

Olympia Tumwater RFA Planning Committee

Fire Benefit Charge Factor Options

October 10, 2022

Tonight's presentation

1. Review Option 3 B.
2. Seek RFA Planning Committee recommendation on FBC.

Option 3 B – Same as Option 3 A but with slightly lower weight for residential tier1 and commercial tier 1, and revised Cost Per Gallon.

\$10.5 M in FBC collections.

3. Note: Options 3 A and 3 B are not "apples to apples" because of revised Cost Per Gallon information.

FBC Formula

Fire Benefit Charge = **Fire Flow** x **Cost Per Gallon Factor** x **Bldg. Weight Factor** x Hazard Reduction Factors x Hazard Increase Factors x Exemption/Discount Factors

- **Fire Flow** = Square Root (Total Square Feet) x 18
- **Cost Per Gallon Factor** = Total FBC ÷ Fire Flow x .01
- **Building Weight Factor** = weight for building type/size

Hazard Reduction Factors

- **Sprinklers**
- Smoke Detectors
- Automatic Alarms

Hazard Increase Factors

- Flammable Materials
- Multiple Stories
- Response Density

Exemption/Discount Factors

- Religious facilities
- Low income housing
- Low-income seniors and disabled

The formula we are using does not have any **hazard increase factors**. All **exemptions/discounts** allowed by state law will apply.

Formula options

Option 1	FBC is distributed proportionately to the square footage of each building class, <i>e.g.</i> , 66% of total square footage is single-family residential so single-family residential pays about that same % of FBC. Includes sprinkler data for apartments and commercial. (This option has been shared previously).
Option 1-A	Option 1 with <i>residential sprinkler data added</i> . Revenue lost to the sprinkler discounts shifted to residential properties resulting in a slight increase in the Residential Building Class Weight, increasing to .582 from the original .58.
Option 2	Residential Sector share reduced by 6%; Commercial share increased by 6%.
Option 3	Divide residential into 3 classes, weights increasing with square footage. Breakpoints at 2000 and 3000 sq. ft. Residential and Commercial shares same as Option 2 (+/- 6% over Option 1-A)
Option 3 A	Same as option 3, but use lower target FBC collection amount , eliminate fee for mobile homes.
Option 3 B	Same as option 3 A but with slightly lower weight for residential tier 1 and commercial tier 1.
Option 4	Major reduction for Small Residential (1500 sq. ft. max) and Small Commercial (1000 sq. ft. max). Total Residential share lowered by 8% and Commercial share increased by 8% as compared to Option 1-A

Options Summary: Classifications, weights

	Option 1 (Original)	Option 1-A	Option 2	Option 3	Option 3 A	Option 3 B	Option 4
	Bldg Weights approx. proportional to Square footage.	Add Sprinkler Data; Minor increase in Residential Weights	Larger decrease in Residential Bldg Weights; Larger increase in Commercial Weights	Differentiate Residential Weights, retain 6% shift from residential to Commercial	Same as Option 3, lower FBC target, zero charge for mobile homes	Same as option 3 A but with slightly lower weight for residential tier 1 and commercial tier 1.	Major reduction in Small Residential and Small Commercial Weights
MH	0.450	0.450	0.450	0.450	0.0	0.0	0.450
Res 1	0.580	0.582	0.5466	0.510	0.38	.45	0.300
Res 2	0.580	0.582	0.5466	0.550	0.43	.55	0.500
Res 3	0.580	0.582	0.5466	0.590	0.48	.64	0.650
APT	1.450	1.450	1.450	1.450	1.0	1.5	1.450
Com 1	1.000	1.000	1.000	1.000	0.7	.8	0.500
Com 2	1.500	1.500	1.700	1.700	1.2	1.5	1.200
Com 3	2.000	2.000	2.500	2.500	2	2.7	2.500
Com 4	3.000	3.000	3.500	3.500	3	4.1	3.500
Com 5	4.000	4.000	4.500	4.500	4	5.5	4.500
Com 6	5.000	5.000	5.500	5.500	5	6.5	5.500

Sample FBCs					Square Footage Allocation
Sample	Structure Sq Ft	Option 1 A	Option 3 B 3a but with slightly lower weight for residential tier1 and commercial tier 1.	Option 3 B Cost per Sq Ft.	Equally allocate \$10.5M FBC by square foot (\$0.1336 per square foot)
Residential					
R3	1500	\$338	\$202	\$0.13	200
R4	2000	\$391	\$233	\$0.12	267
R6	2500	\$437	\$318	\$0.13	334
R8	3255	\$499	\$423	\$0.13	435
R10	4466	\$584	\$496	\$0.11	597
R11	6220	\$689	\$585	\$0.09	831
Apartments					
A3	2,724	\$1022	\$817	\$0.30	364
A4	5,100	\$1554	\$1,242	\$0.24	682
A5	10,250	\$1983	\$1,585	\$0.15	1,370
A6	21,120	\$3163	\$2,528	\$0.12	2,823
A7	103,401	\$6298	\$5,035	\$0.05	13,819

Sample FBCs					Square Footage Allocation
Sample	Structure Sq Ft	Option 1 A	Option 3 B 3a but with slightly lower weight for residential tier1 and commercial tier 1.	Option 3 B Cost per Sq Ft.	Equally allocate \$10.5M FBC by square foot (\$0.1336 per square foot)
Mobile Homes					
M1	576	\$41	\$0.0	\$0.0	77
M2	600	83	\$0.0	\$0.0	80
M3	432	141	\$0.0	\$0.0	58
M4	440	142	\$0.0	\$0.0	59
M5	952	208	\$0.0	\$0.0	127
M6	1572	268	\$0.0	\$0.0	210
Sample Commercial 1- (400-5,000SqFt)					
C1.1	450	\$318	\$196	\$0.44	60
C1.2	1500	581	\$359	\$0.24	200
C1.3	2140	694	\$429	\$0.20	286
C1.4	3000	822	\$508	\$0.17	401

Sample FBCs					Square Footage Allocation
Sample	Structure Sq Ft	Option 1 A	Option 3 B 3a but with slightly lower weight for residential tier1 and commercial tier 1.	Option 3 B Cost per Sq Ft.	Equally allocate \$10.5M FBC by square foot (\$0.1336 per square foot)
Sample Commercial 2 (5,001-20,000SqFt)					
C2.1	5000	\$1061	\$656	\$0.13	668
C2.2	9000	1993	\$1,540	\$0.17	1,203
C2.3	15000	2481	\$1,917	\$0.13	2,005
C2.4	19540	2832	\$2,188	\$0.11	2,611
Sample Commercial 3 (20,001-50,000SqFt)					
C3.1	20035	\$3824	\$3,989	\$0.20	2,678
C3.2	36000	5126	\$5,347	\$0.15	4,811
C3.3	44200	5680	\$5,925	\$0.13	5,907
C3.4	49056	5983	\$6,292	\$0.13	6,556

Sample FBCs					Square Footage Allocation
Sample	Structure Sq Ft	Option 1 A	Option 3 B 3a but with slightly lower weight for residential tier1 and commercial tier 1.	Option 3 B Cost per Sq Ft.	Equally allocate \$10.5M FBC by square foot (\$0.1336 per square foot)
Sample Commercial 4 (50,001-100,000SqFt)					
C4.1	50333	\$9091	\$9,602	\$0.19	6,727
C4.2	65834	10397	\$10,981	\$0.17	8,798
C4.3	77369	11,271	\$11,905	\$0.15	10,340
C4.4	90804	12,211	\$12,897	\$0.14	12,135
Sample Commercial 5 (100,001-200,000SqFt)					
C5.1	100778	\$17,152	\$18,227	\$0.18	13,468
C5.2	121671	18,846	\$20,027	\$0.16	16,261
C5.3	130094	19,488	\$20,709	\$0.16	17,386
C5.4	147156	20,726	\$22,025	\$0.15	19,667
Sample Commercial 6 (200,001+SqFt)					
C6.1	214476	\$31,278	\$31,424	\$0.15	28,663
C6.2	247656	33,610	\$33,768	\$0.14	33,098

Under the square footage allocation, a 500,000 square foot warehouse would pay **\$66,822**

Discussion & Direction