kW	Washington	16.52 mi	65.06°

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# Pros and Cons of Over-the-Air

## Pros:

Free! (other than one time purchase of antenna and installation)

Live, real time TV from local broadcast stations

Good selection of channels in our area

## Cons:

Requires installation of the antenna in a good location

TV must be directly connected to the antenna using a cable – harder to connect multiple TVs

No pausing, rewind, fast forwarding of content – yet

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# Choosing a Video Service Provider

## 1. Know your comfort level with technology

- Are you comfortable with change?
- Are you okay switching from a cable TV box to an app-type interface?
- Do you want cable, a cable-like replacement, or mix-and-match?
- Do you have friends or family that can help?

## 2. Identify your viewing habits (programs and interests)

- What are your “must-have” channels? Make a list.
- What types of programming do you like to explore?

## 3. Research available streaming service providers

- Do they match your technology comfort level?
- Do they have your “must-have” and other channels?
- Check their customer reviews and satisfaction

## 4. Do they meet your budget requirements?

- What is the cost/month?
- Is there a contract term?
- Will the prices increase?

# Choosing a Video Service Provider

## Types of video service providers:

- Cable TV (Comcast, Cox and Verizon) and Satellite TV (DirecTV & DISH) operators
- Live TV Platform (**Cable-like service**) (YouTube TV, Hulu+Live TV, Sling, Roku Channel, etc.)
- On-Demand Streaming (**Mix-and-match**) (Netflix, Hulu, AppleTV+, Peacock, Philo, Amazon Prime Video, HBO Max, Disney+, Tubi, Fubo, Kanopy, PBS Documentaries, etc.)
- Over-the-air broadcasters (**Antenna**) (ABC, CBS, Fox, NBC, The CW, PBS, Univision, Telemundo, etc.)

## Types of Programming:

- Over-the-air TV local channels (Network TV plus digital channels)
- Cable TV channels (e.g., Weather Channel, HGTV, Bravo, Food Network, Nickelodeon, Disney Channel)
- On-demand streaming channels
- Premium - original programming and movies (e.g., HBO/Max, Showtime, Cinemax, Starz, etc.)
- Sports
- Educational
- More!

# How to Decide? Cost Comparisons\*

Service Type	Service Provider	Internet Service/mo. (ave. 200 MBPS)	Streaming Price/mo.	Cable TV Price/mo.	Fees (Broadcast TV & regional sports)	TOTAL/mo. (excluding taxes and equipment)	Contract Term
Cable TV	Comcast	Included	n/a	\$129 (185+ channels)	\$45	\$174	None - Monthly
	Cox	Included	n/a	\$172 (250+ channels)	\$45	\$217	None - monthly
	Verizon	Included	n/a	\$119 (300+channels)	\$25	\$144	2 years
Live TV Streaming (Cable Replacement)	YouTube TV (Google)	\$50	\$84	n/a	n/a	\$134	None - Monthly
	Hulu + Live TV	\$50	\$77-\$90	n/a	n/a	\$127	None - Monthly
	Sling TV	\$50	\$40-\$60	n/a	n/a	\$90	None - Monthly
	Philo	\$50	\$25	n/a	n/a	\$75	None - Monthly
	FuboTV	\$50	\$80-\$100	n/a	n/a	\$130	None - Monthly
	DirectTV Stream (AT&T)	\$50	\$80-\$165	n/a	n/a	\$130	None - Monthly
	Netflix	\$50	\$7(ads)-\$15.50	n/a	n/a	\$57	None - Monthly
On-Demand Streaming (Mix-and-Match)	Prime Video (Amazon)	\$50	\$15 (ads)	n/a	n/a	\$60	None - Monthly
	Apple TV+	\$50	\$10	n/a	n/a	\$60	None - Monthly
	Hulu	\$50	\$8(ads) -\$18	n/a	n/a	\$58	None - Monthly
	Disney+ & ESPN+	\$50	\$8(ads)-\$14	n/a	n/a	\$58	None - Monthly
	Max (HBO) & Discovery	\$50	\$10(ads)-\$16	n/a	n/a	\$60	None - Monthly
	Peacock	\$50	\$6(ads)-\$12	n/a	n/a	\$56	None - Monthly
	Paramount+ (CBS) & Showtime	\$50	\$6-\$12	n/a	n/a	\$56	None - Monthly
	Roku Channel	\$50	Free	n/a	n/a	\$50	None - Monthly
	Pluto TV (Paramount)	\$50	Free	n/a	n/a	\$50	None - Monthly
	Amazon Freevee	\$50	Free	n/a	n/a	\$50	None - Monthly

\* Plans and pricing subject to change. Fairfax County is not recommending or endorsing any provider.

# Streaming Account Sharing Comparisons

Streaming Service	Sharing Within Household	Sharing Outside Household	Notes / Restrictions
Netflix	✔ Allowed	⚠ Fee (~\$7.99/user)	Household only; charges for extra users
Disney+	✔ Allowed	✘ Not allowed	Actively blocking out-of-home sharing
Hulu (w/ ads)	✔ Allowed	✘ Not allowed	Tracks IP/location; blocks frequent remote access
Hulu + Live TV	✔ Allowed	✘ Strictly blocked	Requires monthly check-in from home network
Max (HBO Max)	✔ Allowed	⚠ May restrict	Household use intended; limited tolerance
Paramount+	✔ Allowed	⚠ Monitored	Flags excessive remote use
Peacock	✔ Allowed	⚠ Rarely enforced	Some sharing allowed unless abused
Apple TV+	✔ Allowed (Family Sharing)	✔ Allowed	Up to 6 users via Apple Family
Amazon Prime Video	✔ Allowed (Household)	✔ Allowed	2 adults via Amazon Household
YouTube TV	✔ Allowed	✔ Allowed (same location)	Up to 5 family members; home location required

Legend: ✔ = Allowed ⚠ = Restricted / Extra fee or limited ✘ = Not allowed / prohibited

# Need Help Deciding? Resources:

## Overall comparisons:

- [www.aarp.com](http://www.aarp.com)
- [www.consumerreports.com](http://www.consumerreports.com)
- [www.tomsguide.com](http://www.tomsguide.com)
- [www.pcmag.com](http://www.pcmag.com)

## Search for where your programs are:

- [www.justwatch.com/us](http://www.justwatch.com/us)
- [www.reelgood.com](http://www.reelgood.com)
- [www.tvtime.com](http://www.tvtime.com) (mobile app)

# Who's Watching Whom?

## Your Smart TV and Your Privacy

- **Why smart TVs collect your personal data** - Viewing experience, targeted ads, \$\$\$
- **How they do it** – Automatic Content Recognition (ACR)
- **What data is collected and where does it go?** Viewing habits, IP address; Goes to business partners, Samba TV, other data companies
- **Is it legal?** Yes; it's not PII, but it requires opting-in; legal recourse
- **How to limit or prevent data collection** – Read the fine print, don't opt in, if opted-in then opt-out; make your TV dumb; consider using a VPN

# Agenda

## 1. Buying a New Smart TV:

- Screen types & Features
- Sizes
- Prices

## 2. Trends in TV Viewing Over the Internet:

- Why “Streaming” is the trend
- How you do it
- Where to find video content
- Another way (Free!)

## 3. Economic & Privacy Considerations

- Choosing a video service provider
- What it costs
- Who’s watching whom?

## 4. Where the Video Industry is Heading

## 5. Q&A

# Where We're Headed: Smarter TVs

- **More technological advancements**
  - MicroLED, rollable screens, foldable displays, mobile viewing, “watch parties”, redefined viewing environments, sound
- **Smart Integration**
  - Not just a screen – a smart hub able to stream content, surf the web, manage our smart homes
- **Artificial Intelligence (AI)**
  - Upscaling older content, better understanding your viewing preferences, less searching, custom viewing tailored to your tastes (interactive content & adaptive storylines)

# Where We're Headed: NextGen TV

- Latest version of over-the-air TV
  - Next Gen TV (ATSC 3.0)
  - FCC approved voluntary use in 2017
  - Backward compatibility – works with older TVs.
  - Enhanced picture quality (4K & 8K)
  - Immersive audio
  - Integration with broadband internet (on-demand content, interactive, personalized)
  - [www.watchnextgentv](http://www.watchnextgentv), [www.antennaweb.org](http://www.antennaweb.org),  
[www.rabbitears.info](http://www.rabbitears.info)

# Questions & Answers

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