ANNE ARUNDEL COUNTY FIRE DEPARTMENT

Crownsville Fire Station #6

Virtual Community Input Meeting | October 27, 2021

Trisha L. Wolford
Fire Chief

Rob Manns
Principal Architect
MW STUDIOS

INTRODUCTIONS
& PROCEDURES

STUDIOS

AGENDA

1. Station Relocation
2. Response Times & Call Volumes
3. Units & Staffing
4. Health & Wellness
5. Design & Station Features
6. Cost & Timeline

STUDIOS

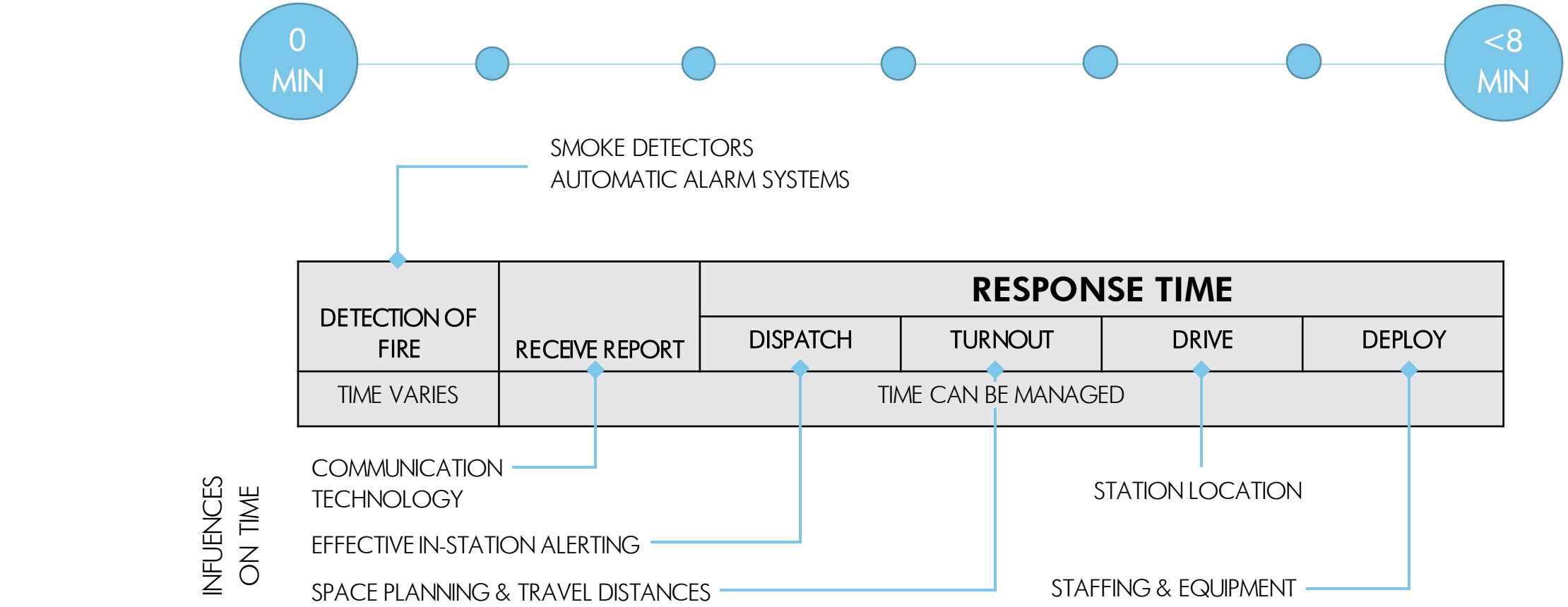
GEOGRAPHIC
STATION LOCATION

STUDIOS

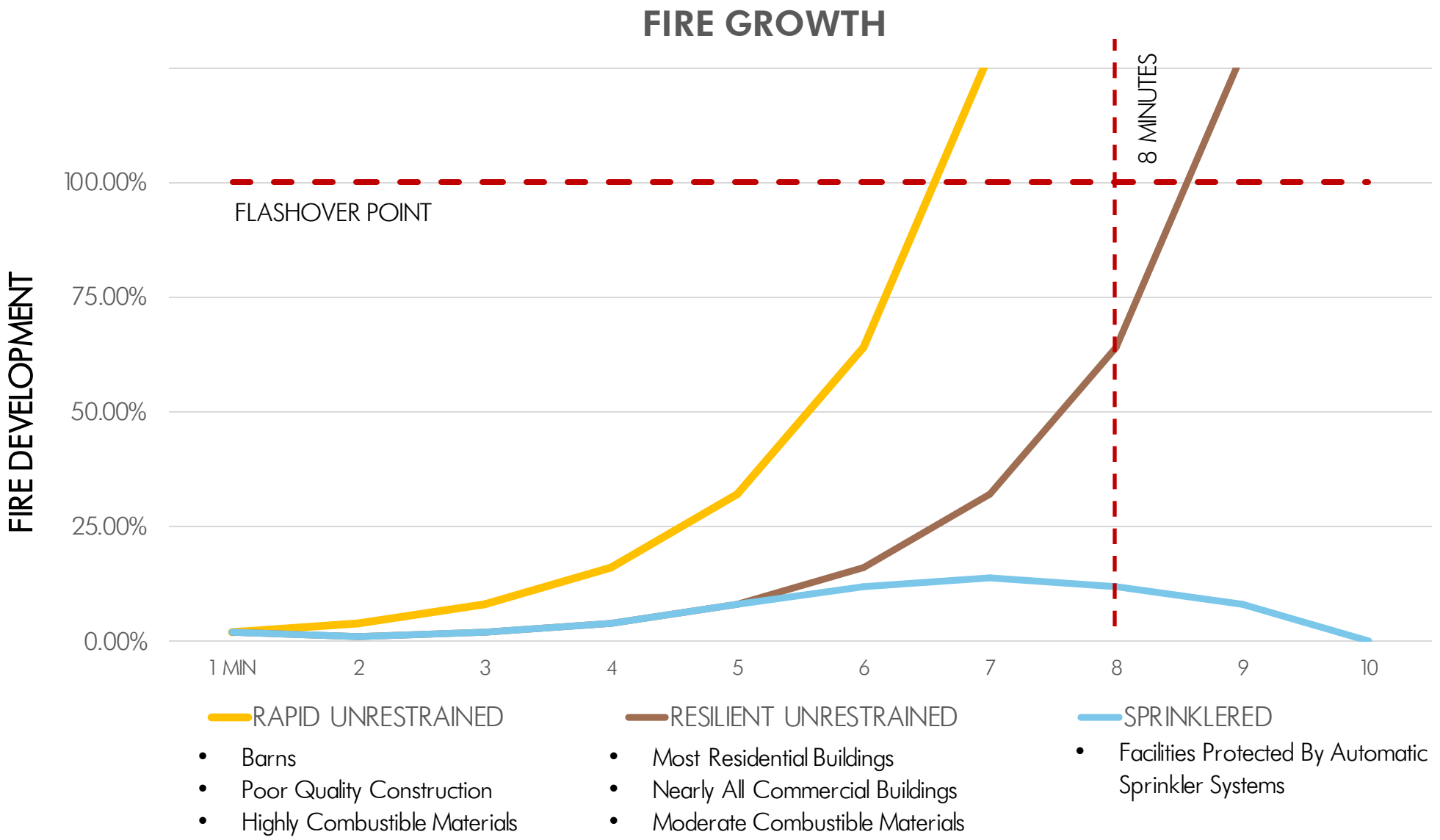
STATION LOCATION

RESPONSE TIMES
& CALL VOLUME

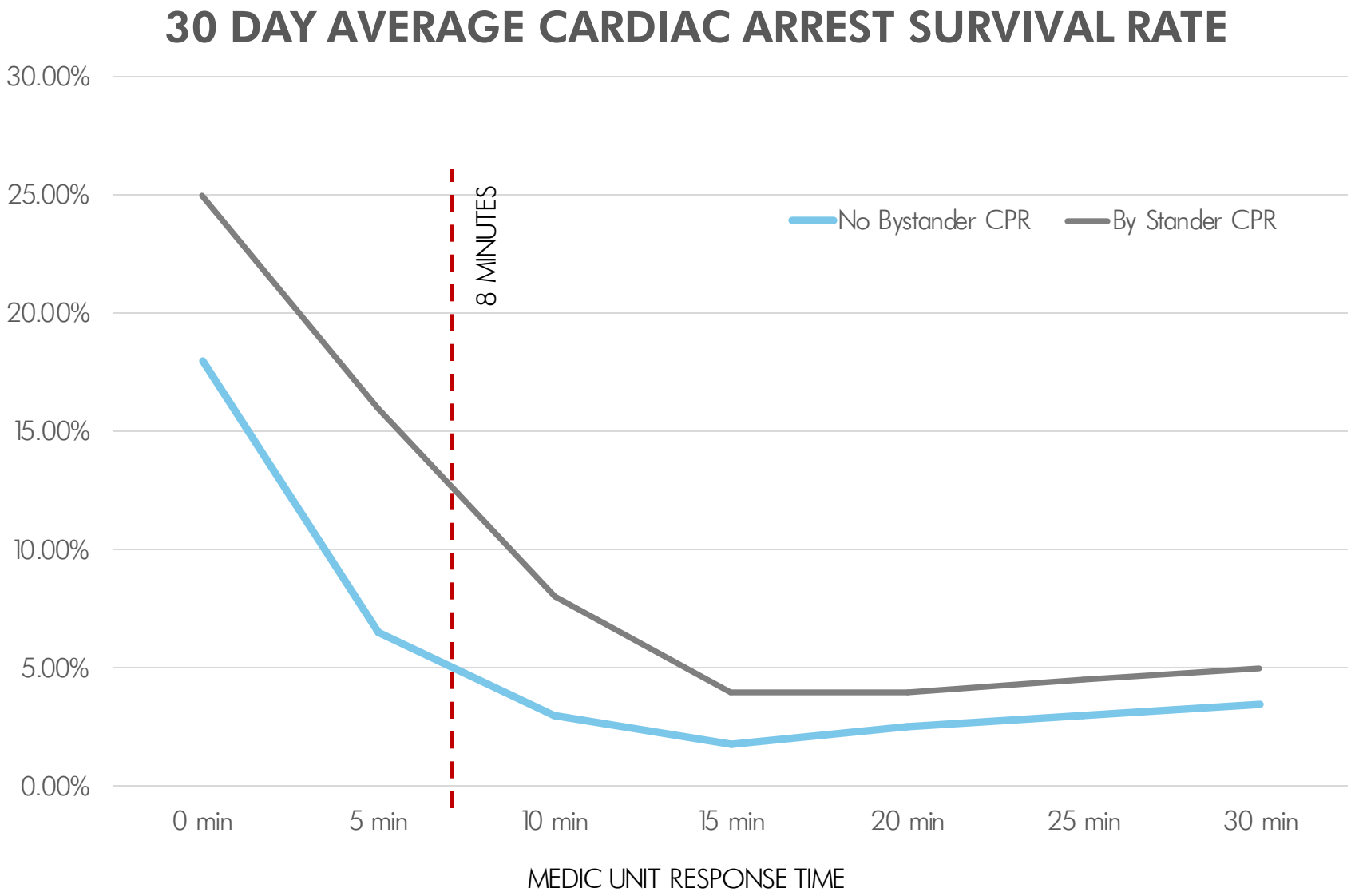
STUDIOS



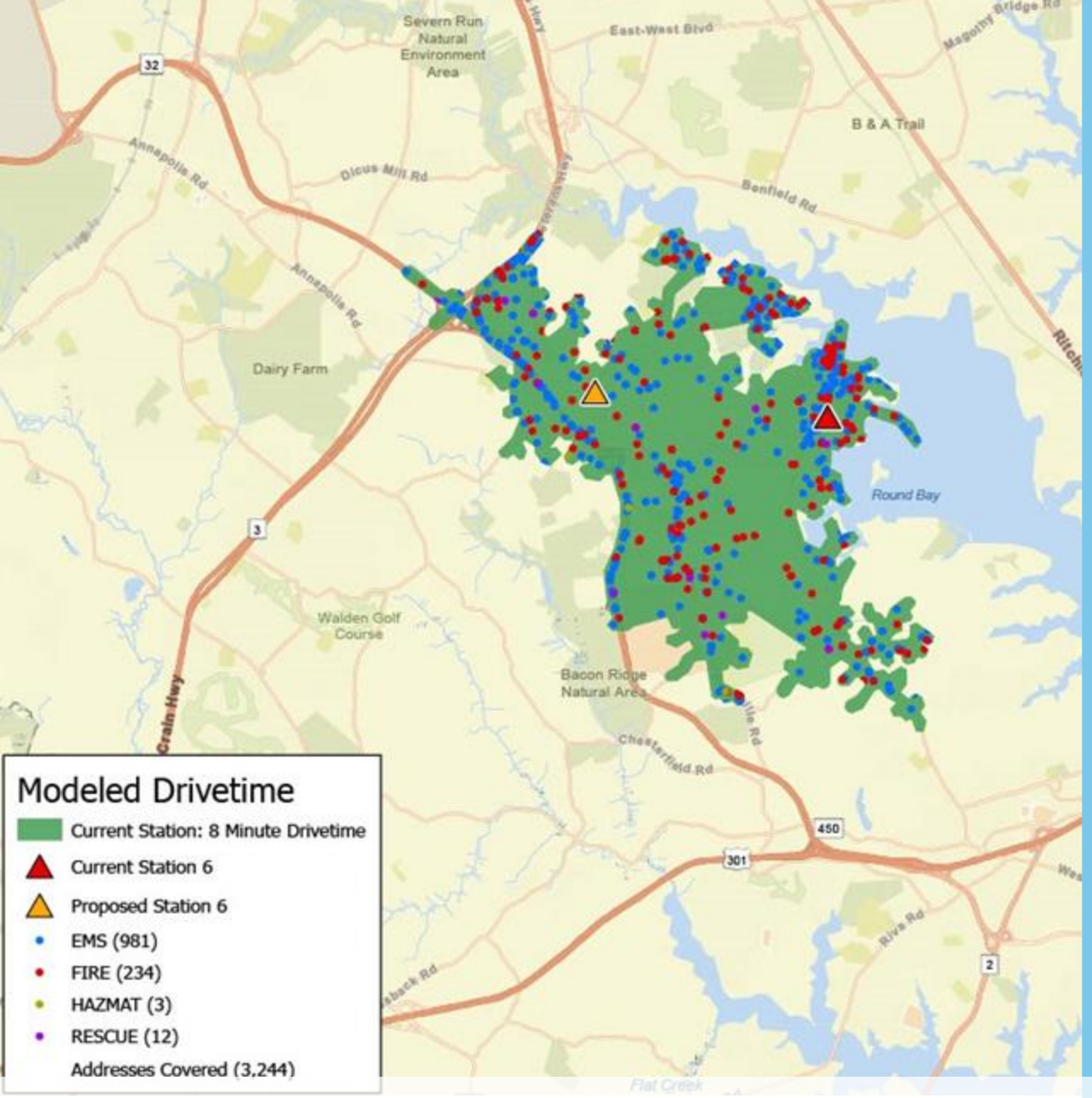
FACTORS IMPACTING RESPONSE TIMES

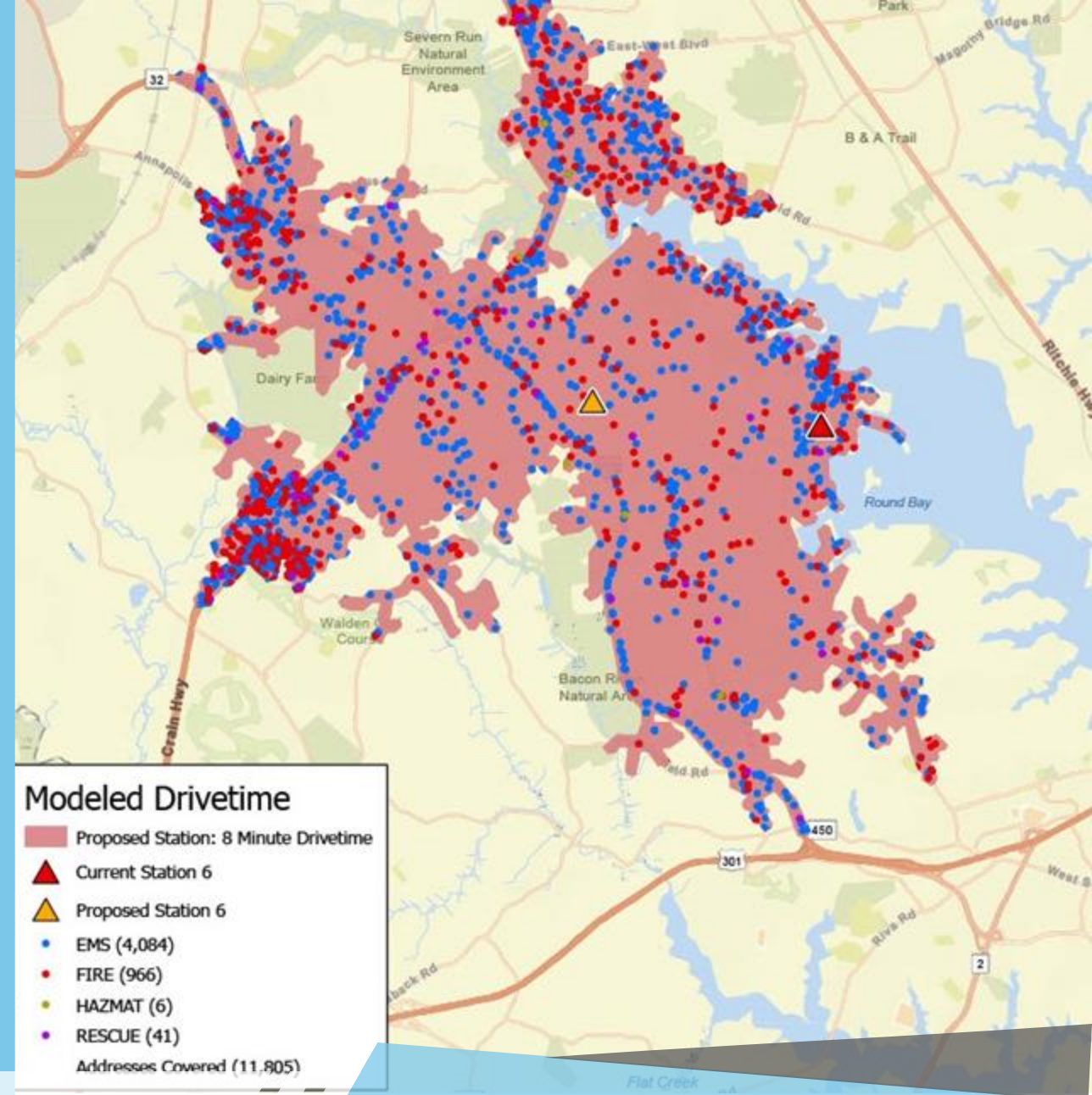


WHY FIRE RESPONSE TIMES MATTER



WHY EMS RESPONSE TIMES MATTER



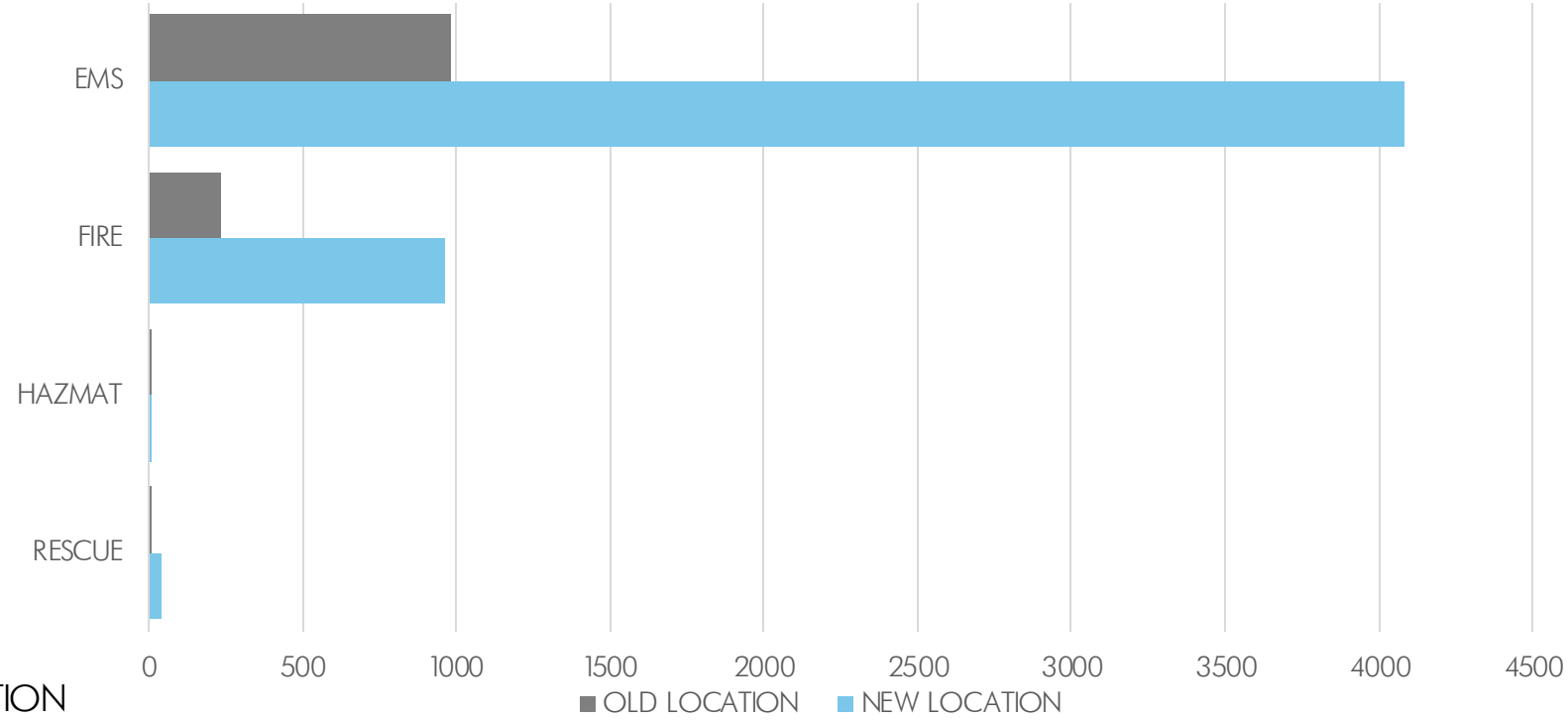


RESPONSE ANALYSIS

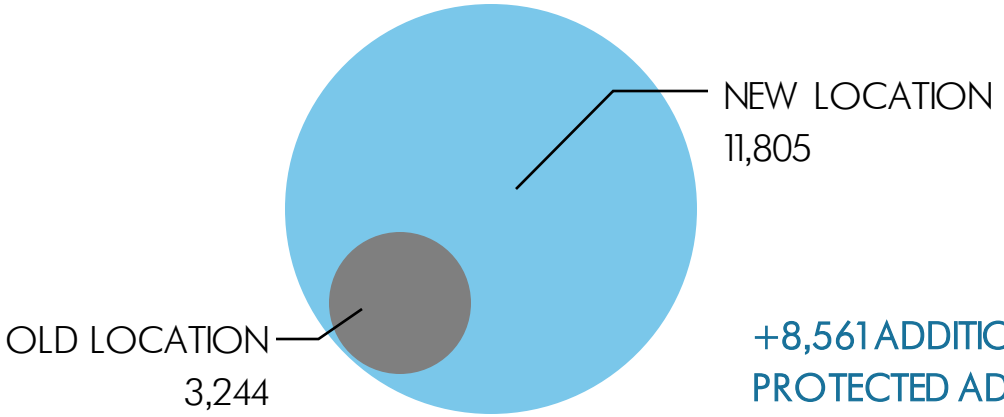
CALL VOLUMES

TYPE	OLD	NEW	DELTA
EMS	981	4,804	+3,103
FIRE	234	966	+732
HAZMAT	3	6	+3
RESCUE	12	41	+29
TOTAL	1,230	5,817	+4,587

CALL VOLUME COMPARISON



ADDRESS COVERAGE



+8,561 ADDITIONAL PROTECTED ADDRESSES

RESPONSE ANALYSIS

UNITS &
STAFFING

STUDIOS

UNITS ASSIGNED

- ENGINE
- TANKER
- MEDIC UNIT
- AMBULANCE
- BRUSH TRUCK
- SPECIAL UNIT
- SHIFT COMMANDER
- FIRE & EXPLOSIVES INVESTIGATION (x2)
- EMS OFFICER

STAFF SHIFT ASSIGNMENT

Division Chief
Company Officer
Firefighter III
Firefighter II
Firefighter / Paramedic
Fire Investigator Officer
Fire Investigator
EMS Officer
Volunteers

9 CAREER + VOLUNTEERS PER SHIFT

FIRST RESPONDER
HEALTH & WELLNESS

STUDIOS

WHAT MAKES A GOOD FIRE STATION TODAY?

SOME DEFINING CHARACTERISTICS

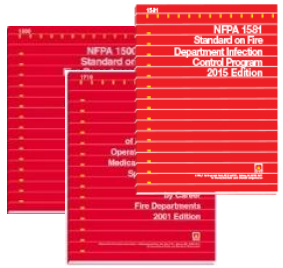
- Designed for first responder health and safety
- They're called a **fire house** for a reason; people live there…
- Provide spaces for responders to decompress after "battle"
- Fast & Safe Response Paths To Apparatus
- Future Growth & Expansion Taken Into Consideration
- Defined Public vs. Private Areas
- Improves operational efficiency and decreases operational costs
- Serve as a beacon to the community
- "Reads" as a fire station
- Responds to the context of your community
- Fiscally Responsible

VS

MINIMAL STANDARD OF CARE

BUILDING CODES

- Building Codes Establish a **MINIMAL** set of standards to ensure structures are safe for human occupancy.
- Different Jurisdictions and Agencies Enforce Different Codes – Sometimes The Conflict – In Which Case, The Most Stringent Regulation Typically Applies.
  - International Building Code (IBC)
  - NFPA 101 (Life Safety)
  - UFC (Typically State or Federal Installations)
- Fire Stations Are Unique As There Are Special Provisions For Ensuring the Resilience of Essential Facilities.
- Many Additional Standards & Policies Exist That Are Not Adopted By Local Jurisdictions. I.E. NFPA 1500 Infectious Disease
- Would your department be in a tough position if you ever had to take the stand?



SOBERING FACTS

CANCER

Firefighters have a **9% higher chance of being diagnosed with cancer,** and a 14% higher chance of dying from cancer when compared to the general population. Certain types of cancer present significantly higher rates of diagnosis.

LINE OF DUTY DEATHS

The **leading cause** of line of duty deaths in both fire and police personnel is **cardiac arrest.** This can be largely attributed to over exertion and conditioning.

SLEEP DEPRIVATION

Sleep deprivation increases the risk of cardiovascular disease, obesity, diabetes, apnea, and cancer. Chronic sleep deprivation elevates the risk of long term illness and injury on the fire ground.

SLIPS & FALLS

Humans are subject to error. While everything on the planet can't be protected with bubble wrap, there are smart design decisions that can be made to mitigate the risks of in-house injuries. In 2015 68,000 Firefighters were injured. **58% Of Injuries Occur off the fire grounds.**

POST TRAUMATIC STRESS

Firefighters experience post-traumatic stress disorder at rates similar to what's seen among combat veterans. Culturally, no one wants to talk about it. According to National Firefighters Foundation any given department is **4x more likely to experience a suicide death than a LODD**.

DESIGN FEATURES
AND PROJECT OVERVIEW

STUDIOS

KEY PROJECT FEATURES

- 22,400 Gross Square Feet
- Scaled To Fit Into Residential Context
- LEED Silver Sustainability Certification
- State of The Art Health & Safety Features

KEY PROJECT FEATURES

- Rapid Internal Response Times
- In Station Alerting w/ State-of-the-art Lighting
- Durable Resilient Construction
- Integrated Site Design

KEY

1A STATION BAYS
1B STATION ADMIN/PERSONNEL AREAS
2 PUBLIC PARKING
3 PERSONNEL PARKING
4 DUMPSTER ENCLOSURE
5 STORMWATER MANAGEMENT AREAS
6A SITE SIGNAGE W/ ELECTRONIC INFO
6B SITE SIGNAGE W/ LETTERING ONLY
7 RESPONSE APRON
8 RETURN APRON
9 SPRINKLER PUMP HOUSE
10 PROPANE TANK
11 GENERATOR
12 MECHANICAL YARD
13 TRANSFORMER
14 PATIO AREA
15 TRAFFIC LIGHT INTERSECTION
16 SANITARY SYSTEM SAND MOUND
17 ROAD WIDENING
18 FLAGPOLES

SITE PLAN

AERIAL VIEW

GENERALS HIGHWAY VIEW

MAIN ENTRANCE

SUNRISE BEACH ROAD

+/- 22,400 GSF

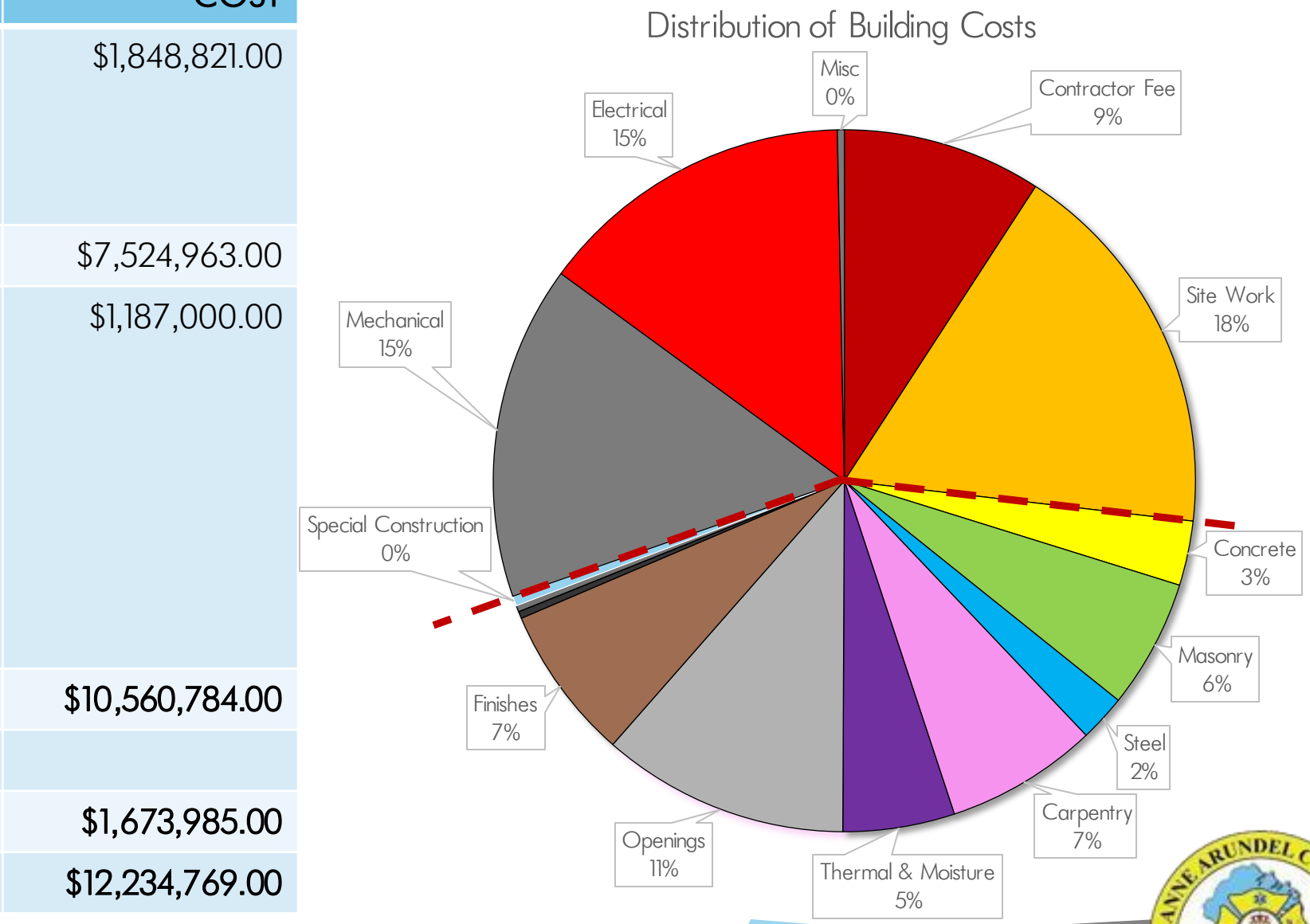
- 4 Drive Through Bays
- Rapid Response Organization
- NFPA Compliant Decontamination
- Indoor Air Quality Monitoring
- Access to Natural Light
- EV Apparatus Ready
- Community Engagement

BUILDING FLOOR PLAN

PROJECT COSTS
AND TIMELINE

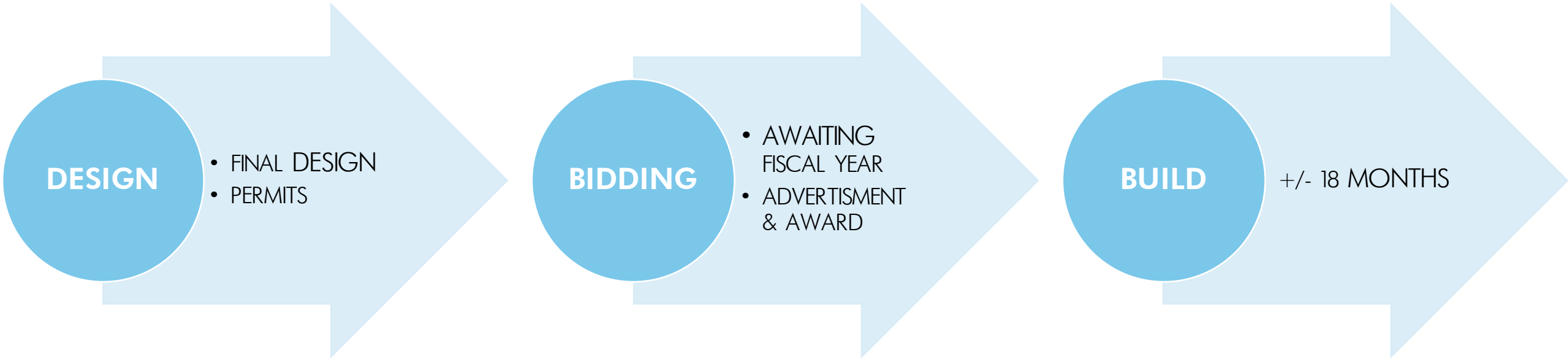
STUDIOS

ELEMENT	COST
SITEWORK • Earthwork • Septic & Well • Traffic Control & Road Widening	$1,848,821.00
STATION COST	$7,524,963.00
SPECIAL SYSTEMS • Four-Fold Doors • Vehicle Exhaust • Alerting • Station Equipment • Generator • Lightning Protection • Resinous Bay Flooring	$1,187,000.00
BUILDING TOTAL	$10,560,784.00
INSURANCE & CONTINGENCY	$1,673,985.00
TOTAL ESTIMATE	$12,234,769.00



AWAITING FY23' APPROPRIATION

ESTIMATED COSTS



90% COMPLETE

SUMMER 22’

FALL 22’ - SPRING 23’

TIMELINE

AERIAL VIEW

THANK YOU