

City of Gainesville, Florida

Fire Services Special Assessment Memorandum

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Presented by:

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Background

INTRODUCTION

The City of Gainesville (City) has engaged Government Services Group, Inc. (GSG) to assist the City in the update of the City's existing fire services assessment program for Fiscal Year 2018-19 (Fire Assessment Project). This engagement is to (1) assist the City with updating the City's fire services assessment program for Fiscal Year 2018-19 and future fiscal years and (2) ensure continued legal defensibility.

GSG specializes in government finance and taxation issues, in 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.

This document is the City of Gainesville 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 2018-19. 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.

The City currently imposes fire assessments within the incorporated area based on a prior study conducted by GSG in 2015. The fire assessment rate imposed by the City for Fiscal Year 2018-19 is \$101.00 per Net Factored Fire Protection Unit; this assessment rate generated approximately \$6.9 million in revenues for Fiscal Year 2018-19.

OBJECTIVES

The City retained GSG to update the existing annual recurring special assessment program so that it is capable of funding the assessable costs associated with providing fire services. The collection of the fire assessment uses the property tax bill collection process as described in section 197.3632, Florida Statutes (Uniform Method).

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

- The service provided must confer a special benefit to the property being assessed; and
- 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 update the fire assessment program that focuses upon the proposed Fiscal Year 2018-19 assessable cost calculations. The objectives of this 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 2018-19 and the five-year average assessable budget based on the Adopted Fiscal Year 2017-18 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 Rescue 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, technical rescue, 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 2/2x rating effective September 1, 2014.

The Fire Rescue Department facilities inventory is comprised of nine fire stations, an administrative office and a training facility that service the entire City. Table 1 identifies the Fire Rescue Department's buildings/facility inventory, as well as the corresponding physical location address for each facility.

Table 1
Fire Rescue Department Buildings/Facility Inventory

Station	Address
Station 1	525 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	3638 NE 39th Avenue, Gainesville, FL
Station 7	5601 NW 43rd Street, Gainesville, FL
Station 8	3223 NW 42nd Avenue, Gainesville, FL
Station 9	4213 SW 30th 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 Rescue Department

The City has an Automatic Aid 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 Rescue Department's current service operations and service components.

Table 2 provides the Fire Rescue Department’s organizational structure.

Table 2
City of Gainesville Fire Rescue Department Organizational Chart

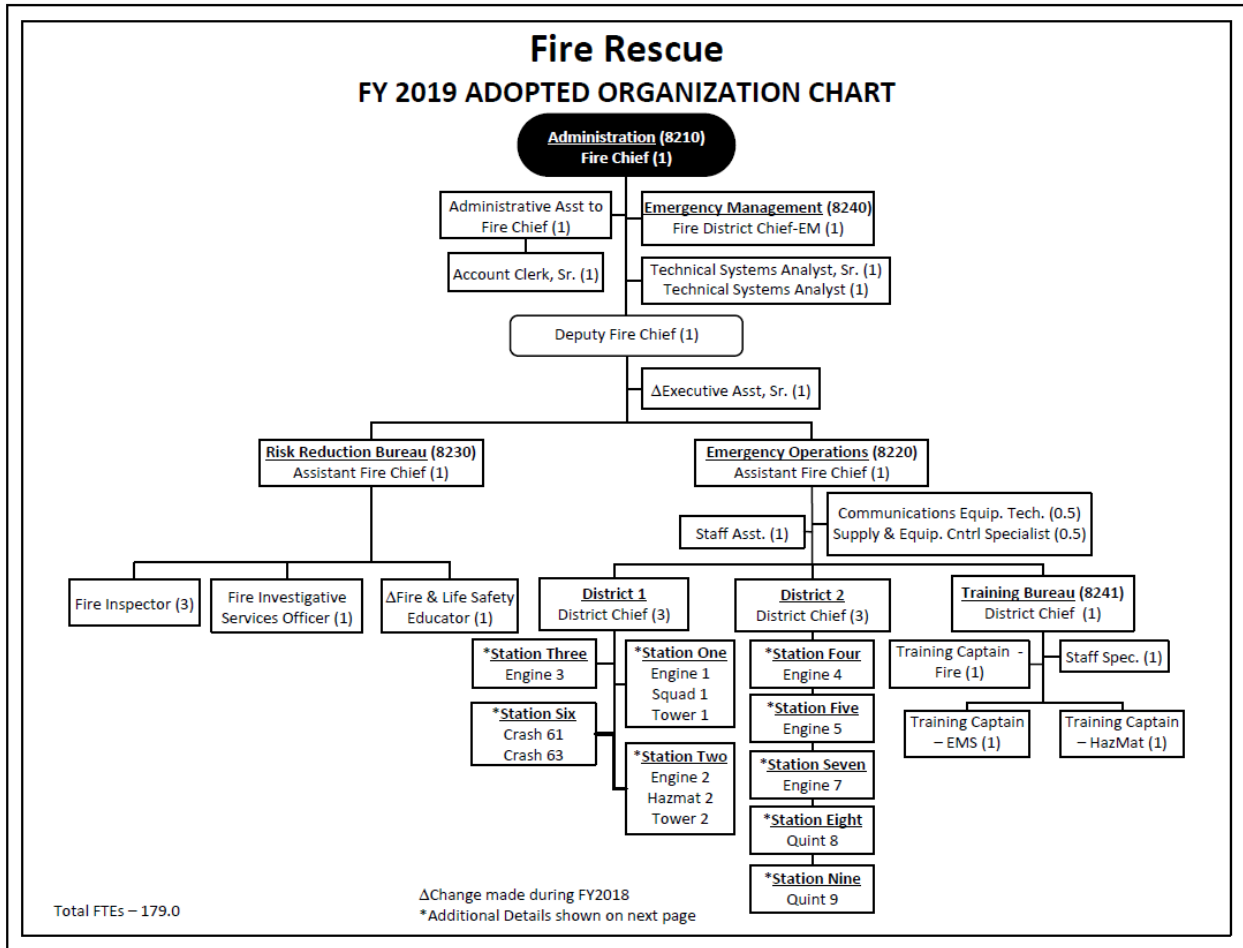


Table 3 describes the minimum staffing for each apparatus. This information is used in the development of the Administrative Factor, as further discussed in the “Development of Factors” section of this Assessment Memorandum.

Table 3
Fire Rescue Department Apparatus Minimum Staffing Requirements

Apparatus	Minimum Staffing
Engine Vehicle	3 Personnel
Tower/Quint Vehicle	4 Personnel
Squad Vehicle	2 - 3 Personnel
Crash	1 Personnel
Shift Command	1 Personnel

Source: City of Gainesville Fire Rescue Department

Table 4 lists the location and the fire flow/pumping capacity of the Fire Rescue Department's apparatus. This information is used to determine the square footage cap for non-residential properties, if applicable.

**Table 4
Fire Rescue Department Apparatus Location and Pumping Capacity¹**

Apparatus	Location	Fire Flow (GPM)
Engine 1	Station 1	1,750
Tower 1	Station 1	100
Engine 2	Station 2	1,750
Tower 2	Station 2	100
Engine 3	Station 3	1,750
Engine 4	Station 4	1,750
Engine 5	Station 5	1,750
Engine 7	Station 7	1,750
Quint 8	Station 8	1,750
Quint 9	Station 9	1,750
Total GPM		14,200

Source: City of Gainesville Fire Rescue Department

The current pumping capacity is defined as the combined amount of water that all personnel and apparatus in the Fire Rescue 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 Rescue Department is 14,200 GPM per minute. However, the formula used to calculate the fire flow in NFPA 1142 Annex G does not calculate for more 12,000 GPM or for 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 Rescue Department response protocol.

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

Call Type	Response
Residential Building Fire Response	2 Engines, 1 Quint or Tower, 1 Squad, 2 District Chiefs
Non-Residential Building Fire Response	3 Engines, 2 Quint or Tower, 1 Squad, 2 District Chiefs
Single Company Fire Responses	1 Engine or 1 Quint or Tower

Source: City of Gainesville Fire Rescue 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

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

related to non-EMS calls.

The proposed Fiscal Year 2018-19 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 the "Public Education" and "Fire Inspections" divisions were allocated entirely to fire. All costs associated with the line item "EMT 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. Under normal staffing, the City has 28 non-EMS personnel and 11 EMS personnel, for a total of 39 combat personnel per shift. This staffing level therefore yields a 71.79 percent non-EMS Administrative Factor.

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-Elect Sewer Water," and "Office Supplies" 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 Rescue Department's operations, was then applied to certain budget line items such as "Combined Communication Center".

For purposes of the fire services assessment program update, to determine all of the calls made by the City's Rescue Department, GSG used two sources of data: the City's Computer-Aided-Dispatch (CAD) data for the EMS incidents and the City's Florida Fire Incident Reporting System (FFIRS) for the non-EMS incidents. GSG also used 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 Fiscal Year 2016-17, the City reported 13,788 incidents in the CAD system and 5,508 incidents in the FFIRS database. Of the 19,296 combined total fire rescue incident calls, 4,002 were non-EMS (i.e. fire) calls and 15,294 were EMS calls. This information results in a 20.74% 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 2018-19 through 2022-23 are based on the following assumptions for the purpose of this Fire Assessment Memorandum.

- The Fiscal Year 2017-18 Adopted Budget line-item detail by Unit was used to allocate the line item costs between fire and EMS.
- The line-item detail analysis by Unit from the Fiscal Year 2017-18 Adopted Budget was used to allocate the costs between fire and EMS for the Fiscal Year 2018-19 Projected Budget and for the five-year budget for Fiscal Years 2018-19 through 2022-23.
- The fire-related portion of the expenditures for the Combined Communications Center, the Automatic Aid Agreement and Indirect Costs were added to the Fire Rescue Department assessable costs.
- The City provided the Capital Improvement Plan for the Fire Rescue Department for Fiscal Years 2018-19 through 2022-23 and the fire-related portion of the CIP expenditures were added to the Fire Rescue Department assessable costs.
- 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 “Fire Inspection Fees,” and “False Alarm Penalties.”
- 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 Statutes, 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 “Collection Costs (Property Appraiser)” under “Additional Costs” reflects reimbursement for the costs associated with the non-ad valorem assessment incurred by the Property Appraiser. Pursuant to section 197.3632, Florida Statutes, a municipal or county government shall only compensate the property appraiser 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 2018-19 based on an application of the above factors to the Fiscal Year 2017-18 Adopted Budget. The calculation yields an assessable cost of \$16,115,742 for Fiscal Year 2018-19.

Table 6
Fire Services Assessable Cost Calculations (Fiscal Year 2018-19)

Gainesville Fire Rescue	FY 17-18 Adopted Budget	FY 18 - 19 Projected Budget	FY 18 - 19 Assessable Budget
Personal Services			
Permanent Full Time	\$10,021,595	\$10,322,243	\$7,510,179
Permanent Part Time	\$50,247	\$51,754	\$37,157
Overtime-One and One-Half Rate	\$240,900	\$248,127	\$183,023
Holiday Pay	\$110,000	\$113,300	\$81,344
Special Assignment	\$137,690	\$141,821	\$104,010
Longevity	\$145,152	\$149,507	\$107,338
Technical Rescue Supp (Fire)	\$17,568	\$18,095	\$12,991
Hazmat Incentive Pay	\$60,420	\$62,233	\$61,734
EMT Certification Pay	\$642,855	\$662,141	\$0
Education Incentive Pay Fire Fight	\$75,000	\$77,250	\$56,368
FLSA	\$87,060	\$89,672	\$64,932
Fire Inspector Certification	\$2,879	\$2,965	\$2,965
Social Security	\$895,346	\$922,206	\$671,188
Retirement	\$1,854,082	\$1,909,704	\$1,394,568
Health Insurance	\$1,300,053	\$1,339,055	\$974,908
Retirees Health Insurance Cont	\$58,501	\$60,256	\$43,853
Life Insurance	\$19,752	\$20,345	\$14,795
Workers' Compensation	\$210,468	\$216,782	\$157,809
Dry Cleaning	\$6,744	\$6,946	\$5,314
Clothing Allowance	\$585	\$603	\$603
Total Personal Services	\$15,936,897	\$16,415,004	\$11,485,077
Operating			
Non-Capital Equipment	\$70,400	\$71,808	\$51,554
Materials and Supplies	\$140,380	\$143,188	\$106,369
Office Supplies	\$11,025	\$11,246	\$8,333
Printing and Binding	\$720	\$734	\$614
Uniform Purchase Price	\$158,039	\$161,200	\$116,539
Telephone	\$57,398	\$58,546	\$43,299
T.R.S. Access Charge	\$62,988	\$64,248	\$46,127
Postage	\$550	\$561	\$403
Advertising	\$1,200	\$1,224	\$1,224
Utilities-Elect Sewer Water	\$166,017	\$169,337	\$121,878
Gasoline Oil Grease	\$117,707	\$120,061	\$29,358
Assessment Centers	\$15,000	\$15,300	\$10,985
Local Travel	\$4,800	\$4,896	\$3,515
Travel & Training	\$55,100	\$56,202	\$42,220
Safety Awards	\$15,875	\$16,193	\$11,625
Books & Films	\$1,400	\$1,428	\$1,025
Dues Memberships Publication	\$6,702	\$6,836	\$5,443
Rental-Equipment	\$8,375	\$8,543	\$7,140

Gainesville Fire Rescue	FY 17-18 Adopted Budget	FY 18 - 19 Projected Budget	FY 18 - 19 Assessable Budget
Insurance Premiums	\$195,523	\$199,433	\$143,183
Lease Expense	\$22,800	\$23,256	\$16,697
Professional Services	\$68,454	\$69,823	\$50,129
Other Contractual Services	\$19,134	\$19,517	\$14,012
Fleet Service Cost - Variable	\$403,169	\$411,232	\$98,816
Fleet Service Cost - Fixed	\$921,543	\$939,974	\$680,985
Maintenance Office/Other Equipment	\$57,858	\$59,015	\$42,370
Total Operating	\$2,582,157	\$2,633,800	\$1,653,841
Non-Operating & Capital			
Machinery & Equipment	\$20,000	\$20,400	\$14,646
Total Non-Operating & Capital	\$20,000	\$20,400	\$14,646
Other Expenses			
Combined Communications Center	\$586,047	\$603,628	\$125,193
Total Other Expenses	\$586,047	\$603,628	\$125,193
Capital Outlay and Service Enhancements			
Fire Station 9 Capital, Personnel and Operating	\$0	\$938,505	\$673,798
Fire Station 1	\$0	\$748,886	\$537,662
Station Replacement	\$0	\$341,630	\$245,273
Squad	\$0	\$220,696	\$158,448
Total Capital Outlay and Service Enhancements	\$0	\$2,249,717	\$1,615,181
Indirect Costs			
Indirect Costs - Fire	\$1,011,220	\$1,041,557	\$747,784
Total Indirect Costs	\$1,011,220	\$1,041,557	\$747,784
Total Expenditures	\$20,136,321	\$22,964,106	\$15,641,722
Revenues			
Fire Inspection Fees	\$57,314	\$57,314	\$57,314
GFR-Billable Overtime	\$45,829	\$45,829	\$32,903
False Alarm Penalties	\$91,444	\$91,444	\$91,444
Airport Fire Station	\$517,823	\$517,823	\$371,770
Hazmat Gross Receipts Tax	\$155,014	\$155,014	\$155,014
Haz Mat Costs	\$1,139	\$1,139	\$1,139
Total Revenues	\$868,563	\$868,563	\$709,584
Total Expenditures	\$20,136,321	\$22,964,106	\$15,641,722
Total Revenues	\$868,563	\$868,563	\$709,584
Total Net Expenditures	\$19,267,758	\$22,095,543	\$14,932,138
Additional Costs			
Collection Costs @ 2% (tax collector)			\$322,315
Property Appraiser Costs			\$18,000

Gainesville Fire Rescue	FY 17-18 Adopted Budget	FY 18 - 19 Projected Budget	FY 18 - 19 Assessable Budget
Statutory Discount @ 5% (4% early payment/1% non-collection)			\$805,788
Study Reimbursement			\$37,500
Total Additional Costs			\$1,183,603
Total Assessable Costs			\$16,115,742

Table 7 shows the summary of the full cost of the Fire Services Assessment Program for Fiscal Year 2018-19 through Fiscal Year 2022-23 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 2018-19 through 2022-23)

Gainesville Fire Rescue	FY 18 - 19 Assessable Budget	FY 19 - 20 Assessable Budget	FY 20 - 21 Assessable Budget	FY 21 - 22 Assessable Budget	FY 22 - 23 Assessable Budget	Five-Year Average Assessable Budget
Total Personal Services	\$11,485,077	\$11,829,629	\$12,184,518	\$12,550,054	\$12,926,555	\$12,195,167
Total Operating	\$1,653,841	\$1,686,918	\$1,720,656	\$1,755,069	\$1,790,171	\$1,721,331
Total Non-Operating & Capital	\$16,646	\$14,939	\$15,238	\$15,543	\$15,853	\$15,244
Total Other Expenses	\$125,193	\$128,949	\$132,817	\$136,802	\$140,906	\$132,933
Total Capital Outlay and Service Enhancements	\$1,615,181	\$1,378,947	\$1,725,415	\$2,043,653	\$2,064,825	\$1,765,604
Total Indirect Cost	\$747,784	\$770,218	\$793,324	\$817,124	\$841,638	\$794,018
Total Revenues	\$709,584	\$709,584	\$709,584	\$709,584	\$709,584	\$709,584
Total Net Expenditures	\$14,932,138	\$15,100,015	\$15,862,384	\$16,608,659	\$17,070,363	\$15,914,712
Total Additional Costs	\$1,183,603	\$1,167,175	\$1,227,814	\$1,283,986	\$1,318,739	\$1,236,915
Total Assessable Costs	\$16,115,742	\$16,267,190	\$17,090,198	\$17,892,646	\$18,389,103	\$17,151,627

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 Rescue 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 net Factored Fire Protection Unit per year; the assessment amount due is calculated by multiplying the number of Net Factored Fire Protection Units on the parcel by the rate per net Factored 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 (2012 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 06-2014) 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 Rescue 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 firefighting 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 firefighting 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 (2012 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 firefighting 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 firefighting 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 firefighting 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 C. The Alachua County Property Appraiser also assigns a Department of Revenue property use code (DOR code) that is a four-digit code describing the primary use of the parcel. A listing of DOR 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 where no mobile home occupies the space.
- 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 where no recreational vehicle occupies the space.
- 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 sprinklered and 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	9,733.59
Hazard Class 5	957.11
Hazard Class 6	2,122.32
Hazard Class 7	64,268.10
Total	77,081.12

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 Rescue 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 39 combat personnel per shift, including an adjustment for hours spent by EMS personnel on fire calls:

Fire hours = 245,280.00
 EMS hours = 96,360.00
 Total hours = 341,640.00

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

7,636.81 hours

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

4,002 incidents x 0.25 hours = 1,000.50 hours

- (4) The total number of person-hours spent on training was based on the Fiscal Year 2016-17 training hours:

62,533.50 hours

Based on these calculations, it was determined that approximately 71,170.81 person-hours per year were spent on responses to fire calls out of 245,280.00 total scheduled annual person-hours for fire services. Therefore, the remainder of the person-hours (174,109.19), or 70.984% of the person-hours per year are required to be available to respond to primary structure fire incidents and 29.016% 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 Rescue Department vehicles within the City limits for Fiscal Year 2016-17. 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 code list for the “fixed property use” as recorded in the fire rescue incident reports.

GSG analyzed the Fiscal Year 2016-17 fire rescue incident data. The City fire rescue incident data from Fiscal Year 2016-17 represent 19,296 fire rescue incidents. Of the 19,296 fire rescue incidents, there were 15,294 incidents classified as EMS type incidents based on the type of situation found indicated on the incident report. The 15,294 EMS type incidents were not included in the analysis.

Of the 4,002 remaining fire type incidents, 2,443 were calls to specific property uses. Accordingly, 1,559 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 1,559 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 2,443 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.

Table 9
Fire Calls by Hazard Classification (Fiscal Year 2016-17)

Hazard Class	Incident Count	Percentage of Incidents
Hazard Class 3 & 4	185	7.57%
Hazard Class 5	112	4.58%
Hazard Class 6	159	6.51%
Hazard Class 7	1,987	81.33%
Total	2,443	100.00%

Source: City of Gainesville Fire Rescue Department (2018)

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 (29.016%). Fiscal Year 2016-17 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 29.016%

Table 10 shows the calculation of the Demand Component Factor by Hazard Class.

Table 10
Calculation of Demand Component Factor

Hazard Class	Incident Count	Fire Protection Units	Incident Per Fire Protection Unit	Demand Component Factor
Hazard Class 3 & 4	185	9,733.59	0.0190	0.1740
Hazard Class 5	112	957.11	0.1170	1.0713
Hazard Class 6	159	2,122.32	0.0749	0.6859
Hazard Class 7	1,987	64,268.10	0.0309	0.2831
Total/Average	2,443	77,081.12	0.0317	

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 70.98%.

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	0.1740	0.7098	0.8838
Hazard Class 5	1.0713	0.7098	1.7812
Hazard Class 6	0.6859	0.7098	1.3957
Hazard Class 7	0.2831	0.7098	0.9929

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.

A listing of the Fire Protection Units and the Factored Fire Protection Units for each Hazard Class for each building size is provided as Appendix E.

Table 12
Factored Fire Protection Units

Hazard Class	Fire Protection Units	Factored Fire Protection Units
Hazard Class 3 & 4	9,733.59	8,602.98
Hazard Class 5	957.11	1,704.77
Hazard Class 6	2,122.32	2,962.17
Hazard Class 7	64,268.10	63,811.21
Total	77,081.12	77,081.12

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.

A mitigation credit policy was implemented when the fire assessment program was initiated in 2010 and is based on the sprinklered building information provided by individual property owners through an annual application process. Under the Fire Flow Mitigation Credit Policy, the number of Factored Fire Protection Units are reduced by 10% upon documentation and proof that the building is protected by an automatic sprinkler system that fully meets the requirements of NFPA 12, NFPA 13D or NFPA 13R and that the system was installed, inspected, monitored and maintained in accordance with the City standards. A complete description of the City's Fire Flow Mitigation Credit Policy is provided in the Initial Assessment Resolution adopted in June 2010.

The current number of Net Factored Fire Protection Units due to the credit application is 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	9,733.59	8,602.98	8,590.26
Hazard Class 5	957.11	1,704.77	1,700.52
Hazard Class 6	2,122.32	2,962.17	2,958.17
Hazard Class 7	64,268.10	63,811.21	63,735.45
Total	77,081.12	77,081.12	76,984.39

Computation of Fire Services Assessment Rates

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

Table 14
Proforma Assessment Rates (Based on Five-Year Average Assessable Budget = \$17,151,627)

Percent of Assessable Budget	Gross Revenue	Rounded Net Factored Units Assessment Rate
100.00%	\$17,151,627	\$223.00
50.00%	\$8,575,814	\$112.00
45.33%	\$7,774,833	\$101.00

Source: Preliminary Assessment Roll
 1% of the assessable budget is equal to Gross Revenue of \$171,516 and a Net Factored Units Assessment Rate of \$2.23.

Exemptions and Impact of Exemptions

Because the fire rescue assessment was developed to meet the case law standards for a valid special assessment, any proposed exemptions require special scrutiny. Whenever crafting an exemption, 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 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 assessment to be imposed upon any other non-exempt parcels.

Whether the City decides to charge governmental entities or fund exemptions on governmentally-owned property requires certain considerations. First, a forced sale of government property is not available as an enforcement mechanism. The charge to governmentally-owned parcels would be more akin to a service fee for each government parcel’s proportionate benefit from the availability and provision of fire rescue services by the City. The billing would be direct, received by government buildings and facilities. Enforcement would be by judicial proceedings to require payment. As to each level of government, differing concepts of immunity and other statutory provisions or case law decisions may prevent collection or frustrate special assessment imposition.

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 assessable cost calculations.

Accordingly, if the City continues to exempt governmentally-owned property from the fire rescue assessment and fund such costs from inter-local agreement with the affected government or from the City’s general fund, it is important that the City continue to set a reasonable contingency within its general fund to fund the cost incurred in providing fire rescue services to governmentally-owned properties.

Table 15 summarizes the estimated Fiscal Year 2018-19 impact of exempting governmental property for the rate scenarios shown in Table 14.

Table 15
Estimated Annual Impact of Exemptions (Based on Five-Year Average Assessable Budget = \$17,151,627)

Percent of Assessable Budget	Gross Revenue	Net Revenue
100.00%	\$17,151,627	\$15,535,093
50.00%	\$8,575,814	\$7,763,922
45.33%	\$7,774,833	\$7,042,680

1% of the assessable budget is equal to Gross Revenue of \$171,516 and a Net Revenue of \$155,351.

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
0100	SINGLE FAMILY	HAZARD CLASS 7
0109	SFR NON SOH	HAZARD CLASS 7
0200	SFR - MFG	HAZARD CLASS 7
0209	SFR - MFG	HAZARD CLASS 7
0300	SFR - ZERO LOT	HAZARD CLASS 7
0309	SFR - ZERO LOT	HAZARD CLASS 7
0400	CONDO	HAZARD CLASS 7
0500	NO VALUE	NOT USED
0600	RENTAL UNIT	HAZARD CLASS 7
0609	RENTAL UNIT	HAZARD CLASS 7
0700	MH PRE 1977	HAZARD CLASS 7
0709	MH PRE 1977	HAZARD CLASS 7
0800	MH POST 1977	HAZARD CLASS 7
0809	MH POST 1977	HAZARD CLASS 7
0900	EXC RESIDENTIAL	HAZARD CLASS 7
0909	EXC RESIDENTIAL	HAZARD CLASS 7
1000	CONDO LOW RISE	HAZARD CLASS 7
1009	CONDO LOW RISE	HAZARD CLASS 7
1100	CONDO/APT	HAZARD CLASS 7
1109	CONDO/APT	HAZARD CLASS 7
1200	CONDO TOWNHOUSE	HAZARD CLASS 7
1209	CONDO TOWNHOUSE	HAZARD CLASS 7
1300	CONDOMINIUM	HAZARD CLASS 7
1309	CONDOMINIUM	HAZARD CLASS 7
1400	COOP LOW RISE	HAZARD CLASS 7
1409	COOP LOW RISE	HAZARD CLASS 7
1500	COOP HIGH RISE	HAZARD CLASS 7
1600	COOP TOWN HOUSE	HAZARD CLASS 7
1700	DORMITORY	HAZARD CLASS 7
1800	INTERV LO RISE	HAZARD CLASS 7
1900	INTERV HI RISE	HAZARD CLASS 7
2000	INTERV TOWNHOUS	HAZARD CLASS 7
2200	MFR LOW RISE	HAZARD CLASS 7
2209	MFR LOW RISE	HAZARD CLASS 7
2300	MFR HI RISE	HAZARD CLASS 7
2309	MFR HI RISE	HAZARD CLASS 7
2400	MFR TOWNHOUSE	HAZARD CLASS 7
2409	MFR TOWNHOUSE	HAZARD CLASS 7
2500	MFR ROW	HAZARD CLASS 7
2509	MFR ROW	HAZARD CLASS 7
2600	APARTMENT	HAZARD CLASS 7
2609	APARTMENT	HAZARD CLASS 7
2700	DUPLEX	HAZARD CLASS 7
2709	DUPLEX	HAZARD CLASS 7
2800	TRI/QUADRAPLEX	HAZARD CLASS 7

Code	Description	Hazard Class Assignment
2809	TRI/QUADRAPLEX	HAZARD CLASS 7
2900	EXCEP DWELLING	HAZARD CLASS 7
2909	EXCEP DWELLING	HAZARD CLASS 7
3500	STORE RETAIL	HAZARD CLASS 4
3600	STORE DISCOUNT	HAZARD CLASS 4
3700	STORE DEPT	HAZARD CLASS 4
3800	SH CTR NBRHD	HAZARD CLASS 4
3900	SH CTR COMMITY	HAZARD CLASS 4
4000	SH CTR REGIONAL	HAZARD CLASS 4
4100	SH CTR SUPREGNL	HAZARD CLASS 4
4200	SUPERMARKET	HAZARD CLASS 4
4300	SUPMKT NBRHD/CV	HAZARD CLASS 4
4400	HTL/MTL FULL SER	HAZARD CLASS 7
4500	MOTEL/COURT	HAZARD CLASS 7
4600	MOTEL LOW RISE	HAZARD CLASS 7
4700	MOTEL HI RISE	HAZARD CLASS 7
4900	OFFICE LOW RISE	HAZARD CLASS 7
5000	OFFICE HI RISE	HAZARD CLASS 7
5100	OFFICE CONDO	HAZARD CLASS 7
5152	MEDICAL CONDO	HAZARD CLASS 6
5200	MEDICAL OFFICE	HAZARD CLASS 6
5300	HOSPITAL	HAZARD CLASS 7
5400	NURS/CONV HOME	HAZARD CLASS 7
5500	NIGHTCLUB/BAR	HAZARD CLASS 5
5600	RESTAURANT	HAZARD CLASS 5
5700	REST FAST FOOD	HAZARD CLASS 5
5800	BOWLING ALLEY	HAZARD CLASS 5
5900	ARENA	HAZARD CLASS 4
6000	AUDITORIUM	HAZARD CLASS 4
6100	THEATER	HAZARD CLASS 4
6200	BANK	HAZARD CLASS 7
6300	FINANCIAL	HAZARD CLASS 7
6400	SERV STATION	HAZARD CLASS 6
6500	PARKING GARAGE	HAZARD CLASS 6
6600	VEH SLS/REPAIR	HAZARD CLASS 4
6700	SERVICE SHOP	HAZARD CLASS 4
6800	MORTUARY	HAZARD CLASS 6
6900	CLUBHOUSE	HAZARD CLASS 7
6901	CLUBHOUSE (COMMERCIAL)	HAZARD CLASS 7
7000	COLD STRG/PCKG	HAZARD CLASS 5
7100	TRANSPOR TERMNL	HAZARD CLASS 4
7200	DAYCARE	HAZARD CLASS 7
7300	GYMNASIUM	HAZARD CLASS 7
7400	FIRE STA-STAFFED	HAZARD CLASS 7
7500	FIRE STA-VOL	HAZARD CLASS 7

Code	Description	Hazard Class Assignment
7600	ASSISTED LIVING	HAZARD CLASS 7
7700	EXCEP OFFICE	NOT USED
7800	EXCEP STORE	NOT USED
7900	EXCEP COMMERC	NOT USED
8000	MFG LIGHT	HAZARD CLASS 5
8100	MFG HEAVY	HAZARD CLASS 4
8200	WRHSE DISTRIB.	HAZARD CLASS 4
8250	WRHSE DISTRIB MEGA	HAZARD CLASS 4
8300	WRHSE MINI	HAZARD CLASS 4
8400	WRHSE STORAGE	HAZARD CLASS 4
8500	AIRCRAFT HANGAR	HAZARD CLASS 4
8600	BARNS	HAZARD CLASS 5
8700	PREFAB METAL	HAZARD CLASS 4
8800	SHED	NOT USED
8900	EXCEP INDUST	NOT USED
9000	SCHOOL	HAZARD CLASS 7
9100	CHURCH	HAZARD CLASS 6
9200	EDU/RELIG MISC	HAZARD CLASS 6
9300	GOVMENTAL BLDG	HAZARD CLASS 6
9301	POST OFFICE	HAZARD CLASS 6
9400	LIBRARY	HAZARD CLASS 5
9500	CONVENTION CTR	HAZARD CLASS 4
MHPK	MOBILE HOME PARK UNITS	HAZARD CLASS 7
RVPK	RV PARK UNITS	HAZARD CLASS 7

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	WHOLESALE
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/BEEES/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

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	0.9929
CLASS 7 TIER 2	1,200	1,999	1.5	1.4894
CLASS 7 TIER 3	2,000	3,099	2.0	1.9858
CLASS 7 TIER 4	3,100	4,499	2.5	2.4823
CLASS 7 TIER 5	4,500	6,099	3.0	2.9787
CLASS 7 TIER 6	6,100	7,999	3.5	3.4752
CLASS 7 TIER 7	8,000	9,999	4.0	3.9716
CLASS 7 TIER 8	10,000	12,399	4.5	4.4681
CLASS 7 TIER 9	12,400	14,999	5.0	4.9645
CLASS 7 TIER 10	15,000	17,799	5.5	5.4610
CLASS 7 TIER 11	17,800	20,899	6.0	5.9574
CLASS 7 TIER 12	20,900	24,199	6.5	6.4539
CLASS 7 TIER 13	24,200	27,799	7.0	6.9503
CLASS 7 TIER 14	27,800	31,699	7.5	7.4468
CLASS 7 TIER 15	31,700	35,699	8.0	7.9432
CLASS 7 TIER 16	35,700	39,999	8.5	8.4397
CLASS 7 TIER 17	40,000	44,599	9.0	8.9361
CLASS 7 TIER 18	44,600	49,399	9.5	9.4326
CLASS 7 TIER 19	49,400	54,499	10.0	9.9290
CLASS 7 TIER 20	54,500	59,799	10.5	10.4255
CLASS 7 TIER 21	59,800	65,399	11.0	10.9219
CLASS 7 TIER 22	65,400	71,199	11.5	11.4184
CLASS 7 TIER 23	71,200	77,199	12.0	11.9148
CLASS 7 TIER 24	77,200	83,499	12.5	12.4113
CLASS 7 TIER 25	83,500	89,999	13.0	12.9077
CLASS 7 TIER 26	90,000	96,799	13.5	13.4042
CLASS 7 TIER 27	96,800	103,899	14.0	13.9006
CLASS 7 TIER 28	103,900	111,199	14.5	14.3971
CLASS 7 TIER 29	111,200	118,699	15.0	14.8935
CLASS 7 TIER 30	118,700	126,499	15.5	15.3900
CLASS 7 TIER 31	126,500	134,499	16.0	15.8864
CLASS 7 TIER 32	134,500	142,799	16.5	16.3829
CLASS 7 TIER 33	142,800	151,299	17.0	16.8793
CLASS 7 TIER 34	151,300	159,999	17.5	17.3758
CLASS 7 TIER 35	160,000	169,099	18.0	17.8722
CLASS 7 TIER 36	169,100	178,299	18.5	18.3687
CLASS 7 TIER 37	178,300	187,799	19.0	18.8651
CLASS 7 TIER 38	187,800	197,599	19.5	19.3616
CLASS 7 TIER 39	197,600	207,599	20.0	19.8580
CLASS 7 TIER 40	207,600	217,799	20.5	20.3545
CLASS 7 TIER 41	217,800	228,299	21.0	20.8509
CLASS 7 TIER 42	228,300	239,099	21.5	21.3474
CLASS 7 TIER 43	239,100	249,999	22.0	21.8438
CLASS 7 TIER 44	250,000	261,299	22.5	22.3403

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	22.8367
CLASS 7 TIER 46	272,800	284,499	23.5	23.3332
CLASS 7 TIER 47	284,500	296,499	24.0	23.8296
CLASS 7 TIER 48	296,500	308,699	24.5	24.3261
CLASS 7 TIER 49	308,700	321,199	25.0	24.8225
CLASS 7 TIER 50	321,200	333,899	25.5	25.3190
CLASS 7 TIER 51	333,900	346,799	26.0	25.8154
CLASS 7 TIER 52	346,800	359,999	26.5	26.3119
CLASS 7 TIER 53	360,000	373,499	27.0	26.8083
CLASS 7 TIER 54	373,500	387,199	27.5	27.3048
CLASS 7 TIER 55	387,200	401,199	28.0	27.8012
CLASS 7 TIER 56	401,200	415,399	28.5	28.2977
CLASS 7 TIER 57	415,400	429,799	29.0	28.7941
CLASS 7 TIER 58	429,800	444,499	29.5	29.2906
CLASS 7 TIER 59	444,500	459,399	30.0	29.7870
CLASS 7 TIER 60	459,400	474,599	30.5	30.2835
CLASS 7 TIER 61	474,600	489,999	31.0	30.7799
CLASS 7 TIER 62	490,000	505,699	31.5	31.2764
CLASS 7 TIER 63	505,700	521,699	32.0	31.7728
CLASS 7 TIER 64	521,700	537,799	32.5	32.2693
CLASS 7 TIER 65	537,800	554,199	33.0	32.7657
CLASS 7 TIER 66	554,200	570,899	33.5	33.2622
CLASS 7 TIER 67	570,900	587,799	34.0	33.7586
CLASS 7 TIER 68	587,800	604,999	34.5	34.2551
CLASS 7 TIER 69	605,000	622,399	35.0	34.7515
CLASS 7 TIER 70	622,400	639,999	35.5	35.2480
CLASS 7 TIER 71	640,000	657,999	36.0	35.7444
CLASS 7 TIER 72	658,000	676,099	36.5	36.2409
CLASS 7 TIER 73	676,100	694,499	37.0	36.7373
CLASS 7 TIER 74	694,500	713,099	37.5	37.2338
CLASS 7 TIER 75	713,100	731,999	38.0	37.7302
CLASS 7 TIER 76	732,000	751,199	38.5	38.2267
CLASS 7 TIER 77	751,200	770,499	39.0	38.7231
CLASS 7 TIER 78	770,500	790,199	39.5	39.2196
CLASS 7 TIER 79	790,200	999,999,999	40.0	39.7160
CLASS 6 TIER 1	100	899	1.0	1.3957
CLASS 6 TIER 2	900	1,599	1.5	2.0936
CLASS 6 TIER 3	1,600	2,499	2.0	2.7914
CLASS 6 TIER 4	2,500	3,499	2.5	3.4893
CLASS 6 TIER 5	3,500	4,799	3.0	4.1871
CLASS 6 TIER 6	4,800	6,199	3.5	4.8850
CLASS 6 TIER 7	6,200	7,799	4.0	5.5828
CLASS 6 TIER 8	7,800	9,699	4.5	6.2807
CLASS 6 TIER 9	9,700	11,699	5.0	6.9785

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	7.6764
CLASS 6 TIER 11	13,900	16,299	6.0	8.3742
CLASS 6 TIER 12	16,300	18,899	6.5	9.0721
CLASS 6 TIER 13	18,900	21,699	7.0	9.7699
CLASS 6 TIER 14	21,700	24,699	7.5	10.4678
CLASS 6 TIER 15	24,700	27,799	8.0	11.1656
CLASS 6 TIER 16	27,800	31,199	8.5	11.8635
CLASS 6 TIER 17	31,200	34,699	9.0	12.5613
CLASS 6 TIER 18	34,700	38,499	9.5	13.2592
CLASS 6 TIER 19	38,500	42,399	10.0	13.9570
CLASS 6 TIER 20	42,400	46,599	10.5	14.6549
CLASS 6 TIER 21	46,600	50,899	11.0	15.3527
CLASS 6 TIER 22	50,900	55,399	11.5	16.0506
CLASS 6 TIER 23	55,400	60,099	12.0	16.7484
CLASS 6 TIER 24	60,100	64,999	12.5	17.4463
CLASS 6 TIER 25	65,000	70,099	13.0	18.1441
CLASS 6 TIER 26	70,100	75,399	13.5	18.8420
CLASS 6 TIER 27	75,400	80,899	14.0	19.5398
CLASS 6 TIER 28	80,900	86,599	14.5	20.2377
CLASS 6 TIER 29	86,600	92,399	15.0	20.9355
CLASS 6 TIER 30	92,400	98,499	15.5	21.6334
CLASS 6 TIER 31	98,500	104,699	16.0	22.3312
CLASS 6 TIER 32	104,700	111,199	16.5	23.0291
CLASS 6 TIER 33	111,200	117,799	17.0	23.7269
CLASS 6 TIER 34	117,800	124,599	17.5	24.4248
CLASS 6 TIER 35	124,600	131,599	18.0	25.1226
CLASS 6 TIER 36	131,600	138,799	18.5	25.8205
CLASS 6 TIER 37	138,800	146,199	19.0	26.5183
CLASS 6 TIER 38	146,200	153,799	19.5	27.2162
CLASS 6 TIER 39	153,800	161,599	20.0	27.9140
CLASS 6 TIER 40	161,600	169,599	20.5	28.6119
CLASS 6 TIER 41	169,600	177,799	21.0	29.3097
CLASS 6 TIER 42	177,800	186,099	21.5	30.0076
CLASS 6 TIER 43	186,100	194,699	22.0	30.7054
CLASS 6 TIER 44	194,700	203,399	22.5	31.4033
CLASS 6 TIER 45	203,400	212,399	23.0	32.1011
CLASS 6 TIER 46	212,400	221,499	23.5	32.7990
CLASS 6 TIER 47	221,500	230,799	24.0	33.4968
CLASS 6 TIER 48	230,800	240,299	24.5	34.1947
CLASS 6 TIER 49	240,300	249,999	25.0	34.8925
CLASS 6 TIER 50	250,000	259,899	25.5	35.5904
CLASS 6 TIER 51	259,900	269,999	26.0	36.2882
CLASS 6 TIER 52	270,000	280,299	26.5	36.9861
CLASS 6 TIER 53	280,300	290,799	27.0	37.6839

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	38.3818
CLASS 6 TIER 55	301,500	312,299	28.0	39.0796
CLASS 6 TIER 56	312,300	323,399	28.5	39.7775
CLASS 6 TIER 57	323,400	334,599	29.0	40.4753
CLASS 6 TIER 58	334,600	346,099	29.5	41.1732
CLASS 6 TIER 59	346,100	357,699	30.0	41.8710
CLASS 6 TIER 60	357,700	369,499	30.5	42.5689
CLASS 6 TIER 61	369,500	381,499	31.0	43.2667
CLASS 6 TIER 62	381,500	393,699	31.5	43.9646
CLASS 6 TIER 63	393,700	406,099	32.0	44.6624
CLASS 6 TIER 64	406,100	418,699	32.5	45.3603
CLASS 6 TIER 65	418,700	431,499	33.0	46.0581
CLASS 6 TIER 66	431,500	444,499	33.5	46.7560
CLASS 6 TIER 67	444,500	457,699	34.0	47.4538
CLASS 6 TIER 68	457,700	470,999	34.5	48.1517
CLASS 6 TIER 69	471,000	484,599	35.0	48.8495
CLASS 6 TIER 70	484,600	498,299	35.5	49.5474
CLASS 6 TIER 71	498,300	512,299	36.0	50.2452
CLASS 6 TIER 72	512,300	526,399	36.5	50.9431
CLASS 6 TIER 73	526,400	540,699	37.0	51.6409
CLASS 6 TIER 74	540,700	555,199	37.5	52.3388
CLASS 6 TIER 75	555,200	569,899	38.0	53.0366
CLASS 6 TIER 76	569,900	584,799	38.5	53.7345
CLASS 6 TIER 77	584,800	599,899	39.0	54.4323
CLASS 6 TIER 78	599,900	615,199	39.5	55.1302
CLASS 6 TIER 79	615,200	999,999,999	40.0	55.8280
CLASS 5 TIER 1	100	699	1.0	1.7818
CLASS 5 TIER 2	700	1,199	1.5	2.6727
CLASS 5 TIER 3	1,200	1,799	2.0	3.5636
CLASS 5 TIER 4	1,800	2,499	2.5	4.4545
CLASS 5 TIER 5	2,500	3,499	3.0	5.3454
CLASS 5 TIER 6	3,500	4,499	3.5	6.2363
CLASS 5 TIER 7	4,500	5,699	4.0	7.1272
CLASS 5 TIER 8	5,700	6,999	4.5	8.0181
CLASS 5 TIER 9	7,000	8,499	5.0	8.9090
CLASS 5 TIER 10	8,500	9,999	5.5	9.7999
CLASS 5 TIER 11	10,000	11,799	6.0	10.6908
CLASS 5 TIER 12	11,800	13,699	6.5	11.5817
CLASS 5 TIER 13	13,700	15,699	7.0	12.4726
CLASS 5 TIER 14	15,700	17,799	7.5	13.3635
CLASS 5 TIER 15	17,800	20,099	8.0	14.2544
CLASS 5 TIER 16	20,100	22,499	8.5	15.1453
CLASS 5 TIER 17	22,500	25,099	9.0	16.0362
CLASS 5 TIER 18	25,100	27,799	9.5	16.9271

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	17.8180
CLASS 5 TIER 20	30,700	33,699	10.5	18.7089
CLASS 5 TIER 21	33,700	36,799	11.0	19.5998
CLASS 5 TIER 22	36,800	39,999	11.5	20.4907
CLASS 5 TIER 23	40,000	43,499	12.0	21.3816
CLASS 5 TIER 24	43,500	46,999	12.5	22.2725
CLASS 5 TIER 25	47,000	50,699	13.0	23.1634
CLASS 5 TIER 26	50,700	54,499	13.5	24.0543
CLASS 5 TIER 27	54,500	58,499	14.0	24.9452
CLASS 5 TIER 28	58,500	62,499	14.5	25.8361
CLASS 5 TIER 29	62,500	66,799	15.0	26.7270
CLASS 5 TIER 30	66,800	71,199	15.5	27.6179
CLASS 5 TIER 31	71,200	75,699	16.0	28.5088
CLASS 5 TIER 32	75,700	80,299	16.5	29.3997
CLASS 5 TIER 33	80,300	85,099	17.0	30.2906
CLASS 5 TIER 34	85,100	89,999	17.5	31.1815
CLASS 5 TIER 35	90,000	95,099	18.0	32.0724
CLASS 5 TIER 36	95,100	100,299	18.5	32.9633
CLASS 5 TIER 37	100,300	105,699	19.0	33.8542
CLASS 5 TIER 38	105,700	111,199	19.5	34.7451
CLASS 5 TIER 39	111,200	116,799	20.0	35.6360
CLASS 5 TIER 40	116,800	122,499	20.5	36.5269
CLASS 5 TIER 41	122,500	128,499	21.0	37.4178
CLASS 5 TIER 42	128,500	134,499	21.5	38.3087
CLASS 5 TIER 43	134,500	140,699	22.0	39.1996
CLASS 5 TIER 44	140,700	146,999	22.5	40.0905
CLASS 5 TIER 45	147,000	153,499	23.0	40.9814
CLASS 5 TIER 46	153,500	159,999	23.5	41.8723
CLASS 5 TIER 47	160,000	166,799	24.0	42.7632
CLASS 5 TIER 48	166,800	173,699	24.5	43.6541
CLASS 5 TIER 49	173,700	180,699	25.0	44.5450
CLASS 5 TIER 50	180,700	187,799	25.5	45.4359
CLASS 5 TIER 51	187,800	195,099	26.0	46.3268
CLASS 5 TIER 52	195,100	202,499	26.5	47.2177
CLASS 5 TIER 53	202,500	210,099	27.0	48.1086
CLASS 5 TIER 54	210,100	217,799	27.5	48.9995
CLASS 5 TIER 55	217,800	225,699	28.0	49.8904
CLASS 5 TIER 56	225,700	233,699	28.5	50.7813
CLASS 5 TIER 57	233,700	241,799	29.0	51.6722
CLASS 5 TIER 58	241,800	249,999	29.5	52.5631
CLASS 5 TIER 59	250,000	258,499	30.0	53.4540
CLASS 5 TIER 60	258,500	266,999	30.5	54.3449
CLASS 5 TIER 61	267,000	275,699	31.0	55.2358
CLASS 5 TIER 62	275,700	284,499	31.5	56.1267

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	57.0176
CLASS 5 TIER 64	293,500	302,499	32.5	57.9085
CLASS 5 TIER 65	302,500	311,799	33.0	58.7994
CLASS 5 TIER 66	311,800	321,199	33.5	59.6903
CLASS 5 TIER 67	321,200	330,699	34.0	60.5812
CLASS 5 TIER 68	330,700	340,299	34.5	61.4721
CLASS 5 TIER 69	340,300	350,099	35.0	62.3630
CLASS 5 TIER 70	350,100	359,999	35.5	63.2539
CLASS 5 TIER 71	360,000	370,099	36.0	64.1448
CLASS 5 TIER 72	370,100	380,299	36.5	65.0357
CLASS 5 TIER 73	380,300	390,699	37.0	65.9266
CLASS 5 TIER 74	390,700	401,199	37.5	66.8175
CLASS 5 TIER 75	401,200	411,799	38.0	67.7084
CLASS 5 TIER 76	411,800	422,499	38.5	68.5993
CLASS 5 TIER 77	422,500	433,499	39.0	69.4902
CLASS 5 TIER 78	433,500	444,499	39.5	70.3811
CLASS 5 TIER 79	444,500	999,999,999	40.0	71.2720
CLASS 4 TIER 1	100	499	1.0	0.8838
CLASS 4 TIER 2	500	899	1.5	1.3257
CLASS 4 TIER 3	900	1,399	2.0	1.7676
CLASS 4 TIER 4	1,400	1,899	2.5	2.2095
CLASS 4 TIER 5	1,900	2,599	3.0	2.6514
CLASS 4 TIER 6	2,600	3,399	3.5	3.0933
CLASS 4 TIER 7	3,400	4,299	4.0	3.5352
CLASS 4 TIER 8	4,300	5,299	4.5	3.9771
CLASS 4 TIER 9	5,300	6,399	5.0	4.4190
CLASS 4 TIER 10	6,400	7,599	5.5	4.8609
CLASS 4 TIER 11	7,600	8,899	6.0	5.3028
CLASS 4 TIER 12	8,900	10,299	6.5	5.7447
CLASS 4 TIER 13	10,300	11,899	7.0	6.1866
CLASS 4 TIER 14	11,900	13,499	7.5	6.6285
CLASS 4 TIER 15	13,500	15,199	8.0	7.0704
CLASS 4 TIER 16	15,200	17,099	8.5	7.5123
CLASS 4 TIER 17	17,100	18,999	9.0	7.9542
CLASS 4 TIER 18	19,000	21,099	9.5	8.3961
CLASS 4 TIER 19	21,100	23,199	10.0	8.8380
CLASS 4 TIER 20	23,200	25,499	10.5	9.2799
CLASS 4 TIER 21	25,500	27,799	11.0	9.7218
CLASS 4 TIER 22	27,800	30,299	11.5	10.1637
CLASS 4 TIER 23	30,300	32,899	12.0	10.6056
CLASS 4 TIER 24	32,900	35,499	12.5	11.0475
CLASS 4 TIER 25	35,500	38,299	13.0	11.4894
CLASS 4 TIER 26	38,300	41,199	13.5	11.9313
CLASS 4 TIER 27	41,200	44,199	14.0	12.3732

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	12.8151
CLASS 4 TIER 29	47,300	50,499	15.0	13.2570
CLASS 4 TIER 30	50,500	53,799	15.5	13.6989
CLASS 4 TIER 31	53,800	57,199	16.0	14.1408
CLASS 4 TIER 32	57,200	60,799	16.5	14.5827
CLASS 4 TIER 33	60,800	64,399	17.0	15.0246
CLASS 4 TIER 34	64,400	68,099	17.5	15.4665
CLASS 4 TIER 35	68,100	71,899	18.0	15.9084
CLASS 4 TIER 36	71,900	75,899	18.5	16.3503
CLASS 4 TIER 37	75,900	79,899	19.0	16.7922
CLASS 4 TIER 38	79,900	84,099	19.5	17.2341
CLASS 4 TIER 39	84,100	88,299	20.0	17.6760
CLASS 4 TIER 40	88,300	92,699	20.5	18.1179
CLASS 4 TIER 41	92,700	97,099	21.0	18.5598
CLASS 4 TIER 42	97,100	101,699	21.5	19.0017
CLASS 4 TIER 43	101,700	106,399	22.0	19.4436
CLASS 4 TIER 44	106,400	111,199	22.5	19.8855
CLASS 4 TIER 45	111,200	115,999	23.0	20.3274
CLASS 4 TIER 46	116,000	120,999	23.5	20.7693
CLASS 4 TIER 47	121,000	126,099	24.0	21.2112
CLASS 4 TIER 48	126,100	131,299	24.5	21.6531
CLASS 4 TIER 49	131,300	136,599	25.0	22.0950
CLASS 4 TIER 50	136,600	141,999	25.5	22.5369
CLASS 4 TIER 51	142,000	147,499	26.0	22.9788
CLASS 4 TIER 52	147,500	153,199	26.5	23.4207
CLASS 4 TIER 53	153,200	158,899	27.0	23.8626
CLASS 4 TIER 54	158,900	164,699	27.5	24.3045
CLASS 4 TIER 55	164,700	170,699	28.0	24.7464
CLASS 4 TIER 56	170,700	176,699	28.5	25.1883
CLASS 4 TIER 57	176,700	182,799	29.0	25.6302
CLASS 4 TIER 58	182,800	189,099	29.5	26.0721
CLASS 4 TIER 59	189,100	195,399	30.0	26.5140
CLASS 4 TIER 60	195,400	201,899	30.5	26.9559
CLASS 4 TIER 61	201,900	208,499	31.0	27.3978
CLASS 4 TIER 62	208,500	215,099	1.5	27.8397
CLASS 4 TIER 63	215,100	221,899	32.0	28.2816
CLASS 4 TIER 64	221,900	228,799	32.5	28.7235
CLASS 4 TIER 65	228,800	235,799	33.0	29.1654
CLASS 4 TIER 66	235,800	242,899	33.5	29.6073
CLASS 4 TIER 67	242,900	249,999	4.0	30.0492
CLASS 4 TIER 68	250,000	257,299	34.5	30.4911
CLASS 4 TIER 69	257,300	264,799	35.0	30.9330
CLASS 4 TIER 70	264,800	272,299	35.5	31.3749
CLASS 4 TIER 71	272,300	279,899	36.0	31.8168

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	32.2587
CLASS 4 TIER 73	287,600	295,399	37.0	32.7006
CLASS 4 TIER 74	295,400	303,299	37.5	33.1425
CLASS 4 TIER 75	303,300	311,399	38.0	33.5844
CLASS 4 TIER 76	311,400	319,499	38.5	34.0263
CLASS 4 TIER 77	319,500	327,799	39.0	34.4682
CLASS 4 TIER 78	327,800	336,099	39.5	34.9101
CLASS 4 TIER 79	336,100	999,999,999	0.0	35.3520
CLASS 3 TIER 1	100	399	1.0	0.8838
CLASS 3 TIER 2	400	799	1.5	1.3257
CLASS 3 TIER 3	800	1,199	2.0	1.7676
CLASS 3 TIER 4	1,200	1,599	2.5	2.2095
CLASS 3 TIER 5	1,600	2,199	3.0	2.6514
CLASS 3 TIER 6	2,200	2,899	3.5	3.0933
CLASS 3 TIER 7	2,900	3,599	4.0	3.5352
CLASS 3 TIER 8	3,600	4,499	4.5	3.9771
CLASS 3 TIER 9	4,500	5,399	5.0	4.4190
CLASS 3 TIER 10	5,400	6,399	5.5	4.8609
CLASS 3 TIER 11	6,400	7,599	6.0	5.3028
CLASS 3 TIER 12	7,600	8,799	6.5	5.7447
CLASS 3 TIER 13	8,800	9,999	7.0	6.1866
CLASS 3 TIER 14	10,000	11,399	7.5	6.6285
CLASS 3 TIER 15	11,400	12,899	8.0	7.0704
CLASS 3 TIER 16	12,900	14,399	8.5	7.5123
CLASS 3 TIER 17	14,400	16,099	9.0	7.9542
CLASS 3 TIER 18	16,100	17,799	9.5	8.3961
CLASS 3 TIER 19	17,800	19,599	10.0	8.8380
CLASS 3 TIER 20	19,600	21,599	10.5	9.2799
CLASS 3 TIER 21	21,600	23,599	11.0	9.7218
CLASS 3 TIER 22	23,600	25,599	11.5	10.1637
CLASS 3 TIER 23	25,600	27,799	12.0	10.6056
CLASS 3 TIER 24	27,800	30,099	12.5	11.0475
CLASS 3 TIER 25	30,100	32,399	13.0	11.4894
CLASS 3 TIER 26	32,400	34,899	13.5	11.9313
CLASS 3 TIER 27	34,900	37,399	14.0	12.3732
CLASS 3 TIER 28	37,400	39,999	14.5	12.8151
CLASS 3 TIER 29	40,000	42,799	15.0	13.2570
CLASS 3 TIER 30	42,800	45,599	15.5	13.6989
CLASS 3 TIER 31	45,600	48,399	16.0	14.1408
CLASS 3 TIER 32	48,400	51,399	16.5	14.5827
CLASS 3 TIER 33	51,400	54,499	17.0	15.0246
CLASS 3 TIER 34	54,500	57,599	17.5	15.4665
CLASS 3 TIER 35	57,600	60,899	18.0	15.9084
CLASS 3 TIER 36	60,900	64,199	18.5	16.3503

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	16.7922
CLASS 3 TIER 38	67,600	71,199	19.5	17.2341
CLASS 3 TIER 39	71,200	74,799	20.0	17.6760
CLASS 3 TIER 40	74,800	78,399	20.5	18.1179
CLASS 3 TIER 41	78,400	82,199	21.0	18.5598
CLASS 3 TIER 42	82,200	86,099	21.5	19.0017
CLASS 3 TIER 43	86,100	89,999	20.0	19.4436
CLASS 3 TIER 44	90,000	94,099	22.5	19.8855
CLASS 3 TIER 45	94,100	98,199	23.0	20.3274
CLASS 3 TIER 46	98,200	102,399	23.5	20.7693
CLASS 3 TIER 47	102,400	106,799	24.0	21.2112
CLASS 3 TIER 48	106,800	111,199	24.5	21.6531
CLASS 3 TIER 49	111,200	115,599	25.0	22.0950
CLASS 3 TIER 50	115,600	120,199	25.5	22.5369
CLASS 3 TIER 51	120,200	124,899	26.0	22.9788
CLASS 3 TIER 52	124,900	129,599	26.5	23.4207
CLASS 3 TIER 53	129,600	134,499	27.0	23.8626
CLASS 3 TIER 54	134,500	139,399	27.5	24.3045
CLASS 3 TIER 55	139,400	144,399	28.0	24.7464
CLASS 3 TIER 56	144,400	149,599	28.5	25.1883
CLASS 3 TIER 57	149,600	154,799	29.0	25.6302
CLASS 3 TIER 58	154,800	159,999	29.5	26.0721
CLASS 3 TIER 59	160,000	165,399	30.0	26.5140
CLASS 3 TIER 60	165,400	170,899	30.5	26.9559
CLASS 3 TIER 61	170,900	176,399	31.0	27.3978
CLASS 3 TIER 62	176,400	182,099	31.5	27.8397
CLASS 3 TIER 63	182,100	187,799	32.0	28.2816
CLASS 3 TIER 64	187,800	193,599	32.5	28.7235
CLASS 3 TIER 65	193,600	199,599	33.0	29.1654
CLASS 3 TIER 66	199,600	205,599	33.5	29.6073
CLASS 3 TIER 67	205,600	211,599	34.0	30.0492
CLASS 3 TIER 68	211,600	217,799	34.5	30.4911
CLASS 3 TIER 69	217,800	224,099	35.0	30.9330
CLASS 3 TIER 70	224,100	230,399	35.5	31.3749
CLASS 3 TIER 71	230,400	236,899	36.0	31.8168
CLASS 3 TIER 72	236,900	243,399	36.5	32.2587
CLASS 3 TIER 73	243,400	249,999	37.0	32.7006
CLASS 3 TIER 74	250,000	256,799	37.5	33.1425
CLASS 3 TIER 75	256,800	263,599	38.0	33.5844
CLASS 3 TIER 76	263,600	270,399	38.5	34.0263
CLASS 3 TIER 77	270,400	277,399	39.0	34.4682
CLASS 3 TIER 78	277,400	284,499	39.5	34.9101
CLASS 3 TIER 79	284,500	999,999,999	40.0	35.3520