

# York County Comprehensive Communications System System Failure Recovery Plan – Backup Communications Plan

## **Purpose:**

The effectiveness of the York County 800MHz communications network is based on the proper planning for meeting the communications needs of the network users. This plan outlines the modes of operation of the Motorola 800MHz radio network and how radio and data system users should react in the event of system failure.

## **Modes of operation:**

1. Wide area – normal operation of the voice and HPD data network.
2. Site Trunking – loss of system Zone controllers, loss of wireline dispatch console operation, loss of data networks.
3. Failsoft – loss of trunking and causes channels to merge based on Failsoft plan, loss of wireline dispatch console operation, loss of data networks.

In the event of any system malfunction, County and Motorola technical staff will be notified of the tower site outage and will respond accordingly so as to mitigate impact to radio system users.

## **Loss of tower site:**

The loss of a single tower site within the voice or data networks would not require alternate communications methods by dispatchers or units in the field. Coverage in the area surrounding the non-functioning tower site may be limited, but normal system operation will continue.

## **Site Trunking mode:**

In the Site Trunking mode, “SITE TRUNKING” will be displayed of each of the radios in the field. Wireline console (York County 911 and Rock Hill Police Department) operations will cease and backup radios in the dispatch centers will have to be used to communicate with field units.

Course of action – wireline consoles:

1. From a backup radio, contact field units and alert them to the Site Trunking operation.
2. Have field units move to the pre-designated talkgroups that are being monitored in the dispatch centers. You will have to move to each talkgroup that is normally used and ask that units move the designated talkgroups.
3. Dispatch consoles can be used for communications on non-York County talkgroups or channels.

Course of action – wireless consoles:

1. Normal operations can be continued as no impact to wireless consoles will be noted.

**Failsoft:**

In the Failsoft mode, “FAILSOFT” will be displayed on radios and each radio will begin to beep every 10 seconds. Wireline console (York County 911 and Rock Hill Police Department) operations will cease and backup radios in the dispatch centers will have to be used to communicate with field units. All talk groups will merge based on the plan listed below.

Course of action – wireline consoles:

1. From a backup radio, contact field units and alert them to the Failsoft operation.
2. Have field units move to the pre-designated talkgroups that are being monitored in the dispatch centers.
3. Dispatch consoles can be used for communications on non-York County talkgroups or channels.

Course of action – wireless consoles:

1. Channels will merge. Operations will continue on the merged Failsoft channel.

Failsoft Channel Assignment:

Trunking Personality	Talkgroups	Failsoft Frequency	RF Channel Assigned
			(Ch 2 - 15)
TBD	other users - Charlotte/State	853.6000 MHz	2
10	Rock Hill Public Works & HTS	853.5000 MHz	3
1	York Co Public Works and Govt	853.3875 MHz	4
2	York Co Mutual Aid and Event	853.3875 MHz	4
6	Public Safety Training	853.3875 MHz	4
12	Fort Mill	853.2000 MHz	5
13	York	852.9750 MHz	6
14	Clover	852.7125 MHz	7
15	Tega Cay	852.3375 MHz	8
16	Winthrop University	852.1500 MHz	9
3	York Co Sheriff's Office	851.8375 MHz	10
4	York Co Fire Service	851.6375 MHz	11
5	York Co Fire Marshal's Office	851.6375 MHz	11
7	EMS & Rescue	851.6125 MHz	12
8	York Co Office of Emerg Mgt	851.6125 MHz	12
9	Rock Hill Fire Dept	851.3625 MHz	13
11	Rock Hill Police Dept	851.1125 MHz	14

**Complete system failure:**

In the event of complete voice and data systems failure, “OUT OF RANGE” will be displayed on radios and in the field. Wireline console (York County 911 and Rock Hill Police Department) operations will cease and backup radios in the dispatch centers will have to be used to communicate with field units. Field units should minimize radio traffic as coverage and channel availability will be limited.

\*\*Dispatch centers should immediately ask emergency responders, via alternate means, to move to the appropriate conventional channels.

Course of action – Public Safety Radio Users:

1. Contact field units by text message, paging system, or other means that the York County 800MHz radio network is out of service. Have all units move to the zone listed as “B-U” (B-U = Backup) in their portable and mobile radios.

Channel Position	B-U - Backup	
	zone	Channel name
1	B-U	YCSO/YPD
2	B-U	EMS/FIRE
3	B-U	PUB WRKS
4	B-U	CLVR PD
5	B-U	TC/FMPD
6	B-U	RHPD/WU
7	B-U	EMS T/A
8	B-U	FIRE T/A
9	B-U	LAW T/A
10	B-U	BLANK
11	B-U	BLANK
12	B-U	BLANK
13	B-U	BLANK
14	B-U	BLANK
15	B-U	BLANK
16	UNPROGRAMMED	

2. Have field units move to the pre-designated conventional channels that are being monitored in the dispatch centers. \*The conventional repeaters listed below should remain enabled at the dispatch centers.\*
  - Sheriff’s Office / York Police – YCSO/YPD (8CALL90)
  - EMS/All Fire/Rescue/Emergency Management/Dept of Fire Safety – EMS/FIRE (8TAC91)
  - Clover Police – CLVR PD (8TAC93 - Paraham Road site)
  - Tega Cay Police / Fort Mill Police – TC/FMPD (8SCTAC 3 - Fort Mill site)
  - Rock Hill Police, Winthrop University Police – RHPD/WU (8SCTAC 5 - Lesslie site)

3. Tactical (on-scene) communications would need to be moved to the appropriate talk-around channel. Coverage from the 8TAC and 8SCTAC repeaters will not suffice for in-building or below grade coverage. EMS, FIRE, and LAW T/A channels should be used in these circumstances. \*dispatch centers will not be able to monitor T/A channels\*
4. Wireline Dispatch consoles may be used for communications on non-York County talkgroups or channels.
5. Wireless Dispatch consoles users must utilize a backup radio on the appropriate channel listed above.

Course of action – Public Works and non-public safety radio system users:

1. Public Works and non-public safety users should move to 8TAC92 which is located at the Hickory Grove tower site. 8TAC92 can be found in **Zone C** of the XTS1500 portable and mobile radios. The zone/channel listed below.
  - Public Works / Non-public safety – 8TAC92 (Hickory Grove site)