

Hershey's Mill Transition to Verizon Overview and Frequently Asked Questions & Answers

December 5, 2017* **UPDATED**

The information contained in this document is not for Public dissemination and is for Hershey's Mill Residents use only.

The transition from Comcast to Verizon is an exciting opportunity for Hershey's Mill and all Residents. Hershey's Mill is updating the technology within the Community. This installation is a large, complex process covering 1720 homes, approximately 3000+ residents on 800 acres. Below is an Overview that will answer many questions. Following the Overview are Answers to Questions not answered in the Overview. Please keep in mind that some things will change. Quantities and times are estimates. Information is subject to change without notice. This document may be updated from time to time.

The Verizon Bulk Package, Includes:

- Preferred HDTV (335 channels: 255 Standard and 80 HD Channels*)
- One (1) HD Set Top Box
- Internet – 150 Mg Upload and Download Speeds
- One (1) Dual Band Router
- Phone/Voice (Dial Tone) – unlimited nationwide, Canada and Puerto Rico

*Subject to change

***IMPORTANT NOTE: Comcast Contracts**

Please be careful not to do anything to effect a change in your current Comcast contract. The Verizon transition will take effect in approximately four to six months depending on which village you are in. If you upgrade your Comcast equipment, services or anything else or if you are offered free equipment upgrades, increased services or lower costs on anything you are paying for now, check to be sure it does not come with a contract extension or renewal past the Verizon transition time period. We caution against this so you will not be contractually obligated to pay for services you will no longer utilize or twice for similar services.

Please read carefully for answers to many questions.

Obviously, some residents prefer Comcast to Verizon, and some residents who had Verizon's FIOS in previous homes miss it. This is the subjective side of the discussion that will not be fully resolved in all residents' opinions.

OVERVIEW

The Mandate Given to the Telecommunications Committee was to:

Determine the most technically optimum and cost effective options available to address the current and future communication needs (television, Internet, telephone, Wi-Fi, security, tele-medicine, IoT, etc.) for the HM community.

(Note: IoT = Internet of Things; these include a long list of items currently available and coming in the near and far future. A few easy examples are medical devices, smart thermostats, light controls and many more.)

History of What was Done:

With the advice and concurrence of the Board, the President appointed a Telecommunications Committee, in March of 2016, of interested, and in some cases, highly experienced resident volunteers to research and study available telecommunications services, ascertain which might be available on a bulk basis for all residents so that the vast majority of residents would in fact save a significant sum of money each year on these collective services. The Telecom Committee made contact with six (6) companies, sent RFPs to three (3) companies who expressed interest and received proposals from three (3) including Comcast and Verizon. Each responding provider was offering significant discounts under individual retail prices for any bulk services the MA was willing to bundle together for its residents. The Telecom Committee made regular reports to the Board and the Board kept the MA Members apprised of the Committee's progress. These updates were mentioned in the minutes of each assembly. Since the Committee knew residents were already enjoying the benefits of bulk savings on basic digital cable television service, all residents need a phone line to keep their alarm systems in communication with the Security Department and MOST residents have or want high speed internet service, it was self-evident to the Committee, the Board and the MA Members that significant savings in comparison to retail rates for unbundled services could be achieved.

Three of the items that guided research and decisions in relation to residents:

- 1) What was best for the majority of HM residents in the long run?
- 2) What was the cost impact on residents without internet?
- 3) What would the status of the community be in 18 months?

The determination was the Verizon Triple Play plan was best, for the vast majority of current and future residents' communication needs, in the long run, for many reasons including:

- Meets resident minimum requirement of telephone to meet security requirements and bulk cable.
- Meets new buyers' expectations
- Provides an expanded selection of add on services outside the plan, including, but not limited to items available now and coming in the future, like: medical devices, Internet of Things, remote controls for lights, smart thermostats and others.
- Provides a significant improvement in Internet services
- Provides a State of the Art Fiber Optic Infrastructure to each HM home
- Preferred HDTV (315 channels + channel 20) and HD set top box
- Super fast 150/150 megabits Internet and Dual Band Router
- Telephone line: unlimited local & long distance calls nationwide, Canada and Puerto Rico
- Ability to add other services as desired
- *No activation or installation fee for bulk/add on services during the transition period, or after unless installing for example a*

Community

*Beginning in 2017, Verizon worked with HM to design an infrastructure plan. Verizon then installed the Conduit for the fiber optic network infrastructure throughout the community. Infrastructure installation began in 2017. There are five Hubs servicing the Community. Junction/distribution boxes are buried underground with surface level covers. The fiber optic is installed underground through the conduit. The fiber optic will come to each village and to each home within villages. Each home will receive its own fiber optic. (Currently, in most cases, a cable enters a multi residential building in one location and then is split between all three homes within the building.) An ingress to each home will be created and sealed with silicon. Most likely, the fiber optic will come in closest to the electrical box input. The [in-residence](#) Transition and Implementation will be done in steps and phases beginning in Spring 2018. More information will be provided as we get closer.

Education

Several opportunities have been and more will be provided to educate yourself on the changes, process, new equipment, what to do and when to do it. Reading this, and other articles posted, is one of the steps in the process of learning about the change.

There will be future informational publications on the HM website, Village websites, on Channel 20 and others. ***Be sure to Attend your village and Community wide meetings and Read the Board, the Master Association and your Village Council Meeting Minutes that are published monthly for more information!***
The Verizon FiOS Experience Team will also periodically continue to be available here On Site in Hershey's Mill.

The Verizon Bulk Package, Includes

- Preferred HDTV (335 channels: 255 Standard and 80 HD Channels*)
- One (1) HD Set Top Box
- Internet – 150 Mg Upload and Download Speeds (other providers cannot match upload speeds to down load speeds)
- One (1) Dual Band Router
- Phone/Voice (Dial Tone) – unlimited nationwide, Canada and Puerto Rico

*Subject to change

Dedicated 800 Telephone Number for Bulk Customers

A Bulk Customer 800 number will be published for Hershey's Mill residents. This 800 number goes directly to a Call Center that only handles Bulk customers. This is the same set up as we had with Comcast.

Transition

As the transition period gets closer, a plan with dates for transition will be published. Each village will be given dates to call a dedicated 800 number. The dates to call Verizon to arrange your installation date will be village by village. Calling during your village call dates will lower any wait times for a Verizon representative to help you. Calling during your village call dates will also allow Verizon Technicians to be scheduled by village for more efficient and quicker installation.

Resident Responsibility

During your village call dates, each resident will call Verizon to set up your own individual account. During this call, you will tell Verizon:

- 1) if you want to keep or "port" your phone number over to Verizon,
- 2) what extra items you need (like extra set top boxes or premium channels or extra telephone lines or Battery Backup that you may want).

Verizon will give you your own installation date. There will be planning sessions to help you prepare for the phone call to Verizon. You will only be charged directly for any extra equipment or services you request over and above the items included in the Bulk Plan. See "The Verizon Bulk Package Includes" above to know what is included. On installation day, have your smart phones, tablets, and laptops fully charged and available for the Technician to be sure they are connecting to your Wi-Fi. Your televisions and desk top computers should be easily accessible also.

COMCAST SERVICES & EQUIPMENT

Services: Do not cancel your Comcast account or services until the Verizon FiOS installation is completed and successful.

Equipment: All rented Comcast equipment must be returned to Comcast by the Resident.

Contacting Comcast: 1-855-638-2855

- 1) Contact Comcast prior to the day of the Verizon FiOS transition appointment and obtain a list of all equipment that Comcast has assigned to your account, including serial numbers.
- 2) Check the list against the Comcast equipment currently in your home. If there is a discrepancy, contact Comcast again and resolve the discrepancy. Comcast will charge for any equipment listed on your account that is not returned to them.
- 3) On Verizon FiOS transition day, after a successful transition, call Comcast, cancel the services transitioned to Verizon FiOS, effective immediately, **receive and record a Cancellation Number** and ask for instructions on how to return Comcast equipment properly.

NOTE: We suggest returning the Comcast equipment to the Comcast Store in Exton and cancelling again in person, verifying a **Cancellation Number and receiving a Receipt for return of equipment**

- 4) There is a Comcast Store in the Main Street Mall, Exton near Bed, Bath & Beyond.
- 5) **NOTE:** Comcast will charge for any equipment not returned to Comcast. Many recommend returning the equipment directly to the local Comcast Store.

Resident Installation

On your installation date, a Verizon Technician will visit your home. During this visit the Technician will turn off and disconnect all Comcast equipment and will install all the equipment included in the Bulk Plan and any extra equipment you ordered during your account set up call. A grounded outlet (three prong plug) will be needed for the ONT (Optical Network Terminal) unit. All homes within HM should have a grounded outlet. The ONT unit connects the fiber optic to your interior cabling. The Technician will also provide instruction on how to operate your new remote control. They will work with you to be sure your tablets, computers, laptops, smart phones, etc. are accessing your Wi-Fi and that your home phone(s) and television(s) are working. During the installation, the Technician will also work with you to test your Security System connection. There may be a Volunteer within your village to be in your home with you during installation if you feel you would like or need extra help with the process.

Early Adopters

Those wishing to transition to Verizon early will be given the opportunity to do so on a retail basis. This will involve setting up a retail plan temporarily and then transitioning to the Bulk Plan Spring, 2018. The bill you get for add on services will be prorated for that first/conversion month.

Early Adopters will continue with the current HOA payment that includes the current bulk TV plan. See the “Verizon Transition Update” for more information.

Power Outage – see this section below (**Page 12, 17 & 18**) for a fuller explanation. If you desire a battery backup, please order a **POWERRESERVE** unit when you place your transition phone call to the 800 number on the dates for your village. If you order the Battery Backup, it will be shipped directly to you to arrive before your installation date. Be sure to give it to the Verizon Technician when he/she arrives, so they can install it. The 800 number and dates will be provided as we get closer to the transition period.

VOLUNTEER Opportunities:

There are opportunities to assist with the transition within your village and community wide. Please let your Village President know if you would like to Volunteer to assist your neighbors.

Volunteers will receive early training and will be Ambassadors throughout the community for the pre - transition and transition phases.

Volunteers are needed and will be specially trained in the following areas:

Village Expert for most commonly asked questions,

Information Dissemination within Village (print, email, verbally)

Village Coordinator for Verizon Account Set Up dates as assigned

Village Contact for Verizon Technician during installation,

In Home Buddy as requested when a resident is undergoing installation

Village Expert for operating remote controls

Village Comcast Equipment Return Expert

SPECIFIC GENERAL INFORMATION

Current Telephone Numbers

You may keep your current telephone number, if you wish. To keep your current telephone number, each resident is responsible for making arrangements with Verizon to “port” their number during the individual account set up phone call. If you use voice mail on your telephone you must activate the new Verizon voice mail within 60 days of transitioning to Verizon for it to remain available and active. Note: any saved voice messages will no longer be accessible.

Multiple Telephone Lines within a Residence

The Bulk Plan includes one (1) telephone line. Any extra telephone lines must be ordered during the individual account set up call. If you wish to keep the telephone numbers on the additional telephone lines residents must make arrangements through Verizon to “port” those phone numbers during the individual account set up.

***EMAIL Addresses: all email addresses may be accessed by any device connected to the internet. IMAP only supports functions across devices.**

You may keep your Comcast email address or any gmail or yahoo or aol address. You must access your Comcast email address within 30 days and use it at least once a month for the email account to remain active. If you have any further questions about your Comcast email account, please visit the Comcast website or contact Comcast to assist you.

***VERIZON:** If you currently have a Verizon email address, you may keep it, provided you follow the instructions on the Verizon email with specific instructions already sent to you or will be sent. If you have any questions concerning your current Verizon email address, we suggest you contact Verizon directly.

***AOL:** AOL email offers IMAP (Internet Message Access Protocol – this means that when you access/read/reply to your emails on multiple devices like smart phone,

tablet, laptop, desktop, deleting on one device deletes on all devices), Advanced Spam Filters and Virus Protection. From Verizon:

“For customers choosing to keep their **verizon.net** email address, Verizon is teaming up with AOL to provide our customers with AOL Mail, an enhanced email experience. Here are just a few of the benefits you'll get with AOL Mail:

- Keep current verizon.net email address
- Much more storage space for your email
- Advanced spam filters
- Virus protection
- Email attachments up to 25MB
- Send texts and instant messages right from your inbox
- Easily manage your email anywhere with the highly rated AOL app

To learn more visit the AOL Mail for Verizon Customers help page”
or visit: <https://www.verizon.com/support/residential/email/migrations.htm> .

Installation and Activation Charges

During the Transition Period and beyond, there will be no installation or activation charges for Bulk services. There will only be charges if, during or after the Transition Period, a Technician is required to come to your home to install something new – like a tv in a room that has never had cabling or a tv before.

Interior Cabling

Cabling inside your home is always the resident’s responsibility. If the cabling inside your home works now, it will work with Verizon. There is no need to upgrade from RG59 to RG6 cable.

Internet Speed – 150Mg up and down load speeds

A significant number of HM homes have DSL; these homes would see a many-fold increase in speed. Most of the remainder have told us they see speeds of 30-80 Mg. A few have speeds in excess of 100Mg with Comcast Blast (Blast is an 'as available speed', meaning it is not a steady flow, but a Blast, and is not bi-directional, i.e., download AND upload). NOTE: Internet Speeds – Currently, many people see slower than anticipated response due to old routers limiting the thru put of their WIFI

Internet - Non-typical Residents - those who do not desire internet – Any resident who does not desire Internet service does not have to turn it on.

In studying the needs, available services and costs, residents without internet services were considered. The cost impact on the minority with no internet was determined to be minimal because of the minimum requirement for any home owner to live in HM - namely \$31.64 for Comcast Bulk Cable TV, paid through HOA fees, PLUS the

requirement for every home, with the exception of Ashton, to have a home telephone line to meet Security Requirements. Based on these two minimum cost requirements, and the greatly reduced cost of Verizon's Triple Play, any possible additional cost to the minority is minimal. Currently, the home turnover rate in Hershey's Mill is approximately 100 homes or more per year. Typically, those who are most likely not to have internet services, are the residents who are leaving HM. At this turnover rate, the number of residents not wanting or utilizing internet services will consistently diminish. Further, the average age of those residents moving into HM is younger than the current resident average age now. The new residents or prospective residents do want and will demand high speed internet services.

Netflix

Netflix is available through streaming over the Internet via smart tv or pc. An app to Stream through Verizon has just been announced. Please see the Posting: "Ways To Watch Netflix"

Non-HD Televisions

These older type televisions will still work. Suggest using a Digital Adapter for this type TV.

Programming

For details on programming offered, please visit the Verizon website (Verizon.com) or view the posted Channel Line Ups on the same hersheysmill.org list this document is located. Most programming is similar between providers, although Channel numbers are different.

Seasonal Residents

A MOBILE APP allows using FIOS TV on any Internet connected device when away from Hershey's Mill.

Telephone Numbers – See "Current Telephone Numbers" above

QUESTIONS AND ANSWERS

Battery Backup

See Power Outage below.

Cable Cards

Cable Cards are, as of this writing, available through Verizon for a monthly charge of \$4.99. Any resident desiring a cable card and possessing the appropriate equipment to utilize a cable card must order these during their individual account set up call. We are working with Verizon to determine if one Cable Card may be substituted for the included Set Top Box.

For those that own their own cable cards: the cards may be compatible with Verizon's service. There may only be two types of cable cards on the market. Verizon is not able to verify in advance if any particular cable card, other than the ones they have, is compatible with their system. Please contact the manufacturer of your cable cards to verify compatibility.

Choice

Bulk Rates are offered by Providers in exchange for all residents subscribing to the Provider's services under a Bulk Contractual Agreement. Providers do not allow a community to be in two Bulk agreements at the same time. For everyone within HM to have a choice of Providers everyone will have to be on Retail Rates. Retail Rates are much higher and would cost residents approximately \$53 More per month for Verizon or \$97 More per month for Comcast for the same services as in the Bulk Package. The Retail Rates amount to approximately \$636 to \$1161 More per year. The Retail Rates quoted in this paragraph are detailed below and are based on Introductory Rates offered on **April 10, 2017**. Note: these rates fluctuate up and down, sometimes weekly.

NOTE:

- 1) Any resident who desires to keep Comcast as their provider may do so. The HOA fee for Verizon will still be due for any residents who wish^{es} to keep Comcast. So, these residents will pay both the Verizon Bulk Rate and the Comcast Retail Rate.
- 2) Any resident who desires to keep Comcast television only will need to contact Comcast to determine if the inside wiring in their residence will accommodate both services. If the inside wiring does not accommodate both service providers the resident is responsible for any modifications necessary to their inside wiring to accommodate both services. Retail Rates for Comcast services will apply plus Verizon's Bulk Rate for these residents.

CHOICE - Current Retail Rates COMPARISON: See Next Page

CHOICE - Current Retail Rates:

Packages Offered By Verizon and Comcast for New RETAIL Subscribers **on Monday, April 10, 2017** are detailed below. NOTE: New Retail Pricing **changes** frequently. The details are important in the advertising.

Verizon Triple Play: as offered Monday, April 10, 2017

TV – 245 Channels plus HBO

Internet - 150 Mg upload and download speed

Voice (Dial Tone) – unlimited nationwide

DVR/Set Top Box

Cost per year averaged: \$102.49 (Year 1: \$94.99, Year 2: \$109.99. Average \$102.49)

Plus, Router \$10.00

Plus, Taxes and Fees \$18.37 (Approximate)

Total Monthly Cost \$130.86* *Subject to provider changing prices*

Comcast Triple Play: as offered Monday, April 10, 2017

TV – 230 Channels plus Showtime and Stars

Internet – 200 Mg Download Only 20 Mg Upload (Also a new offering, however, this speed is Not listed on their Internet speed rates.)

Voice (Dial Tone) – unlimited nationwide

Cost per Year for two years: \$139.99

Plus, Router \$10.00

Plus, Set Top Box \$10.00

Plus, Taxes and Fees \$23.99 (Approximate)

Total \$183.99

Minus Credit - 7.00

Total Monthly Cost \$176.98* *Subject to provider changing prices*

Hard Wire PC's

Q: Can PC's be 'hard wired' connected (connected by cable instead of through WiFi to PC's?)

A: Yes

IPv6

Q: Is Verizon IPv6 ready?

A: IPv6's primary purpose is to expand the availability of IP addresses to accommodate future needs and make upgrades to current needs thru the application of newer technological developments. Verizon is ready for it, when it is needed. See this link for IPv6:

<https://www.verizon.com/support/consumer/consumer-education/ipv6>

Power Outage / Battery Backup

Q: Will phones work in a power outage if they are plugged directly into a wired phone outlet?

A: *Telephones will not work in a power outage unless a battery backup device is purchased by the resident. Verizon FiOS uses electricity to power your voice service. The PowerReserve device uses 12 standard D-Cell batteries to provide up to 20 hours of power for your Verizon home phone service. The cost for this is a one time approximate cost of \$40.00. The new version battery backup uses Standard D-Cell alkaline batteries and allows the resident to change out the battery themselves when needed. The PowerReserve will only provide power for Verizon voice service, including calls to 911. It will not provide power to your Verizon TV or internet service or cordless phones, home security systems, or devices that assist customers with disabilities. To the best of our knowledge, alarm boxes in Hershey's Mill have battery backup. You will be offered the PowerReserve when you place your Account Setup Call to Verizon. If you order the battery backup, it will be shipped directly to you so you will have it in time for the Verizon Technician to install it. Please give it to the Technician when they arrive at your home so they can install it.

NOTE: Not all Comcast telephones work in a power outage. The only backup battery available for Comcast equipment is limited to their voice modem, specifically eMTA modems, which is used for both Internet service and Comcast voice service. Comcast says battery replacement is a homeowner's responsibility and cost.

*If you desire a Verizon PowerReserve battery backup please order this when you place your transition phone call to the 800 number on the dates for your village. The 800 number and dates will be provided as we get closer to the transition period.

<https://www.verizon.com/home/accessories/powerreserve/>

*See end of document for more information – Pages 17 and 18

Purchased Movies

Q: I have Comcast now and from On-Demand I have purchased (not rented) movies, will I still have those purchased movies when we switch to Verizon?

A: Yes, paid for Movies purchased through Comcast will continue to be available. Here is how you will access your paid for movies after the transition to Verizon: As per the Comcast website xfinity.com, 'XFINITY On Demand FAQ's Section', movies purchased through Comcast should continue to be available as detailed on this page. Briefly, previously purchased movies will be available through 'www.xfinity.com/stream' and the XFINITY Stream app. You will need your *primary* XFINITY username and password to access your purchases. Refer to the XFINITY.com website for full directions.

Programming

Q: How does the Verizon Programming (TV Channels) compare to Comcast?

A: They are similar. Visit the Verizon website (Verizon.com) and look at the listings under "Preferred HD" for the exact programming. See Sports Channels below for Sports Channels information. Or view the Channel Line Ups on the same listing as this document on hersheysmill.org.

Repairs and Maintenance

Q: Who is responsible for the repair and maintenance of the phone lines and the alarm system?

A: 1) Interior 'phone lines' or cabling is always the responsibility of the resident, here in HM or in any home in any neighborhood. Note: Some people pay an extra charge on their phone bills to cover repair of interior phone lines. The last price for this we saw was \$12+ a month.

2) Repair and maintenance of exterior phone lines is the carriers' responsibility, no matter the company providing service.

3) The repair and maintenance of the alarm systems does not change.

Remotes: Voice Controlled Remote

Q: Does Verizon have a voice-controlled remote?

A: At this time, Verizon does not have a voice controlled remote. Please also note, Comcast's voice controlled remotes only work with XFINITY X1 and not with basic Comcast. Verizon has a Voice Activated Remote in development with a planned 2018 release.

Further, at this time, Verizon has an app for your smart phone that acts as a remote. This app has recently been upgraded to have voice control. STB channels can be changed using your FiOS mobile app from your smart phone, when connected to the home WiFi.

RF Remotes

Q: Does Verizon have RF remotes? RF (radio frequency) remotes allow equipment to be out of sight.

A: At this time, Verizon does not have RF remotes. We are unsure of a release date for RF remotes. However, Logitech and other manufacturers sell RF converters, at reasonable prices. A homeowner can purchase IR to RF to IR extender systems; for example, see <http://www.smarthome.com/80451/IR-to-RF-to-IR-Remote-Control-Range-Extender-Kit-433-MHz/p.aspx>.

Ver1.0

NOTE: Comcast's RF remotes only work with XFINITY X1 and not with basic Comcast. Verizon does have IR Remotes. IR (infrared) Remotes operate on line of sight. Also, Verizon does sell an extender for \$12.

Security Suite/Protection

Q: Does Verizon offer a free Security Suite?

A: Security Protection

Typically, computer viruses make their way onto computers through emails. Less frequently, a computer virus can be obtained through a website. Anti-virus Security can be purchased for a one-time fee. Norton, McAfee and other companies sell anti-virus protection. Anti-virus protection can also be obtained for a monthly fee through Verizon. On March 27, 2017, Verizon offered a monthly virus protection fee that includes Life Lock, and protection for your mobile devices and desk top devices. Go to the website below for more information:

http://images-promo.verizon.com/ECRM/03-27-2017-DSP-EM/DSP_Mar_27_DSP1A.html?CMP=EMC-CON_2017-Q1_RX-NA-ecrmtxid327DSP1a_0339&txid=B20170327_4584483216

A monthly PC Security Suite is \$6.99 with Verizon (as of April 12, 2017.).

NOTE: Comcast only offers an included Security Suite with Xfinity internet. AOL email provides IMAP, an Advanced Spam Filter and Virus Protection.

NOTE: Internet Speeds - Many people see slower than anticipated response due to old routers limiting the thru put of their WIFI.

Sports Channels

Q: What Sports Channels are included in Verizon's Preferred HDTV Bulk Plan?

A: Comcast Network, Comcast Sports Network, All ESPN Channels, Fox Sports 1 & 2, Big Ten 1 & 2, NBCSN, NFL Network.

Sport Channel Playoffs

Q: In the spring, if the Philadelphia. Flyers or Sixers make the playoffs, their playoff games bump the early season Phillies games off of Comcast Sports Net (Channel 576 on FIOS). On the Comcast system, the Phillies games are moved to another Comcast Sports Channel. Does Verizon offer this alternate sports channel as well?

A: Yes. The station used to be called TCN, it is now called NBCSN and it is available in standard and high definition in the Preferred package. It is also available in Extreme and Ultimate if someone upgrades.

Storage

Q: Will Verizon's TV box use a hard drive for storage or will storage be in the "cloud" like today's Comcast?

A: Verizon's and Comcast's DVR's are very similar. Both use only the DVR for storage. Comcast uses the 'cloud' only as a portal to watch saved programming through their remote application. Verizon also uses the 'cloud' as a portal to watch saved

programming through their remote application. As of April 12, 2017, Comcast reports their DVR's can record up to 50 total hours. As of April 10, 2017, Verizon FiOS reports their DVR's can record up to 200 total hours.

Telephone Outlets - Existing

Q: Will the existing phone outlets still work?

A: Yes

Why is Verizon making a \$1.2+ Billion Investments in Fiber Optic cable?

Verizon has just announced a \$1.2+ Billion purchase of Fiber Optic Cable from Corning Glass. Verizon is not only installing Fiber Optic in all new locations but, importantly, they are replacing old copper cabling with Fiber Optic Cable in both residential and commercial locations. Verizon reports that they are making this billion dollar investment and undertaking this extensive replacement at no cost to current Verizon environments because of the demands of both the near and far future. The ability to provide new services, such as the Internet of Things, including medical devices, smart technologies and many other services and items we do not even know are coming, will require an infrastructure that can support huge amounts of information flow that must be robust and deep in fiber optic transmission capability.

Why is Fiber Optic cable better than copper? For a more complete, longer discussion on Fiber Optic Cable, please refer to pages 16 and 17. In summary:

Fiber Optics refers to technology that transmits data through thin strands of a highly transparent material that usually is either glass or plastic. Fiber Optic enhances cable television performance reliability, as well as, enables the offering of both phone and Internet service on the same fiber. Fiber Optic cable is necessary to receive and provide services available today and coming in the future.

- Fiber Optic offers speed, reliability, clearer signals with fewer connection points along with cost effectiveness.
- Fiber Optic does not break as easily and has much fewer repair or failed signal issues.
- Fiber Optic does not conduct electricity and is not a fire hazard.
- Each home will receive its own Fiber Optic cable without having to share signal strength.
- Fiber optic transmission is much faster than over copper.
- Fiber optic transmission results in less signal loss, providing a clearer signal over longer distances requiring fewer connection points.
- Fiber Optic cables do not conduct electricity and are not a fire hazard.

-Fiber optic cables do not break as easily.

Why is Fiber Optic cable better than copper?

Fiber Optics refers to technology that transmits data through thin strands of a highly transparent material that usually is either glass or plastic. Fiber Optic enhances cable television performance reliability, as well as, enables the offering of both phone and Internet service on the same fiber. Fiber Optic cable is necessary to receive and provide services available today and coming in the future.

Fiber Optic offers speed, reliability, clearer signals with fewer connection points along with cost effectiveness. Fiber Optic does not break as easily and has much fewer repair or failed signal issues. Fiber Optic does not conduct electricity and is not a fire hazard. Fiber Optic is the choice for building for now and the future. Each home will receive its own Fiber Optic cable without having to share signal strength. Fiber Optic cable offers many advantages over copper:

Fiber optic transmission is faster: Fiber optic versus copper wire transmission can be boiled down to the speed of photons versus the speed of electrons. Photons travel at the speed of light, whereas electrons (as used in copper wire) occurring in nature travel at less than one percent of the speed of light. And while fiber optic cables don't travel at the speed of light, they come very close — only about 31 percent slower than the speed of light. So as you can see, there's a huge inherent speed difference.

Fiber optic transmission results in less attenuation: When traveling over a long distance, fiber optic cables experience less signal loss than copper cabling, known as low attenuation. One source estimates that fiber loses only three percent signal strength going over 100 meters (approximately 320 feet) in distance. By contrast, copper loses 94 percent over the same distance. Repeaters or boosters can improve those rates, but in its native state, fiber beats out copper when it comes to avoiding signal loss. Fiber optics can convey a clear signal much farther than copper or wireless.

Fiber optic cables are impervious to electromagnetic interference: Copper wires, if not properly installed, will produce electromagnetic currents that can interfere with other wires and wreak havoc on a network. An added benefit of fiber optic cables is that they are not a fire hazard. (Fiber optic cables, unlike copper cables, do not conduct electricity.)

Fiber optic cables do not break as easily: This means that you will not have to worry about replacing them as frequently as copper wires.

See Battery BackUp/ PowerReserve Information next pages:

Battery PowerReserve Unit - Customer Service | Verizon 4/4/17,



Support Battery Backup PowerReserve

If your ONT is configured with a Power Adaptor, you may utilize the Verizon Voice Backup PowerReserve. Using 12 D-cell batteries, this device provides backup power for your basic voice services, including Emergency 911 dialing, for up to 20 hours in the event of a power failure.

How do I install my PowerReserve device?



The PowerReserve device is easy to install and can be mounted on the wall, if desired. Please download the PowerReserve installation instructions [here](#) (pdf format) or follow along below.

1. Open the PowerReserve door by pressing the latched tab toward the unit and then pushing the tab up.
2. The PowerReserve device can be laid flat or mounted to a wall.
3. Uncoil the cable located in the center of the tray.
4. Insert 12 new D-cell alkaline batteries into the device. **DO NOT use rechargeable or Lithium batteries.**
5. Place the power switch to the OFF position.
6. Plug the power cable into the power adapter.
7. Close the PowerReserve door.
8. Leave the unit OFF until needed during a commercial power outage or change the batteries at least twice a year just as we did with Smoke Alarms.



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Will the PowerReserve provide battery backup for Internet and TV service in the event of a power outage?

The PowerReserve device will only provide power for voice calls in the event of a power outage. Please use your voice service only for emergency calls to preserve your battery power. Verizon will not provide credits and is not liable for interruptions of service due to power outages. The PowerReserve device will not power cordless phones, other devices, including those that assist customers with disabilities or home security systems, or your Fios[®] by Verizon Internet or TV service.