

South County Fire Benefit Charge Formula for 2022

The basis for the benefit charge (BC) assessments used or favored by most fire jurisdictions that have approved a BC is “fire flow”. The principle is that the basic unit of public fire service is delivery of water to a fire. Fire flow increases with fire load, a determination that accounts primarily for building construction type, use-type and size (total area).

$$\text{[SQRT (Square Feet) x 18] x CF x CPG x BF x Discount = BC}$$

(If applicable)

SQRT (Square Feet) * 18 * Construction Type

This is an Insurance Services Office (ISO) formula for determining fire flow (Ref: *National Fire Protection Association Handbook, 18th Ed., Ch 6, Water Flow Requirements for Fire Protection*). We have used a construction type factor of “1” due to the variety of construction types in the Regional Fire Authority and the inability to determine the construction type for every structure from existing database information. Therefore, since the construction type is equal to “1”, we have not displayed this factor within the BC formula.

Category Factors (CF):

Residential = 0.3522377

Mobile Home = 0.21144753

Multi-Family = 0.48832641

Commercial

Comm 1	= 0.39	< 5,000 sq. ft.
Comm 2	= 0.959111	< 20,000 sq. ft.
Comm 3	= 1.7	< 50,000 sq. ft.
Comm 4	= 2.6	< 100,000 sq. ft.
Comm 5	= 3.8	< 200,000 sq. ft.
Comm 6	= 5	≥ 200,000 sq. ft.

Categories are “*Use Type*” groups. *Use Type* information is obtained from Snohomish County’s database. Each **Category Factor** is a weighted value and is determined by evaluating the relative “benefit” provided to the category of structures. The benefit to each category of structures is proportional to the total square feet of improvements in the Regional Fire Authority.

Cost Per Gallon Factor (CPG):

The Cost per Gallon Factor (CPG) is determined by dividing the total Supplemental Operating funds needed (**Total BC**) by the **Total Fire Flow** (SQRT(totsqft)*18) of the Regional Fire Authority. **TotBC/TotFF = CPG**

Balancing Factor (BF):

The RCW 52.18.010 requires the Regional Fire Authority to specify the specific revenue amount to be collected via the BC program. The Balancing Factor (BF) is used to “fine-tune” the final calculations to all parcels to equitable and to help make the total benefit charge amount assessed be as specified by the Board of Commissioners. The first year BF is .01.

Senior Citizen Discount:

Seniors are eligible for the same discount rate they receive for regular property taxes. This information is obtained from, and maintained by, Snohomish County.

Sprinkler System Discount:

All commercial and multi-family parcels with a full coverage fire sprinkler system will receive a ten percent (10%) BC discount. Partial coverage systems will receive the discount on the parcels sprinklered square footage.

Multi-Family/Apartments:

The same formula is applied to this category, but first the total square feet of the complex is divided by the number of units to produce an average unit square footage. That figure is then inserted into the formula resulting in an average BC for each unit. This average is then multiplied by the number of units to get the total BC to be collected from the parcel owner.

Minimum Square Footage:

A benefit charge will not be applied to parcels with a total improvement square footage of less than 400 square feet.

Decks, Porches, Carports and Garages:

The square footage for decks and porches is not included in the improvement square footage while carports and garages are included in the calculations.