



UPDATE: 911/EOC/ETSB Facility Design

911 Operations Committee

**Carl Kirar (FCS)
January 20, 2022**

911/EOC/ETSB Building

2019 Strategic Plan Alignment



County's Mission: Deliver exceptional, financially and environmentally responsive / responsible services that promote a safe, affordable, healthy, and resilient community

Strategic Initiatives	
X	Regional Leadership
X	Fiscal Responsibility
X	Exceptional Service and Operational Excellence
Strategic Goals	
	Public Safety and Integrated, Data-Driven Justice System
X	Enhance Economic Opportunities
X	Improve Infrastructure
X	Promote a Sustainable Environment
	Build Healthy, Inclusive, and Resilient Communities

Strategic Themes	
	Inter-Organizational Cooperation
X	Quality of Life
X	Economic Development
X	Infrastructure
X	Environmental Sustainability
X	Non-Environmental Sustainability
X	Lake County Branding
	Mental Health
X	Grants and Specialty Funding
	Diversity and Inclusion

[Link to Strategic Plan](#)

- **Purpose**
 - Status update and discussion of 911/EOC/ETSB project.
- **Agenda**
 - **Overview of project**
 - Design Principals, Requirements and Block Diagram
 - Design Considerations
 - Next Steps

Overview

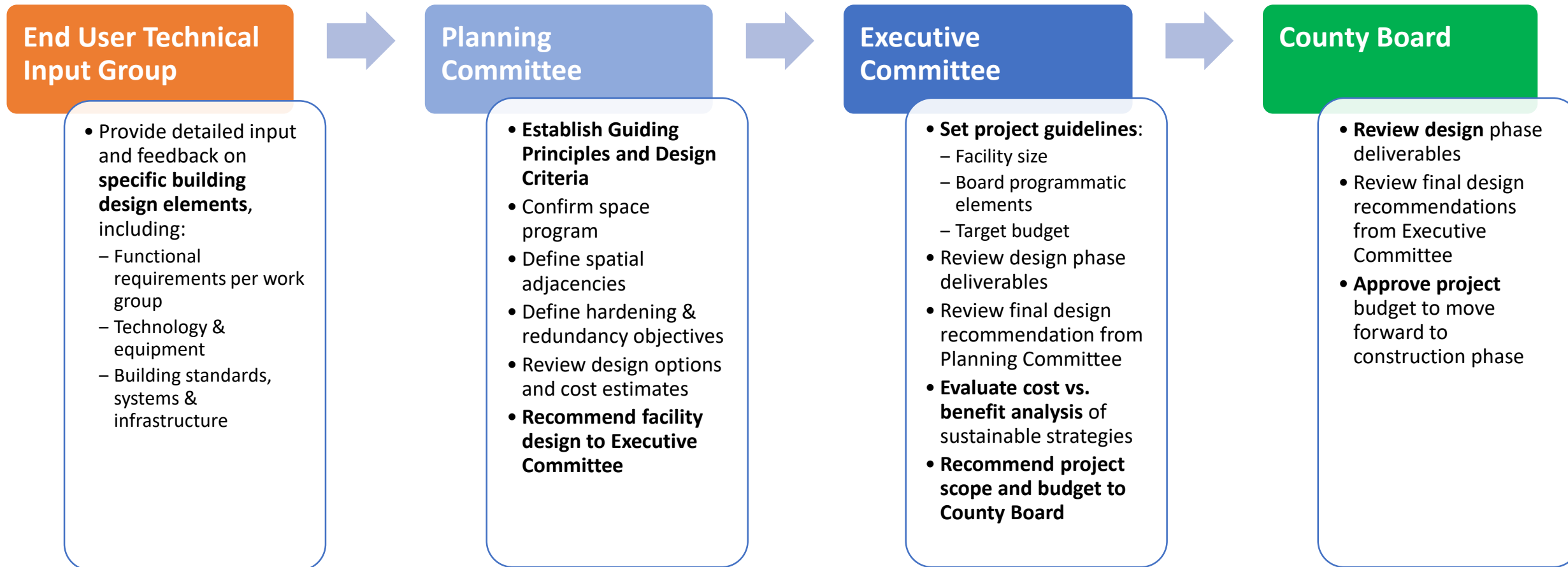
911/EOC/ETSB Project Scope and Requirement



- **Purpose-built facility for 911, Emergency Management Agency (EMA) and Emergency Telephone System Boards (ETSB)**
- **Building will provide:**
 - **Comprehensive functional space design**
 - **Opportunity for regional consolidation of ETSB and Public Safety Answering Points (PSAP)**
 - **Structural protection from severe weather and active threats**
 - **Provide needed permanent housing areas for emergency 911 equipment**
- **Modernize the building's environmental controls**
- **Design with operator wellness in mind**
- **Next Generation 911 (additional space requirements for added equipment)**
- **Maximize sustainable design**

Overview

Design Roles and Responsibilities



- **Purpose**
 - Status update and discussion of 911/EOC/ETSB project.
- **Agenda**
 - Overview of project
 - **Design Principals, Requirements and Block Diagram**
 - Design Considerations
 - Next Steps

Design Principles



The New Consolidated 911/EOC/ETSB Building should...

1. Support efficient and effective emergency communications and emergency management operations and responses to public safety events for the communities served through creative and efficient design.
2. Be an example of a facility 'done right' and a model of excellence in a supporting multitude of objectives, including: operations, accreditation, sustainability/energy efficiency, survivability, serviceability, and durability.
3. Accommodate the needs of both today and tomorrow's environment by being expandable, flexible, functional, and a good place to work.
4. Emphasize staff wellness and retention through workplace design.
5. Represent the best value to the taxpayers through being environmentally friendly, efficient, practical, and effective.
6. Maximize the optimization of shared spaces that can be accessed by the users of the building, as well as by other County personnel.
7. Provide optimal physical security and resiliency.
8. Support achievement of high levels of employee thermal comfort, access to natural daylight, and physical well-being.

Preliminary Space Requirements

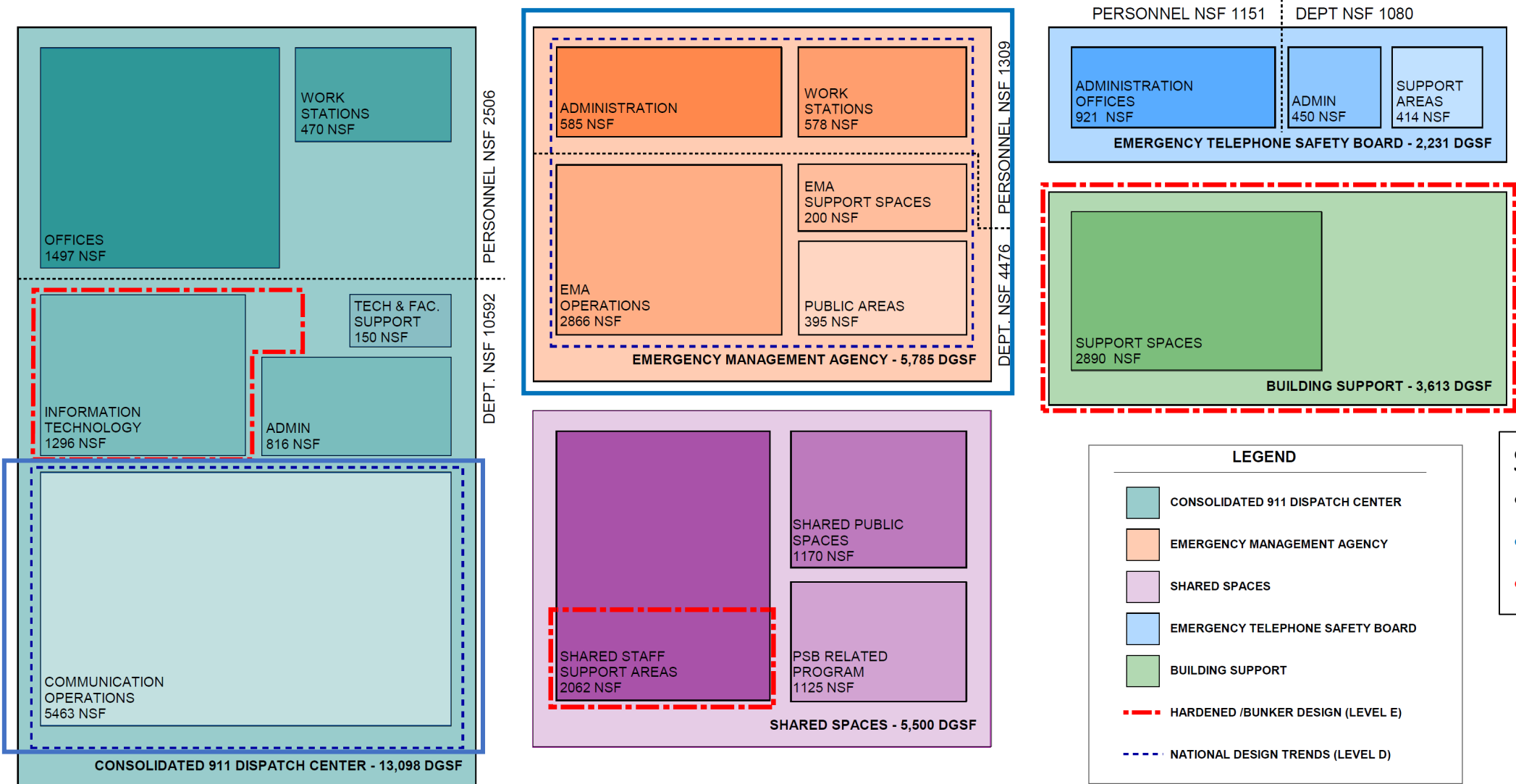


Department	2019 Program		2022 Verified Program	
	Max Personnel	Net Sq-Ft	Max Personnel	Net Sq-Ft
Consolidated 911 Dispatch Center	80	9,706	96	11,492
EMA	8	3,983	8	4,474
ETSB	6	1,573	8	1,785
Shared Spaces	0	2,610	0	4,357
Building Support	0	2,090	0	2,890
Totals	94	19,962	112	24,998
Building Spaces/Circulation		8,275		11,503
Gross Sq-Ft		28,237		36,501

Structural Hardening Design Trends:

- **B - MINIMAL SURVIVABILITY:**
 - Designed to withstand Building Code wind loads
 - \$425/Gross sq-ft
- **C - LOW-LEVEL PROTECTION / CONTINUITY OF OPERATIONS**
 - Designed to withstand 150 mph wind loads (wind pressures 2.75 times those of a typical building)
 - \$490/Gross sq-ft
- **D - NATIONAL DESIGN TRENDS:**
 - Designed to withstand wind loads of 250 mph (wind pressures 8 times those of a typical building)
 - Hurricane windows designed to resist 150 mph winds, but not projectiles
 - \$590/Gross sq-ft
- **E - HARDENED / BUNKER DESIGN:**
 - Designed to withstand FEMA 350 required wind loads of 250 mph
 - No windows to the exterior
 - \$670/Gross sq-ft

Block Diagram



Structural Design:

- C: 12,008 sq-ft
- D: 14,610 sq-ft
- E: 6,971 sq-ft

- **Purpose**

- Status update and discussion of 911/EOC/ETSB project.

- **Agenda**

- Overview of project, Building Requirements
- Design Principals, Requirements and Block Diagram
- **Design Considerations**
- Next Steps

Design Considerations

- **34 positions in the Communications Operations (911) area**
- **Structural Design:**
 - **911 floor and EOC floor fall within the “D” National Design Trend**
 - **Mechanicals and IT areas being designed to the “E” Hardened / Bunker Design**
- **Sustainability:**
 - **Design to LEED Gold standard**
 - **Geothermal heating and cooling**
 - **Solar power**

- **Purpose**

- Status update and discussion of 911/EOC/ETSB project.

- **Agenda**

- Overview of project, Building Requirements
- Design Principals, Requirements and Block Diagram
- Design Considerations
- **Next Steps**

Next Steps

- **Complete schematic design (Mar 2022)**
- **Present financial decision points to F&A (Feb 2022)**
 - Design standard (structural design)
 - Sustainability (geothermal and solar)
- **Develop Funding Strategy:**
 - ARPA (portion of project from Revenue Replacement)
 - Bonding
 - Grants (infrastructure and energy)
 - 3rd Party Energy/Sustainability (solar)



Questions