



HFD ETHAN PROJECT

DAVID PERSSE, MD
MEDICAL DIRECTOR
HOUSTON FIRE DEPARTMENT/EMS

MICHAEL G. GONZALEZ, MD
ASSOCIATE MEDICAL DIRECTOR

ETHAN: EMERGENCY TELE- HEALTH AND NAVIGATION



CROSSROADS

- * ED OVERCROWDING AND OVERUSE
- * ACCESS TO HEALTHCARE CONCERNS
- * UNPARALLELED POPULATION GROWTH
- * TELEMEDICINE & TECHNOLOGY INNOVATION

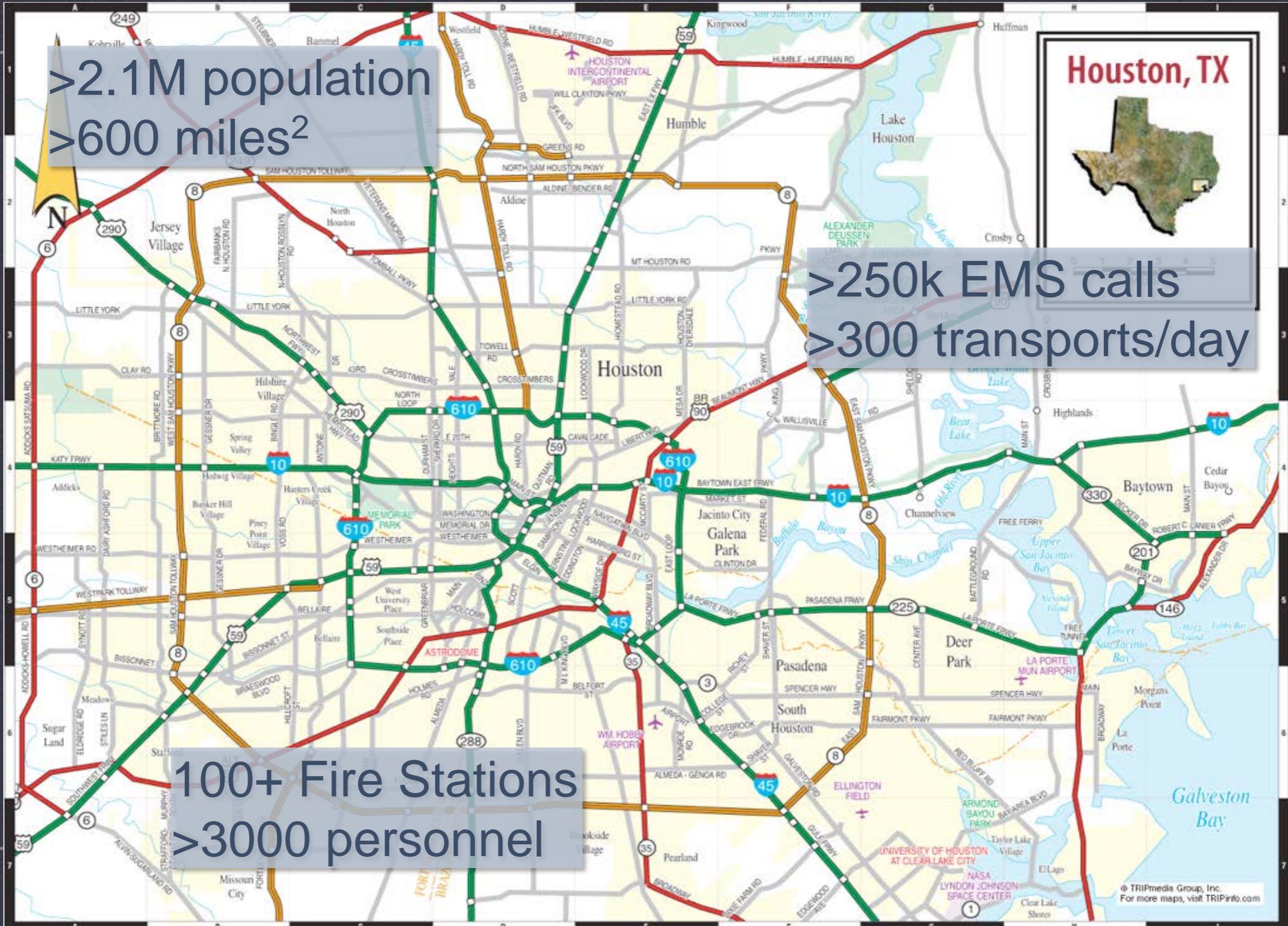
>2.1M population
>600 miles²

Houston, TX



>250k EMS calls
>300 transports/day

100+ Fire Stations
>3000 personnel





911 CALL



FIRST RESPONDER



PANASONIC G1 TOUGHPAD



ETHAN PHYSICIAN



ETHAN - MD31
ONLINE



ETHAN WORKSTATION

ETHAN DISPOSITION

- MD Referral to ER
- MD Referral to Clinic Appt
 - Patient agree
 - Taxi or POV
 - Patient refuse
 - Taxi to ER
- MD Referral for Followup, as needed
 - Home Care instructions
 - Patient agree
 - Patient refuse -> taxi ER



ETHAN - CARE HOUSTON

- * FOLLOWUP CALL
- * ARRANGES CLINIC VISIT
- * TAXI VOUCHER
- * CONNECTS WITH RESOURCES AS NEEDED
- * ESTABLISHES MEDICAL HOME



ETHAN TEAM

- * EMT/PARAMEDICS
- * ETHAN PHYSICIAN
- * BASE STATION
- * CARE HOUSTON LINK
- * CLINIC FOLLOWUP



ETHAN - MILESTONES

- * INFRASTRUCTURE
 - * BASE STATION
 - * FIELD UNITS
 - * ARCHIVE/STORAGE
- * CONNECTIVITY
- * PERSONNEL
- * CLINIC & FOLLOWUP

ETHAN PARTNERS

- * HARRIS COUNTY HEALTHCARE ALLIANCE
- * UT-SCHOOL OF PUBLIC HEALTH
- * RICE UNIVERSITY EHRI/BRC
- * GREATER HOUSTON HEALTHCONNECT
- * CARE HOUSTON/COH HEALTH DEPT.
- * LOCAL COMMUNITY HEALTH CENTERS
- * COUNTY RIDES (YELLOW CAB)
- * CLINTON HEALTH MATTERS INITIATIVE

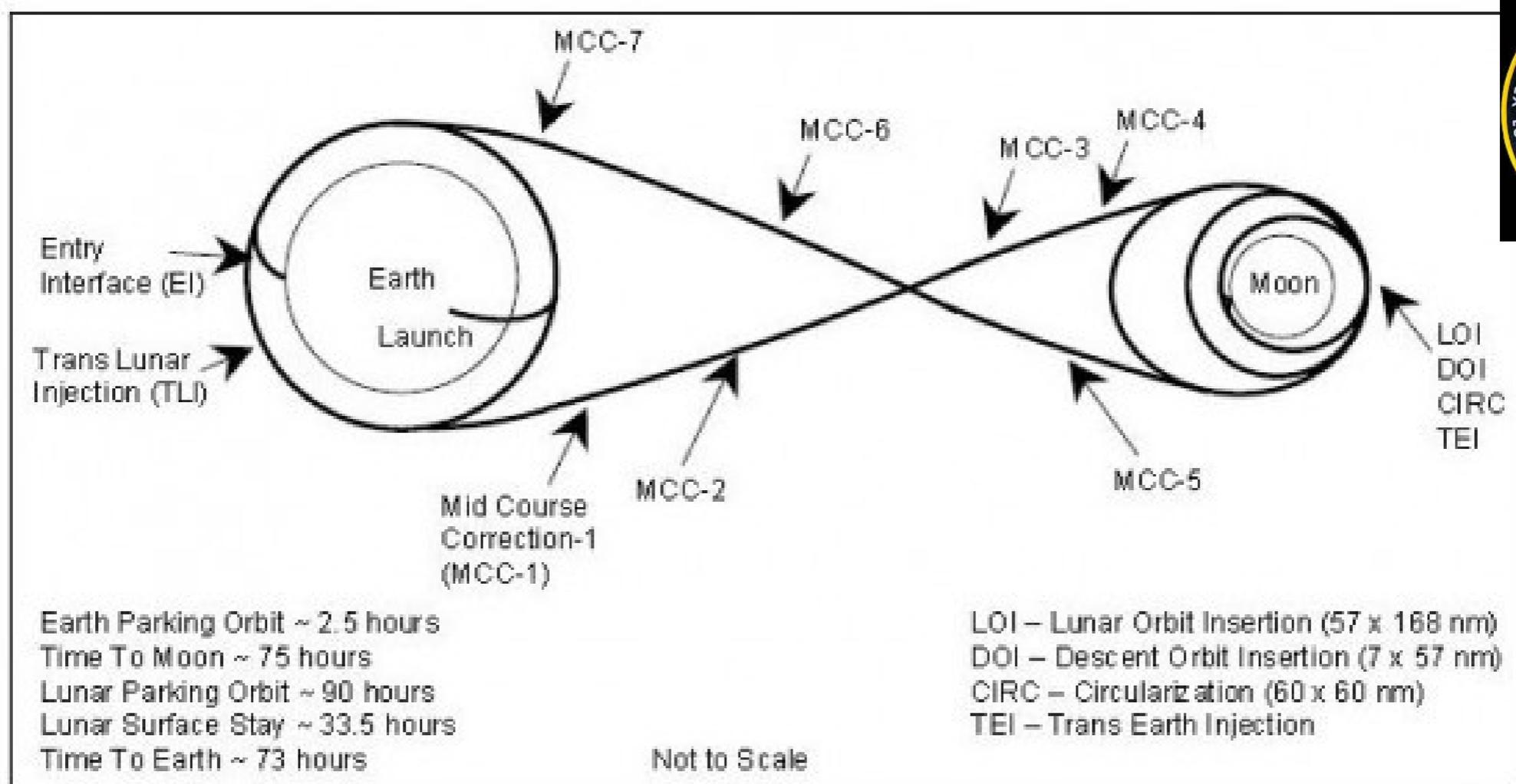


Figure 4. Nominal Apollo 13 mission profile.¹²

APOLLO 13

QUESTIONS?

MICHAELG.GONZALEZ@HOUSTONTX.GOV