



THE D, E, F, AND G'S OF EOC'S

**Lessons Learned in Building an EOC –
A Case Study on the
Terrebonne Parish EOC and Safe Room**

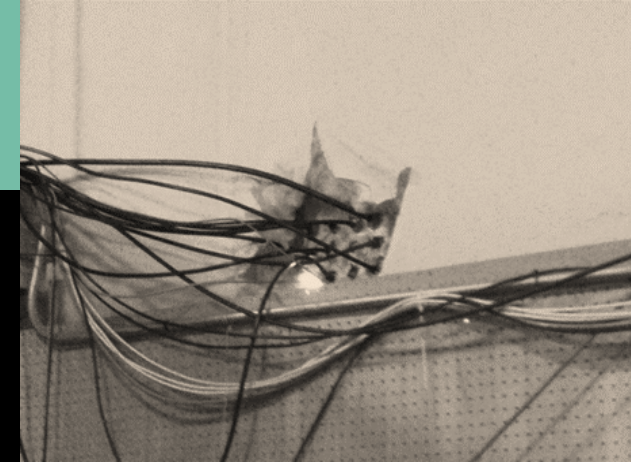
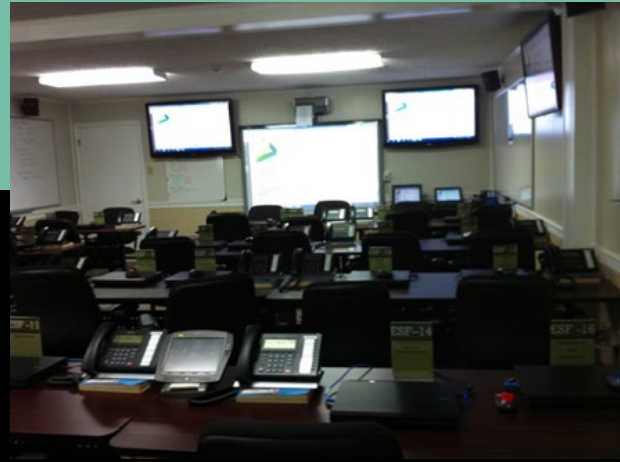
Earl Eues, Director of Homeland
Security and Emergency
Preparedness for Terrebonne Parish



CASE STUDY: TERREBONNE PARISH EOC FACILITY

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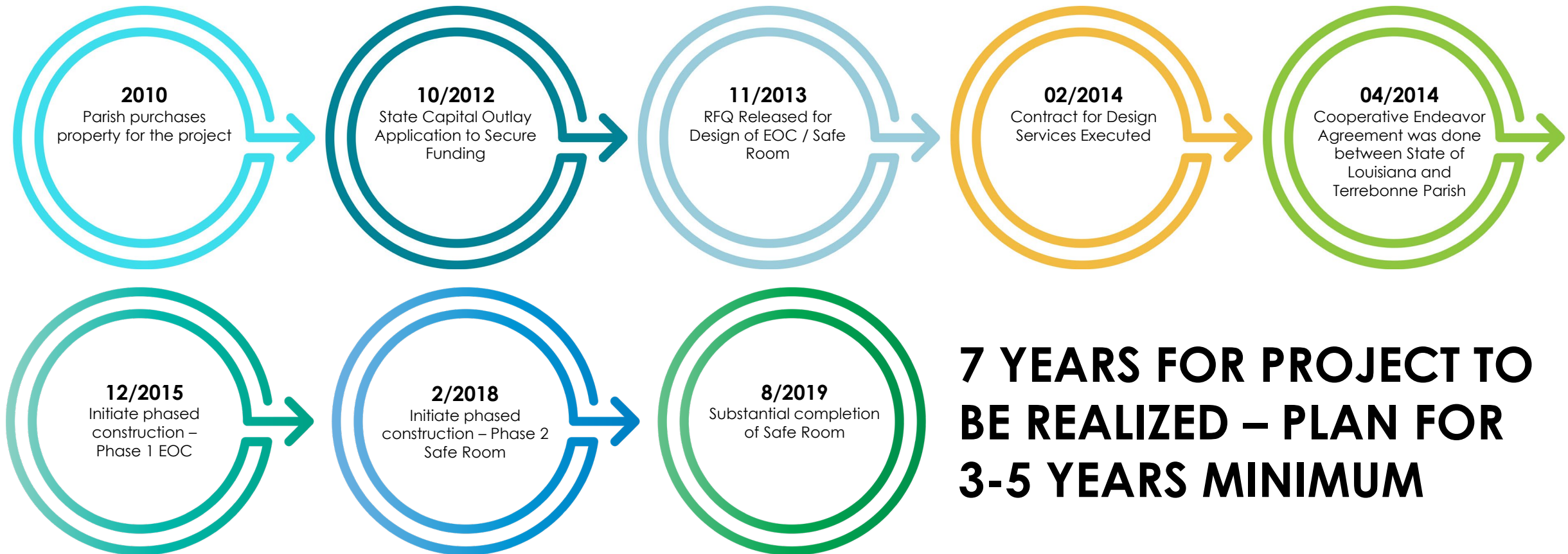
Existing EOC Deficiencies

- Building not hardened
- Located in a flood plain
- Inadequate space - Operating out of approximately 3,000 SF
- Inadequate technology
- Unprotected systems infrastructure
- Insufficient restroom facilities
- Not enough parking

EVOLUTION OF PROJECT: TERREBONNE PARISH EOC FACILITY AND SAFE ROOM

PROJECT TIMELINE

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EVOLUTION OF PROJECT

Phase 1 Construction – EOC

- 12/2015 – Notice to Proceed given to your selected contractor for the EOC
- 02/2016 – Ground Breaking for the EOC
- 03/2017 – Substantial Completion of the EOC
- 04/07/2017 – MOVE IN DAY for the EOC!



Phase 2 Construction – Safe Room

- 02/20/2018 – Notice to Proceed given for the Safe Room
- 08/08/2019 – Substantial Completion for the Safe Room
- 10/01/2019 – MOVE IN DAY for the Safe Room!





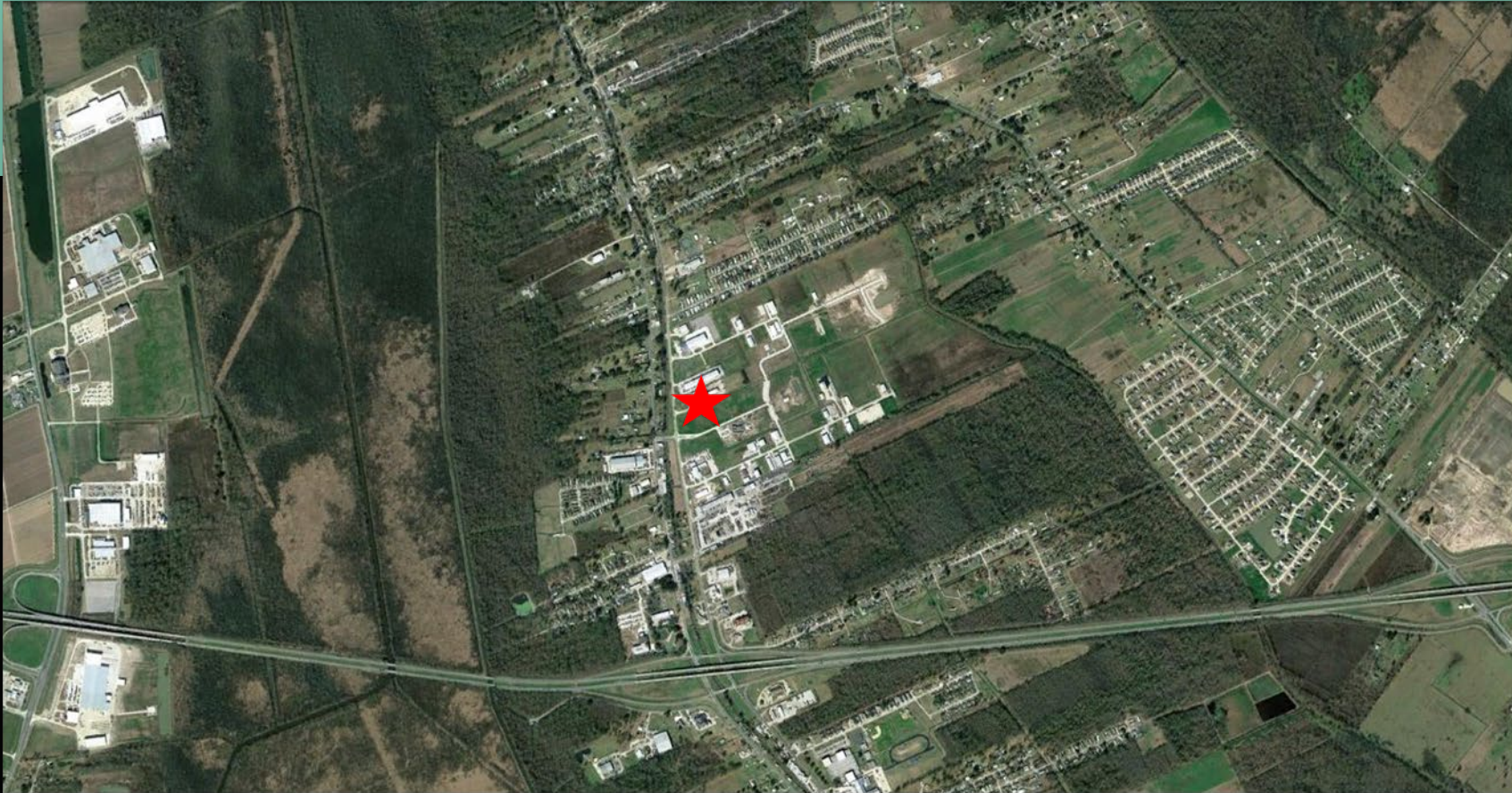
PHASE 3: OPERATION & ACTIVATION

- **Activations**

- Pandemic Activation Activities
- Hurricane Ida (2021)
- Hurricane Marco (2020)
- Hurricane Laura (2020)
- Hurricane Delta (2020)
- Hurricane Zeta (2020)
- Hurricane Barry (2019)

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2010 – Parish purchases property on Highway 24 North for new Emergency Operations Center as part of Government Center



PROJECT FUNDING FOR THE EOC

- \$3.06 Million from Parish General Fund
- \$4.34 Million from Capital Outlay Funding Request

PROJECT COSTS FOR THE EOC

- \$ 551,774 Architectural/Engineering
- \$ 6,012,684 Construction
- \$ 510,639 Audio/Visual
- \$ 96,755 Furniture
- \$ 299,199 Temporary EOC
- **\$ 7,374,299 TOTAL COST**

Cost in today's dollars: **\$10M**

Cost of property: **\$5M**



PROJECT COSTS FOR THE SAFE ROOM

- \$ (See EOC) Architectural/Engineering
- \$ 2,352,460 Construction
- \$ (Included) Audio/Visual
- \$ (Included) Furniture
- **\$ 2,432,460 TOTAL COST**

Cost in today's dollars: **\$3.2M**

Cost of property: **Included in EOC**

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- Precast walls / conc. roof deck, single-story
- EOC: 11,864 SF
- Safe Room: 3,893 SF
- EOC: IBC Risk Cat. V. Wind Speed of 180 mph, Level E impact resistance level
- Safe Room: FEMA Grant Wind Speed 190 mph, 100 mph impact speed
- Separated Functions, co-located redundant utility sources
- Connectivity for normal & activation uses

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Space Needs Assessment
Plan for current need

Plan for future expansion:

- Population growth
- Expanded responsibilities
- Accommodating other governmental functions

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Program / Design Space Comparison Executive Summary

Terrebonne Parish Emergency Operations Center
Terrebonne Parish, Louisiana
ADG Project Number: 892-12

General Notes	Space Designation		Space Requirements (square feet)		
	No.	Space Function	Approved Program	Current Design	Surplus / (Deficit)
	1.0	Public Access Areas	582	887	305
	2.0	Emergency Management Administration	1,922	1,719	(203)
	3.0	Emergency Operations Center	4,150	4,198	48
	4.0	Facility Support	2,938	2,615	(323)
	5.0	Facility Services	750	1,591	841
	6.0	Total Gross Sq. Ft.	10,343	11,010	667
	7.0	Enclosed Parking	2,250	1,431	(819)
	7.1	Covered Parking Alternate	---	486	486
	8.0	Covered Break Area	---	875	875

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EMERGENCY OPERATIONS CENTER - TERREBONNE PARISH, LA
ARCHITECTS DESIGN GROUP IN ASSOCIATION WITH HOUSTON J. LIRETTE, AIA



SCALE: 1"= 400'-0"
0' 200' 400' 800' 1600'

OVERALL SITE PLAN
May 28, 2014

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ORIGINAL SITE PLAN



CURRENT AERIAL WITH THE ANIMAL SHELTER AND JUVENILE DETENTION CENTER



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SITE DEVELOPMENT DATA:

BUILDING DATA SQUARE FOOTAGE CALCULATIONS

EOC:	10,418 SF
COMMUNICATIONS / SAFE ROOM:	6,100 SF
TOTAL:	16,526 SF

SITE AREA 2.5 ACRES (PROPOSED SITE AREA)

PARKING COUNT PROVIDED	
SECURED:	52
NON-SECURED:	7
TOTAL SPACES:	65

TYPICAL MINIMUM REQUIREMENTS 1:300 OR 10,418/300 = 35 SPACES

REQUESTED PARKING	
SECURED SPACES:	28
PUBLIC SPACES:	7
TOTAL SPACES:	35



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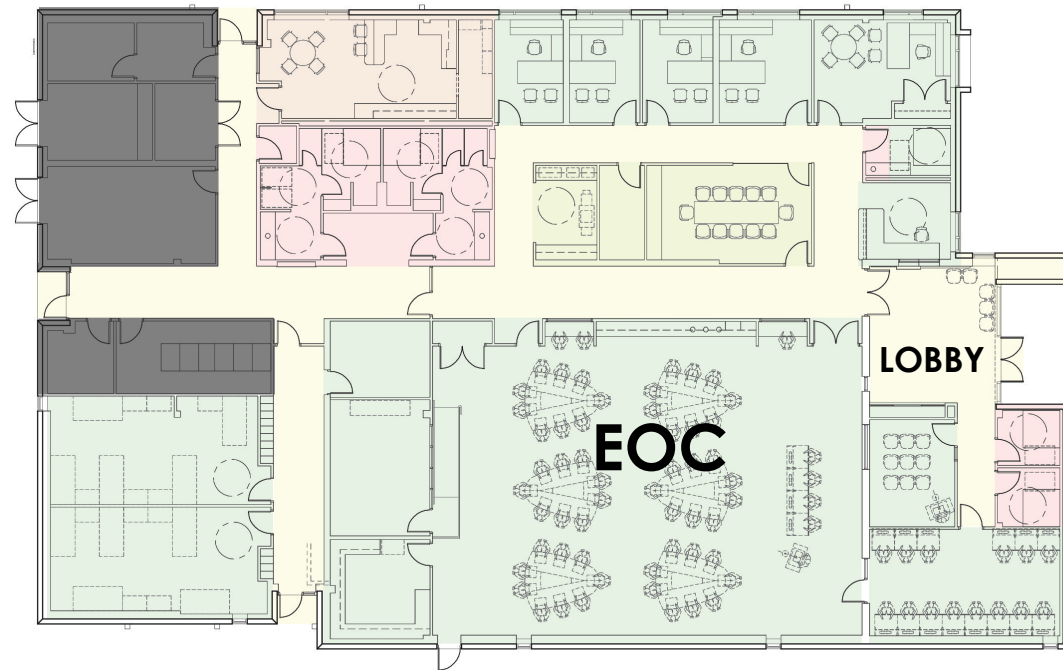
SITE PLAN
May 28, 2014

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PHASE TWO – SAFE ROOM



PHASE ONE – EOC

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FRONT ENTRY



SHELTER ENTRANCE



BIRDS EYE VIEW



BIRDS EYE VIEW

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CONCEPTUAL RENDERINGS
May 28, 2014

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January 6, 2016: Groundbreaking Ceremony

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Initial Construction –
Site Work



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Initial Construction –
Foundations and Structure



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Initial Construction –
Building and Comm. Tower



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Completed Facility

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Completed Facility



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Completed Facility –
Protected Redundant
Systems



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Completed Facility



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Completed Facility



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Completed Facility



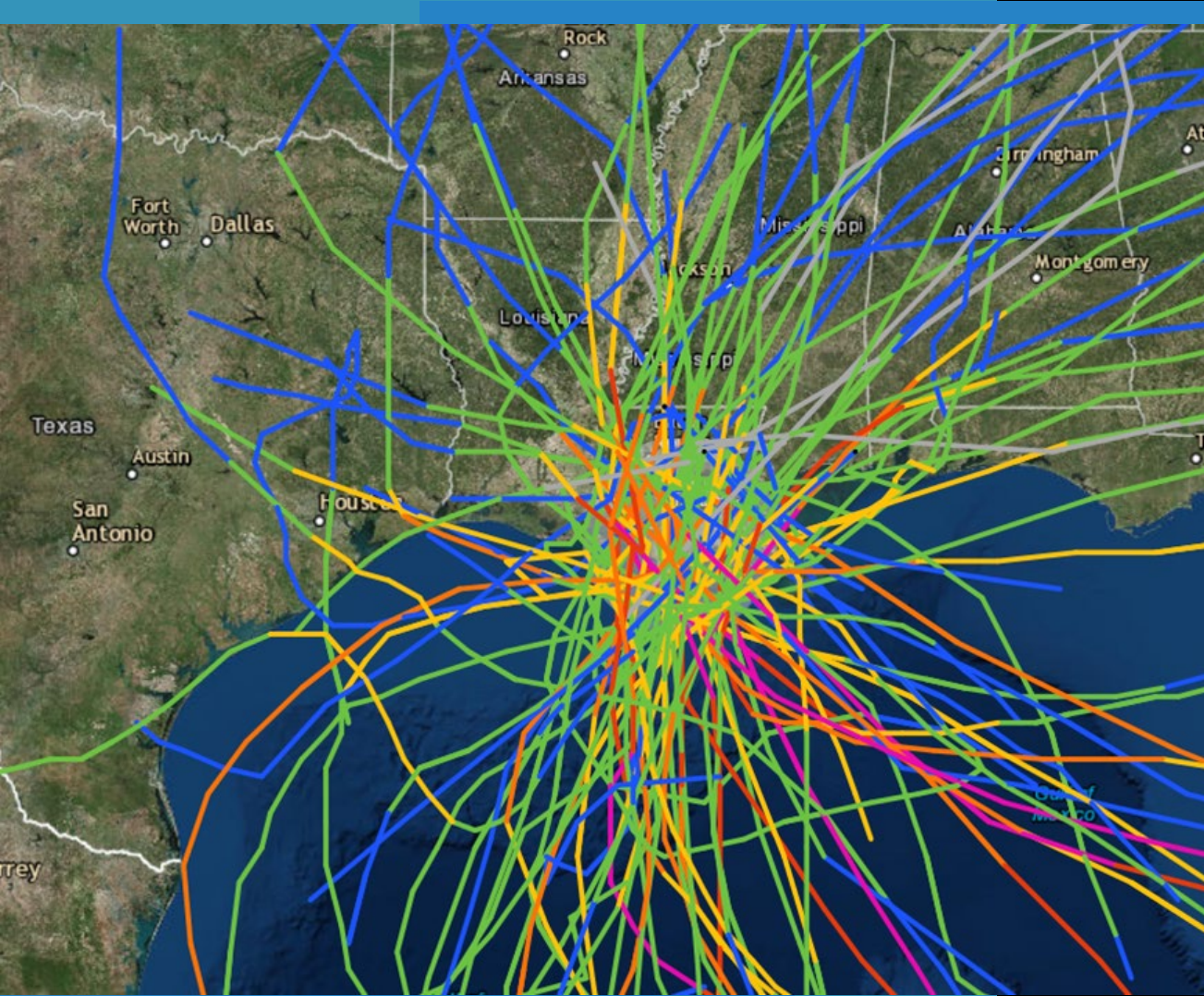
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Safe Room



REASONS WHY THIS PROJECT MOVED FORWARD

1. Officials recognized the need.



HURRICANE TRACKS

REASONS WHY THIS PROJECT MOVED FORWARD

2. Buy-In from State Legislature
for Funding



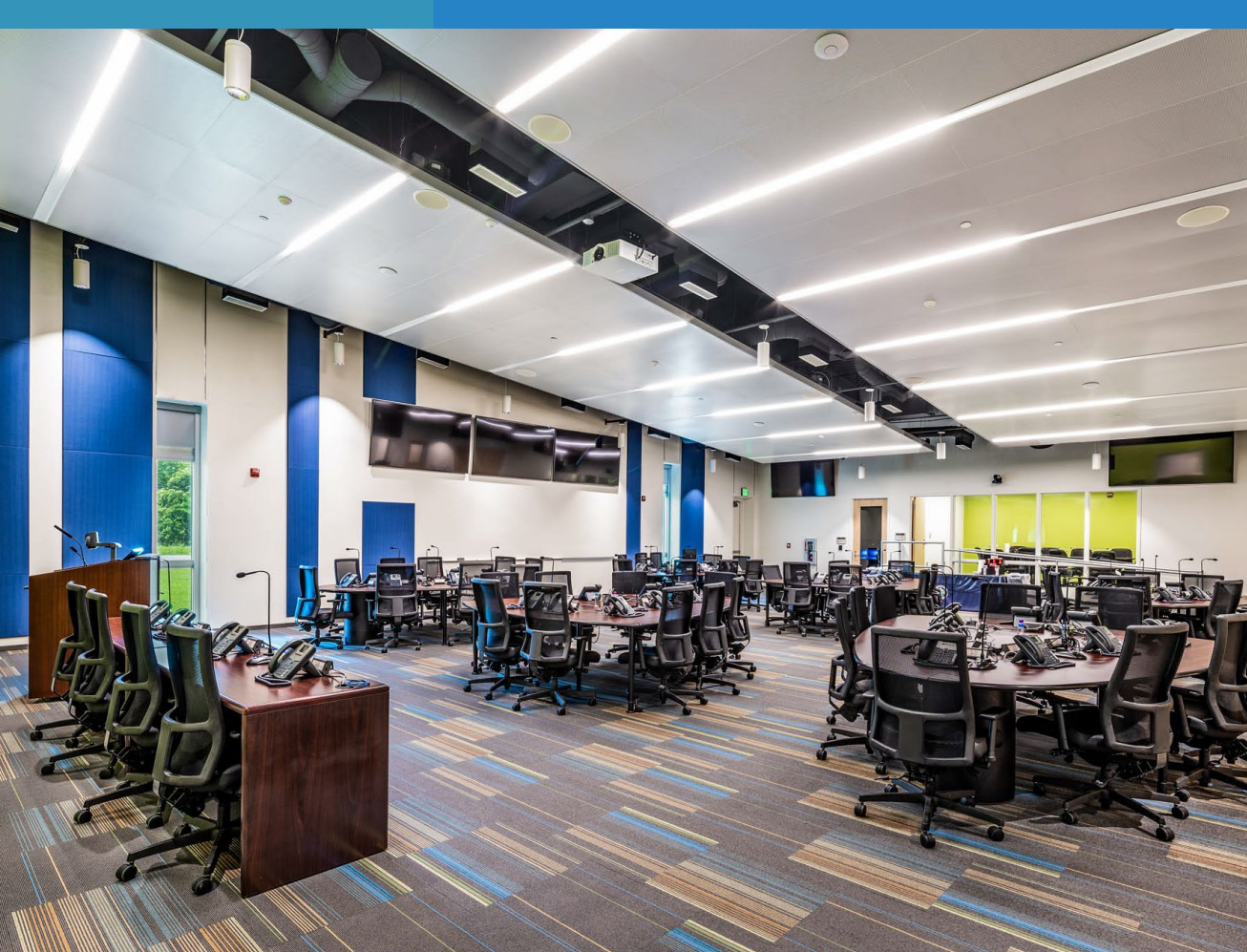
REASONS WHY THIS PROJECT MOVED FORWARD

3. Need for a Survivable Structure



REASONS WHY THIS PROJECT MOVED FORWARD

4. Designed to Function as a
Multi-Use Space

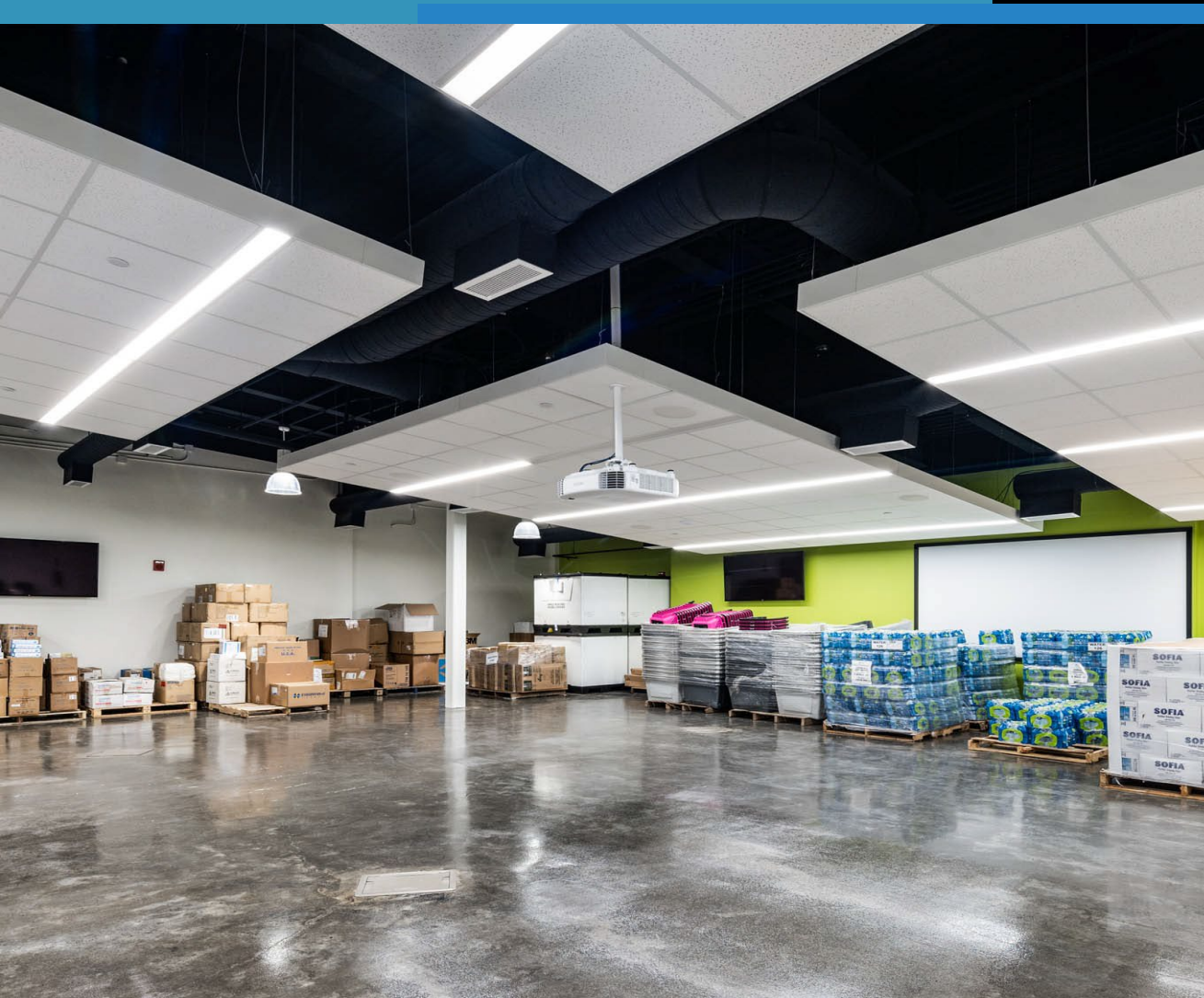


LESSONS LEARNED - EOC



- Need to utilize an architectural firm that specializes in Public Safety Building design
- Utilize a commissioning agent
- Plan for 2x more storage than you think you will need
- Future maintenance and operation costs
- Plan on additional costs to update technology in the future
- Would have doubled the size of the server room due to so many outside agencies requesting to use it as well
- Additional tower capacity to provide additional revenue stream / Increased height of communication tower for additional users / capacity.

LESSONS LEARNED – SAFE ROOM



- Focus on flexibility (storage, workspace, training, and safe room bunking functions)
- Provide adequate access for palletized storage with forklift
- Isolate wet systems (plumbing and HVAC) from occupied areas
- Plan for social distancing (may require additional area)

ADDITIONAL LESSONS LEARNED - ACTIVATION



- Ensure pressurized water source
- Provide backup generator to the backup generator (N + 1 + Mobile Generator Connection)
- Parking – must have strategy for substantial increase in parking needs during activation
- Accommodate protected garbage dumpster capacity for activation
- Additional Spaces Needed
 - Office Space for Partner Agencies
 - Quiet Room / Decompression Room
 - Full Kitchen and Additional Dining Area



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