### Memorandum



DATE: January 24, 2014

Honorable Members of the Public Safety Committee: Sheffie Kadane (Chair), Adam Medrano (Vice Chair), Dwaine Caraway, Jennifer S. Gates, Sandy Greyson, Scott Griggs

### SUBJECT: Interrelation of Technology in EMS

Attached is briefing material on the "Interrelation of Technology in EMS" to be presented to the Members of the Public Safety Committee on Monday, January 27, 2014.

Charles M. Cato

Interim Assistant City Manager

#### Attachment

cc: Honorable Mayor and Members of the Dallas City Council

A.C. Gonzalez, Interim City Manager

Rosa A. Rios, City Secretary

Warren M. S. Ernst, City Attorney

Craig D. Kinton, City Auditor

Daniel F. Solis, Administrative Judge

Ryan S. Evans, Interim First Assistant City Manager

Jill A. Jordan, P. E., Assistant City Manager

Forest E. Turner, Assistant City Manager

Joey Zapata, Assistant City Manager

Theresa O'Donnell, Interim Assistant City Manager

Jeanne Chipperfield, Chief Financial Officer

Frank Librio, Public Information Officer

Elsa Cantu, Assistant to the City Manager – Mayor and Council

# Dallas Fire-Rescue Department

### Interrelation of Technology in EMS

Public Safety Committee January 27,2014





# Purpose

To provide an overview of the historical, current and predicted future technology involved in the delivery of prehospital care by Dallas Fire-Rescue Department, Emergency Medical Service Bureau

This presentation will also include a discussion of the interrelation of technology that links Dallas Fire-Rescue EMS to other healthcare agencies

# The Evolving World of Technology for EMS

- Much has changed in the EMS world over the past 40+ years
- Enhanced equipment
- Better data exchange capabilities
- Improved software for Electronic
  Patient Care Report (EPCR) and
  Electrocardiogram (EKG/ECG) transmission
- Other enhancements coming in the next few years



# Technology Changes in Equipment





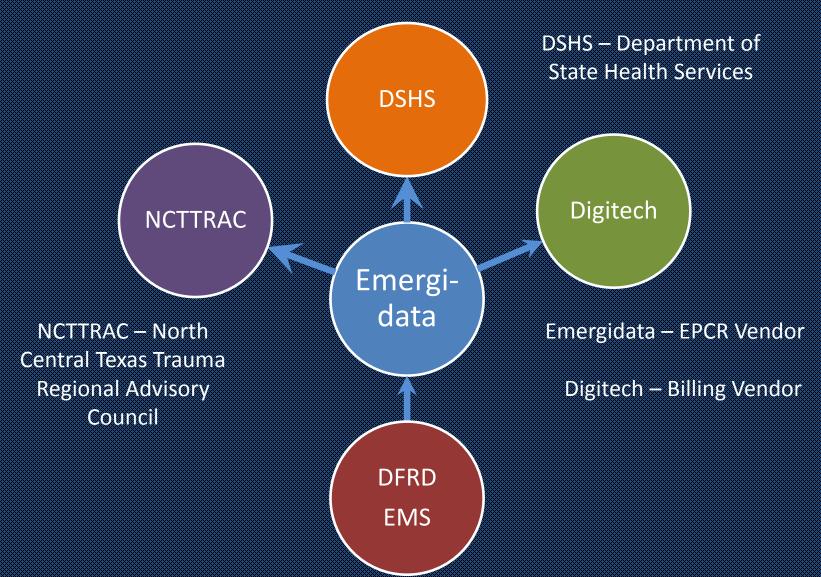








### **Current Data Exchange Process**



# LIFENET ® By Physio Control

- Allows for the transmission of 12-lead EKG's
- Utilized in STEMI (ST elevation myocardial infarction) patients – acute onset heart attack
- Allows the paramedics treating a STEMI patient to transmit an EKG to the receiving hospital while enroute
- The treating cardiologist can also access the EKG via a mobile device
- Shortens the door-to-balloon time resulting in better patient outcomes

# Dispatch Procedures

- Currently going through the procurement process to purchase an enhanced Emergency Medical Dispatch (EMD) process
- Includes enhanced dispatch and unit assignment capabilities
- Will also include enhanced pre-arrival EMS instructions for the caller

# **Future Technology**

- Enhancements to all equipment and software
  - Military funded technology research will impact equipment design and functionality
  - Evidence based procedures and technology
  - Enhanced interoperability and improved communication platforms for healthcare partners
- Better business practices for DFR EMS through EMS specific software platforms (Affordable Care Act initiatives driven)
  - Inventory control
  - Improved cost analysis
  - Streamlined processes
- Regional Patient Tracking pilot program
  - North Central Texas Trauma Regional Advisory Committee
  - Hospital notifications
  - Disaster management

# **Future Technology**

- Health Information Exchanges (HIE)
  - Transmission of EPCR information to HIE
  - Sent from HIE to receiving hospital for inclusion on the patients medical record
  - Receipt of some patient information by responding Rescues
  - Ability to track patient outcomes by DFR
  - Benchmarking
  - Mobile Community Healthcare Program
- Telemedicine

# QUESTIONS?

