

# Smart Meter Deployment

Williamsburg Office



**smart**energy



# Advanced Metering = Advanced Capabilities

## Foundation to Modernizing the Electric Grid

- Asset Management
  - Preemptive Outage Mitigation
  - Proactive Projects Before Failure
  - Component Level Analyses
- Distributed Generation Integration
- Leverage for Distribution Automation

## Meets Evolving Customer Expectations

- Improved operations
- More information available to customers
- Supports future rate offerings, like Time-of-Use which can help lower bills



# Smart Meter Customer Benefits

**Power outage detection** – Smart meters can notify us when your power goes out and when it has been restored.

**Detailed Energy Usage** – Customers can log into Manage Account to receive more detailed energy usage enabling them to take control of how and when they use energy.

**Remote meter readings** – We will be able to remotely collect meter readings daily, ensuring that your smart meter is working properly.

**Healthier environment** – Smart meter data collection means fewer trucks on the road, reducing emissions and benefiting the environment.

**Remote meter turn on and off** – Smart meters enable us to turn your electric service on and off without having to send an employee to your home or business.

**Text and email Alerts** – When something affects your electric service, such as storms, our emails and text alerts can keep you informed. Eligible customers can sign up for Energy Usage Alerts too.



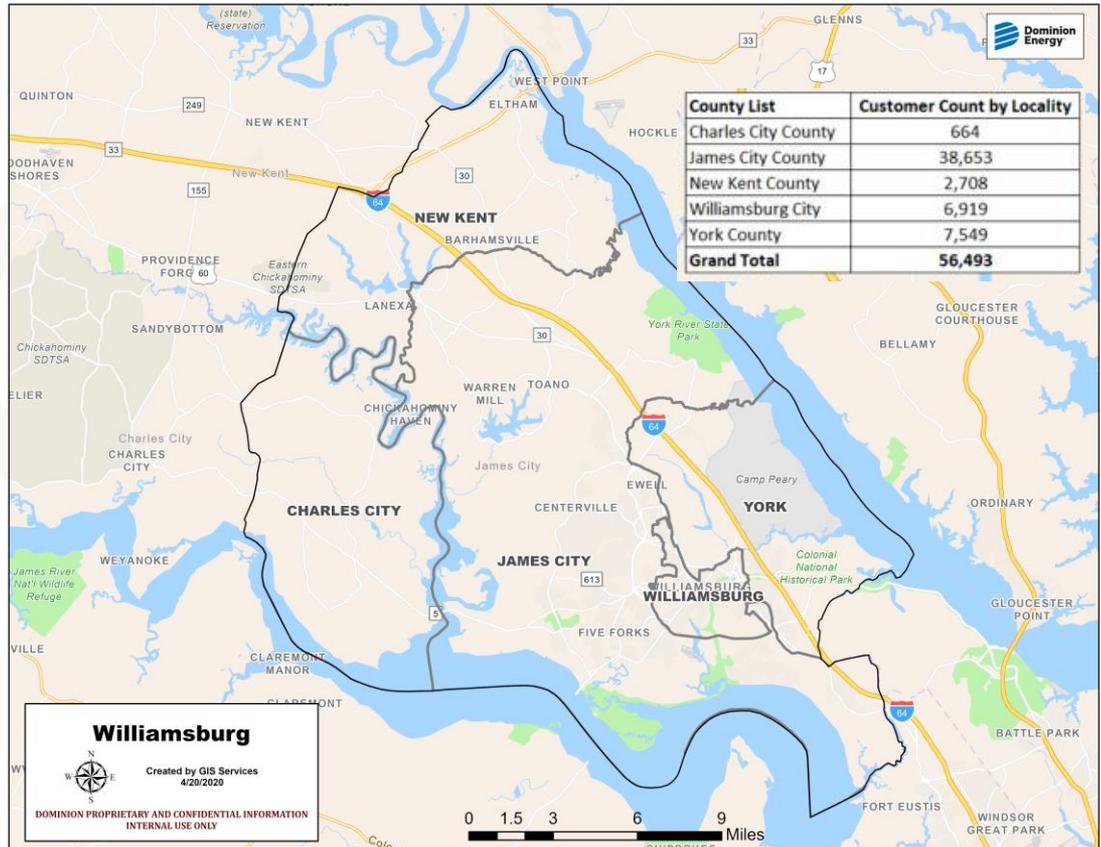
➤ **Dominion Energy Virginia has deployed nearly 600,000 smart meters**

# Williamsburg Office Footprint

**Mesh Network** – Backbone infrastructure already deployed

## Smart Meter Installations

- Begin mid-August, continue through end of 2020
- Office area shown on map
  - Portion of the **City of Williamsburg** completed previously (Colonial Williamsburg area)
  - **James City, Charles City, New Kent and York Counties**



# Customer Communications

- **Website updates**
  - Factsheets, videos
  - Opt-out information (residential only)
- **Postcard** mailed 2-3 weeks prior to installation
- **Door hanger** provided day of deployment
- **Customer Service** agents available to answer questions and schedule exchanges (Aclara) where access is an issue



Postcard

**Smart Meters: our newest metering technology for managing energy**

You're due for an upgrade. Soon, Dominion will be exchanging existing meters in your area for new Smart Meters. Why? To continue providing you with better service—like more reliable delivery of energy, better power-outage detection, faster problem resolution and remote meter reading. Smart meters also allow you to view your daily energy usage and participate in pricing plans which help you manage energy and costs.

The meter upgrade will require only a momentary power interruption; no need for you to make an appointment or be present during the exchange.

**For more information, including how to view your daily energy usage, please visit**  
[DominionEnergy.com/SmartMeter](http://DominionEnergy.com/SmartMeter)

The meter upgrade will occur at:  
The upgrade will occur between 10:00 PM and 5:00 AM on Monday, October 10, 2011. The upgrade will occur between 10:00 PM and 5:00 AM on Tuesday, October 11, 2011. The upgrade will occur between 10:00 PM and 5:00 AM on Wednesday, October 12, 2011. The upgrade will occur between 10:00 PM and 5:00 AM on Thursday, October 13, 2011. The upgrade will occur between 10:00 PM and 5:00 AM on Friday, October 14, 2011. The upgrade will occur between 10:00 PM and 5:00 AM on Saturday, October 15, 2011. The upgrade will occur between 10:00 PM and 5:00 AM on Sunday, October 16, 2011. © Copyright 2011 Dominion Energy. 100174011000

**Dominion Energy**  
P.O. Box 26686  
Richmond, VA 23221

**Dominion Energy**

**By upgrading to new, advanced metering technologies, we're investing in our infrastructure and in our customers.**

Date \_\_\_\_\_

- A utility service representative upgraded the electric meter today. If you have any questions or concerns related to the meter exchange, please call: **866-566-4426 | 9 AM to 5 PM, Monday to Friday**
- A utility service representative stopped by today to upgrade the electric meter. However, the meter could not be exchanged due to: \_\_\_\_\_

To discuss the issue and reschedule the meter upgrade, please call: **844-562-8472 | 9 AM to 5 PM, Monday to Friday | 8 AM to 5 PM, Saturday**

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Door Hanger

**smartenergy**

**Transforming Virginia's Future**  
We are delivering for our customers, with bold targets for reducing carbon, adding renewable energy resources and transforming the electric grid for more reliable service that meets our customers' evolving needs.

**Smart Meters Improve service and provide several benefits:**

- **Remote Meter Readings** – We will be able to remotely collect meter readings daily and ensure that your meter is working properly.
- **Service Restoration Status** – Smart Meters can notify us when your power goes out and when it has been restored.
- **Healthier Environment** – Remote data collection means fewer trucks on the road, reducing emissions and benefiting the environment.
- **Remote Operations** – Smart Meters will help you save time if you move or transfer service by allowing us to remotely turn your electric service on and off without having to send someone to your home or business.

[DominionEnergy.com/SmartMeter](http://DominionEnergy.com/SmartMeter)

# Website Content

Virginia | Sign In | Careers | News | Investors | Suppliers | Search

**Dominion Energy**

Home & Small Business | Large Business | Outages | Our Promise | Company | Contact Us

**Company**

- Our People
- Governance
- Diversity
- Community
- Safety
- Making Energy
- Moving Energy

**Electric Projects**

- > Power Line Projects
- > Coal Ash - Our Commitment to Getting it Right

**Smart Meters**

**Smart Meters Deliver Benefits**



**With Smart Meters you get:**

- Detailed Energy Usage - The ability to receive more detailed energy usage reports on your use energy.

**Smart Meter FAQs**



Smart meters are the latest technology advancement in the metering world, providing customers with new ways to conserve energy and improve Dominion Energy's operations. The network of smart meters is referred to as Advanced Metering Infrastructure, or AMI. Smart meters are the foundation to create a smart grid.

**About Smart Meters**

What are the benefits of having a smart meter? >

How does the smart meter system work? >

**Dominion Energy**

## Ensuring Customer Privacy



Dominion Energy is committed to protecting your personal data while providing safe, reliable and affordable electricity. This includes using technology to help us manage customer data for billing, load forecasting, and other business purposes.

**Protecting Customer Privacy**

**Information we collect**  
Customers provide information when they open an account, participate in a Dominion Energy program, or use one of our services. We collect customer data to manage accounts, operate the electrical grid, provide customers with current and new services, and conduct business. The information collected includes:

- Contact information such as customer name, services used, mailing address, phone numbers, email addresses, and Social Security number
- Billing information related to your financial

**How Dominion Energy Protects Your Information**

- No customer names and addresses are transmitted to our meters.
- Any customer information is protected by a secure system.

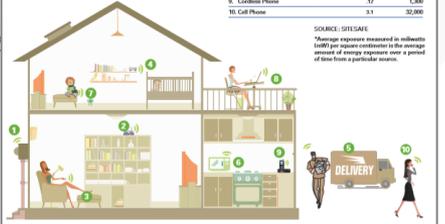
Protection measures are in place throughout Dominion Energy's system to safeguard the privacy of customer data.

## Understanding Radio Frequency

How does the radio frequency of a smart meter compare to other wireless products?

Device	Average RF Level (mW/cm²)	Average Time Spent (hours)
1. Smart Meter	0.00005	0.000001
2. Wireless Modem	0.00005	3.2
3. TV Remote	0.0011	1.1
4. Baby Monitor	0.002	2.0
5. Cordless Babyphone	0.002	2.0
6. Microwave Oven	0.009	30
7. Toy Remote	0.001	4.0
8. Laptop	0.017	8.0
9. Cordless Phone	1.2	1,300
10. Cell Phone	3.1	30,000

SOURCE: SITS/SAFE  
\*Average exposure measured in milliwatts (mW) per square centimeter is the average amount of energy exposure over a period of time from a particular source.



**Myth**

**Safety**  
Smart meters are not safe and don't meet federal standards.

**Fact**

**Safety**  
False. Dominion Energy's smart meters comply with Federal Communications Commission (FCC) health and safety standards.

# Additional Resources



Smart Meter Upgrade

Smart Meter information and  
Frequently Asked Questions  
[www.DominionEnergy.com/SmartMeters](http://www.DominionEnergy.com/SmartMeters)

Benefits of the Grid Transformation Plan  
and future projects  
[www.DominionEnergy.com/SmartEnergy](http://www.DominionEnergy.com/SmartEnergy)

Videos explaining the benefits of smart  
meters and other infrastructure  
**YouTube – Dominion Energy channel**  
*Playlist: “Smart Grid”*

# Smart Meters

## Energy gets an upgrade

By upgrading to new, advanced metering technologies, we're investing in our infrastructure and in our customers.

These days there are smart phones and smart cars. Smart meters are the latest metering technology for managing energy. Smart meters enables us to provide you with electricity at reasonable rates and with better service – like better power-outage detection, faster problem resolution and remote meter reading.



## What are the benefits of smart meters?

### Faster outage detection and power restoration

Smart meters notify us when your power goes out (even when you're not home) and when it has been restored.

### Remote meter readings

Remote data collection enables an additional level of energy data, like daily readings, to help you make informed decisions about your energy usage.

### Healthier environment

Remotely collecting data means fewer trucks on the road, reducing emissions and benefitting the environment.

### Greater customer control and convenience

Smart meters can be operated remotely, without having to send a representative to your home.

### Improved grid operations

Smart meter information helps to improve grid operations and assist with the integration of distributed energy resources, such as solar energy.

### Smart Pricing Plans

Smart meters can measure energy usage in 30-minute intervals, enabling Dominion Energy to offer voluntary pricing plans with rates based on time of day usage, and to better manage your energy use and costs.

For more information about Dominion Energy's smart meter initiative, visit [DominionEnergy.com/SmartMeter](http://DominionEnergy.com/SmartMeter)

## How it works

The smart meter system enables remote two-way communication between the meter and Dominion Energy.



Home or Business



Router



Dominion Energy



# Ensuring Customer Privacy



Dominion Energy is committed to protecting your personal data while providing safe, reliable and affordable electricity. This includes using technology to help us manage customer data for billing, load forecasting, and other business purposes.



Protection measures are in place throughout Dominion Energy's system to safeguard the privacy of customer data.

## Protecting Customer Privacy

### Information we collect

Customers provide information when they open an account, participate in a Dominion Energy program, or use one of our services. We collect customer data to manage accounts, operate the electrical grid, provide customers with current and new services, and conduct business. The information collected includes:

- Contact information such as customer name, services used, mailing address, phone numbers, email addresses, and Social Security number
- Billing information related to your financial relationship with us, including your payment and credit history
- Electric usage data gathered by our metering systems
- Your power outage history
- Data from your participation in Dominion Energy programs and services, such as those related to energy efficiency

### How Dominion Energy protects your personal information

- No customer-specific information, such as names and addresses, is stored in the meters or transmitted across the network by the smart meter.
- Any customer electrical usage data is transferred safely across our secure network.
- The data we collect help us to manage customer accounts and our business. Dominion Energy does not monitor how a customer uses energy.
- Dominion Energy protects all customer data under current privacy protection laws, regardless of meter type.

For more information, visit [dominionenergy.com/mya](https://www.dominionenergy.com/mya).

# The Facts About Smart Meters and Privacy

Smart meters use digital technology to enable secure two-way communication between the meter and Dominion Energy.



Like other types of meters, smart meters measure how much energy customers use—not how the energy is used. Smart meters don't store or transmit any information about who our customers are, where they live or what they are doing.

## Myth

### Surveillance

The smart meter knows when you're home, what appliances you're using, etc., allowing for surveillance of your personal life.

### Surveillance

False. Like other types of meters, smart meters measure how much energy customers use, not how the energy is used. The smart meter does not store or transmit any information about who our customers are or where they live.

### Data

Your energy data may be misused by Dominion Energy or sold to a third party.

### Data

False. Your energy data is used only to manage your Dominion Energy account and the electrical grid. Unless required in a legal proceeding or through a subpoena, a third party can view your energy use data only with your prior permission. A signed letter of authorization from you must be on file before we would move forward with any requests. Energy data is not sold or otherwise disclosed to third parties.

### Cybersecurity

Since meters are wireless, they are susceptible to hackers. The signals can be intercepted by criminals.

### Cybersecurity

False. No personal information—such as names and addresses—is stored in the smart meter or sent across the network. Energy Data is transmitted via a secure wireless network that complies with the industry's highest standards for cybersecurity set by the National Institute of Standards and Technology.

### Controlling Appliances

Smart meters may turn off appliances within a customer's home without permission.

### Controlling Appliances

False. Dominion Energy's smart meters cannot operate appliances inside a home or business. The meter cannot communicate with any device inside of a customer's home. Customers do have the choice to participate in their own energy management system. It would be up to the customer to own, operate and manage a system that provides them further energy consumption information, independent and separate from their service with Dominion Energy.

### Privacy

Dominion Energy monitors my energy usage in real time.

### Privacy

False. Smart meters record energy usage and Dominion Energy collects these readings every day. Any customer with a smart meter has the ability to view their energy consumption data (provided in 30-minute intervals) by visiting the Dominion Energy website and logging onto their account.

### Disclosure

My energy information is not available.

### Disclosure

False. Past billing, payment and usage information is available for up to 18 months through Manage Your Account. Visit [www.dominionenergy.com/mya](http://www.dominionenergy.com/mya) to access your account or to sign up. Customers are able to review data and make informed decisions about their home's energy usage. Dominion Energy uses aggregated data to develop load forecasts to help manage the business.

# Smart Meters and Radio Frequency



Dominion Energy is investing in smart grid modernization efforts to build a stronger, smarter and more efficient electric grid to meet your energy needs. Smart meters are a fundamental component of the smart grid, and Dominion Energy's smart meters comply with Federal Communications Commission (FCC) health and safety standards.



## What is Radio Frequency?

Smart meters send information about electricity usage to Dominion Energy by Radio Frequency (RF) signals. Other widely used wireless products such as cell phones, laptop computers and baby monitors also work using RF communications.

**Distance + Power + "Time on" = Radio Frequency Level**

### Distance

Signal strength and radio frequency decrease as a person moves farther from the device. Meters are typically placed outdoors, with a wall separating the meter from the living space.

### Power

A smart meter transmits using one watt, similar to the power of a cordless phone, baby monitor or radio-controlled toy.

### "Time on"

Unlike cell phones, laptop computers and baby monitors, which are left on for long periods, smart meters use RF energy to transmit a maximum of 4.5% of the day.\*

[DominionEnergy.com/SmartMeter](http://DominionEnergy.com/SmartMeter)

In the U.S., the Federal Communications Commission (FCC) establishes the requirements for use of RF and acceptable exposure limits for the public. Dominion Energy's smart meters comply with all requirements set by the FCC, as well as international requirements set by global bodies. The smart meter's operating band is 26 MHz wide between 902 and 928 MHz. FCC exposure limit is frequency-dependent and the limit for this band ranges between 601 and 619  $\mu\text{W}/\text{cm}^2$  (microwatts per square centimeter). The exposure level from a smart meter at one foot is more than 150 times lower than the FCC limit.

\*Electric Power Research Institute report titled "Characterization of Radio Frequency Emission from Two Models of Wireless Smart Meters," December 2011

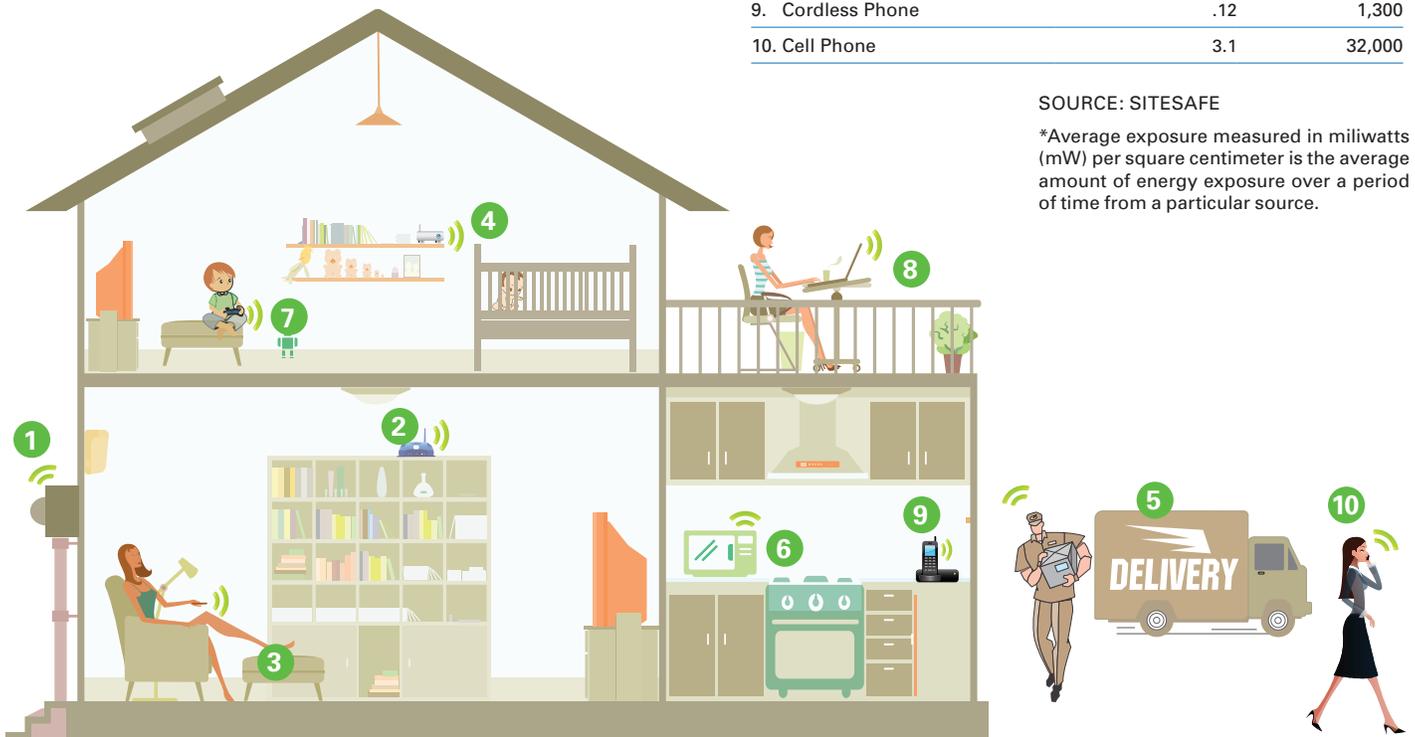
# Understanding Radio Frequency

How does the radio frequency of a smart meter compare to other wireless products?

Device	Average RF Level (mW/cm <sup>2</sup> )	Average Times Higher
1. Smart Meter	.000095	
2. Wireless Modem	.000095	1
3. TV Remote	.00031	3.2
4. Baby Monitor	.0011	11
5. Handheld Delivery Terminal	.0022	23
6. Microwave Oven	.0029	30
7. Toy Remote	.0041	43
8. Laptop	.0077	81
9. Cordless Phone	.12	1,300
10. Cell Phone	3.1	32,000

SOURCE: SITESAFE

\*Average exposure measured in miliwatts (mW) per square centimeter is the average amount of energy exposure over a period of time from a particular source.



Myth	Fact
<p><b>Safety</b> Smart meters are not safe and don't meet federal standards.</p>	<p><b>Safety</b> False. Dominion Energy's smart meters comply with Federal Communications Commission (FCC) health and safety standards.</p>
<p><b>Time</b> Like a cell phone, a smart meter is "on" all of the time and emitting RF as it searches for a signal.</p>	<p><b>Time</b> False. On average, a Dominion Energy smart meter is "on" and transmitting a maximum of 4.5% of the day in short signals.</p>
<p><b>Health</b> Smart meters can cause health effects.</p>	<p><b>Health</b> False. There is no medical evidence linking health concerns with exposure from a smart meter. The public health and scientific community has found no reason to change exposure limits based on RF health concerns after repeated testing.</p>
<p><b>Home Safety</b> The RF from a smart meter is more powerful than other devices typically used in the home.</p>	<p><b>Home Safety</b> False. In the home, smart meter RF level is over 100,000 times below the FCC limit. Smart meters are typically placed outdoors, with a wall separating the meter from the living space. Signal strength and radio frequency decrease as a person moves farther from the device.</p>

**From:** Bellamy, Mark  
**Sent:** Wednesday, July 22, 2020 3:43 PM  
**To:** Schott, Heather; Vance, Sarah; Diggs, Victoria  
**Subject:** FW: PEMS Regional Awards

For Friday package....

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**From:** Kopczynski, Stephen  
**Sent:** Wednesday, July 22, 2020 3:41 PM  
**To:** Morgan, Neil; Bellamy, Mark; McGettigan, Vivian; Whittaker, Gail; Hersh, Paula  
**Subject:** FW: PEMS Regional Awards

FYI.  
Thanks,  
SPK

**STEPHEN P. KOPCZYNSKI**  
**FIRE CHIEF/DIRECTOR**  
**COORDINATOR OF EMERGENCY MANAGEMENT**  
**YORK COUNTY (VA) DEPARTMENT OF FIRE AND LIFE SAFETY**

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**From:** Kopczynski, Stephen  
**Sent:** Wednesday, July 22, 2020 3:40 PM  
**To:** All FLS Employees <AllFLSEmployees@yorkcounty.gov>  
**Subject:** PEMS Regional Awards

I am pleased to inform everyone that the PEMS Regional Awards have been announced.  
They can be found at the link below.

<https://peninsulas.vaems.org/>

As they specifically pertain to York County the awards are:

**Innovation Excellence in EMS** – Peninsulas COVID-19 Operations Center (City of Hampton, City of Newport News, City of Poquoson, City of Williamsburg, James City County, York County, Bon Secours Mary Immaculate Hospital, Hampton VA Medical Center, Riverside Doctors Hospital of Williamsburg, Riverside Regional Medical Center, Sentara CarePlex Hospital, Sentara Williamsburg Regional Medical Center, Joint Base Langley-Eustis, Navy Regional Mid-Atlantic, Hampton/Peninsula Health Districts, Peninsulas EMS Council )

**Outstanding Contribution to EMS Preparedness and Response** – Sherl Emerson, York County Department of Fire and Life Safety

**Outstanding EMS Call** – York County Department of Fire and Life Safety – December 22, 2019 75 vehicle Crash on Interstate 64.

Congratulations and thanks for the hard work by all!!!

SPK

**STEPHEN P. KOPCZYNSKI**  
**FIRE CHIEF/DIRECTOR**  
**COORDINATOR OF EMERGENCY MANAGEMENT**  
**YORK COUNTY (VA) DEPARTMENT OF FIRE AND LIFE SAFETY**

**From:** Whittaker, Gail  
**Sent:** Friday, July 24, 2020 1:56 PM  
**Subject:** York County Update 7/24/2020: Fire & Life Safety COVID-19 Update; Economic Development Announces Small Business Grant; Tourism Development Awarded Grant; Summer Concert Series Coming to you Live-Streamed; Join us for Movies in the Parks  
**Attachments:** 2020-073.pdf; Movie at the Mac.jpg; ED Grant comparison.jpg

July 24, 2020

### **Fire and Life Safety COVID-19 Update**

- Eleven Fire & Life Safety personnel who had tested positive for the COVID-19 virus and quarantined per policy, have returned to duty along with other staff under quarantine as a health and safety precaution. In the past 24 hours, two additional staff have tested positive, are in the process of being quarantined, and the department is working to identify additional personnel who may be in need of quarantine. Additional information is available in the [press release](#).

### **Economic Development Announces COVID-19 Small Business Grant that Joins York CARES Grant in Assisting Local Businesses**

- York County Economic Development has announced an additional grant to small businesses – those with under 20 employees. The **COVID-19 Small Business Grant** offers up to \$5,000 in recovery funding for eligible businesses as reimbursement for purchase of protective supplies, tools, equipment, or inventory; cleaning services or supplies; property improvements or renovations to accommodate social distancing or outdoor dining, recreation, services, etc.; payment for rent or mortgages during times of required business closure and/or modification; and other qualifying expenses incurred following the State reopening requirements. Visit the [website](#) for more information including eligibility requirements. This grant is in addition to the York CARES Grant (see below).
- York County set aside funding received from the government's CARES ACT to establish the **York CARES Grant**. The County and Economic Development Authority are offering one-time financial assistance to eligible for-profit small businesses up to \$3,000. The application and eligibility requirements are available on the Office of Economic Development [website](#).

### **Tourism Development Awarded Virginia Tourism Corporation (VTC) DMO WanderLove Grant**

- York County Tourism Development is pleased to announce that it is the recipient of a \$10,000 Recovery Grant awarded by the Virginia Tourism Corporation for destination-marketing organizations (DMO) across the Commonwealth. The funding will be used to increase awareness and visitation to our destination

through the WanderLOVE campaign, which aims to stimulate economic activity and travel “road trips” across the state. These funds will support creating WanderLOVE videos, digital assets, and participation in the VTC Google search and digital banner campaigns. **As part of the grant, and to help celebrate National Farmers Market Week, York County is excited to once again host the VTC’s life-sized LOVE letters, this time for the special August 8 market.** The letters are an extension of the “Virginia is for Farmers Market Lovers” variation of the state’s iconic motto. The annual event provides an opportunity for the community to learn more about how their food is grown and harvested, and to celebrate our farmers and other local small businesses. The letters will be on display for photo opportunities from August 1 through August 9.

- **The show will go on... virtually. Tourism Development is bringing you the Sounds of Summer Concert Series live online!** While in-person Sounds of Summer concerts have been cancelled up to this point as a result of the pandemic, the Tourism Development Office is excited to announce **three upcoming real-time concerts that will be live-streamed** for the community! These performances are Thursday nights on a closed set inside the Freight Shed. Viewers may tune in at 7 p.m. via York County’s YouTube page and the Visit Yorktown Facebook page to see 90 minutes of music from some of our area’s most popular bands. This series is a collaborative effort between York County’s Tourism Development, WYCG-TV, and Department of Information Technology. A special thank you to James River Audio Visual for their support and services. Upcoming Line-Up:
  - **Thursday, July 30 – Slapnation**
  - **Thursday, August 6 – WOAH**
  - **Thursday, August 13 – Tidewater Drive Band**

### **Parks and Recreation’s Movies in the Parks Continues**

- Movies in the Parks continues this weekend with a family-friendly movie showing just after sunset at New Quarter Park. Two of these movie showings have taken place – July 10 at Charles Brown Park and July 18 at New Quarter Park – and have attracted approximately 60 people at each event. These outdoor movies are an opportunity for families to enjoy a movie, spend time outside, and socially distance all at the same time. For a complete listing of upcoming movies, view the [schedule online](#).

### **York County Fire & Life Safety Awarded Regional Peninsulas EMS Awards**

- The Department of Fire & Life Safety received two awards – one for Outstanding EMS Call for its response to the 75-car pileup on Interstate 64 in December of 2019, and another for Outstanding Contribution to EMS Preparedness and Response given to Sherl Emerson, Senior Administration Services Manager (now retired) for her 39 years of service to the department. The Innovation Excellence in

EMS award was given for the Peninsulas COVID-19 Operations Center, of which York County Fire & Life Safety is a partner. For additional information, please see the [press release](#).

### **Board of Supervisors July 21 Meeting Online, TV**

- The Board of Supervisors July 21 meeting was held remotely. Meeting details are available [here](#). Meeting replays are always available to [view online](#) and are shown on WYCG-TV (Cox 46, Verizon 38). The Board does not hold a meeting on the first Tuesday in July. The next meeting is August 4. The meeting agenda will be posted online during the previous week.

*Gail L. Whittaker*

Public Information Officer/FOIA Officer

York County Public Affairs

(757) 890-3310 – desk

(757) 890-3300 – main

(757) 817-2665 – cell

[www.yorkcounty.gov](http://www.yorkcounty.gov)