# City of Gainesville, Florida

## Fire Services Special Assessment Memorandum

MAY 2010

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## INTRODUCTION

Government Services Group, Inc. (GSG) specializes in government finance and taxation issues by working with cities, counties, special districts and state agencies to develop unique funding and service delivery solutions for critical infrastructure and service needs. GSG has developed extensive experience in structuring and implementing alternative revenue sources in Florida.

The City of Gainesville (City) has entered into a professional services agreement with GSG to provide specialized services in the development and implementation of a non-ad valorem assessment program to fund fire services within the incorporated areas of the City (Fire Assessment Project).

The objective of the Fire Assessment Project was to develop and implement an annual assessment program to fund the City's provision of fire services (Fire Assessment). The annual assessment will be collected by using the property tax bill beginning in November 2010. This document is the Fire Assessment Memorandum (Assessment Memorandum), which is one of the project deliverables specified in the scope of services.

The work effort, documented by this Assessment Memorandum, focused on the calculation of assessment rates and classifications required to fully fund the identified assessable costs to provide fire services within the City for Fiscal Year 2010-11. However, the City has the choice of funding all or only a portion of the assessable costs based on policy direction. In addition, the work effort recorded in this Assessment Memorandum required the identification of the full costs of assessable fire services (minus all revenues) and the allocation of those costs to properties that specially benefit from the provision of such fire services. Currently, fire services provided within the City are primarily funded by the General Fund.

## OBJECTIVES

The City retained GSG to develop an annual recurring special assessment program that is capable of funding all of the assessable costs associated with providing fire services. The collection of the fire assessment using the property tax bill collection process is described in section 197.3632, Florida Statutes (Uniform Method). Because the fire assessment would be collected using the Uniform Method, the data available on the ad valorem tax roll will be used to develop the Fiscal Year 2010-11 assessment program, as well as the subsequent years' programs.

Accordingly, the challenge for the City is to develop a non-ad valorem assessment program which uses property information that is or will be on the ad valorem tax roll. To this end, GSG has been charged to fully cost the services to be provided by the City, develop a fair and reasonable apportionment methodology for such assessable costs, and determine assessment rates and parcel classifications that are accurate, fair and reasonable.

The fire non-ad valorem assessments must meet the Florida case law requirements for a valid special assessment. These requirements include the following:

1. The service provided must confer a special benefit to the property being assessed; and
2. The costs assessed must be fairly and reasonably apportioned among the properties that receive the special benefit.

The work effort of this project required the evaluation of data obtained from the City to develop a fire assessment program that focuses upon the proposed Fiscal Year 2010-11 assessable cost calculations. The objectives of this initial effort were to:

- Determine the full costs of providing fire services within the City.
- Review such final cost determination with the City to determine which elements provide the requisite special benefit to the assessed properties.
- Determine the relative benefit anticipated to be derived by property classes within the City from the delivery of fire services.
- Recommend the fair and reasonable apportionment of assessable costs among benefited parcels within the City.
- Calculate assessment rates for Fiscal Year 2010-11 based on the Fiscal Year 2009-10 proposed budget.
- Ensure that the recommended assessment rates conform to the statutory requirements of the Uniform Method.

# Service Description and Assessable Cost Calculations

## SERVICE DELIVERY DESCRIPTION

The City of Gainesville's Fire Department is an all hazards emergency and non-emergency service provider. This organization provides fire suppression, emergency medical services (EMS at an advanced life support (ALS) level), hazmat response, state disaster mutual aid response, fire prevention inspections and life safety education. The City of Gainesville has provided high quality services for over 100 years and currently enjoys an Insurance Services Office (ISO) Class 3-9 rating. The fire service is also evaluated against the National Fire Protection Association (NFPA) Standards, which outline performance standards to measure a department's ability to provide timely fire protection services. Currently, the City of Gainesville does not meet the NFPA's performance standard of a four-minute response time 90% of the time. This is a performance goal that department staff continues to work towards.

The Fire Department facilities inventory is comprised of eight fire stations (Station 8 is planned for construction in FY 2010), an administrative office and a training facility that service the entire City. Table 1 identifies the Fire Department's buildings/facility inventory, as well as the corresponding physical location address for each facility.

**Table 1**
**Fire Department Buildings/Facility Inventory**

| Station | Address |
|---|---|
| Station 1 | 427 S. Main Street, Gainesville, FL |
| Station 2 | 2210 SW Archer Road, Gainesville, FL |
| Station 3 | 900 NE Waldo Road, Gainesville, FL |
| Station 4 | 10 SW 36th Street, Gainesville, FL |
| Station 5 | 1244 NW 30th Avenue, Gainesville, FL |
| Station 6 | 4381 NE 47th Avenue, Gainesville, FL |
| Station 7 | 5601 NW 43rd Street, Gainesville, FL |
| Station 8 | 3223 NW 42nd Avenue, Gainesville, FL |
| Fire Administration | 1025 NE 13th Street, Gainesville, FL |
| Fire Training Facility | 1026 NE 14th Street, Gainesville, FL |

Source: City of Gainesville Fire Department

The City has a Fire Services Assistance Agreement with Alachua County for fire services. The intent of the agreement is to provide the most efficient service utilizing the fire services units nearest the incident and it is intended to provide the most efficient fire services to properties within the City of Gainesville. The Agreement has an established formula for determining the costs associated with these services and provides for monthly reimbursement for the responses. Central communication services are provided by the Combined Communications Center operated by the Alachua County Sheriff's office through a separate combined communications center agreement.

Tables 2 through 5 outline the Fire Department's current service operations and service components. Table 2 provides the Fire Department's organizational structure.

**Table 2**
**City of Gainesville Fire Department Organizational Chart**

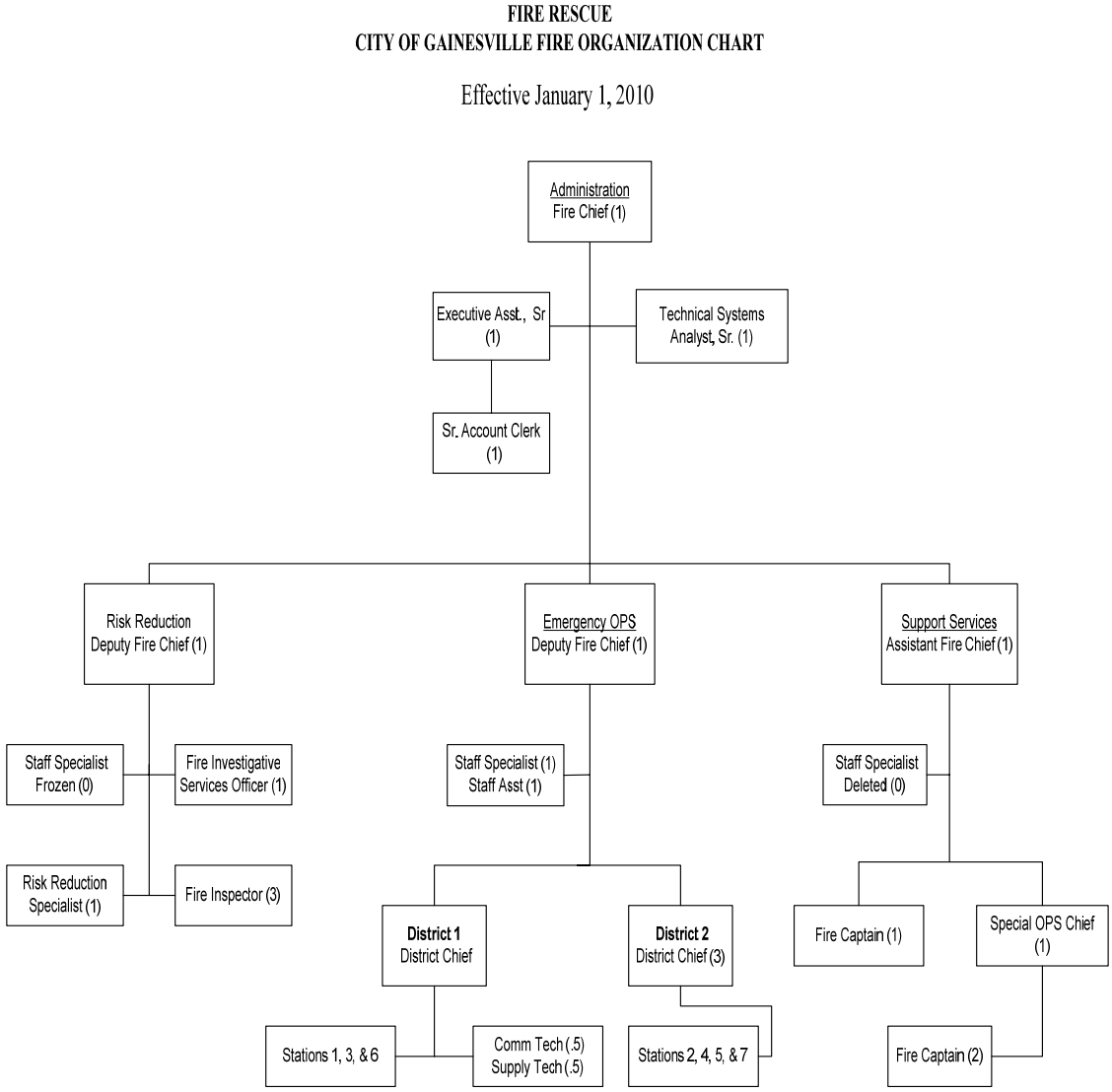


Table 3 describes the minimum staffing for each apparatus. This information is used in the development of the Administrative Factor, as further discussed in the "Development of Factors" section of this Assessment Memorandum.

**Table 3**
**Fire Department Apparatus Minimum Staffing Requirements**

| Apparatus | Minimum Staffing |
|---|---|
| Engine Vehicle | 3 Personnel |
| Tower/Quint Vehicle | 4 Personnel |
| Squad Vehicle | 2 Personnel |

Source: City of Gainesville Fire Department

Table 4 lists the location and the fire flow/pumping capacity of the Fire Department's apparatus. This information is used to determine the square footage cap for non-residential properties, if applicable. Once Station 8 is completed, Quint 5 will be housed at Station 8 and be replaced by an engine at Station 5; the pumping capacity for Engine 5 was not included in this calculation.

**Table 4**
**Fire Department Apparatus Location and Pumping Capacity[1]**

| Apparatus | Location | Fire Flow (GPM) |
|---|---|---|
| Engine 1 | Station 1 | 1,750 |
| Tower 1 | Station 1 | 1,750 |
| Engine 2 | Station 2 | 1,750 |
| Tower 2 | Station 2 | 1,750 |
| Engine 3 | Station 3 | 1,750 |
| Engine 4 | Station 4 | 1,750 |
| Quint 5 | Station 5 | 1,750 |
| Engine 7 | Station 7 | 1,750 |
| **Total GPM** | | **14,000** |

Source: City of Gainesville Fire Department

The current pumping capacity is defined as the combined amount of water that all personnel and apparatus in the Fire Department can pump to a first alarm fire in gallons per minute (GPM). Based on the apparatus detailed in Table 4 above, the pumping capacity of the City's Fire Department is 14,000 GPM per minute. However, NFPA 1142 Annex G states that the fire flow should not exceed 12,000 GPM or be less than 250 GPM. Therefore, it is reasonable and appropriate to cap the fire flow calculation for the City at 12,000 GPM.

Table 5 details the Fire Department response protocol.

**Table 5**
**City of Gainesville Fire Minimum Response Protocol**

| Call Type | Response |
|---|---|
| Aircraft Crash Off Airport | 2 Engines, Tower, Squad, Rescue, District Chief |
| Aircraft Crash on Airport | 2 Engines, Tower, Squad, Rescue, Aircraft Rescue and Fire Fighter, District Chief |
| Aircraft Fire: Parked/Empty | Engine, Aircraft Rescue and Fire Fighter, District Chief |
| Aircraft Inbound (confirmed problem) | 2 Engines, Tower, Squad, Rescue, Aircraft Rescue and Fire Fighter, District Chief |
| Aircraft Inbound (reported problem) | Engine, Aircraft Rescue and Fire Fighter, District Chief |
| Alarm - Reduced Response | Engine |
| Brush Fire | Engine |
| Brush Fire w/Exposure | 2 Engines, Tower, Rescue, District Chief, Division of Forestry |
| Building Collapsed / Damage w/PI | 2 Engines, Tower, Squad, Rescue, District Chief |
| Building Damage w/o PI | Engine |
| Building Fire-Commercial | 3 Engines, 2 Towers, Squad, Rescue, District Chief |
| Building Fire-Institutional | 3 Engines, 2 Towers, Squad, Rescue, District Chief |
| Building Fire-Residential | 2 Engines, Tower, Squad, Rescue, District Chief |
| Commercial Fire Alarm | Engine, Tower |
| Confined Space Rescue | 2 Engines, Tower, Squad, Rescue, District Chief |
| Dumpster Fire | Engine |
| Dumpster Fire w/Exposure | 2 Engines, Tower, Squad, Rescue, District Chief |

[1] Station 6 aircraft firefighting units are not included in the pumping capacity calculations.

| Call Type | Response |
|---|---|
| Elevated Rescue | Engine, Tower, Squad, Rescue, District Chief |
| Elevator Stuck | Tower |
| Emergency Lockout | Engine, Rescue |
| EMS Call | EMD PROTOCOL |
| EMS Call (Haz / Inhalation) | Engine, Rescue, Hazmat Unit, District Chief |
| Explosive Device | Engine, Tower, Rescue, District Chief |
| Institutional Fire Alarm | 2 Engines, Tower, District Chief |
| Large Vehicle Fire | 2 Engines, Tower, Rescue, District Chief |
| Level 0 Hazmat | Engine |
| Level 1 Hazmat | Engine, Hazmat Unit |
| Level 2 Hazmat | 2 Engines, Rescue, Hazmat Unit, Special Operations Chief, District Chief |
| Level 3 Hazmat | 2 Engines, Tower, Squad, Rescue, Hazmat Unit, Special Operations, District Chief |
| Mutual Aid Request | AS REQUESTED, District Chief |
| Mutual Aid Request- Hazmat | STA 2, Special Operations Chief, District Chief |
| Odor (not smoke) Commercial Building | Engine, Tower |
| Residential Fire Alarm | Engine |
| Service Call | Engine |
| Shed Fire w/o Exposure | 2 Engines |
| Sign Fire w/o Exposure | Engine |
| Smoke Investigation | Engine |
| Storm Damage | Engine, Tower |
| Train Fire | 2 Engines, Tower, Rescue, District Chief |
| Transformer Fire | Engine |
| Trash Fire | Engine |
| Trash Fire w/Exposure | 2 Engines, Tower, Squad, Rescue, District Chief |
| Trouble Alarm | Engine |
| UF Automatic Alarm (non-residential) | Engine, Tower |
| Veh Accident w/>2 PT | Engine, 2 Rescues, Squad, District Chief |
| Veh Accident w/Ext | Engine, Tower, Squad, Rescue, District Chief |
| Veh Accident w/Hazmat | Engine, Rescue, Hazmat Unit, Special Operations Chief, District Chief |
| Vehicle Fire | Engine |
| Water / Smoke Salvage | Tower, Squad |
| Water Rescue | Engine, Squad, Rescue |
| Wires Down w/Fire | Engine |

Source: City of Gainesville Fire Department

# DEVELOPMENT OF FACTORS

## FIRE SERVICES V. EMERGENCY MEDICAL SERVICES

In June 2000, litigation over the City of North Lauderdale fire rescue assessment program resulted in a decision by the Fourth District Court of Appeals in the case of SMM Properties, Inc. v. City of North Lauderdale, (the "North Lauderdale" case). The Fourth District Court of Appeals concluded that Emergency Medical Services (EMS) did not provide a special benefit to property. The Court, however, reaffirmed that fire suppression, fire prevention, fire/building inspections and first response medical services do provide a special benefit to property. In August 2002, the Florida Supreme Court upheld the decision of the Fourth District Court of Appeals.

To address these concerns, GSG has developed a methodology that removes the costs associated with emergency medical services. The apportionment methodology only utilizes fire incident report data related to non-EMS calls.

The proposed Fiscal Year 2010-11 projected departmental costs were allocated between fire rescue and emergency medical services because of the Florida Supreme Court's opinion in City of North Lauderdale v. SMM Properties that emergency medical services (above the level of first response) does not provide a special benefit to property. Accordingly, the fire rescue costs were split from emergency medical service costs based on the following general guidelines.

## DIRECT ALLOCATIONS

To the extent that certain line items could be allocated directly to fire, direct allocations were made. For example, all costs associated with "Fire Safety Education" and "Fire Inspections" were allocated entirely to fire. All costs associated with "Emergency Medical Technician Certification" were allocated entirely to EMS and not included in the assessable costs.

## ADMINISTRATIVE FACTOR

Certain line items were allocated between fire and EMS based on an Administrative Factor. This Administrative Factor is derived by creating a ratio between non-EMS or fire personnel and total combat personnel per shift. The City's optimal staffing level includes 24 non-EMS personnel and 12 EMS personnel, for a total of 36 combat personnel within the proposed funding timeframe. This optimal staffing yields a 66.67% percent non-EMS Administrative Factor. Personnel that will be assigned to Station 8 once completed were not included in this calculation.

This percentage was then applied to all applicable line items to allocate the costs that could not be directly allocated as fire costs or EMS costs, and that could not be operationally allocated (see below). For example, the Administrative Factor was applied to the personnel expenditures for salaries and benefits, as well as line item expenditures such as "Uniform Purchase Price," "Utilities – Electric, Water, Sewer," and "Maintenance/Office Other Equipment" to determine the fire service costs of these line items.

## OPERATIONAL FACTOR

Other assessable cost line items may also be allocated between fire and EMS based on an Operational Factor. The Operational Factor is derived by creating a ratio between non-EMS (i.e. fire) calls and EMS calls, and this ratio, which is based on the City Fire Department's operations, was then applied to certain budget line items such as "Gasoline, Oil and Grease" and "Fleet Service Cost - Variable".

Given the automatic aid agreement between the City and Alachua County (detailed in the Fire Services Assistance Agreement) provides the response protocols that dictate the closest units respond to a call for service, there were some incidents within the City limits that received a response only from the County. In order to capture the entire universe of calls, the City provided incident data from the County's records management system for those calls within the City limits, but without an incident report maintained by the City.

Once the universe of calls was identified, GSG used the City's Florida Fire Incident Reporting System (FFIRS) to ascertain the details of each incident. FFIRS is a tool for fire departments to report and maintain computerized records of fire rescue incidents and other department activities in a uniform manner. Under this system, a series of basic phrases with code numbers are used to describe fire rescue incidents. A data field in the FFIRS, "type of situation found," identifies the incident as an EMS or non-EMS type of call for each incident. Appendix A provides a codes list for the "type of situation found" as recorded on the fire rescue incident reports used to identify EMS and non-EMS calls. Another data field in the FFIRS, "fixed property use," identifies the type of property that fire departments respond to for each fire rescue incident. The fixed property uses correlate to property uses determined by the Alachua County Property Appraiser on the ad valorem tax roll. Appendix B provides a codes list for the "fixed property use" as recorded on the fire rescue incident reports.

For Calendar Year 2009, the City reported 15,760 total fire rescue incident calls, of which 3,705 were non-EMS (i.e. fire) calls and 12,055 were EMS calls. This information results in a 23.51% non-EMS Operational Factor. The ratio between non-EMS (i.e. fire) calls and EMS calls is then applied to all applicable line items to allocate the costs that could not be directly allocated as fire costs or EMS costs, and that could not be administratively allocated.

## ASSESSABLE COST CALCULATIONS

The fire services assessable cost calculations for Fiscal Years 2010-11 through 2014-15 are based on the following assumptions for the purpose of this Fire Assessment Memorandum.

- Unless more accurate information was available, a one percent annual increase was applied across all "Personnel Services."
- "Operating Expenditures" and "Other Expenses" were increased one percent annually. Revenues were increased one percent annually.
- "Capital Improvement Plan – Consolidated" and "Indirect Costs" were held constant over the projection period.
- Revenues are shown as a reduction of the total projected expenditures for each fiscal year, thereby reducing the total assessable costs for that year. Revenues are comprised of revenues directly received from or for the delivery of fire services, such as "Open Burn Permits," "Fire Inspection Fees," and "False Alarm Penalties."
- The line item "Study Reimbursement – Phase 1" and "Study Reimbursement – Phase 2" under "Additional Costs" is the cost associated with the development of the updated assessment study.
- Pursuant to section 197.3632, Florida Statutes, the tax collector and property appraiser may each enter into an agreement with the local government for reimbursement of necessary administrative costs incurred from the collection of the non-ad valorem assessment. Accordingly, if any such fee(s) is charged, the fee may be recouped as an add-on to the total assessable costs for the year.

  The line item "Collection Costs (Tax Collector)" under "Additional Costs" reflects reimbursement for the collection costs associated with the non-ad valorem assessment incurred by the Tax Collector. Pursuant to section 197.3632, Florida Statues, a municipal or county government shall only compensate the tax collector for the actual costs of collecting the non-ad valorem assessment.

- The line item "Statutory Discount" under "Additional Costs" reflects a 95% collection of the Fire Services Assessment to cover the 4% statutory discount allowed by the Uniform Method and 1% reserve for under collection. Accordingly, the statutory discount is budgeted at 5% of the total assessable costs.

Table 6 provides a calculation of the assessable costs for Fiscal Year 2010-11 based on an application of the above factors to the Fiscal Year 2009-10 Proposed Budget. The calculation yields an assessable cost of $10,611,497 for Fiscal Year 2010-11.

**Table 6**
**Fire Services Assessable Cost Calculations (FY 2010-11)**

| | 2009-10 Proposed Budget | FY 10-11 Proforma Budget | FY 10-11 Assessable Budget |
|---|---|---|---|
| **Personnel Services** | | | |
| Regular Pay | $8,514,049 | $8,599,189 | $5,899,340 |
| Overtime-One And One-Half Rate | $363,636 | $367,272 | $246,425 |
| Holiday Pay | $95,395 | $96,349 | $64,233 |
| Special Assignment | $136,712 | $138,079 | $94,693 |
| Longevity | $157,914 | $159,493 | $109,718 |
| Technical Rescue Support (Fire) | $30,255 | $30,558 | $20,372 |
| Hazmat Incentive Pay | $55,150 | $55,702 | $55,702 |
| EMT Certification | $524,259 | $529,502 | $0 |
| Education Incentive Fire Fight | $50,760 | $51,268 | $35,269 |
| FLSA | $59,745 | $60,342 | $40,228 |
| Social Security | $752,621 | $760,147 | $520,591 |
| Retirement | $560,004 | $565,604 | $387,429 |
| Disability Pen. Contribution | $2,745 | $2,772 | $2,006 |
| Consolidated Pension Contribution | $14,309 | $14,452 | $9,635 |
| Health Insurance | $687,726 | $694,603 | $475,459 |
| Retirees Health Insurance Contributions | $39,131 | $39,522 | $27,030 |
| Life Insurance | $10,986 | $11,096 | $7,591 |
| Worker's Compensation | $119,773 | $120,971 | $82,855 |
| Dry Cleaning | $7,410 | $7,484 | $5,757 |
| Clothing Allowance | $595 | $601 | $601 |
| Safety Awards | $19,201 | $19,393 | $12,929 |
| **Total Salaries And Benefits** | **$12,202,376** | **$12,324,400** | **$8,097,170** |
| **Operating Expenditures** | | | |
| Non-Capital Equipment | $47,756 | $48,234 | $32,156 |
| Materials and Supplies | $90,384 | $91,288 | $69,417 |
| Office Supplies | $12,030 | $12,150 | $8,945 |
| Printing and Binding | $4,085 | $4,126 | $2,948 |
| Uniform Purchase Price | $95,669 | $96,626 | $64,803 |
| Telephone | $49,216 | $49,708 | $34,497 |
| T.R.S. Access Charge | $87,355 | $88,229 | $58,819 |
| Postage | $1,700 | $1,717 | $1,246 |
| Utilities-Electric, Sewer, Water | $113,520 | $114,655 | $76,947 |
| Gasoline, Oil, Grease | $140,550 | $141,956 | $45,764 |
| Assessment Centers | $6,500 | $6,565 | $4,377 |
| Local Travel | $3,825 | $3,863 | $2,576 |
| Travel & Training | $61,192 | $61,804 | $51,098 |
| Books & Film | $5,678 | $5,735 | $4,565 |
| Dues, Memberships, Publication | $10,842 | $10,950 | $8,885 |

| | 2009-10 Proposed Budget | FY 10-11 Proforma Budget | FY 10-11 Assessable Budget |
|---|---|---|---|
| Rental-Equipment | $12,209 | $12,331 | $9,748 |
| Insurance Premiums | $405,916 | $409,975 | $273,317 |
| Professional Services | $186,588 | $188,454 | $132,201 |
| Other Contractual Services | $89,158 | $90,050 | $82,411 |
| Fleet Service Cost-Variable | $261,627 | $264,243 | $65,541 |
| Fleet Service Cost-Fixed | $341,992 | $345,412 | $235,306 |
| Maintenance Office/Other Equip | $34,832 | $35,180 | $23,454 |
| Machinery and Equipment | $23,000 | $23,230 | $15,487 |
| **Total Operating Expenditures** | **$2,085,624** | **$2,106,480** | **$1,307,506** |
| | | | |
| **Other Expenses** | | | |
| Combined Communications Center | $391,848 | $395,766 | $93,040 |
| Fire Services Assistance Agreement | $570,240 | $576,000 | $135,411 |
| **Total Other Expenses** | **$962,088** | **$971,766** | **$228,451** |
| | | | |
| **Capital Improvement Plan - Consolidated** | | | |
| Capital Equipment for Training Stations | $0 | $54,015 | $36,010 |
| Public Safety Equipment - Fire | $0 | $86,750 | $86,750 |
| Mobile Station Alerting System | $0 | $27,500 | $6,465 |
| Special Operations Equipment - Fire | $0 | $10,000 | $10,000 |
| Asset Maintenance For Buildings & Grounds | $0 | $235,000 | $156,667 |
| Fire Station 5 Remodel (One-time cost in FY12) | $0 | $0 | $0 |
| **Total Capital Outlay** | **$0** | **$413,265** | **$295,892** |
| | | | |
| **Indirect Costs** | | | |
| Indirect Costs - Fire | $952,707 | $952,707 | $635,138 |
| **Total Indirect Costs** | **$952,707** | **$952,707** | **$635,138** |
| | | | |
| **Total Expenditures** | **$16,202,795** | **$16,768,618** | **$10,564,157** |
| | | | |
| **Revenues** | | | |
| Open Burn Permit | $10,000 | $10,100 | $10,100 |
| Fire Inspection Fees | $75,337 | $76,090 | $76,090 |
| False Alarm Penalties | $80,000 | $80,800 | $80,800 |
| Airport Fire Station | $479,325 | $484,118 | $322,746 |
| Hazmat Gross Receipts Tax | $247,372 | $249,846 | $249,846 |
| **Total Revenues** | **$892,034** | **$900,954** | **$739,582** |
| | | | |
| **Total Expenditures** | | **$16,768,618** | **$10,564,157** |
| **Total Revenues** | | **$900,954** | **$739,582** |
| **Total Net Expenditures** | | **$15,867,664** | **$9,824,576** |
| Additional Costs | | | |
| Collection Costs @ 2% (tax collector) | | | $196,492 |
| Statutory Discount @ 5% (4% early payment / 1% non-collection) | | | $491,229 |
| Study Reimbursement - Phase I | | | $35,000 |
| Study Reimbursement - Phase 2 | | | $20,000 |
| Projected Notice Costs | | | $44,200 |
| **Total Additional Costs** | | | **$786,921** |
| **Total Assessable Costs** | | | **$10,611,497** |

Table 7 shows the calculation of the full cost of the Fire Services Assessment Program for Fiscal Year 2010-11 through Fiscal Year 2014-15 as well as the five-year average Fire Services Assessment Program cost.

**Table 7**
**Fire Services Assessable Cost Calculations Proforma Five-Year Average (Fiscal Year 2010-11 through 2014-15)**

| | FY 10-11 Assessable Budget | FY 11-12 Assessable Budget | FY 12-13 Assessable Budget | FY 13-14 Assessable Budget | FY 14-15 Assessable Budget | Five-Year Average Assessable Budget |
|---|---|---|---|---|---|---|
| Total Salaries And Benefits | $8,097,170 | $8,178,142 | $8,259,923 | $8,342,523 | $8,425,948 | $8,260,741 |
| Total Operating Expenditures | $1,307,506 | $1,320,581 | $1,333,787 | $1,347,125 | $1,360,596 | $1,333,919 |
| Total Other Expenses | $228,451 | $230,736 | $233,043 | $235,374 | $237,727 | $233,066 |
| Total Capital Outlay | $295,892 | $433,342 | $217,820 | $202,720 | $199,581 | $269,871 |
| Total Indirect Costs | $635,138 | $635,138 | $635,138 | $635,138 | $635,138 | $635,138 |
| **Total Expenditures** | **$10,564,157** | **$10,797,939** | **$10,679,712** | **$10,762,879** | **$10,858,991** | **$10,732,735** |
| **Total Revenues** | **$739,582** | **$746,977** | **$754,447** | **$761,992** | **$769,612** | **$754,522** |
| **Total Net Expenditures** | **$9,824,576** | **$10,050,961** | **$9,925,264** | **$10,000,887** | **$10,089,379** | **$9,978,214** |
| Additional Costs | | | | | | |
| Collection Costs @ 2% (Tax Collector) | $196,492 | $201,020 | $198,506 | $200,018 | $201,788 | $199,565 |
| Statutory Discount @ 5% (4% Early Payment / 1% Non-Coll) | $491,229 | $502,549 | $496,264 | $500,045 | $504,469 | $498,911 |
| Study Reimbursement - Phase I | $35,000 | $0 | $0 | $0 | $0 | $7,000 |
| Study Reimbursement - Phase 2 | $20,000 | $0 | $0 | $0 | $0 | $4,000 |
| Projected Notice Costs | $44,200 | $0 | $0 | $0 | $0 | $8,840 |
| **Total Additional Costs** | **$786,921** | **$703,569** | **$694,770** | **$700,063** | **$706,257** | **$718,316** |
| **Total Assessable Costs** | **$10,611,497** | **$10,754,531** | **$10,620,035** | **$10,700,951** | **$10,795,637** | **$10,696,530** |

# Apportionment Methodology

The apportionment methodology is based upon the development of a base-billing unit, called a Fire Protection Unit. A Fire Protection Unit is a measure that serves as a common index to compare the fire flow requirements for each building within the Fire Service Area; each Fire Protection Unit equates to the Fire Department's capability to effectively deliver 300 gallons per minute (GPM) of effective fire flow, which equates to the City's initial full alarm response. The Fire Protection Unit assignments vary for each building within the Fire Service Area based upon each building's occupancy hazard classification(s) (Hazard Class) and building area calculated in square foot increments of building improvements.

The City Commission will set the fire services assessment rate for buildings in terms of dollars per Fire Protection Unit per year; the assessment amount due is calculated by multiplying the number of Fire Protection Units on the parcel by the rate per Fire Protection Unit.

## SPECIAL BENEFIT ASSUMPTIONS

The following assumptions support a finding that the fire services, facilities, and programs provided by the City provide a special benefit to the assessed parcels.

- Fire services, facilities, and programs possess a logical relationship to the use and enjoyment of property by: (i) protecting the value and integrity of improvements and structures through the availability and provision of comprehensive fire services; (ii) protecting the life and safety of intended occupants in the use and enjoyment of property; (iii) lowering the cost of fire insurance by the presence of a professional and comprehensive fire program; and (iv) containing fire incidents occurring on land with the potential to spread and endanger other property and property features.
- The availability and provision of comprehensive fire services enhances and strengthens the relationship of such services to the use and enjoyment of the parcels of property, the market perception of the area and, ultimately, the property values within the assessable area.

## APPORTIONMENT METHODOLOGY

The following section describes the recommended two-step apportionment methodology.

The first step of the apportionment methodology uses the relationships established in NFPA 1142 Standard on Water Supplies for Suburban and Rural Fire Fighting (2007 Edition) for determining the required amount of fire flow to fight a fire based upon certain building characteristics. The formula provided in Annex G of NFPA 1142 uses a combination of factors to calculate the fire flow for each building within the Fire Service Area based upon occupancy hazard classifications and building area calculated in square foot increments of building improvements. The NFPA formula used in the apportionment methodology uses ordinary construction as the basis because a majority of the buildings within the Fire Service Area are considered ordinary construction, which is any building that is not constructed with fire resistive or noncombustible materials. The Insurance Services Organization (ISO) Guide for Determination of Needed Fire Flow (Edition 05-2006) contains an identical formula.

In addition, NFPA 1710 (2010 Edition), which is the Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Career Fire Departments and which also reflects the City's standards and practices, was also used to assign Fire Protection Units to each building. The purpose of this standard is to specify the minimum criteria addressing the effectiveness and efficiency of the career public fire suppression operations, emergency medical service, and special operations delivery in protecting the citizens of the jurisdiction. Adoption of this standard is not mandatory in the State of Florida although it is the recognized industry standard in Florida and the United States. Although not formally adopted by the City, the City strives to meet these standards and uses them to determine their resource allocation.

NFPA 1710 and the City's standards and practices, state that fire suppression operations should be organized to ensure the fire department's fire suppression capability includes personnel, equipment and resources to deploy the initial arriving company, the full initial alarm assignment and additional alarm assignments. The initial full alarm assignment should provide the establishment of an uninterrupted water supply of a minimum of 300 GPM for 30 minutes. This standard, which is used by the City, was used to assign Fire Protection Units to each building. Therefore, each Fire Protection Unit equates to the fire department's capability to effectively deliver 300 GPM and the Fire Protection Unit assignments vary by Hazard Class.

The Fire Protection Units for each building is a proxy for the number of fire fighters, type, quantity and size of apparatus and other special fire fighting equipment required to be available for each building in the Fire Service Area pursuant to the City's standard resource allocation for an initial response to a fire call. It is fair and reasonable to use the Fire Protection Units for each building because the fire flow requirement for each building provides a reasonable estimation of the costs of the fire fighters, apparatus, equipment, services, facilities and programs the City must have available to serve each building and these fire fighting resources are directly funded by the Fire Services Assessment.

The second step of the apportionment methodology develops a relationship between the occupancy hazard classifications to address the actual time spent in response to fire incidents and the time available to respond to primary structure fire incidents. To develop this relationship, GSG used information included in the City's Florida Fire Incident Reporting System (FFIRS). The FFIRS is a tool for fire departments to report and maintain computerized records of fire rescue incidents and other department activities in a uniform manner.

## DETERMINATION OF FIRE PROTECTION UNITS – STEP ONE

GSG obtained information from the ad valorem tax roll from the Alachua County Property Appraiser's office to determine Fire Protection Units. Based upon NFPA 1142 standards, a Hazard Class was assigned to each building within the Fire Service Area based upon the building's assignment of use by the County Property Appraiser or verification of use obtained through field research. According to NFPA 1142, the lowest Hazard Class number is 3, and it is assigned to the highest (most hazardous) hazard group. The highest Hazard Class number is 7, and it is assigned to the lowest (least hazardous) hazard group. For example, Hazard Class 3 properties include plywood and particleboard manufacturing, plastic processing and cereal or flour mills while Hazard Class 7 properties include residential dwellings, apartments and offices.

In addition, for all parcels within the municipal boundary, GSG determined the amount of square footage of the structures using the building files on the ad valorem tax roll or through the use of field research. The information regarding the number of stories and the square footage attributable to each story was incomplete on the ad valorem tax roll so the actual square footage of the buildings was used in the apportionment methodology.

Using the fire flow calculation from NFPA 1142, a Fire Protection Unit was assigned to each square foot increment by Hazard Class. The number of Fire Protection Units assigned to a building represents that building's proportionate share of the burden of maintaining the fire department and the availability of

these vital public services. The number of Fire Protection Units assigned to a building was determined by the Hazard Class assignment and the amount of building area contained in a building –a larger building area and/or riskier Hazard Class translates into more needed fire flow, which increases the cost of providing fire services. This higher cost is charged to that particular building.

The method for determining fire flow does not include large, special fire protection problems such as lumberyards, petroleum storage, refineries, grain elevators and large chemical plants that would require greater fire flow. If there were any of these types of properties with predetermined fire flow plans, those plans were utilized; if predetermined fire flow plans did not exist, properties were assigned the riskiest hazard classification.

## METHODOLOGY ASSUMPTIONS

The following assumptions support findings that the apportionment methodology is fair and reasonable.

- It is fair and reasonable to use the formula provided in NFPA 1142, the Standard on Water Supplies for Suburban and Rural Fire Fighting (2007 Edition) to calculate the required fire flow and resources for a structure because NFPA 1142 provides standards to assist fire departments with the establishment of the fire flow necessary for structural fire fighting purposes and the City utilizes this standard in determining its resource allocation.
- A fire in a building containing highly combustible contents will require a higher rate of fire flow and associated resources due to the greater risk of fire spread and heat release than a building with contents of low combustibility and the City must allocate its fire fighting resources to provide this greater fire flow demand. Therefore, it is fair and reasonable to use the Hazard Classes established by NFPA 1142, Chapter 5 because such standard contains the best practices in the fire fighting industry and is the most comprehensive, accurate and reliable information with regard to building risk assignments.
- The greater the size of the building, the greater the potential for a large fire and the greater the fire flow requirement that must be available in the event of a fire in a structure of that building's size and Hazard Class. Therefore, it is fair and reasonable to apportion the assessed costs based on the size of each building.
- It is fair and reasonable to use the City's operational standards and practices as provided in NFPA 1710 (2010 Edition), the Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Career Fire Departments to determine the effective fire flow because this standard states that fire suppression operations should be organized to ensure the fire department's fire suppression capability includes personnel, equipment and resources to deploy the initial arriving company, the full initial alarm assignment and additional alarm assignments and that the initial full alarm assignment should provide the establishment of an effective fire flow of a minimum of 300 GPM for 30 minutes.
- The City's initial full alarm assignment provides for the establishment of an effective fire flow of 300 GPM. It is fair and reasonable to use the City's response protocol as the basis for calculating the Fire Protection Units assigned to each building, because each Fire Protection Unit equates to the fire department's capability to effectively deliver fire flow of 300 GPM.
- The assignment of the City's standards and practices for building uses based on the relationships established in NFPA 1142 and NFPA 1710 is fair and reasonable because the resource components of these relationships (fire stations, training, apparatus and personnel) are directly funded by the special assessment revenue.
- The assignment of Fire Protection Units is fair and reasonable because the demand for fire services capacity is measured by the square footage of structures and improvements and Hazard Class assignment within benefited parcels.

- The assignment of Fire Protection Units within square footage ranges is a fair and reasonable method to classify benefited buildings and to apportion costs among benefited buildings that create similar demand for the availability of fire services.
- The demand for the availability of fire services diminishes at the outer limit of building size since a fire occurring in a building greater than a certain size is not capable of being suppressed under expected conditions and the fire control activities under such circumstances are directed to avoid the spread of the fire event to adjacent structures. Therefore, it is fair and reasonable to place a cap on the fire flow within the Hazard Classes.
- As a consequence of the transient use and potential extraordinary vacancies within mobile home parks as compared to other residential property and the lack of demand for fire services for unoccupied spaces, it is fair and reasonable to provide for an extraordinary vacancy adjustment procedure for mobile home park property.
- Section 125.0168, Florida Statutes and section 166.223, Florida Statutes, provide that when a county or city levies a non-ad valorem special assessment on a recreational vehicle park regulated under chapter 513, Florida Statutes, the non-ad valorem special assessment shall not be based on the assertion that the recreational vehicle park is comprised of residential units. Instead, recreational vehicle parks regulated under chapter 513, Florida Statutes shall be assessed as a commercial entity in the same manner as a hotel, motel, or other similar facility.
- In accordance with section 166.223, Florida Statutes, which mandates that the City treat recreational vehicle park property as commercial property for non-ad valorem special assessments levied by the City, like the fire services assessment, it is fair and reasonable to assign the square footage of 191 square feet, the average size of a recreational vehicle, according to the Florida Association of RV Parks and Campgrounds to each space within recreational vehicle park property.

## ASSIGNMENT OF FIRE PROTECTION UNITS TO BUILDINGS

Each building within the Fire Service Area on the ad valorem tax roll was assigned to a Hazard Class based on its assignment of use by the Alachua County Property Appraiser or verification of use obtained through field research. The Alachua County Property Appraiser assigns a building use code (BUC) that is a four-digit code describing the type of improvements on a parcel. A listing of BUC codes is provided as Appendix D.

Using the building codes, the specific methodology for the assignment of Fire Protection Units to each building is generally described below.

- The City's initial response protocol of 300 GPM of effective fire flow;
- The use of actual building area and Hazard Class assignment in the calculation of Fire Protection Units to quantify the building's fire flow requirement;
- For mobile home parks, assign Fire Protection Units based on the average estimated building area of 720 square feet for each mobile home space and assigned one Fire Protection Unit; however, these properties will be eligible for an extraordinary vacancy adjustment for vacant mobile home spaces.
- For residential condominium parcels, the area of each condominium within each building will be aggregated and assigned Fire Protection Units. The aggregate Fire Protection Units for each complex will be divided by the number of parcels (condo units) in the complex to determine the Fire Protection Units for each parcel.
- For commercial condominium parcels, the area of each condominium within each building will be aggregated and assigned Fire Protection Units. The building's Fire Protection Units will be multiplied by each parcel's (condo unit) percentage of the total square feet of the building to determine the Fire Protection Units for the parcel.

- For townhouse parcels, the area of each townhouse within each building will be aggregated and assigned Fire Protection Units. The aggregate Fire Protection Units for each complex will be divided by the number of parcels in the complex to determine the Fire Protection Units for each parcel.
- For recreational vehicle park parcels, Fire Protection Units will be assigned based upon the number of spaces multiplied by 191 square feet and aggregated as one building. Fire Protection Units for the other primary structures will be based on their individual square footage. All recreational vehicle spaces within a recreational vehicle park will be included; however, these properties will be eligible for an extraordinary vacancy adjustment for vacant recreational vehicle spaces.
- Parcels that are identified as special fire protection problems such as lumberyards, petroleum storage, refineries, grain elevators and large chemical plants were assigned the riskiest hazard classification since predetermined fire flow plans were not available. The actual fire flow requirement is then divided by the City's initial full alarm response of 300 GPM to determine the number of Fire Protection Units.
- The incorporation of credits for parcels with a building equipped with a functioning and properly designed, fully automated fire sprinkler system.

Table 8 shows the final assignment of Fire Protection Units by Hazard Class.

**Table 8**
**Fire Protection Units by Hazard Class**

| Hazard Class | Fire Protection Units |
|---|---|
| Hazard Class 3 & 4 | 9,210.42 |
| Hazard Class 5 | 994.72 |
| Hazard Class 6 | 2,140.45 |
| Hazard Class 7 | 61,670.25 |
| **Total** | **74,015.83** |

Source: Preliminary Assessment Roll

## DEMAND–AVAILABILITY FACTOR – STEP TWO

Once the Fire Protection Units have been assigned to each building, the next step of the apportionment methodology develops a relationship between the occupancy hazard classifications to address the actual time spent in response to fire incidents and the time available to respond to primary structure fire incidents (Demand-Availability Factor). This two-part factor is developed for each Hazard Class based on the proportion of person-hours attributable to the Demand and Availability Components.

## DEMAND-AVAILABILITY COMPONENT ASSUMPTIONS

The following assumptions support findings that the methodology used to determine the Demand-Availability Components is fair and reasonable.

- Determining the number of person-hours attributable to the actual time spent in response to fire incidents and the time available to respond to fire incidents based on information included in the fire incident reports is fair and reasonable because the fire incident reports were developed to provide this information and are the most reliable data available to professional fire departments.
- Apportioning the number of fire incidents among Hazard Classes to determine the Demand Component Factor for each Hazard Class is fair and reasonable because the fire incident reports are the most reliable data available to determine the historical demand for fire services from Hazard Classes and to determine the benefit to property use resulting from the demand for fire services to

protect and serve buildings located upon assessed property and their intended occupants. There exist sufficient fire incident reports that document the historical demand for fire services from assessed property within the Hazard Classes.

- Using the same percentage of person-hours available for calls to determine the Availability Component Factor for all Hazard Classes is fair and reasonable because the Fire Department's staffing for potential responses is not dictated by the Hazard Class and because such allocation provides a reasonable estimation of the costs of the availability of fire services, staff, facilities and programs for all structures.

## CALCULATION AND APPLICATION OF DEMAND-AVAILABILITY FACTORS

To calculate the Demand and Availability Components, first, the person-hours associated with the historical fire calls and the person-hours associated with time available to respond to primary structure incidents were determined as follows:

(1) The total number of scheduled hours for fire services versus emergency medical services based on minimum staffing of 36 combat personnel per shift including an adjustment for hours spent by EMS personnel on fire calls:

Fire hours = 212,136.3

EMS hours = 103,223.7

Total hours = 315,360.0

(2) The total number of person-hours spent on all fire incidents was calculated from the actual incident data fields:

19,795.6 hours

(3) The average amount of time spent on incident reports for each incident was estimated at 0.25 hours for each incident:

3,705 incidents x 0.25 hours = 926.3 hours

(4) The total number of person-hours spent on training was based on the City's comprehensive training program that exceeds the minimum requirements as set forth by the Insurance Services Office (ISO). The City training program requires a minimum of 360 annual training hours for each firefighter:

132 firefighters x 360 hours = 47,520.0 hours

Based on these calculations, it was determined that approximately 68,241.9 person-hours per year were spent on responses to fire calls out of 212,136.3 total scheduled annual person-hours for fire services. Therefore, the remainder of the person-hours (143,894.5), or 67.83% of the person-hours per year are required to be available to respond to primary structure fire incidents and 32.17% of the person-hours are spent in actual response to fire calls.

## DEMAND COMPONENT

To determine the Demand and Availability Components, GSG obtained the incident information from the City in an electronic format, identifying the number and type of fire rescue incident responses by City Fire Department vehicles and County Fire Department vehicles within the city limits for Calendar Year 2009. Under this system, a series of basic phrases with code numbers are used to describe fire rescue

incidents. A data field in the FFIRS, "fixed property use", identifies the type of property that fire departments respond to for each fire rescue incident. The fixed property uses correlate to building uses determined by the Alachua County Property Appraiser on the ad valorem tax roll. Appendix B provides a codes list for the "fixed property use" as recorded on the fire rescue incident reports.

GSG analyzed the Calendar Year 2009 fire rescue incident data. The City fire rescue incident data from Calendar Year 2009 represent 15,760 fire rescue incidents. Of the 15,760 fire rescue incidents, there were 12,055 incidents classified as EMS type incidents based on the type of situation found indicated on the incident report. The 12,055 EMS type incidents were not included in the analysis.

Of the 3,705 remaining fire type incidents, 2,869 were calls to specific property uses. Accordingly, 836 incidents were considered non-specific type incidents. Because of the inability to correlate these non-specific type incidents to specific property categories, the call analysis does not include these 836 incidents. The City's budget is based upon its ability to provide service to improved property within its boundaries. Therefore, the level of services required to meet anticipated demand for fire services and the corresponding annual fire services budget required to fund fire services provided to non-specific property uses would be required notwithstanding the occurrence of any incidents from such non-specific property use.

The suppression of fires on vacant land and agricultural property primarily benefits adjacent property by containing the spread of fire rather than preserving the integrity of the vacant parcel. Thus, incidents to vacant and unimproved agricultural property were treated as non-specific and not utilized in the cost apportionment.

Using the fixed property use codes, the remaining 2,869 fire type incidents were assigned to their corresponding Hazard Classes. Because of the limited number of properties for Hazard Class 3, the fire incidents and properties for Hazard Class 3 and Hazard Class 4 were combined. Table 9 outlines the hazard class assignment of fire type incidents based on the historical demand for service in each zone.

**Table 9**
**Fire Calls by Hazard Classification (Calendar Year 2009)**

| Category | Number of Incidents | Percentage of Calls |
|---|---|---|
| Hazard Class 3 & 4 | 223 | 7.77% |
| Hazard Class 5 | 91 | 3.17% |
| Hazard Class 6 | 238 | 8.30% |
| Hazard Class 7 | 2,317 | 80.76% |
| **Total** | **2,869** | **100.00%** |

Source: City of Gainesville Fire Department (2009)

The Demand Component Factor is calculated for each Hazard Class by dividing the Hazard Class's Incidents per Fire Protection Unit by the average Incidents per Fire Protection Unit for all Hazard Classes and multiplying by the Demand Component percentage of person-hours (32.17%). Calendar Year 2009 fire call data was used to calculate the Incidents per Fire Protection Unit.

**Demand Component Factor =**

**Incidents/Fire Protection Units ÷ Average Incidents/Fire Protection Units x 32.17%**

Table 10 shows the calculation of the Demand Component Factor by Hazard Class for each service level zone.

**Table 10**
**Calculation of Demand Component Factor**

| Hazard Class | Incident Count | Fire Protection Units | Incidents per Fire Protection Unit | Demand Component Factor |
|---|---|---|---|---|
| Hazard Class 3 & 4 | 223 | 9,210.42 | 0.0242 | 0.2009 |
| Hazard Class 5 | 91 | 994.72 | 0.0915 | 0.7592 |
| Hazard Class 6 | 238 | 2,140.45 | 0.1112 | 0.9228 |
| Hazard Class 7 | 2,317 | 61,670.25 | 0.0376 | 0.3118 |
| **Total/Average** | **2,869** | **74,015.83** | **0.0388** | |

The Availability Component Factor is the percent of person-hours available for calls; this component is the same for all hazard classes and was calculated at 67.83%.

The next step adds the two factors for each component as shown in Table 11.

**Table 11**
**Demand-Availability Factor by Hazard Class**

| Hazard Class | Demand Component Factor | Availability Component Factor | Combined Factor |
|---|---|---|---|
| Hazard Class 3 & 4 | 0.2009 | 0.6783 | 0.8792 |
| Hazard Class 5 | 0.7592 | 0.6783 | 1.4375 |
| Hazard Class 6 | 0.9228 | 0.6783 | 1.6011 |
| Hazard Class 7 | 0.3118 | 0.6783 | 0.9901 |

These factors were applied to the actual Fire Protection Units to calculate the Factored Fire Protection Units for each Hazard Class and are provided in Table 12.

**Table 12**
**Factored Fire Protection Units**

| Hazard Class | Fire Protection Units | Combined Factor | Factored Fire Protection Units |
|---|---|---|---|
| Hazard Class 3 & 4 | 9,210.42 | 0.8792 | 8,097.80 |
| Hazard Class 5 | 994.72 | 1.4375 | 1,429.91 |
| Hazard Class 6 | 2,140.45 | 1.6011 | 3,427.07 |
| Hazard Class 7 | 61,670.25 | 0.9901 | 61,059.71 |
| **Totals/Average** | **74,015.83** | | **74,014.49** |

## CREDITS FOR FIRE SAFETY MEASURES

Fire flow, as expressed in Fire Protection Units, is a proxy for all the fire-fighting resources that would be dispatched to any incident involving property. Even with a building equipped with a functioning and properly designed, fully automated fire sprinkler system, the City's fire fighting resources must still be present at the scene of any fire incident to control the scene, respond in the event of a system malfunction, ultimately extinguish any fire, and ensure the safety of all structures involved. However, fully functioning and properly designed fire sprinkler systems may provide some measure of built-in fire protection which may lessen the total fire suppression burden and the use of the City's fire fighting resources. Further, as an incentive to encourage existing and new buildings to employ these types of fire safety measures, mitigation credits may be granted by the City for buildings with fire sprinkler systems that are installed, monitored, inspected, maintained and tested to the specifications of City standards.

The mitigation credit was based on the sprinklered building information provided by the City. The Alachua County Property Appraiser provided a complete list of buildings with approved and functioning fire sprinkler systems. This list was used as the basis for the estimation of buildings with a fire sprinkler system. A study conducted by the City in 2003 confirmed the estimate. A complete description of the City's credit mitigation policy will be provided in the Final Assessment Resolution or by supplemental resolution.

To estimate the potential impact of reduced Factored Fire Protection Units due to credit application, the Factored Fire Protection Units were reduced by 10% for all properties that contain fire sprinkler systems as provided in Table 13.

**Table 13**
**Factored Fire Protection Units after Credits**

| Hazard Class | Fire Protection Units | Factored Fire Protection Units | Net Factored Fire Protection Units After Credits |
|---|---|---|---|
| Hazard Class 3 & 4 | 9,210.42 | 8,097.80 | 7,509.83 |
| Hazard Class 5 | 994.72 | 1,429.91 | 1,318.54 |
| Hazard Class 6 | 2,140.45 | 3,427.07 | 3,143.00 |
| Hazard Class 7 | 61,670.25 | 61,059.71 | 57,348.54 |
| **Total** | **74,015.83** | **74,014.49** | **69,319.91** |

# Computation of Fire Services Assessment Rates

Based on the five-year average assessable costs of providing fire services and the number of factored Fire Protection Units after credit application, Table 14 summarizes the maximum allowable fire services assessment rates after application of the proposed assessment methodology. The information is shown on a rate per Fire Protection Unit basis. The actual assessment amount for a particular property is calculated by multiplying the rate per Fire Protection Unit by the number of factored Fire Protection Units assigned to that property.

**Table 14**
**Proforma Assessment Rates – Maximum Funding Level (Based on Five-Year Average Assessable Budget)**

| | |
|---|---|
| Total Assessable Costs | $10,696,530.00 |
| Total Number of Fire Protection Units | 69,319.91 |
| **Annual Rate per Fire Protection Unit** | **$155.00** |

Source: Preliminary Assessment Roll

Table 15 summarizes the fire services assessment rates, after application of the proposed assessment methodology, based upon revenue generation level of 67% of the maximum allowable fire services assessment rates. The information is shown on a rate per Fire Protection Unit basis. The actual assessment amount for a particular property is calculated by multiplying the rate per Fire Protection Unit by the number of factored Fire Protection Units assigned to that property.

**Table 15**
**Proforma Assessment Rates – 67% Funding Level (Based on Five-Year Average Assessable Budget)**

| | |
|---|---|
| Total Assessable Costs | $7,166,675.00 |
| Total Number of Fire Protection Units | 69,319.91 |
| **Annual Rate per Fire Protection Unit** | **$104.00** |

Source: Preliminary Assessment Roll

Table 16 summarizes the fire services assessment rates, after application of the proposed assessment methodology, based upon revenue generation level of 33% of the maximum allowable fire services assessment rates. The information is shown on a rate per Fire Protection Unit basis. The actual assessment amount for a particular property is calculated by multiplying the rate per Fire Protection Unit by the number of factored Fire Protection Units assigned to that property.

**Table 16**
**Proforma Assessment Rates – 33% Funding Level (Based on Five-Year Average Assessable Budget)**

| | |
|---|---|
| Total Assessable Costs | $3,529,855.00 |
| Total Number of Fire Protection Units | 69,319.91 |
| **Annual Rate per Fire Protection Unit** | **$51.00** |

Source: Preliminary Assessment Roll

# Exemptions and Impact of Exemptions

It is important to understand that the fair apportionment element required by Florida case law prohibits the shifting of the fiscal costs of any special assessment from exempt landowners to other non-exempt landowners. In other words, the funding for an exemption from a special assessment must come from a legally available external revenue source, such as the City's general fund. Funding for fire services assessment exemptions cannot come from the proceeds derived directly from the imposition of special assessments for fire services and facilities. Because any exemption must be funded by an external funding source, the grant of any exemption will not have any impact upon the fire services assessment to be imposed upon any other non-exempt parcels.

State and federal laws contain a patchwork of provisions exempting certain governmental property owners from the payment of special assessments. For example, section 423.02, Florida Statutes, exempts certain housing projects from the payment of special assessments. This general law does provide that a housing authority may agree with a local government to make payments in lieu of taxes, but past experience is that such an agreement, if in existence at all, under-funds the impact of such properties on a City's fire services assessable cost calculations.

It is important that the City take steps to set up a reasonable contingency within its general budget to fund the cost incurred in providing fire services to governmentally owned, non-assessable properties.

Table 17 summarizes the estimated Fiscal Year 2010-11 impact of exempting governmental property.

**Table 17**
**Estimated Annual Impact of Exemptions (Five-Year Average Assessable Budget)**

| Hazard Class | Estimated Government Buy-Down |
|---|---|
| Hazard Class 3 & 4 | $129,124.95 |
| Hazard Class 5 | $15,291.82 |
| Hazard Class 6 | $195,644.92 |
| Hazard Class 7 | $698,843.59 |
| **Total** | **$1,038,905.28** |

# Outstanding Issues

## BUILDING USE CLASSIFICATIONS

The property information obtained from the Alachua County Property Appraiser's office was incomplete for purposes of developing the fire services assessment methodology. The dwelling units and building square footage information was not available for those buildings designated with "no value." The City completed fieldwork to determine the dwelling units and/or square footage for these buildings. The assessment rates for these buildings are thus based on the City's data and any changes could consequently affect the estimated assessment rates.

## UNIVERSITY OF FLORIDA

GSG utilized best available data to identify and classify the University of Florida property. This property information as obtained from the Alachua County Property Appraiser's office was incomplete for purposes of developing the fire services assessment methodology. The dwelling units and building square footage information was not available. The City completed fieldwork to determine the dwelling units and/or square footage for these buildings. As a result of these assumptions, incomplete or incorrect building information could consequently affect the estimated assessment rates.

## EXEMPTION OF GOVERNMENTAL PARCELS

The aggregate cost for fire services provided to schools and governmental properties (municipalities, county, state, federal and any sovereign state or nation) was also estimated as part of the Institutional and Educational Property Use Categories based on an analysis of each parcel's use. The fair apportionment concepts in the methodology provided within this Assessment Memorandum require an identification of the calls for service to these properties and, therefore, their respective costs.

Current case law provides that state agencies are exempt from special assessments absent a statute specifically authorizing, either explicitly or by necessary implication, special assessments on state property. City of Gainesville v. State, 863 so.2d 138 (Fla. 2003). The proportional assessment cost allocated to such state agencies must either be paid by such agencies as fees or funded from other legally available sources because the financial burden of such exemption cannot be apportioned to non-exempt parcels.

## HARDSHIP ASSISTANCE PROGRAM

The City has the option of creating a Hardship Assistance Program to assist residential property owners with homesteaded property, who meet the eligibility criteria, with the financial burden created by the imposition of the Fire Services Assessment. The eligibility criteria are typically based upon Federal Government Poverty Level Guidelines established by the United States Department of Health and Human Services, as adjusted for family size, but may also be based upon criteria from an existing hardship assistance program.

## MOBILE HOME AND RECREATIONAL VEHICLE PARK VACANCY CREDIT

As a consequence of the transient use and potential extraordinary vacancies within mobile home and recreational vehicle (RV) parks as compared to other residential property and the lack of demand for fire services for unoccupied spaces, it is fair and reasonable to provide for an extraordinary vacancy adjustment procedure for mobile home and RV park properties. Vacant mobile home and RV spaces within a mobile home or RV park will be charged; however, these properties will be eligible for an extraordinary vacancy adjustment for vacant mobile home or RV spaces.

## NON-SPECIFIC CALLS

In the fire call analysis, certain fire related calls were classified as non-property specific, because of the location of occurrence in the incident report. These calls represent non-specific incidents that either could not be correlated to a specific parcel or involved auto accidents or other types of incidents along roads and highways. These calls are excluded from the analysis that determines the percentage of calls for service to respective property types and, therefore, are not considered in the determination of the extent of budget required to fund the department. Because the budget is established based on the ability of the department to adequately protect structures, no adjustment has been made to the budget due to non-property specific calls. Further, even if such calls did affect the cost of the department's operations, there are sufficient non-assessment revenues available to offset any impact upon the budget. However, there is a current legal challenge to this treatment of non-specific calls pending. In McConaghey v. City of Pembroke Pines, Case No, CACE 07-023975 (Fla. 17th Cir.), the plaintiff in this case brought a challenge to the City's fire rescue assessment program alleging that the City's use of special assessments to fund 100% of the fire department's budget was invalid on two bases. The plaintiff alleged that the allocation of expenses between fire services and rescue services was arbitrary and that the City is prohibited from allocating the cost of non-specific calls (i.e. fire calls that cannot be tied to a fixed property use) to the fire services budget. This case is still pending before the 17th Circuit Court.

# Implementation — Phase II

## TAX BILL FISCAL YEAR 2010-11 AND THEREAFTER

The following section describes all of the steps required to implement and collect the fire services assessment on the ad valorem tax bill in Fiscal Year 2010-11 and thereafter. Following this section is a critical events schedule identifying specific dates for all significant remaining events for the City to comply with those expected to be prescribed by the City's home rule ordinance authorizing the imposition of the annual fire services assessments.

To use the tax bill collection process, a local government must follow the strict procedures provided in section 197.3632, Florida Statutes (Uniform Method). A local government must initiate the process almost a year before it intends to begin using the Uniform Method to collect the assessments. The process begins with the passage of a resolution of intent prior to January 1 or, if the property appraiser, tax collector, and local government agree, March 1. The adoption of a resolution of intent does not obligate the local government to use the method or to impose a special assessment, but it is a prerequisite to using the Uniform Method.

The City must publish notice of its intent to consider a resolution to use the Uniform Method weekly for four consecutive weeks prior to a public hearing on the matter. If the resolution is adopted, the City must send a copy of it to the property appraiser, the tax collector, and the Florida Department of Revenue by January 10 or, if the property appraiser, tax collector, and local government agree, March 10. The City complied with this requirement by adopting a resolution of intent and timely notifying the Alachua County Property Appraiser, the Alachua County Tax Collector and the Florida Department of Revenue.

Under section 197.3632, Florida Statutes, property appraisers must annually provide certain information to local governments by June 1 to assist the local government in the preparation of special assessment rolls to be collected under the Uniform Method.

Pursuant to the Home Rule Ordinance, an initial assessment resolution to be adopted by the City will be required. Such initial assessment resolution should, among other things, briefly describe the Fire Services Assessment Program, the method of apportionment, set a public hearing date for final consideration, and direct and authorize the mailed and published notifications to those property owners included on an initial assessment roll.

Upon adoption of the initial assessment resolution, the City will have made the tentative decision to move forward with the imposition of special assessments to fund the fire services assessable cost calculations. After adopting the necessary implementing documentation, the City must develop a computerized, non-ad valorem assessment roll that contains the basis and rate of the assessment and electronically applies it to each building subject to the assessment. The non-ad valorem assessment roll must utilize the parcel identification number and property use code classifications maintained by the property appraiser and be compatible with the ad valorem tax roll.

Statutory requirements to use the tax bill collection method provide that a service assessment roll must be adopted at a public hearing between January 1 and September 15 so the tax collector can merge it with the ad valorem tax roll and mail a single bill for the combined collection of assessments and ad valorem taxes. At least 20 days prior to the public hearing, the City must publish a notice of the hearing in a newspaper of general circulation within the government's boundaries and by individual first class United States mail to the owners of property subject to the assessment. The mailed notice can either be a separate notice or the City may have the option to use the Truth-In-Millage (TRIM) notice to notify property owners of their respective fire services assessment amount. The use of TRIM is dependent

upon the agreement of the property appraiser. Should the City obtain the permission of the Alachua County Property Appraiser, notification of the assessment amounts for Fiscal Year 2010-11 may be accomplished using the TRIM notice. If the City expects to employ the use of the TRIM notice, it is imperative to begin coordinating with the property appraiser early in the calendar year.

At the public hearing, the City will adopt a final assessment resolution, which, among other things, will confirm the initial assessment resolution, articulate the rate of assessments, approve the assessment roll, and direct and authorize the method of collection.

Once the final assessment resolution is adopted and the roll certified on September 15 to the Alachua County Tax Collector to be collected along with ad valorem taxes, any minor modifications, corrections or errors must be made in accordance with the procedure applicable to the correction of errors on the tax roll, upon written direction from the City to the Alachua County Tax Collector.

Collection of the special assessments and ad valorem taxes begins in November. Failure to pay the assessments and taxes result in the issuance of a tax certificate and may result in the sale of a tax deed.

## IMPLEMENTATION SCHEDULE

Outlined in Table 18 is a critical events schedule identifying general timeframes for all significant remaining events for the City to implement the fire services assessment program and collect the assessments using the tax bill collection method for Fiscal Year 2010-11.

**Table 18**
**Critical Events Schedule**

| Event | Date |
|---|---|
| GSG provides Final Assessment Report to City | May 27, 2010 |
| City adopts Initial Assessment Resolution | June 3, 2010 |
| City publishes Public Hearing to Adopt Final Assessment Resolution | By June 24, 2010 |
| GSG mails Notices to Affected Property Owners | By June 24, 2010 |
| Public Hearing to adopt Final Assessment Resolution | July 15, 2010 |
| GSG certifies Assessment Roll to County Tax Collector | By September 15, 2010 |

# Appendix A

SITUATION FOUND CODES AND DESCRIPTIONS

| Code | Description | Call Type |
|---|---|---|
| 100 | Fire, Other | Non-EMS |
| 111 | Building Fire | Non-EMS |
| 113 | Cooking fire, confined to a container | Non-EMS |
| 116 | Fuel burner/boiler malfunction, fire confined | Non-EMS |
| 118 | Trash or rubbish fire, contained | Non-EMS |
| 120 | Fire in mobile property used as a fixed structure, other | Non-EMS |
| 121 | Fire in mobile home used as a fixed residence | Non-EMS |
| 130 | Mobile property (vehicle) fire, other | Non-EMS |
| 131 | Passenger vehicle fire | Non-EMS |
| 133 | Rail vehicle fire | Non-EMS |
| 138 | Off Road vehicle or heavy equipment fire | Non-EMS |
| 140 | Natural vegetation fire | Non-EMS |
| 141 | Forest, woods or wildland fire | Non-EMS |
| 142 | Brush, or brush and grass mixture fire | Non-EMS |
| 143 | Grass fire | Non-EMS |
| 150 | Outside rubbish fire, other | Non-EMS |
| 151 | Outside rubbish, trash or waste fire | Non-EMS |
| 152 | Garbage dump or sanitary landfill fire | Non-EMS |
| 153 | Construction or demolition landfill fire | Non-EMS |
| 154 | Dumpster or other outside trash receptacle fire | Non-EMS |
| 160 | Special outside fire, other | Non-EMS |
| 161 | Outside storage fire | Non-EMS |
| 162 | Outside equipment fire | Non-EMS |
| 163 | Outside gas or vapor combustion explosion | Non-EMS |
| 300 | Rescue, EMS call, other | EMS |
| 311 | Medical assist, assist EMS crew | EMS |
| 321 | EMS call, excluding vehicle accident with injury | EMS |
| 322 | Vehicle accident with injuries | EMS |
| 324 | Motor Vehicle Accident, No Injuries | EMS |
| 331 | Lock-in (if lock out, use 511) | Non-EMS |
| 340 | Search, other | Non-EMS |
| 350 | Extrication, rescue, other | Non-EMS |
| 351 | Extrication of victim(s) from building/structure | Non-EMS |
| 352 | Extrication of victim(s) from vehicle | Non-EMS |
| 353 | Removal of victim(s) from stalled elevator | Non-EMS |
| 355 | Confined space rescue | Non-EMS |
| 357 | Extrication of victim(s) from machinery | Non-EMS |
| 371 | Electrocution or potential electrocution | EMS |
| 400 | Hazardous condition, other | Non-EMS |
| 410 | Flammable gas or liquid condition, other | Non-EMS |
| 411 | Gasoline or other flammable liquid spill | Non-EMS |
| 412 | Gas leak | Non-EMS |
| 413 | Oil or other combustible liquid spill | Non-EMS |
| 421 | Chemical hazard ( no spill or leak ) | Non-EMS |
| 422 | Chemical spill or leak | Non-EMS |

| Code | Description | Call Type |
|---|---|---|
| 423 | Refrigeration leak | Non-EMS |
| 424 | Carbon monoxide incident | Non-EMS |
| 431 | Radiation leak, radioactive material | Non-EMS |
| 440 | Electrical wiring/equipment problem, other | Non-EMS |
| 441 | Heat from short circuit (wiring), defective/worn | Non-EMS |
| 442 | Overheated motor | Non-EMS |
| 443 | Light ballast breakdown | Non-EMS |
| 444 | Power line down | Non-EMS |
| 445 | Arcing, shorted electrical equipment | Non-EMS |
| 451 | Police Assist | Non-EMS |
| 460 | Accident, potential accident, other | Non-EMS |
| 461 | Building or structure weakened or collapsed | Non-EMS |
| 462 | Aircraft standby | Non-EMS |
| 463 | Vehicle accident, general cleanup | Non-EMS |
| 481 | Attempt to burn | Non-EMS |
| 500 | Service call, other | Non-EMS |
| 510 | Person in distress, other | Non-EMS |
| 511 | Lock-out | Non-EMS |
| 520 | Water problem, other | Non-EMS |
| 521 | Water evacuation | Non-EMS |
| 522 | Water or steam leak | Non-EMS |
| 531 | Smoke or odor removal | Non-EMS |
| 542 | Animal rescue | Non-EMS |
| 550 | Public service assistance, other | Non-EMS |
| 551 | Assist police or other governmental agency | Non-EMS |
| 552 | Police matter | Non-EMS |
| 553 | Public service | Non-EMS |
| 554 | Assist invalid | Non-EMS |
| 555 | Defective elevator | Non-EMS |
| 561 | Unauthorized burning | Non-EMS |
| 600 | Good intent call, other | Non-EMS |
| 611 | Dispatched & canceled en route | Non-EMS |
| 6112 | EMS Dispatched & canceled in route | EMS |
| 621 | Wrong location | Non-EMS |
| 622 | No incident found upon arrival | Non-EMS |
| 631 | Authorized controlled burning | Non-EMS |
| 632 | Prescribed fire | Non-EMS |
| 650 | Steam, other gas mistaken for smoke, other | Non-EMS |
| 651 | Smoke scare, odor of smoke | Non-EMS |
| 652 | Steam, vapor, fog or dust thought to be smoke | Non-EMS |
| 653 | Barbecue, tar kettle | Non-EMS |
| 671 | Hazmat release investigation w/no hazmat | Non-EMS |
| 672 | Biological hazard investigation, none found | Non-EMS |
| 700 | False alarm or false call, other | Non-EMS |
| 710 | Malicious, mischievous false call, other | Non-EMS |

| Code | Description | Call Type |
|---|---|---|
| 711 | Municipal alarm system, malicious false alarm | Non-EMS |
| 712 | Direct tie to FD, malicious/false alarm | Non-EMS |
| 714 | Central station, malicious false alarm | Non-EMS |
| 715 | Local alarm system, malicious false alarm | Non-EMS |
| 730 | System malfunction | Non-EMS |
| 731 | Sprinkler activation due to malfunction | Non-EMS |
| 732 | Extinguishing system activation due to malfunction | Non-EMS |
| 733 | Smoke detector activation due to malfunction | Non-EMS |
| 734 | Heat detector activation due to malfunction | Non-EMS |
| 735 | Alarm system sounded due to malfunction | Non-EMS |
| 736 | CO detector activation due to malfunction | Non-EMS |
| 740 | Unintentional transmission of alarm, other | Non-EMS |
| 741 | Sprinkler activation, no fire - unintentional | Non-EMS |
| 742 | Extinguishing system activation | Non-EMS |
| 743 | Smoke detector activation, no fire - unintentional | Non-EMS |
| 744 | Detector activation, no fire - unintentional | Non-EMS |
| 745 | Alarm system sounded, no fire - unintentional | Non-EMS |
| 746 | Carbon monoxide detector activation, no CO | Non-EMS |
| 751 | ALARM-Biological hazard, malicious false report | Non-EMS |
| 814 | Lightning strike (no fire) | Non-EMS |
| 900 | Special type of incident, other, Dumpster fire | Non-EMS |
| 911 | Citizen complaint | Non-EMS |

# Appendix B

FIXED PROPERTY USE CODES AND USE DESCRIPTIONS

| Code | Description | Hazard Class Assignment |
|---|---|---|
| 110 | FIXED USE RECREATION, OTHER | HAZARD CLASS 5 |
| 111 | BOWLING ESTABLISHMENT | HAZARD CLASS 5 |
| 112 | BILLIARD CENTER | HAZARD CLASS 5 |
| 115 | ROLLER RINK | HAZARD CLASS 5 |
| 116 | SWIMMING FACILITY | HAZARD CLASS 5 |
| 122 | EXHIBITION HALL | HAZARD CLASS 4 |
| 123 | ARENA/STADIUM | HAZARD CLASS 7 |
| 124 | PLAYGROUND | HAZARD CLASS 7 |
| 129 | AMUSEMENT CENTER INDOOR/OUTDOOR | HAZARD CLASS 5 |
| 131 | CHURCH/CHAPEL | HAZARD CLASS 6 |
| 134 | FUNERAL PARLOR/CHAPEL | HAZARD CLASS 6 |
| 140 | CLUBS, OTHER | HAZARD CLASS 7 |
| 141 | ATHLETIC CLUB/YMCA | HAZARD CLASS 7 |
| 142 | CLUB HOUSE | HAZARD CLASS 7 |
| 150 | PUBLIC, GOVT, OTHER | HAZARD CLASS 6 |
| 151 | LIBRARY | HAZARD CLASS 7 |
| 155 | COURT ROOM | HAZARD CLASS 6 |
| 160 | EATING/DRINKING PLACES | HAZARD CLASS 5 |
| 161 | RESTAURANT | HAZARD CLASS 5 |
| 162 | NIGHTCLUB | HAZARD CLASS 5 |
| 170 | TERMINALS OTHER | HAZARD CLASS 4 |
| 171 | AIRPORT TERMINAL | HAZARD CLASS 4 |
| 173 | BUS TERMINAL | HAZARD CLASS 4 |
| 180 | THEATER, STUDIO OTHER | HAZARD CLASS 7 |
| 181 | PERFORMANCE THEATER | HAZARD CLASS 4 |
| 182 | AUDITORIUM, CONCERT HALL | HAZARD CLASS 4 |
| 183 | MOVIE THEATER | HAZARD CLASS 4 |
| 185 | RADIO, TV STUDIO | HAZARD CLASS 6 |
| 200 | EDUCATIONAL PROPERTY OTHER | HAZARD CLASS 7 |
| 210 | SCHOOLS NON-ADULT OTHER | HAZARD CLASS 7 |
| 211 | PRE-SCHOOL | HAZARD CLASS 7 |
| 213 | ELEMENTARY SCHOOL | HAZARD CLASS 7 |
| 215 | HIGH SCHOOL/JR HIGH/MIDDLE SCHOOL | HAZARD CLASS 7 |
| 241 | COLLEGE/UNIVERSITY | HAZARD CLASS 7 |
| 254 | DAY CARE-IN COMMERCIAL PROPERTY | HAZARD CLASS 7 |
| 255 | DAY CARE-IN RESIDENCE-LICENSED | HAZARD CLASS 7 |
| 300 | HEALTHCARE/DETENTION OTHER | HAZARD CLASS 7 |
| 311 | CARE OF THE AGED/NURSING STAFF | HAZARD CLASS 7 |
| 321 | MENTAL RETARDATION/DEVELOPMENT DISABILITY FACILITY | HAZARD CLASS 7 |
| 322 | ALCOHOL/SUBSTANCE ABUSE RECOVERY CENTER | HAZARD CLASS 7 |
| 323 | ASYLUM/MENTAL INSTITUTION | HAZARD CLASS 7 |
| 331 | HOSPITAL-MEDICAL/PSYCHIATRIC | HAZARD CLASS 7 |
| 340 | CLINICS, OTHER | HAZARD CLASS 6 |
| 341 | CLINIC, CLINIC-TYPE INFIRMARY | HAZARD CLASS 6 |
| 342 | DOCTOR/DENTIST/SURGEONS OFFICE | HAZARD CLASS 6 |

| Code | Description | Hazard Class Assignment |
|---|---|---|
| 361 | JAIL/PRISON - NOT JUVENILE | HAZARD CLASS 7 |
| 365 | POLICE STATION | HAZARD CLASS 7 |
| 400 | RESIDENTIAL OTHER | HAZARD CLASS 7 |
| 419 | ONE- AND TWO-FAMILY DWELLING | HAZARD CLASS 7 |
| 429 | MULTI-FAMILY DWELLINGS | HAZARD CLASS 7 |
| 439 | ROOMING, BOARDING, RESIDENTIAL HOTELS | HAZARD CLASS 7 |
| 449 | HOTELS, MOTELS, INNS, LODGES | HAZARD CLASS 7 |
| 459 | RESIDENTIAL BOARD AND CARE | HAZARD CLASS 7 |
| 460 | DORMITORIES OTHER | HAZARD CLASS 7 |
| 462 | FRATERNITY, SORORITY HOUSE | HAZARD CLASS 7 |
| 464 | MILITARY BARRACKS/DORMITORY | HAZARD CLASS 7 |
| 500 | MERCANTILE PROPERTIES OTHER | HAZARD CLASS 4 |
| 511 | CONVENIENCE STORE | HAZARD CLASS 6 |
| 519 | FOOD, BEVERAGE SALES, GROCERY STORE | HAZARD CLASS 4 |
| 529 | TEXTILE, WEARING APPAREL SALES | HAZARD CLASS 4 |
| 539 | HOUSEHOLD GOODS SALES, REPAIRS | HAZARD CLASS 4 |
| 549 | SPECIALTY SHOPS | HAZARD CLASS 4 |
| 557 | BARBER, BEAUTY SHOP, PERSONAL SERVICES | HAZARD CLASS 4 |
| 559 | RECREATIONAL, HOBBY,HOME SALES, PET STORE | HAZARD CLASS 4 |
| 564 | SELF-SERVICE LAUNDRY/DRY CLEANING | HAZARD CLASS 4 |
| 569 | PROFESSIONAL SUPPLIES | HAZARD CLASS 4 |
| 571 | SERVICE STATION | HAZARD CLASS 6 |
| 579 | MOTOR VEHICLE, BOAT SALES/SERVICE/REPAIRS | HAZARD CLASS 4 |
| 580 | GENERAL ITEM STORES, OTHER | HAZARD CLASS 4 |
| 581 | DEPARTMENT STORE | HAZARD CLASS 4 |
| 592 | BANK W/FIRST STORY BANKING FACILITY | HAZARD CLASS 7 |
| 593 | MEDICAL, RESEARCH, SCIENTIFIC OFFICE | HAZARD CLASS 6 |
| 596 | POST OFFICE OR MAILING FORMS | HAZARD CLASS 6 |
| 599 | BUSINESS OFFICES | HAZARD CLASS 7 |
| 610 | ENERGY PRODUCTION, OTHER | HAZARD CLASS 6 |
| 615 | ELECTRIC GENERATING PLANT | HAZARD CLASS 6 |
| 629 | LABORATORIES | HAZARD CLASS 6 |
| 631 | NATIONAL DEFENSE SITE/MILITARY SITE | HAZARD CLASS 6 |
| 635 | COMPUTER, DATA PROCESSING CNTR | HAZARD CLASS 7 |
| 639 | COMMUNICATIONS CENTER | HAZARD CLASS 6 |
| 640 | UTILITY, ENERGY DISTRIBUTION CNTR OTHER | HAZARD CLASS 6 |
| 642 | ELECTRIC TRANSMISSION DISTIB. SYSTEM | HAZARD CLASS 6 |
| 644 | GAS DISTRIBUTION SYSTEM, PIPELINE | HAZARD CLASS 6 |
| 647 | WATER UTILITY | HAZARD CLASS 6 |
| 648 | SANITARY SERVICE | HAZARD CLASS 6 |
| 655 | CROPS, ORCHARDS | NOT USED |
| 669 | FOREST, TIMBERLAND | NOT USED |
| 679 | MINING, QUARRYING/NATURAL RAW MATERIALS | HAZARD CLASS 3 |
| 700 | MANUFACTURING PROPERTY, PROCESSING | HAZARD CLASS 5 |
| 800 | STORAGE PROPERTY OTHER | HAZARD CLASS 4 |

| Code | Description | Hazard Class Assignment |
|---|---|---|
| 807 | OUTSIDE MATERIAL STORAGE AREA | NOT USED |
| 808 | SHED | NOT USED |
| 849 | OUTSIDE STORAGE TANK | NOT USED |
| 880 | VEHICLE STORAGE; OTHER | HAZARD CLASS 6 |
| 881 | RESIDENTIAL PARKING STORAGE | HAZARD CLASS 6 |
| 882 | GENERAL VEHICLE PARKING GARAGE | HAZARD CLASS 6 |
| 888 | FIRE STATIONS | HAZARD CLASS 7 |
| 891 | GENERAL WAREHOUSE | HAZARD CLASS 4 |
| 900 | OUTSIDE, SPECIAL PROPERTIES; OTHER | NOT USED |
| 919 | DUMP SANITARY LANDFILL | NOT USED |
| 931 | OPEN LAND, FIELD | NOT USED |
| 935 | CAMPSITE WITH UTILITIES | NOT USED |
| 936 | VACANT LOT | NOT USED |
| 938 | GRADED AND CARED FOR PLOTS OF LAND | NOT USED |
| 960 | STREET, OTHER | NOT USED |
| 961 | DIVIDED HIGHWAY, HIGHWAY | NOT USED |
| 962 | PAVED PUBLIC STREET, RESIDENTIAL | NOT USED |
| 963 | PAVED PRIVATE STREET, COMMERCIAL | NOT USED |
| 965 | UNCOVERED PARKING AREA | NOT USED |
| 972 | AIRCRAFT RUNWAY | HAZARD CLASS 4 |
| 974 | AIRCRAFT LOADING AREA | HAZARD CLASS 4 |
| 981 | CONSTRUCTION SITE | NOT USED |
| 983 | PIPELINE, POWER LINE RIGHT OF WAY | NOT USED |
| 984 | INDUSTRIAL PLANT YARD | HAZARD CLASS 6 |
| NNN | NONE | NOT USED |
| UUU | UNDETERMINED | NOT USED |

# Appendix C

ALACHUA COUNTY BUILDING IMPROVEMENT CODES

| Code | Description | Hazard Class Assignment | Institutional Classification |
|---|---|---|---|
| 0100 | SINGLE FAMILY | HAZARD CLASS 7 | NO |
| 0109 | SFR NON SOH | HAZARD CLASS 7 | NO |
| 0200 | SFR - MFG | HAZARD CLASS 7 | NO |
| 0209 | SFR - MFG | HAZARD CLASS 7 | NO |
| 0300 | SFR - ZERO LOT | HAZARD CLASS 7 | NO |
| 0309 | SFR - ZERO LOT | HAZARD CLASS 7 | NO |
| 0400 | CONDO | HAZARD CLASS 7 | NO |
| 0500 | NO VALUE | NOT USED | NO |
| 0600 | RENTAL UNIT | HAZARD CLASS 7 | NO |
| 0609 | RENTAL UNIT | HAZARD CLASS 7 | NO |
| 0700 | MH PRE 1977 | HAZARD CLASS 7 | NO |
| 0709 | MH PRE 1977 | HAZARD CLASS 7 | NO |
| 0800 | MH POST 1977 | HAZARD CLASS 7 | NO |
| 0809 | MH POST 1977 | HAZARD CLASS 7 | NO |
| 0900 | EXC RESIDENTIAL | HAZARD CLASS 7 | NO |
| 0909 | EXC RESIDENTIAL | HAZARD CLASS 7 | NO |
| 1000 | CONDO LOW RISE | HAZARD CLASS 7 | NO |
| 1009 | CONDO LOW RISE | HAZARD CLASS 7 | NO |
| 1100 | CONDO/APT | HAZARD CLASS 7 | NO |
| 1109 | CONDO/APT | HAZARD CLASS 7 | NO |
| 1200 | CONDO TOWNHOUSE | HAZARD CLASS 7 | NO |
| 1209 | CONDO TOWNHOUSE | HAZARD CLASS 7 | NO |
| 1300 | CONDOMINIUM | HAZARD CLASS 7 | NO |
| 1309 | CONDOMINIUM | HAZARD CLASS 7 | NO |
| 1400 | COOP  LOW RISE | HAZARD CLASS 7 | NO |
| 1409 | COOP  LOW RISE | HAZARD CLASS 7 | NO |
| 1500 | COOP HIGH RISE | HAZARD CLASS 7 | NO |
| 1600 | COOP TOWN HOUSE | HAZARD CLASS 7 | NO |
| 1700 | DORMITORY | HAZARD CLASS 7 | YES |
| 1800 | INTERV LO RISE | HAZARD CLASS 7 | NO |
| 1900 | INTERV HI RISE | HAZARD CLASS 7 | NO |
| 2000 | INTERV TOWNHOUS | HAZARD CLASS 7 | NO |
| 2200 | MFR LOW RISE | HAZARD CLASS 7 | NO |
| 2209 | MFR LOW RISE | HAZARD CLASS 7 | NO |
| 2300 | MFR HI RISE | HAZARD CLASS 7 | NO |
| 2309 | MFR HI RISE | HAZARD CLASS 7 | NO |
| 2400 | MFR TOWNHOUSE | HAZARD CLASS 7 | NO |
| 2409 | MFR TOWNHOUSE | HAZARD CLASS 7 | NO |
| 2500 | MFR ROW | HAZARD CLASS 7 | NO |
| 2509 | MFR ROW | HAZARD CLASS 7 | NO |
| 2600 | APARTMENT | HAZARD CLASS 7 | NO |
| 2609 | APARTMENT | HAZARD CLASS 7 | NO |
| 2700 | DUPLEX | HAZARD CLASS 7 | NO |
| 2709 | DUPLEX | HAZARD CLASS 7 | NO |

| Code | Description | Hazard Class Assignment | Institutional Classification |
|---|---|---|---|
| 2800 | TRI/QUADRAPLEX | HAZARD CLASS 7 | NO |
| 2809 | TRI/QUADRAPLEX | HAZARD CLASS 7 | NO |
| 2900 | EXCEP DWELLING | HAZARD CLASS 7 | NO |
| 2909 | EXCEP DWELLING | HAZARD CLASS 7 | NO |
| 3500 | STORE RETAIL | HAZARD CLASS 4 | NO |
| 3600 | STORE DISCOUNT | HAZARD CLASS 4 | NO |
| 3700 | STORE DEPT | HAZARD CLASS 4 | NO |
| 3800 | SH CTR NBRHD | HAZARD CLASS 4 | NO |
| 3900 | SH CTR COMMITY | HAZARD CLASS 4 | NO |
| 4000 | SH CTR REGIONAL | HAZARD CLASS 4 | NO |
| 4100 | SH CTR SUPREGNL | HAZARD CLASS 4 | NO |
| 4200 | SUPERMARKET | HAZARD CLASS 4 | NO |
| 4300 | SUPMKT NBRHD/CV | HAZARD CLASS 4 | NO |
| 4400 | HTL/MTL FULL SER | HAZARD CLASS 7 | NO |
| 4500 | MOTEL/COURT | HAZARD CLASS 7 | NO |
| 4600 | MOTEL LOW RISE | HAZARD CLASS 7 | NO |
| 4700 | MOTEL HI RISE | HAZARD CLASS 7 | NO |
| 4900 | OFFICE LOW RISE | HAZARD CLASS 7 | NO |
| 5000 | OFFICE HI RISE | HAZARD CLASS 7 | NO |
| 5100 | OFFICE CONDO | HAZARD CLASS 7 | NO |
| 5152 | MEDICAL CONDO | HAZARD CLASS 6 | NO |
| 5200 | MEDICAL OFFICE | HAZARD CLASS 6 | NO |
| 5300 | HOSPITAL | HAZARD CLASS 7 | YES |
| 5400 | NURS/CONV HOME | HAZARD CLASS 7 | YES |
| 5500 | NIGHTCLUB/BAR | HAZARD CLASS 5 | NO |
| 5600 | RESTAURANT | HAZARD CLASS 5 | NO |
| 5700 | REST FAST FOOD | HAZARD CLASS 5 | NO |
| 5800 | BOWLING ALLEY | HAZARD CLASS 5 | NO |
| 5900 | ARENA | HAZARD CLASS 4 | NO |
| 6000 | AUDITORIUM | HAZARD CLASS 4 | NO |
| 6100 | THEATER | HAZARD CLASS 4 | NO |
| 6200 | BANK | HAZARD CLASS 7 | NO |
| 6300 | FINANCIAL | HAZARD CLASS 7 | NO |
| 6400 | SERV STATION | HAZARD CLASS 6 | NO |
| 6500 | PARKING GARAGE | HAZARD CLASS 6 | NO |
| 6600 | VEH SLS/REPAIR | HAZARD CLASS 4 | NO |
| 6700 | SERVICE SHOP | HAZARD CLASS 4 | NO |
| 6800 | MORTUARY | HAZARD CLASS 6 | YES |
| 6900 | CLUBHOUSE | HAZARD CLASS 7 | YES |
| 6901 | CLUBHOUSE (COMMERCIAL) | HAZARD CLASS 7 | NO |
| 7000 | COLD STRG/PCKG | HAZARD CLASS 5 | NO |
| 7100 | TRANSPOR TERMNL | HAZARD CLASS 4 | NO |
| 7200 | DAYCARE | HAZARD CLASS 7 | NO |
| 7300 | GYMNASIUM | HAZARD CLASS 7 | YES |

| Code | Description | Hazard Class Assignment | Institutional Classification |
|---|---|---|---|
| 7400 | FIRE STA-STAFFED | HAZARD CLASS 7 | YES |
| 7500 | FIRE STA-VOL | HAZARD CLASS 7 | YES |
| 7600 | ASSISTED LIVING | HAZARD CLASS 7 | YES |
| 7700 | EXCEP OFFICE | NOT USED | NO |
| 7800 | EXCEP STORE | NOT USED | NO |
| 7900 | EXCEP COMMERC | NOT USED | NO |
| 8000 | MFG LIGHT | HAZARD CLASS 5 | NO |
| 8100 | MFG HEAVY | HAZARD CLASS 4 | NO |
| 8200 | WRHSE DISTRIB. | HAZARD CLASS 4 | NO |
| 8250 | WRHSE DISTRIB MEGA | HAZARD CLASS 4 | NO |
| 8300 | WRHSE MINI | HAZARD CLASS 4 | NO |
| 8400 | WRHSE STORAGE | HAZARD CLASS 4 | NO |
| 8500 | AIRCRAFT HANGAR | HAZARD CLASS 4 | NO |
| 8600 | BARNS | HAZARD CLASS 5 | NO |
| 8700 | PREFAB METAL | HAZARD CLASS 4 | NO |
| 8800 | SHED | NOT USED | NO |
| 8900 | EXCEP INDUST | NOT USED | NO |
| 9000 | SCHOOL | HAZARD CLASS 7 | YES |
| 9100 | CHURCH | HAZARD CLASS 6 | YES |
| 9200 | EDU/RELIG MISC | HAZARD CLASS 6 | YES |
| 9300 | GOVMENTAL BLDG | HAZARD CLASS 6 | YES |
| 9301 | POST OFFICE | HAZARD CLASS 6 | NO |
| 9400 | LIBRARY | HAZARD CLASS 5 | NO |
| 9500 | CONVENTION CTR | HAZARD CLASS 4 | NO |
| MHPK | MOBILE HOME PARK UNITS | HAZARD CLASS 7 | NO |
| RVPK | RV PARK UNITS | HAZARD CLASS 7 | NO |

# Appendix D

FLORIDA DEPARTMENT OF REVENUE PROPERTY USE CODES

| Code | DESCRIPTION |
|---|---|
| 0000 | VACANT |
| 0100 | SINGLE FAMILY |
| 0200 | MOBILE HOME |
| 0300 | MULTIFAMILY |
| 0400 | CONDOMINIUM |
| 0500 | COOPERATIVE |
| 0600 | RETIREMENT |
| 0700 | MISC. RESIDENCE |
| 0800 | MFR <10 UNITS |
| 0900 | COMMON AREA |
| 1000 | VACANT COMM |
| 1100 | STORES |
| 1200 | STORE/OFF/RES |
| 1300 | DEPT STORE |
| 1400 | SUPERMARKET |
| 1500 | SH CTR REGIONAL |
| 1600 | SH CTR CMMITY |
| 1601 | SH CTR NBHD |
| 1700 | OFFICE 1 STORY |
| 1701 | POST OFFICE |
| 1800 | OFF MULTISTORY |
| 1900 | PROF OFFICES |
| 2000 | AIRPORT |
| 2100 | RESTAURANT |
| 2200 | REST, DRIVE-IN |
| 2300 | FINANCIAL |
| 2400 | INSURANCE |
| 2500 | SERVICE SHOPS |
| 2600 | SERV STATIONS |
| 2700 | AUTO SALES |
| 2800 | PKG LOT (COMM) |
| 2801 | MOBILE HOME PARK |
| 2900 | WHOLESALER |
| 3000 | FLORIST |
| 3100 | DRV-IN THEATER |
| 3200 | THEATER |
| 3300 | NIGHT CLUBS |
| 3400 | BOWLING ALLEY |
| 3500 | TOURIST ATTRACTION |
| 3600 | CAMPS |
| 3700 | RACETRACK |
| 3800 | GOLF COURSE |
| 3900 | MOTEL |
| 4000 | VACANT INDUSTRIAL |
| 4100 | LIGHT MFG |

| Code | DESCRIPTION |
|---|---|
| 4200 | HEAVY MFG |
| 4300 | LUMBER YD/MILL |
| 4400 | PACKING |
| 4500 | BOTTLER |
| 4600 | FOOD PROCESSING |
| 4700 | MIN PROCESSING |
| 4800 | WAREH/DIST TERM |
| 4900 | OPEN STORAGE |
| 5000 | IMPROVED AGRI |
| 5100 | CROPSOIL CLASS1 |
| 5200 | CROPSOIL CLASS2 |
| 5300 | CROPSOIL CLASS3 |
| 5400 | TMBR SI 90+ |
| 5500 | TMBR SI 80-89 |
| 5600 | TMBR SI 70-79 |
| 5700 | TMBR SI 60-69 |
| 5800 | TMBR SI 50-59 |
| 5900 | TMBR NOT CLSSFD |
| 6000 | GRZGSOIL CLASS1 |
| 6100 | GRZGSOIL CLASS2 |
| 6200 | GRZGSOIL CLASS3 |
| 6300 | GRZGSOIL CLASS4 |
| 6400 | GRZGSOIL CLASS5 |
| 6500 | GRZGSOIL CLASS6 |
| 6600 | ORCHARD GROVES |
| 6700 | POUL/BEES/FISH |
| 6800 | DAIRIES/FEEDLTS |
| 6900 | ORN/MISC AGRI |
| 7000 | VACANT INSTITUTIONAL |
| 7100 | CHURCHES |
| 7200 | PRV SCHL/COLL |
| 7300 | PRV HOSPITAL |
| 7400 | NURSING HOME |
| 7500 | ORPHNG/NON-PROF |
| 7600 | MORT/CEMETERY |
| 7700 | CLB/LDG/UN HALL |
| 7800 | SANI/ REST HOME |
| 7900 | CULTURAL |
| 8000 | WATER MGT DIST |
| 8100 | MILITARY |
| 8200 | FOREST/PK/REC |
| 8300 | PUB CTY SCHOOL |
| 8400 | COLLEGE |
| 8500 | HOSPITAL |
| 8600 | CTY INC NONMUNI |

| Code | DESCRIPTION |
|---|---|
| 8700 | STATE |
| 8800 | FEDERAL |
| 8900 | MUNICIPAL |
| 9000 | LEASEHOLD INT |
| 9100 | UTILITY |
| 9200 | MING/PET/GASLND |
| 9300 | SUBSURF RIGHTS |
| 9400 | RIGHT-OF-WAY |
| 9500 | RIVERS/LAKES |
| 9600 | SEWG/WASTE LAND |
| 9700 | OUTDR REC/PK LD |
| 9800 | CENTRALLY ASSD |
| 9900 | ACRG NOT ZND AG |
| 9999 | EXEMPT |

# Appendix E

FIRE PROTECTION UNIT ASSIGNMENT TABLE

| Hazard Class Square Foot Tier | Minimum Square Feet | Maximum Square Feet | Equivalent Fire Protection Units | Factored Fire Protection Units |
|---|---|---|---|---|
| CLASS 7 TIER 1 | 100 | 1,199 | 1.0 | 0.9901 |
| CLASS 7 TIER 2 | 1,200 | 1,999 | 1.5 | 1.4852 |
| CLASS 7 TIER 3 | 2,000 | 3,099 | 2.0 | 1.9802 |
| CLASS 7 TIER 4 | 3,100 | 4,499 | 2.5 | 2.4753 |
| CLASS 7 TIER 5 | 4,500 | 6,099 | 3.0 | 2.9703 |
| CLASS 7 TIER 6 | 6,100 | 7,999 | 3.5 | 3.4654 |
| CLASS 7 TIER 7 | 8,000 | 9,999 | 4.0 | 3.9604 |
| CLASS 7 TIER 8 | 10,000 | 12,399 | 4.5 | 4.4555 |
| CLASS 7 TIER 9 | 12,400 | 14,999 | 5.0 | 4.9505 |
| CLASS 7 TIER 10 | 15,000 | 17,799 | 5.5 | 5.4456 |
| CLASS 7 TIER 11 | 17,800 | 20,899 | 6.0 | 5.9406 |
| CLASS 7 TIER 12 | 20,900 | 24,199 | 6.5 | 6.4357 |
| CLASS 7 TIER 13 | 24,200 | 27,799 | 7.0 | 6.9307 |
| CLASS 7 TIER 14 | 27,800 | 31,699 | 7.5 | 7.4258 |
| CLASS 7 TIER 15 | 31,700 | 35,699 | 8.0 | 7.9208 |
| CLASS 7 TIER 16 | 35,700 | 39,999 | 8.5 | 8.4159 |
| CLASS 7 TIER 17 | 40,000 | 44,599 | 9.0 | 8.9109 |
| CLASS 7 TIER 18 | 44,600 | 49,399 | 9.5 | 9.4060 |
| CLASS 7 TIER 19 | 49,400 | 54,499 | 10.0 | 9.9010 |
| CLASS 7 TIER 20 | 54,500 | 59,799 | 10.5 | 10.3961 |
| CLASS 7 TIER 21 | 59,800 | 65,399 | 11.0 | 10.8911 |
| CLASS 7 TIER 22 | 65,400 | 71,199 | 11.5 | 11.3862 |
| CLASS 7 TIER 23 | 71,200 | 77,199 | 12.0 | 11.8812 |
| CLASS 7 TIER 24 | 77,200 | 83,499 | 12.5 | 12.3763 |
| CLASS 7 TIER 25 | 83,500 | 89,999 | 13.0 | 12.8713 |
| CLASS 7 TIER 26 | 90,000 | 96,799 | 13.5 | 13.3664 |
| CLASS 7 TIER 27 | 96,800 | 103,899 | 14.0 | 13.8614 |
| CLASS 7 TIER 28 | 103,900 | 111,199 | 14.5 | 14.3565 |
| CLASS 7 TIER 29 | 111,200 | 118,699 | 15.0 | 14.8515 |
| CLASS 7 TIER 30 | 118,700 | 126,499 | 15.5 | 15.3466 |
| CLASS 7 TIER 31 | 126,500 | 134,499 | 16.0 | 15.8416 |
| CLASS 7 TIER 32 | 134,500 | 142,799 | 16.5 | 16.3367 |
| CLASS 7 TIER 33 | 142,800 | 151,299 | 17.0 | 16.8317 |
| CLASS 7 TIER 34 | 151,300 | 159,999 | 17.5 | 17.3268 |
| CLASS 7 TIER 35 | 160,000 | 169,099 | 18.0 | 17.8218 |
| CLASS 7 TIER 36 | 169,100 | 178,299 | 18.5 | 18.3169 |
| CLASS 7 TIER 37 | 178,300 | 187,799 | 19.0 | 18.8119 |
| CLASS 7 TIER 38 | 187,800 | 197,599 | 19.5 | 19.3070 |
| CLASS 7 TIER 39 | 197,600 | 207,599 | 20.0 | 19.8020 |
| CLASS 7 TIER 40 | 207,600 | 217,799 | 20.5 | 20.2971 |
| CLASS 7 TIER 41 | 217,800 | 228,299 | 21.0 | 20.7921 |
| CLASS 7 TIER 42 | 228,300 | 239,099 | 21.5 | 21.2872 |
| CLASS 7 TIER 43 | 239,100 | 249,999 | 22.0 | 21.7822 |
| CLASS 7 TIER 44 | 250,000 | 261,299 | 22.5 | 22.2773 |

| Hazard Class Square Foot Tier | Minimum Square Feet | Maximum Square Feet | Equivalent Fire Protection Units | Factored Fire Protection Units |
|---|---|---|---|---|
| CLASS 7 TIER 45 | 261,300 | 272,799 | 23.0 | 22.7723 |
| CLASS 7 TIER 46 | 272,800 | 284,499 | 23.5 | 23.2674 |
| CLASS 7 TIER 47 | 284,500 | 296,499 | 24.0 | 23.7624 |
| CLASS 7 TIER 48 | 296,500 | 308,699 | 24.5 | 24.2575 |
| CLASS 7 TIER 49 | 308,700 | 321,199 | 25.0 | 24.7525 |
| CLASS 7 TIER 50 | 321,200 | 333,899 | 25.5 | 25.2476 |
| CLASS 7 TIER 51 | 333,900 | 346,799 | 26.0 | 25.7426 |
| CLASS 7 TIER 52 | 346,800 | 359,999 | 26.5 | 26.2377 |
| CLASS 7 TIER 53 | 360,000 | 373,499 | 27.0 | 26.7327 |
| CLASS 7 TIER 54 | 373,500 | 387,199 | 27.5 | 27.2278 |
| CLASS 7 TIER 55 | 387,200 | 401,199 | 28.0 | 27.7228 |
| CLASS 7 TIER 56 | 401,200 | 415,399 | 28.5 | 28.2179 |
| CLASS 7 TIER 57 | 415,400 | 429,799 | 29.0 | 28.7129 |
| CLASS 7 TIER 58 | 429,800 | 444,499 | 29.5 | 29.2080 |
| CLASS 7 TIER 59 | 444,500 | 459,399 | 30.0 | 29.7030 |
| CLASS 7 TIER 60 | 459,400 | 474,599 | 30.5 | 30.1981 |
| CLASS 7 TIER 61 | 474,600 | 489,999 | 31.0 | 30.6931 |
| CLASS 7 TIER 62 | 490,000 | 505,699 | 31.5 | 31.1882 |
| CLASS 7 TIER 63 | 505,700 | 521,699 | 32.0 | 31.6832 |
| CLASS 7 TIER 64 | 521,700 | 537,799 | 32.5 | 32.1783 |
| CLASS 7 TIER 65 | 537,800 | 554,199 | 33.0 | 32.6733 |
| CLASS 7 TIER 66 | 554,200 | 570,899 | 33.5 | 33.1684 |
| CLASS 7 TIER 67 | 570,900 | 587,799 | 34.0 | 33.6634 |
| CLASS 7 TIER 68 | 587,800 | 604,999 | 34.5 | 34.1585 |
| CLASS 7 TIER 69 | 605,000 | 622,399 | 35.0 | 34.6535 |
| CLASS 7 TIER 70 | 622,400 | 639,999 | 35.5 | 35.1486 |
| CLASS 7 TIER 71 | 640,000 | 657,999 | 36.0 | 35.6436 |
| CLASS 7 TIER 72 | 658,000 | 676,099 | 36.5 | 36.1387 |
| CLASS 7 TIER 73 | 676,100 | 694,499 | 37.0 | 36.6337 |
| CLASS 7 TIER 74 | 694,500 | 713,099 | 37.5 | 37.1288 |
| CLASS 7 TIER 75 | 713,100 | 731,999 | 38.0 | 37.6238 |
| CLASS 7 TIER 76 | 732,000 | 751,199 | 38.5 | 38.1189 |
| CLASS 7 TIER 77 | 751,200 | 770,499 | 39.0 | 38.6139 |
| CLASS 7 TIER 78 | 770,500 | 790,199 | 39.5 | 39.1090 |
| CLASS 7 TIER 79 | 790,200 | 999,999,999 | 40.0 | 39.6040 |
| CLASS 6 TIER 1 | 100 | 899 | 1.0 | 1.6011 |
| CLASS 6 TIER 2 | 900 | 1,599 | 1.5 | 2.4017 |
| CLASS 6 TIER 3 | 1,600 | 2,499 | 2.0 | 3.2022 |
| CLASS 6 TIER 4 | 2,500 | 3,499 | 2.5 | 4.0028 |
| CLASS 6 TIER 5 | 3,500 | 4,799 | 3.0 | 4.8033 |
| CLASS 6 TIER 6 | 4,800 | 6,199 | 3.5 | 5.6039 |
| CLASS 6 TIER 7 | 6,200 | 7,799 | 4.0 | 6.4044 |
| CLASS 6 TIER 8 | 7,800 | 9,699 | 4.5 | 7.2050 |
| CLASS 6 TIER 9 | 9,700 | 11,699 | 5.0 | 8.0055 |

| Hazard Class Square Foot Tier | Minimum Square Feet | Maximum Square Feet | Equivalent Fire Protection Units | Factored Fire Protection Units |
|---|---|---|---|---|
| CLASS 6 TIER 10 | 11,700 | 13,899 | 5.5 | 8.8061 |
| CLASS 6 TIER 11 | 13,900 | 16,299 | 6.0 | 9.6066 |
| CLASS 6 TIER 12 | 16,300 | 18,899 | 6.5 | 10.4072 |
| CLASS 6 TIER 13 | 18,900 | 21,699 | 7.0 | 11.2077 |
| CLASS 6 TIER 14 | 21,700 | 24,699 | 7.5 | 12.0083 |
| CLASS 6 TIER 15 | 24,700 | 27,799 | 8.0 | 12.8088 |
| CLASS 6 TIER 16 | 27,800 | 31,199 | 8.5 | 13.6094 |
| CLASS 6 TIER 17 | 31,200 | 34,699 | 9.0 | 14.4099 |
| CLASS 6 TIER 18 | 34,700 | 38,499 | 9.5 | 15.2105 |
| CLASS 6 TIER 19 | 38,500 | 42,399 | 10.0 | 16.0110 |
| CLASS 6 TIER 20 | 42,400 | 46,599 | 10.5 | 16.8116 |
| CLASS 6 TIER 21 | 46,600 | 50,899 | 11.0 | 17.6121 |
| CLASS 6 TIER 22 | 50,900 | 55,399 | 11.5 | 18.4127 |
| CLASS 6 TIER 23 | 55,400 | 60,099 | 12.0 | 19.2132 |
| CLASS 6 TIER 24 | 60,100 | 64,999 | 12.5 | 20.0138 |
| CLASS 6 TIER 25 | 65,000 | 70,099 | 13.0 | 20.8143 |
| CLASS 6 TIER 26 | 70,100 | 75,399 | 13.5 | 21.6149 |
| CLASS 6 TIER 27 | 75,400 | 80,899 | 14.0 | 22.4154 |
| CLASS 6 TIER 28 | 80,900 | 86,599 | 14.5 | 23.2160 |
| CLASS 6 TIER 29 | 86,600 | 92,399 | 15.0 | 24.0165 |
| CLASS 6 TIER 30 | 92,400 | 98,499 | 15.5 | 24.8171 |
| CLASS 6 TIER 31 | 98,500 | 104,699 | 16.0 | 25.6176 |
| CLASS 6 TIER 32 | 104,700 | 111,199 | 16.5 | 26.4182 |
| CLASS 6 TIER 33 | 111,200 | 117,799 | 17.0 | 27.2187 |
| CLASS 6 TIER 34 | 117,800 | 124,599 | 17.5 | 28.0193 |
| CLASS 6 TIER 35 | 124,600 | 131,599 | 18.0 | 28.8198 |
| CLASS 6 TIER 36 | 131,600 | 138,799 | 18.5 | 29.6204 |
| CLASS 6 TIER 37 | 138,800 | 146,199 | 19.0 | 30.4209 |
| CLASS 6 TIER 38 | 146,200 | 153,799 | 19.5 | 31.2215 |
| CLASS 6 TIER 39 | 153,800 | 161,599 | 20.0 | 32.0220 |
| CLASS 6 TIER 40 | 161,600 | 169,599 | 20.5 | 32.8226 |
| CLASS 6 TIER 41 | 169,600 | 177,799 | 21.0 | 33.6231 |
| CLASS 6 TIER 42 | 177,800 | 186,099 | 21.5 | 34.4237 |
| CLASS 6 TIER 43 | 186,100 | 194,699 | 22.0 | 35.2242 |
| CLASS 6 TIER 44 | 194,700 | 203,399 | 22.5 | 36.0248 |
| CLASS 6 TIER 45 | 203,400 | 212,399 | 23.0 | 36.8253 |
| CLASS 6 TIER 46 | 212,400 | 221,499 | 23.5 | 37.6259 |
| CLASS 6 TIER 47 | 221,500 | 230,799 | 24.0 | 38.4264 |
| CLASS 6 TIER 48 | 230,800 | 240,299 | 24.5 | 39.2270 |
| CLASS 6 TIER 49 | 240,300 | 249,999 | 25.0 | 40.0275 |
| CLASS 6 TIER 50 | 250,000 | 259,899 | 25.5 | 40.8281 |
| CLASS 6 TIER 51 | 259,900 | 269,999 | 26.0 | 41.6286 |
| CLASS 6 TIER 52 | 270,000 | 280,299 | 26.5 | 42.4292 |
| CLASS 6 TIER 53 | 280,300 | 290,799 | 27.0 | 43.2297 |

| Hazard Class Square Foot Tier | Minimum Square Feet | Maximum Square Feet | Equivalent Fire Protection Units | Factored Fire Protection Units |
|---|---|---|---|---|
| CLASS 6 TIER 54 | 290,800 | 301,499 | 27.5 | 44.0303 |
| CLASS 6 TIER 55 | 301,500 | 312,299 | 28.0 | 44.8308 |
| CLASS 6 TIER 56 | 312,300 | 323,399 | 28.5 | 45.6314 |
| CLASS 6 TIER 57 | 323,400 | 334,599 | 29.0 | 46.4319 |
| CLASS 6 TIER 58 | 334,600 | 346,099 | 29.5 | 47.2325 |
| CLASS 6 TIER 59 | 346,100 | 357,699 | 30.0 | 48.0330 |
| CLASS 6 TIER 60 | 357,700 | 369,499 | 30.5 | 48.8336 |
| CLASS 6 TIER 61 | 369,500 | 381,499 | 31.0 | 49.6341 |
| CLASS 6 TIER 62 | 381,500 | 393,699 | 31.5 | 50.4347 |
| CLASS 6 TIER 63 | 393,700 | 406,099 | 32.0 | 51.2352 |
| CLASS 6 TIER 64 | 406,100 | 418,699 | 32.5 | 52.0358 |
| CLASS 6 TIER 65 | 418,700 | 431,499 | 33.0 | 52.8363 |
| CLASS 6 TIER 66 | 431,500 | 444,499 | 33.5 | 53.6369 |
| CLASS 6 TIER 67 | 444,500 | 457,699 | 34.0 | 54.4374 |
| CLASS 6 TIER 68 | 457,700 | 470,999 | 34.5 | 55.2380 |
| CLASS 6 TIER 69 | 471,000 | 484,599 | 35.0 | 56.0385 |
| CLASS 6 TIER 70 | 484,600 | 498,299 | 35.5 | 56.8391 |
| CLASS 6 TIER 71 | 498,300 | 512,299 | 36.0 | 57.6396 |
| CLASS 6 TIER 72 | 512,300 | 526,399 | 36.5 | 58.4402 |
| CLASS 6 TIER 73 | 526,400 | 540,699 | 37.0 | 59.2407 |
| CLASS 6 TIER 74 | 540,700 | 555,199 | 37.5 | 60.0413 |
| CLASS 6 TIER 75 | 555,200 | 569,899 | 38.0 | 60.8418 |
| CLASS 6 TIER 76 | 569,900 | 584,799 | 38.5 | 61.6424 |
| CLASS 6 TIER 77 | 584,800 | 599,899 | 39.0 | 62.4429 |
| CLASS 6 TIER 78 | 599,900 | 615,199 | 39.5 | 63.2435 |
| CLASS 6 TIER 79 | 615,200 | 999,999,999 | 40.0 | 64.0440 |
| CLASS 5 TIER 1 | 100 | 699 | 1.0 | 1.4375 |
| CLASS 5 TIER 2 | 700 | 1,199 | 1.5 | 2.1563 |
| CLASS 5 TIER 3 | 1,200 | 1,799 | 2.0 | 2.8750 |
| CLASS 5 TIER 4 | 1,800 | 2,499 | 2.5 | 3.5938 |
| CLASS 5 TIER 5 | 2,500 | 3,499 | 3.0 | 4.3125 |
| CLASS 5 TIER 6 | 3,500 | 4,499 | 3.5 | 5.0313 |
| CLASS 5 TIER 7 | 4,500 | 5,699 | 4.0 | 5.7500 |
| CLASS 5 TIER 8 | 5,700 | 6,999 | 4.5 | 6.4688 |
| CLASS 5 TIER 9 | 7,000 | 8,499 | 5.0 | 7.1875 |
| CLASS 5 TIER 10 | 8,500 | 9,999 | 5.5 | 7.9063 |
| CLASS 5 TIER 11 | 10,000 | 11,799 | 6.0 | 8.6250 |
| CLASS 5 TIER 12 | 11,800 | 13,699 | 6.5 | 9.3438 |
| CLASS 5 TIER 13 | 13,700 | 15,699 | 7.0 | 10.0625 |
| CLASS 5 TIER 14 | 15,700 | 17,799 | 7.5 | 10.7813 |
| CLASS 5 TIER 15 | 17,800 | 20,099 | 8.0 | 11.5000 |
| CLASS 5 TIER 16 | 20,100 | 22,499 | 8.5 | 12.2188 |
| CLASS 5 TIER 17 | 22,500 | 25,099 | 9.0 | 12.9375 |
| CLASS 5 TIER 18 | 25,100 | 27,799 | 9.5 | 13.6563 |

| Hazard Class Square Foot Tier | Minimum Square Feet | Maximum Square Feet | Equivalent Fire Protection Units | Factored Fire Protection Units |
|---|---|---|---|---|
| CLASS 5 TIER 19 | 27,800 | 30,699 | 10.0 | 14.3750 |
| CLASS 5 TIER 20 | 30,700 | 33,699 | 10.5 | 15.0938 |
| CLASS 5 TIER 21 | 33,700 | 36,799 | 11.0 | 15.8125 |
| CLASS 5 TIER 22 | 36,800 | 39,999 | 11.5 | 16.5313 |
| CLASS 5 TIER 23 | 40,000 | 43,499 | 12.0 | 17.2500 |
| CLASS 5 TIER 24 | 43,500 | 46,999 | 12.5 | 17.9688 |
| CLASS 5 TIER 25 | 47,000 | 50,699 | 13.0 | 18.6875 |
| CLASS 5 TIER 26 | 50,700 | 54,499 | 13.5 | 19.4063 |
| CLASS 5 TIER 27 | 54,500 | 58,499 | 14.0 | 20.1250 |
| CLASS 5 TIER 28 | 58,500 | 62,499 | 14.5 | 20.8438 |
| CLASS 5 TIER 29 | 62,500 | 66,799 | 15.0 | 21.5625 |
| CLASS 5 TIER 30 | 66,800 | 71,199 | 15.5 | 22.2813 |
| CLASS 5 TIER 31 | 71,200 | 75,699 | 16.0 | 23.0000 |
| CLASS 5 TIER 32 | 75,700 | 80,299 | 16.5 | 23.7188 |
| CLASS 5 TIER 33 | 80,300 | 85,099 | 17.0 | 24.4375 |
| CLASS 5 TIER 34 | 85,100 | 89,999 | 17.5 | 25.1563 |
| CLASS 5 TIER 35 | 90,000 | 95,099 | 18.0 | 25.8750 |
| CLASS 5 TIER 36 | 95,100 | 100,299 | 18.5 | 26.5938 |
| CLASS 5 TIER 37 | 100,300 | 105,699 | 19.0 | 27.3125 |
| CLASS 5 TIER 38 | 105,700 | 111,199 | 19.5 | 28.0313 |
| CLASS 5 TIER 39 | 111,200 | 116,799 | 20.0 | 28.7500 |
| CLASS 5 TIER 40 | 116,800 | 122,499 | 20.5 | 29.4688 |
| CLASS 5 TIER 41 | 122,500 | 128,499 | 21.0 | 30.1875 |
| CLASS 5 TIER 42 | 128,500 | 134,499 | 21.5 | 30.9063 |
| CLASS 5 TIER 43 | 134,500 | 140,699 | 22.0 | 31.6250 |
| CLASS 5 TIER 44 | 140,700 | 146,999 | 22.5 | 32.3438 |
| CLASS 5 TIER 45 | 147,000 | 153,499 | 23.0 | 33.0625 |
| CLASS 5 TIER 46 | 153,500 | 159,999 | 23.5 | 33.7813 |
| CLASS 5 TIER 47 | 160,000 | 166,799 | 24.0 | 34.5000 |
| CLASS 5 TIER 48 | 166,800 | 173,699 | 24.5 | 35.2188 |
| CLASS 5 TIER 49 | 173,700 | 180,699 | 25.0 | 35.9375 |
| CLASS 5 TIER 50 | 180,700 | 187,799 | 25.5 | 36.6563 |
| CLASS 5 TIER 51 | 187,800 | 195,099 | 26.0 | 37.3750 |
| CLASS 5 TIER 52 | 195,100 | 202,499 | 26.5 | 38.0938 |
| CLASS 5 TIER 53 | 202,500 | 210,099 | 27.0 | 38.8125 |
| CLASS 5 TIER 54 | 210,100 | 217,799 | 27.5 | 39.5313 |
| CLASS 5 TIER 55 | 217,800 | 225,699 | 28.0 | 40.2500 |
| CLASS 5 TIER 56 | 225,700 | 233,699 | 28.5 | 40.9688 |
| CLASS 5 TIER 57 | 233,700 | 241,799 | 29.0 | 41.6875 |
| CLASS 5 TIER 58 | 241,800 | 249,999 | 29.5 | 42.4063 |
| CLASS 5 TIER 59 | 250,000 | 258,499 | 30.0 | 43.1250 |
| CLASS 5 TIER 60 | 258,500 | 266,999 | 30.5 | 43.8438 |
| CLASS 5 TIER 61 | 267,000 | 275,699 | 31.0 | 44.5625 |
| CLASS 5 TIER 62 | 275,700 | 284,499 | 31.5 | 45.2813 |

| Hazard Class Square Foot Tier | Minimum Square Feet | Maximum Square Feet | Equivalent Fire Protection Units | Factored Fire Protection Units |
|---|---|---|---|---|
| CLASS 5 TIER 63 | 284,500 | 293,499 | 32.0 | 46.0000 |
| CLASS 5 TIER 64 | 293,500 | 302,499 | 32.5 | 46.7188 |
| CLASS 5 TIER 65 | 302,500 | 311,799 | 33.0 | 47.4375 |
| CLASS 5 TIER 66 | 311,800 | 321,199 | 33.5 | 48.1563 |
| CLASS 5 TIER 67 | 321,200 | 330,699 | 34.0 | 48.8750 |
| CLASS 5 TIER 68 | 330,700 | 340,299 | 34.5 | 49.5938 |
| CLASS 5 TIER 69 | 340,300 | 350,099 | 35.0 | 50.3125 |
| CLASS 5 TIER 70 | 350,100 | 359,999 | 35.5 | 51.0313 |
| CLASS 5 TIER 71 | 360,000 | 370,099 | 36.0 | 51.7500 |
| CLASS 5 TIER 72 | 370,100 | 380,299 | 36.5 | 52.4688 |
| CLASS 5 TIER 73 | 380,300 | 390,699 | 37.0 | 53.1875 |
| CLASS 5 TIER 74 | 390,700 | 401,199 | 37.5 | 53.9063 |
| CLASS 5 TIER 75 | 401,200 | 411,799 | 38.0 | 54.6250 |
| CLASS 5 TIER 76 | 411,800 | 422,499 | 38.5 | 55.3438 |
| CLASS 5 TIER 77 | 422,500 | 433,499 | 39.0 | 56.0625 |
| CLASS 5 TIER 78 | 433,500 | 444,499 | 39.5 | 56.7813 |
| CLASS 5 TIER 79 | 444,500 | 999,999,999 | 40.0 | 57.5000 |
| CLASS 4 TIER 1 | 100 | 499 | 1.0 | 0.8792 |
| CLASS 4 TIER 2 | 500 | 899 | 1.5 | 1.3188 |
| CLASS 4 TIER 3 | 900 | 1,399 | 2.0 | 1.7584 |
| CLASS 4 TIER 4 | 1,400 | 1,899 | 2.5 | 2.1980 |
| CLASS 4 TIER 5 | 1,900 | 2,599 | 3.0 | 2.6376 |
| CLASS 4 TIER 6 | 2,600 | 3,399 | 3.5 | 3.0772 |
| CLASS 4 TIER 7 | 3,400 | 4,299 | 4.0 | 3.5168 |
| CLASS 4 TIER 8 | 4,300 | 5,299 | 4.5 | 3.9564 |
| CLASS 4 TIER 9 | 5,300 | 6,399 | 5.0 | 4.3960 |
| CLASS 4 TIER 10 | 6,400 | 7,599 | 5.5 | 4.8356 |
| CLASS 4 TIER 11 | 7,600 | 8,899 | 6.0 | 5.2752 |
| CLASS 4 TIER 12 | 8,900 | 10,299 | 6.5 | 5.7148 |
| CLASS 4 TIER 13 | 10,300 | 11,899 | 7.0 | 6.1544 |
| CLASS 4 TIER 14 | 11,900 | 13,499 | 7.5 | 6.5940 |
| CLASS 4 TIER 15 | 13,500 | 15,199 | 8.0 | 7.0336 |
| CLASS 4 TIER 16 | 15,200 | 17,099 | 8.5 | 7.4732 |
| CLASS 4 TIER 17 | 17,100 | 18,999 | 9.0 | 7.9128 |
| CLASS 4 TIER 18 | 19,000 | 21,099 | 9.5 | 8.3524 |
| CLASS 4 TIER 19 | 21,100 | 23,199 | 10.0 | 8.7920 |
| CLASS 4 TIER 20 | 23,200 | 25,499 | 10.5 | 9.2316 |
| CLASS 4 TIER 21 | 25,500 | 27,799 | 11.0 | 9.6712 |
| CLASS 4 TIER 22 | 27,800 | 30,299 | 11.5 | 10.1108 |
| CLASS 4 TIER 23 | 30,300 | 32,899 | 12.0 | 10.5504 |
| CLASS 4 TIER 24 | 32,900 | 35,499 | 12.5 | 10.9900 |
| CLASS 4 TIER 25 | 35,500 | 38,299 | 13.0 | 11.4296 |
| CLASS 4 TIER 26 | 38,300 | 41,199 | 13.5 | 11.8692 |
| CLASS 4 TIER 27 | 41,200 | 44,199 | 14.0 | 12.3088 |

| Hazard Class Square Foot Tier | Minimum Square Feet | Maximum Square Feet | Equivalent Fire Protection Units | Factored Fire Protection Units |
|---|---|---|---|---|
| CLASS 4 TIER 28 | 44,200 | 47,299 | 14.5 | 12.7484 |
| CLASS 4 TIER 29 | 47,300 | 50,499 | 15.0 | 13.1880 |
| CLASS 4 TIER 30 | 50,500 | 53,799 | 15.5 | 13.6276 |
| CLASS 4 TIER 31 | 53,800 | 57,199 | 16.0 | 14.0672 |
| CLASS 4 TIER 32 | 57,200 | 60,799 | 16.5 | 14.5068 |
| CLASS 4 TIER 33 | 60,800 | 64,399 | 17.0 | 14.9464 |
| CLASS 4 TIER 34 | 64,400 | 68,099 | 17.5 | 15.3860 |
| CLASS 4 TIER 35 | 68,100 | 71,899 | 18.0 | 15.8256 |
| CLASS 4 TIER 36 | 71,900 | 75,899 | 18.5 | 16.2652 |
| CLASS 4 TIER 37 | 75,900 | 79,899 | 19.0 | 16.7048 |
| CLASS 4 TIER 38 | 79,900 | 84,099 | 19.5 | 17.1444 |
| CLASS 4 TIER 39 | 84,100 | 88,299 | 20.0 | 17.5840 |
| CLASS 4 TIER 40 | 88,300 | 92,699 | 20.5 | 18.0236 |
| CLASS 4 TIER 41 | 92,700 | 97,099 | 21.0 | 18.4632 |
| CLASS 4 TIER 42 | 97,100 | 101,699 | 21.5 | 18.9028 |
| CLASS 4 TIER 43 | 101,700 | 106,399 | 22.0 | 19.3424 |
| CLASS 4 TIER 44 | 106,400 | 111,199 | 22.5 | 19.7820 |
| CLASS 4 TIER 45 | 111,200 | 115,999 | 23.0 | 20.2216 |
| CLASS 4 TIER 46 | 116,000 | 120,999 | 23.5 | 20.6612 |
| CLASS 4 TIER 47 | 121,000 | 126,099 | 24.0 | 21.1008 |
| CLASS 4 TIER 48 | 126,100 | 131,299 | 24.5 | 21.5404 |
| CLASS 4 TIER 49 | 131,300 | 136,599 | 25.0 | 21.9800 |
| CLASS 4 TIER 50 | 136,600 | 141,999 | 25.5 | 22.4196 |
| CLASS 4 TIER 51 | 142,000 | 147,499 | 26.0 | 22.8592 |
| CLASS 4 TIER 52 | 147,500 | 153,199 | 26.5 | 23.2988 |
| CLASS 4 TIER 53 | 153,200 | 158,899 | 27.0 | 23.7384 |
| CLASS 4 TIER 54 | 158,900 | 164,699 | 27.5 | 24.1780 |
| CLASS 4 TIER 55 | 164,700 | 170,699 | 28.0 | 24.6176 |
| CLASS 4 TIER 56 | 170,700 | 176,699 | 28.5 | 25.0572 |
| CLASS 4 TIER 57 | 176,700 | 182,799 | 29.0 | 25.4968 |
| CLASS 4 TIER 58 | 182,800 | 189,099 | 29.5 | 25.9364 |
| CLASS 4 TIER 59 | 189,100 | 195,399 | 30.0 | 26.3760 |
| CLASS 4 TIER 60 | 195,400 | 201,899 | 30.5 | 26.8156 |
| CLASS 4 TIER 61 | 201,900 | 208,499 | 31.0 | 27.2552 |
| CLASS 4 TIER 62 | 208,500 | 215,099 | 31.5 | 27.6948 |
| CLASS 4 TIER 63 | 215,100 | 221,899 | 32.0 | 28.1344 |
| CLASS 4 TIER 64 | 221,900 | 228,799 | 32.5 | 28.5740 |
| CLASS 4 TIER 65 | 228,800 | 235,799 | 33.0 | 29.0136 |
| CLASS 4 TIER 66 | 235,800 | 242,899 | 33.5 | 29.4532 |
| CLASS 4 TIER 67 | 242,900 | 249,999 | 34.0 | 29.8928 |
| CLASS 4 TIER 68 | 250,000 | 257,299 | 34.5 | 30.3324 |
| CLASS 4 TIER 69 | 257,300 | 264,799 | 35.0 | 30.7720 |
| CLASS 4 TIER 70 | 264,800 | 272,299 | 35.5 | 31.2116 |
| CLASS 4 TIER 71 | 272,300 | 279,899 | 36.0 | 31.6512 |

| Hazard Class Square Foot Tier | Minimum Square Feet | Maximum Square Feet | Equivalent Fire Protection Units | Factored Fire Protection Units |
|---|---|---|---|---|
| CLASS 4 TIER 72 | 279,900 | 287,599 | 36.5 | 32.0908 |
| CLASS 4 TIER 73 | 287,600 | 295,399 | 37.0 | 32.5304 |
| CLASS 4 TIER 74 | 295,400 | 303,299 | 37.5 | 32.9700 |
| CLASS 4 TIER 75 | 303,300 | 311,399 | 38.0 | 33.4096 |
| CLASS 4 TIER 76 | 311,400 | 319,499 | 38.5 | 33.8492 |
| CLASS 4 TIER 77 | 319,500 | 327,799 | 39.0 | 34.2888 |
| CLASS 4 TIER 78 | 327,800 | 336,099 | 39.5 | 34.7284 |
| CLASS 4 TIER 79 | 336,100 | 999,999,999 | 40.0 | 35.1680 |
| CLASS 3 TIER 1 | 100 | 399 | 1.0 | 0.8792 |
| CLASS 3 TIER 2 | 400 | 799 | 1.5 | 1.3188 |
| CLASS 3 TIER 3 | 800 | 1,199 | 2.0 | 1.7584 |
| CLASS 3 TIER 4 | 1,200 | 1,599 | 2.5 | 2.1980 |
| CLASS 3 TIER 5 | 1,600 | 2,199 | 3.0 | 2.6376 |
| CLASS 3 TIER 6 | 2,200 | 2,899 | 3.5 | 3.0772 |
| CLASS 3 TIER 7 | 2,900 | 3,599 | 4.0 | 3.5168 |
| CLASS 3 TIER 8 | 3,600 | 4,499 | 4.5 | 3.9564 |
| CLASS 3 TIER 9 | 4,500 | 5,399 | 5.0 | 4.3960 |
| CLASS 3 TIER 10 | 5,400 | 6,399 | 5.5 | 4.8356 |
| CLASS 3 TIER 11 | 6,400 | 7,599 | 6.0 | 5.2752 |
| CLASS 3 TIER 12 | 7,600 | 8,799 | 6.5 | 5.7148 |
| CLASS 3 TIER 13 | 8,800 | 9,999 | 7.0 | 6.1544 |
| CLASS 3 TIER 14 | 10,000 | 11,399 | 7.5 | 6.5940 |
| CLASS 3 TIER 15 | 11,400 | 12,899 | 8.0 | 7.0336 |
| CLASS 3 TIER 16 | 12,900 | 14,399 | 8.5 | 7.4732 |
| CLASS 3 TIER 17 | 14,400 | 16,099 | 9.0 | 7.9128 |
| CLASS 3 TIER 18 | 16,100 | 17,799 | 9.5 | 8.3524 |
| CLASS 3 TIER 19 | 17,800 | 19,599 | 10.0 | 8.7920 |
| CLASS 3 TIER 20 | 19,600 | 21,599 | 10.5 | 9.2316 |
| CLASS 3 TIER 21 | 21,600 | 23,599 | 11.0 | 9.6712 |
| CLASS 3 TIER 22 | 23,600 | 25,599 | 11.5 | 10.1108 |
| CLASS 3 TIER 23 | 25,600 | 27,799 | 12.0 | 10.5504 |
| CLASS 3 TIER 24 | 27,800 | 30,099 | 12.5 | 10.9900 |
| CLASS 3 TIER 25 | 30,100 | 32,399 | 13.0 | 11.4296 |
| CLASS 3 TIER 26 | 32,400 | 34,899 | 13.5 | 11.8692 |
| CLASS 3 TIER 27 | 34,900 | 37,399 | 14.0 | 12.3088 |
| CLASS 3 TIER 28 | 37,400 | 39,999 | 14.5 | 12.7484 |
| CLASS 3 TIER 29 | 40,000 | 42,799 | 15.0 | 13.1880 |
| CLASS 3 TIER 30 | 42,800 | 45,599 | 15.5 | 13.6276 |
| CLASS 3 TIER 31 | 45,600 | 48,399 | 16.0 | 14.0672 |
| CLASS 3 TIER 32 | 48,400 | 51,399 | 16.5 | 14.5068 |
| CLASS 3 TIER 33 | 51,400 | 54,499 | 17.0 | 14.9464 |
| CLASS 3 TIER 34 | 54,500 | 57,599 | 17.5 | 15.3860 |
| CLASS 3 TIER 35 | 57,600 | 60,899 | 18.0 | 15.8256 |
| CLASS 3 TIER 36 | 60,900 | 64,199 | 18.5 | 16.2652 |

| Hazard Class Square Foot Tier | Minimum Square Feet | Maximum Square Feet | Equivalent Fire Protection Units | Factored Fire Protection Units |
|---|---|---|---|---|
| CLASS 3 TIER 37 | 64,200 | 67,599 | 19.0 | 16.7048 |
| CLASS 3 TIER 38 | 67,600 | 71,199 | 19.5 | 17.1444 |
| CLASS 3 TIER 39 | 71,200 | 74,799 | 20.0 | 17.5840 |
| CLASS 3 TIER 40 | 74,800 | 78,399 | 20.5 | 18.0236 |
| CLASS 3 TIER 41 | 78,400 | 82,199 | 21.0 | 18.4632 |
| CLASS 3 TIER 42 | 82,200 | 86,099 | 21.5 | 18.9028 |
| CLASS 3 TIER 43 | 86,100 | 89,999 | 22.0 | 19.3424 |
| CLASS 3 TIER 44 | 90,000 | 94,099 | 22.5 | 19.7820 |
| CLASS 3 TIER 45 | 94,100 | 98,199 | 23.0 | 20.2216 |
| CLASS 3 TIER 46 | 98,200 | 102,399 | 23.5 | 20.6612 |
| CLASS 3 TIER 47 | 102,400 | 106,799 | 24.0 | 21.1008 |
| CLASS 3 TIER 48 | 106,800 | 111,199 | 24.5 | 21.5404 |
| CLASS 3 TIER 49 | 111,200 | 115,599 | 25.0 | 21.9800 |
| CLASS 3 TIER 50 | 115,600 | 120,199 | 25.5 | 22.4196 |
| CLASS 3 TIER 51 | 120,200 | 124,899 | 26.0 | 22.8592 |
| CLASS 3 TIER 52 | 124,900 | 129,599 | 26.5 | 23.2988 |
| CLASS 3 TIER 53 | 129,600 | 134,499 | 27.0 | 23.7384 |
| CLASS 3 TIER 54 | 134,500 | 139,399 | 27.5 | 24.1780 |
| CLASS 3 TIER 55 | 139,400 | 144,399 | 28.0 | 24.6176 |
| CLASS 3 TIER 56 | 144,400 | 149,599 | 28.5 | 25.0572 |
| CLASS 3 TIER 57 | 149,600 | 154,799 | 29.0 | 25.4968 |
| CLASS 3 TIER 58 | 154,800 | 159,999 | 29.5 | 25.9364 |
| CLASS 3 TIER 59 | 160,000 | 165,399 | 30.0 | 26.3760 |
| CLASS 3 TIER 60 | 165,400 | 170,899 | 30.5 | 26.8156 |
| CLASS 3 TIER 61 | 170,900 | 176,399 | 31.0 | 27.2552 |
| CLASS 3 TIER 62 | 176,400 | 182,099 | 31.5 | 27.6948 |
| CLASS 3 TIER 63 | 182,100 | 187,799 | 32.0 | 28.1344 |
| CLASS 3 TIER 64 | 187,800 | 193,599 | 32.5 | 28.5740 |
| CLASS 3 TIER 65 | 193,600 | 199,599 | 33.0 | 29.0136 |
| CLASS 3 TIER 66 | 199,600 | 205,599 | 33.5 | 29.4532 |
| CLASS 3 TIER 67 | 205,600 | 211,599 | 34.0 | 29.8928 |
| CLASS 3 TIER 68 | 211,600 | 217,799 | 34.5 | 30.3324 |
| CLASS 3 TIER 69 | 217,800 | 224,099 | 35.0 | 30.7720 |
| CLASS 3 TIER 70 | 224,100 | 230,399 | 35.5 | 31.2116 |
| CLASS 3 TIER 71 | 230,400 | 236,899 | 36.0 | 31.6512 |
| CLASS 3 TIER 72 | 236,900 | 243,399 | 36.5 | 32.0908 |
| CLASS 3 TIER 73 | 243,400 | 249,999 | 37.0 | 32.5304 |
| CLASS 3 TIER 74 | 250,000 | 256,799 | 37.5 | 32.9700 |
| CLASS 3 TIER 75 | 256,800 | 263,599 | 38.0 | 33.4096 |
| CLASS 3 TIER 76 | 263,600 | 270,399 | 38.5 | 33.8492 |
| CLASS 3 TIER 77 | 270,400 | 277,399 | 39.0 | 34.2888 |
| CLASS 3 TIER 78 | 277,400 | 284,499 | 39.5 | 34.7284 |
| CLASS 3 TIER 79 | 284,500 | 999,999,999 | 40.0 | 35.1680 |