



# Institute of Medicine

*The immediate, hands-on response of bystanders to cardiac arrest is critical to improve rates of effective resuscitation and, thereby, increase the likelihood of survival and positive neurological outcomes for out-of-hospital cardiac arrest.*

*Bystander CPR makes the next link in the chain of survival, early defibrillation, more effective by increasing the proportion of individuals who are found with a shockable rhythm.*

*Many national and international registry studies indicate that bystander CPR can **increase survival rate** for OCHA between **50 and 500 percent**.*



*Strategies to Improve Cardiac Arrest Survival: A Time to Act*  
*Robert Graham, Margaret A. McCoy and Andrea M. Schultz*  
*IOM June 30, 2015*



# New England Journal of Medicine

*CPR performed before EMS arrival was associated with a 30-day survival rate after an out-of-hospital cardiac arrest that was more than twice as high as that associated with no CPR before EMS arrival.*

*Early Cardiopulmonary Resuscitation in Out-of-Hospital Cardiac Arrest  
Ingela Hasselqvist-Ax, Gabriel Riva, Johan Herlitz, et al  
June 11, 2015*

*Bystander CPR and defibrillation were associated with risks of brain damage or nursing home admission and of death from any cause were significantly lower than those associated with no bystander resuscitation.*

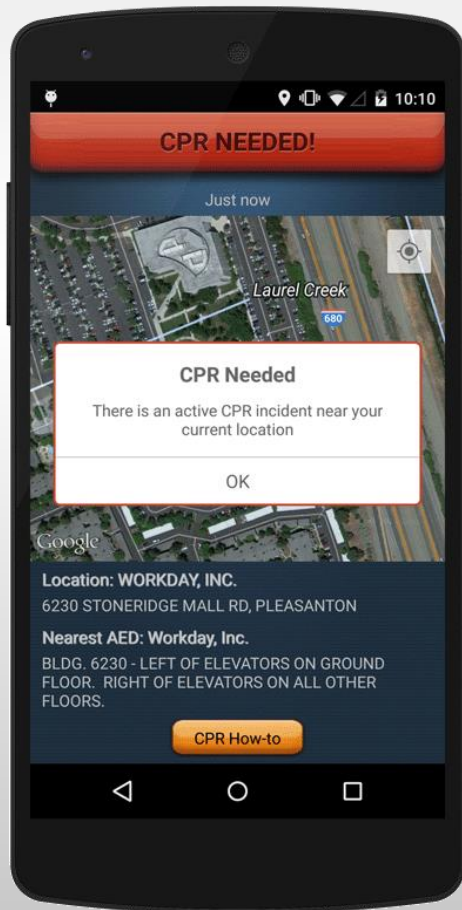
*Bystander Efforts and 1-year Outcomes in Out-of Hospital Cardiac Arrest  
Kristian Kragholm, M.D., Ph.D., Mads Wissenberg, M.D., Ph.D., et al  
May 4, 2017*

# City Partners with PulsePoint to Improve Cardiac Arrest Response in RVA



- 100 Club, extension of Retail Merchants Association provided grant funding
- Pulsepoint relies on location aware mobile devices
- Empowers citizens – strengthens the “Chain of survival”
- 2/3 of our 24 hour healthcare team are off duty each day
- Pulsepoint puts the *Right* people, in the *Right* Place at the *Right* time
- Survival rates decrease by 10% each minute help is not available.

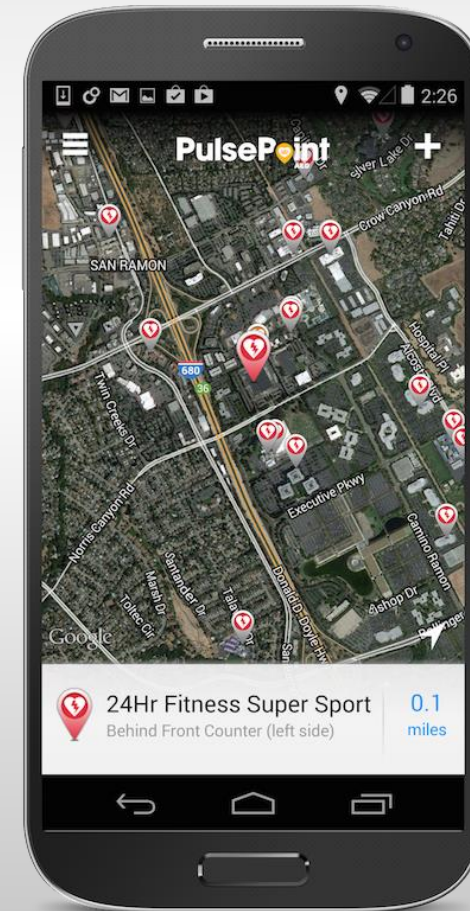
# Two different Apps – Designed to match Responders & AED's to those in need



Pulsepoint  
Responder



Pulsepoint  
AED





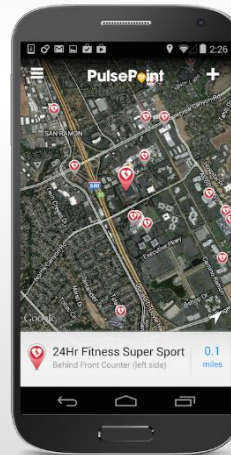
# See it in Action



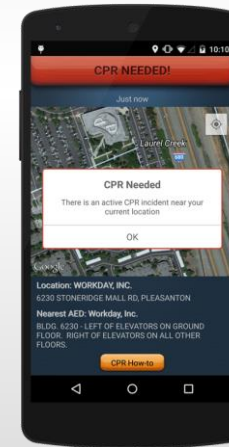
## Demonstrated Results



## PulsePoint AED



## PulsePoint Responder



# RVA Connected



# Richmond Public Safety professionals try everyday to change outcomes – Pulsepoint is a way to help do that



## PulsePoint CPR PUSH EVENT

Agency: Richmond Fire / RAA / DEC (76000)

Agency Incident Number: F01801170062

Determinant Code: SCA - Generic Sudden Cardiac Arrest

Address: 1025 W GRACE ST, RICHMOND, VA

Common Place Name: DOMINION PLACE APTS

Call Received: 2018-01-17 16:13:13 EST

Crews dispatched: 2018-01-17 16:14:22 EST

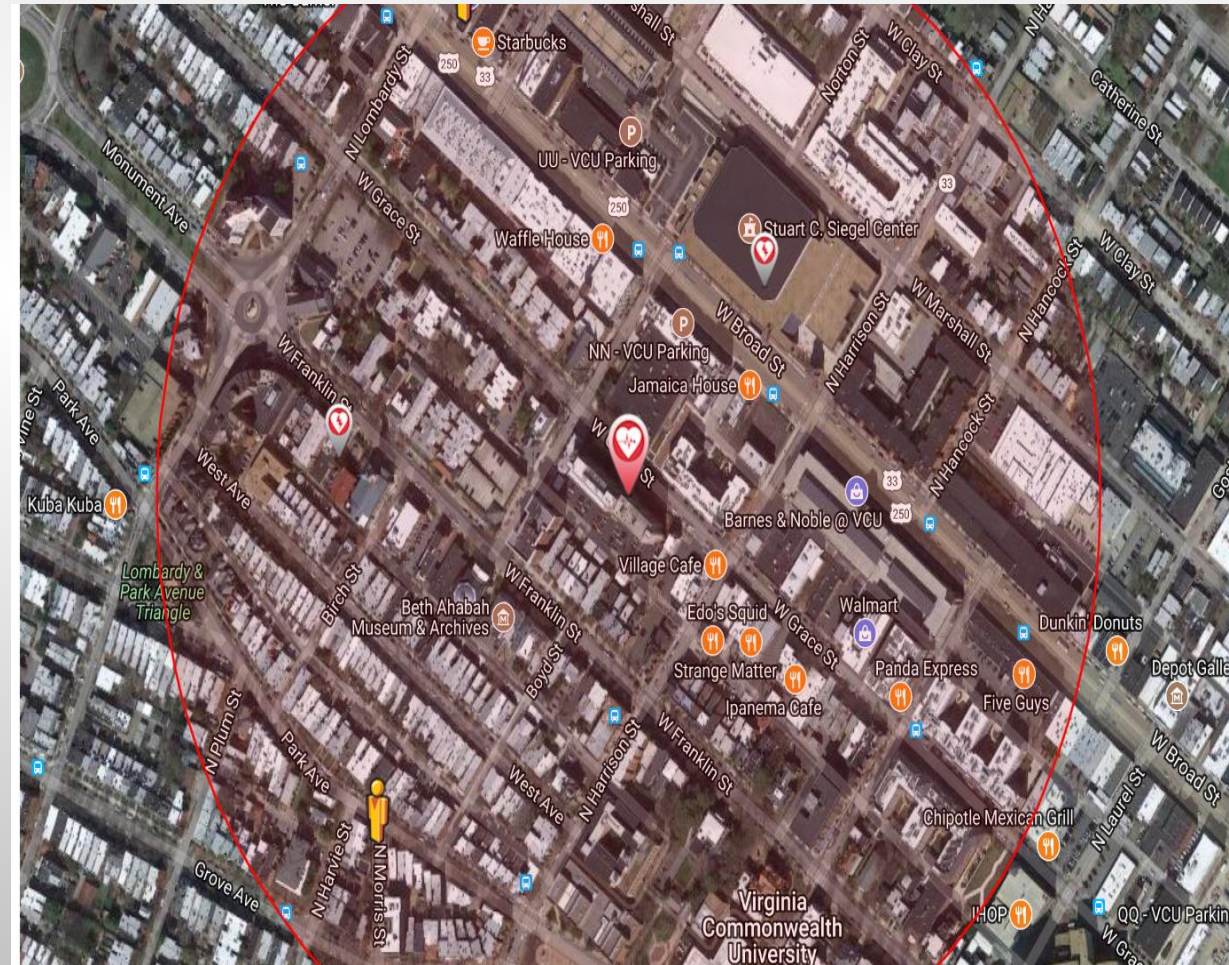
Determinant trigger received by PulsePoint: 2018-01-17 16:13:54 EST (delay: 41 seconds from Call Received)

Eligible responders notified 28 seconds before crews dispatched.

Number of eligible responders: 2

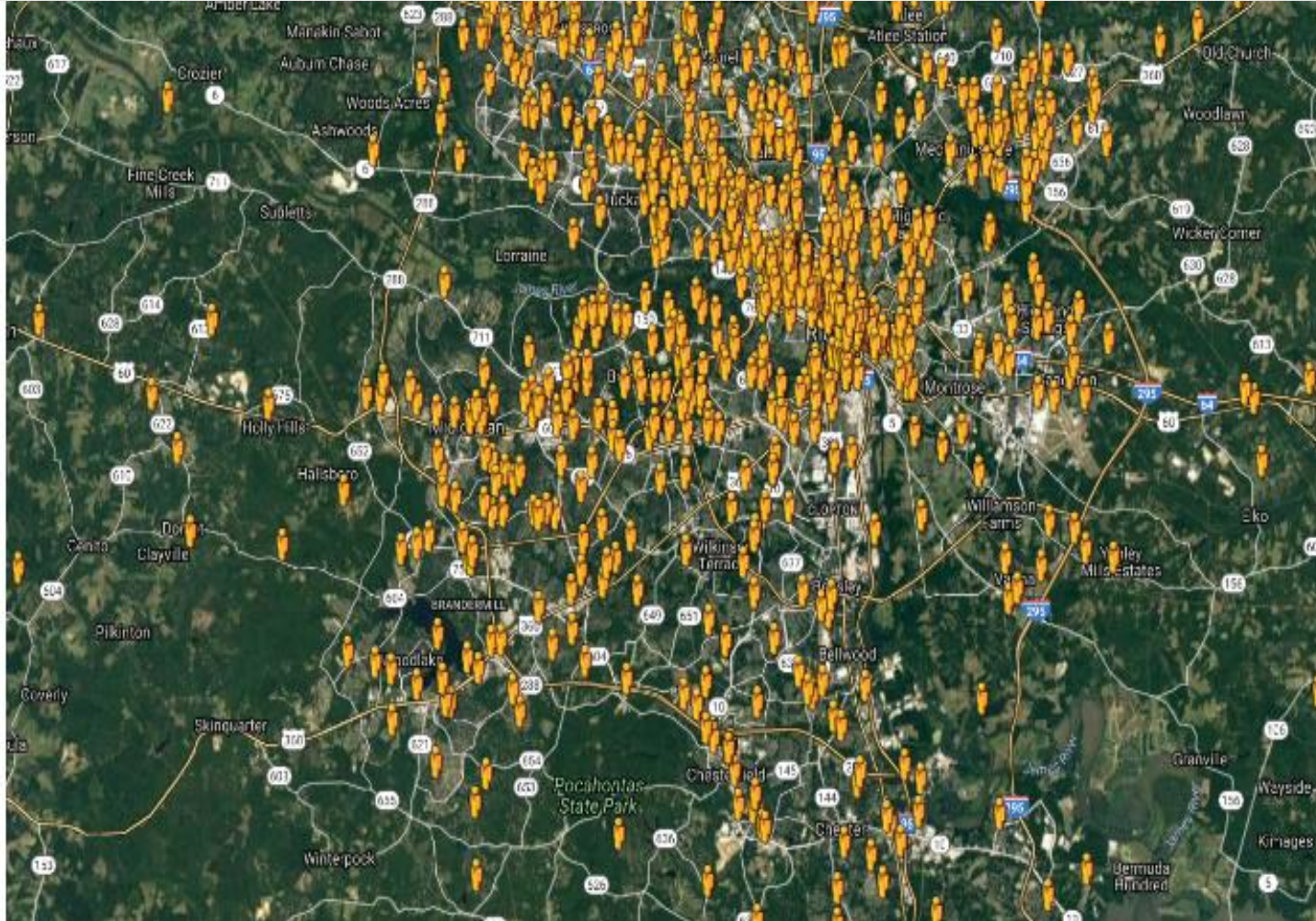
Public Location?: YES

Responder Radius: .25 mile (403 meters)

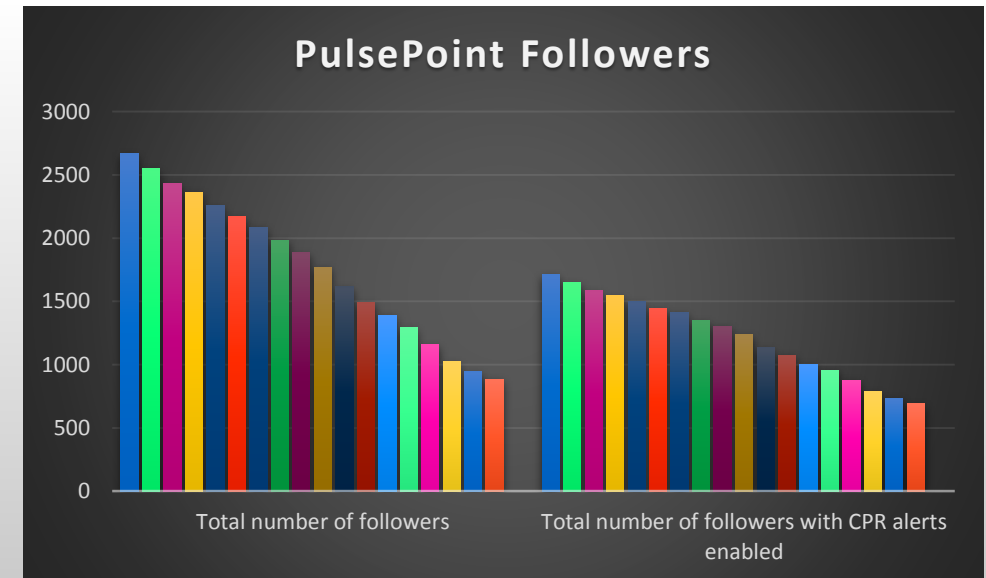




# Current Responder Network

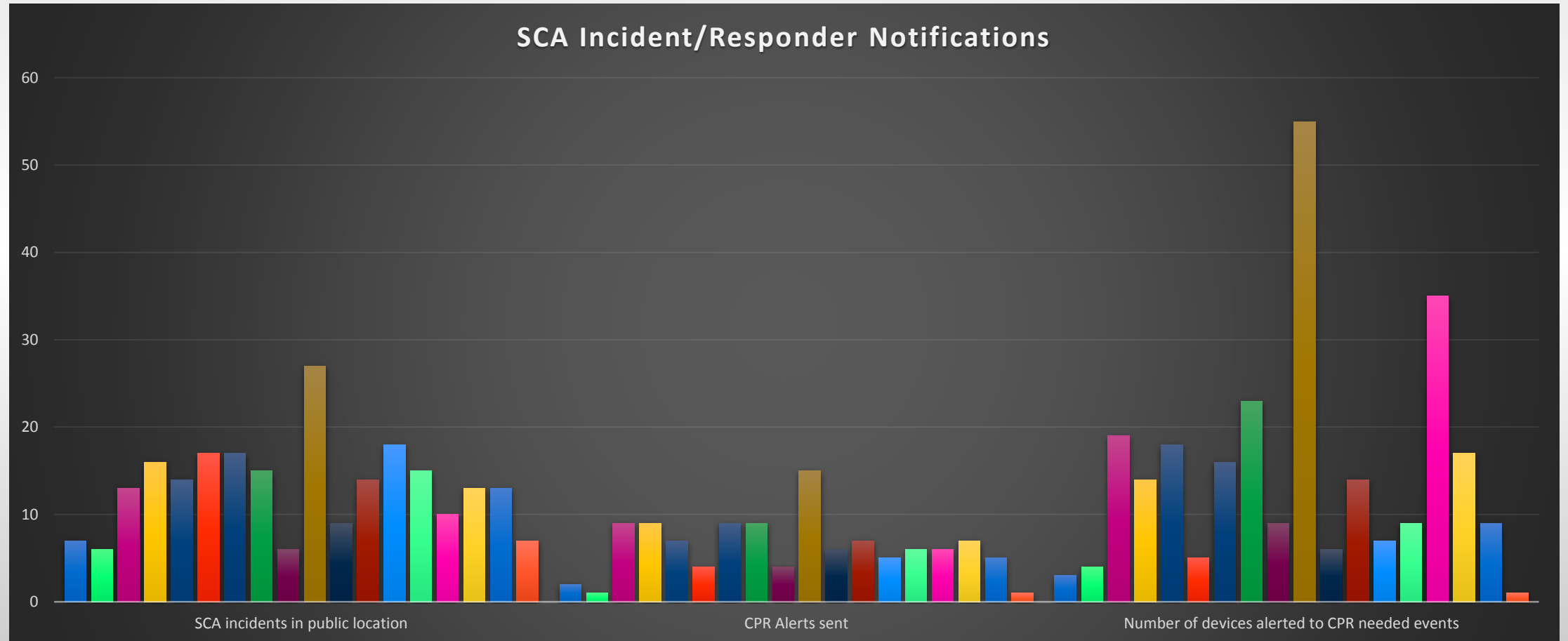


- Consistent/Progressive Growth over the project life
- 100 subscribers/month
- 13 SCA/month in public place
- 15 potential responders/month





# Cardiac Events within Richmond by Frequency and Provider Notification (Month/Month)





**Help us find RVA AED's**

**PulsePoint AED Location**

Type in Address to Search  MAP IT

Binford Middle School

In front of main office

Approved

Public

☐ AED not in fixed location (vehicle, cart, etc.)

☐ Do not display this AED in Respond app

☐ Hemorrhage control resources co-located

Latitude: 37.5476125466

Longitude: -77.4647270143



Recorded by: tory.maye@gmail.com

Image Approved

Update Image

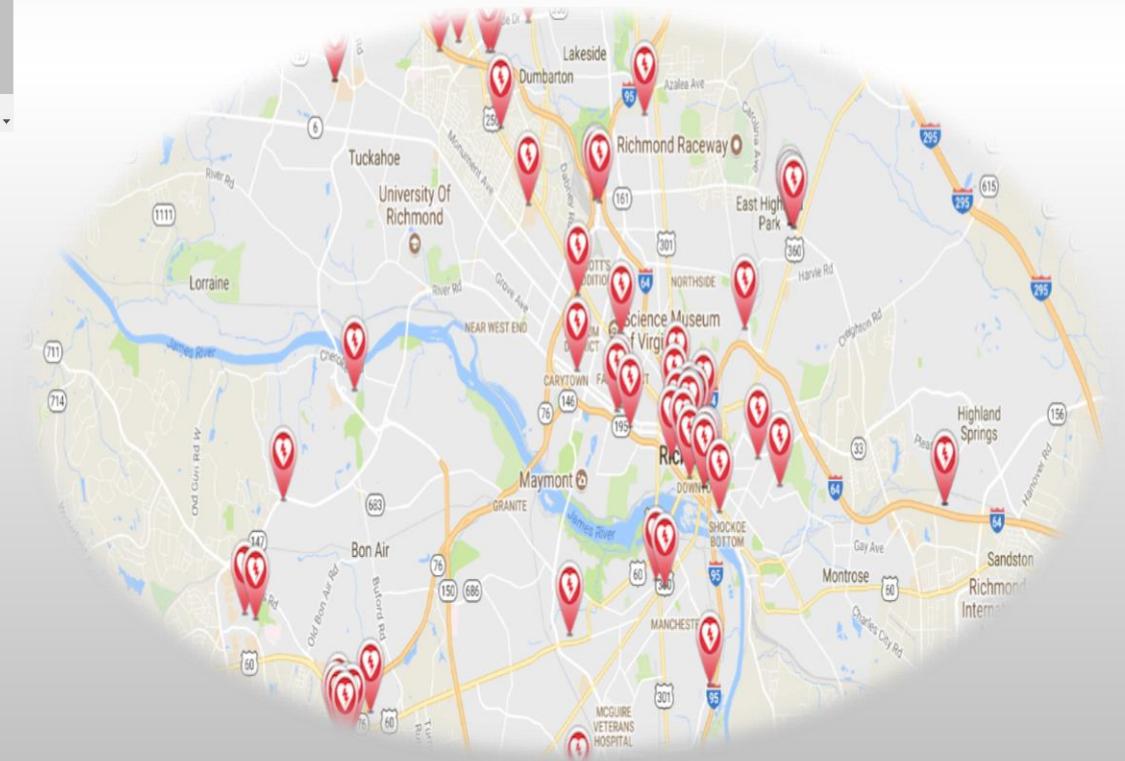
Delete Image

CANCEL UPDATE THIS AED MORE

# Maintained AED Registry

- 238 AED's maintained within the RVA registry currently
- Notification potential for battery/Pad checks
- Co-locate Stop Bleed materials with the kits and store notification
- Public or Private device





# **Community Engagement – *Saving Lives Together***

