

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: CS/HB 1575 Public Safety Emergency Communications Systems

SPONSOR(S): Commerce Committee, Brackett

TIED BILLS: IDEN./SIM. BILLS: CS/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	16 Y, 0 N, As CS	Fortenberry	Hamon

SUMMARY ANALYSIS

The State Fire Marshal (SFM), within the Department of Financial Services (DFS), enforces laws applicable to fire safety, and 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 that accept and amplify first responders' radio signals so that the radio signal strength at ground level 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; have 150 or less dwelling units; and all dwelling units discharge to the exterior or to a corridor that leads directly to a n exit as defined in the Florida Building Code (Code).

The bill creates a limitation on when an LAHJ can require installation of an enhancement system, as follows:

- Assessment:
 - Unless the building undergoes significant renovation or poses a safety threat, the LAHJ may only require an assessment no more often than:
 - Every three years for high-rise buildings or buildings exceeding 12,000 square feet; or
 - Every five years for all other buildings.
- Post-assessment:
 - If an enhancement system is required after assessment of a **new building**, a contractor must submit a design to the LAHJ for an enhancement system and the LAHJ must require installation of the system within 180 days after the issuance of temporary certificate of occupancy.
 - If an LAHJ requires an **existing building** to retrofit its enhancement system, it must give the building owner at least one year to do so.
- Establishes that certain structures are not required to meet radio signal strength requirements at any time.

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.

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;
- Have 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. An LAHJ may require the following:

- The installation of an enhancement system in a **new or existing** building if the interior of the building does not meet the minimum radio signal strength as required in the FFPC.
- An assessment of a **new or existing building's** interior radio coverage and signal strength to determine whether an enhancement system is needed, at most:
 - Once every three years for an existing high-rise building or building exceeding 12,000 total gross square feet; or
 - Once every five years for all other existing buildings

The bill establishes that a **new or existing building** may be subjected to an assessment more often if:

- It undergoes Level III building alteration or rehabilitation as determined by the Code;
- It undergoes reconstruction as determined by the FFPC;
- A public safety agency reports to the LAHJ that the agency's communication devices failed to function correctly inside a building due to poor signal coverage; or
- A building is determined to be an imminent life safety threat to first responders.

If an LAHJ determines that the public safety agency communications signal strength or delivered audio quality is inadequate outside a building, an enhancement system is not required. However, if an LAHJ modifies its public safety emergency communication system such that modifications to an existing enhancement system are required, the LAHJ must give owners of the existing systems at least 180-days' notice before requiring any modification.

The bill provides that any modification to an existing enhancement system or installation of a new system requires the express consent of the frequency licenseholder of the frequencies which the system is intended to amplify.

If an assessment of a **new building's** interior radio coverage and signal strength determines that the installation of an enhancement system is required, a contractor must submit a design to the LAHJ for an enhancement system. The bill requires that, upon approval of the design by the LAHJ, the LAHJ must require the installation of the enhancement system within 180 days after the issuance of a temporary certificate of occupancy. Additionally, the LAHJ may not withhold issuance of a temporary certificate of occupancy for the building based solely on the need for an enhancement system.

The bill establishes that if an LAHJ requires an **existing building** to retrofit its enhancement system, it must give the building owner at least one year to complete the retrofit.

The bill creates a list of structures that do not have to meet minimum radio signal strength requirements or have a radio signal strength assessment, as follows:

- One- and two-family dwellings and townhouses.
- Buildings have less than 12,000 total gross square feet with no underground areas.
- Apartments and transient public lodging establishments that are less than three stories high and have direct access from the apartment or guest area to an outside exit.
- Wood-frame apartment buildings are not required to install enhancement systems.

Finally, the bill prevents LAHJs from enforcing requirements related to enhancement systems that are more stringent than the FFPC.

B. SECTION DIRECTORY:

Section 1. Amends s. 553.79, F.S., relating to permits; applications; issuance; inspections.

Section 2. Amends s. 633.202, F.S. relating to Florida Fire Prevention Code.

Section 3. Amends s. 843.16, F.S., relating to Unlawful to install or transport radio equipment using assigned frequency of state or law enforcement officers; definitions, exceptions; penalties.

Section 4. Amends. s. 440.103, F.S., relating to building permits; identifications of minimum premium policy.

Section 5. 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 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 will avoid the expense of installing 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 provides the State Fire Marshal with the authority to adopt rules to implement, interpret, and enforce the provisions of the bill where necessary.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

IV. AMENDMENTS/COMMITTEE SUBSTITUTE CHANGES

On April 17, 2023, the Commerce Committee considered the bill, adopted a strike-all amendment, and reported the bill favorably as a committee substitute. The amendment made the following changes to the bill:

- Provided that, when installation of an two-way radio signal enhancement system is required, the LAHJ must require the installation within 180 days after the issuance of a temporary certificate of occupancy.
- Clarified which buildings must be assessed by an LAHJ on a three-year basis, which must be assessed on a five-year basis, and which are exempt from assessment.
- Established that the frequency license holder (e.g. a local emergency or fire safety provider) must expressly consent to the modification of an existing enhancement system or the installation of a new enhancement system.
- Established that an LAHJ must give enhancement system owners at least 180-days' notice before requiring modifications in an existing enhancement system.
- Provided that LAHJs must allow at least a one-year grace period for existing buildings to complete any required retrofitting of enhancement systems.
- Made technical and grammatical changes to conform the bill to the Senate.

The analysis is drafted to the committee substitute as passed by the Commerce Committee.