

The Florida Senate
BILL ANALYSIS AND FISCAL IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

Prepared By: The Professional Staff of the Committee on Rules

BILL: CS/SB 1614

INTRODUCER: Banking and Insurance Committee and Senator Rodriguez

SUBJECT: Public Safety Emergency Communications Systems

DATE: April 18, 2023

REVISED: _____

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	<u>Hackett</u>	<u>Ryon</u>	<u>CA</u>	Favorable
2.	<u>Thomas</u>	<u>Knudson</u>	<u>BI</u>	Fav/CS
3.	<u>Hackett</u>	<u>Twogood</u>	<u>RC</u>	Pre-meeting

Please see Section IX. for Additional Information:

COMMITTEE SUBSTITUTE - Substantial Changes

I. Summary:

CS/SB 1614 Amends the Florida Building Codes Act to require the installation of a two-way radio communications enhancement system (radio enhancement system) if the interior of the building does not meet the minimum radio signal strength as required in the Florida Fire Prevention Code. If an assessment of a new building's interior radio coverage determines that installation of a radio enhancement system is required, a properly licensed contractor must submit a design for a radio enhancement system to correct the non-compliant radio coverage. However, a temporary certificate of occupancy may not be withheld solely because a radio enhancement system is needed. The system must be installed within 180 days after a temporary certificate of occupancy is issued, but an extension of the temporary certificate of occupancy may not be unnecessarily withheld.

The bill also makes the following changes regarding radio enhancement system requirements of the Florida Fire Prevention Code (Code):

- Specifies all buildings must meet minimum radio signal strength requirements of the Code except for:
 - One- and two-family dwellings and townhouses.
 - Buildings less than 12,000 total gross square feet.
 - Apartments and transient public lodging establishments that are less than three stories and that have direct access from the apartment or guest area to an exterior means of egress.

- Apartment buildings 75 feet or less in height that are constructed using wood framing, provided that the building has less than 150 dwelling units and that all dwelling units discharge to the exterior or to a corridor that leads directly to an exit.
- Prevents a local authority from requiring such assessments more than once every 3 years for existing high-rise buildings and existing buildings over 15,000 total gross square feet and once every 5 years for all other existing buildings, unless such building undergoes Level III building alteration or rehabilitation; or if a public safety agency reports to the local authority having jurisdiction that their communications devices failed to function correctly inside a building due to poor signal coverage.
- Requires that modifications or installations of a radio enhancement system must have the express consent of the frequency license holder of the frequency to be enhanced.
- Provides that if the public safety agency communications system is inadequate at the building's exterior, a radio enhancement system or assessment may not be required.
- Requires that a local authority must:
 - Provide a building owner at least 180 days' notice before requiring the modification of a radio enhancement system necessitated by a jurisdiction's modification to a public safety emergency communications system.
 - Allow the building owner at least 1 year to complete the retrofit of a radio enhancement system.
- Prohibits local adoption of more stringent requirements.

The bill is not expected to have a fiscal impact on state or local government.

The bill takes effect July 1, 2023.

II. Present Situation:

Florida Fire Prevention Code

The State Fire Marshal, by rule, adopts the Florida Fire Prevention Code (Florida Fire Code), which contains all firesafety 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 firesafety laws and rules.¹ The State Fire Marshal adopts a new edition of the Florida Fire Code every three years.² The Florida Fire Code is largely based on the *National Fire Protection Association's (NFPA) Standard 1, Fire Prevention Code*, along with the current edition of the *Life Safety Code, NFPA 101*.³ The 7th, and current, edition took effect on December 31, 2020.⁴ State law requires all municipalities, counties, and special districts with firesafety responsibilities to enforce the Florida Fire Code as the minimum fire prevention code to operate uniformly among local governments and in conjunction with the Florida Building Code.⁵ The Florida Fire Code applies to every building and structure throughout the state with few exceptions.⁶ Municipalities, counties, and special districts with firesafety

¹ Fla. Admin. Code R. 69A-60.002.

² Section 633.202(1), F.S.

³ Section 633.202(2), F.S.

⁴ Division of State Fire Marshal, *Florida Fire Prevention Code*, available at <https://www.myfloridacfo.com/division/sfm/bfp/florida-fire-prevention-code> (last visited April 2, 2023).

⁵ Sections 633.108 and 633.208, F.S.

⁶ Section 633.208, F.S., and Fla. Admin. Code R. 69A-60.002(1).

responsibilities may supplement the Florida Fire Code with more stringent standards adopted in accordance with s. 633.208, F.S.⁷

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. All firefighters, professional and volunteer, operate in extreme environments that are markedly different from those of any other radio users. The radio is the lifeline that connects the firefighters to command and outside assistance when in the most desperate of situations.⁸

Modern focus on radio signal strength stems from difficulties experienced by firefighters attempting rescue operations on September 11, 2001, in the World Trade Towers, who found that in certain areas of the building their radio signal degraded, making live communication difficult or impossible.⁹

Two-way radio communication 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 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.¹⁰

Minimum Radio Signal Strength

Section 633.202(18), F.S.,¹¹ and the Florida Fire Code provide that all new and existing buildings must maintain minimum radio signal strength at a level determined by the authority

⁷ Section 633.208(3), F.S., and Fla. Admin. Code R 69A-60.002(2).

⁸ Federal Emergency Management Agency, United States Fire Administration. Voice Radio Communications Guide for the Fire Service (June 2016), p. 1, available at https://www.usfa.fema.gov/downloads/pdf/publications/Voice_Radio_Communications_Guide_for_the_Fire_Service.pdf (last visited April 2, 2023).

⁹ See *Assessment of Total Evacuation Systems for Tall Buildings: Literature Review*, National Fire Protection Association's (NFPA), available at <https://www.nfpa.org/-/media/Files/News-and-Research/Fire-statistics-and-reports/Executive-summaries/evacsystemstallbuildingsliteraturereviewexecsum.ashx#:~:text=According%20to%20the%20definition%20of,floor%20of%20the%20highest%20occupiable> (last visited April 2, 2023) and Fire Engineering, *World Trade Center Disaster: Initial Response*, <https://www.fireengineering.com/firefighting/world-trade-center-disaster-initial-response/#gref> (Sep 1, 2002) (last visited April 2, 2023).

¹⁰ See *High-Rise Public Safety System Integrators*, Treasure Island Fire Department, available at https://www.mytreasureisland.org/residents/departments/fire_dept/local_high-rise_public_safety_system_integrators.php (last visited April 2, 2023); *Information Bulletin: Two-Way Radio Communication Enhancement System Requirements*, East Lake Tarpon Special Fire Control District, available at <https://www.elfr.org/files/e2eae3cb2/Bulletin+East+Lake+Two+Way+Communications.pdf> (last visited April 2, 2023).

¹¹ Enacted in 2016 and recently amended in 2021 and 2022. Chs. 2016-129, s. 27; 2021-113, s. 25; and 2022-210, L.O.F.

having jurisdiction (local fire authorities).¹² The requirements set by the local authority must be based on the existing radio signal coverage levels provided by the jurisdiction's infrastructure as measured at the exterior of the building.¹³

Two-way radio communication enhancement systems or their equivalent may be used to comply with these minimum signal strength requirements. Radio signal enhancement systems involve powered devices which accept and amplify radio signals within a building. There are many factors which vary costs associated with these systems, from building design to structural impediments to radio signal strength.

Where required by a local fire authority, two-way radio communication enhancement systems must comply with federal standards for installation, maintenance, and use of emergency services communications systems.¹⁴ An enhancement system may not be required if the existing radio signal coverage as measured at the building's exterior is not strong enough to deliver.¹⁵ Such a system may not be required in an apartment building provided that it is 75 feet or less in height, constructed with wood framing, contains fewer than 150 dwelling units, and each unit discharges to the exterior or to a corridor leading directly to an exit.¹⁶

Existing high-rise¹⁷ buildings are not required to comply with minimum radio strength requirements until January 1, 2025.¹⁸ However, 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 for an appropriate permit for the required installation with the local government agency having jurisdiction and must demonstrate that the building will become compliant by January 1, 2025.¹⁹

Local Enforcement of the Florida Building Code

It is the intent of the Legislature that local governments have the power to inspect all buildings, structures, and facilities within their jurisdiction in protection of the public's health, safety, and welfare.²⁰

¹² Florida Fire Prevention Code (7th ed.) s. 11.10.1. The "authority having jurisdiction" is typically the designated head fire and rescue officer of the county, municipality, or special district with fire safety responsibilities over an area.

¹³ Florida Fire Prevention Code (7th ed., as amended Apr. 2022) s. 11.10.1.

¹⁴ Florida Fire Prevention Code (7th ed.) s. 11.10.2.

¹⁵ Florida Fire Prevention Code (7th ed., as amended Apr. 2022) s. 11.10.1.1, requires a delivered audio quality of 3.4, which is defined as "speech understandable with repetition only rarely required, and with some noise and/or distortion." P25 Best Practice, *Coverage Needs*, available at <https://www.p25bestpractice.com/specifying/coverage-needs/#:~:text=DAQ%203.4%20is%20defined%20as,noise%20and%20For%20distortion.%E2%80%9D> (last visited April 2, 2023).

¹⁶ Section 633.202(18), F.S.

¹⁷ A high-rise building is a building greater than 75 feet in height where the building height is measured from the lowest level of fire department vehicle access to the floor of the highest story that can be occupied. NFPA 101, Life Safety Code, 2021 edition - Ch. 3.3.37.7.

¹⁸ Section 633.202(18), F.S.

¹⁹ *Id.*

²⁰ Section 553.72, F.S.

Every local government must enforce the Building Code and issue building permits.²¹ It is unlawful for a person, firm, or corporation to construct, erect, alter, repair, secure, or demolish any building without first obtaining a permit from the local government enforcing agency or from such persons as may, by resolution or regulation, be directed to issue such permit, upon the payment of reasonable fees as set forth in a schedule of fees adopted by the enforcing agency.²²

Building Permits

It is the intent of the Legislature that local governments have the power to inspect all buildings, structures, and facilities within their jurisdiction in protection of the public's health, safety, and welfare.²³ Every local government must enforce the Building Code and issue building permits.²⁴

It is unlawful for a person, firm, or corporation to construct, erect, alter, repair, secure, or demolish any building without first obtaining a building permit from the local government or from such persons as may, by resolution or regulation, be directed to issue such permit, upon the payment of reasonable fees as set forth in a schedule of fees adopted by the enforcing agency.²⁵ A building permit is not valid until the fees for the permit have been paid.²⁶

III. Effect of Proposed Changes:

Section 1 amends s. 553.79, F.S., relating to building permits to provide that:

- If an assessment of a new building's interior radio coverage and signal strength under the Florida Fire Prevention Code determines that installation of a two-way radio communications enhancement system is required, a contractor licensed in the appropriate category under the Florida Department of Business and Professional Regulation must submit a design for a two-way radio communications enhancement system to correct the non-compliant radio coverage.
- The local authority having jurisdiction over the building may not withhold the issuance of a temporary certificate of occupancy based solely upon the need for a two-way radio communications enhancement system.
- Upon approval of the design by the local authority having jurisdiction, the jurisdiction must require the installation of the enhancement system within 180 days after the issuance of a temporary certificate of occupancy.
- A temporary certificate of occupancy extension may not be unnecessarily withheld.

Section 2 amends s. 633.202(18), F.S., governing the Florida Fire Prevention Code, to provide that:

- The local authority having jurisdiction may:
 - Require the installation of a two-way radio communications enhancement system if the interior of the building does not meet the minimum radio signal strength as required in the Florida Fire Prevention Code.

²¹ Sections 125.01(1)(bb), 125.56(1), and 553.80(1), F.S.

²² Sections 125.56(4)(a), 553.79(1), F.S.

²³ Section 553.72, F.S.

²⁴ Sections 125.01(1)(bb), 125.56(1), and 553.80(1), F.S.

²⁵ See ss. 125.56(4)(a) and 553.79(1), F.S.

²⁶ Section 109.1 of the Seventh edition of the Florida Building Code (Building).

- Require assessment of a building's interior radio coverage and signal strength not more than once every 3 years for existing high-rise buildings and existing buildings over 15,000 total gross square feet and once every 5 years for all other existing buildings, unless such building undergoes Level III building alteration or rehabilitation²⁷; or if a public safety agency reports to the local authority having jurisdiction that their communications devices failed to function correctly inside a building due to poor signal coverage.
- Any modification to an existing system or any new installation must have the consent of the license holder of the frequencies for which the device or system is intended to amplify.
- If a jurisdiction modifies its public safety emergency communications system such that modifications to existing two-way radio communications enhancement system installations are required, the jurisdiction must give owners of the two-way radio communications enhancement systems at least 180 days' notice before requiring any modification.
- A local authority that requires an existing building to retrofit its two-way radio communications enhancement system after January 1, 2025, must give the building owner at least 1 year to complete the retrofit. The 1-year period begins when the local authority having jurisdiction cites the building owner with a notice of code violation.

The following occupancies or buildings are not required to meet minimum radio signal strength requirements or have a radio signal strength assessment for public safety agency communications:

- One- and two-family dwellings and townhouses.
- Buildings less than 12,000 total gross square feet.
- Apartments and transient public lodging establishments that are less than three stories and that have direct access from the apartment or guest area to an exterior means of egress.

The bill provides that the provisions of s. 633.208, F.S. (minimum firesafety standards), and this section authorizing the adoption of requirements more stringent than those specified in the Florida Fire Prevention Code and minimum firesafety codes do not apply to the requirements of this subsection. The local authority may not enforce requirements that are more stringent than those specified in the Florida Fire Prevention Code and the provisions of this subsection.

The State Fire Marshal is authorized to incorporate these provisions in the Florida Fire Prevention Code and may adopt rules to implement, interpret, and enforce this subsection with respect to the requirement for, design of, or installation of a two-way radio communications enhancement system.

Section 3 amends s. 843.16, F.S., to provide that the installation of a two-way radio communications enhancement system to comply with the requirements of s. 633.202(18), F.S., is exempt from the crime making it unlawful to install or transport radio equipment using an assigned frequency of state or law enforcement officers.

²⁷ Level 3 alterations apply where the work area exceeds 50 percent of the aggregate area of the building and made within any 12-month period. Exception: Work areas in which the alteration work is exclusively plumbing, mechanical or electrical shall not be included in the computation of total area of all work areas. <https://www.floridabuilding.org/fbc/commission> (last accessed April 5, 2023).

Section 4 amends s. 440.103, F.S., to conform a cross-reference.

Section 5 provides that the bill takes effect July 1, 2023.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

Article VII, section 18 (a) of the Florida Constitution provides in part that a county or municipality may not be bound by a general law requiring a county or municipality to spend funds or take an action that requires the expenditure of funds unless certain specified exemptions or exceptions are met.

Article VII, section 18 (d) provides eight exemptions, which, if any single one is met, exempts the law from the limitations on mandates. Laws having an “insignificant fiscal impact” are exempt from the mandate requirements, which for Fiscal Year 2022-2023 is forecast at approximately \$2.3 million.^{28, 29}

The bill does not appear to have a fiscal impact on local governments.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

D. State Tax or Fee Increases:

None.

E. Other Constitutional Issues:

None identified.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

²⁸ FLA. CONST. art. VII, s. 18(d).

²⁹ An insignificant fiscal impact is the amount not greater than the average statewide population for the applicable fiscal year times \$0.10. See Florida Senate Committee on Community Affairs, *Interim Report 2012-115: Insignificant Impact*, (Sept. 2011), available at <http://www.flsenate.gov/PublishedContent/Session/2012/InterimReports/2012-115ca.pdf> (last visited April 2, 2023).

B. Private Sector Impact:

Builders may be positively impacted to the extent that buildings are subject to less frequent radio signal strength assessments and are entitled to receive an earlier certificate of occupancy than otherwise in certain circumstances.

C. Government Sector Impact:

None.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Statutes Affected:

This bill substantially amends the following sections of the Florida Statutes: 553.79, 633.202, 843.16, and 440.103.

IX. Additional Information:**A. Committee Substitute – Statement of Substantial Changes:**
(Summarizing differences between the Committee Substitute and the prior version of the bill.)**CS by Banking and Insurance Committee on April 5, 2023:**

The committee substitute makes the following changes:

- Provides that if an assessment of a new building's interior radio coverage determines that installation of a two-way radio communications enhancement system is required, a properly licensed contractor must submit a design for an enhancement system to correct the non-compliant radio coverage.
- The local jurisdiction may not withhold issuance of a temporary certificate of occupancy for the building based solely upon the need for a two-way radio communications enhancement system.
- Upon approval of the submitted design, the jurisdiction must require the installation of the enhancement system within 180 days after the issuance of a temporary certificate of occupancy.

The local authority may:

- Require the installation of a two-way radio communications enhancement system if the interior of the building does not meet the minimum radio signal strength as required in the Florida Fire Prevention Code.
- Require assessment of a building's interior radio coverage not more than once every 3 years for existing high-rise buildings and existing buildings over 15,000 total gross square feet and once every 5 years for all other existing buildings, unless such

building undergoes Level III building alteration or rehabilitation; or if a public safety agency reports to the local authority having jurisdiction that their communications devices failed to function correctly inside a building due to poor signal coverage.

The following occupancies or buildings are not required to meet minimum radio signal strength requirements or have a radio signal strength assessment for public safety agency communications:

- One- and two-family dwellings and townhouses.
- Buildings less than 12,000 total gross square feet.
- Apartments and transient public lodging establishments that are less than three stories and that have direct access from the apartment or guest area to an exterior means of egress.
- Apartment buildings 75 feet or less in height that are constructed using wood framing, provided that the building has less than 150 dwelling units and that all dwelling units discharge to the exterior or to a corridor that leads directly to an exit.

B. Amendments:

None.