



RFA GOVERNANCE BOARD REGULAR MEETING AGENDA

10:00 A.M. – Monday, August 14, 2023

Fire Station #13, 18002 108th Ave SE, Renton, WA 98055

Zoom Webinar: <https://us02web.zoom.us/j/84836968318>

Dial-in: (253) 215-8782 | Webinar ID: 848 3696 8318

View Live via Facebook: <http://www.Facebook.com/RentonRFA>

- Call Meeting to Order
- Flag Salute
- Roll Call
- Agenda Modifications
- Announcements, Proclamations, and Presentations
- Public Comment

Members of the audience may comment on items relating to any matter related to RFA business under the Public Comment period. Comments are limited to three (3) minutes per person pursuant to the rules established under Section 8 of the bylaws.
- Consent Agenda
 - Approval of [Minutes from July 10, 2023](#), Regular Meeting
 - Approval of [Vouchers](#): AP Check Register 6/16/2023 – 7/15/2023
Payroll Checklist 6/1/2023 – 6/30/2023
- Signing of Vouchers
- Board Committee Reports
 - Budget & Finance Committee
 - Operations and Capital Committee
- [Chief's Report](#)
- Division Reports
 - Administration (CAO Babich)
 - [Q2 2023 Financial Report](#)
 - EMS/Health & Safety (Deputy Chief DeSmith)
 - [2023 Mid-Year CPR Statistics](#)

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- Office of the Fire Marshal (Fire Marshal Barton)
 - [OFM Monthly Report](#)
- Support Services (Deputy Chief Alexander)
 - Station 16 Property Update
- Response Operations (Deputy Chief Seaver)
 - Significant Events
 - 7/1/23: 2104 NE 6th Pl Residential Fire
 - 7/4/23: 18925 SE 113th Way SE Residential Fire
 - 7/6/23: 830 N 10th St Commercial Fire
 - 7/9/23: 208 Sunset Blvd N Commercial Fire
 - 7/13/23: SE 177th Pl MVA w/Pedestrian
 - 7/13/23: 10619 SE 172nd St Commercial Fire
 - 7/14/23: S 4th St/ Morris Ave S Shooting
 - 7/17/23: 3000 SE Royal Hills Dr Brush Fire
 - Training
 - Live Fire Multi-Company Operations
 - Rescue Swimmer
 - Multiple JATC Tests
 - Public Outreach
 - Renton River Days
 - Station Tours
 - Station 11 (x2), Station 16, Station 17
 - Engine Visits
 - Kennydale KinderCare
 - Fairwood Martial Arts
 - Sunset Park, Summer Lunch Program
 - Burnett Linear Park
 - Renton High School
 - Heritage Park, Summer Lunch Program
 - Maplewood Heights Elementary
 - [July Response Reports](#)
- Correspondence
- Unfinished Business
- New Business
 - [Establish Public Hearing Dates](#)
 - [Capital Facilities Plan and Rate Study](#)
- Good of the Order

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- Executive Session

Executive Session pursuant to RCW 42.30.110(1)(i), to discuss with legal counsel representing the agency litigation or potential litigation to which the agency, the governing body, or a member acting in an official capacity is, or likely to become, a party, when public knowledge regarding the discussion is likely to result in an adverse legal or financial consequence to the agency.

- Future Meetings:

- Monday, August 21, 2023, 10:00 a.m., Governance Board Special Meeting, Fire Station #13 (18002 108th Ave SE, Renton) / Video Conference
- Monday, August 28, 2023, 10:00 a.m., Budget/Finance Committee Meeting, Video Conference
- Monday, August 28, 2023, 10:30 a.m., Operations/Capital Committee Meeting, Video Conference
- Monday, September 11, 2023, 10:00 a.m., Governance Board Regular Meeting, Fire Station #13 (18002 108th Ave SE, Renton) / Video Conference

- Adjournment



Renton Regional Fire Authority

18002 108th Ave SE
Renton, WA 98055
Office: (425) 276-9500
Fax: (425) 276-9592

MINUTES

RFA Governance Board Regular Meeting

10:00 A.M. – Monday, July 10, 2023

Fire Station #13 – 18002 108th Ave SE, Renton

CALL TO ORDER

Governance Board Chair O'Halloran called the regular meeting to order at 10:00 a.m.

ROLL CALL

Governance Board Members Present:

Kerry Abercrombie, Vice Chair (Fire District 25)
James Alberson (City of Renton)
Valerie O'Halloran, Chair (City of Renton)
Ruth Pérez (City of Renton)
Andrew Schneider (Non-Voting Advisory Position, Fire District 40)

Governance Board Members Not Present:

Sean Cook (Fire District 25)
Marcus Morrell (Fire District 25)

Administrative Staff Present:

Fire Chief Steve Heitman, Chief Administration Officer Samantha Babich, Fire Marshal Anjela Barton, Deputy Chief Mark Seaver, Deputy Chief Dan Alexander, Cpt. Mark Dos Remedios, Facilities Manager Scott Murphy, Site Reliability Engineers Wyatt Humphreys and Javier Esparza, Board Secretary Samantha Vergara, and RFA Attorney Brian Snure.

A **MOTION** was made by Board Member Alberson and **SECONDED** by Vice Chair Abercrombie to excuse the absent Board Members from this meeting. **MOTION CARRIED (4-0)**

AGENDA MODIFICATIONS

There were no agenda modifications.

ANNOUNCEMENTS, PROCLAMATIONS, AND PRESENTATIONS

There were no announcements, proclamations, or presentations.

PUBLIC COMMENT

There was no public comment.

CONSENT AGENDA

Approval of minutes from the June 12, 2023, regular meeting and the approval of vouchers.

A **MOTION** was made by Vice Chair Abercrombie and **SECONDED** by Board Member Alberson to approve the consent agenda for July 10, 2023. **MOTION CARRIED (4-0)**

SIGNING OF VOUCHERS

The Governance Board Members signed the Voucher Approval letter for July 10, 2023.

BOARD COMMITTEE REPORTS

There were no Board Committee reports.

CHIEF'S REPORT

Chief Heitman presented his report.

Board Member Alberson asked for an overview of the accreditation process. Chief Heitman explained that the details of our processes are being analyzed; how our policies support our strategic plan. Board Chair O'Halloran asked the reasoning for our due date being moved up 30 days. This was to accommodate the peer-assessor teams after the change in the conference date.

Regarding the training academy at the consortium, Vice Chair Abercrombie asked about putting more candidates through each class. Chief Heitman shared that each participating agency is allotted a certain number of slots and next year our allotment goes from 5 to 8 candidates. Vice Chair Abercrombie inquired about whether the other agencies are experiencing the same attrition rate. Chief Heitman confirmed yes – on both the retirement side and academy side.

With regards to Prop 1, Vice Chair Abercrombie asked about Local 864's participation in getting the word out. Chief Heitman confirmed firefighters are involved and have plans for sign waving. Board Chair O'Halloran shared Lt. Krystofiak has reached out to the City Council and the Mayor.

DIVISION REPORTS

Each of the division managers presented an overview of their respective division reports. Deputy Chief Alexander presented the EMS/Health & Safety report on behalf of Deputy Chief DeSmith.

After the Administration report was presented, Vice Chair Abercrombie asked that communication be sent to all board members to ensure a quorum on key dates. Board Secretary Vergara will follow-up with this request.

With the Office of the Fire Marshal report, Board Member Schneider asked for an update on significant events related to fireworks and whether there has been a downward trend over the years. Both Fire Marshal Barton and Deputy Chief Seaver provided information. Fire Marshal Barton noted the significant fire event at The Landing that was caused by fireworks on the roof and resulted in substantial water damage to three businesses.

Board Member Alberson inquired about the increase in the incendiary fires and if fire investigations have found a common theme. Fire Marshal Barton noted they are tied to the transient community, explaining that an illegal activity is considered as an intentionally set fire.

Board Member Alberson asked about the penalty for illegally setting off fireworks, such as M-80s. Fire Marshal Barton shared that Renton Municipal does have fines that Renton PD may issue, but the challenge is police must witness the action. The Fire Marshal's Office no longer participates in the enforcement side due to high-risk to staff from confrontational public behavior.

After Deputy Chief Seaver presented his report on Response Operations, Board Member Alberson inquired about the proposed lithium battery storage facility in Covington, the impact to fire response and if training has been conducted. Deputy Chief Seaver shared that although this is outside our

jurisdiction, we will answer a mutual aid call and our Hazmat team will be included in a response. It was noted our Hazmat team has been preparing/training.

Fire Marshal Barton shared that in the proposal to build the plant in Renton, RRFA asked the City of Renton to pause any approval until adequate fire codes and requirements would be implemented. Chief Heitman stressed the fact that there is no way to put out a fire at a storage facility containing lithium batteries because they burn under water. He is concerned of any impact to the communities.

Board Chair O'Halloran inquired about the fire service reaching out to Olympia to express these concerns. Chief Heitman shared that the State Fire Chiefs and State Council of Firefighters brought this issue to the Legislature.

Deputy Chief Seaver added to his report that our Renton Hazmat team has been assisting Seattle's Hazmat team to cover the MLB All-Star game in monitoring for terrorist type substances and radiation explosives.

CORRESPONDENCE

There was no correspondence.

UNFINISHED BUSINESS

There was no unfinished business.

NEW BUSINESS

There was no new business presented.

GOOD OF THE ORDER

There was no good of the order.

EXECUTIVE SESSION

There was no executive session.

FUTURE MEETINGS

- Monday, July 24, 2023, 10:00 a.m., Budget/Finance Committee Meeting, Video Conference
- Monday, July 24, 2023, 10:30 a.m., Operations/Capital Committee Meeting, Video Conference
- Monday, August 14, 2023, 10:00 a.m., Governance Board Regular Meeting, Fire Station #13 (18002 108th Ave SE, Renton) / Video Conference

ADJOURNMENT

Board Chair O'Halloran adjourned the meeting at 10:44 a.m.

Valerie O'Halloran, Board Chair

Christine Noddings, Board Secretary

VOUCHER APPROVAL FOR AUGUST 14, 2023 MEETING

AUDITING OFFICER CERTIFICATION

I, the undersigned, do hereby certify under penalty of perjury that the materials have been furnished, the services rendered, or the labor performed as described herein, that any advance payment is due and payable pursuant to a contract or is available as an option for full or partial fulfillment of a contractual obligation, and that the claim is a just, due and unpaid obligation against the Renton Regional Fire Authority, and that I am authorized to authenticate and certify said claim.

Auditing Officer: _____

Steven C. Heitman, Fire Chief

AUDIT COMMITTEE

The vouchers below have been reviewed and certified by individual departments and the RFA's Auditing Officer as required by RCW's 42.24.080 & 090, and a list of vouchers has been provided for review by the Finance Committee.

The undersigned members of the Finance Committee of the Renton Regional Fire Authority do hereby approve for payment accounts payable vouchers totaling \$2,566,177.78, payroll vouchers and direct deposits totaling \$1,377,540.03.

A/P VOUCHERS	Payment Date	Numbers	Amount
Virtual Pay	06/16/2023 - 07/15/2023	APA002015-APA002099	\$769,153.46
Checks	06/16/2023 - 07/15/2023	13692-13693	\$34,279.65
EFTs	06/16/2023 - 07/15/2023	-	\$375,535.47
Bank Drafts	06/16/2023 - 07/15/2023	-	\$763,294.40
AR Refund Checks	06/16/2023 - 07/15/2023	-	\$0.00
TOTAL A/P			\$1,942,262.98
PAYROLL VOUCHERS		No. of Vouchers	Amount
Direct Deposits	6/23/2023	168	\$690,241.54
Payroll Checks	6/23/2023	0	\$0.00
Direct Deposits	7/10/2023	173	\$739,937.87
Payroll Checks	7/10/2023	2	\$0.00
TOTAL PAYROLL		343	\$1,430,179.41
TOTAL CLAIMS			\$3,372,442.39

Renton Regional Fire Authority Governance Board:

Valerie O'Halloran, Board Chair

Kerry Abercrombie, Board Vice Chair

Marcus Morrell, Board Member

James Alberson, Board Member

Sean Cook, Board Member

Ruth Pérez, Board Member

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RENTON REGIONAL FIRE AUTHORITY

M E M O R A N D U M

DATE: August 14, 2023

TO: Kerry Abercrombie (Fire District 25)
James Alberson, Jr. (City of Renton)
Sean Cook (Fire District 25)
Marcus Morrell (Fire District 25)
Valerie O'Halloran (City of Renton)
Ruth Pérez (City of Renton)
Andrew Schneider (Non-Voting Advisory Position, Fire District 40)

FROM: Steve Heitman, Fire Chief

SUBJECT: **Renton Regional Fire Authority Chief's Report**

1. Members of the 2nd Quarter

Nominations were held for our quarterly recognitions. The following members were chosen for this honor:

Officer – Lt. Chris Ellis

Firefighter – FF Brandon Ross

Civilian – Finance Assistant Evyn Villa

2. Welcome New Members

Please join me in welcoming our new Finance Assistant, Thomas Paluch, new Assistant Fire Marshal, LeMont Lucas, and new Deputy Fire Marshals, Ashlinn Phipps and Vlad Kononenko, to the team.

Thomas Paluch's journey began in Superior, Colorado where he was born and raised. In 2017, he decided to attend Seattle University where he graduated in 2021 with a bachelor's in business administration, majoring in finance, and minoring in entrepreneurship and innovation. A fun fact about Thomas is that he is a big sports fan; he loves playing and watching all kinds of sports. His favorite sport to watch and play is basketball. "I could not be more excited to be here at Station 13 and am looking forward to my career with Renton Regional Fire Authority."



LeMont Lucas served in the US Army as an airborne infantryman, earning multiple prestigious awards such as the Army Good Conduct Medal, Army Commendation Medal, and the Combat Infantryman's Badge, among others. He completed a tour in Afghanistan during his years of service. Following his time in the army, LeMont obtained a bachelor's degree in criminal justice administration from the University of Phoenix. LeMont joined the fire service in June of 2018 as a Fire Code Officer with Vancouver Fire and was promoted to Deputy Fire Marshal. Most recently as a Lead Deputy Fire Marshal, LeMont coordinated the fire code enforcement and community risk reduction programs. LeMont is a certified Fire and Explosion Investigator from the National Association of Fire Investigators, as well as a Fire Plans Examiner and Fire Inspector I & II. LeMont finds joy in the company of his loved ones and enjoys riding his motorcycle and snowboarding.



Vladislav Kononenko joins our Fire Marshal's Office after working in the fire alarm and fire sprinkler industry. He is married to his wife Rufina and has a baby boy and are expecting another baby in February. Vlad and his wife enjoy the outdoors and exploring trails.



Ashlinn Phipps recently graduated from Washington State University with a bachelor's degree in criminal justice. Ashlinn grew up in Sacramento and enjoys running, skiing, and going camping with friends.

3. Community Involvement

Renton RFA team members participated in three separate community barbeque events this summer that were hosted by the City of Renton. The last event was on July 19th at Renton High School; I attended the Renton Community BBQ with Deputy Chief Seaver and Deputy Chief DeSmith. On-duty crews were also present to engage with community



members and provide rig tours. We handed out summer safety swag and information regarding Proposition 1 at the event.

On August 1st, two crews, DFM/PIO's Sara Morris and Ashlinn Phipps and Fire Marshal Barton staffed the National Night Out Community Booth at the Farmers Market.

Open house planning is underway, with the following schedule set for the stations in October. Communication will be going out to HOAs and other community groups in the Renton community, and interactive activities will include trying on gear, spray the fire hose, micro obstacle course, jaws of life demo, ride the stretcher, and more.

- October 14th – Station #11 (9-11am) and Station #12 (1-3pm)
- October 21st – Station #13 (9-11am) and Station #15 (1-3pm)
- October 28th – Station #16 (9-11am) and Station #17 (1-3pm)

For Fire Station 17, we have the Zone 3 Fire Cadets already reserved to help with parking and street crossing. Additional signage is being added this year to assist in directing drivers to stay safe when approaching the station. We also plan to work with nearby businesses to “sponsor” parking for the event and have a sign directing people forward to their location when our lot and the KinderCare lot across the street is full.

4. Fire-Rescue International 2023 Conference & Expo

I will be attending the annual FRI Conference & Expo from August 14-18 in Kansas City, Missouri with CAO Samantha Babich, DC Dan Alexander and DC Chuck DeSmith. FRI education covers all areas of the emergency service, including navigating the political environment, managing change, ethical leadership, EMS issues, career development, and more. FRI attracts hundreds of exhibitors to showcase the newest fire service innovations in apparatus, technology, equipment, gear and more, so we look forward to bringing back a wealth of knowledge to further improve our own operations.

5. Proposition 1 Wrap-Up

I was invited to present information about the ballot measure to the Fairwood Greens HOA on July 25th. This was our last presentation before the election, and the information was well received.

While the votes are still being counted, current election results as of Friday, August 4th are appearing to be a positive outcome for both Renton RFA and Fire District #40 Proposition 1 ballot measures. We are patiently awaiting final results to determine next steps.

6. SKCFTC Admin Board Meeting

We bumped up to 10 slots for the February academy.

7. Dive Team Update

DC Seaver met with our dive partner, Valley Regional Fire Authority, at the beginning of the year to discuss the potential elimination of the dive team. We have also met with the King County Sheriff's Office (KCSO) dive team, Zone 3 Ops Chiefs, Zone 3 Chiefs, KC Ops Chiefs, KC Chiefs, and Rescue Swimmer instructors to assess impacts with no issues identified. This is not for financial reasons, but rather due to underutilization of resources. We are currently three members short of a fully-staffed team, and may lose four more with promotions. Valley RFA is also short members. KCSO will take over the dive portion effective September 30th. This move will bolster our Rescue Swimmer program, with other agencies also utilizing Rescue Swimmer programs.

Last year, Dive312 was dispatched 46 times and made it on scene 17 of those calls. Only six of the 17 were possible dive incidents, two of which were in Renton with no water entry, and four were out of jurisdiction. Of the six incidents, three had already been handled by rescue swimmers, one was removed by a bystander, one divers searched an empty car and found no patient, and one body was recovered 90 minutes from the time of the call.

8. Accreditation Update

Our accreditation deadline has been postponed until 2024.

9. Governance Board Notifications

Per our procurement process and policy, I am notifying the Board of the following purchases. The replacement PPE and bunker boots have already been shown on the vouchers.

Replacement PPE – \$43,807.55

Recruit Bunker Gear – \$40,608.39



2023 Q2 Financial Report

Renton Regional Fire Authority

For Period ending on June 30th, 2023



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1. Operating Fund Performance

Category	Actual	Budget	Variance	YTD % vs Budget
Revenue	30,199,839	50,841,205	(20,641,366)	59.4%
10-Property Tax	9,856,838	18,672,206	(8,815,368)	52.8%
11-Fire Benefit Charge	9,433,490	17,895,336	(8,461,845)	52.7%
13-EMS Levy	2,405,273	2,516,986	(111,713)	95.6%
20-FD 40 Contract	3,326,171	6,652,341	(3,326,171)	50.0%
30-Permits & Fees	431,923	340,100	91,823	127.0%
40-Investment Income	264,802	137,007	127,795	193.3%
50-EMS Services	4,144,636	4,154,071	(9,435)	99.8%
60-Other Revenues	336,707	473,159	(136,452)	71.2%
Expense	23,234,664	50,841,205	(27,606,541)	45.7%
10-Salaries and Wages	13,471,193	29,832,004	(16,360,811)	45.2%
20-Payroll Tax and Benefits	4,253,153	8,490,859	(4,237,706)	50.1%
30-Supplies	647,643	1,761,500	(1,113,857)	36.8%
40-Services	2,300,646	5,632,784	(3,332,138)	40.8%
81-Transfers Out	2,562,029	5,124,058	(2,562,029)	50.0%
Change in Fund Balance	6,965,175	6,965,175	6,965,175	

Beginning Fund Balance:	24,100,503
Increase / (Decrease)	6,965,175
Decrease by Fund Balance Transfer	
Ending Fund Balance:	31,065,678

Highlights

Revenue:

- ✓ First half of Property Tax/FBC was collected in April
- ✓ Other Revenue includes \$93K for an Ecology Grant and \$100K in FEMA grants

Expenditures:

- ✓ \$100K in FBC Collection fees, \$450K for CARES Contract, \$585K in ValleyCom Fees

Fund Balance:

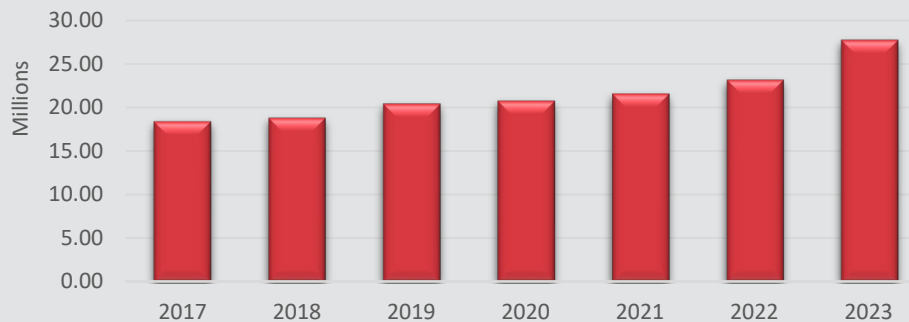
- ✓ Fund balance increased by \$6.9M

Operating Fund Performance (continued)

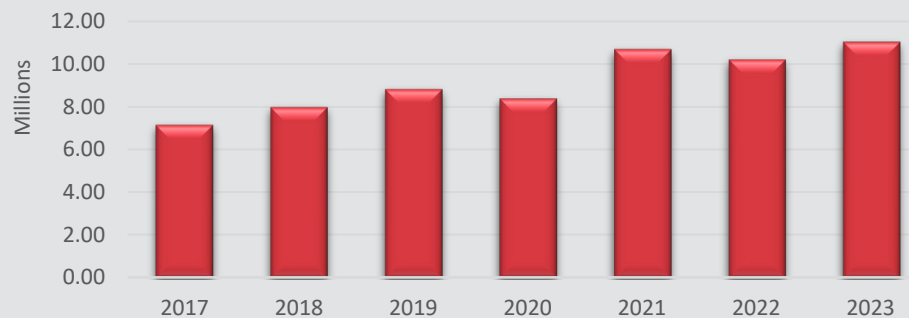
Quarter over Quarter Operating Fund Performance by High Level Category

	2017	2018	2019	2020	2021	2022	2023
Revenue	18,396,322	18,803,88	20,403,371	20,746,68	21,551,37	23,146,03	27,701,45
10-Property Tax	8,291,118	7,984,205	8,079,288	8,189,603	8,433,865	8,865,076	8,911,080
11-Fire Benefit Charge	7,182,002	6,729,617	8,104,932	7,867,036	8,122,255	8,653,062	8,581,026
13-EMS Levy	275,746	1,498,108	1,441,980	1,913,962	1,730,860	294,944	2,405,273
20-FD 40 Contract	2,503,319	2,378,544	2,595,385	2,663,316	2,710,565	2,924,925	3,326,171
30-Permits & Fees	91,694	81,490	43,905	32,334	51,073	229,919	331,527
40-Investment Income	(1,502)	41,036	95,142	72,983	42,205	27,386	164,757
50-EMS Services					123,878	2,023,637	3,943,431
60-Other Revenues	53,945	90,881	42,739	7,447	336,672	127,087	38,190
Expense	7,143,653	7,964,999	8,800,044	8,371,513	10,668,69	10,178,41	11,005,83
10-Salaries and Wages	4,399,618	4,603,974	5,244,878	5,689,638	6,237,315	6,147,151	6,599,634
20-Payroll Tax and Benefits	1,133,682	1,333,395	1,555,501	1,706,122	1,767,037	1,720,398	1,815,534
30-Supplies	95,042	108,864	175,938	212,491	427,653	396,910	373,675
40-Services	866,986	1,499,434	349,970	763,262	707,035	912,153	935,980
81-Transfers Out	648,326	419,332	1,473,756		1,529,657	1,001,803	1,281,014
Change in Fund Balance	11,252,669	10,838,88	11,603,328	12,375,16	10,882,67	12,967,62	16,695,61

Operating Fund Revenue Quarter Over Quarter



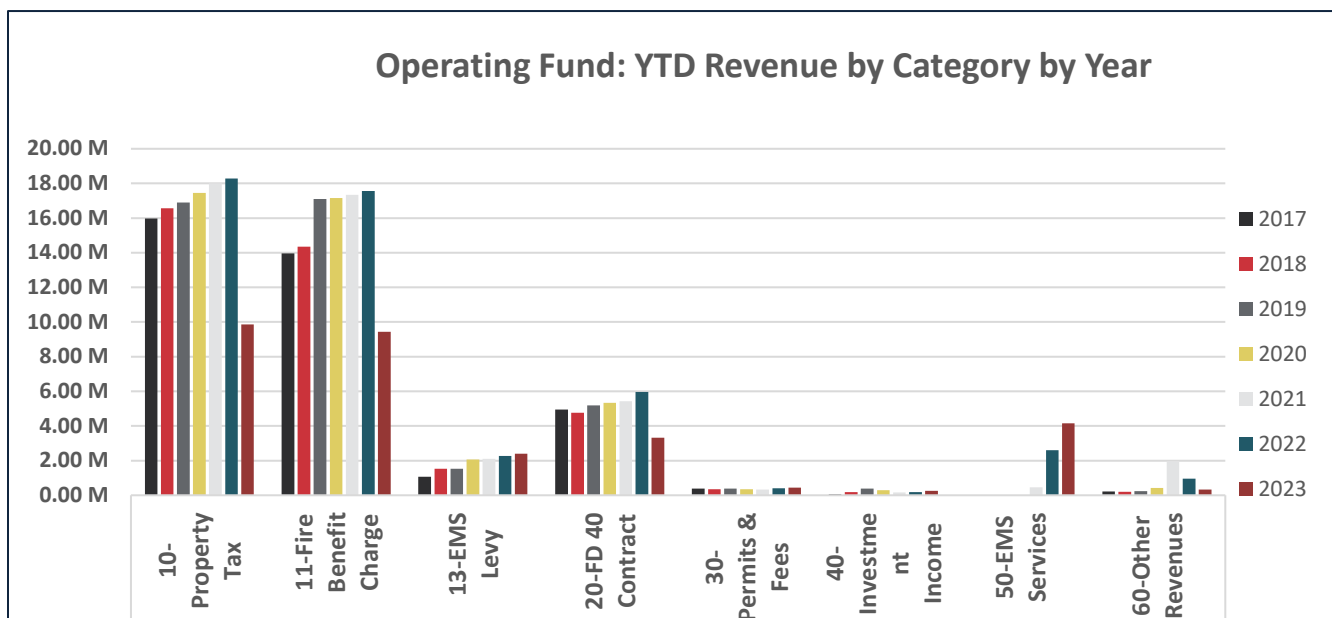
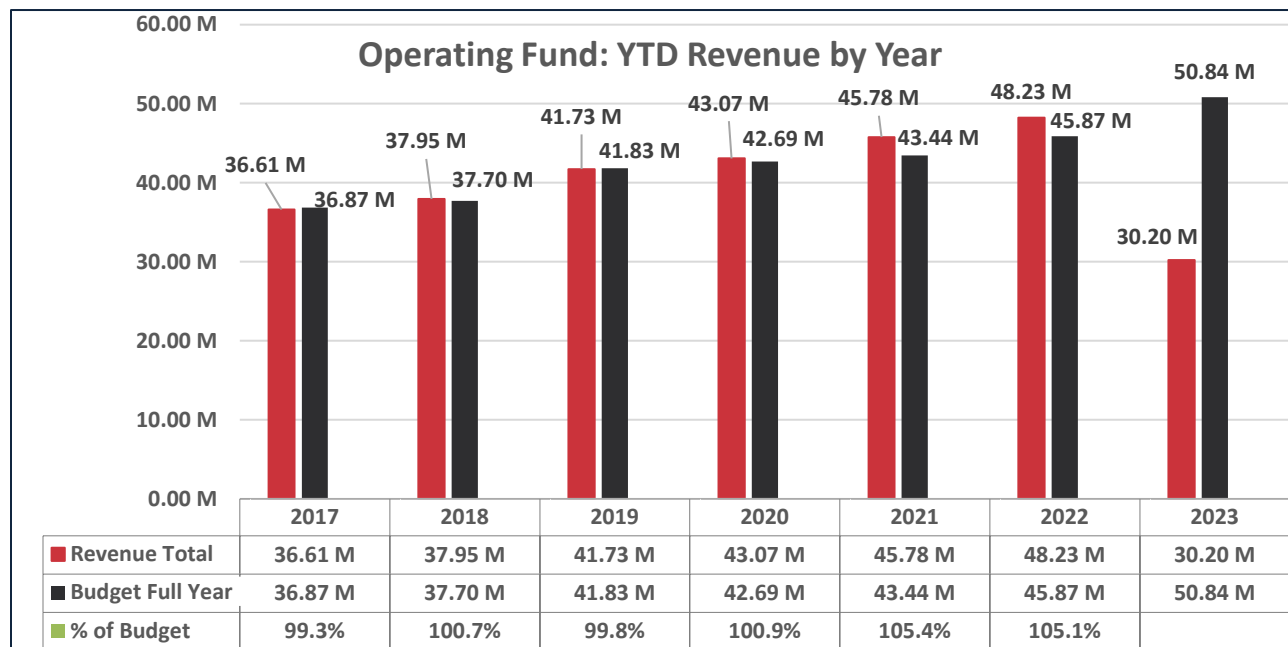
Operating Fund Expenses Quarter Over Quarter



Operating Fund Performance (continued)

Year over Year Revenue by High Level Category

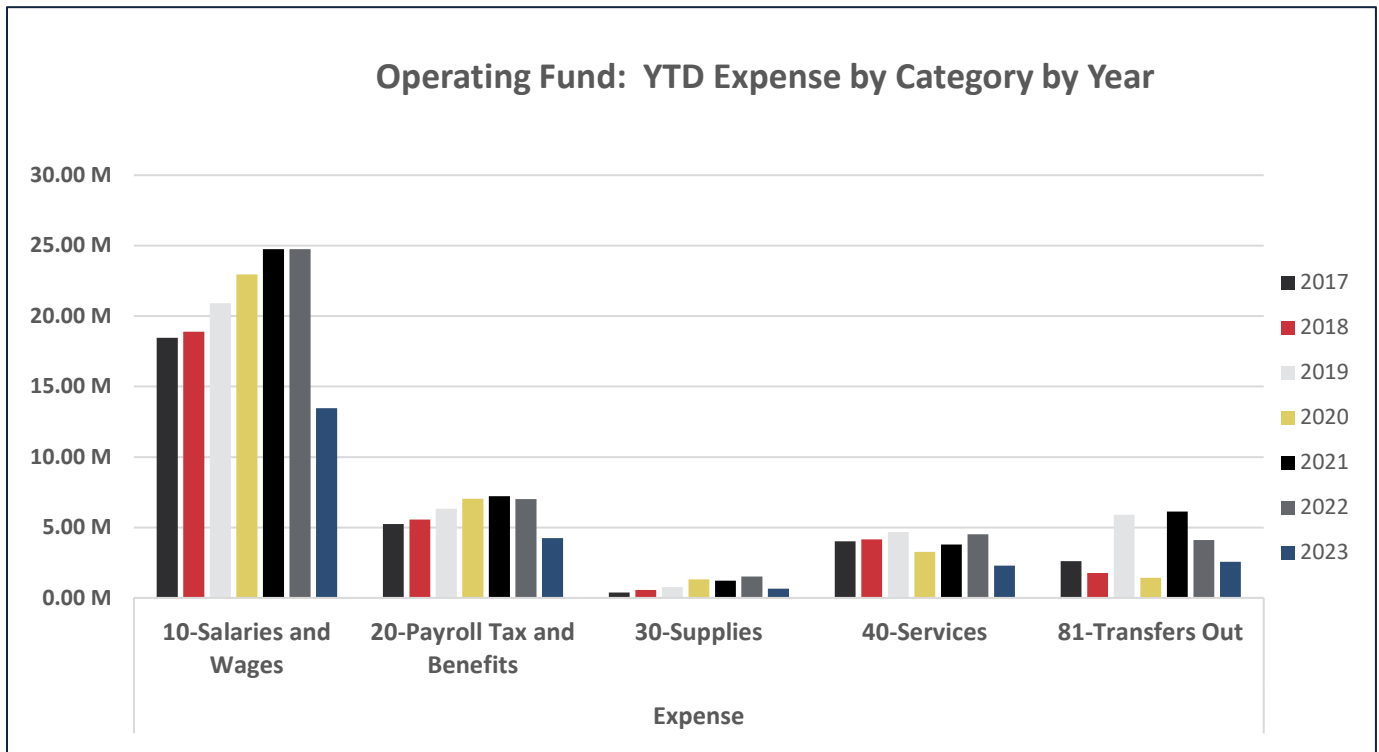
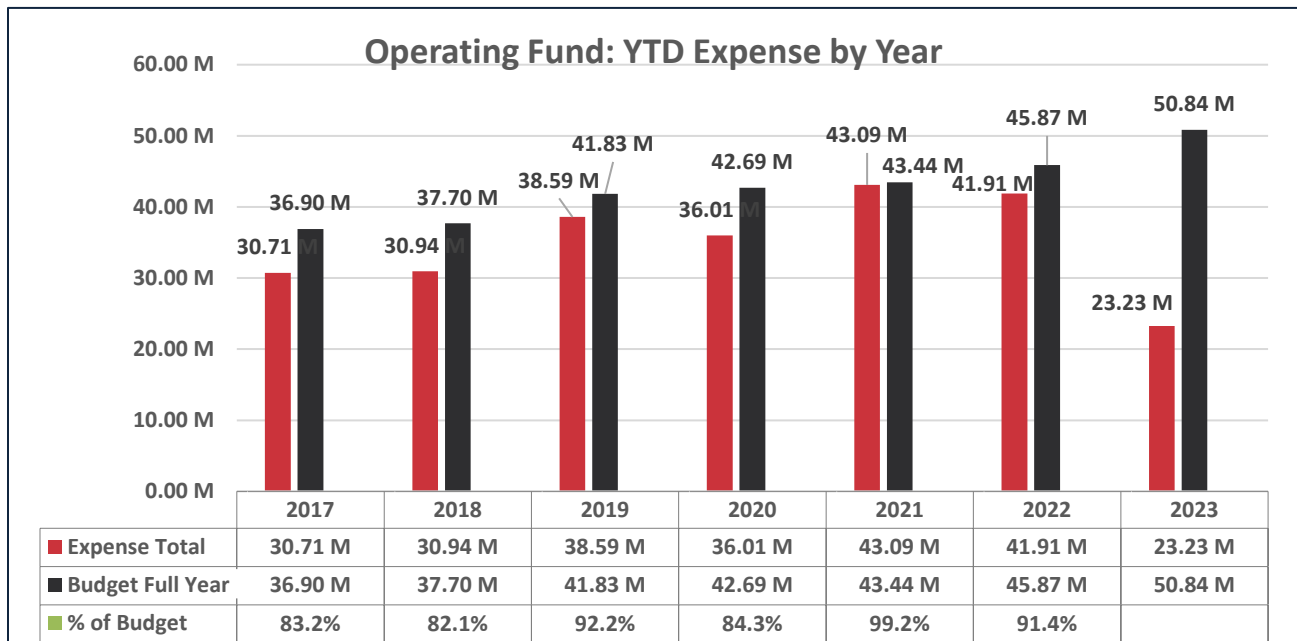
High Level Category	2017	2018	2019	2020	2021	2022	2023
10-Property Tax	15,983,668	16,573,797	16,901,220	17,446,980	18,002,404	18,278,518	9,856,838
11-Fire Benefit Charge	13,955,838	14,357,859	17,108,508	17,152,390	17,346,646	17,572,160	9,433,490
13-EMS Levy	1,075,269	1,538,064	1,521,902	2,074,254	2,104,821	2,266,067	2,405,273
20-FD 40 Contract	4,946,723	4,757,087	5,190,769	5,326,632	5,421,129	5,955,337	3,326,171
30-Permits & Fees	378,607	345,446	379,996	357,525	334,585	408,018	431,923
40-Investment Income	45,445	179,449	386,006	289,507	170,919	186,177	264,802
50-EMS Services					452,897	2,606,647	4,144,636
60-Other Revenues	225,758	200,596	243,851	425,191	1,946,911	958,791	336,707
Revenue Total	36,611,308	37,952,298	41,732,252	43,072,479	45,780,311	48,231,713	30,199,839



Operating Fund Performance (continued)

Year over Year Expense by High Level Category

High Level Category	2017	2018	2019	2020	2021	2022	2023
10-Salaries and Wages	18,456,32	18,891,66	20,917,56	22,962,44	24,754,11	24,740,88	13,471,19
20-Payroll Tax and	5,234,099	5,567,872	6,330,152	7,036,751	7,208,008	7,017,052	4,253,153
30-Supplies	391,508	557,359	776,024	1,316,317	1,224,646	1,509,582	647,643
40-Services	4,026,162	4,158,827	4,666,383	3,267,648	3,787,131	4,521,881	2,300,646
81-Transfers Out	2,600,000	1,768,000	5,895,045	1,429,180	6,118,626	4,116,213	2,562,029
Expense Total	30,708,08	30,943,71	38,585,17	36,012,34	43,092,52	41,905,61	23,234,66



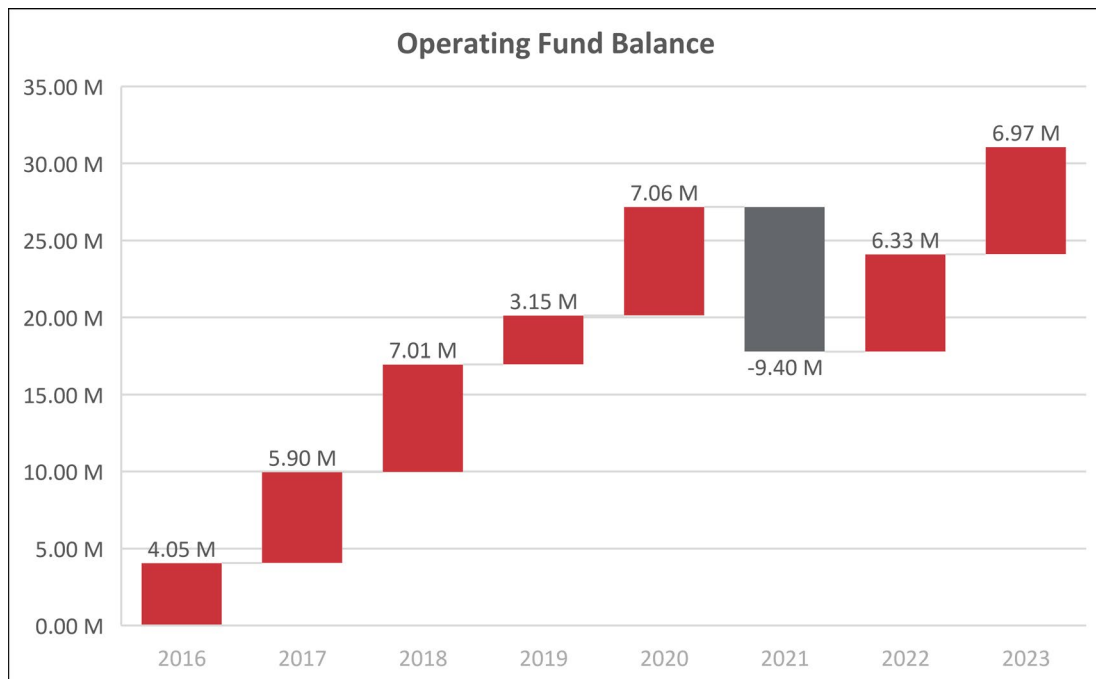
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Operating Fund Performance (continued)

Fund Balance

	2017	2018	2019	2020	2021	2022	2023
Revenue	36,611,308	37,952,298	41,732,252	43,072,479	45,780,311	48,231,713	30,199,83
10-Property Tax	15,983,668	16,573,797	16,901,220	17,446,980	18,002,404	18,278,518	9,856,838
11-Fire Benefit Charge	13,955,838	14,357,859	17,108,508	17,152,390	17,346,646	17,572,160	9,433,490
13-EMS Levy	1,075,269	1,538,064	1,521,902	2,074,254	2,104,821	2,266,067	2,405,273
20-FD 40 Contract	4,946,723	4,757,087	5,190,769	5,326,632	5,421,129	5,955,337	3,326,171
30-Permits & Fees	378,607	345,446	379,996	357,525	334,585	408,018	431,923
40-Investment Income	45,445	179,449	386,006	289,507	170,919	186,177	264,802
50-EMS Services					452,897	2,606,647	4,144,636
60-Other Revenues	225,758	200,596	243,851	425,191	1,946,911	958,791	336,707
Expense	30,708,089	30,943,718	38,585,172	36,012,340	43,092,524	41,905,615	23,234,66
10-Salaries and Wages	18,456,320	18,891,660	20,917,569	22,962,444	24,754,112	24,740,886	13,471,19
20-Payroll Tax and	5,234,099	5,567,872	6,330,152	7,036,751	7,208,008	7,017,052	4,253,153
30-Supplies	391,508	557,359	776,024	1,316,317	1,224,646	1,509,582	647,643
40-Services	4,026,162	4,158,827	4,666,383	3,267,648	3,787,131	4,521,881	2,300,646
81-Transfers Out	2,600,000	1,768,000	5,895,045	1,429,180	6,118,626	4,116,213	2,562,029
Change in Fund Balance	5,903,219	7,008,581	3,147,080	7,060,139	2,687,787	6,326,099	6,965,175

Beginning Fund Balance:	4,053,261	9,956,480	16,965,060	20,112,140	27,172,279	17,774,404	24,100,50
Increase / (Decrease)	5,903,219	7,008,581	3,147,080	7,060,139	2,687,787	6,326,099	6,965,175
Decrease by Fund Balance					(12,085,662)		
Ending Fund Balance:	9,956,480	16,965,060	20,112,140	27,172,279	17,774,404	24,100,503	31,065,67



2. Fleet Fund Performance

Current Year – 2023 YTD

Category	Actual	Budget	Variance	YTD % vs Budget
Revenue	644,377	1,213,700	(569,323)	53.1%
40-Investment Income	25,479	13,700	11,779	186.0%
60-Transfer In	600,000	1,200,000	(600,000)	50.0%
60-Other Revenues	18,898		18,898	0.0%
Expense	71,060	181,530	(110,470)	39.1%
30-Supplies	11		11	0.0%
60-Capital Outlay	71,049	181,530	(110,481)	39.1%
Change in Fund Balance	573,317	573,317	-	

Beginning Fund Balance:	1,864,982
Increase / (Decrease)	573,317
Ending Fund Balance:	2,438,298

Highlights

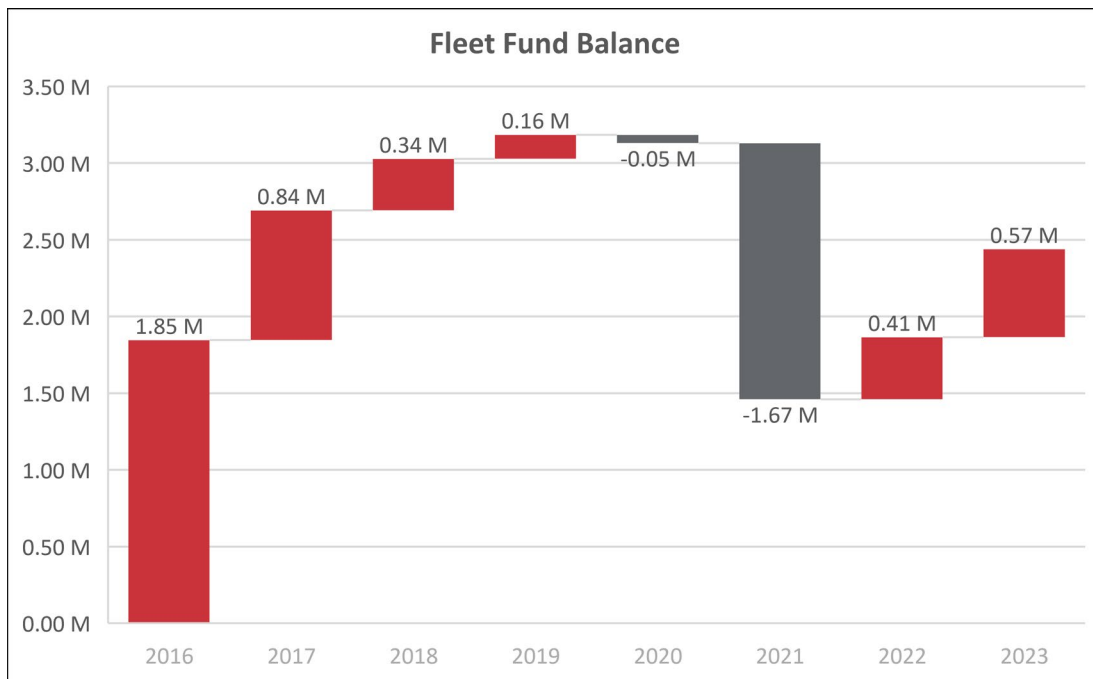
- ✓ Capital Outlay includes purchase of Battalion Chief vehicle with upfitting

Fleet Fund Performance (continued)

Historical Performance & Fund Balance

Category	2017	2018	2019	2020	2021	2022	2023
Revenue	2,172,227	673,826	2,321,649	583,871	46,765	1,271,764	644,377
40-Investment Income	22,227	44,905	85,445	48,285	12,277	15,151	25,479
60-Transfer In	2,150,000	600,000	2,200,000	250,000		1,200,000	600,000
60-Other Revenues		28,921	36,204	285,586	34,488	56,613	18,898
Expense	1,327,596	337,905	2,164,351	637,322	1,718,039	866,536	71,060
30-Supplies			0	220		17	11
40-Services				109			
60-Capital Outlay	1,327,596	337,905	2,164,351	636,993	1,718,039	866,519	71,049
Change in Fund Balance	844,631	335,921	157,298	(53,451)	(1,671,274)	405,228	573,317

Beginning Fund Balance:	1,846,629	2,691,260	3,027,181	3,184,479	3,131,028	1,459,754	1,864,982
Increase / (Decrease)	844,631	335,921	157,298	(53,451)	(1,671,274)	405,228	573,317
Ending Fund Balance:	2,691,260	3,027,181	3,184,479	3,131,028	1,459,754	1,864,982	2,438,298



- 2021 Capital Outlay Includes purchase of multiple apparatus

3. Facilities Improvement Fund Performance

Current Year – 2023 YTD

Category	Actual	Budget	Variance	YTD % vs Budget
Revenue	996,043	1,973,526	(977,483)	50.5%
40-Investment Income	16,130	13,700	2,430	117.7%
60-Transfer In	979,913	1,959,826	(979,913)	50.0%
Expense	636,713	1,690,180	(1,053,466)	37.7%
30-Supplies	29,316		29,316	0.0%
40-Services	66,896	142,000	(75,104)	47.1%
60-Capital Outlay	540,501	1,548,180	(1,007,679)	34.9%
Change in Fund Balance	359,330	359,330	-	

Beginning Fund Balance:	1,177,607
Increase / (Decrease)	359,330
Ending Fund Balance:	1,536,937

Highlights

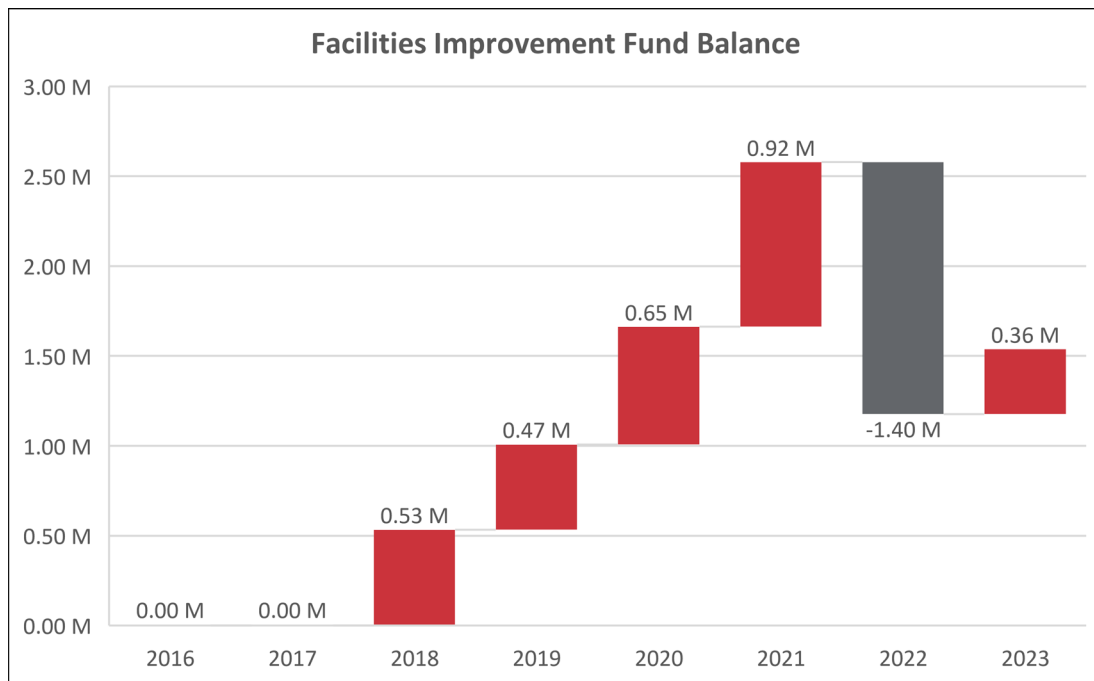
- ✓ Capital Outlay includes:
 - \$470K for Station 13 Tenant Improvements
 - \$25K for Station 16 property escrow payment
- ✓ Services includes \$65K for Station 16 architecture and consulting services

Facilities Improvement Fund Performance (Continued)

Historical Performance & Fund Balance

Category	2017	2018	2019	2020	2021	2022	2023
Revenue	-	578,056	1,012,065	1,184,861	1,512,808	2,099,613	996,043
40-Investment Income		6,056	20,734	18,982	12,808	22,400	16,130
60-Transfer In	-	572,000	969,711	500,000	1,500,000	2,077,213	979,913
60-Other Revenues			21,620	665,879			
Expense		43,992	537,735	531,598	595,060	3,501,410	636,713
30-Supplies			52,513	16,633	5,988	12,732	29,316
40-Services					74,508	167,626	66,896
60-Capital Outlay		43,992	485,223	514,965	514,564	3,321,051	540,501
Change in Fund Balance	-	534,064	474,330	653,263	917,747	(1,401,797)	359,330

Beginning Fund Balance:	-	-	534,064	1,008,393	1,661,656	2,579,404	1,177,607
Increase / (Decrease)	-	534,064	474,330	653,263	917,747	(1,401,797)	359,330
Ending Fund Balance:	-	534,064	1,008,393	1,661,656	2,579,404	1,177,607	1,536,937



- 2022 Capital Outlay Includes purchase of property

4. Equipment Fund Performance

Current Year – 2023 YTD

Category	Actual	Budget	Variance	YTD % vs Budget
Revenue	87,323	347,500	(260,177)	25.1%
40-Investment Income	7,323	13,700	(6,377)	53.5%
60-Transfer In	80,000	333,800	(253,800)	24.0%
Expense	56,627		56,627	0.0%
60-Capital Outlay	56,627		56,627	0.0%
Change in Fund Balance	30,696	30,696	-	

Beginning Fund Balance:	601,414
Increase / (Decrease)	30,696
Ending Fund Balance:	632,110

Highlights

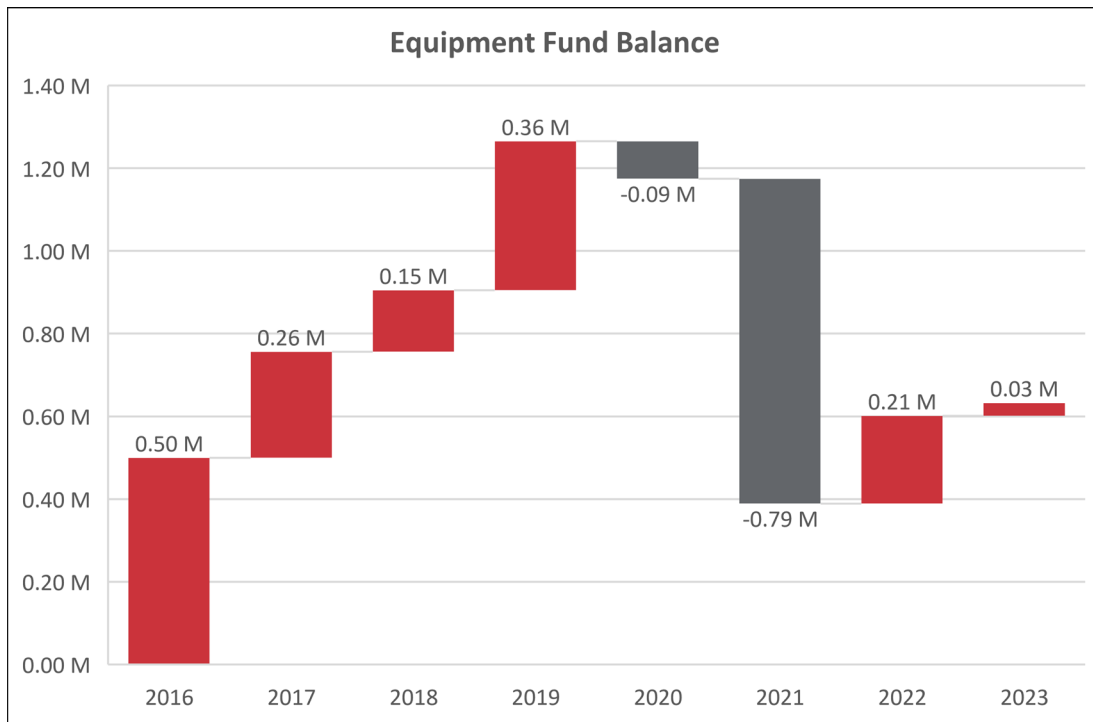
- ✓ \$31K of capital purchase was for a Holmatro
- ✓ \$25K was for a Power Pro Ambulance Cot

Equipment Fund Performance (continued)

Historical Performance & Fund Balance

Category	2017	2018	2019	2020	2021	2022	2023
Revenue	256,246	319,176	401,830	113,192	308,586	406,177	87,323
40-Investment Income	6,246	13,176	24,096	19,899	8,586	5,177	7,323
60-Transfer In	250,000	306,000	377,734	93,293	300,000	400,000	80,000
60-Other Revenues						1,000	
Expense		170,512	41,822	203,463	1,094,446	193,550	56,627
60-Capital Outlay		170,512	41,822	203,463	1,094,446	193,550	56,627
Change in Fund Balance	256,246	148,664	360,008	(90,270)	(785,860)	212,626	30,696

Beginning Fund Balance:	500,000	756,246	904,910	1,264,918	1,174,648	388,788	601,414
Increase / (Decrease)	256,246	148,664	360,008	(90,270)	(785,860)	212,626	30,696
Ending Fund Balance:	756,246	904,910	1,264,918	1,174,648	388,788	601,414	632,110



- 2021 Capital Outlay includes SCBA replacement

5. IT Fund Performance

Current Year – 2023 YTD

Category	Actual	Budget	Variance	YTD % vs Budget
Revenue	68,375	213,700	(145,325)	32.0%
40-Investment Income	8,375	13,700	(5,325)	61.1%
60-Transfer In	60,000	200,000	(140,000)	30.0%
Expense	239,940	325,691	(85,751)	73.7%
60-Capital Outlay	228,939	314,000	(85,061)	72.9%
Change in Fund Balance	11,001	11,691		

Beginning Fund Balance:	819,860
Increase / (Decrease)	(171,564)
Ending Fund Balance:	648,295

Highlights

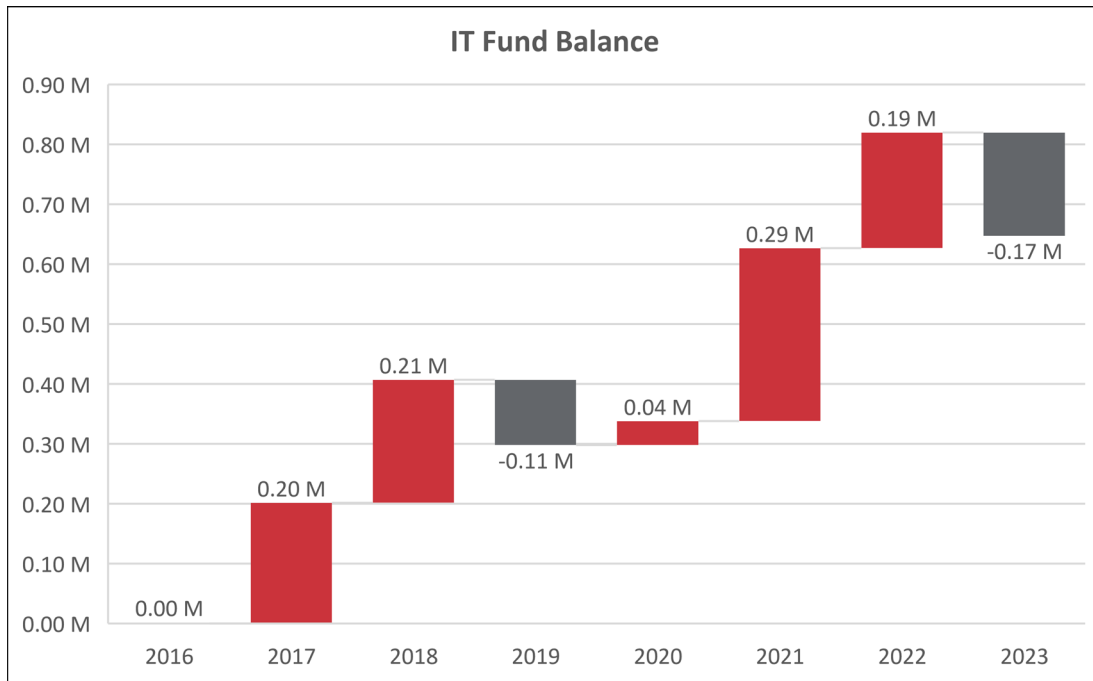
- ✓ \$217K in capital outlay is for station security cameras and access control

IT Fund Performance (continued)

Historical Performance & Fund Balance

Category	2017	2018	2019	2020	2021	2022	2023
Revenue	201,667	205,367	608,999	155,066	302,983	307,856	68,375
40-Investment Income	1,667	5,367	8,999	5,066	2,983	7,856	8,375
60-Transfer In	200,000	200,000	600,000	150,000	300,000	300,000	60,000
Expense			718,227	114,830	14,548	114,473	239,940
30-Supplies			111,251	(170)			
40-Services			500				228,939
60-Capital Outlay			606,476	115,000	14,548	114,473	11,001
Change in Fund Balance	201,667	205,367	(109,227)	40,236	288,435	193,383	(171,564)

Beginning Fund Balance:	-	201,667	407,034	297,807	338,043	626,478	819,861
Increase / (Decrease)	201,667	205,367	(109,227)	40,236	288,435	193,383	(171,564)
Ending Fund Balance:	201,667	407,034	297,807	338,043	626,478	819,861	648,296



- 2019 Capital Outlay includes stand up of new IT
- 2023 Services includes station security system

6. Contingency Fund Performance

Current Year – 2023 YTD

Category	Actual	Budget	Variance	YTD % vs Budget
Revenue	39,574	75,000	(35,426)	52.8%
40-Investment Income	2,074		2,074	0.0%
60-Transfer In	37,500	75,000	(37,500)	50.0%
Expense	13,171		13,171	0.0%
30-Supplies	1,743		1,743	0.0%
40-Services	11,427		11,427	0.0%
Change in Fund Balance	26,403	26,403	-	

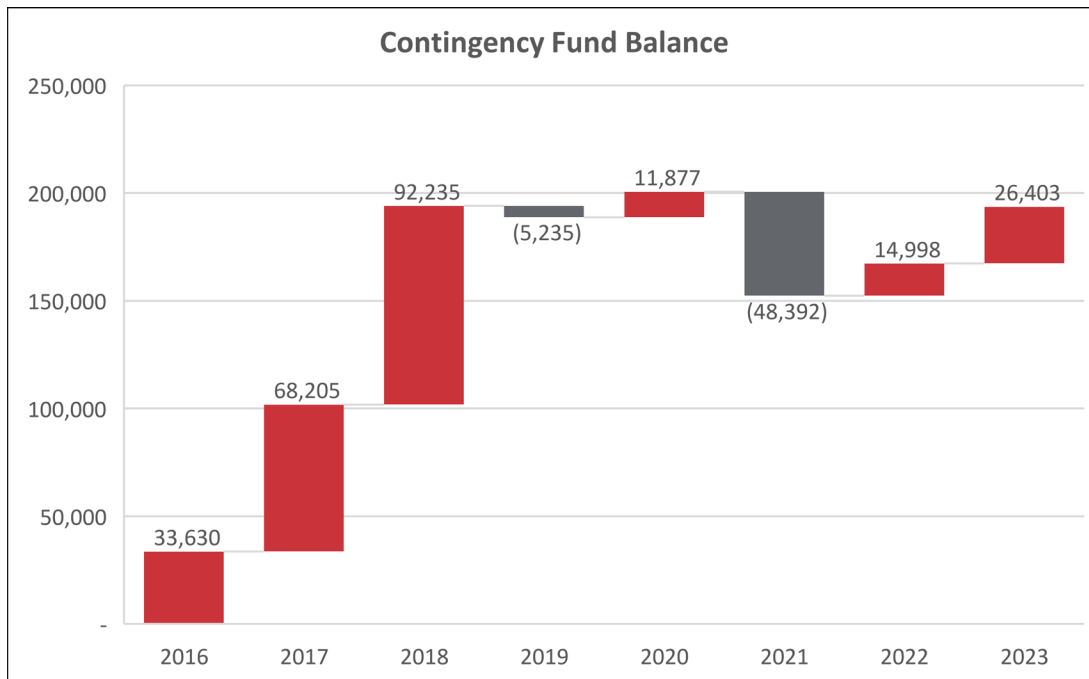
Beginning Fund Balance:	167,319
Increase / (Decrease)	26,403
Ending Fund Balance:	193,722

Contingency Fund Performance (continued)

Historical Performance & Fund Balance

Category	2017	2018	2019	2020	2021	2022	2023
Revenue	68,205	92,235	4,365	24,021	16,366	139,931	39,574
40-Investment Income		2,235	4,365	3,047	1,366	931	2,074
60-Transfer In	68,205	90,000		6,250	15,000	139,000	37,500
60-Other Revenues				14,724			
Expense			9,600	12,144	64,757	124,933	13,171
30-Supplies				2,283		12,929	1,743
40-Services			9,600	9,861	64,757	112,004	11,427
Change in Fund Balance	68,205	92,235	(5,235)	11,877	(48,392)	14,998	26,403

Beginning Fund Balance:	33,630	101,835	194,070	188,836	200,713	152,321	167,319
Increase / (Decrease)	68,205	92,235	(5,235)	11,877	(48,392)	14,998	26,403
Ending Fund Balance:	101,835	194,070	188,836	200,713	152,321	167,319	193,722



- 2022 Services include \$34K in unemployment claims and \$78K in insurance claim deductibles

7. Operating Reserve Fund Performance

Current Year – 2023 YTD

Category	Actual	Budget	Variance	YTD % vs Budget
Revenue	989,958	1,289,232	(299,274)	76.8%
40-Investment Income	185,342		185,342	0.0%
60-Transfer In	804,616	1,289,232	(484,616)	62.4%
Change in Fund Balance	989,958	989,958	-	

Beginning Fund Balance:	15,135,014	15,135,014		
Increase / (Decrease)	989,958	989,958		
Ending Fund Balance:	16,124,972	16,124,972		

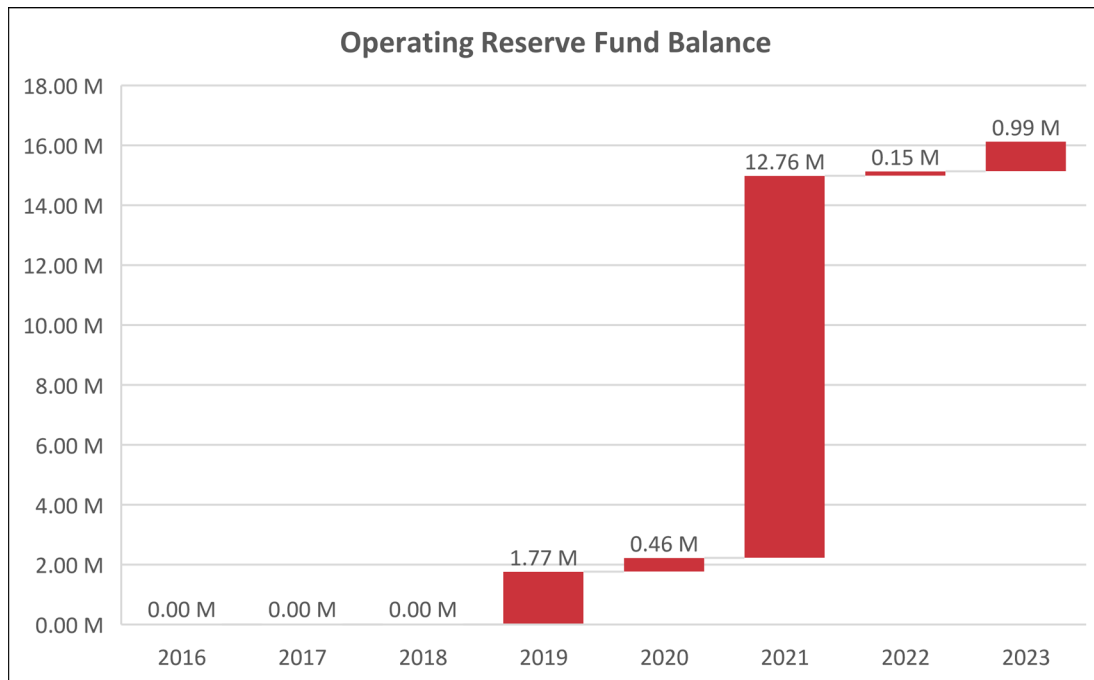
Operating Reserve Fund Performance (continued)

Historical Performance & Fund Balance

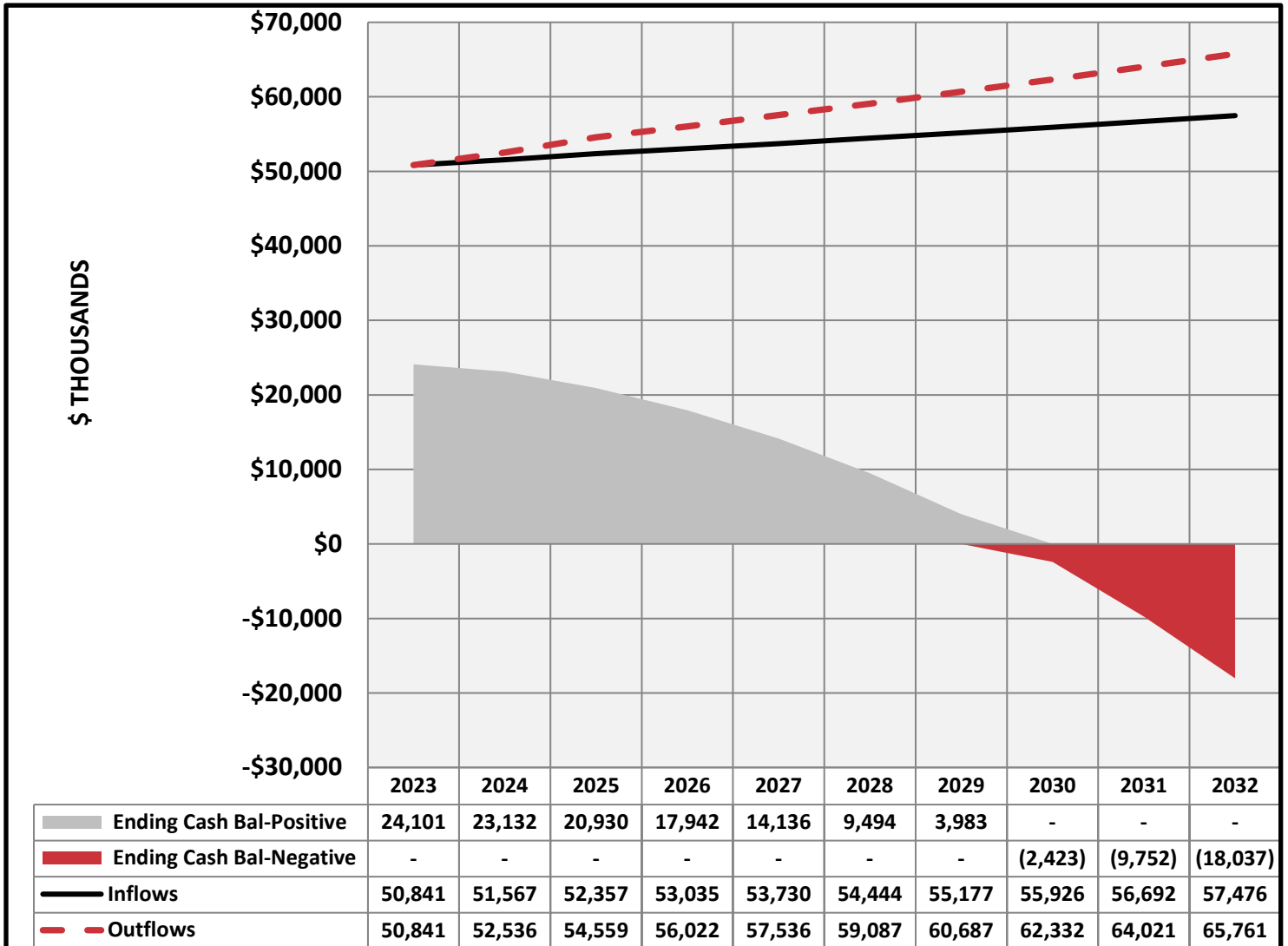
Category	2017	2018	2019	2020	2021	2022	2023
Revenue	-	-	1,766,056	462,513	12,757,755	148,690	989,958
40-Investment Income			18,456	32,876	34,129	148,690	185,342
60-Transfer In	-	-	1,747,600	429,637	12,723,626		804,616
Change in Fund Balance	-	-	1,766,056	462,513	12,757,755	148,690	989,958

Beginning Fund Balance:	-	-	-	1,766,056	2,228,569	14,986,324	15,135,014
Increase / (Decrease)	-	-	1,766,056	462,513	12,757,755	148,690	989,958
Ending Fund Balance:	-	-	1,766,056	2,228,569	14,986,324	15,135,014	16,124,972

Fund Balance % of Budget	-	-	4%	5%	34%	33%	32%
Compliance?	NO	NO	NO	NO	YES	YES	NO



8. 10 Year Financial Forecast



Assumptions

- FBC stays flat year over year
- No Levy Lid Lift
- Assessed value growth based on King County projections
- Includes flat \$3M GEMT revenue projection year over year

2023 CPR/First Aid Monthly Classes						
Date	Instructor	Shadow/Co-Teach/2nd Instructor	CPR Registrations (9:00 - 11:30 a.m.)	CPR Attended	First Aid Registrations (12:00 p.m. - 2:00 p.m.)	First Aid Attended
1/7/2023	Luevano		11	10	8	7
2/4/2023	Berg	McGinnis (shadow)	14	15	9	7
3/4/2023	Berg		16	16	10	9
4/1/2023	Yun	McGinnis (co-teach)	16	16	11	11
5/6/2023	McGinnis		13	10	8	6
6/3/2023	Luevano	Clearman	16	11	16	12
7/1/2023	Yun		17	15	15	13
8/5/2023	Blakeslee		16		17	
9/2/2023	Elliott					
10/7/2023	Yun					
11/4/2023	Clearman	Luevano				
12/2/2023	McGinnis					
		TOTALS:	119	93	94	65

2023 Private Classes						
Date	Instructor	Company	CPR Registrations	CPR Attended	First Aid Registrations	First Aid Attended
2/1/2023	Berg, Luevano	Nick of Time Foundation (Liberty High School)	200	200	0	0
2/5/2023	Blakeslee	Gurudwara Singh Sabha Group	20	22	0	0
2/17/2023	Yun	Puget Sound Training Center	10	9	10	9
2/21/2023	Berg, Blakeslee	RRFA (Day Staff)	27	20	0	0
4/20/2023	Blakeslee	Alliance Packaging	10	8	10	8
4/21/2023	Blakeslee	Alliance Packaging	11	8	11	8
4/27/2023	Berg, McGinnis	Alliance Packaging	12	10	12	10
4/28/2023	Yun	Alliance Packaging	11	9	11	9
4/29/2023	Luevano	Alliance Packaging	11	10	11	10
5/7/2023	Blakeslee	Gurudwara Singh Sabha Group	20	19	0	0
7/7/2023	Berg/Blakeslee	Zone 3 Cadets/Skyway	15	15	0	0
7/10/2023	Berg/Blakeslee	Zone 3 Cadets/Skyway	0	0	15	15
7/11/2023	Clearman/Berg	ADT Commercial	25	23	25	23
7/13/2023	Berg/McGinnis	ADT Commercial	25	23	25	23
7/31/2023	Blakeslee	Emergency Management	12	12	0	0
8/2/2023	Blakeslee	Emergency Management	0	0	12	12
8/3/2023	Berg/Blakeslee	ADT Commercial	25	21	25	21
8/24/2023	Blakeslee	Fairwood Plaza Animal Clinic	9		9	
10/5/2023	McGinnis	Habitat for Humanity	12		12	
10/18/2023	Berg	Habitat for Humanity	12		12	
		TOTALS:	467	409	200	148
		GRAND TOTALS:	586	502	294	213

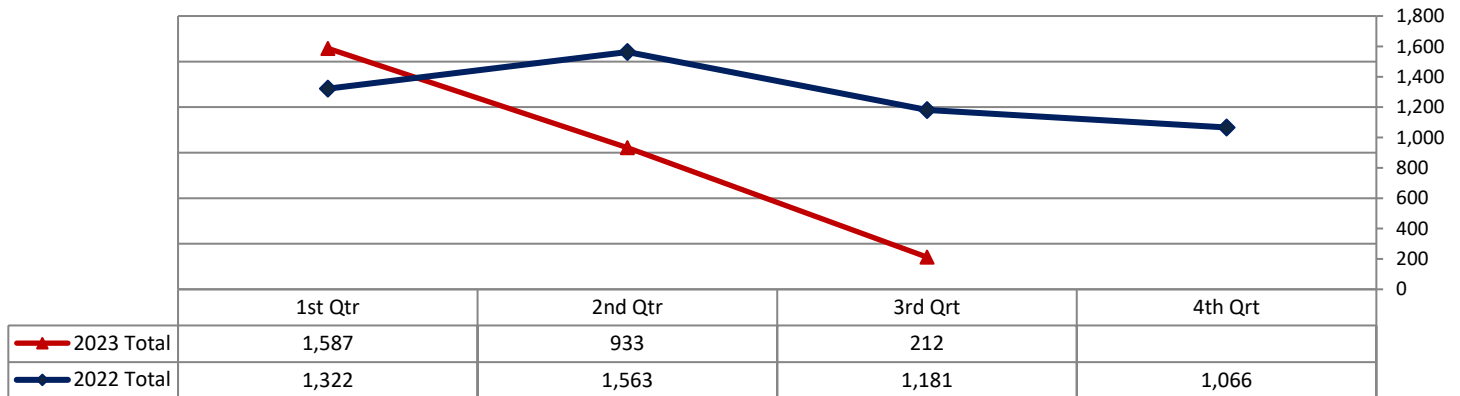
Office of the Fire Marshal 2023 Monthly Report

August 2023

Inspections

Staff have completed 2,732 inspections (business, multi-family, IFC permit, special, complaint & re-inspections) year to date.

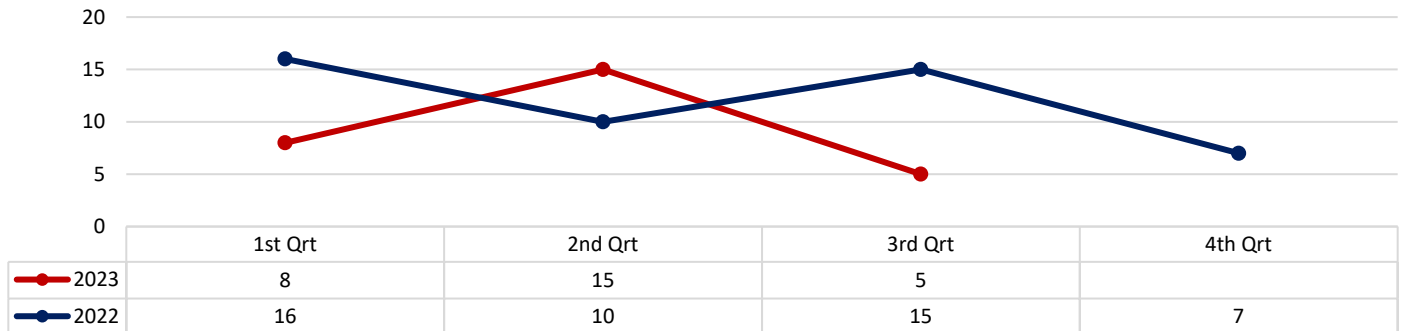
Inspections Completed by Quarter - Comparative to 2022



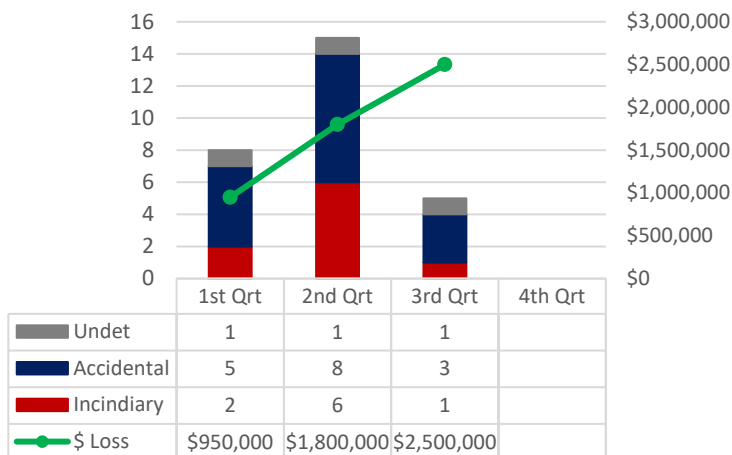
Fire Investigations

Staff have investigated 28 fires this year. Total dollar loss for the year is estimated at \$5 million.

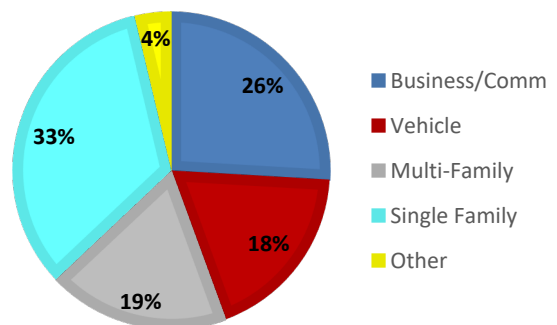
Fire Investigations by Quarter - Comparative to 2022



FIRE CAUSE AND LOSS ESTIMATE



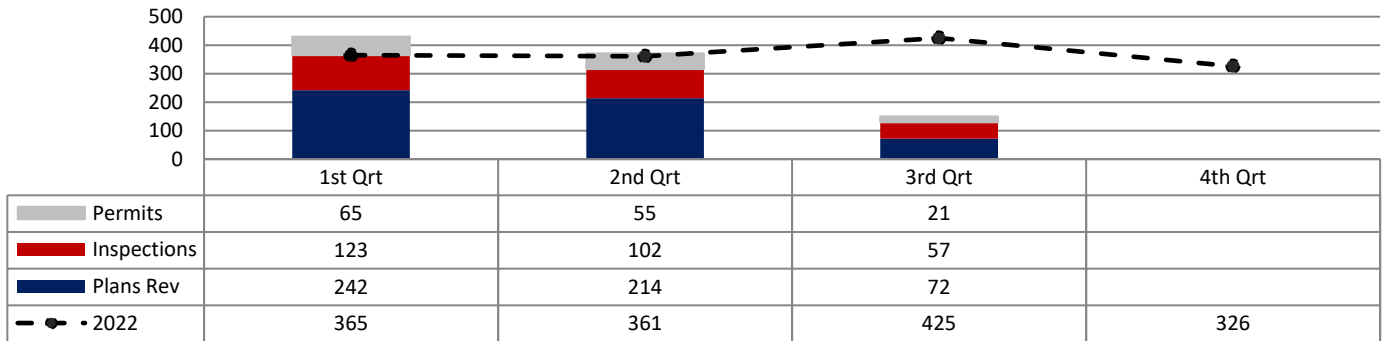
PROPERTY TYPE OF INVESTIGATED FIRES



Plans Review, Construction Inspections & Permits

Staff completed 528 plans reviews, 282 construction inspections, and issued 141 fire systems and/or fire construction permits year to date.

Plans Review, Construction Inspections & Permits by Quarter - Comparative to 2022

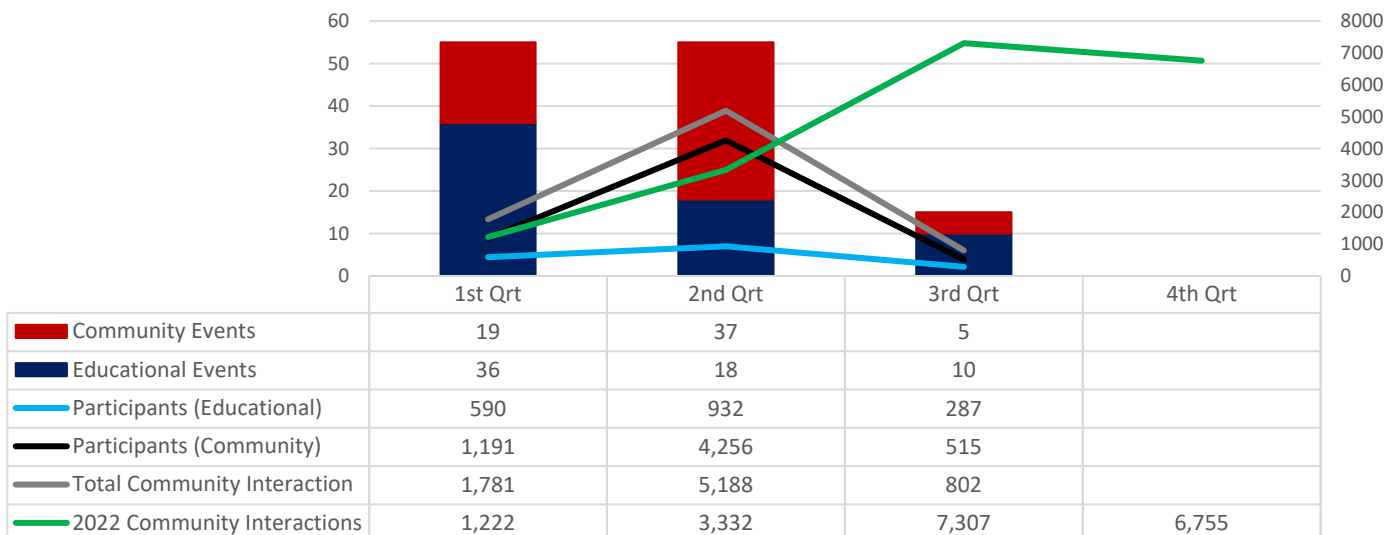


Public Education / Community Outreach Highlights



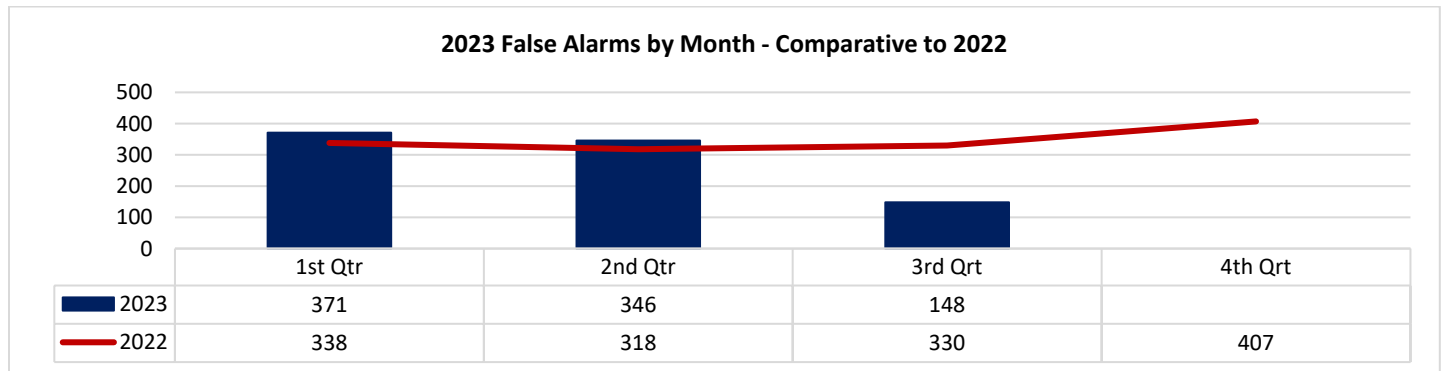
- E315 and our public educator visited Kennydale KinderCare to discuss smoke alarms, home escape planning and to participate in story time, with 65 students attending.
- We visited Fairwood Martial Arts and participated in their summer school program, providing fire safety education to over 30 students.
- E312 and our public educator visited Maplewood Heights Elementary and provided fire safety education to over 125 students for 5 summer sessions.

PUBLIC EDUCATION & COMMUNITY OUTREACH

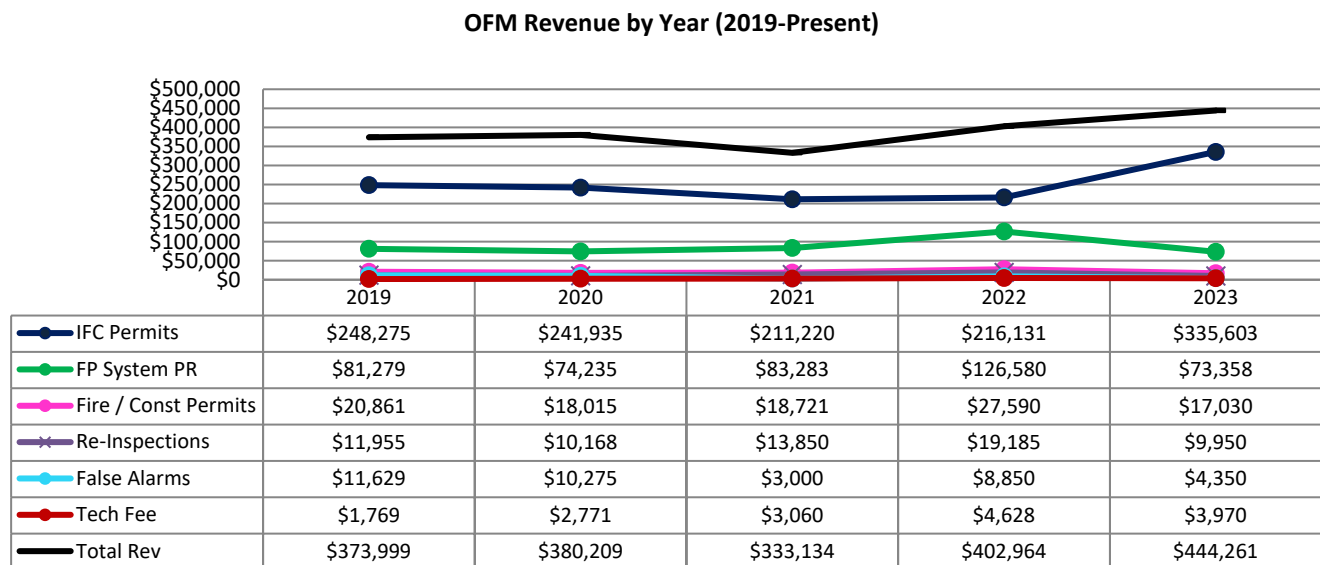


False Alarms

The Department has responded to 865 false alarms year to date.



Revenue \$444,261 in Fire Marshal revenues have been collected year to date.



Monthly Overview

Station Reliability (Not include **Out of Jurisdiction Incidents**)

RRFA Station Area	First Due Incident Counts	Incidents in RRFA Area	Station Reliability
▲			
11	354	378	93.65%
12	272	292	93.15%
13	368	424	86.79%
14	98	123	79.67%
15	88	104	84.62%
16	130	144	90.28%
17	203	224	90.63%
Total	1513	1689	89.58%

Incident Breakdown by Station Responses (Including Out of Jurisdiction Incidents)

Incident Type Group	11	12	13	14	15	16	17	Total
▲								
100 - Fire	37	37	40	20	14	22	22	132
200 - Overpressure Rupture, Explosion, Overheat	1		1	1				2
300 - Rescue & EMS	322	246	344	89	83	111	185	1300
400 - Hazardous Condition	8	4	3	6	1	2	1	20
500 - Service Call	21	13	13	3	5	7	9	68
600 - Good Intent Call	43	16	35	32	10	17	17	147
700 - False Alarm	28	21	30	21	11	13	17	136
900 - Special Incident			1					1
Total	460	337	467	172	124	172	251	1806

Response Breakdown by Station's Units (Including Out of Jurisdiction Responses)

Unit/Station	Response Counts
▲	
▣ 11	558
A311	142
E311	271
L311	145
▣ 12	426
A312	201
B312	42
CAR312	15
DIV312	6
E312	155
E412	7
▣ 13	575
A313	304
B313	57
E313	204
E413	10
▣ 14	175
E314	158
HM314	17
▣ 15	125
E315	125
▣ 16	181
BR316	4
E316	177
▣ 17	288
A317	170
BR317	8
Total	2328

1 **Incident** can have multiple **responses**.

- Ex. A car crash (1 incident) might requires 3 Fire Units responding (3 responses)

Out of Jurisdiction incidents = Incidents that didn't happen in RRFA Jurisdiction

Station Reliability:

Availability of our closest Station's Units when the incidents were reported

*The incident total from *Station Reliability Table* is different compare to *Incident Counts by Incident Type* and they are both correct.

- Total Under *Station Reliability Table* shows the number of incidents which have occurred within RRFA jurisdiction
- Total under *Incident Counts by Incident Type* shows the total incidents that RRFA Units have responded to

Good Intent Calls include Cancelled enroute, Wrong Location, Controlled Burning, Steam

Last Month Response Time Breakdown

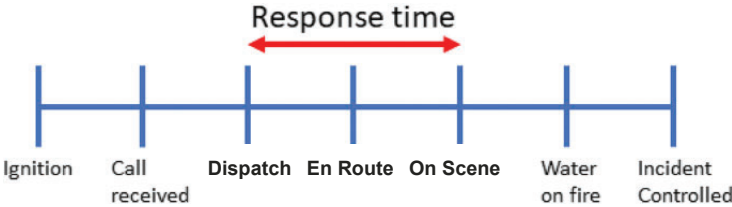
Station / Unit	Avg Turnout Time	Avg Travel Time	Avg Response Time	90th Percentile Turnout Time	90th Percentile Travel Time	90th Percentile Response Time
11	00:01:26	00:03:38	00:05:04	00:02:18	00:05:42	00:08:00
Aid Unit	00:01:24	00:03:30	00:04:55	00:02:05	00:05:49	00:07:55
Engine	00:01:31	00:03:48	00:05:19	00:02:25	00:05:14	00:07:39
Ladder Truck	00:01:16	00:03:32	00:04:49	00:02:07	00:05:48	00:07:55
12	00:01:41	00:03:24	00:05:05	00:02:50	00:05:25	00:08:15
Aid Unit	00:01:36	00:03:19	00:04:56	00:02:37	00:05:24	00:08:02
Engine	00:01:54	00:03:38	00:05:32	00:03:08	00:05:26	00:08:34
13	00:01:36	00:04:06	00:05:42	00:02:32	00:05:59	00:08:31
Aid Unit	00:01:36	00:04:11	00:05:47	00:02:28	00:05:56	00:08:25
Engine	00:01:36	00:03:52	00:05:29	00:02:37	00:06:01	00:08:38
14	00:01:56	00:03:55	00:05:52	00:02:39	00:05:49	00:08:28
Engine	00:01:56	00:03:55	00:05:52	00:02:39	00:05:49	00:08:28
15	00:01:47	00:04:51	00:06:39	00:02:48	00:07:40	00:10:28
Engine	00:01:47	00:04:51	00:06:39	00:02:48	00:07:40	00:10:28
16	00:01:45	00:03:58	00:05:44	00:02:48	00:06:16	00:09:04
Engine	00:01:45	00:03:58	00:05:44	00:02:48	00:06:16	00:09:04
17	00:01:39	00:03:43	00:05:23	00:02:26	00:05:31	00:07:57
Aid Unit	00:01:37	00:03:42	00:05:20	00:02:21	00:05:31	00:07:53
Engine	00:01:46	00:03:48	00:05:35	00:02:43	00:05:30	00:08:13
Total	00:01:37	00:03:49	00:05:27	00:02:34	00:05:53	00:08:27

Definition:

Turnout time = Dispatch to Firefighters in vehicle ready to respond

Travel Time = Firefighters in vehicle ready to respond to Firefighters On Scene

Response Time = Dispatch to Firefighters On Scene



Year-to-date RRFA Incidents Overview

Incident Counts by RRFA Station Areas
(Not including Out of Jurisdiction Incidents)

Station Areas	January	February	March	April	May	June	July	Total
11	366	326	373	412	417	398	378	2670
12	336	291	293	285	297	288	292	2082
13	425	339	351	377	376	397	424	2689
14	89	108	95	102	104	122	123	743
15	79	94	97	100	106	107	104	687
16	146	109	130	127	123	134	144	913
17	210	181	183	197	198	204	224	1397
Total	1651	1448	1522	1600	1621	1650	1689	11181

Incident Counts by NFIRS Incident Type
(Including Out of Jurisdiction Incidents)

Incident Type Group	January	February	March	April	May	June	July	Total
100 - Fire	26	30	36	35	70	54	132	383
200 - Overpressure Rupture, Explosion, Overheat	1	1	1		1		2	6
300 - Rescue & EMS	1325	1201	1293	1385	1327	1345	1300	9176
400 - Hazardous Condition	37	27	20	26	24	25	20	179
500 - Service Call	54	44	52	43	60	54	68	375
600 - Good Intent Call	139	112	112	120	151	131	147	912
700 - False Alarm	156	119	130	113	114	140	136	908
800 - Severe Weather & Natural Disaster		1		1				2
900 - Special Incident	3	1	2				1	7
Total	1741	1536	1646	1723	1747	1749	1806	11948

Responses Breakdown by Apparatus

Apparatus Station	January	February	March	April	May	June	July	Total
▣ 11	548	499	567	587	605	579	558	3943
A311	157	152	174	167	182	175	142	1149
E311	269	234	263	274	274	271	271	1856
L311	122	113	130	146	149	133	145	938
▣ 12	440	402	416	366	439	416	426	2905
A312	225	222	211	203	222	215	201	1499
B312	28	23	41	20	46	40	42	240
CAR312	21	17	20	26	14	21	15	134
DIV312	1			1	2	8	6	18
E312	165	140	144	116	155	132	155	1007
E412							7	7
▣ 13	541	487	500	540	544	509	575	3696
A313	288	260	276	304	279	297	304	2008
B313	36	44	35	44	56	35	57	307
E313	217	183	189	192	209	177	204	1371
E413							10	10
▣ 14	125	135	146	160	171	177	175	1089
E314	115	120	134	145	153	162	158	987
E414		1						1
HM314	10	14	12	15	18	15	17	101
▣ 15	96	109	114	130	143	133	125	850
E315	96	109	114	130	143	133	125	850
▣ 16	153	118	139	139	144	149	181	1023
BR316					3		4	7
E316	153	118	139	139	141	149	177	1016
▣ 17	273	236	247	251	262	275	288	1832
A317	182	150	160	173	153	161	170	1149
BR317	1		1		4	2	8	16
E317	90	86	86	78	105	112	110	667
Total	2176	1986	2129	2173	2308	2238	2328	15338



Governing Board Agenda Item

SUBJECT/TITLE: Establish Public Hearing Dates

STAFF CONTACT: CAO Babich

SUMMARY STATEMENT:

In order to meet the required deadlines for filing property tax levy and fire benefit charge information with King County, we are proposing a special meeting on 10/23/2023 after the committee meetings in order to hold a public hearing on the proposed levy and fire benefit charge.

FISCAL IMPACT:

Expenditure N/A Revenue _____
Currently in the Budget Yes ☐ No ☐ N/A ☒

SUMMARY OF ACTION:

Here are the proposed actions to be taken:

10/02/2023 - Send notice to publish public hearing in print on 10/9 and 10/16.

10/09/2023 - Regular Governance Board Meeting

10/23/2023 - Special Governance Board Meeting - Public Hearing on A/V Levy (RCW 84.55.120) and FBC (RCW 52.26.230).

11/13/2023 - Regular Governance Board Meeting - Adopt Levy (RCW 84.52.070) and FBC (RCW 52.26.230) and Preliminary 2024 Budget.

11/30/2023 - Last day to certify Levy to County Assessor (RCW 84.52.020).

Reviewed by Legal Yes ☐ No ☐ N/A ☒

EXHIBITS:

[2024 Budget Calendar](#)

RFA GOVERNANCE BOARD RECOMMENDED ACTION:

I move to hold a special meeting on 10/23/2023 at 11:30 am following the committee meetings at Fire Station #13 for the purpose of holding public hearings regarding the proposed levy and fire benefit charge.

RRFA 2024 Budget Calendar

2023 Month	Date	Task	Responsible / Coordinator	Participants	Goal
JANUARY					
	All Month	Review BARS and RCW for changes applicable to RFA.	Administration	Finance	Ensure compliance with all updates to BARS and RCW applicable to Fire Districts.
JUNE					
	All Month	Review and update financial policies	Administration	E-Team & Finance	Evaluate current financial policies and update if necessary
	All Month	Adopt revise financial policies as necessary	Administration	Administration Governance Board	Ensure compliance with laws governing financial transactions.
	All Month Due 8/1/2023	Develop/update Capital Facilities Plan (CFP)	Support Services Administration	Planning Administration	To review and update capital facilities needs and funding plan.
	All Month Due 8/1/2023	Develop/update Fire Marshal Fees (OFM)	Office of the Fire Marshal Administration	OFM Administration	To review and update fees related to Fire Marshal's Office. (permits, plans reviews, etc.)
	6/20/2023	Set funding priorities	Fire Chief	E-Team	To create priority list for ensuing year.
	6/26/2023	Finalize budget calendar	Administration	Administration Bud/Fin Committees	Ensure all applicable target dates, meeting dates, and RCW notice requirements are met.
	6/30/2023	Notice of budget process kick-off	Fire Chief	All staff	Communication via administrative memorandum regarding budget process and guidelines.
JULY					
	7/10/2023	E-Team budget meeting	Administration	E-Team	Establish overall budget guidelines and priorities, considering revenue trends, economic forecasts, projected personnel expense, major projects, and service levels.
	7/10/2023	Budget schedule briefing to Governance Board	Administration	All Board Members & staff	Present budget calendar to Governance Board as a briefing.
AUGUST					
	8/1/2023	Fire Marshal Fees (OFM) changes due to CoR	Office of the Fire Marshal	Office of the Fire Marshal	To review and update fees related to Fire Marshal's Office (permits, plans reviews, etc.)
	8/14/2023	Board to establish public hearing dates	Administration	All Board Members & staff	Present agenda item form and budget calendar to Governance Board to approve special meeting on 10/23/2023.
	8/22/2023	BLS estimated allocations	KCEMS	Administration	Estimated date of EMS Allocation numbers
	8/31/2023	Budget requests due	Line Item Managers	Division Managers Line Item Managers	All budget requests due by 5pm. Submittal through Incode Online.
SEPTEMBER					
	9/1/2023	CFP, Rate Study, and Impact Fees due to CoR	Administration	Finance & Planning	Required per ILA
	9/7/2023	Budget workshop	Administration	Line Item Managers	To review budget requests and projected revenues.
	9/11/2023	Regular Governance Board Meeting	Administration	Board Secretary	Establish Public Hearing Date of 10/23/2023
	9/12/2023	Request for King County assessed valuation	Administration	Finance	Email to request initial Levy Worksheet
	9/15/2023	Budget revisions due	Administration	Line Item Managers	Revisions to budget requests due in Incode Online.
	9/15/2023	King County preliminary assessed valuation due	Administration	King County Assessor	To estimate the 2022 Property valuation and estimated 2023 Property Tax and Fire Benefit Charge.
	9/21/2023	Develop preliminary budget	Administration	E-Team	To consolidate the full budget
	9/21/2023	Fire Benefit Charge estimate	Support Services Administration	Planning Administration	To estimate the potential 2023 Fire Benefit Charge.
	9/25/2023	Budget workshop (Bud/Fin Committee Meetings)	Administration	Administration Bud/Fin Committees	To review suggested budget or any adjustments
OCTOBER					
	10/2/2023	Publication of public hearing dates	Administration	Board Secretary	Publish on 10/9 and 10/16.
	10/5/2023	Finalize preliminary budget	Administration	Finance	Prepare final balanced budget for Governance Board packets
	10/9/2023	Regular Governance Board Meeting	Administration	Finance	Proposed Budget
	10/9/2023	FD 40 contract estimate	Administration	Finance	Notice to FD40 Board Secretary of estimated contract amount. (ILA Section 6.6)
	10/23/2023	Special Governance Board Meeting - Public Hearing on A/V Levy RCW 84.55.120 Public Hearing on FBC RCW 52.26.230	Administration	Governance Board Citizens	To review revenue sources and potential benefit charges for the subsequent year. *will replace committee meetings

NOVEMBER					
	11/13/2023	Regular Governance Board Meeting: Adopt Levy RCW 84.52.070 Adopt FBC RCW 52.26.230 Adopt Budget	Administration	Governance Board Citizens	Provide FD40 Final Contract - in no event later than 11/25 (ILA Section 6.6)
	11/30/2023	FBC Resolution provided to County Treasurer with report on public hearing RCW 52.26.230	Administration	Finance	
	11/30/2023	Levy provided to Assessor & Treasurer with report on public hearing RCW 84.52.070 Complete Ordinance 2152 Disclosure	Administration	Finance	
	11/30/2023	File budget with County RCW 84.52.020	Administration	Finance	
DECEMBER					
	12/15/2023	Budget posted to SharePoint	Administration	Finance	To make the budget visible internally
JANUARY 2024					
	1/1/2024	Final assessed values	Administration		
	1/16/2024	Budget load in finance system	Administration		To load budget in RFA Finance System.



Governing Board Agenda Item

SUBJECT/TITLE: _____

STAFF CONTACT: _____

SUMMARY STATEMENT:

FISCAL IMPACT:

Expenditure _____ Revenue _____

Currently in the Budget **Yes** No **N/A**

SUMMARY OF ACTION:

Reviewed by Legal **Yes** No **N/A**

EXHIBITS:

RFA GOVERNANCE BOARD RECOMMENDED ACTION:



RENTON REGIONAL FIRE AUTHORITY

18002 108TH AVE SE
RENTON, WA 98055
(425) 276-9500



CAPITAL FACILITIES PLAN

August 2023

WWW.RENTONRFA.COM

PROFESSIONALISM • INTEGRITY • LEADERSHIP • LOYALTY • ACCOUNTABILITY • RESPECT

[Back to Top](#)

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1.0 Introduction

1.1 PURPOSE

The purpose of this Capital Facilities Plan (CFP) is to identify capital facility needs necessary for the Renton Regional Fire Authority (RRFA) to achieve and maintain adopted standards for levels of service concurrent with, or prior to, the impacts of expected development and population growth over the next six years (2024-2029) and is consistent with the land use and transportation elements of the City of Renton (City) and King County comprehensive plans. This CFP also identifies sound fiscal policies and funding resources for implementation.

1.2 CAPITAL PLANNING REQUIREMENTS

The Washington State Growth Management Act (GMA) requires that a county's or city's CFP should consist of: a) an inventory of existing capital facilities owned by public entities; b) a forecast of the future needs for capital facilities; c) the proposed locations and capacities of expanded or new capital facilities; d) a six-year plan to finance capital facilities within projected funding capacities and clearly identified sources of public money for such purposes; and e) a requirement to reassess the land use element if probable funding falls short of existing needs (RCW 36.70a.070(3)). The GMA requires that all capital facilities have "probable funding" to pay for capital facility needs and that jurisdictions have capital facilities in place and readily available when new development comes in or must be of sufficient capacity when the population grows. The City prepares a CFP element as part of its comprehensive plan. In accordance with the Interlocal Agreement (ILA) in place between the City and the RRFA, the City will incorporate the RRFA's six-year plan for fire and emergency services facilities into its comprehensive plan CFP. That allows the City to impose an impact fee. Impact fees may be collected and spent only for the public facilities addressed by a CFP element of a comprehensive land use plan adopted pursuant to the GMA (RCW 82.02.050 (4)).

Levels of service (LOS) are established in the CFP and represent quantifiable measures of capacity. They are minimum standards established by the RRFA to provide capital facilities and services to the RRFA service area at a certain level of quality and within the financial capacity of the RRFA. As the population grows, it is expected that demands for fire and emergency response services will also grow. Additional facilities will be necessary to meet this growing demand for service. LOS standards are influenced by local citizens, elected, and appointed officials, national and state standards, mandates, and other considerations, such as available funding.

Growth, LOS standards, and a funded capital improvement program are to be in balance. In the case where the LOS cannot be met by a service or facility, the jurisdiction could do one of the

following: 1) add proposed facilities within funding resources, 2) reduce demand through demand management strategies, 3) lower LOS standards, 4) phase growth, or 5) change the land use plan.

1.3 DEFINITION OF CAPITAL FACILITIES

The CFP addresses public facilities necessary for providing fire and emergency response services. Capital facilities generally have a long useful life and include RRFA-owned and/or -operated buildings, land, equipment, and apparatus. Capital facilities planning does not cover regular operation and maintenance, but it does include major repair, rehabilitation, or reconstruction of facilities. The RRFA considers capital assets to be assets of more than \$5,000 in value and an estimated useful life of more than one year.

1.4 PRINCIPLES GUIDING CAPITAL INVESTMENTS

There are two main guiding elements behind capital facilities planning: RRFA standard operating procedures (SOP) that define fiscal policies and the GMA. RRFA SOP 2315 “Reserve Funds” and SOP 2317 “Long-Term Planning” address the RRFA’s policies regarding capital reserves and investments. The CFP supports RRFA in making strategic capital investments that support this effort.

RRFA intends to use the CFP as:

- a tool for budgeting;
- the basis for capital spending, giving a degree of assurance about how public money will be spent; and
- a useful guidance document for leadership and staff.

Toward that end, RRFA has developed and used the following guidelines to evaluate projects before adding them to the CFP:

- Growth-related project costs should be timed to match with available remitted fire impact fee revenues.
- Project costs that are not growth-related should be timed to match with revenues available through operating transfers.
- Projects should be spaced to allow for progress on RRFA’s other financial goals, especially maintaining its capital and operating reserves.

1.5 RRFA HISTORY AND GOVERNANCE

RRFA is a special purpose district that provides fire and medical emergency response services within the City and King County Fire District 25 (KCFD25). The RRFA was established on July 1, 2016, after voters residing within KCFD25 and the City approved Proposition 1. This legislation

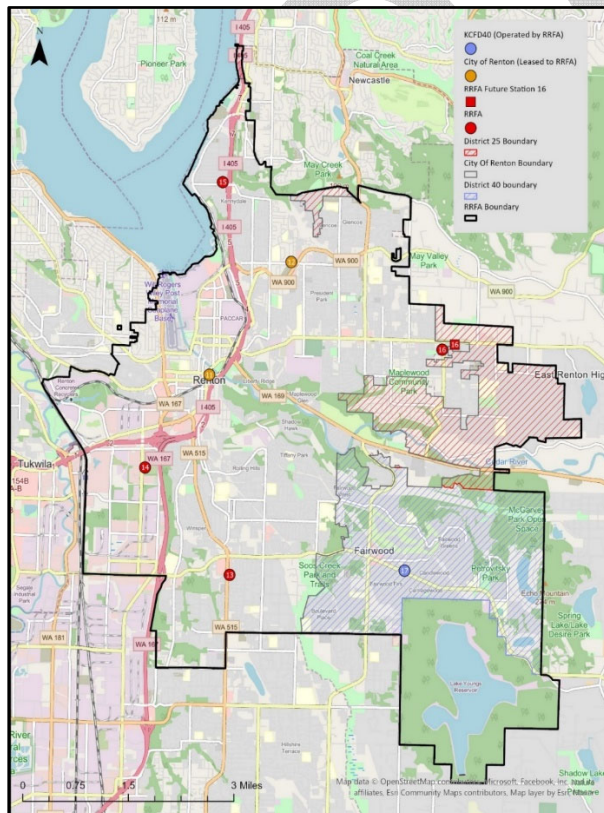
formed the regional fire authority and authorized a fire benefit charge. Prior to the creation of the RRFA, service in the City was provided by Renton Fire & Emergency Services (RF&ES) and both KCFD25 and King County Fire District 40 (KCFD40) contracted for services with the City.

Creation of the RRFA consolidated fire protection for the City and KCFD25 under a single special local government authority. The contract for fire protection with KCFD40 remained in place and transferred to RRFA and was renewed in 2022 for an additional twenty years. Accordingly, KCFD40 is treated as part of the RRFA entity for the purposes of this CFP.

1.6 SERVICE AREA

RRFA is located at the south end of Lake Washington, between Seattle and Tacoma. According to King County GIS data, the RRFA's total response area is 37 square miles, including the City of Renton and KCFD25 (27 square miles) and the KCFD40 and Lake Youngs area (10 square miles). KCFD25 is located in the area east of the City and north of State Route 169 known as the East Renton Highlands. KCFD40 and Lake Youngs are located in the area east of the City and south of State Route 169 known as Fairwood. The RRFA service area is bordered by unincorporated areas of King County, as well as the cities of Kent, Tukwila, and Newcastle, with the City of Seattle just a few miles northwest. Exhibit 1-1 presents a map of the RRFA service area and station locations.

Exhibit 1-1. Service Area and Station Locations



1.7 CURRENT CONDITIONS AND PROJECTED GROWTH

Renton is the fourth largest city in King County, covering 23.54 square miles and having an estimated 2022 population of 107,900. The City includes residential neighborhoods, a strong industrial base, and a growing commercial/office sector. The City's downtown and northern manufacturing area were designated as a regional growth center by the Puget Sound Regional Council (PSRC) in 1995. The northern part of the regional growth center borders Lake Washington and emphasizes mixed use and regional employment, including the Boeing Company's Renton Plant and The Landing, a significant recent retail and residential development. The southern part of the regional growth center includes the downtown core and adjacent residential area. Downtown Renton has seen investment in recent years, including the Renton Pavilion Event Center and Piazza Park, the Renton Transit Center, the IKEA Performing Arts Center, Top Golf, the Hyatt, and Southport. The City also contains commercial corridors, multi-family nodes, and extensive single-family neighborhoods. KCFD25 and KCFD40 mostly contain residential areas located in King County outside of Renton city limits.

Population projections for Renton, KCFD25, and KCFD40 for the years 2023-2029 are presented in Exhibit 1-2.¹ The City is expected to grow by 6,053 residents, 86% of the total population growth forecasted for the RRFA service area.

Exhibit 1-2. Service Area Population and Projected Growth

Description	2022	Projected Growth 2023-2029
City of Renton	107,900	6,053
KCFD25	7,947	87
KCFD40	22,148	917
Total Service Area	137,995	7,057
City of Renton Share of Population Growth		86%

¹ Source: Projections provided by the City of Renton.

2.0 Inventory of Existing RRFA Capital Facilities

This section provides a current inventory of capital facilities that are either owned or operated by RRFA, including both stations and apparatus.

2.1 BUILDING INVENTORY

Exhibit 1-1 in Section 1 maps the locations and ownership of the seven fire stations operated by RRFA. Exhibit 2-1 provides station locations and square footage operated by RRFA.

Exhibit 2-1. Fire Station Inventory

Station	Address	Building Square Footage Operated by RRFA
Fire Station 11 ²	211 Mill Ave S, Renton, WA 98057	20,550
Fire Station 12 (Ex EOC) ³	1209 Kirkland Ave NE, Renton, WA 98056	14,800
Fire Station 13	18002 108th Ave SE, Renton, WA 98055	20,521
Fire Station 13 Shop	18002 108th Ave SE, Renton, WA 98055	6,000
Fire Station 14	1900 Lind Ave SW, Renton, WA 98057	13,659
Fire Station 14 Tower	1900 Lind Ave SW, Renton, WA 98057	3,658
Fire Station 15	1404 N 30th St., Renton, WA 98056	7,497
Fire Station 16	12923 156th Ave SE, Renton, WA 98059	7,732
Fire Station 17 ⁴	14810 Petrovitsky Rd SE, Renton, WA 98058	6,836

² Fire Station 11 is owned by the City of Renton and leased to RRFA. The building square footage excludes the area leased by KC Medics.

³ Fire Station 12 is owned by the City of Renton and leased to the RRFA. The building square footage excludes the portion of the building that is utilized by City of Renton Emergency Management.

⁴ Fire Station 17 is owned by Fire District 40 and used by RRFA through service contract.

2.2 APPARATUS INVENTORY

The RRFA maintains a wide variety of highly specialized apparatus in order to fulfill its mission to protect the community it serves. Inventories of RRFA engines, ladders, aid units, hazardous materials vehicles, brush trucks, command vehicles, dive apparatus, service vehicles, staff vehicles, utility vehicles, small utility vehicles, and other apparatus/equipment are shown in Exhibits 2-2 through 2-13.

Exhibit 2-2. Engines in RRFA Fleet

Vehicle Number	Call Sign	Station/ Division Assignment	Year	Make	Model	Replacement Year	Est. Cost in Year of Replacement
F074	E413	Station 13	1999	E-One	Cyclone II	not scheduled	\$0
F085	E414	Station 14	2005	E-One	Cyclone II	2025	\$1,103,258
F093	E412	Station 12	2008	E-One	Cyclone II	2025	\$1,103,258
F114	E313	Station 13	2015	E-One	Cyclone II	2031	\$1,317,348
F115	E314	Station 14	2015	E-One	Cyclone II	2031	\$1,317,348
F123	E311	Station 11	2017	E-One	Cyclone II	2033	\$1,397,574
F124	E312	Station 12	2017	E-One	Cyclone II	2033	\$1,397,574
F137	E316	Station 16	2019	E-One	Cyclone II	2035	\$1,482,687
F148	E313	Station 13	2022	Pierce	Enforcer	2038	\$1,620,172
F149	E314	Station 14	2022	Pierce	Enforcer	2038	\$1,620,172
F2515	E316	Station 16	2003	E-One	Cyclone II	2025	\$1,103,258
F441	E417	Station 17	2022	Pierce	Enforcer	2038	\$1,620,172

Exhibit 2-3. Ariel Ladder Inventory

Vehicle Number	Call Sign	Station/Division Assignment	Year	Make	Model	Replacement Year	Est. Cost in Year of Replacement
F105	L311	Station 11	2011	E-One	Aerial	2029	\$2,591,449
F135	L311	Station 11	2019	E-One	Cyclone	2037	\$3,282,770

Exhibit 2-4. Aid Units in RRFA Fleet

Vehicle Number	Call Sign	Station/Division Assignment	Year	Make	Model	Replacement Year	Est. Cost in Year of Replacement
F110	A313	Station 13	2014	INTE	Northstar	2025	\$421,371
F111	A312	Station 12	2014	INTE	Northstar	2025	\$421,371
F138	A311	Station 11	2020	Ford	F-450	2032	\$518,233
F153	A313	Station 13	2022	Ford	F-450	2034	\$549,793
F154	A312	Station 12	2022	Ford	F-450	2034	\$549,793
F440	A317	Station 17	2022	Ford	F-450	2034	\$549,793

Exhibit 2-5. Hazardous Materials Vehicle in RRFA Fleet

Vehicle Number	Call Sign	Station/Division Assignment	Year	Make	Model	Replacement Year	Est. Cost in Year of Replacement
F120	HM314	Station 14	2017	E-One	Freightliner	2037	\$826,618

Exhibit 2-6. Brush Trucks in RRFA Fleet

Vehicle Number	Call Sign	Station/ Division Assignment	Year	Make	Model	Replacement Year	Est. Cost in Year of Replacement
F091	BR317	Station 17	2008	Ford	F-550	2024	\$354,413
F155	BR316	Station 16	2022	Ford	F-550	2037	\$520,467

Exhibit 2-7. Command Vehicles in RRFA Fleet

Vehicle Number	Call Sign	Station/Division Assignment	Year	Make	Model	Replacement Year	Est. Cost in Year of Replacement
F109	B413	Station 13	2013	Chevrolet	Tahoe	2023	\$111,202
F119	B312	Station 12	2016	Chevrolet	Silverado	2024	\$114,538
F121	C312	Station 13	2017	Chevrolet	Tahoe	2027	\$125,159
F122	C314	Station 13	2017	Ford	Explorer	2027	\$125,159
F125	B313	Station 13	2018	Chevrolet	Silverado	2028	\$128,914
F134	C313	Station 13	2020	Ford	Explorer	2030	\$136,764
F139	C311	Station 13	2020	Ford	Explorer	2030	\$136,764
F156	TBD	Station 11	2023	Chevrolet	Silverado	2033	\$149,446
F158	TBD	Station 12	2024	Chevrolet	Silverado 2500	2034	\$153,930

Exhibit 2-8. Dive Apparatus in RRFA Fleet

Vehicle Number	Call Sign	Station/Division Assignment	Year	Make	Model	Replacement Year	Est. Cost in Year of Replacement
F129	DIV312	Station 12	2018	Ram	5500	2039	\$443,087

Exhibit 2-9. Service Vehicles in RRFA Fleet

Vehicle Number	Call Sign	Station/Division Assignment	Year	Make	Model	Replacement Year	Est. Cost in Year of Replacement
F136	CAR312	EMS	2019	Ford	F-150 Pursuit	2029	\$110,086
F434	CAR52	EMS	2004	Chevrolet	Tahoe	2023	\$92,195

Exhibit 2-10. Staff Vehicles in RRFA Fleet

Vehicle Number	Call Sign	Station/Division Assignment	Year	Make	Model	Replacement Year	Est. Cost in Year of Replacement
F096A	N/A	OFM	2009	Ford	Escape	2024	\$39,035
F104	N/A	EMS	2012	Ford	Escape	2027	\$42,655
F116	N/A	Administration	2016	Ford	Police Utility	2030	\$46,610
F117	N/A	OFM	2015	Ford	C-Max	2030	\$46,610
F126	N/A	OFM	2018	Ford	Escape	2033	\$50,932
F127	N/A	OFM	2018	Ford	Escape	2033	\$50,932
F128	N/A	OFM	2018	Ford	Escape	2033	\$50,932
F130	N/A	OFM	2020	Ford	Escape	2035	\$54,033
F143	N/A	OFM	2020	Ford	Escape	2035	\$54,033
F144	N/A	OFM	2020	Ford	Escape	2035	\$54,033
F145	N/A	Support Services	2020	Ford	Escape	2035	\$54,033
F146	N/A	Support Services	2020	Ford	Escape	2035	\$54,033
F147	N/A	Support Services	2020	Ford	Escape	2035	\$54,033

Exhibit 2-11. Utility Vehicles in RRFA Fleet

Vehicle Number	Call Sign	Station/Division Assignment	Year	Make	Model	Replacement Year	Est. Cost in Year of Replacement
F112	N/A	SKCFTC	2015	Ford	F-250	2030	\$85,978
F113	N/A	OFM	2015	Dodge	Promaster	2030	\$85,978
F132	N/A	Support Services	2019	Ford	F-250	2034	\$96,769
F133	N/A	Support Services	2019	Ford	F-250	2034	\$96,769
F140	N/A	Administration	2020	Chevrolet	Express 2500	2035	\$99,672
F151	N/A	SKCFTC	2021	Ford	F-150	2036	\$102,662
F152	N/A	SKCFTC	2021	Ford	F-150	2036	\$102,662
F159	N/A	Support Services	2024	Chevrolet	Silverado	2039	\$112,182
F436	N/A	Support Services	2005	Chevrolet	Silverado	2023	\$69,908

Exhibit 2-12. Small Utility Vehicles in RRFA Fleet

Vehicle Number	Call Sign	Station/Division Assignment	Year	Make	Model	Replacement Year	Est. Cost in Year of Replacement
F131	N/A	Station 14	2020	Ford	Transit Connect	2035	\$60,022
F141	N/A	Station 13	2020	Nissan	NV200 S	2035	\$60,022
F142	N/A	Station 13	2020	Nissan	NV200 S	2035	\$60,022

Exhibit 2-13. Other Apparatus/Equipment in RRFA Fleet

Vehicle Number	Call Sign	Station/Division Assignment	Year	Make	Model	Replacement Year	Est. Cost in Year of Replacement
F092	N/A	N/A	2007	Cargo	Trailer 22Ft	not scheduled	\$0
F094	N/A	N/A	2008	Eagle	Utility	not scheduled	\$0
F101	N/A	N/A	2008	Club	Inteltrak	not scheduled	\$0
F103	N/A	N/A	2008	PLRS	Spirit	2025	\$100,394
F118	N/A	N/A	2016	EZLD	Trailer	2026	\$17,727
F150	N/A	N/A	2005	CGMT	Trailblazer	2025	\$17,210

3.0 Measuring Future Capital Facility Needs

The GMA was enacted to provide local oversight of community growth with the intent for local governments such as counties, cities, and towns to monitor and mitigate the impacts of growth. GMA Goal 1 promotes placing growth in urban areas where there are public facilities and services, while GMA Goal 12 promotes adequate facilities and services to support development:

(1) Urban growth. Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.

(12) Public facilities and services. Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards (RCW 36.70A.020(12)).

Concurrency for transportation infrastructure is mandated by the GMA, and local agencies were given the authority to establish concurrency guidelines for other public needs such as water, sewer, and fire services:

Purpose.

- The purpose of concurrency is to assure that those public facilities and services necessary to support development are adequate to serve that development at the time it is available for occupancy and use, without decreasing service levels below locally established minimum standards.
- Concurrency describes the situation in which adequate facilities are available when the impacts of development occur, or within a specified time thereafter. Concurrency ensures consistency in land use approval and the development of adequate public facilities as plans are implemented, and it prevents development that is inconsistent with the public facilities necessary to support the development.
- With respect to facilities other than transportation facilities, counties and cities may fashion their own regulatory responses and are not limited to imposing moratoria on development during periods when concurrency is not maintained (WAC 365-196-840).

The RRFA CFP identifies the need for \$25.5M in capital investments as shown in Exhibits 4-1 and 4-2, to maintain fire service concurrency through the year 2029.

3.1 LEVEL OF SERVICE MEASURES

RRFA measures LOS from three different perspectives. The first concerns the cost of facilities for

incident response per unit of development. The second perspective concerns turnout and response times in accordance with established policy. The third perspective concerns the Protection Class (PC) rating for each of the areas served (the City of Renton, KCFD25, and KDFD40). Each of these LOS measures are described below.

3.1.1 Cost of Facilities for Incident Response per Unit of Development

In 2023, RRFA conducted a rate study for fire impact fees. That study presents a methodology for quantifying the need for fire and EMS stations and apparatus to serve new growth, for the purpose of collecting fire impact fees. The level of service standard is the 2022 ratio of apparatus and stations to EMS and fire/other incidents. More specifically, the rate study calculates the annualized facility value per incident as well as the number of incidents produced by different kinds of development. This determines the total cost of facilities for incident response needed per unit of development. This standard is used to measure the systemwide capacity of facilities to support incident response throughout the RRFA service area.

Full documentation of the methodology is available in the rate study. A brief summary follows.

For apparatus, including engines and other response vehicles, the ratio of apparatus to incidents as of 2022 was selected as an acceptable LOS standard. As growth occurs, more incidents will occur, and therefore more apparatus will be needed to maintain this standard. It is anticipated that much of the growth in the RRFA service area will come in the form of infill development and increased density within the City. As the growth occurs, the RRFA intends to add additional apparatus units to address the anticipated increase in multi-story housing (ladder) and emergency medical calls for service (aid unit).

For fire stations, the rate study measures LOS using the ratio of station square footage to incidents. However, a deduction to the station square footage is made to account for unused beds that could accommodate additional fire and emergency response staff. As stated above, it is anticipated that much of the growth in the RRFA service area will come in the form of infill development and increased density within the City. As this growth occurs, the RRFA intends to utilize excess bed capacity in current stations to increase its capacity for emergency response at existing stations.

On the next page, Exhibit 3-1 shows the cost of response per unit of development (dwelling unit, square foot, room, or student), by land use category, as calculated in the 2023 RRFA Rate Study for Fire Impact Fees. These represent the total amount of facility investment the RRFA would need to make to maintain the current level of service as growth occurs within the service area, but not the actual fire impact fee to be charged.

Exhibit 3-1. Total Cost of Response by Land Use Category

Land Use Type	Unit of Development	Total Cost of Response to EMS, Fire, & Other Incidents, Per Unit of Development
Single-Family Residential	d.u.	\$883.59
Multi-Family Residential	d.u.	\$1,211.52
Hotel/Motel/Resort	room	\$725.02
Medical Care Facility	d.u.	\$2,053.69
Office	sq. ft.	\$0.29
Medical/Dental Office	sq. ft.	\$1.29
Retail	sq. ft.	\$1.39
Leisure Facilities	sq. ft.	\$0.89
Restaurant/Lounge	sq. ft.	\$3.03
Industrial/Manufacturing	sq. ft.	\$0.10
Church/Non-Profit	sq. ft.	\$0.50
Education	student	\$59.03
Special Public Facilities	sq. ft.	\$0.68

3.1.2 Turnout and Response Time Standards

Traffic and geographic barriers currently present challenges to providing adequate response time in some areas. For this reason, RRFA also has turnout and response time standards for measuring performance across the entire service area and by individual station.

Turnout and response time standards are documented in SOP 4101 “Response Guidelines”. First, this policy addresses turnout times, or the interval that begins when audible or visual notification is received by firefighters from the 911 center and ends at the beginning point of travel time. SOP 4101 states: “Turnout time for emergent responses shall be expedient and no longer than one hundred twenty seconds.” Second, this policy addresses response times, or the interval that begins with notification and ends with the time the unit arrives on scene. SOP 4101 states: “The organization aspires in a non-disaster situation, under current conditions of funding, staffing, and equipment, to respond to 90% of the emergency service calls within 7 minutes and 30 seconds from the time of dispatch.”

These standards are summarized in Exhibit 3-2.

⁵ Source: RRFA Rate Study for Fire Impact Fees, 2023

Exhibit 3-2. Response Time Level of Service Standards

Service Standard	Response Time	Meet Response Time Goal
Turnout time for emergency response	120 seconds	100%
First unit arrival	7 minutes and 30 seconds from the time of dispatch	90%

Measuring response time helps RRFA to identify where additional capacity may be necessary. It also helps to identify where current conditions such as station design, local traffic, land use, or geographic barriers are presenting challenges to responding to incidents in a timely manner. For example, Fire Stations 13 and 16 are multi-story buildings that require response crews to travel from a second story to the main story in order to respond, thus increasing their turnout time compared to a single-story station. Similarly, the increased density of multi-family housing and commercial development outside of the Fire Station 11 response area reduces the probability of meeting the response standard and impacts response time level of service for that property type.

The response time level of service standards for 2022 are displayed in Exhibit 3-3 and 3-4.

Exhibit 3-3. 2022 Response Time Level of Service Standards for Fire/Other

In/Out of Jurisdiction	Turnout time under 120 seconds	Response time under 7.5m
In Jurisdiction	50.66%	81.87%
Out of Jurisdiction	56.22%	32.33%

Exhibit 3-4. 2022 Response Time Level of Service Standards for EMS

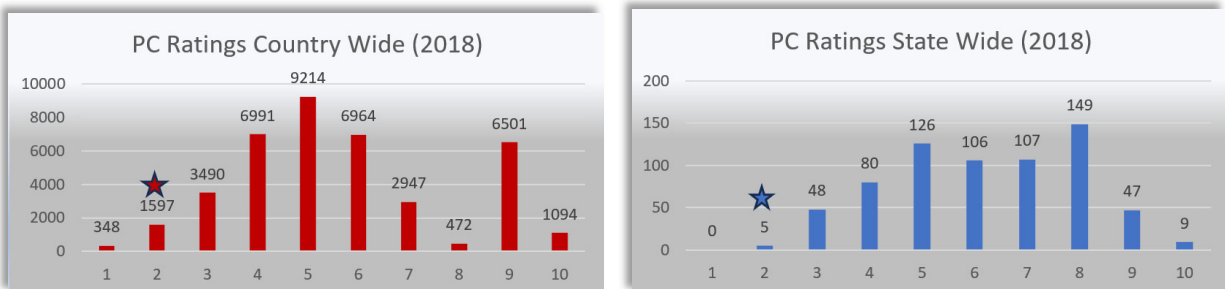
In/Out of Jurisdiction	Turnout time under 120 seconds	Response time under 7.5m
In Jurisdiction	74.26%	94.06%
Out of Jurisdiction	72.02%	72.13%

3.1.3 Washington Surveying Rating Bureau Protection Class

A Washington Surveying Rating Bureau (WSRB) protection class (PC) is a score from 1 to 10 that represents the community-provided fire protection capabilities available at a specific property. A PC of 1 indicates exemplary fire protection capabilities are available; a PC of 10 indicates the fire protection capabilities, if any, are not sufficient to receive credit for insurance. Each community in Washington state has a PC, which is used as a starting point to determine the PC of individual properties.

In 2018, the City's PC was upgraded from a Class 3 to a Class 2.⁶ This put the RRFA's fire protection of the City in the top 5% in the country and top 1% in the state. In July of 2022, the City of Seattle became the first and only fire department in the state to achieve a Class 1 PC.

Exhibit 3-5. City of Renton 2018 PC Rating



The improvements made to fire and life safety throughout Renton over the past several years have led to this outstanding upgrade in PC for the Renton community. Because a community's PC is one of the key factors in insurance premium determination, not only does this upgrade represent exceptional fire and life safety protection, but Renton property owners also have an even greater opportunity to realize insurance premium savings. KCFD25 and KCFD40 both maintain a PC of Class 3.

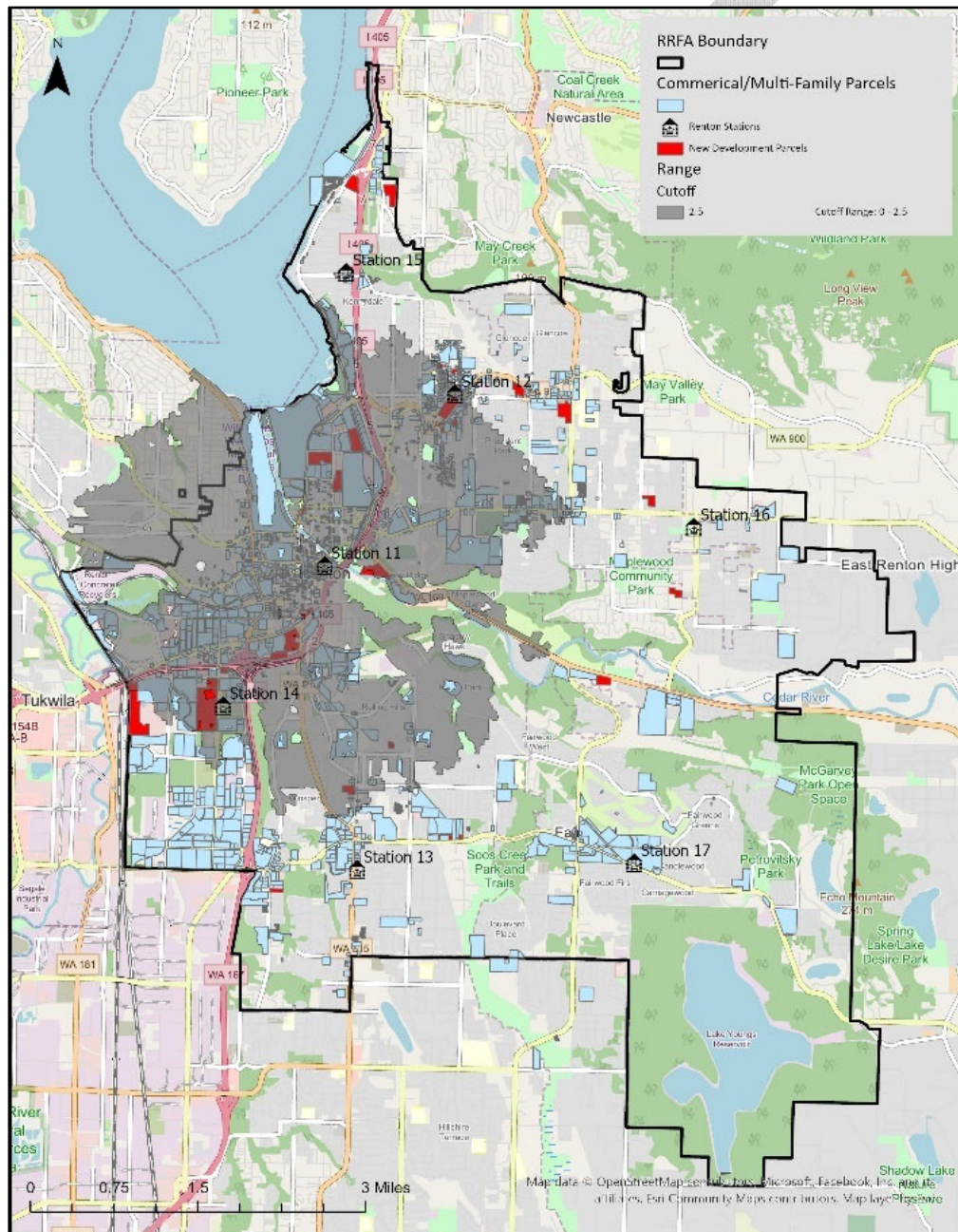
A community's PC rating is evaluated using the following criteria:

- **Fire department (40%),** including distribution of stations, staffing levels, equipment, and personnel training.
- **Water supply (35%),** including water flow capacity, fire hydrant location, and maintenance.
- **Emergency communications system (9%),** including dispatching system, staffing, and training.
- **Fire safety control (16%),** including fire code and building code enforcement, fire investigations, and public fire education programs.

⁶ Source: Country Wide PC Ratings were obtained in 2019 from www.isomitigation.com/ppc/program-works/facts-and-figures-about-ppc-codes-around-the-country/. State Wide PC Ratings were published in the WSRB Protection Class Report for Renton, dated October 5, 2018.

Because the PC criteria that most affect the overall rating are the fire operations and deployment of resources for fire protection, the RRFA must maintain the fire protection apparatus, staffing, and deployment that supports its current PC rating as growth occurs. For example, WSRB requires a ladder to be positioned within 2.5 road miles of a given structure. The RRFA maintains a single ladder located at Fire Station 11 in downtown Renton. Exhibit 3-6 shows the 2.5 road mile radius of Fire Station 11 in comparison to the projected new development within the City. A second ladder is required to address the growth in these areas.

Exhibit 3-6. Fire Station 11 Ladder with 2.5 Road Mile Radius



Some of the City-projected developments that will require a ladder response are shown in Exhibit 3-7 below.⁷

Exhibit 3-7. Highlighted City of Renton Planned Development



⁷ Source: City of Renton: [Renton Highlighted Development \(arcgis.com\)](https://arcgis.com) accessed 08/04/2023.



Cedar River Apartments



Watershed Apartments



Kennedydale Gateway



4.0 Forecast of Future Facility Needs, 2024-2029

The following is a summary of capital facility needs for the period of 2024-2029.

4.1 APPARATUS FACILITY NEEDS

Over the next six years, RRFA will need to replace 17 apparatus and add 2 additional apparatus to its fleet. The inventory of apparatus in Section 2.2 provides the year of replacement for all apparatus in the current fleet. Exhibit 4-1 summarizes scheduled apparatus replacements and total costs through the year 2029. It also includes the cost of expansions to the RRFA vehicle fleet needed to serve new growth.⁸

Exhibit 4-1. Capital Costs for Apparatus, 2024-2029

Project Description	Quantity	Average Unit Cost	Total Cost in Year of Replacement	Percentage Related to City of Renton Growth	Impact Fee Eligible Costs
Apparatus Replacements					
Engine	3	\$1,103,258	\$3,826,688	0%	\$0
Ladder	1	\$2,591,449	\$2,591,449	0%	\$0
Aid Unit	2	\$421,371	\$842,741	0%	\$0
HazMat Vehicle	0	N/A	\$0	0%	\$0
Brush Truck	1	\$354,413	\$354,413	0%	\$0
Command Vehicle	4	\$123,442	\$493,769	0%	\$0
Dive Apparatus	0	N/A	\$0	0%	\$0
Service Vehicle	1	\$110,086	\$110,086	0%	\$0
Staff Vehicle	2	\$40,845	\$81,689	0%	\$0
Utility Vehicle	0	N/A	\$0	0%	\$0
Sm. Utility Vehicle	0	N/A	\$0	0%	\$0
Other Apparatus/Equipment	3	N/A	\$135,332	0%	\$0
Apparatus Fleet Expansions					
Ladder	1	\$2,591,449	\$2,591,449	86%	\$2,222,764
Aid Unit	1	\$421,371	\$421,371	86%	\$361,422
Apparatus Total			\$7,622,299		\$2,584,186

⁸ See the RRFA Rate Study for Fire Impact Fees (2023) for the methodology used to determine the proportion of growth-related apparatus needs based on population.

4.2 STATION FACILITY NEEDS

RRFA has three categories of station facility costs: debt servicing for existing stations, new station construction, and renovations to address operational needs. The costs related to these needs are summarized in Exhibit 4-2 and described in more detail below.

Exhibit 4-2. Capital Facility Costs for Stations, 2024-2029

Project Description	Total Cost	Percentage Related to City of Renton Growth	Impact Fee Eligible Costs
Fire Station Debt Servicing			
Fire Station 16/Maintenance	\$15,064,544	18%	\$2,711,618
Fire Station Improvements for Operational Needs			
Fire Station 11 Facility Improvements	\$571,225	0%	\$0
Fire Station 12 Facility Improvements	\$883,022	0%	\$0
Fire Station 13 Facility Improvements	\$852,489	0%	\$0
Fire Station 13 Shop Facility Improvements	\$0	0%	\$0
Fire Station 14 Facility Improvements	\$320,319	0%	\$0
Fire Station 14 Tower Facility Improvements	\$0	0%	\$0
Fire Station 15 Facility Improvements	\$0	0%	\$0
Fire Station 16 Facility Improvements	\$190,542	0%	\$0
Fire Station 17 Facility Improvements	\$1,069	0%	\$0
Total Fire Station Costs	\$17,883,211		\$2,711,618

4.2.1 Debt Servicing

RRFA intends to relocate Fire Station 16 and build a new maintenance repair facility within the City borders to address the anticipated growth in the area. The percent attributed to City growth is 18%. Construction costs have not yet been developed; however, TCA has provided an estimate of \$20M for the project. The RRFA currently has no debt but does intend to issue Limited Tax General Obligation (LTGO) bonds in late 2023 and early 2024 for the financing of the new Fire Station 16 and maintenance facility in the amount of approximately \$20M. The debt service in Exhibit 4-2 represents anticipated bond payments for the years 2024-2029. See Appendix A for an estimated amortization table.

4.2.2 New Facility Needs

RRFA has identified the need to replace Fire Station 16 in the East Plateau neighborhood on the northeast side of Renton. The existing facility was built in 1974 and is approaching 50 years old and does not accommodate the modern needs of the fire service. Building a new station will increase capacity to serve expected growth in this area of Renton for the next 50 years. In addition, the RRFA intends to build a new maintenance facility to provide the space necessary to conduct apparatus service and repair as we continue to expand our fleet. RRFA's assessment of facility needs to meet our current level of service standards has determined that 82% of this new station and maintenance facility will address existing deficiencies while 18% will expand capacity to serve future growth. Construction of the new Fire Station 16 is anticipated to begin in 2024. The total estimated cost of this station and additional apparatus repair facility, including land acquisition, is \$20,000,000.

Exhibit 4-3. Fire Station 16



4.2.3 Capital Projects Associated with Station Operational Needs

The RRFA anticipates several improvement projects at existing fire stations necessary to address operational needs and maintain concurrency of fire services through 2029. These improvements include major repair and rehabilitation and do not including regular operations and maintenance. They are summarized in Exhibit 4-2 above and detailed in Appendix B.

4.3 PROPOSED LOCATIONS AND CAPACITIES OF EXPANDED OR NEW CAPITAL FACILITIES

4.3.1 Apparatus

The RRFA has identified the need to add one aid unit and one ladder to serve the new growth within the City. Appendix C highlights the areas covered by the addition of an aid unit at Fire Station 11, much of which includes new development parcels. Appendix D highlights the areas

covered by adding an additional ladder and locating one ladder at Fire Station 12 and one at Fire Station 13.

4.3.2 Station

The new Fire Station 16 and maintenance facility will be located at 15815 SE 128th St in Renton. The existing Fire Station 16 is 7,732 square feet (SF) and is situated on a 58,806 SF parcel of land. Due to the limited size of the current lot, the maximum building area allowed is 12,800 SF which will not accommodate a station intended to serve growth over the next 50 years, the average longevity of a fire station. In addition, the current maintenance facility located at Fire Station 13 is at maximum capacity and cannot accommodate servicing any additions to the RRFA fleet. An additional maintenance facility is needed. The new Fire Station 16 will be located on a 150,200 SF parcel of land and that will allow up to 25,100 SF of building space. A single-story station of approximately 15,150 will accommodate eight beds and three bays and a five-bay maintenance facility are planned for the new parcel. See Appendix E for a preliminary layout of the parcel.

5.0 Capital Facilities Revenue Analysis

5.1 OVERVIEW

This CFP revenue analysis supports the financing for providing facilities and services, as required by RCW 36.70A.070(3)(d). Revenue estimates, using assumptions based on historical trends, are used to represent realistic expectations for revenue that may be available for capital funding.

This revenue analysis provides an **approximate, and not exact, projection of future revenue sources**. The numbers projected in this analysis are for planning purposes and cannot account for sensitivities such as local, state, and federal policy, economic trends, and other factors. This analysis may not align with RRFA's annual budget because it is based on multi-year projections of revenue, while the annual budget presents precise estimates of available revenue for spending in a specific fiscal year.

5.2 FUNDING THE CAPITAL FACILITIES PLAN

Estimated future revenues are projected for the years 2024-2029. The revenue analysis is categorized according to:

- **Dedicated Capital Revenues.** Dedicated revenues are required to be used for certain types of capital spending, outlined by the law. The dedicated capital revenues for RRFA include fire impact fees remitted to RRFA by the City.
- **Operating Transfers.** Operating transfers-in are those revenue sources that are transferred in from the operating fund. Although these are not dedicated sources to be relied on for capital funding, the RRFA endeavors to make regular operating transfers-in to its reserves on a level basis each year. These transfers are not specifically dedicated to capital spending and could be used elsewhere.
- **LTGO Bonds.** Financing bonds that do not require voter approval or include the levying of an additional tax to repay them.
- **Other Funding Sources.** The RRFA continuously explores external sources available to fund capital projects such as grant opportunities.

5.3 ASSUMPTIONS

The RRFA revenue analysis is based on the following assumptions:

- **Analysis Boundary.** The analysis includes the current RRFA boundary as shown in Exhibit 1-1.
- **Growth.** Growth targets were provided by the City staff and reflect projections as of August 2023.
- **Property Tax.** This analysis assumes that the property tax levy rate will reset to

\$1 per thousand in 2024 with the successful passing of Proposition 1 in August of 2023. Property tax revenues will increase at an annual rate of 1% going forward, with the assessed value and new construction growing according to the July 2023 King County Economic and Revenue Forecast – Office of Economic and Financial Analysis.

- **Fire Benefit Charge.** In 2021, the voters approved a ten-year renewal of the fire benefit charge with a vote of nearly 82% in favor of the proposition. By law, the fire benefit charge may be used for up to 60% of the RRFA operating budget. In 2023, the fire benefit makes up approximately 35% of the RRFA's total budget. With the passing of Proposition 1 (see above), the RRFA intends to lower the fire benefit charge by as much as 50% and is estimating that the benefit charge will account for approximately 17% of the 2024 operating budget.
- **Fire Impact Fees.** This analysis assumes the City will adopt the 2024 fire impact fees proposed by the RRFA and will remit fees collected to the RRFA as outlined in the interlocal agreement between the City and the RRFA. Projected residential and commercial impact fee revenues are based on residential and nonresidential growth projections provided by City staff.
- **Fire District 40 Service Contract.** RRFA and KCFD40 entered into a twenty-year agreement in 2022 and maintains a collaborative relationship with the governance board for the district. This analysis assumes that from 2024 forward, the service contract grows annually at a rate relative to the costs of operating the RRFA.
- **EMS Levy.** This analysis assumes revenues from the EMS levy continue to increase at an annual growth rate of 3%.
- **Permits and Fees.** This analysis assumes revenues from miscellaneous permits and fees will remain at now current rates.
- **EMS Services.** This analysis assumes revenues from EMS services will increase at a rate of 5% per year and Ground Emergency Medical Transport (GEMT) revenues will remain level. GEMT funding is at the discretion of the federal government and the program could be modified or cancelled at any time.

5.4 FIRE IMPACT FEES

The City has collected fire impact fees since 2011. In 2023, the debt service on Fire Station 13 was paid in full and the City now remits fire impact fees to the RRFA on a monthly basis. Impact fees collected through 2023 will be used for capital facility needs identified in the 2017 RRFA CFP. Fees collected beginning in 2024 will be used for capital facility needs identified in this CFP. The RRFA projects fire impact fees of \$5,074,209 for the years 2024 through 2029. Exhibit 5-1 compares the projected fire impact fee revenue to the projected growth-related project costs, as presented in Exhibit 4-1 and Exhibit 4-2.

Exhibit 5-1. Projected Dedicated Capital Revenues and Costs

Dedicated Revenues and Project Costs	2024-2029 Total Revenues and Costs
Fire Impact Fee Revenues (remitted)	\$5,074,209
Planned Growth-Related Project Costs	\$5,295,804
Estimated Dedicated Funding Surplus/(Deficit)	(\$221,594)

5.5 OPERATING TRANSFERS

The projected revenues available for operating transfers-in over the planning period of 2024-2029 is \$33,200,000. RRFA's funding streams for these transfers-in and for capital facilities costs include revenues from its property tax, fire benefit charge, KCFD40 service contract, EMS levy, LTGO bonds, and miscellaneous permits and fees.

5.6 SIX-YEAR COST AND REVENUE COMPARISON

This six-year comparison looks at RRFA's total revenues and planned project costs for the six-year planning horizon of 2024-2029 in order to understand the difference between future dedicated capital costs and potential future revenues. Capital costs are presented as year of expenditure (YOE) and include growth-related capital facility and apparatus replacement costs. Exhibit 5-2 summarizes projected capital facilities revenues and costs.⁹

Exhibit 5-2. Estimated Capital Facilities Revenues and Costs, YOE

Capital Facilities	Revenues and Costs 2024-2029
Growth-Related Capital Costs	\$5,295,804
Capital Replacement and Project Costs, not Growth-Related	\$22,492,690
Total Costs	\$27,788,494
Impact Fee Revenue	\$5,074,209
Operating Transfer Potential Revenue	\$33,200,000
Estimated Funding Surplus/(Deficit)	\$10,485,716

5.7 POLICY OPTIONS AND OTHER FUNDING SOURCES

One additional funding source option is:

- **Unlimited Tax General Obligation (UTGO) Bonds:** Financing bonds that require voter approval and include the levying of an additional tax to repay them.

⁹ Source: Renton RFA, 2023.

Appendix A: Amortization Schedule

Debt Servicing Amortization Schedule

Payment: Every 6 Months Term: 10 Years
 Amount: \$20,000,000 Interest Rate: 4.50%

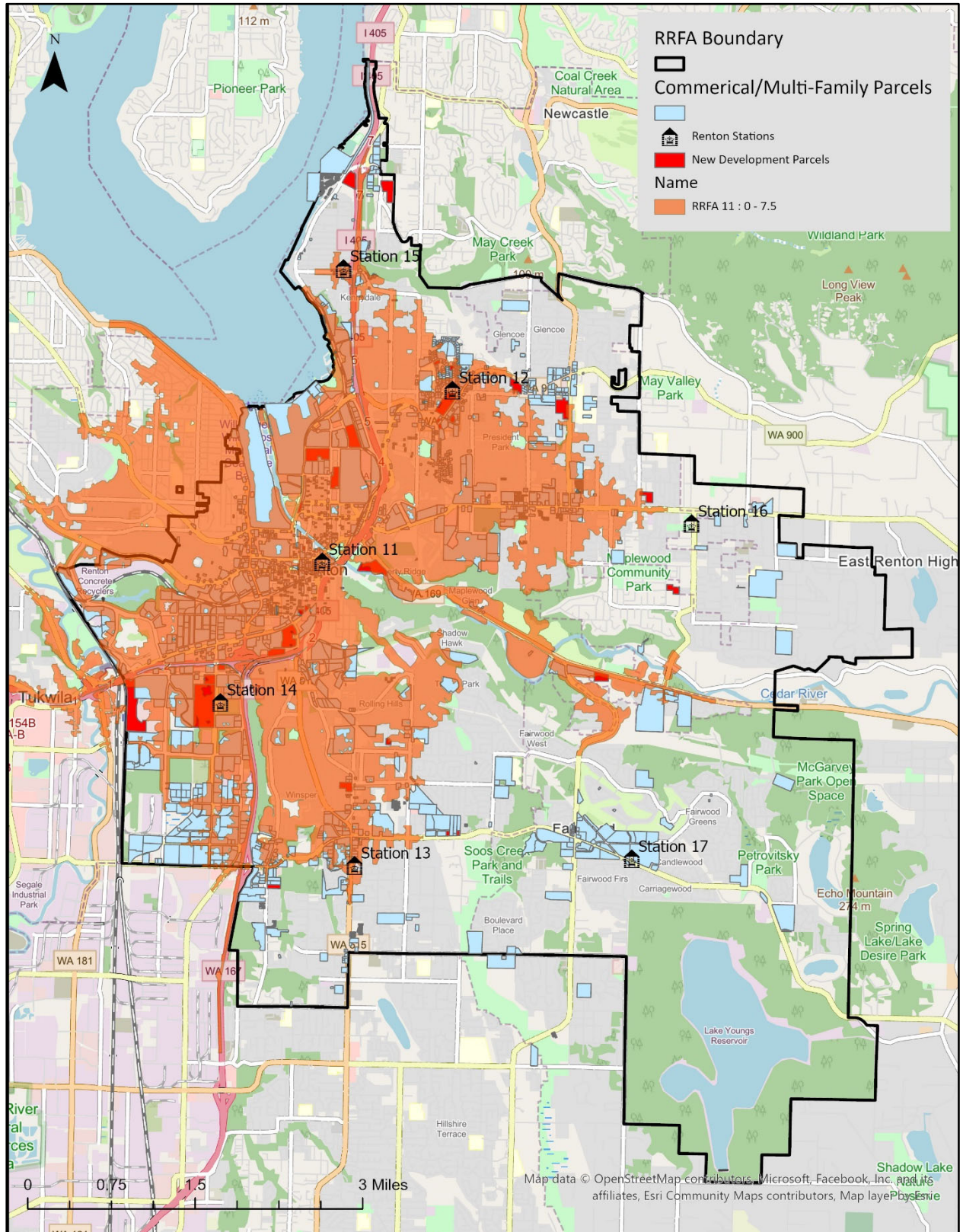
Year	Beginning Balance	Interest	Principal	Ending Balance	Payment	Year
1. Year #1	\$20,000,000.00	\$454,239.90	\$801,138.78	\$19,198,861.22	\$1,255,378.68	2024
2. Year #1	\$19,198,861.22	\$436,044.44	\$819,334.24	\$18,379,526.97	\$1,255,378.68	2024
3. Year #2	\$18,379,526.97	\$417,435.73	\$837,942.96	\$17,541,584.01	\$1,255,378.69	2025
4. Year #2	\$17,541,584.01	\$398,404.37	\$856,974.32	\$16,684,609.70	\$1,255,378.69	2025
5. Year #3	\$16,684,609.70	\$378,940.77	\$876,437.91	\$15,808,171.79	\$1,255,378.68	2026
6. Year #3	\$15,808,171.79	\$359,035.12	\$896,343.57	\$14,911,828.22	\$1,255,378.69	2026
7. Year #4	\$14,911,828.22	\$338,677.37	\$916,701.32	\$13,995,126.90	\$1,255,378.69	2027
8. Year #4	\$13,995,126.90	\$317,857.25	\$937,521.43	\$13,057,605.47	\$1,255,378.68	2027
9. Year #5	\$13,057,605.47	\$296,564.27	\$958,814.41	\$12,098,791.06	\$1,255,378.68	2028
10. Year #5	\$12,098,791.06	\$274,787.68	\$980,591.00	\$11,118,200.05	\$1,255,378.68	2028
11. Year #6	\$11,118,200.05	\$252,516.51	\$1,002,862.18	\$10,115,337.87	\$1,255,378.69	2029
12. Year #6	\$10,115,337.87	\$229,739.50	\$1,025,639.18	\$9,089,698.69	\$1,255,378.68	2029
13. Year #7	\$9,089,698.69	\$206,445.19	\$1,048,933.49	\$8,040,765.20	\$1,255,378.68	2030
14. Year #7	\$8,040,765.20	\$182,621.82	\$1,072,756.87	\$6,968,008.33	\$1,255,378.69	2030
15. Year #8	\$6,968,008.33	\$158,257.37	\$1,097,121.32	\$5,870,887.01	\$1,255,378.69	2031
16. Year #8	\$5,870,887.01	\$133,339.56	\$1,122,039.13	\$4,748,847.88	\$1,255,378.69	2031
17. Year #9	\$4,748,847.88	\$107,855.81	\$1,147,522.88	\$3,601,325.01	\$1,255,378.69	2032
18. Year #9	\$3,601,325.01	\$81,793.28	\$1,173,585.41	\$2,427,739.60	\$1,255,378.69	2032
19. Year #10	\$2,427,739.60	\$55,138.81	\$1,200,239.88	\$1,227,499.72	\$1,255,378.69	2033
20. Year #10	\$1,227,499.72	\$27,878.97	\$1,227,499.72	\$0.00	\$1,255,378.69	2033

Appendix B: Major Repair and Rehabilitation for Stations

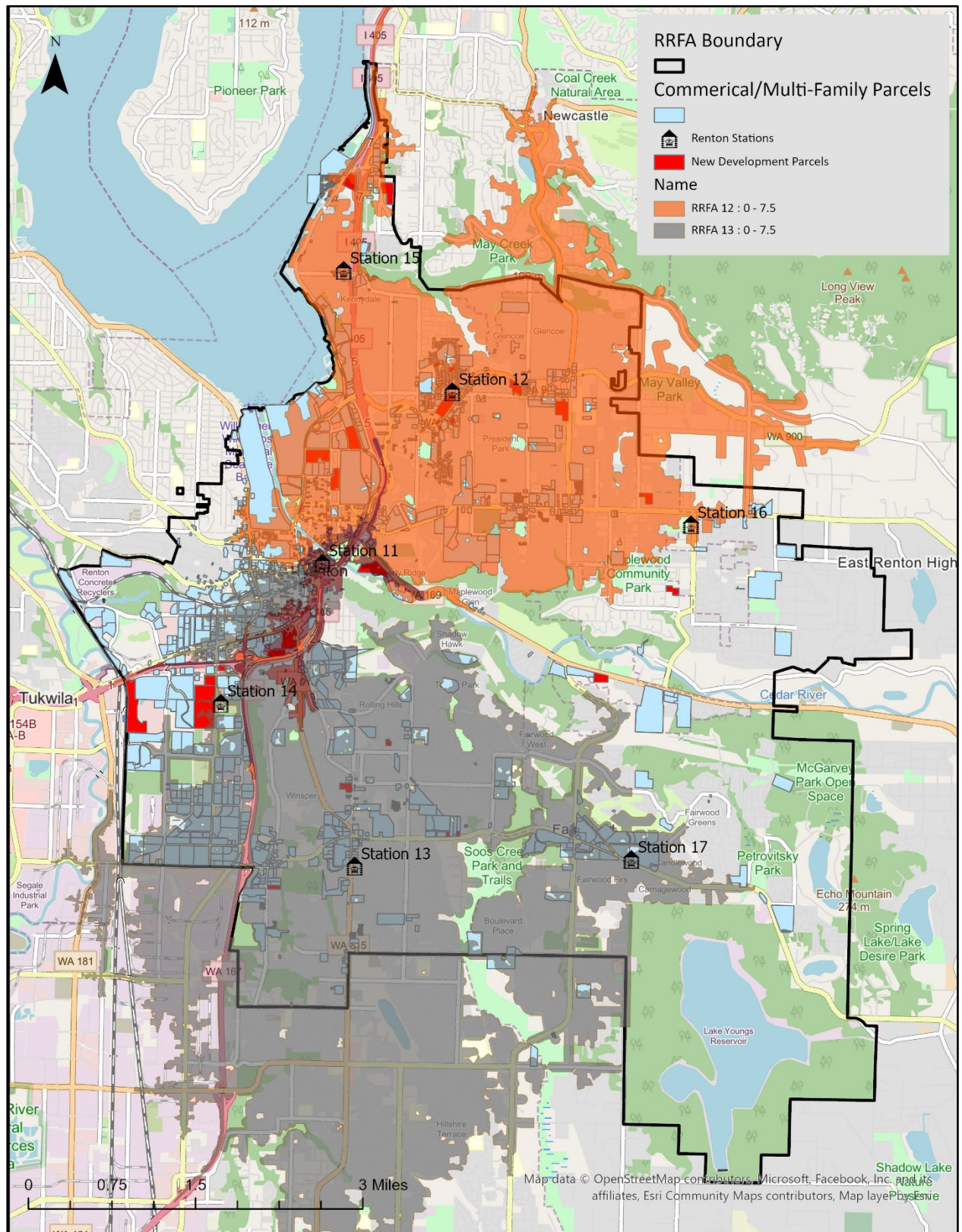
Station/Description	2024	2025	2026	2027	2028	2029
Fire Station #11		\$ 255,571	\$ 26,095	\$ 186,491		\$ 103,068
AC Unit		\$ 155,179				
Carpet/Tile/Hardwood/ Concrete Finishes						\$ 67,652
Ceiling Finishes/Drop Ceilings/Acoustic Tile						\$ 12,490
Exhaust Fan				\$ 47,306		
Expansion Tank						\$ 1,069
Furnace				\$ 139,185		
Heat Pump		\$ 95,008				
Interior Walls						\$ 21,857
Water Heater		\$ 5,384	\$ 26,095			
Fire Station #12	\$ 315,770	\$ 111,539	\$ 304,134	\$ 117,146	\$ 26,577	\$ 7,856
Air Compressor		\$ 16,468				
Air Handler Unit			\$ 297,923			
Automatic Transfer Switch				\$ 10,079		
Boiler				\$ 59,290		
Carpet/Tile/Hardwood/ Concrete Finishes		\$ 65,049				
Fire Alarm Systems		\$ 30,022				
Furniture/Millwork				\$ 47,776		
Lighting	\$ 24,290					
Pump			\$ 6,211			\$ 6,787
Radiant Heater					\$ 6,644	
Roofing	\$ 291,480					
Unit Heater					\$ 19,933	
Water Heater						\$ 1,069
Fire Station #13		\$ 407,561		\$ 423,400		\$ 21,529
AC Unit				\$ 13,439		
Air Compressor						\$ 21,529
Ceiling Finishes/Drop Ceilings/Acoustic Tile		\$ 17,507				
Condensing Unit		\$ 4,750		\$ 5,040		
Duct Heater		\$ 17,497				
Evaporative Unit				\$ 5,320		

Station/Description	2024	2025	2026	2027	2028	2029
Exhaust Fan		\$ 87,660				
Expansion Tank		\$ 950				
Expansion Tank		\$ 1,077				
Exterior Finishes		\$ 61,273				
Fan Terminal Unit		\$ 143,596				
Fire Alarm Systems				\$ 46,432		
Furniture/Millwork		\$ 65,649				
Heat Exchanger		\$ 7,601				
Lighting				\$ 38,693		
Roofing				\$ 314,476		
Fire Station #14				\$ 129,419	\$ 123,889	\$ 67,011
Carpet/Tile/Hardwood/ Concrete Finishes						\$ 64,872
Doors/Hardware					\$ 38,759	
Electrical Panel				\$ 109,664		
Interior Walls				\$ 19,756		
Pump						\$ 2,139
Water Heater					\$ 85,130	
Fire Station #16	\$ 3,075	\$ 117,176	\$ 49,712		\$ 6,921	\$ 13,658
Automatic Transfer Switch	\$ 3,075					
Exhaust Fan			\$ 42,536			
Generator					\$ 6,921	
Interior Walls						\$ 13,658
Package Unit		\$ 117,176				
Unit Heater			\$ 7,176			
Fire Station #17						\$ 1,069
Water Heater						\$ 1,069
Grand Total	\$ 318,845	\$ 891,847	\$ 379,941	\$ 856,456	\$ 157,387	\$ 214,191

Appendix C: Fire Station 11 Drive Time (Aid Unit)



Appendix D: Fire Station 12-13 Drive Time (Ladders)





RENTON REGIONAL FIRE AUTHORITY

18002 108TH AVE SE
RENTON, WA 98055
(425) 276-9500



RATE STUDY FOR IMPACT FEES

August 2023

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1.0 Introduction

The purpose of this study is to establish the rates for impact fees in the Renton Regional Fire Authority (RRFA) for fire protection facilities authorized by RCW 82.02.090(7).¹ The RRFA serves the City of Renton (City) and King County Fire Protection District 25 (KCFD25), and contracts for services with King County Fire Protection District 40 (KCFD40). However, only the City will be implementing impact fees based on this rate study.

Impact fees are charges paid by new development to reimburse local governments for the capital cost of public facilities that are needed to serve new development and the people who occupy or use the new development. Throughout this study, the term “developer” is used as a shorthand expression to describe anyone who is obligated to pay impact fees, including builders, owners, or developers.

Local governments charge impact fees for several reasons:

- to obtain revenue to pay for some of the cost of new public facilities;
- to implement a public policy that new development should pay a portion of the cost of facilities that it requires, and that existing development should not pay all of the cost of such facilities; and
- to assure that adequate public facilities will be constructed to serve new development.

In 2011, the City completed an impact fee rate study that included fee calculations for transportation, parks, and fire protection.² In 2017, the RRFA and the City adopted an updated impact fee rate study³ which utilized methodology generally consistent with the methodology used in the 2011 study, but did include some refinements to reflect the RRFA’s then current approach to measuring level of service and its ability to serve growth-related service demands in the future, as described in Chapter 3. This rate study follows the same format, assumptions, and calculations of the 2011 and 2017 rate studies with some modifications to reflect the current operations and level of service for the RRFA.

1.1 FIRE IMPACT FEE RATE SCHEDULE

Impact fees are paid by all types of new development within the City.⁴ Impact fee rates for new development are based on, and vary according to, the type of land use. Additionally, impact fee rates reflect discounts based on available funds to pay for eligible capital projects. Exhibit 1-1 shows the fire impact fee rates adopted within the City.

¹ Revised Code of Washington (RCW) is the state law of Washington State.

² Henderson, Young & Company. (August 26, 2011). *Rate Study for Impact Fees, City of Renton*.

³ BERK. (August 28, 2017). *Rate Study for Impact Fees, Renton Regional Fire Authority*.

⁴ The impact fee ordinance may specify exemptions for low-income housing and/or “broad public purposes”, but such exemptions must be paid for by public money, not other impact fees. The ordinance may specify if impact fees apply to changes in use, remodeling, etc.

Exhibit 1-1. 2024 Fire Impact Fee Rate Schedule

Land Use	Unit	Fire Impact Fee
Single-Family Residential	Dwelling Unit	\$424.02
Multi-Family Residential	Dwelling Unit	\$581.39
Hotel/Motel/Resort	Square Foot	\$347.93
Medical Care Facility	Square Foot	\$985.54
Office	Square Foot	\$0.14
Medical/Dental Office	Square Foot	\$0.62
Retail	Square Foot	\$0.67
Leisure Facilities	Square Foot	\$0.43
Restaurant/Lounge	Square Foot	\$1.45
Industrial/Manufacturing	Square Foot	\$0.05
Church/Non-Profit	Square Foot	\$0.24
Education	Square Foot	\$28.33
Special Public Facilities	Square Foot	\$0.32

1.2 STUDY ORGANIZATION

This rate study includes three chapters.

- Chapter 1 provides an introduction and defines the 2024 fire impact fee rate schedule.
- Chapter 2 summarizes the statutory requirements for impact fees in Washington State and describes how the RRFA's impact fees comply with the statutory requirements.
- Chapter 3 includes the RRFA service area, level of service used for the purpose of calculating impact fee rates, and the methodology for calculating the capital costs of response by unit of development. It also provides a list of growth-related capital projects that are eligible for impact fees and final adjustments to the impact fee rates to account for eligible costs and future payments of other revenues.

2.0 Statutory Basis

This chapter summarizes the statutory requirements for impact fees in Washington State and describes how the RRFA's impact fees comply with the statutory requirements.

2.1 STATUTORY REQUIREMENTS FOR IMPACT FEES

The Growth Management Act of 1990 (Chapter 17, Washington Laws, 1990, 1st Ex. Sess.) authorizes local governments in Washington State to charge impact fees. RCW 82.02.050 - 82.02.110 contain the provisions of the Growth Management Act that authorize and describe the requirements for impact fees.

The following synopsis of the most significant requirements of the law includes citations to the Revised Code of Washington as an aid to readers who wish to review the exact language of the statutes.

2.1.1 Types of Public Facilities

Four types of public facilities can be the subject of impact fees: 1) public transportation and roads; 2) publicly owned parks, open space and recreation facilities; 3) school facilities; and 4) fire protection facilities (RCW 82.02.090(7)).

2.1.2 Types of Improvements

Impact fees can be spent on "system improvements" (which are typically outside the development), as opposed to "project improvements" (which are typically provided by the developer on-site within the development). Impact fees can never be used to fund maintenance or operational needs (RCW 82.02.050(5) and RCW 82.02.090(5) and (9)).

2.1.3 Benefit to Development

Impact fees must be limited to system improvements that are reasonably related to, and which will benefit new development (RCW 82.02.050(4)(a) and (c)). Local governments must establish reasonable service areas (one area, or more than one, as determined to be reasonable by the local government), and local governments must develop impact fee rate categories for various land uses (RCW 82.02.060).

2.1.4 Proportionate Share

Capital improvement costs can be funded using impact fees to the extent that the improvements are reasonably related to the new development and reasonably benefit the new development. Costs assessed on a development cannot exceed its proportionate share of the costs of system improvements. The impact fee amount shall be based on a formula (or other method of

calculating the fee) that determines the proportionate share (RCW 82.02.050(4)(b) and RCW 82.02.060(1)).

2.1.5 Reductions of Impact Fee Amounts

Impact fees rates must be adjusted to account for other revenues that the development pays (if such payments are earmarked for or pro-ratable to particular system improvements) RCW 82.02.060(1)(b)). Impact fees may be credited for the value of dedicated land, improvements or construction provided by the developer (if such facilities are in the adopted CFP as system improvements eligible for impact fees and are required as a condition of development approval) (RCW 82.02.060(5)).

2.1.6 Exemptions from Impact Fees

Local governments have the discretion to provide exemptions from impact fees for low-income housing (RCW 82.02.060(2)) and other broad public purposes including the development of an early learning center, but all such exempt fees must be paid from public funds (other than impact fee accounts) (RCW 82.02.060(3)).

2.1.7 Developer Options

Developers who are liable for impact fees can submit data and/or an analysis to demonstrate that the impacts of the proposed development are less than the impacts calculated in this rate study (RCW 82.02.060(7)). Developers can pay impact fees under protest and appeal impact fee calculations (RCW 82.02.070(4) and (5)). The developer can obtain a refund of the impact fees if the local government fails to expend or obligate the impact fee payments within ten years, or terminates the impact fee requirement, or the developer does not proceed with the development (and creates no impacts) (RCW 82.02.080).

2.1.8 Capital Facilities Plans

Impact fees must be expended on public facilities in a capital facilities plan (CFP) element or used to reimburse the government for the unused capacity of existing facilities. The CFP must conform to the Growth Management Act of 1990 and must identify existing deficiencies in facility capacity for current development, capacity of existing facilities available for new development, and additional facility capacity needed for new development (RCW 82.02.050(4), RCW 82.02.060(9), and RCW 82.02.070(2)).

2.1.9 New Versus Existing Facilities

Impact fees can be charged for new public facilities (RCW 82.02.060(1)(a)) and for the unused capacity of existing public facilities (RCW 82.02.060(9)) subject to the proportionate share limitation described above.

2.1.10 Accounting Requirements

The local government must separate the impact fees from other monies, expend or obligate the money on CFP projects within ten years, and prepare annual reports of collections and expenditures (RCW 82.02.070(1)-(3)).

2.1.11 Compliance with Statutory Requirements for Impact Fees

Many of the statutory requirements listed above are fulfilled in Chapter 3 of this study, which presents the calculation of the fire impact fees. Some of the statutory requirements are fulfilled in other ways, as described below.

2.1.12 Types of Public Facilities

This study contains impact fees for fire protection facilities as authorized by statute. The RRFA defines “fire protection” as fire protection facilities, including but not limited to fire stations, fire apparatus, and any furnishings and equipment that may be capitalized. The City uses this same definition in the Renton Municipal Code (RMC 4-1-190).

In general, local governments that are authorized to charge impact fees are responsible for specific public facilities for which they may charge such fees. In no instance may a local government charge impact fees for private facilities, but it may charge impact fees for some public facilities that it does not administer if such facilities are “owned or operated by government entities” (RCW 82.02.090 (7)). A city may charge impact fees for fire and enter into an agreement with a regional fire authority (RFA) for the transfer, expenditure, and reporting of fire impact fees for the RFA. A city may only charge and use impact fees on RFA projects if it has an agreement with the RFA, and the city’s CFP references the RFA CFP.

As part of the RRFA plan, the City and the RRFA entered into an interlocal agreement (ILA) (CAG-16-116) in which the City agreed to collect the fire impact fees. Subsequent agreements between the City and the RRFA in 2017 (CAG-19-022) and in 2019 (CAG-19-022, Adden #1-19) affirmed the City will collect fire impact fees on behalf of the RRFA, subject to specific requirements.

2.1.13 Types of Improvements

The impact fees in this study are based on system improvements that are described in Chapter 3. No project improvements are included in this study.

The public facilities that can be paid for by impact fees are “system improvements” (which are typically outside the development), and “designed to provide service to areas within the community at large” as provided in RCW 82.02.090(9)), as opposed to “project improvements” (which are typically provided by the developer on-site within the development or adjacent to the development), and “designed to provide service for a particular development project and that are necessary for the use and convenience of the occupants or users of the project” as provided

in RCW 82.02.090(5). The capital improvements costs contained in Chapter 3 comply with these requirements.

Impact fee revenue can be used for the capital cost of public facilities. Impact fees cannot be used for operating or maintenance expenses. The cost of public facilities that can be paid for by impact fees include design studies, engineering, land surveys, land and right of way acquisition, engineering, permitting, financing, administrative expenses, construction, applicable mitigation costs, and capital equipment pertaining to capital improvements.

2.1.14 Benefit to Development, Proportionate Share and Reductions of Fee Amounts

The law imposes three tests of the benefit provided to development by impact fees: 1) proportionate share, 2) reasonably related to need, and 3) reasonably related to expenditure (RCW 80.20.050(4)). In addition, the law requires the designation of one or more service areas (RCW 82.02.060(8)).

Proportionate Share

First, the “proportionate share” requirement means that impact fees can be charged only for the portion of the cost of public facilities that is “reasonably related” to new development. In other words, impact fees cannot be charged to pay for the cost of reducing or eliminating deficiencies in existing facilities.

Second, there are several important implications of the proportionate share requirement that are not specifically addressed in the law, but which follow directly from the law:

- Costs of facilities that will benefit new development and existing users must be apportioned between the two groups in determining the amount of the fee. This can be accomplished in either of two ways: (1) by allocating the total cost between new and existing users, or (2) calculating the cost per unit and applying the cost only to new development when calculating impact fees.
- Impact fees that recover the costs of existing unused capacity should be based on the government's actual cost. Carrying costs may be added to reflect the government's actual or imputed interest expense.

The third aspect of the proportionate share requirement is its relationship to the requirement to provide adjustments and credits to impact fees, where appropriate. These requirements ensure that the amount of the impact fee does not exceed the proportionate share.

- The “adjustments” requirement reduces the impact fee to account for past and future payments of other revenues (if such payments are earmarked for, or pro-ratable to, the system improvements that are needed to serve new growth). The impact fees calculated in this study include an adjustment that accounts for any other revenue that is used by the RFA to pay for a portion of growth's proportionate share of costs.

This adjustment is in response to the limitations in RCW 82.02.060 (1)(b) and RCW 82.02.050(2).

- The “credit” requirement reduces impact fees by the value of dedicated land, improvements or construction provided by the developer (if such facilities are in the adopted CFP, identified as the projects for which impact fees are collected, and are required as a condition of development approval). The law does not prohibit a local government from establishing reasonable constraints on determining credits. For example, the location of dedicated land can be required to be acceptable to the local government.

Reasonably Related to Need

There are many ways to fulfill the requirement that impact fees be “reasonably related” to the development's need for public facilities, including personal use and use by others in the family or business enterprise (direct benefit), use by persons or organizations who provide goods or services to the fee-paying property or are customers or visitors at the fee-paying property (indirect benefit), and geographical proximity (presumed benefit). These measures of relatedness are implemented by the following techniques:

- Impact fees are charged to properties which need (i.e., benefit from) new public facilities. The RRFA provides fire protection facilities to serve all kinds of property throughout its service area, therefore impact fees have been calculated for all types of property.
- The relative needs of different types of growth are considered in establishing fee amounts (i.e., different impact values for different types of land use). For instance, this study analyzed fire/other and EMS incident and response data to determine rates for each type of land use.
- Feepayers can pay a smaller fee if they demonstrate that their development will have less impact than is presumed in the impact fee schedule calculation for their property classification. Such reduced needs must be permanent and enforceable (i.e., via land use restrictions).

Reasonably Related to Expenditures

Two provisions of the City's impact fee ordinance comply with the requirement that expenditures be “reasonably related” to the development that paid the impact fee. First, the requirement that fee revenue must be earmarked for specific uses related to public facilities ensures that expenditures are on specific projects, the benefit of which has been demonstrated in determining the need for the projects and the portion of the cost of needed projects that are eligible for impact fees as described in this study. Second, impact fee revenue must be expended or obligated within ten years, thus requiring the impact fees to be used to benefit to the feepayer and not held by the RRFA.

Service Areas for Impact Fees

Impact fees in some jurisdictions are collected and expended within service areas that are smaller than the jurisdiction that is collecting the fees. Impact fees are not required to use multiple service areas unless such “zones” are necessary to establish the relationship between the fee and the development. Because of the compact size of the RRFA and the accessibility of its fire facilities to all properties within the service area, the RRFA’s fire facilities serve the entire RRFA service area, therefore the impact fees are based on a single service area corresponding to the boundaries of the RRFA.

2.1.15 Exemptions

The City’s impact fee ordinance addresses the subject of exemptions. Exemptions do not affect the impact fee rates calculated in this study because of the statutory requirement that any exempted impact fee must be paid from other public funds. As a result, there is no increase in impact fee rates to make up for the exemption because there is no net loss to the impact fee account as a result of the exemption.

2.1.16 Developer Options

A developer who is liable for impact fees has several options regarding impact fees. The developer can submit data and or/analysis to demonstrate that the impacts of the proposed development are less than the impacts calculated in this rate study. The developer can appeal the impact fee calculation by the RRFA. If the local government fails to expend the impact fee payments within ten years of receipt of such payments, the developer can obtain a refund of the impact fees. The developer can also obtain a refund if the development does not proceed, and no impacts are created. These provisions are addressed in the City’s impact fee ordinance, and none of them affect the calculation of impact fee rates in this study.

2.1.17 Capital Facilities Plan

There are references in RCW to the CFP as the basis for projects that are eligible for funding by impact fees. The RRFA published a CFP in August 2023 which fulfills the requirements of RCW 82.02.050 et. seq. pertaining to a “capital facilities plan”. This CFP is referenced in the Capital Facilities Plan Element of the City’s Comprehensive Plan.

The requirement to identify existing deficiencies, capacity available for new development, and additional public facility capacity needed for new development is determined by analyzing levels of service for fire/other and emergency response. Chapters 3 provides this analysis.

2.1.18 New Versus Existing Facilities, Accounting Requirements

Impact fees must be spent on capital projects contained in an adopted CFP, or they can be used to reimburse the government for the unused capacity of existing facilities. Washington State

GMA states that an impact fee ordinance “[m]ay provide for the imposition of an impact fee for system improvement costs previously incurred by a county, city, or town to the extent that new growth and development will be served by the previously constructed improvements provided such fee shall not be imposed to make up for any system improvement deficiencies” (RCW 82.02.060(9)). The rate calculations in Chapter 3 affirm there are no existing deficiencies and accounts for excess station capacity systemwide for serving new growth. Because of this excess systemwide capacity, impact fees collected can be used to pay for the debt servicing of stations not to exceed the proportional share of existing station value that is available for serving additional growth.

Impact fee payments that are not expended or obligated within ten years must be refunded unless the City Council makes a written finding that an extraordinary and compelling reason exists to hold the fees for longer than ten years. To verify these two requirements, impact fee revenues must be deposited into separate accounts of the government, and annual reports must describe impact fee revenue and expenditures. These requirements are addressed by the City’s impact fee ordinance and are not factors in the impact fee calculations in this study.

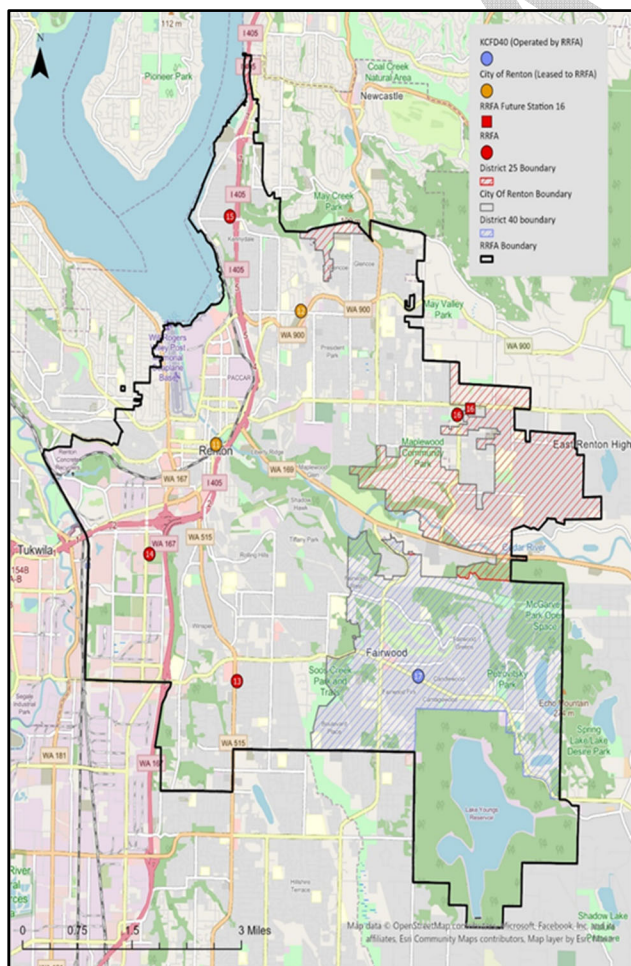
3.0 Fire Impact Fee Methodology

This chapter describes the methodology used to calculate impact fee rates for fire protection facilities. It begins with a discussion of the service area considered for the rate study analysis. This is followed by a discussion of the level of service. Next is an inventory of fire protection facilities, which are defined to include stations, equipment, and apparatus (such as engines and other vehicles). Then a series of calculations are presented to document the methodology for determining the total facility costs per unit of development by land use type.

3.1 SERVICE AREA

As noted above, the RRFA includes both the City and KCFD25. It also provides service to KCFD40 under contract, as shown in Exhibit 3-1. RRFA provides services to these areas as one integrated system. All facilities needed to serve these areas are owned and/or operated by the RRFA. Therefore, the analysis in this rate study considers facility costs per unit of development throughout the entire service area, inclusive of KCFD40.

Exhibit 3-1. Renton Regional Fire Authority Service Area and Stations



While this rate study considers incidents and facilities throughout the RRFA service area when calculating impact fee rates, the RRFA CFP identifies the percentage of capital facilities needs that are directly related to anticipated growth within the City only. This ensures that impact fees collected in the City are not used to pay for capital facility costs associated with growth expected in KCFD25 or KCFD40.

3.2 DATA SOURCES AND ROUNDING

The data in this study of impact was provided by staff from the City and the RRFA, unless a different source is specifically cited. Inventory, incident, and response data were provided by the RRFA's planning section and reflect conditions in the year 2022 for incidents and 2023 for inventory. Development, population, and trip generation data were provided by the staff from the City's Community and Economic Development and Transportation departments.

The data in this study was prepared using computer spreadsheet software. In some tables in this study, there may be very small variations from the results that would be obtained using a calculator based on the same values presented. The reason for these insignificant differences is that the spreadsheet software calculates results to more places after the decimal than is reported in the tables of these reports. The calculation to extra places after the decimal increases the accuracy of the end results but causes occasional minor differences due to rounding of data that appears in this study.

3.3 LEVEL OF SERVICE

The need for fire protection facilities is influenced by a variety of factors, such as response time, call loads, geographical area, land use development, topographic and manmade barriers, and standards of the National Fire Protection Association and the Washington Surveying and Rating Bureau.

RRFA measures level of service (LOS) from three different perspectives. The first concerns the cost of facilities for incident response per unit of development. The second perspective concerns turnout and response times in accordance with established policy. The third perspective concerns the Protection Class rating for each of the areas served (the City, KCFD25, and KDFD 40). This study focuses on the first perspective, the latter two are addressed in the RRFA CFP.

For the purpose of quantifying the need for fire facilities to serve growth, this study uses the ratio of apparatus and stations to incidents. To measure this ratio, this study analyzes both facility inventory and incident data. For apparatus, the current ratio of apparatus to incidents provides an acceptable LOS, and there are no deficiencies. As growth occurs, more incidents will occur, and therefore more apparatus will be needed to maintain this standard.

For stations, LOS is measured in two different ways. The first approach mirrors the LOS standard used for apparatus by measuring using the ratio of station square footage to incidents. This

approach accounts for the systemwide demands for response created by new growth. From this perspective, the current inventory of stations includes excess capacity to serve growth, as shown in Exhibit 3-2. This capacity comes in the form of beds necessary for staffing fire and emergency response facilities and apparatus. It is anticipated that much of the growth in the RRFA service area will come in the form of infill and high-rise development and increased density within the City. As this growth occurs, the RRFA intends to utilize excess bed capacity in current stations to increase its capacity for emergency response at existing stations. Systemwide, this analysis finds that 63% of station capacity is in use. The remaining 37% of station capacity is available to serve new growth.

Exhibit 3-2. Emergency Response Bed Capacity by Station

Station Name	Total Beds	Currently in Use	Percentage of Capacity in Use
Fire Station 11	9	6	67%
Fire Station 12	10	6	60%
Fire Station 13	8	6	75%
Fire Station 14	7	3	43%
Fire Station 15	5	3	60%
Fire Station 16	6	3	50%
Fire Station 17 ⁵	6	5	83%
Total	51	32	63%

⁵ Station 17 is owned by Fire District 40 but considered in this rate study when valuing facility costs per incident, given that the RRFA provides service to Fire District 40 as a single integrated system. This is consistent with the 2011 and 2017 Rate Studies.

3.4 CAPITAL COST OF RESPONSE CALCULATIONS

This section guides the reader through a series of formulas and calculations with the goal of determining the total capital costs of response by unit of development. It begins with an inventory of fire apparatus and stations and the number of emergencies to which the RRFA responded. Next is an analysis of the capital cost of fire protection apparatus and stations including calculation of the capital cost per response.

The emergency responses are summarized according to the types of land uses that received responses, and incident rates are calculated to quantify the average number of emergency responses per unit of development for each type of land use. The costs per response and the response incident rates are used to calculate the number and cost of responses to emergency medical service (EMS) and to fire/other⁶ incidents at each type of land use. The EMS and fire/other cost per unit of development are combined to calculate the total cost per unit of development. The total cost is adjusted for payments of other and the result is the fire impact fee rates for the RRFA for development within the City.

These steps are described below in the formulas, descriptions of variables, tables of data, and explanation of calculations of fire impact fees.

3.4.1 Formula F-1: Inventory and Fire/Other and EMS Responses

The RRFA owns and/or operates a variety of fire apparatus (i.e., fire engines, ladder trucks, Aid Units, etc.). Each vehicle responds to many emergencies. The average number of EMS responses per apparatus is used as one element in calculating the cost per EMS response.

$$\text{Formula F-1: Responses} \div \text{Apparatus} = \text{Responses per Apparatus}$$

There are two variables that require explanation: (A) fire apparatus and (B) fire stations.

Variable (A): Fire Apparatus

The term “fire apparatus” applies to vehicles that the RRFA uses for operations. Exhibit 3-3 contains a list of each type of primary fire apparatus and the number of each type.

⁶ In this study, “fire/other” refers to all emergency incidents to which RRFA responds except for medical emergencies/EMS. These would include fires, hazardous materials, gas leaks, and other non-medical related emergencies.

Exhibit 3-3. Apparatus Inventory and Emergency Responses 2022

Type of Apparatus	Count of Apparatus in Inventory	Total Annual EMS Responses	EMS Responses per Individual Apparatus
Engine	12	12,980	1,082
Ladder	2	1,741	871
Aid Unit	6	6,841	1,141
Hazardous Materials Vehicle	1	155	155
Brush Truck	2	18	9
Command Vehicle	9	950	106
Dive Apparatus	1	41	41
Service Vehicle	2	960	480
Staff Vehicle	13	-	-
Utility Vehicle	9	-	-
Small Utility Vehicle	3	-	-
Other Apparatus/Equipment ⁷	6	-	-
Total	66	23,686	

⁷ Includes trailers, carts, boat, etc.

Variable (B): Fire Stations

RRFA provides fire/other and EMS services out of seven stations. Exhibit 3-4 lists the seven stations and the total square footage of RRFA fire stations and associated support facilities (i.e., shop and tower). Exhibit 3-4 also shows the total fire/other and EMS incidents, and the average square footage of fire station per incident (calculated by dividing the total square footage of all fire stations by the number of annual fire/other and EMS incidents). The total number of incidents from stations is less than the total incidents from apparatus (Exhibit 3-3) because more than one apparatus responds to many calls, but often one station is the source of all the apparatus responding to a call.

As noted earlier in Exhibit 3-2, there is excess station capacity systemwide due to the available beds for emergency responders. The percentage of capacity in use is used to calculate station square feet in use per incident.

Exhibit 3-4. Building Inventory and Building Square Feet per Incident 2022

Station Name	Building Square Feet	Annual Incidents	Total Building Square Feet per Incident	Percentage of Station Capacity in Use ⁸	Station Square Feet in Use Per Incident
Fire Station 11 ⁹	20,550				
Fire Station 12 (Ex EOC) ¹⁰	14,800				
Fire Station 13	20,521				
Fire Station 13 Shop	6,000				
Fire Station 14	13,659				
Fire Station 14 Tower	3,658				
Fire Station 15	7,497				
Fire Station 16	7,732				
Fire Station 17 ¹¹	6,836				
Total	101,253	20,720	4.89	63%	3.07

⁸ See Exhibit 3-2 for calculation of systemwide station capacity in use.

⁹ Station 11 is owned by the City of Renton and leased to RRFA.

¹⁰ Station 12 is owned by the City of Renton and leased to the RRFA. The building square footage excludes the portion of the Station that is utilized exclusively by the City of Renton Emergency Management Division.

¹¹ Station 17 is owned by Fire District 40 and operated by RRFA.

3.4.2 Formula F-2: Annual Cost per Apparatus

Formulas F-2 through F-4 are needed to calculate the apparatus cost per fire/other incident. The first step in this calculation is to identify and annualize the cost of each type of apparatus using formula F-2. The capital cost per apparatus is based on the cost of primary response apparatus and major support equipment. The annualized capital cost per apparatus is determined by dividing the capital cost of each type of apparatus by its useful life:

$$\text{Formula F-2:} \quad \text{Fire Apparatus Cost} \div \text{Useful Life} = \text{Annual Cost Per Apparatus}$$

There are two variables that require explanation: (C) fire apparatus cost and (D) useful life.

Variable (C): Fire Apparatus Cost

Exhibit 3-5 shows the annualized cost for each type of primary apparatus listed in Exhibit 3-3. The cost per apparatus includes the vehicle, fire and EMS equipment, and communication equipment. The apparatus and equipment costs in Exhibit 3-5 represent current costs to purchase a new fully equipped apparatus.

Variable (D): Useful Life

Exhibit 3-5 also shows the number of years of useful life of each type of apparatus. The annualized cost is calculated by dividing each apparatus cost by the useful life of that apparatus. Note that the inventory of apparatus includes a mix of front-line and reserve/callback apparatus. RRFA expects apparatus to serve one half of its useful life in a front-line status and one half as a reserve or call-back vehicle.

Exhibit 3-5. Annualized Apparatus Cost in 2023

Apparatus Type	Cost per Apparatus	Average Useful Lifespan ¹³	Annualized Cost of Apparatus
Engine	\$1,039,927	14.67	\$70,887.97
Ladder	\$2,170,298	18	\$120,572.11
Aid Unit	\$397,182	10	\$39,718.22
Hazardous Materials Vehicle	\$546,492	21	\$26,023.43
Brush Truck	\$344,090	15	\$22,939.33
Command Vehicle	\$111,202	10	\$11,120.20
Dive Apparatus	\$276,117	21	\$13,148.43
Service Vehicle	\$92,195	15	\$6,146.33
Staff Vehicle	\$37,898	15	\$2,526.53
Utility Vehicle	\$69,908	15	\$4,660.53
Small Utility Vehicle	\$42,098	15	\$2,806.53
Other Apparatus/Equipment ¹²	\$148,706	15	\$9,913.75

3.4.3 Formula F-3: Cost per Apparatus per Fire/Other or EMS Response

The second step in calculating the apparatus cost per fire/other or EMS response is formula F-3. The capital cost per fire/other or EMS incident is calculated for each apparatus by dividing the annualized cost per apparatus by the total annual response (both fire/other and EMS) each type of apparatus responds to. Each type of apparatus is analyzed separately because the number and type of apparatus responding to an incident varies depending on the type and severity of the incident.

$$\text{Formula F-3: } \frac{\text{Annual Cost Per Apparatus}}{\text{Annual Responses Per Apparatus}} = \text{Annual Apparatus Cost Per Response}$$

There are no new variables used in formula F-3. Both variables were developed in previous formulas.

In Exhibit 3-6 the cost per fire/other or EMS response is calculated for each type of apparatus. Exhibit 3-6 shows the annualized cost of one of each type of apparatus (from Exhibit 3-5) and the average annual EMS responses for each type of apparatus (from Exhibit 3-3). Each apparatus cost per response is calculated by dividing the annualized cost of that type of apparatus by the total number of annual responses for the same type of apparatus.

¹² Includes carts, trailers, boat, and lift. Cost is cumulative.

¹³ For Engines, Ladders, and Aid Units, the average useful lifespans have been weighted to reflect the proportion of vehicles in the fleet that are front-line vs reserve or call back.

Exhibit 3-6. Apparatus Costs per Response

Apparatus Type	Annualized Cost of Apparatus	Average Annual Responses Per Apparatus	Apparatus Cost Per Response
Engine	\$70,887.97	1,082	\$65.52
Ladder	\$120,572.11	871	\$138.43
Aid Unit	\$39,718.22	1,141	\$34.81
Hazardous Materials Vehicle	\$26,023.43	155	\$167.89
Brush Truck	\$22,939.33	9	\$2,548.81
Command Vehicle	\$11,120.20	106	\$104.91
Dive Apparatus	\$13,148.43	41	\$320.69
Service Vehicle	\$6,146.33	480	\$12.80
Staff Vehicle	\$2,526.53	-	-
Utility Vehicle	\$4,660.53	-	-
Small Utility Vehicle	\$2,806.53	-	-
Other Apparatus/Equipment ¹⁴	\$9,913.75	-	-

¹⁴ Includes carts, trailers, boat, and lift.

3.4.4 Formula F-4: Total Apparatus Cost per Fire/Other Incidents

The third step in calculating the apparatus cost per fire/other incident is Formula F-4. The total apparatus cost per fire/other incident is calculated by multiplying the apparatus cost per response by the percent of fire/other incidents each type of apparatus responds to. This calculation accounts for the fact that multiple apparatuses are dispatched to many incidents, and that some apparatus are only dispatched to specific types of incidents. The result of this calculation is a weighted average total cost of apparatus per fire/other incident.

$$\text{Formula F-4: } \begin{array}{c} \text{Annual Cost Per} \\ \text{Response} \end{array} \times \begin{array}{c} \text{Apparatus Percent of all} \\ \text{Fire/Other Responses} \end{array} = \begin{array}{c} \text{Apparatus Cost Per} \\ \text{Fire/Other Incident} \end{array}$$

There is one new variable that requires explanation: (F) apparatus percent of fire/other responses.

Variable (E): Apparatus Percent of Fire Responses

The next step in calculating the apparatus cost per fire/other incident is to identify the annual number of incidents that RRFA responds to. Emergency incidents are separated into two categories: Fire/Other and EMS. Exhibit 3-7 lists the annual number of fire/other and EMS incidents responded to during 2022.

Exhibit 3-7. Annual Fire/Other and EMS Incidents

Incident Type	Annual Incidents in 2022
Fire/Other	4,674
EMS	16,046
Total	20,720

Different types of fire/other emergencies need different types or combinations of apparatus. As a result, the usage of apparatus varies among the types of apparatus. This variance is an important factor in determining the cost per incident. The percent of fire/other responses by each type of apparatus is calculated in Exhibit 3-8 by dividing the annual fire/other responses for each type of apparatus by the total annual fire/other incidents from Exhibit 3-7. The result of the calculation in Exhibit 3-8 is the percent of fire/other incidents responded to by each type of apparatus.

Exhibit 3-8. Fire/Other Responses per Incident by Apparatus Type

Apparatus Type	Annual Fire/Other-Related Responses for Apparatus	Annual Fire/Other-Related Incidents	Apparatus Response per Fire/Other Incident
Engine	3,940		0.843
Ladder	550		0.118
Aid Unit	354		0.076
Hazardous Materials Vehicle	152		0.033
Brush Truck	18		0.004
Command Vehicle	590		0.126
Dive Apparatus	15		0.003
Service Vehicle	144		0.031
Total	5,763	4,674	

The final step in calculating the apparatus cost per fire/other incident is shown in Exhibit 3-9.

Exhibit 3-9. The cost per response for each type of apparatus (from Exhibit 3-6) is multiplied by the percent of fire/other incidents dispatched to (from Exhibit 3-8) resulting in the total apparatus cost per fire/other incident. The “bottom line” in Exhibit 3-9 is the apparatus cost per fire/other incident of \$104.09. In other words, every fire/other incident “uses up” \$104.09 worth of apparatus.

Exhibit 3-9. Apparatus Cost per Fire/Other Incident

Apparatus Type	Apparatus Cost Per Response	Apparatus Response per Fire/Other Incident	Apparatus Cost per Fire/Other Incident
Engine	\$65.52	0.843	\$55.23
Ladder	\$138.43	0.118	\$16.29
Aid Unit	\$34.81	0.076	\$2.64
Hazardous Materials Vehicle	\$167.89	0.033	\$5.46
Brush Truck	\$2,548.81	0.004	\$9.82
Command Vehicle	\$104.91	0.126	\$13.24
Dive Apparatus	\$320.69	0.003	\$1.03
Service Vehicle	\$12.80	0.031	\$0.39
Total			\$104.09

The RRFA dispatch system does not track usage of staff vehicles and other equipment/apparatus. However, these apparatuses are also essential RRFA emergency response operations. To account for the cost of these apparatus in this rate study, Exhibit 3-10 divides the total apparatus cost by the useful lifespan and divides these annualized costs by the total annual incidents to calculate the total cost per incident.

Exhibit 3-10. Staff Vehicle and Other Equipment/Apparatus Cost per Incident

Apparatus Type	Total Cost of All Apparatus	Useful Lifespan (years)	Annualized Cost of Apparatus	Annual Incidents	Cost per Incident
Staff Vehicle	\$492,674.00	15	\$32,844.93		\$1.59
Utility Vehicle	\$629,172	15	\$41,944.80		\$2.02
Small Utility Vehicle	\$126,294	15	\$8,419.60		\$0.41
Other Equipment/Apparatus	\$148,706	15	\$9,913.75		\$0.48
Total				20,720	

3.4.5 Formula F-5: Annual Station Cost

The annual station cost is determined by dividing the station capital cost by its useful life.

$$\text{Formula F-5: } \frac{\text{Station Cost Per Square Foot}}{\text{Useful Life}} = \text{Annual Station Cost Per Square Foot}$$

There is one new variable that requires explanation: (G) station cost per square foot.

Variable (G): Station Cost per Square Foot

Exhibit 3-11 calculates the average annualized fire station cost per building square foot. The cost per square foot is divided into two parts. Land cost per building square foot is based on the average land cost per building square foot of all stations in the current RRFA inventory. Building, furnishings, and equipment are based on the 2017 Rate Study.¹⁵

The useful life represents the length of time the station is expected to last before it needs to be replaced. The annualized cost is calculated by dividing the estimated cost per square foot by the average useful life. The “bottom line” of Exhibit 3-11¹⁶ is an annualized station cost of \$16.00 per square foot.

Exhibit 3-11. Annualized Station Cost per Square Foot

Type of Cost	Cost per Building Square Foot	Building Useful Life (years)	Annual Station Cost per Square Foot
Land	\$90.00		
Building, Furnishings, & Equipment	\$710.00		
Cost of Borrowing	\$0.00		
Total	\$800.00	50	\$16.00

¹⁵ These stations are Central Pierce Station #63 in Midland, Central Pierce Station #72 in Puyallup, Shoreline Station #63, and Kirkland Station #25. These stations average \$480 per sq. ft. in site preparation and “hard” building costs. An additional 48% is added for soft costs such as sales tax, design, permitting, and furnishings. The total cost per building sq. ft. is \$800.

¹⁶ Source: TCA, 2023

3.4.6 Formula F-6: Station Cost per Fire/Other and EMS Incident

The station cost per fire/other and EMS incident is calculated by multiplying the annual station cost per square foot by the station square feet per fire and EMS incident.

$$\text{Formula F-6: } \frac{\text{Annual Station Cost per Square Foot}}{\text{per Square Foot}} \times \frac{\text{Station Square Feet Per Fire/Other and EMS Incident}}{\text{Fire/Other and EMS Incident}} = \frac{\text{Annual Station Cost Per Fire/Other and EMS Incident}}{\text{Fire/Other and EMS Incident}}$$

There are no new variables used in formula F-6. Both variables were developed in previous formulas.

This calculation is shown in Exhibit 3-12. The station cost per square foot (from Exhibit 3-11) is multiplied by the station square feet per incident (from Exhibit 3-6). The result is the station cost of \$49.06 per fire/other and EMS incident. In other words, each fire/other and EMS incident “uses up” \$49.06 worth of fire station.

Exhibit 3-12. Station Cost per Incident

Annual Station Cost per Square Foot	Square Feet per Incident	Annualized Station Cost per Incident
\$16.00	3.07	\$49.06

3.4.7 Formula F-7: Annual Fire Incident Rate per Unit of Development

The annual fire/other incident rate per unit of development (i.e., dwelling unit or square foot of non- residential development) is calculated by dividing the total annual fire/other incidents to each type of land use by the number of dwelling units or square feet of non-residential development for that type of land use.

$$\text{Formula F-7: } \frac{\text{Annual Fire/Other Incidents at Each Type of Land Use}}{\text{Land Use}} \div \frac{\text{Number of Dwelling Units or Square Feet of Each Type of Land Use}}{\text{Type of Land Use}} = \frac{\text{Annual Fire/Other Incidents Per Unit of Development}}{\text{Development}}$$

There are two variables that require explanation: (H) annual emergency fire/other incidents at land use types, and (I) number of dwelling units or square feet.

Variable (H): Annual Emergency Fire Incidents at Land Use Types

The emergency incident data comes from the RRFA's dispatch records. RRFA codes each individual incident by property type. For the purpose of developing impact fees, this study combines property types into 13 broad land use categories.¹⁷

As shown in Exhibit 3-13, RRFA responded to 4,674 fire/other incidents during 2022. Of these incidents, 3,340 were coded to a specific property type related to one of the 13 land use categories (i.e., the incident occurred at a specific property address, such as a residence or business). 717 incidents occurred in roads and streets (in most cases these are traffic-related). The records for the remaining 617 were not coded to one of the 13 land use categories or roadways. These include incidents with no code at all or those at other kinds of properties such as vacant land or construction sites. To account for all incidents, these 617 incidents were allocated proportionally to properties or roads and streets.

Exhibit 3-13. Fire/Other Incidents by Location

Incident Location	Fire/Other Incidents Identifiable by Location	Percent of Identifiable Fire/Other Incidents	Fire/Other Incidents Not Identifiable by Property Type	Unidentifiable Fire/Other Incidents Allocated to Location	Total Fire/Other Incidents
At Properties	3340	82.33%		508	3,848
In Roads and Streets	717	17.67%		109	826
Total	4,057		617		4,674

The next four exhibits present the allocation of fire/other incidents among the 13 land use categories.

¹⁷ RRFA dispatch data includes property codes for 1-2 unit residences and multi-family residences. For simplicity, this rate study labels each category "single-family" and "multi-family". However, development data for each of these categories starting in Exhibit 3-14 reflects the RRFA property codes. In other words, unit counts for the "single-family" land use type is inclusive of both single-family homes and duplexes. "Multi-family" is inclusive of all structures with more than 2 units. Additionally, mobile homes are included in the "multi-family" land use type consistently.

Exhibit 3-14 shows the fire/other incidents that were identifiable by land use type, Exhibit 3-15 shows the fire/other incidents that were in roads and streets. Exhibit 3-16 summarizes the results of the analysis of fire/other incidents. The total annual fire/other incidents are a combination of the fire/other incidents allocated among direct responses to land use types (from Exhibit 3-14) and the allocation of incidents at roads and streets based on trip generation rates (from Exhibit 3-15). Exhibit 3-16 combines the fire/other incident data (those land use and traffic), and Exhibit 3-17 shows the fire/other incident rate per unit of development.

Exhibit 3-14 shows the distribution of the 3,340 fire/other incidents that are traceable to a land use along with the percent distribution of these 3,340 incidents. In the final column, the total 3,848 fire/other incidents (3,340 traceable + 508 allocated) are allocated among the land use types using the percent distribution column. The result is the total annual fire/other incidents at each of the land use types.

Exhibit 3-14. Fire/Other Incidents at Specific Land Uses

Land Use Type	Annual Fire/Other Incidents Identifiable to Land Use	Percent of All Property Fire/Other Incidents Identifiable to Land Use	Allocate Total Property Related Fire/Other Incidents (3,848) to Land Uses
Single-Family Residential	1,028	30.78%	1,184
Multi-Family Residential	1,200	35.93%	1,382
Hotel/Motel/Resort	105	3.14%	121
Medical Care Facility	72	2.16%	83
Office	107	3.20%	123
Medical/Dental Office	43	1.29%	50
Retail	403	12.07%	464
Leisure Facilities	34	1.02%	39
Restaurant/Lounge	49	1.47%	56
Industrial/Manufacturing	139	4.16%	160
Church/Non-Profit	47	1.41%	54
Education	92	2.75%	106
Special Public Facilities	21	0.63%	24
Total	3,340		3,848

Variable (I): Number of Dwelling Units or Square Feet

Exhibit 3-15 shows total units of development by land use category for the year 2023. Data on dwelling unit counts comes from City staff. These data reflect conditions in 2023 within the entire

RRFA service area, including City, KCFD25, and KCFD40. These data on units of development were aggregated into the same 13 land use categories used to summary incidents by property type.

The fire/other incidents in roads and streets are allocated to land use types based on the amount of traffic generated by each type of land use. In Exhibit 3-15, the number of dwelling units and square feet of non-residential construction in the RRFA service area is multiplied by the number of daily trips that are generated by each land use type as reported in the 11th Edition of Trip Generation by the Institute of Transportation Engineers (ITE). The result is the total trips associated with each land use type. The percent of trips associated with each land use type is calculated from the total of all trips.

In the final calculation of Exhibit 3-15, the total 826 annual fire/other incidents in roads and streets (717 traceable + 109 allocated) are assigned to land use types using the percent of trips generated.

Exhibit 3-15. Fire/Other Incidents in Roads and Streets - Allocated to Land Uses

Land Use Type	Units of Development ¹⁸		ITE Trip Generation Rate	Total Trips	Percent of Trips Generated	Annual Fire/Other Incidents in Roads and Streets per Unit of Development
Single-Family Residential	30,564	d.u.	9.43000	288,219	29.68%	245
Multi-Family Residential	23,725	d.u.	6.74000	159,907	16.47%	136
Hotel/Motel/Resort	1,850	room	7.99000	14,782	1.52%	13
Medical Care Facility	381	d.u.	2.21000	842	0.09%	1
Office	8,726,719	sq. ft.	0.01084	94,598	9.74%	80
Medical/Dental Office	978,096	sq. ft.	0.03600	35,211	3.63%	30
Retail	5,485,938	sq. ft.	0.03701	203,035	20.91%	173
Leisure Facilities	501,843	sq. ft.	0.02882	14,463	1.49%	12
Restaurant/Lounge	302,629	sq. ft.	0.10720	32,442	3.34%	28
Industrial/Manufacturing	15,244,876	sq. ft.	0.00475	72,413	7.46%	62
Church/Non-Profit	861,468	sq. ft.	0.00760	6,547	0.67%	6
Education	20,721	students	1.94000	40,199	4.14%	34
Special Public Facilities	376,429	sq. ft.	0.02259	8,504	0.88%	7
Total				971,160		826

¹⁸ Non-residential units of development exclude structured parking. Single-family units include duplexes (see footnote 16 for explanation). Multi-family residential includes units in all structures larger with more than two units plus mobile homes.

Exhibit 3-16 summarizes the results of the analysis of fire/other incidents. The total annual fire/other incidents are a combination of the fire/other incidents allocated among direct responses to land use types (from Exhibit 3-14) and the allocation of incidents at roads and streets based on trip generation rates (from Exhibit 3-15).

Exhibit 3-16. Total Fire/Other Incidents by Land Use

Land Use Types	Annual Fire/Other Incidents Direct to Land Use	Annual Fire/Other Incidents in Roads and Streets Allocated to Land Use	Total Annual Fire/Other Incidents by Land Use
Single-Family Residential	1,184	245	1,429
Multi-Family Residential	1,382	136	1,519
Hotel/Motel/Resort	121	13	134
Medical Care Facility	83	1	84
Office	123	80	204
Medical/Dental Office	50	30	79
Retail	464	173	637
Leisure Facilities	39	12	51
Restaurant/Lounge	56	28	84
Industrial/Manufacturing	160	62	222
Church/Non-Profit	54	6	60
Education	106	34	140
Special Public Facilities	24	7	31
Total	3,848	826	4,674

The final step in determining the annual fire/other incident rate per unit of development is shown in Exhibit 3-17.¹⁹ The total annual fire/other incidents for each type of land use (from Exhibit 3-16) are divided by the number of dwelling units or square feet of structures to calculate the annual incident rate per dwelling unit or square foot. The units of development are the same as was used to determine traffic-related incidents (see Exhibit 3-15).

The results in Exhibit 3-17 show how many times an average unit of development has a fire/other incident to which the City responds. For example, a single-family residence has an average of 0.0467705 fire/other incidents per year. This is the same as saying that about 4% of single-family homes have a fire/other incident in a year. Another way of understanding this information is that an average single-family home would have a fire/other incident once every 25 years.

Exhibit 3-17. Annual Fire/Other Incident Rate by Land Use

Land Use Type	Total Annual Fire/Other Incidents Attributed to Land Use	Units of Development		Annual Fire/Other Incidents Per Unit of Development
Single-Family Residential	1,429	30,564	d.u.	0.0467705
Multi-Family Residential	1,519	23,725	d.u.	0.0640047
Hotel/Motel/Resort	134	1,850	room	0.0721846
Medical Care Facility	84	381	d.u.	0.2195962
Office	204	8,726,719	sq. ft.	0.0000233
Medical/Dental Office	79	978,096	sq. ft.	0.0000813
Retail	637	5,485,938	sq. ft.	0.0001161
Leisure Facilities	51	501,843	sq. ft.	0.0001026
Restaurant/Lounge	84	302,629	sq. ft.	0.0002777
Industrial/Manufacturing	222	15,244,876	sq. ft.	0.0000145
Church/Non-Profit	60	861,468	sq. ft.	0.0000693
Education	140	20,721	students	0.0067653
Special Public Facilities	31	376,429	sq. ft.	0.0000835
Total	4,674			

¹⁹ Source: RRFA and City of Renton.

3.4.8 Formula F-8: Fire/Other Incident Capital Cost per Unit of Development

The capital cost of fire/other incidents per unit of development is determined by multiplying the annual fire/other incidents per unit of development (from Exhibit 3-17) times the annual capital cost per fire/other incident of each type of apparatus (from Exhibit 3-9) and fire station (from Exhibit 3-12), then multiplying that result times the useful life of the apparatus or fire station.²⁰

$$\begin{array}{ccccccc} \text{Formula F-8:} & \text{Annual Fire/Other} & & \text{Annual Cost Per} & & \text{Useful Life of} & \text{Fire Incident Capital} \\ & \text{Incidents per Unit of} & \times & \text{Fire Incident} & \times & \text{Apparatus or} & \text{Cost per Unit of} \\ & \text{Development} & & & & \text{Station} & \text{Development} \\ & & & & & = & \end{array}$$

There are no new variables used in formula F-8. All three variables were developed in previous formulas. In Exhibit 3-18 through Exhibit 3-30, each fire/other incident rate (from Exhibit 3-17) is multiplied by the annual capital cost per fire/other incident. The result is then multiplied by the useful life of the apparatus or station to calculate the capital cost per unit of development for each type of apparatus and station. For example, single-family residential units average 0.0467705 fire/other incidents per year (i.e., 4% of a fire/other incident per year). In Exhibit 3-18, multiplying this incident rate times the annual capital cost of an engine (\$55.23 from Exhibit 3-9) per incident indicates a cost of about \$2.58 per single-family dwelling unit to provide it with fire engines for one year. Since the weighted useful life of an engine is 14.67 years, the residential dwelling needs to pay for 14.67 times the annual rate, for a total of about \$37.89 per year.

²⁰ Some fire impact fees are calculated for the economic life of the property paying the impact fee, rather than the useful life of the apparatus and stations that provide the fire protection. Both methods meet the legal requirements for impact fees. The method used in this rate study charges impact fees for the first of each type of apparatus and station needed for new development, but subsequent replacements of apparatus and stations are funded by other revenues available to the RRFA.

Exhibit 3-18. Engine Cost of Response to Fire/Other Incidents, per Unit of Development

Land Use Type	Unit of Development	Annual Fire/Other Incidents Per Unit of Development	Engine Cost at \$55.23 per Fire/Other Incident, per Unit of Development	Engine Life Cost per Unit of Development Based on 14.67-Year useful life
Single-Family Residential	d.u.	0.0467705	\$2.5830	\$37.8926
Multi-Family Residential	d.u.	0.0640047	\$3.5348	\$51.8555
Hotel/Motel/Resort	room	0.0721846	\$3.9865	\$58.4827
Medical Care Facility	d.u.	0.2195962	\$12.1277	\$177.9130
Office	sq. ft.	0.0000233	\$0.0013	\$0.0189
Medical/Dental Office	sq. ft.	0.0000813	\$0.0045	\$0.0658
Retail	sq. ft.	0.0001161	\$0.0064	\$0.0941
Leisure Facilities	sq. ft.	0.0001026	\$0.0057	\$0.0831
Restaurant/Lounge	sq. ft.	0.0002777	\$0.0153	\$0.2250
Industrial/Manufacturing	sq. ft.	0.0000145	\$0.0008	\$0.0118
Church/Non-Profit	sq. ft.	0.0000693	\$0.0038	\$0.0562
Education	students	0.0067653	\$0.3736	\$5.4811
Special Public Facilities	sq. ft.	0.0000835	\$0.0046	\$0.0676

Exhibit 3-19 calculates the capital cost per unit of development for a ladder response to fire/other incidents. The incident rate (from Exhibit 3-17) is multiplied by the ladder's capital cost per fire/other incident (\$16.29 from Exhibit 3-9). The result is then multiplied by the ladder's weighted useful life of 18 years to calculate the capital cost per unit of development for ladders.

Exhibit 3-19. Ladder Cost of Response to Fire/Other Incidents, per Unit of Development

Land Use Type	Unit of Development	Annual Fire/Other Incident Per Unit of Development	Ladder Cost at \$16.29 per Fire/Other Incident, per Unit of Development	Ladder Life Cost per Unit of Development Based on 18-Year life
Single-Family Residential	d.u.	0.0467705	\$0.76	\$11.1765
Multi-Family Residential	d.u.	0.0640047	\$1.04	\$15.2948
Hotel/Motel/Resort	room	0.0721846	\$1.18	\$17.2495
Medical Care Facility	d.u.	0.2195962	\$3.58	\$52.4756
Office	sq. ft.	0.0000233	\$0.00	\$0.0056
Medical/Dental Office	sq. ft.	0.0000813	\$0.00	\$0.0194
Retail	sq. ft.	0.0001161	\$0.00	\$0.0277
Leisure Facilities	sq. ft.	0.0001026	\$0.00	\$0.0245
Restaurant/Lounge	sq. ft.	0.0002777	\$0.00	\$0.0664
Industrial/Manufacturing	sq. ft.	0.0000145	\$0.00	\$0.0035
Church/Non-Profit	sq. ft.	0.0000693	\$0.00	\$0.0166
Education	students	0.0067653	\$0.11	\$1.6167
Special Public Facilities	sq. ft.	0.0000835	\$0.00	\$0.0200

Exhibit 3-20 calculates the capital cost per unit of development for aid units responses to fire/other incidents. The incident rate (from Exhibit 3-17) is multiplied by the aid unit cost per fire/other incident (\$2.64 from Exhibit 3-9). The result is then multiplied by the ten-year weighted average useful life of an aid unit to calculate the capital cost per unit of development for aid units.

Exhibit 3-20. Aid Unit Cost of Response to Fire/Other Incidents, per Unit of Development

Land Use Type	Unit of Development	Annual Fire/Other Incident Rate	Aid Unit Cost at \$2.64 per Fire/Other Incident, per Unit of Development	Aid Unit Life Cost per Unit of Development at 10-Year life
Single-Family Residential	d.u.	0.0467705	\$0.1233	\$1.2331
Multi-Family Residential	d.u.	0.0640047	\$0.1687	\$1.6874
Hotel/Motel/Resort	room	0.0721846	\$0.1903	\$1.9031
Medical Care Facility	d.u.	0.2195962	\$0.5790	\$5.7895
Office	sq. ft.	0.0000233	\$0.0001	\$0.0006
Medical/Dental Office	sq. ft.	0.0000813	\$0.0002	\$0.0021
Retail	sq. ft.	0.0001161	\$0.0003	\$0.0031
Leisure Facilities	sq. ft.	0.0001026	\$0.0003	\$0.0027
Restaurant/Lounge	sq. ft.	0.0002777	\$0.0007	\$0.0073
Industrial/Manufacturing	sq. ft.	0.0000145	\$0.0000	\$0.0004
Church/Non-Profit	sq. ft.	0.0000693	\$0.0002	\$0.0018
Education	students	0.0067653	\$0.0178	\$0.1784
Special Public Facilities	sq. ft.	0.0000835	\$0.0002	\$0.0022

Exhibit 3-21 calculates the capital cost per unit of development for hazardous materials vehicle responses to fire/other incidents. The incident rate (from Exhibit 3-17) is multiplied by the hazardous materials vehicle cost per fire/other incident (\$5.46 from Exhibit 3-9). The result is then multiplied by the 21-year useful life of a hazardous materials vehicle to calculate the capital cost per unit of development for hazardous materials vehicles.

Exhibit 3-21. Hazardous Materials Vehicle Cost of Response to Fire/Other Incidents, per Unit of Development

Land Use Type	Unit of Development	Annual Fire/Other Incident Rate	Hazardous Materials Vehicle Cost at \$5.46 per Fire/Other Incident, per Unit of Development	Hazardous Materials Vehicle Life Cost per Unit of Development at 21-Year life
Single-Family Residential	d.u.	0.0467705	\$0.2554	\$5.3626
Multi-Family Residential	d.u.	0.0640047	\$0.3495	\$7.3387
Hotel/Motel/Resort	room	0.0721846	\$0.3941	\$8.2766
Medical Care Facility	d.u.	0.2195962	\$1.1990	\$25.1786
Office	sq. ft.	0.0000233	\$0.0001	\$0.0027
Medical/Dental Office	sq. ft.	0.0000813	\$0.0004	\$0.0093
Retail	sq. ft.	0.0001161	\$0.0006	\$0.0133
Leisure Facilities	sq. ft.	0.0001026	\$0.0006	\$0.0118
Restaurant/Lounge	sq. ft.	0.0002777	\$0.0015	\$0.0318
Industrial/Manufacturing	sq. ft.	0.0000145	\$0.0001	\$0.0017
Church/Non-Profit	sq. ft.	0.0000693	\$0.0004	\$0.0079
Education	students	0.0067653	\$0.0369	\$0.7757
Special Public Facilities	sq. ft.	0.0000835	\$0.0005	\$0.0096

Exhibit 3-22 calculates the capital cost per unit of development for brush truck responses to fire/other incidents. The incident rate (from Exhibit 3-17) is multiplied by the brush truck cost per fire/other incident (\$9.82 from Exhibit 3-9). The result is then multiplied by the 15-year useful life of a brush truck to calculate the capital cost per unit of development for brush trucks.

Exhibit 3-22. Brush Truck Cost of Response to Fire/Other Incidents, per Unit of Development

Land Use Type	Unit of Development	Annual Fire/Other Incident Rate	Brush Truck Cost at \$9.82 per Fire/Other Incident, per Unit of Development	Brush Truck Life Cost per Unit of Development at 15-Year Life
Single-Family Residential	d.u.	0.0467705	\$0.4591	\$6.8863
Multi-Family Residential	d.u.	0.0640047	\$0.6283	\$9.4238
Hotel/Motel/Resort	room	0.0721846	\$0.7085	\$10.6282
Medical Care Facility	d.u.	0.2195962	\$2.1555	\$32.3324
Office	sq. ft.	0.0000233	\$0.0002	\$0.0034
Medical/Dental Office	sq. ft.	0.0000813	\$0.0008	\$0.0120
Retail	sq. ft.	0.0001161	\$0.0011	\$0.0171
Leisure Facilities	sq. ft.	0.0001026	\$0.0010	\$0.0151
Restaurant/Lounge	sq. ft.	0.0002777	\$0.0027	\$0.0409
Industrial/Manufacturing	sq. ft.	0.0000145	\$0.0001	\$0.0021
Church/Non-Profit	sq. ft.	0.0000693	\$0.0007	\$0.0102
Education	students	0.0067653	\$0.0664	\$0.9961
Special Public Facilities	sq. ft.	0.0000835	\$0.0008	\$0.0123

Exhibit 3-23 calculates the capital cost per unit of development for command vehicle responses to fire/other incidents. The incident rate (from Exhibit 3-17) is multiplied by the command vehicle cost per fire/other incident (\$13.24 from Exhibit 3-9). The result is then multiplied by the ten-year useful life of a command vehicle to calculate the capital cost per unit of development for command vehicles.

Exhibit 3-23. Command Vehicle Cost of Response to Fire/Other Incidents, per Unit of Development

Land Use Type	Unit of Development	Annual Fire/Other Incident Rate	Command Vehicle Cost at \$13.24 per Fire/Other Incident, per Unit of Development	Command Vehicle Life Cost per Unit of Development at 10-Year Life
Single-Family Residential	d.u.	0.0467705	\$0.6194	\$9.0860
Multi-Family Residential	d.u.	0.0640047	\$0.8476	\$12.4340
Hotel/Motel/Resort	room	0.0721846	\$0.9559	\$14.0231
Medical Care Facility	d.u.	0.2195962	\$2.9080	\$42.6604
Office	sq. ft.	0.0000233	\$0.0003	\$0.0045
Medical/Dental Office	sq. ft.	0.0000813	\$0.0011	\$0.0158
Retail	sq. ft.	0.0001161	\$0.0015	\$0.0226
Leisure Facilities	sq. ft.	0.0001026	\$0.0014	\$0.0199
Restaurant/Lounge	sq. ft.	0.0002777	\$0.0037	\$0.0540
Industrial/Manufacturing	sq. ft.	0.0000145	\$0.0002	\$0.0028
Church/Non-Profit	sq. ft.	0.0000693	\$0.0009	\$0.0135
Education	students	0.0067653	\$0.0896	\$1.3143
Special Public Facilities	sq. ft.	0.0000835	\$0.0011	\$0.0162

Exhibit 3-24 calculates the capital cost per unit of development for dive apparatus responses to fire/other incidents. The incident rate (from Exhibit 3-17) is multiplied by the dive apparatus cost per fire/other incident (\$1.03 from Exhibit 3-9). The result is then multiplied by the 21-year useful life of a dive apparatus to calculate the capital cost per unit of development for dive apparatus.

Exhibit 3-24. Dive Apparatus Cost of Response to Fire/Other Incidents, per Unit of Development

Land Use Type	Unit of Development	Annual Fire/Other Incident Rate	Dive Apparatus Cost at \$1.03 per Fire/Other Incident, per Unit of Development	Dive Apparatus Life Cost per Unit of Development at 21-Year Life
Single-Family Residential	d.u.	0.0467705	\$0.0481	\$0.7220
Multi-Family Residential	d.u.	0.0640047	\$0.0659	\$0.9881
Hotel/Motel/Resort	room	0.0721846	\$0.0743	\$1.1144
Medical Care Facility	d.u.	0.2195962	\$0.2260	\$3.3901
Office	sq. ft.	0.0000233	\$0.0000	\$0.0004
Medical/Dental Office	sq. ft.	0.0000813	\$0.0001	\$0.0013
Retail	sq. ft.	0.0001161	\$0.0001	\$0.0018
Leisure Facilities	sq. ft.	0.0001026	\$0.0001	\$0.0016
Restaurant/Lounge	sq. ft.	0.0002777	\$0.0003	\$0.0043
Industrial/Manufacturing	sq. ft.	0.0000145	\$0.0000	\$0.0002
Church/Non-Profit	sq. ft.	0.0000693	\$0.0001	\$0.0011
Education	students	0.0067653	\$0.0070	\$0.1044
Special Public Facilities	sq. ft.	0.0000835	\$0.0001	\$0.0013

Exhibit 3-25 calculates the capital cost per unit of development for service vehicle responses to fire/other incidents. The incident rate (from Exhibit 3-17) is multiplied by the service vehicle cost per fire/other incident (\$0.39 from Exhibit 3-9). The result is then multiplied by the 15-year useful life of a service vehicle to calculate the capital cost per unit of development for service vehicles.

Exhibit 3-25. Service Vehicle Cost of Response to Fire/Other Incidents, per Unit of Development

Land Use Type	Unit of Development	Annual Fire/Other Incident Rate	Service Vehicle Cost at \$0.39 per Fire/Other Incident, per Unit of Development	Service Vehicle Life Cost per Unit of Development at 15-Year Life
Single-Family Residential	d.u.	0.0467705	\$0.0185	\$0.3875
Multi-Family Residential	d.u.	0.0640047	\$0.0252	\$0.5302
Hotel/Motel/Resort	room	0.0721846	\$0.0285	\$0.5980
Medical Care Facility	d.u.	0.2195962	\$0.0866	\$1.8193
Office	sq. ft.	0.0000233	\$0.0000	\$0.0002
Medical/Dental Office	sq. ft.	0.0000813	\$0.0000	\$0.0007
Retail	sq. ft.	0.0001161	\$0.0000	\$0.0010
Leisure Facilities	sq. ft.	0.0001026	\$0.0000	\$0.0008
Restaurant/Lounge	sq. ft.	0.0002777	\$0.0001	\$0.0023
Industrial/Manufacturing	sq. ft.	0.0000145	\$0.0000	\$0.0001
Church/Non-Profit	sq. ft.	0.0000693	\$0.0000	\$0.0006
Education	students	0.0067653	\$0.0027	\$0.0560
Special Public Facilities	sq. ft.	0.0000835	\$0.0000	\$0.0007

Exhibit 3-26 calculates the capital cost per unit of development for staff vehicle responses to fire/other incidents. The incident rate (from Exhibit 3-17) is multiplied by the staff vehicle cost per fire/other incident (\$1.59 from Exhibit 3-10). The result is then multiplied by the 15-year useful life of a staff vehicle to calculate the capital cost per unit of development for staff vehicles.

Exhibit 3-26. Staff Vehicle Cost of Response to Fire/Other Incidents, per Unit of Development

Land Use Type	Unit of Development	Annual Fire/Other Incident Rate	Staff Vehicle Cost at \$1.59 per Fire/Other Incident, per Unit of Development	Staff Vehicle Life Cost per Unit of Development at 15-Year Life
Single-Family Residential	d.u.	0.0467705	\$0.0741	\$1.1121
Multi-Family Residential	d.u.	0.0640047	\$0.1015	\$1.5219
Hotel/Motel/Resort	room	0.0721846	\$0.1144	\$1.7164
Medical Care Facility	d.u.	0.2195962	\$0.3481	\$5.2215
Office	sq. ft.	0.0000233	\$0.0000	\$0.0006
Medical/Dental Office	sq. ft.	0.0000813	\$0.0001	\$0.0019
Retail	sq. ft.	0.0001161	\$0.0002	\$0.0028
Leisure Facilities	sq. ft.	0.0001026	\$0.0002	\$0.0024
Restaurant/Lounge	sq. ft.	0.0002777	\$0.0004	\$0.0066
Industrial/Manufacturing	sq. ft.	0.0000145	\$0.0000	\$0.0003
Church/Non-Profit	sq. ft.	0.0000693	\$0.0001	\$0.0016
Education	students	0.0067653	\$0.0107	\$0.1609
Special Public Facilities	sq. ft.	0.0000835	\$0.0001	\$0.0020

Exhibit 3-27 calculates the capital cost per unit of development for utility vehicles for fire/other incidents. The incident rate (from Exhibit 3-17) is multiplied by the utility vehicle cost per fire/other incident (\$2.02 from Exhibit 3-10). The result is then multiplied by the 15-year useful life of a utility vehicle to calculate the capital cost per unit of development for utility vehicles.

Exhibit 3-27. Utility Vehicle Cost per Fire/Other Incident, per Unit of Development

Land Use Type	Unit of Development	Annual Fire/Other Incident Rate	Utility Vehicle Cost at \$2.02 per Incident, per Unit of Development	Utility Vehicle Life Cost per Unit of Development at 15-Year Life
Single-Family Residential	d.u.	0.0467705	\$0.0947	\$1.4202
Multi-Family Residential	d.u.	0.0640047	\$0.1296	\$1.9435
Hotel/Motel/Resort	room	0.0721846	\$0.1461	\$2.1919
Medical Care Facility	d.u.	0.2195962	\$0.4445	\$6.6681
Office	sq. ft.	0.0000233	\$0.0000	\$0.0007
Medical/Dental Office	sq. ft.	0.0000813	\$0.0002	\$0.0025
Retail	sq. ft.	0.0001161	\$0.0002	\$0.0035
Leisure Facilities	sq. ft.	0.0001026	\$0.0002	\$0.0031
Restaurant/Lounge	sq. ft.	0.0002777	\$0.0006	\$0.0084
Industrial/Manufacturing	sq. ft.	0.0000145	\$0.0000	\$0.0004
Church/Non-Profit	sq. ft.	0.0000693	\$0.0001	\$0.0021
Education	students	0.0067653	\$0.0137	\$0.2054
Special Public Facilities	sq. ft.	0.0000835	\$0.0002	\$0.0025

Exhibit 3-28 calculates the capital cost per unit of development for small utility vehicles for fire/other incidents. The incident rate (from Exhibit 3-17) is multiplied by the other small utility vehicle cost per fire/other incident (\$0.41 from Exhibit 3-10). The result is then multiplied by the 15-year useful life of other small utility vehicles to calculate the capital cost per unit of development for other small utility vehicles.

Exhibit 3-28. Small Utility Vehicle Cost of Response to Fire/Other Incident, per Unit of Development

Land Use Type	Unit of Development	Annual Fire/Other Incident Rate	Small Utility Vehicles Cost at \$0.41 per Incident, per Unit of Development	Small Utility Vehicles Life Cost per Unit of Development at 15-Year Life
Single-Family Residential	d.u.	0.0467705	\$0.0190	\$0.2851
Multi-Family Residential	d.u.	0.0640047	\$0.0260	\$0.3901
Hotel/Motel/Resort	room	0.0721846	\$0.0293	\$0.4400
Medical Care Facility	d.u.	0.2195962	\$0.0892	\$1.3385
Office	sq. ft.	0.0000233	\$0.0000	\$0.0001
Medical/Dental Office	sq. ft.	0.0000813	\$0.0000	\$0.0005
Retail	sq. ft.	0.0001161	\$0.0000	\$0.0007
Leisure Facilities	sq. ft.	0.0001026	\$0.0000	\$0.0006
Restaurant/Lounge	sq. ft.	0.0002777	\$0.0001	\$0.0017
Industrial/Manufacturing	sq. ft.	0.0000145	\$0.0000	\$0.0001
Church/Non-Profit	sq. ft.	0.0000693	\$0.0000	\$0.0004
Education	students	0.0067653	\$0.0027	\$0.0412
Special Public Facilities	sq. ft.	0.0000835	\$0.0000	\$0.0005

Exhibit 3-29 calculates the capital cost per unit of development for other apparatus/equipment to fire/other incidents. The incident rate (from Exhibit 3-17) is multiplied by the other apparatus/equipment cost per fire/other incident (\$0.48 from Exhibit 3-10). The result is then multiplied by the 15-year useful life of other apparatus/equipment to calculate the capital cost per unit of development for other apparatus/equipment.

Exhibit 3-29. Other Apparatus/Equipment Cost of Response to Fire/Other Incident, per Unit of Development

Land Use Type	Unit of Development	Annual Fire/Other Incident Rate	Other Apparatus/Equip. Cost at \$0.48 per Incident, per Unit of Development	Other Apparatus/Equip. Life Cost per Unit of Development at 15-Year Life
Single-Family Residential	d.u.	0.0467705	\$0.0224	\$0.3357
Multi-family	d.u.	0.0640047	\$0.0306	\$0.4594
Hotel/Motel/Resort	room	0.0721846	\$0.0345	\$0.5181
Medical Care Facility	d.u.	0.2195962	\$0.1051	\$1.5760
Office	sq. ft.	0.0000233	\$0.0000	\$0.0002
Medical/Dental Office	sq. ft.	0.0000813	\$0.0000	\$0.0006
Retail	sq. ft.	0.0001161	\$0.0001	\$0.0008
Leisure Facilities	sq. ft.	0.0001026	\$0.0000	\$0.0007
Restaurant/Lounge	sq. ft.	0.0002777	\$0.0001	\$0.0020
Industrial/Manufacturing	sq. ft.	0.0000145	\$0.0000	\$0.0001
Church/Non-Profit	sq. ft.	0.0000693	\$0.0000	\$0.0005
Education	students	0.0067653	\$0.0032	\$0.0486
Special Public Facilities	sq. ft.	0.0000835	\$0.0000	\$0.0006

Exhibit 3-30 calculates the capital cost per unit of development for fire stations that house apparatus. The fire/other incident rate (from Exhibit 3-17) is multiplied by the fire station cost per fire/other incident (\$49.06 from Exhibit 3-12). The result is then multiplied by the 50-year useful life of fire stations to calculate the capital cost per unit of development for fire stations.

Exhibit 3-30. Fire Station Cost of Response to Fire/Other Incident, per Unit of Development

Land Use Type	Unit of Development	Annual Fire/Other Incident Rate	Fire Station Cost at \$49.06 per Incident, per Unit of Development	Fire Station Life Cost per Unit of Development at 50-Year Life
Single-Family Residential	d.u.	0.0467705	\$2.2945	\$114.73
Multi-family	d.u.	0.0640047	\$3.1400	\$157.00
Hotel/Motel/Resort	room	0.0721846	\$3.5413	\$177.06
Medical Care Facility	d.u.	0.2195962	\$10.7732	\$538.66
Office	sq. ft.	0.0000233	\$0.0011	\$0.06
Medical/Dental Office	sq. ft.	0.0000813	\$0.0040	\$0.20
Retail	sq. ft.	0.0001161	\$0.0057	\$0.28
Leisure Facilities	sq. ft.	0.0001026	\$0.0050	\$0.25
Restaurant/Lounge	sq. ft.	0.0002777	\$0.0136	\$0.68
Industrial/Manufacturing	sq. ft.	0.0000145	\$0.0007	\$0.04
Church/Non-Profit	sq. ft.	0.0000693	\$0.0034	\$0.17
Education	students	0.0067653	\$0.3319	\$16.59
Special Public Facilities	sq. ft.	0.0000835	\$0.0041	\$0.20

Exhibit 3-31 combines the capital costs of all types of apparatus and station (from Exhibit 3-18 through Exhibit 3-30) to show the total capital cost of responses to fire/other incidents for one single-family unit.

Exhibit 3-31. Example of Calculation of Total Cost of Response to Fire/Other Incidents for a Single-Family Residential Dwelling Unit

Cost Component	Cost
Engine	\$37.89
Ladder	\$11.18
Aid Unit	\$1.23
Hazardous Materials Vehicle	\$5.36
Brush Truck	\$6.89
Command Vehicle	\$9.09
Dive Apparatus	\$0.72
Service Vehicle	\$0.39
Staff Vehicle	\$1.11
Utility Vehicle	\$1.42
Small Utility Vehicle	\$0.29
Other Equipment/Apparatus	\$0.34
Fire Station	\$114.73
Total	\$190.63

This example is repeated for each land use to combine its capital costs of all types of apparatus and station in Exhibit 3-32.

Exhibit 3-32. Total Capital Cost of Response to Fire/Other Incidents, per Unit of Development

Land Use Type	Unit of Development	Fire/Other Incidents: Life Cost of All Apparatus & Stations per Unit of Development
Single-Family Residential	d.u.	\$190.63
Multi-Family Residential	d.u.	\$260.87
Hotel/Motel/Resort	room	\$294.21
Medical Care Facility	d.u.	\$895.02
Office	sq. ft.	\$0.10
Medical/Dental Office	sq. ft.	\$0.33
Retail	sq. ft.	\$0.47
Leisure Facilities	sq. ft.	\$0.42
Restaurant/Lounge	sq. ft.	\$1.13
Industrial/Manufacturing	sq. ft.	\$0.06
Church/Non-Profit	sq. ft.	\$0.28
Education	students	\$27.57
Special Public Facilities	sq. ft.	\$0.34

3.4.9 Formula F-9: Apparatus Cost per EMS Incident

The calculation of apparatus cost per EMS incident is similar to the calculation of costs per fire/other incident in Exhibit 3-9. The total apparatus cost per EMS incident is calculated by multiplying the cost per apparatus per response by the percent of EMS incidents each type of apparatus responds to. This calculation accounts for the fact that multiple apparatuses are dispatched to many incidents, and that some apparatus are only dispatched to specific types of incidents. The result of this calculation is a weighted average total cost of apparatus per EMS incident.

$$\text{Formula F-9:} \quad \text{Apparatus Cost Per Response} \times \text{Apparatus Percent of EMS Responses} = \text{Apparatus Cost Per EMS Incident}$$

There are no new variables used in formula F-9. The first variable is identical to the data from Exhibit 3-6, and the second variable concerning the percent of EMS responses works identically to Variable F, but using EMS responses instead of fire/other responses.

Different types of EMS incidents need different types or combinations of apparatus. As a result, the usage of apparatus varies among the types of apparatus. This variance is an important factor in determining the cost per incident. The percent of EMS responses by each type of apparatus is calculated in Exhibit 3-33 by dividing the annual EMS responses for each type of apparatus by the total annual EMS incidents from Exhibit 3-7. The result of the calculation in Exhibit 3-33 is the percent of EMS incidents responded to by each type of apparatus. For example, engines provided 9,040 responses to the 16,046 EMS incidents, equaling 56.3% of all EMS incidents. Another way to understand this data is that one average EMS incident involved 0.563 engines therefore the cost of responding to an EMS incident includes 56.3% of the cost of an engine.

Exhibit 3-33. EMS Response per Incident Rate by Apparatus Type

Apparatus Type	Annual EMS-Related Responses for Apparatus	Annual EMS-Related Incidents	Apparatus Response per EMS Incident Rate
Engine	9,040		0.563
Ladder	1,191		0.074
Aid Unit	6,487		0.404
Hazardous Materials Vehicle	3		0.000
Brush Truck	0		0.000
Command Vehicle	360		0.022
Dive Apparatus	26		0.002
Service Vehicle	816		0.051
Total	17,923	16,046	

The final step in calculating the apparatus cost per EMS incident is shown in Exhibit 3-34. The cost per response for each type of apparatus (from Exhibit 3-6) is multiplied by the percent of EMS incidents dispatched to (from Exhibit 3-33) resulting in the total apparatus cost per EMS incident. The “bottom line” in Exhibit 3-34 is the apparatus cost per EMS incident of \$64.81. In other words, every EMS incident “uses up” \$64.81 worth of apparatus.

Exhibit 3-34. Apparatus Cost per EMS Incident

Apparatus Type	Apparatus Cost Per Response	Apparatus Response per EMS Incident Rate	Apparatus Cost per EMS Incident
Engine	\$65.52	0.563	\$36.91
Ladder	\$138.43	0.074	\$10.27
Aid Unit	\$34.81	0.404	\$14.07
Hazardous Materials Vehicle	\$167.89	0.000	\$0.03
Brush Truck	\$2,548.81	0.000	\$0.00
Command Vehicle	\$104.91	0.022	\$2.35
Dive Apparatus	\$320.69	0.002	\$0.52
Service Vehicle	\$12.80	0.051	\$0.65
Total			\$64.81

3.4.10 Formula F-10: Annual EMS Incident Rate per Unit of Development

Formula F-10 is the same as Formula F-7. The annual EMS incident rate per unit of development is calculated using the same methodology as described for fire/other incidents in Exhibit 3-14 through Exhibit 3-30. There are no new variables used in formula F-10. The variables are identical to those used in Formula F-7, but using EMS incidents instead of fire/other incidents.

$$\text{Formula F-10: } \frac{\text{Annual EMS Incidents at Each Type of Land Use}}{\text{Number of Dwelling Units or Square Feet of Each Type of Land Use}} = \text{Annual EMS Incidents Per Unit of Development}$$

As shown in Exhibit 3-35, RRFA responded to 16,046 EMS incidents during 2022. Of these incidents, 13,805 were coded to a specific property type related to one of the 13 land use categories used in this study. 1,028 incidents occurred in roads and streets (in most cases these are traffic-related). The records for the remaining 1,213 were not coded to one of the 13 land use categories or roadways. These include incidents with no code at all or those at other kinds of properties such as vacant land or construction sites. To account for all incidents, these 1,213 incidents were allocated proportionally to properties or roads and streets.

Exhibit 3-35. EMS Incidents by Location

Incident Location	EMS Incidents Identifiable by Location	Percent of Identifiable EMS Incidents	EMS Incidents Not Identifiable by Location	Unidentifiable EMS Incidents Allocated to Location	Total EMS Incidents
At Properties	13,805	93.07%		1129	14,934
In Roads and Streets	1,028	6.93%		84	1,112
Total	14,833		1,213		16,046

Exhibits 3-36 through 3-39 present the allocation of EMS incidents among types of land use:

- Exhibit 3-36 shows the EMS incidents that were identifiable by land use type.
- Exhibit 3-37 shows the EMS incidents that were in roads and streets.
- Exhibit 3-38 combines the EMS incident data (at properties and in road and streets).
- Exhibit 3-39 shows the EMS incident rate per unit of development.

Exhibit 3-36 shows the distribution of the 13,805 EMS incidents that are traceable to a land use type along with the percent distribution of these incidents. In the last column, the total 14,934 EMS incidents (13,805 traceable to land use type + 1,129 that are not) are allocated among the land use types using the percent distribution column. The result is the total annual EMS incidents at each of the land use types.

Exhibit 3-36. EMS Incidents at Specific Land Uses

Land Use Type	Annual EMS Incidents Identifiable to Land Use	Percent of All EMS Incidents Identifiable to Land Use	Allocate Total Property Related EMS Incidents (14,934) to Land Uses
Single-Family Residential	5,399	39.11%	5,841
Multi-Family Residential	5,905	42.77%	6,388
Hotel/Motel/Resort	199	1.44%	215
Medical Care Facility	118	0.85%	128
Office	363	2.63%	393
Medical/Dental Office	215	1.56%	233
Retail	1,140	8.26%	1,233
Leisure Facilities	49	0.35%	53
Restaurant/Lounge	120	0.87%	130
Industrial/Manufacturing	96	0.70%	104
Church/Non-Profit	43	0.31%	47
Education	133	0.96%	144
Special Public Facilities	25	0.18%	27
Total	13,805		14,934

The EMS incidents in roads and streets are allocated to land uses on the basis of the amount of traffic generated by each type of land use. In Exhibit 3-37, the number of dwelling units and square feet of non- residential construction in the service area is multiplied by the number of trips that are generated by each land use type in the same manner as Exhibit 3-15. The result is the total trips associated with each land use type. The percent of trips associated with each land use type is calculated from the total of all trips.

In the final calculation in Exhibit 3-37 the total 1,112 annual EMS incidents that are in roads and streets (1,028 traceable + 84 allocated) are assigned to the land use types using the percent of trips generated.

Exhibit 3-37. EMS Incidents in Roads and Streets - Allocated to Land Uses

Land Use Type	Units of Development ²¹		ITE Trip Generation Rate ²²	Total Trips	Percent of Trips Generated	Annual EMS Incidents in Roads and Streets Per Unit of Development
Single-Family Residential	30,564	d.u.	9.43000	288,219	29.68%	330
Multi-Family Residential	23,725	d.u.	6.74000	159,907	16.47%	183
Hotel/Motel/Resort	1,850	room	7.99000	14,782	1.52%	17
Medical Care Facility	381	d.u.	2.21000	842	0.09%	1
Office	8,726,719	sq. ft.	0.01084	94,598	9.74%	108
Medical/Dental Office	978,096	sq. ft.	0.03600	35,211	3.63%	40
Retail	5,485,938	sq. ft.	0.03701	203,035	20.91%	232
Leisure Facilities	501,843	sq. ft.	0.02882	14,463	1.49%	17
Restaurant/Lounge	302,629	sq. ft.	0.10720	32,442	3.34%	37
Industrial/Manufacturing	15,244,876	sq. ft.	0.00475	72,413	7.46%	83
Church/Non-Profit	861,468	sq. ft.	0.00760	6,547	0.67%	7
Education	20,721	students	1.94000	40,199	4.14%	46
Special Public Facilities	376,429	sq. ft.	0.02259	8,504	0.88%	10
Total				971,160		1112

²¹ Non-residential units of development exclude structured parking. Single-family units include duplexes (see footnote 7 for explanation). Multi-family residential includes units in all structures larger with more than two units plus mobile homes.

²² Daily trip generation rates are from the 11th Edition of Trip Generation by the Institute of Transportation Engineers (ITE).

Exhibit 3-38 summarizes the results of the analysis of EMS incidents. The total annual EMS incidents is a combination of the EMS incidents allocated among direct responses to land use types (from Exhibit 3-36) and the allocation of incidents in roads and streets based on trip generation rates (from Exhibit 3-37).

Exhibit 3-38. Total EMS Incidents by Land Use

Land Use Type	Annual Property Related EMS Incidents by Land Use	Annual EMS Incidents in Roads and Streets Assigned to Land Use	Total Annual EMS Incidents by Land Use
Single-Family Residential	5,841	330	6,171
Multi-Family Residential	6,388	183	6,571
Hotel/Motel/Resort	215	17	232
Medical Care Facility	128	1	129
Office	393	108	501
Medical/Dental Office	233	40	273
Retail	1,233	232	1,466
Leisure Facilities	53	17	70
Restaurant/Lounge	130	37	167
Industrial/Manufacturing	104	83	187
Church/Non-Profit	47	7	54
Education	144	46	190
Special Public Facilities	27	10	37
Total	14,934	1112	16,046

The final step in determining the annual EMS incident rate per unit of development is shown in Exhibit 3-39. The total annual EMS incidents for each type of land use (from Exhibit 3-38) are divided by the number of dwelling units or square feet of structures to calculate the annual EMS incident rate per dwelling unit or square foot. The units of development are the same as was used to assign incidents in roads and streets to land use types (see Exhibit 3-39). The results in Exhibit 3-39 show how many times an average unit of development has an EMS incident to which the RRFA responds.

Exhibit 3-39. Annual EMS Incident Rate by Land Use

Land Use Type	Total Annual EMS Incidents Attributed to Land Use	Units of Development		Annual EMS Incidents Per Unit of Development
Single-Family Residential	6,171	30,564	d.u.	0.2018895
Multi-Family Residential	6,571	23,725	d.u.	0.2769653
Hotel/Motel/Resort	232	1,850	room	0.1255134
Medical Care Facility	129	381	d.u.	0.3375692
Office	501	8,726,719	sq. ft.	0.0000574
Medical/Dental Office	273	978,096	sq. ft.	0.0002790
Retail	1,466	5,485,938	sq. ft.	0.0002672
Leisure Facilities	70	501,843	sq. ft.	0.0001386
Restaurant/Lounge	167	302,629	sq. ft.	0.0005517
Industrial/Manufacturing	187	15,244,876	sq. ft.	0.0000123
Church/Non-Profit	54	861,468	sq. ft.	0.0000627
Education	190	20,721	students	0.0091650
Special Public Facilities	37	376,429	sq. ft.	0.0000977
Total	16,046			

3.4.11 Formula F-11: EMS Incident Capital Cost per Unit of Development

The capital cost of EMS incidents per unit of development is determined by multiplying the annual EMS incidents per unit of development (from Exhibit 3-39) times the annual capital cost per EMS incident of each type of apparatus (Exhibit 3-34) and fire station (from Exhibit 3-12), then multiplying that result times the useful life of the apparatus or fire station.²³

$$\text{Formula F-11: } \frac{\text{Annual EMS Incidents}}{\text{per Unit of Development}} \times \frac{\text{Annual Cost Per}}{\text{EMS Incident}} \times \frac{\text{Useful Life of}}{\text{Apparatus or Station}} = \frac{\text{EMS Incident Capital}}{\text{Cost per Unit of Development}}$$

There are no new variables used in formula F-11. The variables are identical to those used in Formula F- 8 but using EMS incident rates and costs instead of fire/other incident rates and costs.

In Exhibit 3-40 through Exhibit 3-52, each EMS incident rate (from Exhibit 3-39) is multiplied by the annual capital cost per EMS incident. The result is then multiplied by the useful life of the apparatus or station to calculate the capital cost per unit of development for each type of apparatus and station.

²³ Footnote 20 applies to F-11 as well as F-8.

Exhibit 3-40 calculates the EMS related capital costs of an engine per unit of development. For example, single-family residential units average 0.2018895 EMS incidents per year (i.e., 20.18% of an EMS incident per year). Multiplying this by the annual capital cost of \$36.91 per incident (from Exhibit 3-34) results in a cost of \$7.45 per dwelling unit to provide it with engines for one year. Since the engine lasts on average 14.67 years on average, the residential dwelling needs to pay for 14.67 times the annual rate, for a total of \$109.32.

Exhibit 3-40. Engine Cost of Response to EMS Incidents, per Unit of Development

Land Use Type	Unit of Development	Annual EMS Incident Rate	Engine Cost at \$36.91 per EMS Incident, per Unit of Development	Engine Life Cost per Unit of Development at 14.67-Year life
Single-Family Residential	d.u.	0.2018895	\$7.4518	\$109.3178
Multi-Family Residential	d.u.	0.2769653	\$10.2229	\$149.9693
Hotel/Motel/Resort	sq. ft.	0.1255134	\$4.6327	\$67.9622
Medical Care Facility	sq. ft.	0.3375692	\$12.4598	\$182.7847
Office	sq. ft.	0.0000574	\$0.0021	\$0.0311
Medical/Dental Office	sq. ft.	0.0002790	\$0.0103	\$0.1511
Retail	sq. ft.	0.0002672	\$0.0099	\$0.1447
Leisure Facilities	sq. ft.	0.0001386	\$0.0051	\$0.0751
Restaurant/Lounge	sq. ft.	0.0005517	\$0.0204	\$0.2987
Industrial/Manufacturing	sq. ft.	0.0000123	\$0.0005	\$0.0066
Church/Non-Profit	sq. ft.	0.0000627	\$0.0023	\$0.0340
Education	sq. ft.	0.0091650	\$0.3383	\$4.9626
Special Public Facilities	sq. ft.	0.0000977	\$0.0036	\$0.0529

Exhibit 3-41 calculates the capital cost per unit of development for ladders responding to EMS incidents. The incident rate (from Exhibit 3-39) is multiplied by the ladder capital cost per EMS incident (\$10.27 from Exhibit 3-34). The result is then multiplied by the ten-year average useful life of a ladder to calculate the capital cost per unit of development for ladders.

Exhibit 3-41. Ladder Cost of Response to EMS Incidents, per Unit of Development

Land Use Type	Unit of Development	Annual EMS Incident Rate	Ladder Cost at \$10.27 per EMS Incident, per Unit of Development	Ladder Life Cost per Unit of Development at 10-Year life
Single-Family Residential	d.u.	0.2018895	\$2.07	\$37.3388
Multi-Family Residential	d.u.	0.2769653	\$2.85	\$51.2238
Hotel/Motel/Resort	sq. ft.	0.1255134	\$1.29	\$23.2133
Medical Care Facility	sq. ft.	0.3375692	\$3.47	\$62.4323
Office	sq. ft.	0.0000574	\$0.00	\$0.0106
Medical/Dental Office	sq. ft.	0.0002790	\$0.00	\$0.0516
Retail	sq. ft.	0.0002672	\$0.00	\$0.0494
Leisure Facilities	sq. ft.	0.0001386	\$0.00	\$0.0256
Restaurant/Lounge	sq. ft.	0.0005517	\$0.01	\$0.1020
Industrial/Manufacturing	sq. ft.	0.0000123	\$0.00	\$0.0023
Church/Non-Profit	sq. ft.	0.0000627	\$0.00	\$0.0116
Education	sq. ft.	0.0091650	\$0.09	\$1.6950
Special Public Facilities	sq. ft.	0.0000977	\$0.00	\$0.0181

Exhibit 3-42 calculates the capital cost per unit of development for aid units responding to EMS incidents. The incident rate (from Exhibit 3-39) is multiplied by the aid unit capital cost per EMS incident (\$14.07 from Exhibit 3-34). The result is then multiplied by the ten-year average useful life of an aid vehicle to calculate the capital cost per unit of development for aid units.

Exhibit 3-42. Aid Vehicle Cost of Response to EMS Incidents, per Unit of Development

Land Use Type	Unit of Development	Annual EMS Incident Rate	Aid Vehicle Cost at \$14.07 per EMS Incident, per Unit of Development	Aid Vehicle Life Cost per Unit of Development at 10-Year life
Single-Family Residential	d.u.	0.2018895	\$2.8412	\$28.4116
Multi-Family Residential	d.u.	0.2769653	\$3.8977	\$38.9768
Hotel/Motel/Resort	sq. ft.	0.1255134	\$1.7663	\$17.6633
Medical Care Facility	sq. ft.	0.3375692	\$4.7506	\$47.5055
Office	sq. ft.	0.0000574	\$0.0008	\$0.0081
Medical/Dental Office	sq. ft.	0.0002790	\$0.0039	\$0.0393
Retail	sq. ft.	0.0002672	\$0.0038	\$0.0376
Leisure Facilities	sq. ft.	0.0001386	\$0.0020	\$0.0195
Restaurant/Lounge	sq. ft.	0.0005517	\$0.0078	\$0.0776
Industrial/Manufacturing	sq. ft.	0.0000123	\$0.0002	\$0.0017
Church/Non-Profit	sq. ft.	0.0000627	\$0.0009	\$0.0088
Education	sq. ft.	0.0091650	\$0.1290	\$1.2898
Special Public Facilities	sq. ft.	0.0000977	\$0.0014	\$0.0138

Exhibit 3-43 calculates the capital cost per unit of development for hazardous materials vehicles responding to EMS incidents. The incident rate (from Exhibit 3-39) is multiplied by the hazardous materials vehicle capital cost per EMS incident (\$0.03 from Exhibit 3-34). The result is then multiplied by the 21-year average useful life of a hazardous materials vehicles to calculate the capital cost per unit of development for hazardous materials vehicles.

Exhibit 3-43. Hazardous Materials Vehicle Cost of Response to EMS Incidents, per Unit of Development

Land Use Type	Unit of Development	Annual EMS Incident Rate	Hazardous Materials Vehicle Cost at \$0.03 per EMS Incident, per Unit of Development	Hazardous Materials Vehicle Life Cost per Unit of Development at 21-Year life
Single-Family Residential	d.u.	0.2018895	\$0.0063	\$0.1331
Multi-Family Residential	d.u.	0.2769653	\$0.0087	\$0.1826
Hotel/Motel/Resort	sq. ft.	0.1255134	\$0.0039	\$0.0827
Medical Care Facility	sq. ft.	0.3375692	\$0.0106	\$0.2225
Office	sq. ft.	0.0000574	\$0.0000	\$0.0000
Medical/Dental Office	sq. ft.	0.0002790	\$0.0000	\$0.0002
Retail	sq. ft.	0.0002672	\$0.0000	\$0.0002
Leisure Facilities	sq. ft.	0.0001386	\$0.0000	\$0.0001
Restaurant/Lounge	sq. ft.	0.0005517	\$0.0000	\$0.0004
Industrial/Manufacturing	sq. ft.	0.0000123	\$0.0000	\$0.0000
Church/Non-Profit	sq. ft.	0.0000627	\$0.0000	\$0.0000
Education	sq. ft.	0.0091650	\$0.0003	\$0.0060
Special Public Facilities	sq. ft.	0.0000977	\$0.0000	\$0.0001

Exhibit 3-44 calculates the capital cost per unit of development for brush trucks responding to EMS incidents. The incident rate (from Exhibit 3-39) is multiplied by the brush trucks capital cost per EMS incident (\$0.00 from Exhibit 3-34). The result is then multiplied by the ten-year average useful life of a brush truck to calculate the capital cost per unit of development for brush trucks.

Exhibit 3-44. Brush Truck Cost of Response to EMS Incidents, per Unit of Development

Land Use Type	Unit of Development	Annual EMS Incident Rate	Brush Truck Cost at \$0.00 per EMS Incident, per Unit of Development	Brush Truck Life Cost per Unit of Development at 10-Year Life
Single-Family Residential	d.u.	0.2018895	\$0.0000	\$0.0000
Multi-Family Residential	d.u.	0.2769653	\$0.0000	\$0.0000
Hotel/Motel/Resort	sq. ft.	0.1255134	\$0.0000	\$0.0000
Medical Care Facility	sq. ft.	0.3375692	\$0.0000	\$0.0000
Office	sq. ft.	0.0000574	\$0.0000	\$0.0000
Medical/Dental Office	sq. ft.	0.0002790	\$0.0000	\$0.0000
Retail	sq. ft.	0.0002672	\$0.0000	\$0.0000
Leisure Facilities	sq. ft.	0.0001386	\$0.0000	\$0.0000
Restaurant/Lounge	sq. ft.	0.0005517	\$0.0000	\$0.0000
Industrial/Manufacturing	sq. ft.	0.0000123	\$0.0000	\$0.0000
Church/Non-Profit	sq. ft.	0.0000627	\$0.0000	\$0.0000
Education	sq. ft.	0.0091650	\$0.0000	\$0.0000
Special Public Facilities	sq. ft.	0.0000977	\$0.0000	\$0.0000

Exhibit 3-45 calculates the capital cost per unit of development for command vehicles responding to EMS incidents. The incident rate (from Exhibit 3-39) is multiplied by the command vehicle capital cost per EMS incident (\$2.35 from Exhibit 3-34). The result is then multiplied by the ten-year average useful life of a command vehicle to calculate the capital cost per unit of development for command vehicles.

Exhibit 3-45. Command Vehicle Cost of Response to EMS Incidents, per Unit of Development

Land Use Type	Unit of Development	Annual EMS Incident Rate	Command Vehicle Cost at \$2.35 per EMS Incident, per Unit of Development	Command Vehicle Life Cost per Unit of Development at 10-Year Life
Single-Family Residential	d.u.	0.2018895	\$0.4752	\$4.7518
Multi-Family Residential	d.u.	0.2769653	\$0.6519	\$6.5188
Hotel/Motel/Resort	sq. ft.	0.1255134	\$0.2954	\$2.9542
Medical Care Facility	sq. ft.	0.3375692	\$0.7945	\$7.9452
Office	sq. ft.	0.0000574	\$0.0001	\$0.0014
Medical/Dental Office	sq. ft.	0.0002790	\$0.0007	\$0.0066
Retail	sq. ft.	0.0002672	\$0.0006	\$0.0063
Leisure Facilities	sq. ft.	0.0001386	\$0.0003	\$0.0033
Restaurant/Lounge	sq. ft.	0.0005517	\$0.0013	\$0.0130
Industrial/Manufacturing	sq. ft.	0.0000123	\$0.0000	\$0.0003
Church/Non-Profit	sq. ft.	0.0000627	\$0.0001	\$0.0015
Education	sq. ft.	0.0091650	\$0.0216	\$0.2157
Special Public Facilities	sq. ft.	0.0000977	\$0.0002	\$0.0023

Exhibit 3-46 calculates the capital cost per unit of development for dive apparatus responding to EMS incidents. The incident rate (from Exhibit 3-39) is multiplied by the dive apparatus capital cost per EMS incident (\$0.52 from Exhibit 3-34). The result is then multiplied by the 21-year average useful life of a dive apparatus to calculate the capital cost per unit of development for dive apparatus.

Exhibit 3-46. Dive Apparatus Cost of Response to EMS Incidents, per Unit of Development

Land Use Type	Unit of Development	Annual EMS Incident Rate	Dive Apparatus Cost at \$0.52 per EMS Incident, per Unit of Development	Dive Apparatus Life Cost per Unit of Development at 21-Year Life
Single-Family Residential	d.u.	0.2018895	\$0.1049	\$2.2031
Multi-Family Residential	d.u.	0.2769653	\$0.1439	\$3.0223
Hotel/Motel/Resort	sq. ft.	0.1255134	\$0.0652	\$1.3696
Medical Care Facility	sq. ft.	0.3375692	\$0.1754	\$3.6837
Office	sq. ft.	0.0000574	\$0.0000	\$0.0006
Medical/Dental Office	sq. ft.	0.0002790	\$0.0001	\$0.0030
Retail	sq. ft.	0.0002672	\$0.0001	\$0.0029
Leisure Facilities	sq. ft.	0.0001386	\$0.0001	\$0.0015
Restaurant/Lounge	sq. ft.	0.0005517	\$0.0003	\$0.0060
Industrial/Manufacturing	sq. ft.	0.0000123	\$0.0000	\$0.0001
Church/Non-Profit	sq. ft.	0.0000627	\$0.0000	\$0.0007
Education	sq. ft.	0.0091650	\$0.0048	\$0.1000
Special Public Facilities	sq. ft.	0.0000977	\$0.0001	\$0.0011

Exhibit 3-47 calculates the capital cost per unit of development for service vehicles. The incident rate (from Exhibit 3-39) is multiplied by the service vehicle capital cost per incident (\$0.52 from Exhibit 3-34). The result is then multiplied by the 15-year average useful life of a service vehicle to calculate the capital cost per unit of development for service vehicles.

Exhibit 3-47. Service Vehicle Cost per EMS Incident, per Unit of Development

Land Use Type	Unit of Development	Annual EMS Incident Rate	Service Vehicle Cost at \$0.52 per Incident, per Unit of Development	Service Vehicle Life Cost per Unit of Development at 15-Year Life
Single-Family Residential	d.u.	0.2018895	\$0.1315	\$1.9720
Multi-Family Residential	d.u.	0.2769653	\$0.1804	\$2.7053
Hotel/Motel/Resort	sq. ft.	0.1255134	\$0.0817	\$1.2260
Medical Care Facility	sq. ft.	0.3375692	\$0.2198	\$3.2973
Office	sq. ft.	0.0000574	\$0.0000	\$0.0006
Medical/Dental Office	sq. ft.	0.0002790	\$0.0002	\$0.0027
Retail	sq. ft.	0.0002672	\$0.0002	\$0.0026
Leisure Facilities	sq. ft.	0.0001386	\$0.0001	\$0.0014
Restaurant/Lounge	sq. ft.	0.0005517	\$0.0004	\$0.0054
Industrial/Manufacturing	sq. ft.	0.0000123	\$0.0000	\$0.0001
Church/Non-Profit	sq. ft.	0.0000627	\$0.0000	\$0.0006
Education	sq. ft.	0.0091650	\$0.0060	\$0.0895
Special Public Facilities	sq. ft.	0.0000977	\$0.0001	\$0.0010

Exhibit 3-48 calculates the capital cost per unit of development for staff vehicles. The incident rate (from Exhibit 3-39) is multiplied by the staff vehicle capital cost per incident (\$1.59 from Exhibit 3-10). The result is then multiplied by the 15-year average useful life of a staff vehicles to calculate the capital cost per unit of development for staff vehicles.

Exhibit 3-48. Staff Vehicles Cost of Response to EMS Incident, per Unit of Development

Land Use Type	Unit of Development	Annual EMS Incident Rate	Staff Vehicle Cost at \$1.59 per Incident, per Unit of Development	Staff Vehicle Life Cost per Unit of Development at 15-Year Life
Single-Family Residential	d.u.	0.2018895	\$0.3200	\$4.8005
Multi-Family Residential	d.u.	0.2769653	\$0.4390	\$6.5856
Hotel/Motel/Resort	sq. ft.	0.1255134	\$0.1990	\$2.9844
Medical Care Facility	sq. ft.	0.3375692	\$0.5351	\$8.0266
Office	sq. ft.	0.0000574	\$0.0001	\$0.0014
Medical/Dental Office	sq. ft.	0.0002790	\$0.0004	\$0.0066
Retail	sq. ft.	0.0002672	\$0.0004	\$0.0064
Leisure Facilities	sq. ft.	0.0001386	\$0.0002	\$0.0033
Restaurant/Lounge	sq. ft.	0.0005517	\$0.0009	\$0.0131
Industrial/Manufacturing	sq. ft.	0.0000123	\$0.0000	\$0.0003
Church/Non-Profit	sq. ft.	0.0000627	\$0.0001	\$0.0015
Education	sq. ft.	0.0091650	\$0.0145	\$0.2179
Special Public Facilities	sq. ft.	0.0000977	\$0.0002	\$0.0023

Exhibit 3-49 calculates the capital cost per unit of development for utility vehicles. The incident rate (from Exhibit 3-39) is multiplied by the utility vehicle capital cost per incident (\$2.02 from Exhibit 3-10). The result is then multiplied by the 15-year average useful life of a utility vehicle to calculate the capital cost per unit of development for utility vehicles.

Exhibit 3-49. Utility Vehicle Cost of Response to EMS Incident, per Unit of Development

Land Use Type	Unit of Development	Annual EMS Incident Rate	Utility Vehicle Cost at \$2.02 per Incident, per Unit of Development	Utility Vehicle Life Cost per Unit of Development at 15-Year Life
Single-Family Residential	d.u.	0.2018895	\$0.4087	\$6.1305
Multi-Family Residential	d.u.	0.2769653	\$0.5607	\$8.4102
Hotel/Motel/Resort	sq. ft.	0.1255134	\$0.2541	\$3.8113
Medical Care Facility	sq. ft.	0.3375692	\$0.6834	\$10.2504
Office	sq. ft.	0.0000574	\$0.0001	\$0.0017
Medical/Dental Office	sq. ft.	0.0002790	\$0.0006	\$0.0085
Retail	sq. ft.	0.0002672	\$0.0005	\$0.0081
Leisure Facilities	sq. ft.	0.0001386	\$0.0003	\$0.0042
Restaurant/Lounge	sq. ft.	0.0005517	\$0.0011	\$0.0168
Industrial/Manufacturing	sq. ft.	0.0000123	\$0.0000	\$0.0004
Church/Non-Profit	sq. ft.	0.0000627	\$0.0001	\$0.0019
Education	sq. ft.	0.0091650	\$0.0186	\$0.2783
Special Public Facilities	sq. ft.	0.0000977	\$0.0002	\$0.0030

Exhibit 3-50 calculates the capital cost per unit of development for small utility vehicles. The incident rate (from Exhibit 3-39) is multiplied by the small utility vehicle capital cost per incident (\$0.41 from Exhibit 3-10). The result is then multiplied by the 15-year average useful life of a small utility vehicle to calculate the capital cost per unit of development for small utility vehicles.

Exhibit 3-50. Small Utility Vehicle Cost of Response to EMS Incident, per Unit of Development

Land Use Type	Unit of Development	Annual EMS Incident Rate	Small Utility Vehicle Cost at \$0.41 per Incident, per Unit of Development	Small Utility Vehicle Life Cost per Unit of Development at 15-Year Life
Single-Family Residential	d.u.	0.2018895	\$0.0820	\$1.2306
Multi-Family Residential	d.u.	0.2769653	\$0.1125	\$1.6882
Hotel/Motel/Resort	sq. ft.	0.1255134	\$0.0510	\$0.7650
Medical Care Facility	sq. ft.	0.3375692	\$0.1372	\$2.0576
Office	sq. ft.	0.0000574	\$0.0000	\$0.0003
Medical/Dental Office	sq. ft.	0.0002790	\$0.0001	\$0.0017
Retail	sq. ft.	0.0002672	\$0.0001	\$0.0016
Leisure Facilities	sq. ft.	0.0001386	\$0.0001	\$0.0008
Restaurant/Lounge	sq. ft.	0.0005517	\$0.0002	\$0.0034
Industrial/Manufacturing	sq. ft.	0.0000123	\$0.0000	\$0.0001
Church/Non-Profit	sq. ft.	0.0000627	\$0.0000	\$0.0004
Education	sq. ft.	0.0091650	\$0.0037	\$0.0559
Special Public Facilities	sq. ft.	0.0000977	\$0.0000	\$0.0006

Exhibit 3-51 calculates the capital cost per unit of development for other apparatus/equipment. The incident rate (from Exhibit 3-39) is multiplied by the other apparatus/equipment capital cost per incident (\$0.48 from Exhibit 3-10). The result is then multiplied by the 15-year average useful life of other apparatus/equipment to calculate the capital cost per unit of development for other apparatus/equipment.

Exhibit 3-51. Other Apparatus/Equipment Cost of Response to EMS Incident, per Unit of Development

Land Use Type	Unit of Development	Annual EMS Incident Rate	Other Apparatus/Equip Cost at \$0.48 per Incident, per Unit of Development	Other Apparatus/Equip Life Cost per Unit of Development at 15-Year Life
Single-Family Residential	d.u.	0.2018895	\$0.0966	\$1.4489
Multi-Family Residential	d.u.	0.2769653	\$0.1325	\$1.9878
Hotel/Motel/Resort	sq. ft.	0.1255134	\$0.0601	\$0.9008
Medical Care Facility	sq. ft.	0.3375692	\$0.1615	\$2.4227
Office	sq. ft.	0.0000574	\$0.0000	\$0.0004
Medical/Dental Office	sq. ft.	0.0002790	\$0.0001	\$0.0020
Retail	sq. ft.	0.0002672	\$0.0001	\$0.0019
Leisure Facilities	sq. ft.	0.0001386	\$0.0001	\$0.0010
Restaurant/Lounge	sq. ft.	0.0005517	\$0.0003	\$0.0040
Industrial/Manufacturing	sq. ft.	0.0000123	\$0.0000	\$0.0001
Church/Non-Profit	sq. ft.	0.0000627	\$0.0000	\$0.0004
Education	sq. ft.	0.0091650	\$0.0044	\$0.0658
Special Public Facilities	sq. ft.	0.0000977	\$0.0000	\$0.0007

Exhibit 3-52 calculates the capital cost per unit of development for fire stations that house EMS apparatus. The EMS incident rate (from Exhibit 3-39) is multiplied by the fire station capital cost per fire/other and EMS incident (\$49.06 from Exhibit 3-12). The result is then multiplied by the 50-year useful life of a fire station to calculate the capital cost per unit of development for fire stations.

Exhibit 3-52. Fire Station Cost of Response to EMS Incident, per Unit of Development

Land Use Type	Unit of Development	Annual EMS Incident Rate	Fire Station Cost at \$49.06 per Incident, per Unit of Development	Fire Station Life Cost per Unit of Development at 50-Year Life
Single-Family Residential	d.u.	0.2018895	\$9.9045	\$495.22
Multi-Family Residential	d.u.	0.2769653	\$13.5876	\$679.38
Hotel/Motel/Resort	sq. ft.	0.1255134	\$6.1576	\$307.88
Medical Care Facility	sq. ft.	0.3375692	\$16.5608	\$828.04
Office	sq. ft.	0.0000574	\$0.0028	\$0.14
Medical/Dental Office	sq. ft.	0.0002790	\$0.0137	\$0.68
Retail	sq. ft.	0.0002672	\$0.0131	\$0.66
Leisure Facilities	sq. ft.	0.0001386	\$0.0068	\$0.34
Restaurant/Lounge	sq. ft.	0.0005517	\$0.0271	\$1.35
Industrial/Manufacturing	sq. ft.	0.0000123	\$0.0006	\$0.03
Church/Non-Profit	sq. ft.	0.0000627	\$0.0031	\$0.15
Education	sq. ft.	0.0091650	\$0.4496	\$22.48
Special Public Facilities	sq. ft.	0.0000977	\$0.0048	\$0.24

Exhibit 3-53 combines the capital costs of all types of apparatus and station (from Exhibit 3-40 through Exhibit 3-52) to show the total capital cost of responses to EMS incidents for one unit of single-family residential development.

Exhibit 3-53. Example of Calculation of Total Cost of Response to EMS Incidents for a Single-Family Residential Dwelling Unit

Cost Component	Cost
Engine	\$109.32
Ladder	\$37.34
Aid Unit	\$28.41
Hazardous Materials Vehicle	\$0.13
Brush Truck	\$0.00
Command Vehicle	\$4.75
Dive Apparatus	\$2.20
Service Vehicle	\$1.97
Staff Vehicle	\$4.80
Utility Vehicle	\$6.13
Small Utility Vehicle	\$1.23
Other Equipment/Apparatus	\$1.45
Fire Station	\$495.22
Total	\$692.96

This example is repeated for each land use to combine its capital costs of all types of apparatus and stations in Exhibit 3-54.

Exhibit 3-54. Total Capital Cost of Response to EMS Incidents, per Unit of Development

Land Use Type	Unit of Development	EMS Incidents: Life Cost per Unit of Development of All Apparatus & Stations
Single-Family Residential	d.u.	\$692.96
Multi-Family Residential	d.u.	\$950.65
Hotel/Motel/Resort	sq. ft.	\$430.81
Medical Care Facility	sq. ft.	\$1,158.67
Office	sq. ft.	\$0.20
Medical/Dental Office	sq. ft.	\$0.96
Retail	sq. ft.	\$0.92
Leisure Facilities	sq. ft.	\$0.48
Restaurant/Lounge	sq. ft.	\$1.89
Industrial/Manufacturing	sq. ft.	\$0.04
Church/Non-Profit	sq. ft.	\$0.22
Education	sq. ft.	\$31.46
Special Public Facilities	sq. ft.	\$0.34

3.4.12 Formula F-12: Total Cost per Unit of Development

The fire/other and EMS costs per unit of development are combined in Exhibit 3-55 to determine the total fire/other and EMS cost per dwelling unit or nonresidential square foot.

$$\text{Formula F-12:} \quad \text{Fire Incident Capital Cost Per Unit of Development} \times \text{EMS Incident Capital Cost Per Unit of Development} = \text{Total Cost of Response Per Unit of Development}$$

There are no new variables used in formula F-12. Both variables were developed in previous formulas and exhibits.

Exhibit 3-55. Total Cost of Response to All Incidents by Land Use Category

Land Use Type	Unit of Development	Fire/Other Incident Life Cost of All Apparatus & Station (Impact Cost of Fire/Other)	EMS Incident Life Cost of All Apparatus & Station (Impact Cost of EMS)	Total Cost of Response to EMS, Fire, & Other Incidents Per Unit of Development by Land Use Category
Single-Family Residential	d.u.	\$190.63	\$692.96	\$883.59
Multi-Family Residential	d.u.	\$260.87	\$950.65	\$1,211.52
Hotel/Motel/Resort	sq. ft.	\$294.21	\$430.81	\$725.02
Medical Care Facility	sq. ft.	\$895.02	\$1,158.67	\$2,053.69
Office	sq. ft.	\$0.10	\$0.20	\$0.29
Medical/Dental Office	sq. ft.	\$0.33	\$0.96	\$1.29
Retail	sq. ft.	\$0.47	\$0.92	\$1.39
Leisure Facilities	sq. ft.	\$0.42	\$0.48	\$0.89
Restaurant/Lounge	sq. ft.	\$1.13	\$1.89	\$3.03
Industrial/Manufacturing	sq. ft.	\$0.06	\$0.04	\$0.10
Church/Non-Profit	sq. ft.	\$0.28	\$0.22	\$0.50
Education	sq. ft.	\$27.57	\$31.46	\$59.03
Special Public Facilities	sq. ft.	\$0.34	\$0.34	\$0.68

3.5 CAPITAL PROJECTS ELIGIBLE FOR IMPACT FEES

As discussed in Section 3.2, the City is expected to grow during the period of 2023 to 2029. This growth, and the new development associated with it, will create increased demands for fire and emergency response services. This chapter first projects increased apparatus needs and the proportion of those needs that are related to expected growth within the City only. This is to identify the proportion of capital facility costs that can be funded with City fire impact fee revenues. Following the summarization of apparatus needs is a summarization of growth-related projects at stations needed to increase operational capacity for emergency response.

3.5.1 Projected Growth in the RRFA Service Area

Exhibit 3-56 presents estimated population in the RRFA in 2022 as well as net population growth projections for the years 2023 through 2029.²⁴ The total service area population is expected to grow by 7,057 residents, of which 6,053 are City residents. This is 86% of the total population growth forecasted for the RRFA service area.

Exhibit 3-56. RRFA Service Area Population and Projected Growth

Description	2022	Growth 2023-2029
City of Renton Population	107,900	6,053
KCFD 25 Population	7,947	87
KCFD 40 Population	22,148	917
Total Service Area Population	137,995	7,057
City of Renton Share of Population Growth		86%

3.5.2 2029 Incident Projections

The number of incidents in the service area is expected to grow with population. Exhibit 3-57 compares population estimates area to total emergency incidents for the years 2019 through 2022.²⁵ This study assumes that the average annual rate of growth in incidents per capita will continue. By 2029, the rate is assumed to be 0.1902.

²⁴ Source: City of Renton, Economic Development Division.

²⁵ Source: Renton RFA, 2019-2022 Annual Reports.

Exhibit 3-57. Total Incidents Per Capita, RRFA Service Area

Description	2019	2020	2021	2022
City of Renton Population	101,100	105,500	106,785	107,900
KCFD 25 Population	7,942	7,924	6,402	7,947
KCFD 40 Population	21,317	21,605	21,317	22,148
Total Service Area Population	130,359	135,029	134,504	137,995
Total Incidents	17,789	17,474	19,722	20,720
Total Incident per Capita	0.1365	0.1294	0.1466	0.1502

As shown in Exhibit 3-56, the City is projected to grow by 6,053 between 2023 and 2029. Exhibit 3-58 shows the projected number of annual incidents associated with this growth in population, using the projected incidents per capita rate for 2029.

Exhibit 3-58. Projection of Annual Incidents Associated with City of Renton Growth, 2029

Description	Value	Source
City of Renton Projected Population Growth, 2024-2029	6,053	RRFA Analysis of City of Renton Forecast
Incidents per Capita, 2029	0.1902	RRFA projection based on historic trend (2019-2022)
Annual Incidents Associated with City of Renton Population Growth	1,151	RRFA Calculation

3.5.3 Projected Growth-Related Apparatus Needs through 2029

In 2022, the RRFA operated with seven front-line engines, one front-line ladder and three front-line Aid Units. Exhibit 3-59 presents baseline responses per incident and average annual responses per front-line apparatus. Unlike the calculations in Chapter 3, these calculations combine both EMS and fire/other incidents to determine response rates per incident. This measure represents the total annual response capacity for each type of vehicle. For the purpose of projecting service demands in 2029, this analysis assumes the proportion of incidents by type (fire, EMS, etc.) will not change. This assumption is supported by analysis of incident data between 2019 and 2022.

Exhibit 3-59. Baseline Front-Line Apparatus Responses per Incident, 2022

Apparatus Type	Count of Front-Line Apparatus	Annual Responses	Annual Incidents	Response Rate per Incident	Annual Responses per Front-Line Apparatus
Engine	7	12,980		0.6264	1,854
Ladder	1	1,741		0.0840	1,741
Aid Unit	3	6,841		0.3302	2,280
Total			20,720		

Exhibit 3-60 calculates the number of additional apparatus needed to serve new growth projected in the City. First it calculated projected growth-related responses by apparatus type by multiplying the projected growth-related annual incidents from Exhibit 3-59 by the annual response rate per incident from Exhibit 3-60. Next, these growth-related responses are divided by the annual responses per front-line apparatus from Exhibit 3-60. It shows that RRFA will need 0.39 new engines, 0.06 new ladders and 0.17 new Aid Units to serve projected growth inside the City.

Exhibit 3-60. Projected Apparatus Need Associated with City of Renton Growth, 2024 - 2029

Apparatus Type	Annual Incidents Associated with Renton Population Growth, 2029	Response Rate per Incident	Projected Growth-Related Responses	Annual Responses per Front-Line Apparatus	Additional Front-Line Apparatus Needed to Serve Renton Growth, 2029
Engine		0.6264	721	1,854	0.39
Ladder		0.0840	97	1,741	0.06
Aid Unit		0.3302	380	2,280	0.17
Total	1,151				

Exhibit 3-61 shows the planned apparatus additions to fleet to address anticipated needs in the entire RRFA service area. It also calculates the percentage of these total planned additions to fleet that are associated with City growth-related needs. Exhibit 3-60 identifies the need for apparatus to respond to an additional 380 aid unit responses and 818 non-aid unit responses per year due to new growth. As discussed in the capital facilities plan, much of the growth in the RRFA service area will come in the form of infill development and increased density within the City. As the growth occurs, the RRFA intends to add additional apparatus units to address the anticipated increase in multi-story housing (ladder) and emergency medical calls for service (aid unit).

Exhibit 3-61. Impact Fee Eligible Costs Associated with Planned Additions to Fleet

Apparatus Type	Total Planned Additions to Fleet, 2024-2029	Additional Front-Line Apparatus Needed to Serve Renton Growth, 2029	Percentage Related to City of Renton Growth, 2024-2029	Unit Cost of Apparatus ²⁶	Impact Fee Eligible Costs	Cost of Future Reserve Capacity
Engine	0	0.00	86%	\$0	\$0	\$0
Ladder	1	0.44	86%	\$2,591,449	\$2,222,764	\$368,686
Aid Unit	1	0.17	86%	\$421,371	\$361,422	\$59,948

²⁶ Unit Cost of apparatus reflects estimated cost in 2025, the year of replacement.

3.5.4 System Improvement Costs Already Incurred

As discussed in Section 3.2, the RRFA has excess capacity at stations systemwide to accommodate increased emergency response staffing. Between 2024 and 2029, the RRFA intends to increase response operations staffing by 20% from 142 to 170 FTE systemwide. Exhibit 3-62 calculates the total station value associated the station capacity needed to accommodate this increase in response operations staffing, systemwide.

Exhibit 3-62. Value of Station Capacity Needed for Growth-Related Response Staffing Increases

Description	Value
A. Total station square feet in RRFA inventory (from Exhibit 3-4)	101,253.00
B. Total cost per building square foot (from Exhibit 3-11)	\$800.00
C. Total value of RRFA station inventory (A multiplied by B)	\$81,002,400.00
D. Baseline percentage of RRFA station capacity in use (from Exhibit 3-2)	63%
E. Value of station capacity in use (C multiplied by D)	\$50,825,035.29
F. Percent increase in response and EMS staffing, 2024-2029	20%
G. Value of increased in usage of station capacity (E multiplied by F)	\$10,021,837.95
H. Percentage of projected service area growth inside City of Renton (from Exhibit 3-56)	86%
I. Value of increased usage of station capacity needed to accommodate City of Renton growth (G multiplied by H)	\$8,596,030.19

Exhibit 3-63 shows the estimated debt service on RRFA capital facilities. The anticipated debt service for capital facilities does not exceed the total value of increased station capacity needed to accommodate response staffing needed to serve Renton growth (row I in Exhibit 3-62). Therefore, the entire amount of this debt service is impact fee eligible.²³

Exhibit 3-63. Impact Fee Eligible Costs Associated with System Improvements

Station Name	Address	Debt Service Payments 2024-2029
Fire Station 16/Maintenance		\$15,064,544

²⁷ Note that RCW 82.02.050(2) states that “...the financing for system improvements to serve new development ... cannot rely solely on impact fees.” Exhibit 3-66 identifies other revenue sources to be applied to comply with this requirement.

3.5.5 Summary of Impact Fee Eligible Project Costs

Exhibit 3-64 present RRFA's capital cost for apparatus during the six-year period of 2024-2029. It includes both replacements to existing apparatus as well as fleet expansions necessitated by new growth.

Exhibit 3-64. Capital Costs for Apparatus, 2024-2029

Project Description	Quantity	Average Unit Cost 2024-2029	Total Cost in Year of Replacement	Percentage Related to City of Renton Growth, 2024-2029	Impact Fee Eligible Costs (2029)
Apparatus Replacements					
Engine	3	\$1,103,258	\$3,826,688	0%	\$0
Ladder	1	\$2,591,449	\$2,591,449	0%	\$0
Aid Unit	2	\$421,371	\$842,741	0%	\$0
HazMat Vehicle	0	N/A	\$0	0%	\$0
Brush Truck	1	\$354,413	\$354,413	0%	\$0
Command Vehicle	4	\$123,442	\$493,769	0%	\$0
Dive Apparatus	0	N/A	\$0	0%	\$0
Service Vehicle	1	\$110,086	\$110,086	0%	\$0
Staff Vehicle	2	\$40,845	\$81,689	0%	\$0
Utility Vehicle	0	N/A	\$0	0%	\$0
Sm. Utility Vehicle	0	N/A	\$0	0%	\$0
Other Apparatus/Equipment	3	N/A	\$135,332	0%	\$0
Apparatus Fleet Expansions					
Aerial	1	\$2,591,449	\$2,591,449	86%	\$2,222,764
Aid Unit	1	\$421,371	\$421,371	86%	\$361,422
Apparatus Total			\$7,622,299		\$2,584,186

Exhibit 3-65 presents RRFA’s capital facility costs for stations during the six-year period of 2024-2029. It includes debt service payments, and renovations for operational needs as well as the proportion of that cost that is reasonably related to serving new growth in the City of Renton.

Exhibit 3-65. Capital Facility Costs for Stations, 2024-2029

Project Description	Total Cost (2024-2029)	Percentage Related to City of Renton Growth	Impact Fee Eligible Costs
Station Debt Servicing			
Fire Station 16/ Maintenance Debt Service Payments	\$15,064,544	18%	\$2,711,618
Station Renovations for Operational Needs			
Admin Headquarters Facility Improvements	\$0	0%	\$0
Fire Station 11 Facility Improvements	\$571,225	0%	\$0
Fire Station 12 Facility Improvements	\$883,022	0%	\$0
Fire Station 13 Facility Improvements	\$852,489	0%	\$0
Fleet Shop Facility Improvements	\$0	0%	\$0
Fire Station 14 Current Facility Improvements	\$320,319	0%	\$0
Tower Facility Improvements	\$0	0%	\$0
OFM Facility Improvements	\$0	0%	\$0
Fire Station 15 Facility Improvements	\$0	0%	\$0
Fire Station 16 Current Facility Improvements	\$190,542	0%	\$0
Fire Station 16 Future Facility Improvements	\$0	0%	\$0
Future Fleet Shop Facility Improvements	\$0	0%	\$0
Fire Station 17 Facility Improvements	\$1,069	0%	\$0
Total Station Costs	\$17,883,211		\$2,711,618

3.6 IMPACT FEE RATE ADJUSTMENTS

Exhibit 3-66 summarizes total impact fee eligible costs and accounts for revenues that RRFA plans to use for funding a portion of impact fee eligible costs. The remaining impact fee eligible costs are \$5,074,209, or 96 percent of total impact fee eligible costs.

Exhibit 3-66. Impact Fee Eligible Costs Compared to Projected Impact Fee Revenues, 2024-2029

Description	Estimated Cost/Revenue
Total Impact Fee Eligible Costs (Apparatus + Stations)	\$5,295,804
Payments from Other Revenue Sources	\$221,594
Remaining Impact Fee Eligible Costs	\$5,074,209
Percentage of Impact Fee Eligible Costs to be Funded with Impact Fee Revenues	96%
Projected Impact Fee Revenues Assuming Renton Adopts Total Cost Per Unit of Development ²⁸	\$10,573,763
Projected Revenues in Excess of Remaining Impact Fee Eligible Costs	\$5,499,553
Impact Fee Eligible Costs as a Percentage of Maximum Projected Revenues	48%

Also shown in Exhibit 3-62 are projected impact fee revenues, assuming the city implements an impact fee schedule equal to the full capital costs per unit of development shown in Exhibit 3-55.²⁹ Remaining impact fee eligible costs amount to about 48 percent of these projected revenues. Therefore, to avoid collecting more impact fee revenue than impact fee eligible capital costs, the full capital costs per unit of development are multiplied by 48 percent to determine the fire impact fee rate.

²⁸ Assumes City of Renton implements an impact fee schedule equal to the full capital costs per unit of development shown in Exhibit 3-55.

²⁹ Projected impact fee revenues are based on projections provided by the City of Renton and contained within the "Current Key Development (May 2023)" as shown in Appendix A.

Exhibit 3-67. 2022 RRFA Fire Impact Fee Rate Schedule

Land Use	Unit	Total Cost of Response Per Unit of Development	Percentage Needed for Eligible Costs	Fire Impact Fee
Single-Family Residential	d.u.	\$883.59	48%	\$424.02
Multi-Family Residential	d.u.	\$1,211.52	48%	\$581.39
Hotel/Motel/Resort	room	\$725.02	48%	\$347.93
Medical Care Facility	d.u.	\$2,053.69	48%	\$985.54
Office	sq. ft.	\$0.29	48%	\$0.14
Medical/Dental Office	sq. ft.	\$1.29	48%	\$0.62
Retail	sq. ft.	\$1.39	48%	\$0.67
Leisure Facilities	sq. ft.	\$0.89	48%	\$0.43
Restaurant/Lounge	sq. ft.	\$3.03	48%	\$1.45
Industrial/Manufacturing	sq. ft.	\$0.10	48%	\$0.05
Church/Non-Profit	sq. ft.	\$0.50	48%	\$0.24
Education	students	\$59.03	48%	\$28.33
Special Public Facilities	sq. ft.	\$0.68	48%	\$0.32

RCW 82.02.050(2) requires that “...the financing for system improvements to serve new development ... cannot rely solely on impact fees.” As shown in Exhibit 3-67, the remaining impact fee eligible costs used as the basis for the impact fee calculation amount to just 48 percent of total impact fee eligible costs.

Therefore, the rates in Exhibit 3-67, which are based on only 48 percent of total impact fee eligible costs, comply with RCW82.02.050(2).

Appendix A: Current Key Development Map

