

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: HB 1575 Public Safety Emergency Communications Systems

SPONSOR(S): Brackett

TIED BILLS: **IDEN./SIM. BILLS:** SB 1614

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Insurance & Banking Subcommittee	18 Y, 0 N	Fortenberry	Lloyd
2) Local Administration, Federal Affairs & Special Districts Subcommittee	18 Y, 0 N	Burgess	Darden
3) Commerce Committee			

SUMMARY ANALYSIS

The State Fire Marshal (SFM), within the Department of Financial Services (DFS), enforces the provisions of ch. 633, F.S., and all other applicable laws relating to fire safety. The SFM adopts by rule the Florida Fire Prevention Code (FFPC), which is the minimum fire prevention code deemed adopted in each municipality, county, and special district with firesafety responsibilities. Local authorities having jurisdiction (LAHJs) set standards for radio signal strength in buildings within their jurisdiction to ensure consistent fire and rescue communication capabilities. Two-way radio communication enhancement systems (enhancement systems) are post-construction systems installed that accept and amplify radio signals used by first responders so that the radio signal strength at ground level, where a fire rescue operation might be based, is equal to the radio signal strength in all locations throughout the building.

LAHJs must determine minimum radio signal strength for fire department communications in all new and existing high-rise buildings. The FFPC defines a high-rise building as a building where the floor of an occupiable story is greater than 75 feet above the lowest level of fire department vehicle access. In 2022, the Legislature clarified that the LAHJ has jurisdiction over buildings of any height, not just high-rise buildings. Enhancement systems, or equivalent systems may be used to comply with the minimum radio signal strength requirements for fire department communications, but systems are not required in apartment buildings that are 75 feet or less in height that also meet all of the following criteria: constructed using wood framing; has 150 or less dwelling units; and all dwelling units discharge to the exterior or to a corridor that leads directly to an exit as defined in the Florida Building Code (Code).

The bill creates a framework for determining whether an enhancement system must be installed in a new or existing building. Before an LAHJ may require an assessment of the need for, or the installation of, an enhancement system in a new or existing building (assessment), a qualified third party must certify that the LAHJ's public safety emergency communications systems meets or exceeds the minimum radio coverage design criteria for emergency services communications systems in the current edition of the NFPA. The certification is valid until the next triennial adoption of the FFPC, which will incorporate changes made to the NFPA.

The bill establishes that, if an LAHJ has a valid radio coverage design certification, the LAHJ may only require an assessment to determine the need for an enhancement system once: every three years for high-rise buildings; or every 5 years for all other buildings. If an assessment determines that the installation of enhancement system is required, the LAHJ may not withhold the issuance of a certificate of occupancy for the building if the registered architect or professional engineer who designed the building determined that an enhancement system is not necessary for the building to meet the minimum standards for interior radio coverage and signal strength. Finally, the bill prohibits an LAHJ from requiring the installation of an enhancement system until at least 90 days after the building's interior radio coverage and signal strength assessment report is completed.

The bill has no impact on state government revenues or expenditures or local government revenues. It has an indeterminate effect on local government expenditures and an indeterminate direct economic impact on the private sector.

The bill is effective on July 1, 2023.

This document does not reflect the intent or official position of the bill sponsor or House of Representatives .

STORAGE NAME: h1575c.LFS

DATE: 3/29/2023

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Background

State Fire Marshal

Chapter 633, F.S., Fire Prevention and Control, designates the Chief Financial Officer (CFO) as the State Fire Marshal (SFM). The SFM, through the Division of the State Fire Marshal within the Department of Financial Services (DFS), is charged with enforcing the provisions of ch. 633, F.S., and all other applicable laws relating to fire safety.¹ The SFM also has the responsibility to minimize the loss of life and property due to fire.² Pursuant to this authority, the SFM regulates, trains, and certifies fire service personnel and firesafety inspectors; investigates the causes of fires; enforces arson laws; regulates the installation of fire equipment; conducts firesafety inspections of state property; and operates the Florida State Fire College.

Florida Fire Prevention Code

The SFM adopts by rule the Florida Fire Prevention Code (FFPC), which contains all fire safety laws and rules that pertain to the design, construction, erection, alteration, modification, repair, and demolition of public and private buildings, structures, and facilities and the enforcement of such fire safety laws and rules.³ The SFM adopts a new edition of the FFPC every three years⁴ and the 7th edition of the FFPC took effect on December 31, 2020.⁵ The FFPC is largely based on the *National Fire Protection Association's (NFPA) Standard 1, Fire Prevention Code*, along with the current edition of the *NFPA's Life Safety Code, NFPA 101*.⁶

The FFPC is the minimum fire prevention code deemed adopted in each municipality, county, and special district with firesafety responsibilities, and applies to every building and structure throughout the state with few exceptions.⁷ Municipalities, counties, and special districts with firesafety responsibilities may supplement the FFPC with more stringent standards.⁸ Local fire authorities (authorities having jurisdiction or LAHJs) set standards for radio signal strength throughout buildings within their jurisdiction to ensure consistent fire and rescue communication capabilities.

Radio Signal Strength for Fire Department Communications

The life safety of firefighters and citizens depends on reliable, functional communication tools that work in the harshest and most hostile of environments.⁹ "All firefighters, professional and volunteer, operate in extreme environments that are markedly different from those of any other radio users."¹⁰ The radio connects the firefighters to command and outside assistance in the most desperate of situations.¹¹ The focus on radio signal strength stems from difficulties firefighters experienced when attempting rescue

¹ S. 633.104 F.S.

² *Id.*

³ Ch. 69A, F.A.C.

⁴ S. 633.202, F.S.

⁵ See Florida Fire Prevention Code (FFPC), <https://www.myfloridacfo.com/division/sfm/bfp/florida-fire-prevention-code> (last visited Mar. 17, 2023).

⁶ S. 633.202(2), F.S.

⁷ S. 633.208, F.S. and R. 69A-60.002(1), F.A.C.

⁸ S. 633.208(3), F.S., and R. 69A-60.002(2), F.A.C.

⁹ U.S. Fire Administration, *Voice Radio Communications Guide for the Fire Service* (June 2016), https://www.usfa.fema.gov/downloads/pdf/publications/Voice_Radio_Communications_Guide_for_the_Fire_Service.pdf (last visited Mar. 18, 2023).

¹⁰ *Id.*

¹¹ *Id.*

operations on September 11, 2001, in the World Trade Center Towers.¹² These firefighters found that in certain areas of the buildings their radio signal degraded, making live communications difficult or impossible.¹³

Two-way radio communication enhancement systems (enhancement systems) are devices installed after a building is constructed that accept, and then amplify, radio signals used by first responders. A radio frequency site survey may be conducted in a building to determine areas where radio signal strength drops due to materials used in construction, such as thick walls, metal construction, underground structures, and low-emissivity glass windows. The generally desired effect is that the radio signal strength at ground level, where a fire rescue operation might be based, is equal to the radio signal strength in all locations throughout the building, to ensure consistent communication. Several devices are available to boost signal strength to meet required radio signal strength. These include bi-directional amplifiers and networks of indoor antennae, referred to collectively as a distributed antenna system.¹⁴

Florida Fire Code Minimum Radio Signal Strength

Amendments to the FFPC, effective January 1, 2018, provided that all new and existing buildings must maintain minimum radio signal strength at a level determined by the local authority having jurisdiction (LAHJ).¹⁵ Where required by a local fire authority, signal enhancement systems must comply with federal standards for installation and upkeep.¹⁶ Additionally, if an enhancement system would have a negative impact on the operations of a facility, the local fire authority may accept an automatically activated emergency responder radio coverage system in the alternative.¹⁷

Minimum Radio Signal Strength for High-Rise Buildings

Section 633.202(18), F.S., enacted in 2016,¹⁸ provides that local LAHJ have to determine minimum radio signal strength for fire department communications in all new and existing high-rise buildings. The FFPC defines a high-rise building as a building where the floor of an occupiable story is greater than 75 feet above the lowest level of fire department vehicle access.¹⁹ Existing high-rise buildings are not required to comply with minimum radio strength for fire department communications and enhancement systems as required by the FFPC until January 1, 2025.²⁰ By January 1, 2024, an existing building that is not in compliance with the requirements for minimum radio strength for fire department communications must apply to the local government agency having jurisdiction for an appropriate permit for the required system installation.²¹ Such an existing building must demonstrate that the building will become compliant with the FFPC by January 1, 2025.²²

2022 Changes to the FFPC

¹² See National Fire Protection Association, *Assessment of Total Evacuation Systems for Tall Buildings: Literature Review*, [evacsystemstallbuildingsliteraturereviewexecsum.ashx](https://www.nfpa.org/evacsystemstallbuildingsliteraturereviewexecsum.ashx) (nfpa.org) (last visited Mar. 17, 2023).

¹³ *Id.*

¹⁴ See City of Treasure Island, Florida, *Enhancement Radio Communications Enhancement Systems Requirements* (Apr. 20, 2019), High-Rise Public Safety System Integrators (mytreasureisland.org) (last visited Mar. 17, 2023); see also East Lake Tarpon Special Fire Control District, *Information Bulletin: Enhancement Radio Communication Enhancement System Requirements*, [Bulletin+East+Lake+Two+Way+Communications.pdf](https://www.eastlaketarpon.com/Information+Bulletin+East+Lake+Two+Way+Communications.pdf) (elfr.org) (last visited Mar. 17, 2023).

¹⁵ Florida Fire Prevention Code (7th ed. 2020) s. 11.10.1, <https://www.nfpa.org/codes-and-standards/all-codes-and-standards/codes-and-standards/free-access?mode=view> (last visited Mar. 17, 2023).

¹⁶ Florida Fire Prevention Code (7th ed. 2020) s. 11.10.2, <https://www.nfpa.org/codes-and-standards/all-codes-and-standards/codes-and-standards/free-access?mode=view> (last visited Mar. 17, 2023).

¹⁷ Florida Fire Prevention Code (7th ed. 2020) s. 11.10.3, <https://www.nfpa.org/codes-and-standards/all-codes-and-standards/codes-and-standards/free-access?mode=view> (last visited Mar. 17, 2023).

¹⁸ Ch. 2016-129, s. 27, Laws of Fla.

¹⁹ Florida Fire Prevention Code (7th ed. 2020) s. 3.3.29.6, <https://www.nfpa.org/codes-and-standards/all-codes-and-standards/codes-and-standards/free-access?mode=view> (last visited Mar. 17, 2023).

²⁰ Prior to July 1, 2022, the compliance dates for existing apartment buildings were the same as those for all other high-rise buildings.

²¹ *Id.*

²² *Id.*

During the 2022 session, the Legislature clarified that the LAHJ has jurisdiction over buildings of any height, not just high-rise buildings. It established that enhancement systems, or equivalent systems, may be used to comply with the minimum radio signal strength requirements for fire department communications. It also established that these systems are not required in apartment buildings that are 75 feet or less in height that also meet all of the following criteria:

- Constructed using wood framing;
- Has 150 or less dwelling units; and
- All dwelling units discharge to the exterior or to a corridor that leads directly to an exit as defined in the Florida Building Code (Code).

Evidence of wood frame construction is shown by the property owner providing building permit documentation that confirms this type of construction. Existing high-rise buildings, as defined in the Code, are not required to comply with minimum radio signal strength for fire department communications and enhancement systems until January 1, 2025, but they must apply for the appropriate permit for installation by January 1, 2024. However, existing high-rise apartment buildings are subject to the same installation deadlines as all other existing high-rise buildings.

Effect of the Bill

The bill creates a framework for determining whether an enhancement system must be installed in a new or existing building. Before an LAHJ may require an assessment of the need for, or the installation of, an enhancement system in a new or existing building (assessment), a qualified third party must certify that the LAHJ's public safety emergency communications systems meets or exceeds the minimum radio coverage design criteria for emergency services communications systems in the current edition of the NFPA. The certification is valid until the next triennial adoption of the FFPC, which will incorporate changes made to the NFPA.

The bill establishes that, if an LAHJ has a valid radio coverage design certification, the LAHJ may only require an assessment to determine the need for an enhancement system once:

- Every three years for high-rise buildings; or
- Every five years for all other buildings.

If an assessment determines that the installation of an enhancement system is required, the LAHJ may not withhold the issuance of a certificate of occupancy for the building if the registered architect or professional engineer who designed the building determined that an enhancement system is not necessary for the building to meet the minimum standards for interior radio coverage and signal strength. Finally, the bill prohibits an LAHJ from requiring the installation of an enhancement system until at least 90 days after the building's interior radio coverage and signal strength assessment report is completed.

B. SECTION DIRECTORY:

Section 1. Amends s. 633.202, F.S. relating to Florida Fire Prevention Code.

Section 2. Provides an effective date of July 1, 2023.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

None.

2. Expenditures:

None.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None.

2. Expenditures:

Indeterminate. LAHJs may need to spend money to hire a third party to certify that the public safety emergency communications system meets or exceeds the minimum radio coverage design criteria. The specific cost of the certification process has not been determined.

Additionally, LAHJs with noncompliant systems must upgrade their systems if they wish to use assessments to require installation of signal enhancement systems. System upgrades would require the expenditure of funds.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

The bill has an indeterminate, but potentially positive impact on the private sector. If it is determined that certain apartment buildings are exempt from putting in enhancement systems, they save the money that would have been spent to install the systems.

D. FISCAL COMMENTS:

None.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not applicable. This bill does not appear to require counties or municipalities to spend funds or take action requiring the expenditures of funds; reduce the authority that counties or municipalities have to raise revenues in the aggregate; or reduce the percentage of state tax shared with counties or municipalities.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

The bill neither authorizes nor requires administrative rulemaking.

C. DRAFTING ISSUES OR OTHER COMMENTS:

Line 43: This line states that a “qualified third party” must certify that an LAHJ’s public safety emergency communications system meets or exceeds minimum radio coverage design criteria, but does not describe the qualifications necessary for the third party. Consideration should be given to specifying the qualifications within the bill.

Lines 67-68: These lines mention the minimum standards for interior radio coverage and signal strength. However, the FFPC does not set minimum standards for enhancement radio strength. Consideration should be given to amending the bill to be more specific about the minimum signal strength required. Alternatively, the bill could specify that the minimum standards mentioned in those lines will be set by the LAHJ.

IV. AMENDMENTS/COMMITTEE SUBSTITUTE CHANGES

None.