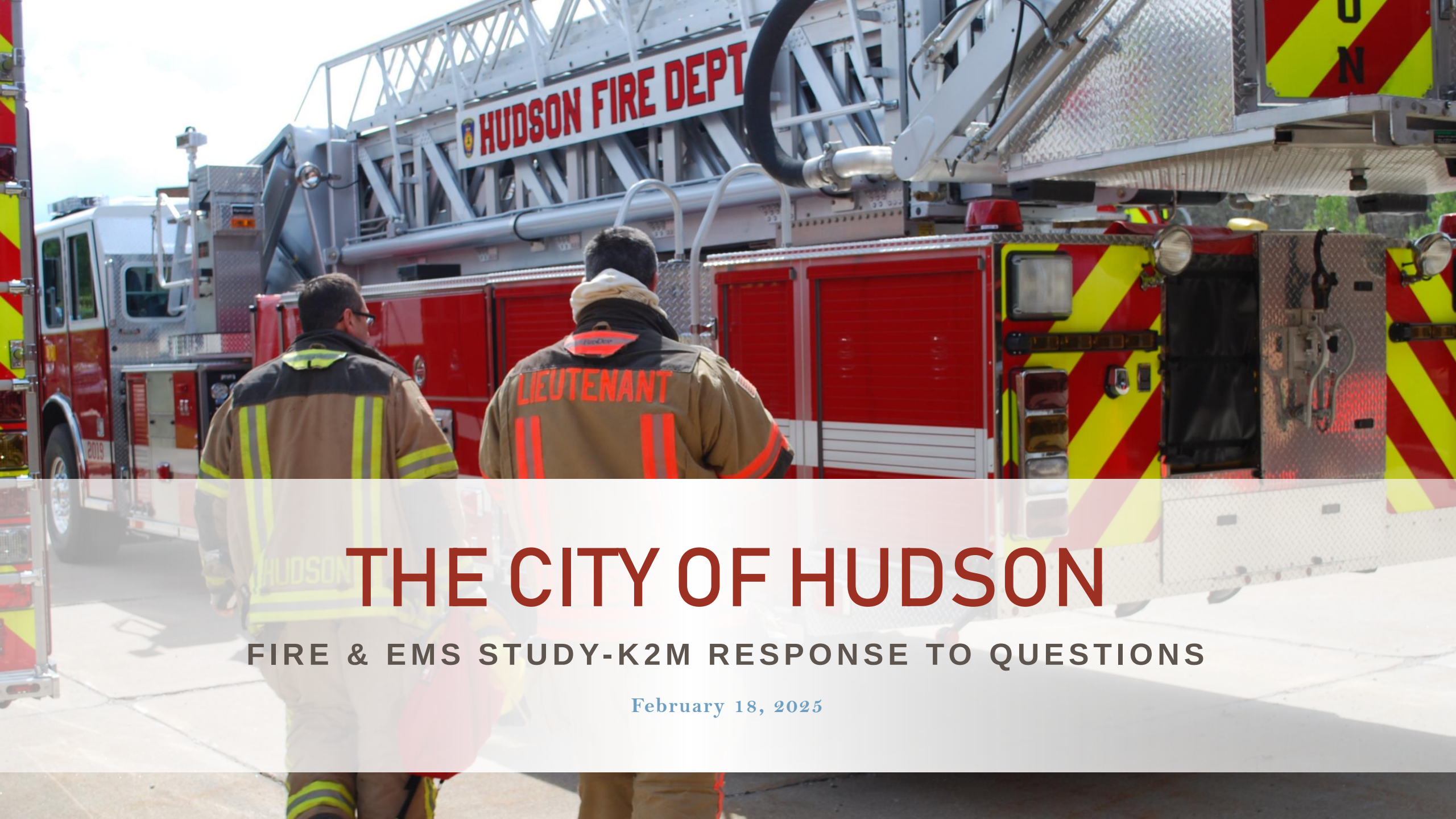




THE CITY OF HUDSON

FIRE & EMS STUDY-K2M RESPONSE TO QUESTIONS

February 18, 2025

Phase 1 Clarification: Four Firefighter Staffing

1. The Recommendation was to establish One Company with four firefighter staffing ready for response, 24 hrs/day.
2. Per OSHA (Two-In, Two-Out) Standard, this is the minimum number of personnel necessary to take interior suppression action at a structure fire when there is no rescue component.

Options that meet Standard:

Establish a 4-0 Engine Company with Duty Chief responding as they currently do (not necessarily with crew in station) in a Command role

Establish a 3-0 Engine Company with Duty Chief in station, responding con-currently.

Assemble a company from available staff in station during the day and bringing paid call staff in at night.

Options that fall-below Standard:

Establish a 3-0 Engine Company with Duty Chief responding as they currently do (separate from crew) in a Command role

Phase 1 Clarification: Can Fire and EMS stay in the existing station for 10 Years?

K2M has created a five -phase approach to remodeling the existing station. This gives the City time and decision points related to capital expenses for Fire and EMS.

Phase 1: Create Dorm space for firefighters. Create air vestibules for Fire and EMS, Create space for turnout storage, relocate fitness room. Address K2M FCA "Immediate" list.

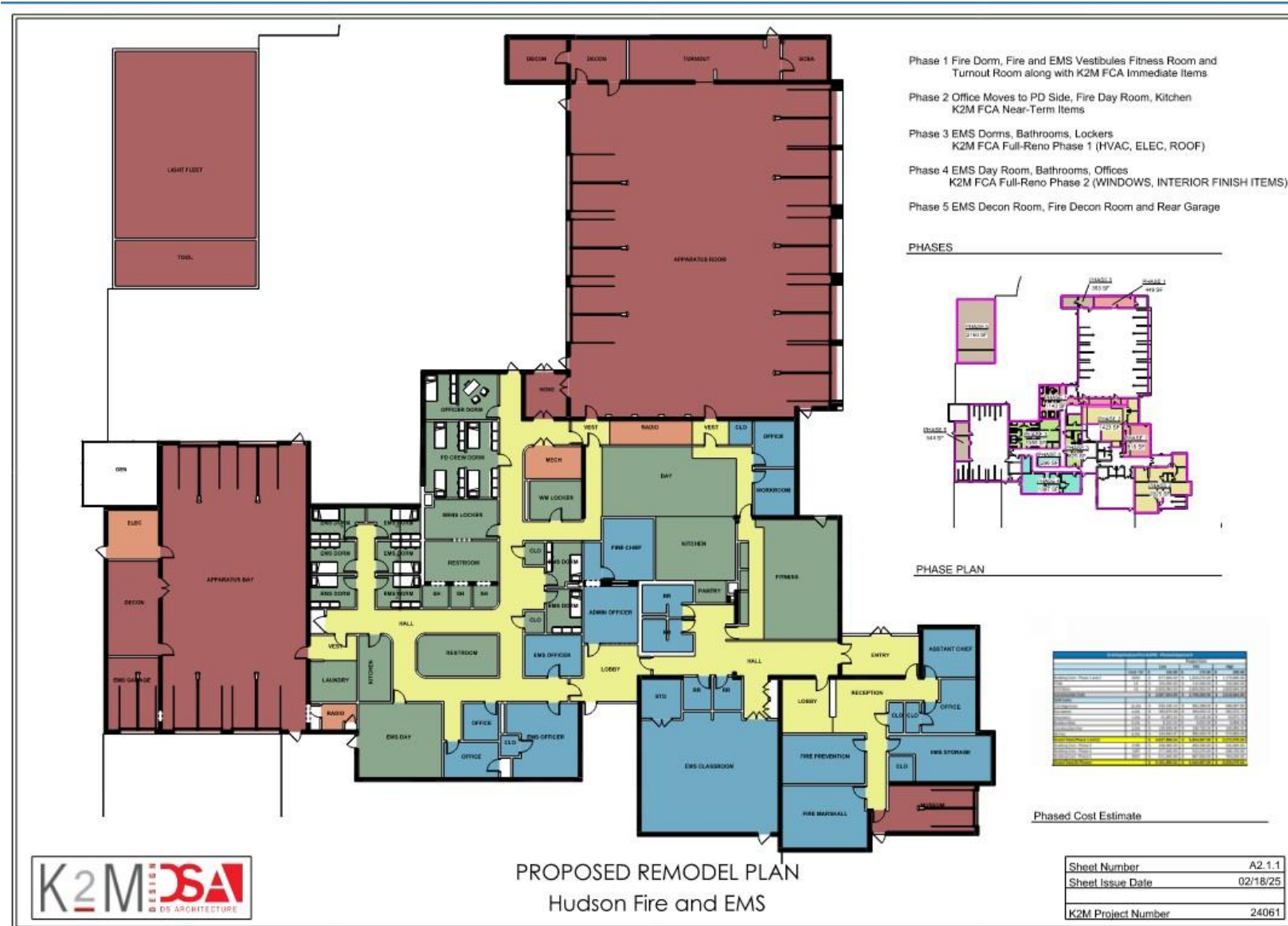
Phase 2: Relocate most offices to PD side in preparation for Phase 3. Remodel Fire Day Room and Kitchen. Address K2M FCA "Near-Term" and "Full-Reno" List.

Phase 3: EMS Dorms and Bathroom 1, Male/Female Lockers.

Phase 4: EMS Day Room and Kitchen, Offices

Phase 5: Fire and EMS Decon, Utility Storage

Interim Modification Plan:



Interim Modification Plan: Preliminary Cost Estimate

Existing Hudson Fire & EMS - Phased Approach				
		Project Cost		
		Low	Mid	High
	Cost / SF	\$ 150.00	\$ 175.00	\$ 200.00
Building Cost - Phase 1 and 2	5853	\$ 877,950.00	\$ 1,024,275.00	\$ 1,170,600.00
FF&E	LS	\$ 100,000.00	\$ 115,000.00	\$ 130,000.00
FCA Work	LS	\$ 2,609,984.00	\$ 2,609,984.00	\$ 2,609,984.00
Construction Cost		\$ 3,587,934.00	\$ 3,749,259.00	\$ 3,910,584.00
Soft Costs				
Contingencies	15.0%	\$ 538,190.10	\$ 562,388.85	\$ 586,587.60
Escalation	4.5%	\$ 185,675.58	\$ 194,024.15	\$ 202,372.72
Insurance	1.0%	\$ 41,261.24	\$ 43,116.48	\$ 44,971.72
Builders Risk	0.2%	\$ 8,252.25	\$ 8,623.30	\$ 8,994.34
Construction Fee	3.0%	\$ 130,839.40	\$ 136,722.35	\$ 142,605.31
AE Fee	8.0%	\$ 344,943.97	\$ 360,453.76	\$ 375,963.55
Grand Total (Phase 1 and 2)		\$ 4,837,096.54	\$ 5,054,587.89	\$ 5,272,079.24
Building Cost - Phase 3	2180	\$ 436,000.00	\$ 490,500.00	\$ 545,000.00
Building Cost - Phase 4	1387	\$ 277,400.00	\$ 312,075.00	\$ 346,750.00
Building Cost - Phase 5	3057	\$ 611,400.00	\$ 687,825.00	\$ 764,250.00
Grand Total All Phases		\$ 6,161,896.54	\$ 6,544,987.89	\$ 6,928,079.24

Phase 3 Clarification: When will Hudson Need Another Fire Station?

There are several factors that go into this decision:

Are our units too busy?

Monitor Unit Utilization, when it reaches 25% or more it is time to consider additional units. When it goes above 30%, pull the trigger.

Is our staffing adequate?

Are we meeting minimum staffing per Standards?

Are we meeting response time goals?

Establish response time standards and evaluate periodically.

Thank You



Addendum Graphics

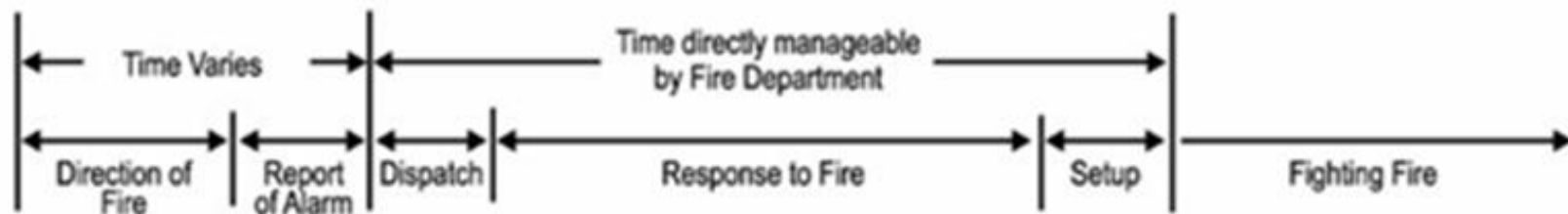
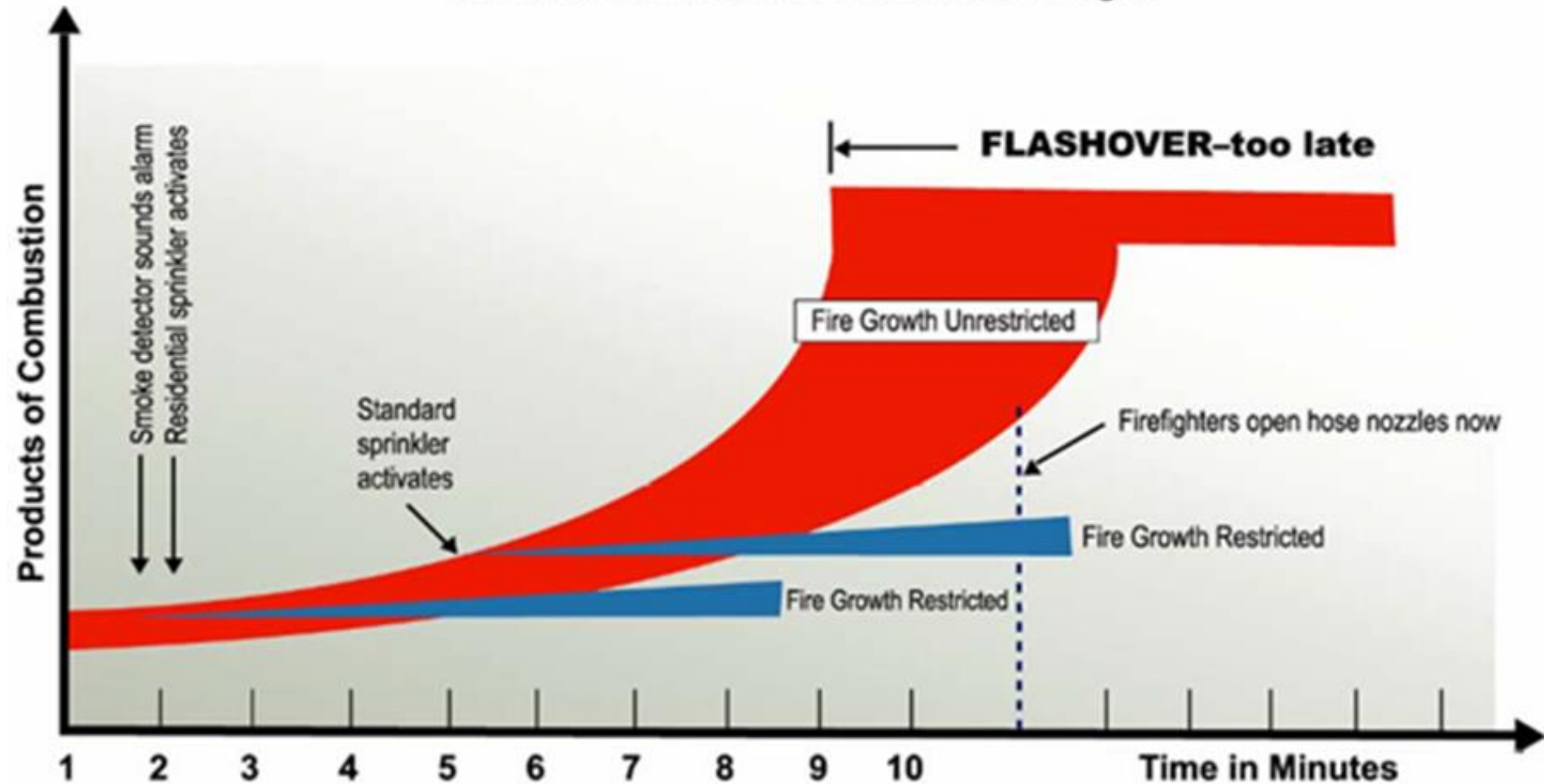


NFPA 1210 Standard for Providing Fire and Emergency Services to the Public

- An NFPA Organizational Statement serves as a structured document that defines:
 1. **Mission & Objectives** – The department’s core purpose, such as fire protection, emergency response, prevention, and education.
 2. **Structure & Leadership** – The hierarchy, including leadership roles, command structure, and operational divisions.
 3. **Service Capabilities** – The scope of services provided, such as fire suppression, EMS, technical rescue, hazardous materials response, and public safety programs.
 4. **Personnel & Training** – Staffing levels, required certifications, ongoing training, and adherence to NFPA standards for firefighter safety and preparedness.
 5. **Equipment & Facilities** – The apparatus, tools, stations, and infrastructure supporting operations.
 6. **Policies & Procedures** – Compliance with NFPA codes, fireground operations, response protocols, and risk management strategies.

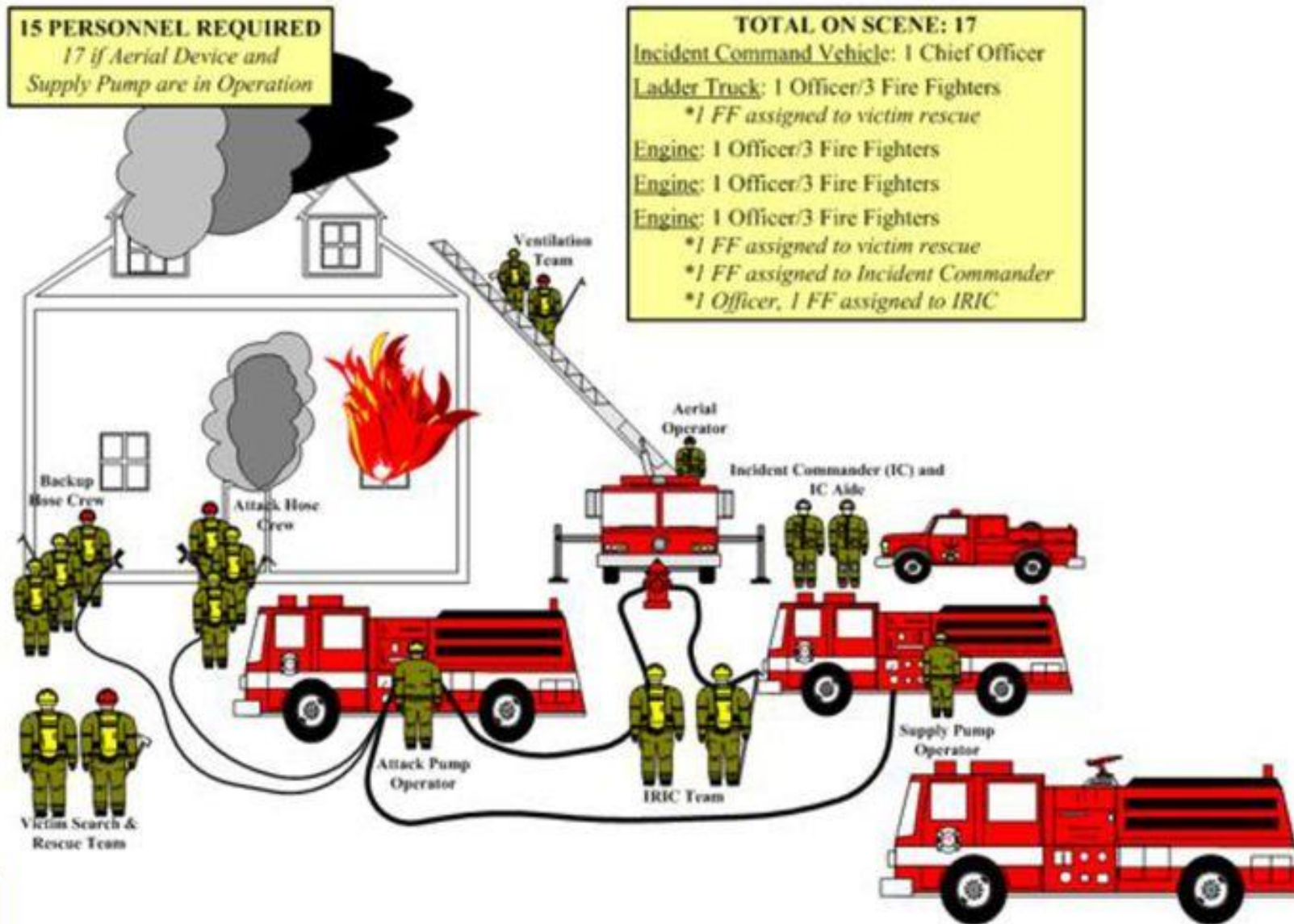
Fire Flashover Timeline

All times are based on national averages



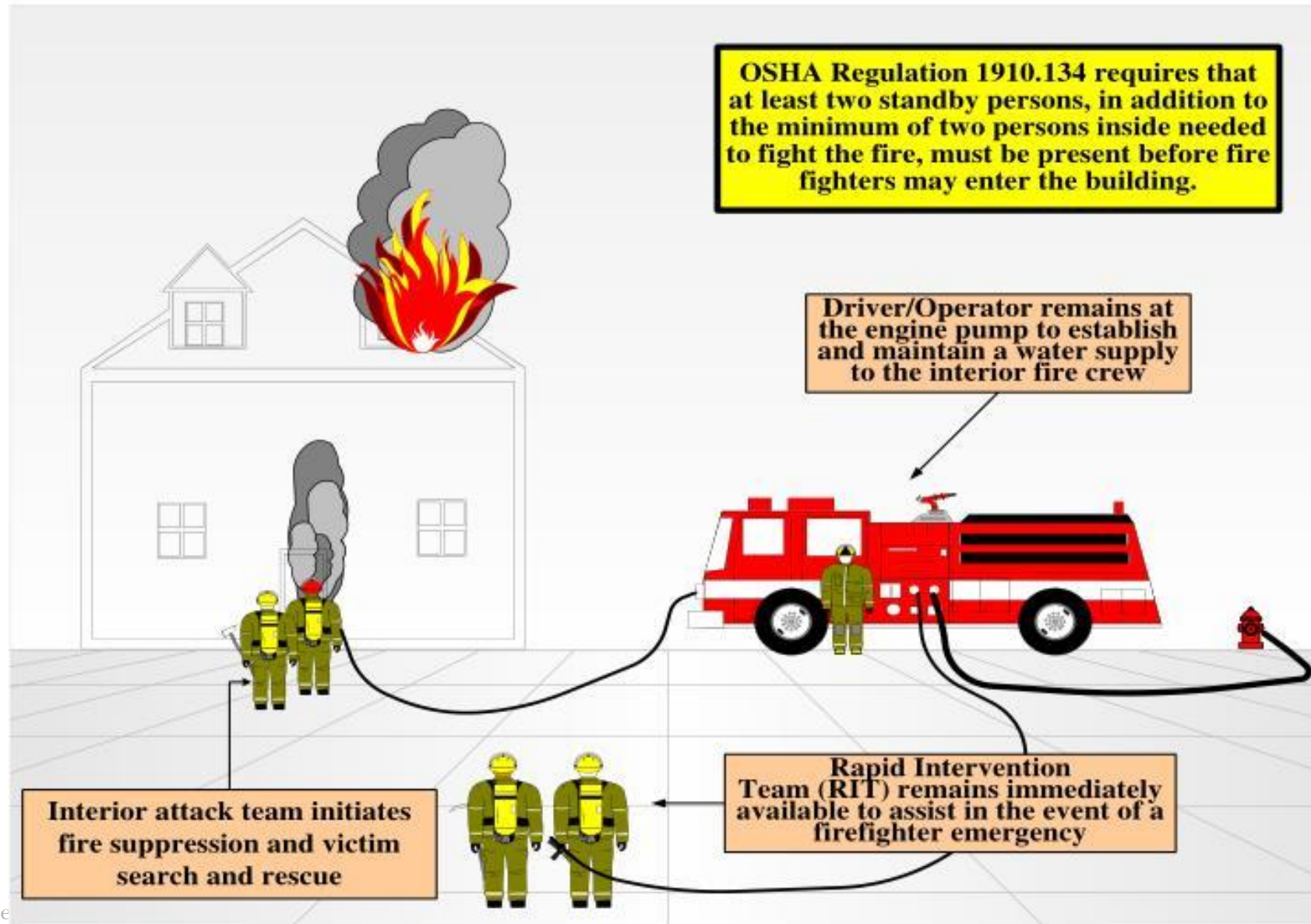
NFPA Structure Fire Staffing Requirements

NFPA 1710 Initial Full Alarm Assignment Deployed Within 8 Minutes



Two-In, Two-Out Staffing Requirements

OSHA '2 In/2 Out' Illustrated



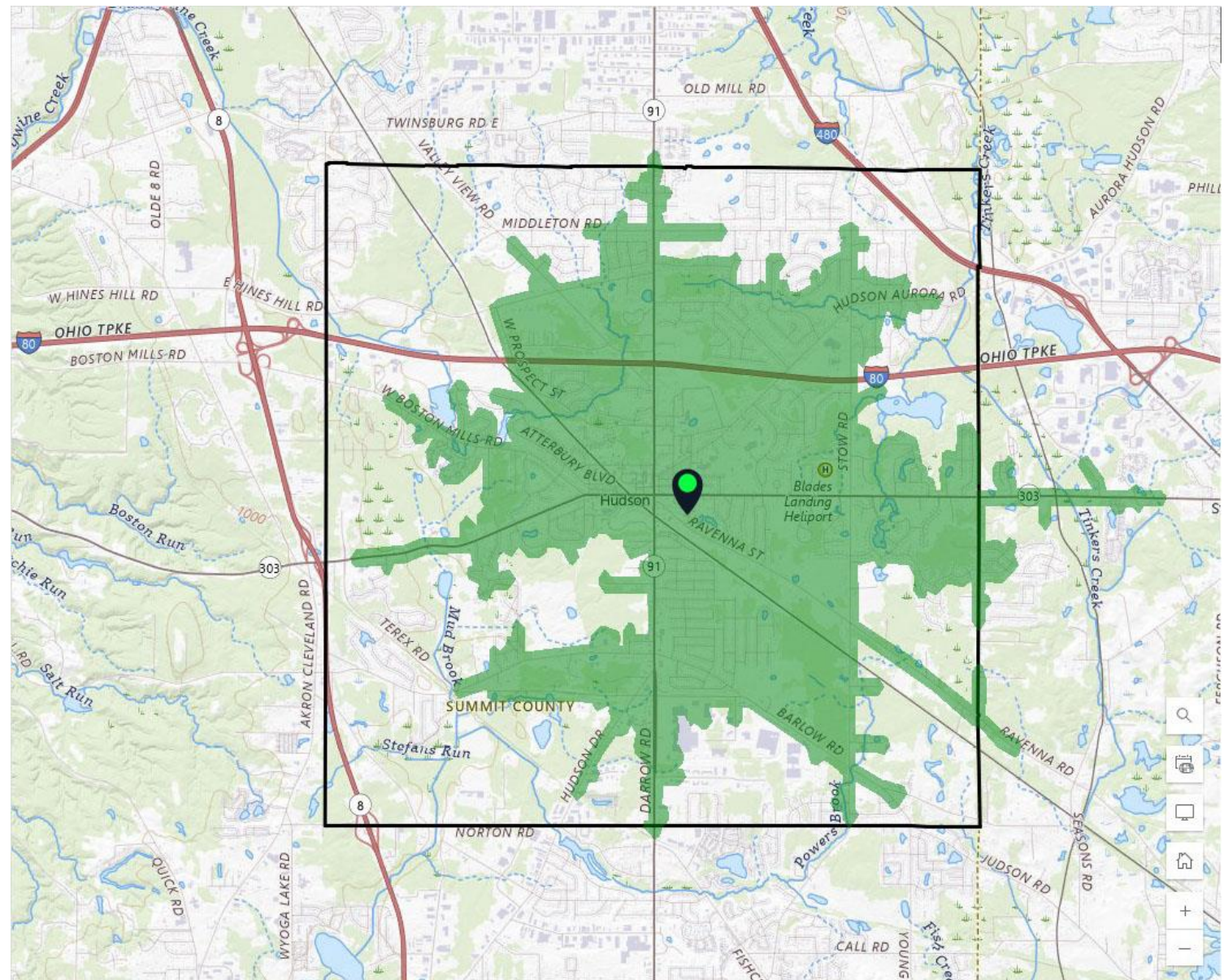
6:30 Drive Time

Response Time Study

Existing Station

9:00 Elapsed Since Call Received

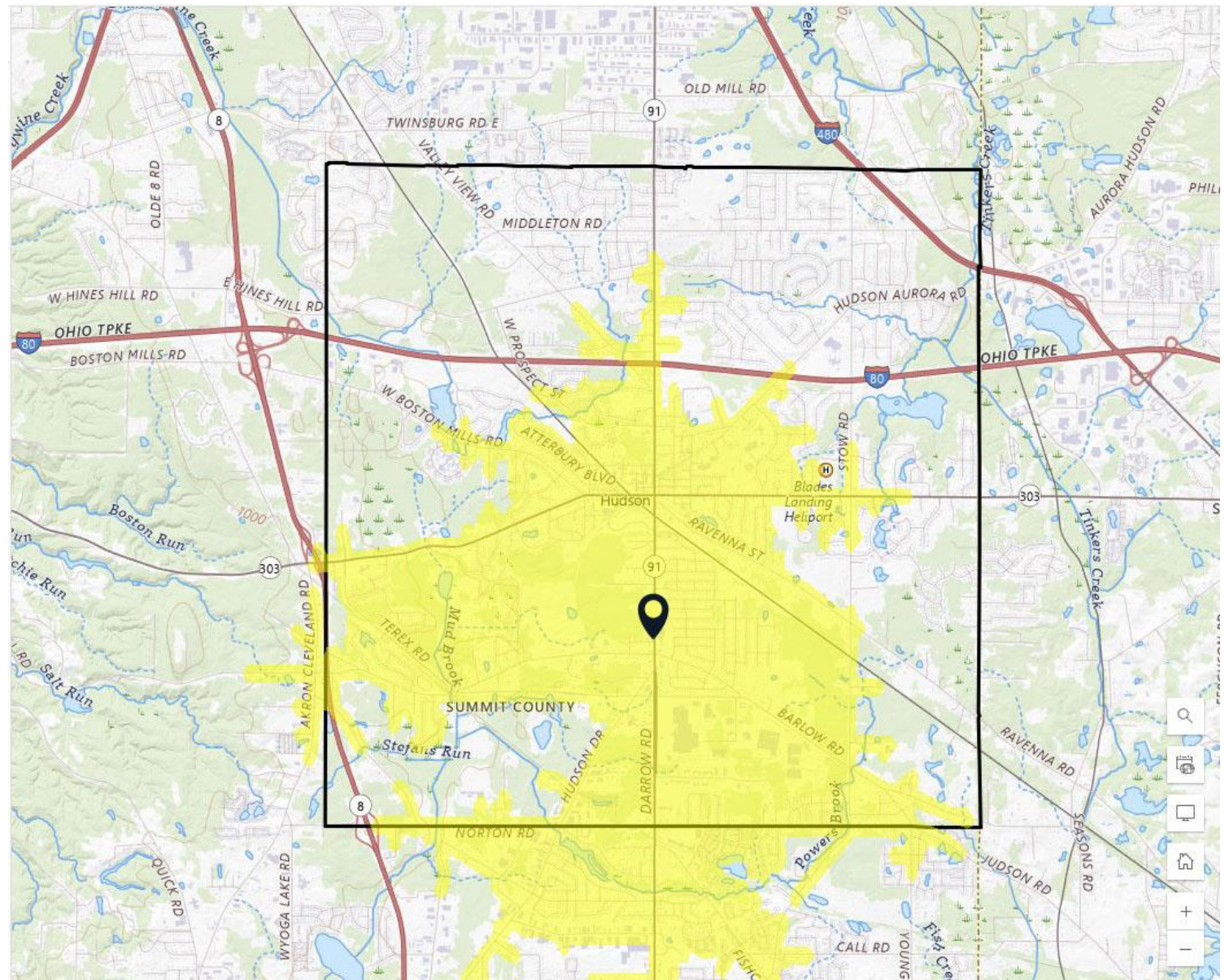
(Assuming Call Processing and
Turnout Time Standards are met)



6:30 Drive Time

Response Time Study South Station (Hypothetical) 9:00 Elapsed Since Call Received

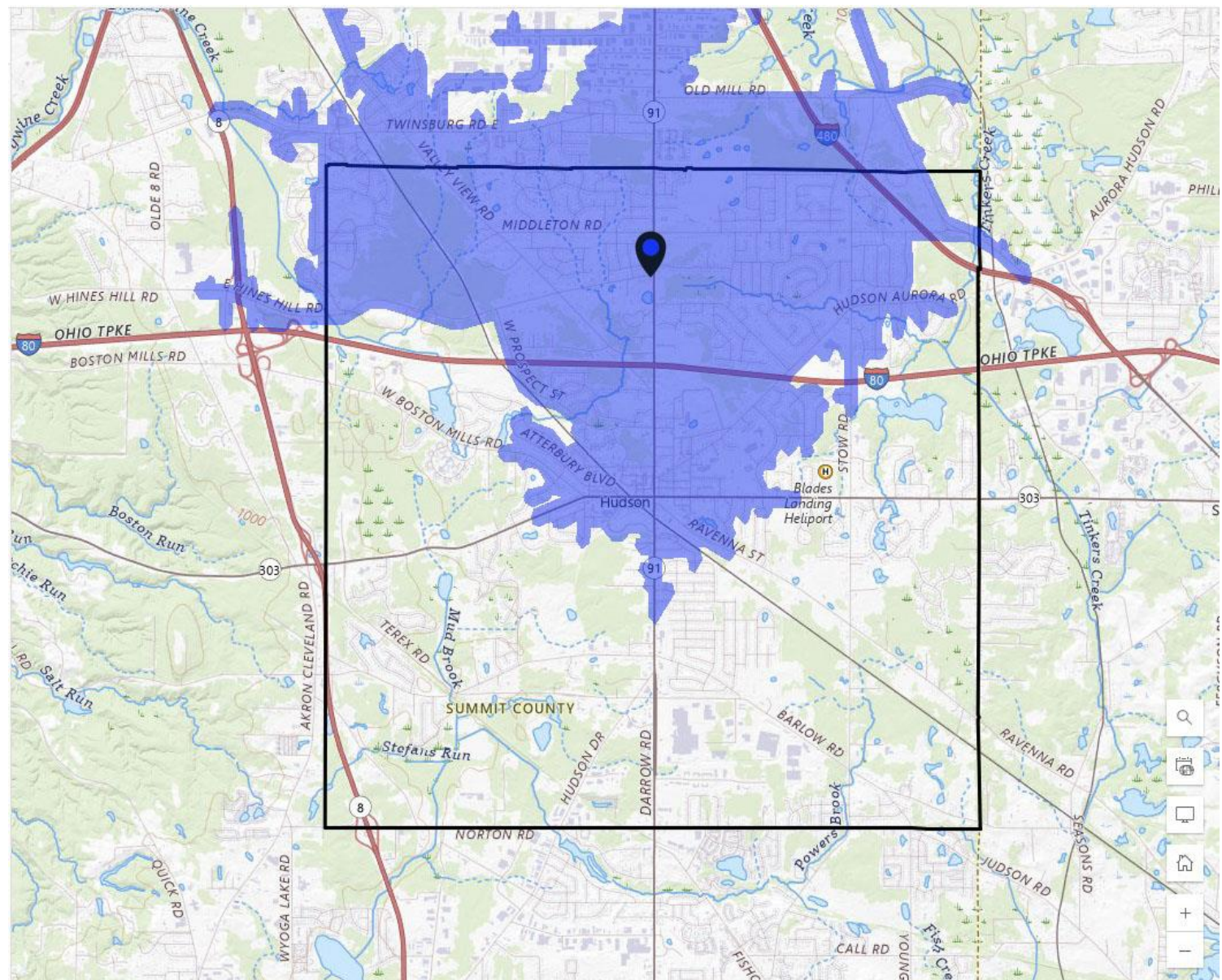
(Assuming Call Processing and
Turnout Time Standards are met)



6:30 Drive Time

Response Time Study North Station (Hypothetical) 9:00 Elapsed Since Call Received

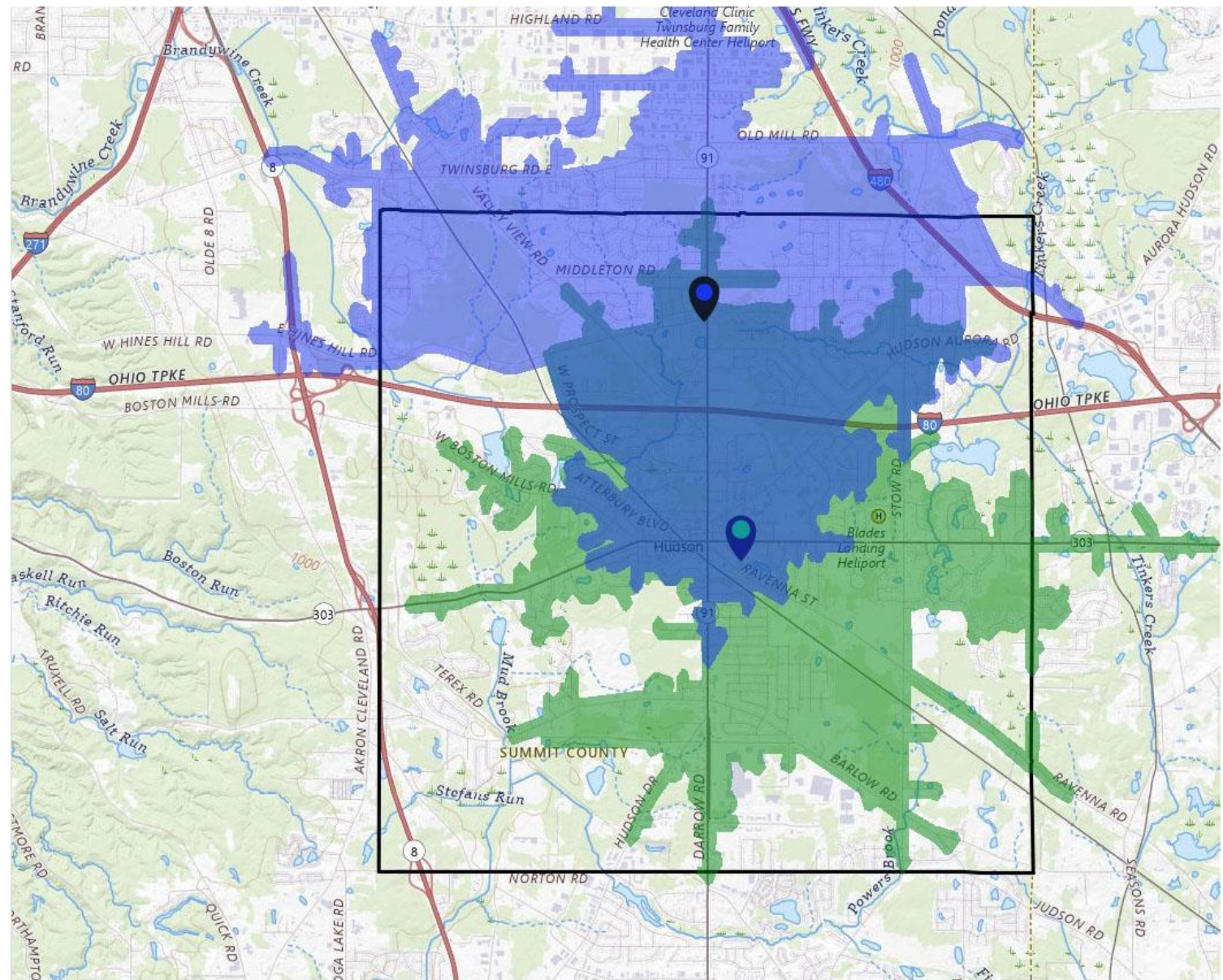
(Assuming Call Processing and
Turnout Time Standards are met)



6:30 Drive Time

Response Time Study North Station + Existing 9:00 Elapsed Since Call Received

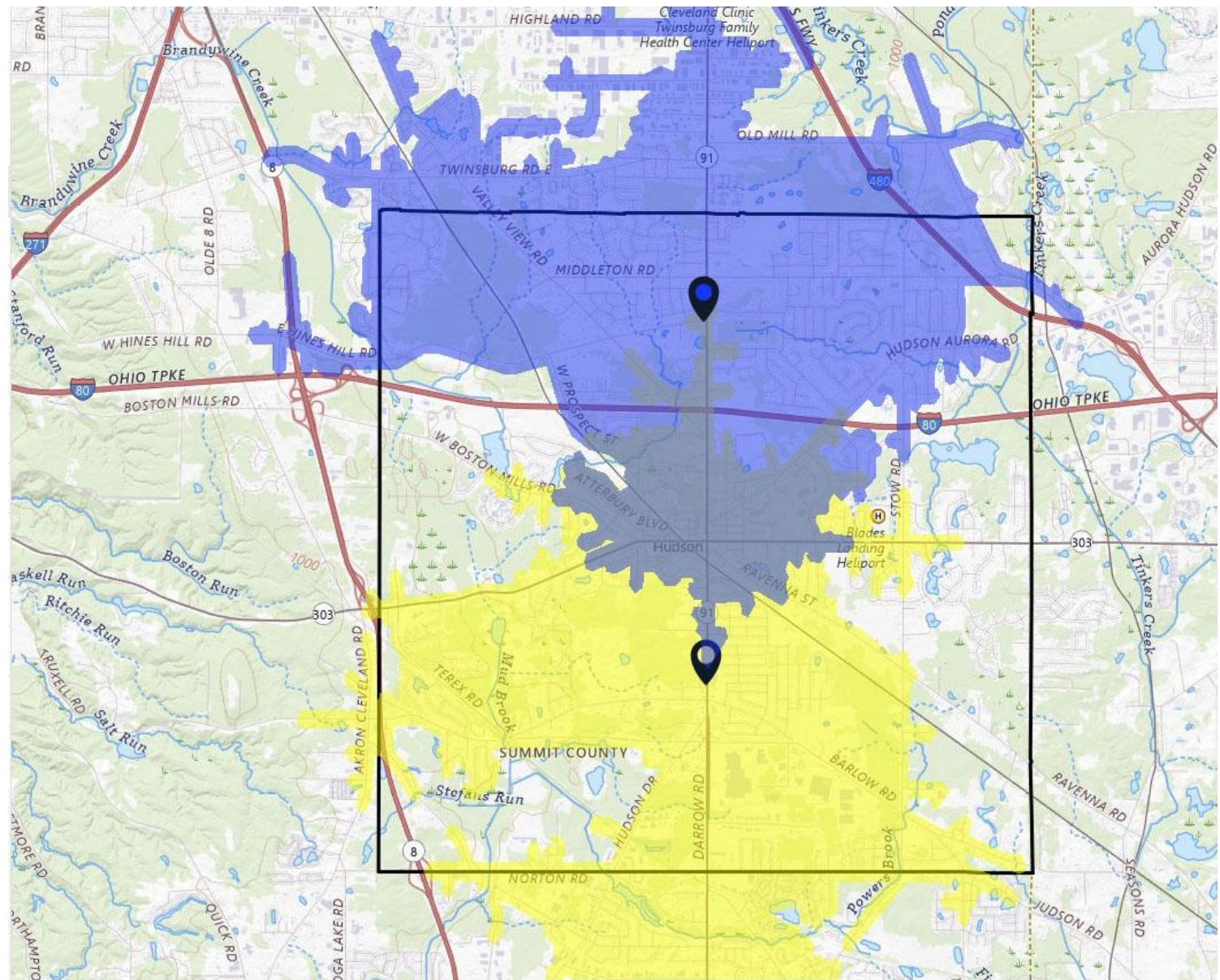
(Assuming Call Processing and
Turnout Time Standards are met)



6:30 Drive Time

Response Time Study North Station + South Station 9:00 Elapsed Since Call Received

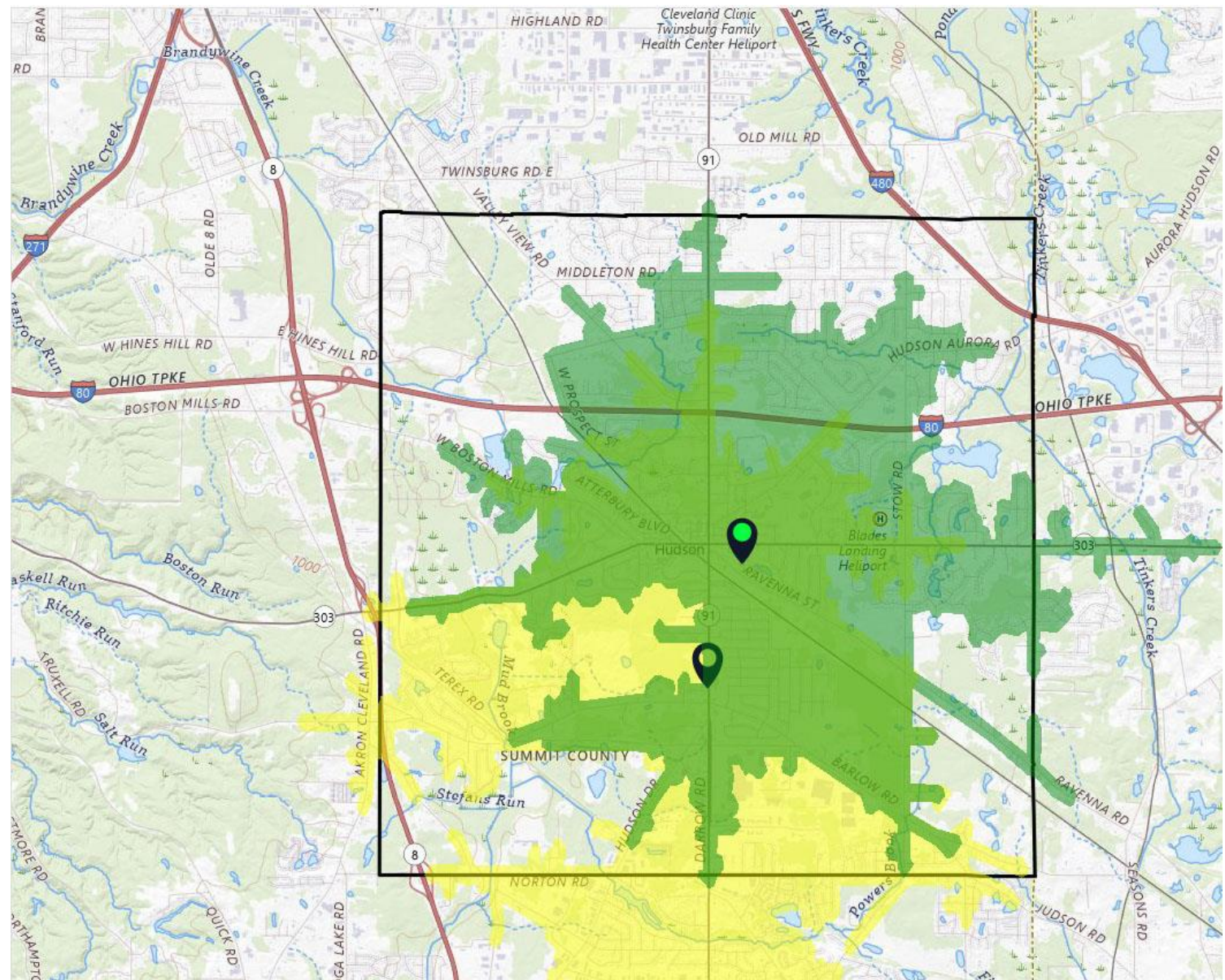
(Assuming Call Processing and
Turnout Time Standards are met)



6:30 Drive Time

Response Time Study Existing + South Station 9:00 Elapsed Since Call Received

(Assuming Call Processing and
Turnout Time Standards are met)



6:30 Drive Time

Response Time Study 3 Station Study 9:00 Elapsed Since Call Received

(Assuming Call Processing and
Turnout Time Standards are met)

