

NOTICE OF STUDY SESSION
CITY OF UNIVERSITY CITY
Fire Department Dispatch Services Proposal

VIA VIDEOCONFERENCE
Monday, September 12, 2022
5:30 p.m.

Due to the ongoing efforts to limit the spread of the COVID-19 virus, the September 12, 2022 study session will be conducted via videoconference.

Observe and/or Listen to the Meeting (your options to join the meeting are below):

Webinar via the link below:

<https://us02web.zoom.us/j/89642792045?pwd=b0twcDRlbFZpVFNaDhPWkpaTFEgydz09>

Passcode: 336937

Live Stream via YouTube:

https://www.youtube.com/channel/UCyN1EJ_-Q22918E9EZimWoQ

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Webinar ID: 896 4279 2045

International numbers available: <https://us02web.zoom.us/j/89642792045>

AGENDA

1. Meeting called to order
2. Changes to Regular Agenda
3. Fire Department Dispatch Services Proposal
4. Adjournment

Citizen may also observe the Meeting via Live Stream on YouTube:

https://www.youtube.com/channel/UCyN1EJ_-Q22918E9EZimWoQ

Posted this 9th day of September, 2022.

LaRette Reese
City Clerk



UNIVERSITY CITY FIRE DEPARTMENT DISPATCH SERVICES

REQUEST TO IMPROVE DISPATCH SERVICE BY JOINING

CENTRAL COUNTY EMERGENCY 911 (CCE911) FOR FIRE DEPARTMENT DISPATCH SERVICES

BILL HINSON, FIRE CHIEF

CURRENT SYSTEM

- Current Dispatch Service provided by Police Department
 - Police Dispatchers serve secondary role as Fire Dispatchers
 - No dispatchers are Emergency Medical Dispatch certified
 - No dedicated Fire dispatcher on duty (police call volume requires their attention)
 - Focus is police dispatching
 - Supervised by the Police Department Command Staff
- CAD (Computer Aided Dispatch) system is oriented to Police use
 - CAD system is 22 years old and does not meet modern standards for Fire and EMS
 - Current Dispatch System not NFPA 1221 compliant



CHANGES TO FIRE DISPATCH

MODERN BEST PRACTICES

- Emergency Medical Dispatchers
- Modern CAD system
- Vehicle Location System for each fire apparatus
- Inter-communication with Mutual Aid Partners (CAD to CAD)
- Communication and Data available to Fire units on each incident (Mobile Data Terminals)
- Compatibility with County funded Fire station reporting system
 - US Digital System
- GIS data and ability to route closest unit to life threats and serious incidents

EMERGENCY MEDICAL DISPATCHING

- **Emergency Medical Dispatch (EMD)** refers to a system that enhances services provided by 911 [Public Safety Answering Point](#) (PSAP) call takers. It does so by allowing the call taker to quickly narrow down the caller's type of medical or trauma situation to better dispatch Emergency Services and provide quality instruction to the caller before Emergency Services arrive.
 - EMDs are the Best Practice in our industry – University City is the only PSAP in the county to not have EMD's answering Emergency 911 calls.
 - Currently University City Dispatch does not provide needed information to our Firefighter/Paramedics prior to their arrival or aid the caller in providing care to our citizens and visitors prior to our unit's arrival.

EMERGENCY MEDICAL DISPATCHING VIDEO – MONTGOMERY COUNTY, VA EMD ROLLOUT IN 2018





EMERGENCY MEDICAL DISPATCHING

- UCPD dispatchers are NOT EMD certified
 - High Call volume and personnel shortages have kept them from attending training or gaining certifications
 - Current system's function is geared towards Police support and dispatchers maintaining their required police certifications



EMERGENCY MEDICAL DISPATCHING

- CCE911 dispatchers are all EMD certified (since 1991)
 - CCE911 is NFPA 1221 compliant
 - Initial Training and Certification completed prior to being allowed to take calls
 - CCE911 provides their dispatchers with a Continuing Education program to maintain their EMD certification
 - Recertify every 2 years with 24 hours continuing education
 - Monthly hands-on training
 - All AHA Healthcare Provider CPR certified (same level of certification Fire/EMS and Emergency room personnel maintain)
- Uses Fire/EMS EMD specific software to assist dispatchers in rapidly assessing the situation, allowing the most up to date information to be sent in real time to responders via mobile data terminals

CURRENT CAD SYSTEM

- Currently University City CAD is 22 years old and has not had a significant innovation or improvement in the last 12 years. This current system uses a card format to assign fire units and has no ability to “know” current locations of Fire Department apparatus.
- System has no live backup or redundancy. When current system goes down, dispatchers are using pen and paper.

CURRENT CAD SYSTEM

- Lacks the capability
 - to redirect the closest unit to a life threat or more emergent call.
 - to track units as they respond to the incident
 - to relay information gained after the initial dispatch
 - Lacks Mobile Data Terminal capability on the Fire Department side.
 - to show on scene commanders the units that are responding to the emergency.



MODERN CAD SYSTEM

- CCE911 uses Tritech Enterprise Computer Aided dispatch system.
 - GIS capability to “know” the location of all Fire Apparatus for University City and our Mutual Aid partners live.
 - Capability that enables dispatchers to direct the closest unit to life threats and significant calls based upon the current location of apparatus.
 - Mobile data terminals in each apparatus linked to CAD to receive live updates as calls unfold.
 - Mapping Capability to adjust to emergency situations and give the most up to date information to our responders
 - System has a live redundant backup system that seamlessly fills in if the primary system fails.




VEHICLE LOCATION FOR EACH APPARATUS

- Proposal includes installation of Mobile Data Terminals and Wireless routers on each of the Fire Department Vehicles
- Sierra Wireless Routers transmit current GPS coordinates of all apparatus live back to CCE911




INTER- COMMUNICATION BETWEEN PSAPS

- Central County E911 uses Tritech Enterprise CAD, which has capability to communicate with other CAD systems.
- ECDC in Richmond Heights is going to Motorola Premier One this year and is coordinating with Motorola to connect their system to Central County. This will allow the two dispatch systems to share resources seamlessly.
- St Louis City is in negotiations to acquire Motorola Premier One as well, allowing all Mutual Aid resources that assist the University City Fire Department connected and able to share information freely.
- All other PSAPs have transitioned their Fire/EMS dispatching to CCE911 or ECDC except Kirkwood. Kirkwood has expanded to provide services for Des Peres to try to remain viable.



COMMUNICATION AND DATA AVAILABLE TO FIRE UNITS ON EACH INCIDENT (MOBILE DATA TERMINALS)

- Mobile Data Terminals connected to Central County allow responding units to see the information coming into the dispatchers live.
 - Nature of Emergency Medical calls, what care is being instructed to callers, patient history, etc..
 - Private information that should not be transmitted over a radio. Location of hidden keys, door codes, phone numbers, patient information, etc. can be relayed through the computers privately and securely
 - Specific information about properties within the city can be set for specific addresses, including access codes, fire department pre-plans, etc.
 - Units can place themselves enroute and on scene at incidents, making reports related to standard compliance more reliable and ensure grants remain within reach of the city
- 

CCE911 CALL INFORMATION

Active Status Advised Day/Night

Call Info

Problem: 26C2 Sick Case Abn Breathing
Address: 182 Fee Fee Rd Apt: F
Place:
Cross Street: WESTPORT STATION DR/GRAPE AVE
Resp. Area: 44H1A
Map Page: 44-049
TAC Channel: **CC911 NO - N MAIN F**

Map App Web Map

Call Data

CCE #: 22-0115486
FD #: 22-4403242
Call Received: 2022-09-02 08:08:31
Call From: Public
Agency: 44
Resp. Plan: 44 EMS
Latitude: 38.716741
Longitude: -90.424538

Unit Times

Unit	Assigned	Enroute	Staged	On Scene	Transpo
4427	08:09:17	08:10:41		08:16:03	

Call Notes

Time Note

08:08:31 [1] A re-bid has occurred, check the ANI(No location information received via 911) Viewer for details (SYS)

08:09:18 [2] ETAs : 4427(03:42) (API)

08:09:30 [3] [ProQA: Case Entry Complete] 1st Party Alone - 75-year-old, Male, Conscious, Breathing, Problem Description: 225/? Chief Complaint: 26, CCText: Sick Person (Specific Diagnosis) (229)

08:09:56 [4] [ProQA Dispatch] Dispatch Level: 26C02 Response Text: Urgent (229)

08:09:56 [5] [ProQA: Key Questions] > He is responding normally (completely alert). > He is not breathing normally. > He is not bleeding (or vomiting blood). > He has other pain: HEADACHE AND LEGS ACHE (229)

08:10:00 [6] [ProQA: Key Questions] > His primary problem is a blood pressure abnormality (asymptomatic). (229)

Incident Map

Leaflet | © OpenStreetMap contributors, CC-BY-SA


Close

My Unit Status

- 4402: In Quarters [44 Admin]
- 4414: In Quarters [44 H1]
- 4417: In Quarters [44 H1]
- 4425: In Quarters [44 H2]
- 4427: On Scene [44 H2]
- 4428: In Quarters [44 H2]
- 4429: In Quarters [44 H2]
- 4488: In Quarters [44 H1]
- 4489: In Quarters [44 H1]
- 4499: In Quarters [44 H1]

CCE Unit Status

- 0251: In Quarters [CCE911 Central]
- 1102: OOS Officer OOS [11 H1]
- 1115: In Quarters [11 H1]
- 1117: On Scene [11 H1]
- 1124: In Quarters [11 H2]
- 1137: In Quarters [11 H3]
- 1198: In Quarters [11 H3]
- 1202: In Quarters [12 H1]
- 1214: In Quarters [12 H1]
- 1219: In Quarters [12 H1]
- 1302: In Service [13 Admin 2]
- 1314: In Quarters [13 H1]
- 1317: In Quarters [13 H1]
- 1325: In Quarters [13 H2]



GIS DATA AND ABILITY TO ROUTE CLOSEST UNIT TO LIFE THREATS AND SERIOUS INCIDENTS

- Routers and Mobile Data Terminals give the CAD “knowledge” of Fire Apparatus at all times.



- CAD will prompt for the closest unit to respond to or be redirected to life threats or significant calls.
- Dispatchers will be able to locate and have knowledge of our unit’s locations. This will make our personnel safer and provide the capability to correct human error if a mistake happens. (O – Orchard, A – Archer)



DISPATCH TIME NFPA COMPLIANCE

Time of call to dispatch time?

- NFPA 1221 requires 64 seconds or less.

University City Dispatch

- 07/01/2021 – 08/30/2022 – Average call to dispatch is 4 minutes 34 seconds

CCE911

- Less than 60 seconds on a fire
- Immediate on medical life threats

DISPATCH TIME NFPA COMPLIANCE



How is this possible?

Focus on Fire/EMS dispatching
Separate Call Taker and Dispatcher
Emergency Medical Dispatchers
Adherence to best industry practices
in the area of Fire/EMS dispatching



CCE911 has a minimum 11
dispatchers/call takers on duty with a
call volume of 143,000 calls per year



University City has up to 3 dispatchers
on duty with a call volume of 102,000
calls per year

DEDICATION

- CCE911 has personnel dedicated to:
 - MDT and mobile router installation and maintenance
 - Network infrastructure maintenance and planning
 - GIS mapping personnel
 - Ongoing Fire/EMS dispatch training and innovation
 - Maintaining an open channel of communication with its members for integration of department information into the dispatch platform.

CLOSING COMMENTS

- Focus – Past versus today
 - Police oriented Focus
 - Fire/EMS oriented Focus
- Best Practices in 2022
- EMD Certified Dispatchers
- Established Technology
 - Focusing limited resources where they are needed in the most efficient method possible
 - Connecting with our Mutual Aid Partners
 - Putting information into the hands of our personnel enabling them to provide the best possible service
- Providing the most effective and efficient service to our citizens and visitors

The image features a blue gradient background with white circuit-like lines in the corners. These lines consist of straight paths that branch out and terminate in small circles, resembling a network or data flow diagram. The lines are positioned in the top-left, top-right, bottom-left, and bottom-right corners, framing the central text.

QUESTIONS?