

CAPITAL FACILITY PLAN



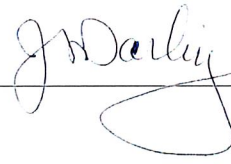
Prepared for
CENTRAL PIERCE FIRE & RESCUE
January 2020
Project No. 1835.01.01

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CAPITAL FACILITY PLAN
CENTRAL PIERCE FIRE & RESCUE

*The material and data in this plan were prepared
under the supervision and direction of the undersigned.*

MAUL FOSTER & ALONGI, INC.

A handwritten signature in blue ink, appearing to read "Jim Darling". The signature is written in a cursive style and is positioned above a horizontal line.

*Jim Darling
Principal*

A handwritten signature in blue ink, appearing to read "Matt Hoffman". The signature is written in a cursive style and is positioned above a horizontal line.

*Matt Hoffman
Senior Planner*

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ACRONYMS AND ABBREVIATIONS

ALS	Advanced Life Support
BLS	Basic Life Support
CPFR	Central Pierce Fire & Rescue
DEIS	Draft Environmental Impact Statement
EIS	Environmental Impact Statement
EMS	Emergency Medical Services
EMT	Emergency Medical Technician
ERF	Equipment Replacement Fund
FBC	Fire Benefit Charge
GEMT	Ground Emergency Medical Transportation
GMA	Growth Management Act
GO	General Obligation
LID	Local Improvement District
OFM	Washington State Office of Financial Management
Plan	Capital Facility Plan
PSRC	Puget Sound Regional Council
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act
SqFt	Square Feet
WAC	Washington Administrative Code

EXECUTIVE SUMMARY

This Capital Facility Plan (Plan) is a planning document covering a 20-year period, with the primary financial focus on the initial six-year period from 2020 to 2026. This Plan is designed to fulfill the Washington State Growth Management Act Capital Facilities requirement as identified in Revised Code of Washington 36.70A.070.

Central Pierce Fire & Rescue (CPFR) is a multiservice organization with services and programs tailored to meet the needs of communities in the county, including fire suppression, emergency medical services (EMS), technical rescue, hazardous material mitigation, and public information and education. The CPFR service area totals 84 square miles and encompasses the City of Puyallup and portions of unincorporated Pierce County. This Plan builds on CPFR's 2018 Strategic Plan, which crafted a mission and vision for the organization and outlined key goals. CPFR's mission statement is to "effectively respond, continuously improve, compassionately serve."

CPFR contends that growth will affect service levels and existing capital facilities will be impacted by the increased call volume, resulting in quicker degradation of services. Not all elements of capital facilities needed to support new growth should be borne by new development, as those already living and working in the service area benefit from CPFR. This Plan will expand on how CPFR will allocate capital facility costs to growth.

Current Conditions

The population of the service area has steadily increased, with an estimated 27,200 people moving into the area between 2010 and 2019. This represents a 1.4 percent average annual increase during the ten-year period. For comparison, Washington State's population grew at a rate of 1.3 percent per year during that same period. In 2019, of the approximately 225,450 residents in the service area, 183,880—or 82 percent—lived in unincorporated Pierce County. The remainder of the population resides in the City of Puyallup.

According to Washington State Office of Financial Management (OFM) estimates, there are about 85,950 housing units in the service area. Sixty-two thousand single-family housing units account for nearly 60 percent of the land in the service area, whereas roughly 22,500 multifamily units occupy only four percent of the service area land area. Nearly 8,000 housing units have been added to the area since 2010 and approximately 30 percent of those units were multifamily developments consisting of three or more units.

In 2018, CPFR responded to 29,481 incidents. On average about 50 percent of incidents were at single-family residences. Multifamily developments and retirement homes combined (Health Care, Detention) comprise an additional 24 percent of calls. The other major driver of incident numbers is the number of occurrences outside in public settings such as streets and parks. Calls to these areas account for 15 percent of all calls. Taken together, these land uses, which are driven directly by population growth, account for 87 percent of all high-risk incidents.

CPFR is meeting or is near the target response time objectives for fire-suppression incidents; however, the actual times for emergency medical incidents are slower than the response time objective. In response to these metrics, CPFR will conduct an EMS Systems study in 2020 to provide a thorough review of all portions of CPFR's EMS system and provide strategic recommendations as to how it can best meet the current and future goals. Growth will impact service levels for CPFR, and existing capital facilities will be impacted by the increased call volume, resulting in quicker degradation of services.

Resource Inventory

CPFR employs 274 uniformed personnel, all of whom are trained as firefighters. Of these, 195 are certified as emergency medical technicians (EMTs) and 79 are paramedics. These highly trained individuals must continually educate themselves in the techniques, dangers, and advancing technologies within the scope of the services they provide.

CPFR currently has 11 staffed fire stations strategically located throughout the district. Each station is staffed 24 hours a day with professional firefighter/EMTs and paramedics. Emergency response apparatus include 16 total engines, three ladders, two battalion chiefs, 12 medic units, and two low acuity aid units. In addition to these frontline response apparatuses, CPFR has a fleet of staff, support and special operations vehicle and equipment detailed in the Plan.

In order to maintain the serviceability of its equipment, CPFR has an equipment replacement plan that is updated annually to plan for the equipment replacement fund (ERF). The cost of replacing these vehicles and equipment over the next six years is anticipated to be \$35.2 million.

Land Use Projections and Analysis

The population in CPFR's service area is expected to grow by about 30,700 by 2040. However, the rate of population growth since 2010 has exceeded the Puget Sound Regional Council's (PSRC) projections. If this historic growth rate continues, then the service area could grow by as many as 59,700 people by 2040. The CPFR service area is also projected to experience significant job growth based on PSRC projections from 2017. It is anticipated that between 2014 and 2040, over 26,500 new jobs will have been added to the local economy. This represents a 30 percent increase.

Pierce County is currently considering zoning changes that could increase population and jobs in the CPFR service area above and beyond the growth anticipated by the PSRC projections. Based on the county's analysis of alternatives, the proposed zoning changes could add as many as 3,425 households to the CPFR service area beyond current estimates.

The Plan modeled the impact of new housing units and business growth on the demand for fire, emergency response and rescue service to determine the additional capital facilities needed as a result of growth. Over the six-year planning period, one suppression unit, one medical unit, and 8,400 square feet of new station will be needed to service growth, at a cost of \$12.7 million. The proposed rezones are anticipated to have little impact over the initial six years but will increase the long-term capital facility's needs.

Capital Facility Plan

The Plan identifies CPFR's capital facility needs over the initial six-year period from 2020 through 2025. The \$35.2 million in capital facilities needed to maintain the current level of service is combined with the \$12.7 million needed to support new growth, for a total capital facility need of \$48.0 million over six years. About 80 percent of this total, or \$38.4 million, is the result of a new station need to maintain existing level of service and accommodate increased demand as a result of growth for 2025.

CPFR anticipates using three main sources to fund these capital needs over the six-year planning period. The first source is the ERF. These revenues include levy funds, fire benefit charges, transport fees, ground emergency medical transport fees, and grants. Currently the ERF is funded at an average of \$2 million per year, with an expected annual average of roughly \$4 million over the next 20 years. This source of funds will support capital investments anticipated between 2020 and 2023.

The second source for the Plan is general obligation (GO) bonds. CPFR intends to put a GO bond on the ballot in 2024 for an estimated \$80.7 million that will project out ten years of capital facility expense for major capital facility costs. This source will support capital investments in 2024 through the end of this Plan's six-year time horizon to 2034. Current bond payoff estimates indicate that CPFR will have 88 percent of its bonding capacity available, or \$206 million, available to it in 2024. Should the voters approve a 10-year GO Bond for \$80.7 million CPFR would still have approximately 54 percent of its bonding capacity remaining. It is CPFR's policy to maintain at least 50 percent of its bonding capacity.

Finally, based on the projected capital facility needs, CPFR requires additional revenue beyond projected and planned GO bond and other existing revenue sources to fund capital improvements necessitated by new growth just to maintain existing levels of service over the planning period. However, pursuant to this plan, new development would bear only a portion of the capital costs of maintaining levels of service. Not all elements of capital facilities needed to support new growth would be borne by the new development, as those already living and working in the service area benefit from CPFR services.

CPFR urges Pierce County to adopt fire impact fee ordinances, as it has for schools, parks and traffic so that the impact of new growth and development can be proportionately assigned to developments causing demand for services. Based on projected single-family, multifamily, and commercial development in the service area, impact fees at an estimated \$3.2 million would support station and apparatus investments proportional to the estimated growth-caused increased incident volume over the next six years. This equals 6.8 percent of the total estimated capital facility costs during the six-year planning period.

Over the past 12 months, CPFR has been an active stakeholder during the County's rezoning process. This includes regular attendance at county planning commission meetings, direct meetings with the County Fire Marshall, briefings with the building industry and realtors, and direct written comments to the County during the draft environmental impact statement comment period.

1 INTRODUCTION

This Capital Facility Plan (Plan) is a planning document covering a 20-year period, with the primary financial focus on the initial six-year period from 2020 through 2025. This Plan is designed to fulfill the Washington State Growth Management Act (GMA) Capital Facilities requirement as identified in Revised Code of Washington (RCW) 36.70A.070, which defines a capital facility plan as:

- (a) An inventory of existing capital facilities owned by public entities, showing the locations and capacities of the capital facilities;
- (b) A forecast of the future needs for such capital facilities;
- (c) The proposed locations and capacities of expanded or new capital facilities;
- (d) At least a six-year plan that will finance such capital facilities within project funding capacities that clearly identifies sources of public money for such purposes; and
- (e) A requirement to reassess the land use element if probable funding falls short of meeting existing needs and to ensure that the land use element, capital facilities plan element, and financing plan with the capital facilities plan element are coordinated and consistent.

The GMA requires that the Plan identify the location and cost of the facilities and the sources of revenue that will be used to fund the facilities needed to support development that is expected to occur during the next six years. The Plan must be financially feasible; in other words, dependable revenue sources must equal or exceed anticipated costs.

CPFR operates as an integrated system. As an integrated system, CPFR's service area operates as one system; its stations may respond to incidents in county-designated rural and urban areas based on which station can respond the quickest based on then existing real time operational demands. Because stations may respond to incidents along an urban corridor or center as well as in rural areas, this plan utilizes urban levels of service standards.

This Plan provides an overview of the existing facilities and equipment for Central Pierce Fire & Rescue (CPFR). It also estimates the needs of CPFR over the next 20 years and provides a six-year plan to finance near-term future capital improvements from 2020 to 2026. CPFR defines capital assets per Policy 339, Property Management as:

- Land;
- Buildings or permanent structures with a cost/value of \$100,000 or more;
- Equipment and furnishings totaling \$5,000 or more;
- Improvements to buildings totaling \$100,000 or \$5,000 in equipment improvements that add value by lengthening useful life or increase the asset's ability to provide service;
- Permanent improvements to land such as fences, parking lots, or retaining walls totaling \$5,000 or more, and

- Intangible items such as computer software totaling \$5,000 or more.

For purposes of this Plan, capital improvements are defined as real estate, structures, or collective equipment purchases anticipated to cost over \$20,000 and having an expected useful life of at least five years. This Plan’s definition of capital improvements is set at higher a monetary cost than CPFR property management Policy 339 so that only significant capital improvements needs are included to maintain existing level of service.

1.1 CPFR Overview

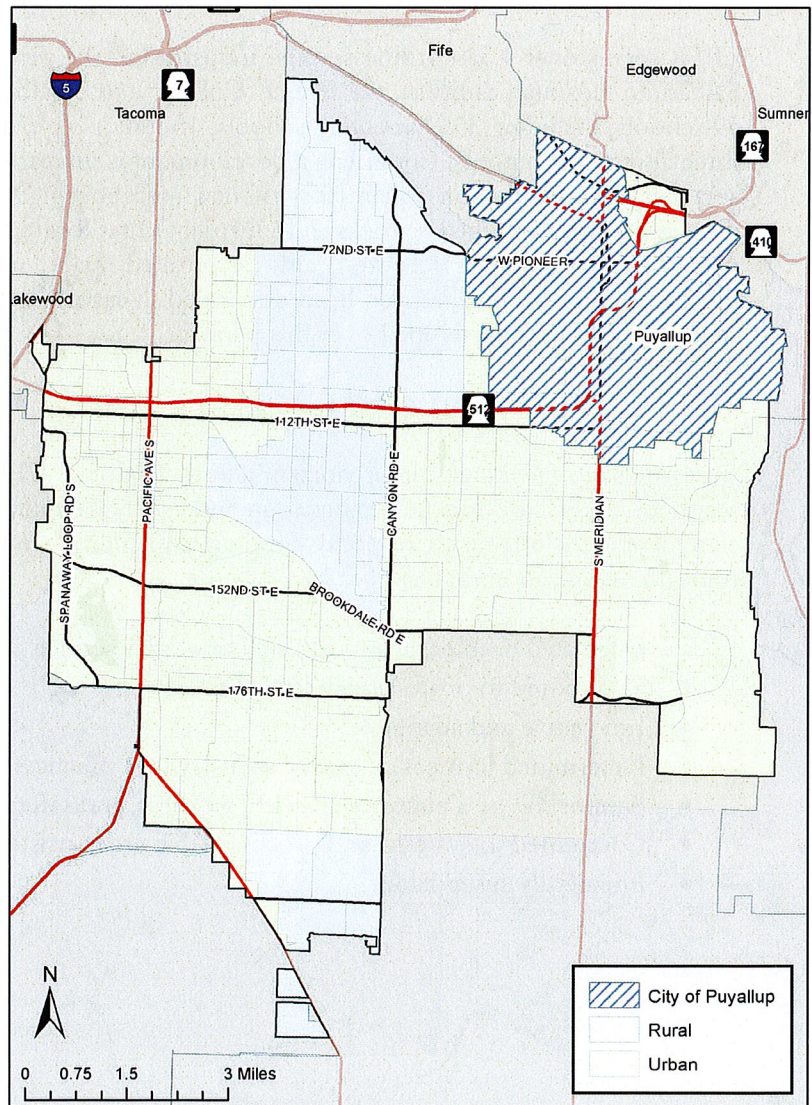
CPFR is a multiservice organization with services and programs tailored to meet the needs of the communities, including:

- Fire suppression;
- EMS;
- Technical rescue;
- Hazardous materials mitigation; and
- Public information and education.

CPFR operates as a legally organized fire protection district under RCW Title 52 and is governed by a five-member Board of Fire Commissioners. The service area was once served by six individual fire departments, five fire districts, and the City of Puyallup Fire Department. In 1996 the fire commissioners realized that by consolidating these departments they would eliminate duplication and provide the communities with more efficient emergency services. The City of Puyallup Fire Department joined CPFR in 2009.

CPFR’s service area is in central Pierce County. Figure 1 shows that the service area encompasses the City of Puyallup and portions of unincorporated Pierce County. The service area is bifurcated by State Route 512 (SR 512), a four-lane state-maintained freeway, and

Figure 1: CPFR Service Area



includes three principal north/south arterial corridors: Pacific Avenue South (SR 7), Canyon Road East, and South Meridian (SR 161). The cities of Tacoma, Lakewood, Edgewood, and Sumner, as well as Joint Base Lewis-McChord, border the service area.

The service area covers approximately 84 square miles with a total population of approximately 225,450 people (Washington State Office of Financial Management [OFM], 2019). This equates to a population density of approximately 2,680 people per square mile in the service area.

About 65 square miles, or 77 percent, of the CPFR service area is designated “urban” by Pierce County, with 19 square miles or 23 percent designated as “rural” (Pierce County, 2019c). In 2014, approximately 86 percent of the CPFR service area population lived in urban areas and 14 percent lived in rural areas (Puget Sound Regional Council [PSRC], 2017). The population density in the urban areas is 2,620 people per square mile, with 1,400 people per square mile in the rural areas (PSRC, 2017). The county’s rural and urban area designations are depicted on Figure 1.

CPFR serves over 4,500 businesses and industries in the service area and is also home to the Good Samaritan hospital campus; the Pierce College and Pacific Lutheran University campuses; and 59 schools, including 33 elementary schools, 15 junior high/middle schools, eight high schools, and three alternative schools. Commercial development is increasing. Over the past five years, the service area has had 2.2 million square feet of new warehousing, distribution, and manufacturing space developed, mainly in the Fredrickson Industrial Center located south of 176th Street SE. Additionally, nearly 1 million square feet of health-care-related space, which includes approximately 675 new retirement home units, has also been developed. Nearly 500,000 square feet of new retail and office space has also been developed over this period.

1.2 CPFR Mission and Goals

In response to the increasing urbanization in the district, CPFR approved a strategic plan that crafted a mission and vision for the organization and established key goals (CPFR, 2018b). CPFR’s mission statement is to “effectively respond, continuously improve, compassionately serve.” CPFR’s vision is to be an organization that is:

- Dedicated to internal and external customer service
- Committed to professional development
- Innovative and adaptable
- Determined to meet or exceed industry best practices
- Supporting of a culture of health, wellness, and safety
- Committed to systems and processes that are consistent and that provide accountability
- Financially sustainable

2 LEVEL-OF-SERVICE OBJECTIVE

The Washington State Fire Departments-Performance Measures (RCW 52.33) encourages and establishes policies for fire protection districts to set performance measures for response time objectives.

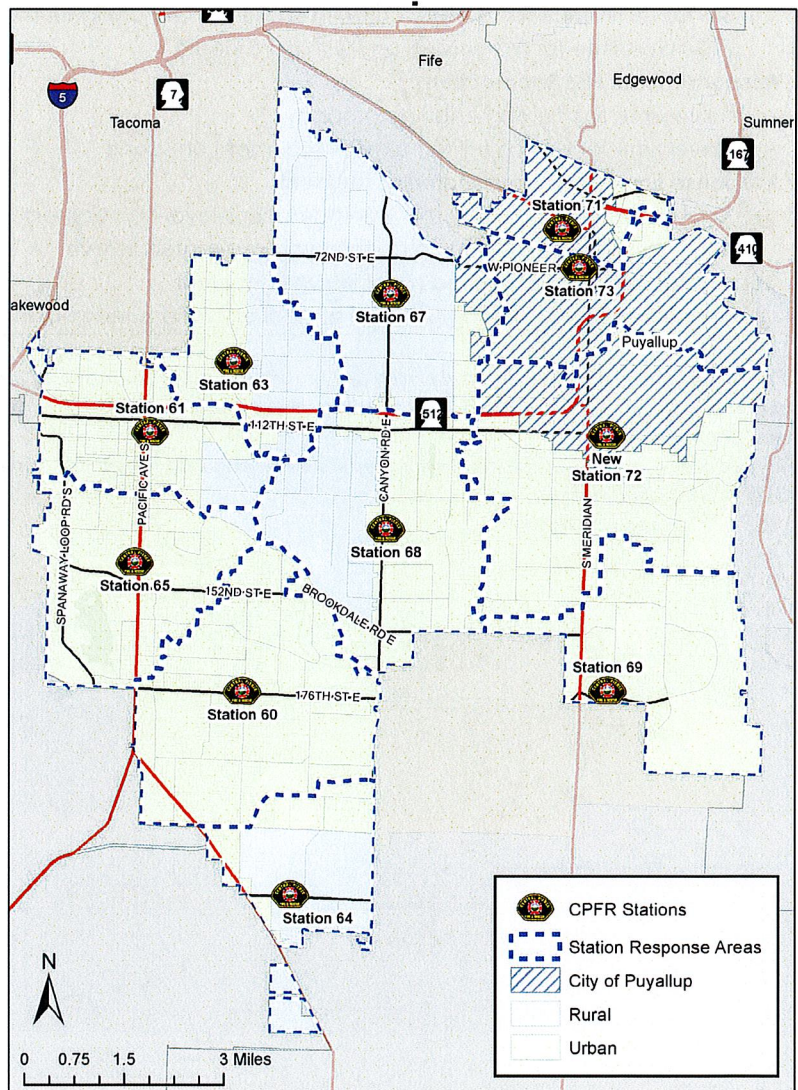
The arrival of first responders with automatic external defibrillator capability before the onset of brain death, and the arrival of adequate fire-suppression resources before flash-over are critical events in mitigation of an emergency and are in the public's best interest. Therefore, fire districts must address the reporting and accountability of these performance measures.

Medical Emergencies / Cardiac arrest: According to the American Heart Association, irreversible brain death begins within four to six minutes after cardiac arrest.

Fire Suppression / Flashover: The national average time for a fire to generate enough heat to ignite the contents of a room and cause flashover is eight minutes *or less* (UL Firefighter Safety Research Institute, 2005). When a flashover occurs, the fire rapidly spreads into adjoining rooms, possibly causing a dramatic increase in occupant injury and/or death. In addition, the property dollar-loss may increase because of the greater fire spread.

Per RCW 52.33, CPFR established response time objectives that the Commission has adopted as

Figure 2: CPFR Station Response Areas



goals (CPFR, 2018a). Table 1 below shows the current adopted response time objectives by incident type.

Figure 2 shows the CPFR stations and corresponding station response areas overlain on the urban and rural areas of the service area. This figure and the data in Section 3 illustrate why CPFR’s response time objectives shown in Table 1 have been established to meet more stringent urban standard response times. As described in the introduction of this Plan, CPFR operates as an integrated system. Because stations may respond to incidents along an urban corridor or center as well as in rural areas, this plan utilizes urban levels of service standards.

Table 1: Response Time Objectives by Major Service Component

Incident Type	Response Time Objective
Turnout time: Priority response for all calls	2:00
Response time: Emergency Medical Incident, priority response	
BLS travel time for first arriving unit with first responder or higher medical training	7:15
ALS travel time for first arriving unit with paramedic	6:00
Response time: Fire Suppression	
Travel time first arriving engine company	6:35
Travel time for having full first alarm assignment on scene	16:00
Response time: Hazardous Materials Incident	
Travel time for first arriving unit with operations-level-trained person or higher	9:00
Travel time for first arriving unit with hazardous-materials level "A" technician	20:00
Response time: Special Rescue (Special Ops) Incident	
Travel time for first arriving unit with special operations technician	10:30

Data Source: CFPR, 2019.

Full First Alarm Assignment: The total number and type of response units and personnel assigned to mitigate an emergency. The number and type of units is determined by the probable size and complexity of occurrence and a task analysis of the resources needed to mitigate the emergency.

Turnout time: From the unit’s receipt of notification of the emergency until the unit departs the station.

BLS = Basic Life Support.

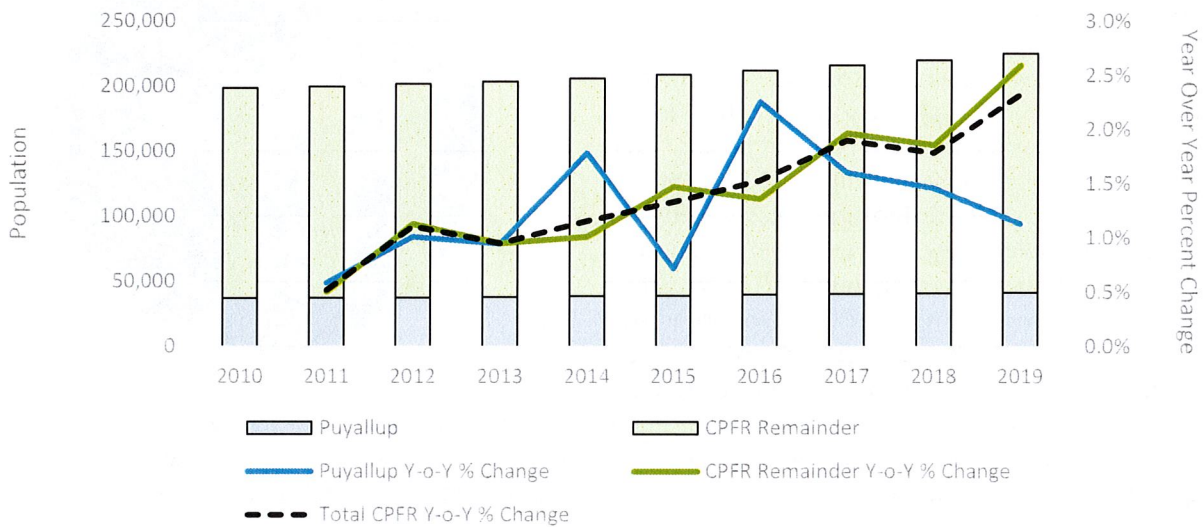
ALS = Advanced Life Support.

3 CURRENT CONDITIONS

3.1 Population

CPFR’s service area was home to approximately 225,450 residents as of 2019 (OFM, 2019). The population of the service area has steadily increased, with an estimated 27,200 people moving into the area between 2010 and 2019. This represents a 1.4 percent average annual increase during the ten-year period. As shown in Figure 3, the year-over-year population growth rate of change has steadily increased, reaching its highest annual rate of 2.3 percent in 2019. This figure also shows that most of the population in the CPFR service area resides in unincorporated Pierce County. In 2019, of the approximately 225,450 residents in the service area, 183,880, or 82 percent, lived in unincorporated Pierce County. The remainder of the population resides in the City of Puyallup.

Figure 3: CPFR Service Area Population Trends



Data Source: OFM, 2019.

Unincorporated Pierce County continues to outpace growth in the incorporated areas of the county. Between 2010 and 2019, unincorporated Pierce County grew by approximately 42,000 people, or 1.4 percent per year, while the incorporated areas grew by approximately 35,000 people, or 1 percent per year. For comparison, Washington State’s population grew at a rate of 1.3 percent per year during that same period (OFM, 2019).

According to OFM estimates, there are about 85,950 housing units in the service area (OFM, 2019). This closely correlates with the estimated 84,500 residential housing units found in the Pierce County Assessor’s 2019 database. The Pierce County Assessor’s figure is used in this Plan because it allows this analysis to evaluate trends in the service area more precisely. Land occupied by the approximately 62,000 single-family housing units accounts for nearly 60 percent of the land in the service area, whereas the roughly 22,500 multifamily units occupy only four percent of the service area land area.

Nearly 8,000 housing units have been added to the area since 2010, and approximately 30 percent of those units were multifamily developments consisting of three or more units (Pierce County Assessor, 2019).

3.2 Incident Volume and Response Times

In 2018, CPFR responded to 29,481 incidents with the highest volume of response incidents occurring between 8:00 a.m. and 10:00 p.m. Station area 61 had the highest number of incidents in 2018—over 4,000 incidents in all. Stations 65, 66, and 73 had the next-highest number of incidents, each having between 3,200 and 3,300 incidents in 2018. Heat maps illustrating the density of emergency medical services (EMS) and fire/other incidents that occurred in 2018 within the service area are included in Appendix A.

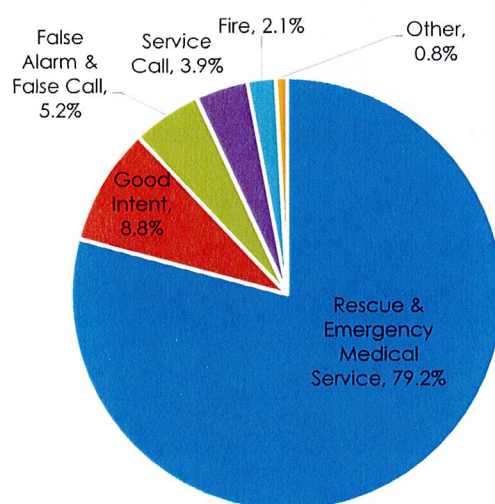
As shown in Figure 4, 79 percent of incidents in 2018 were a result of rescue and EMS needs. There were 616 fire response incidents, representing about 2 percent of all responses.

CPFR uses two main metrics to assess their response time for each station. The first is the turnout time, or the time interval that begins when the emergency response facilities and emergency response unit’s notification process begins by either an audible alarm or a visual annunciation or both, and ends at the beginning of travel time.¹ The target turnout time for each response is two minutes for all high-risk incidents, or incidents where expedient emergency response reduces damage to the environment, property loss, human suffering, disability, and mortality. A full list of high-risk incidents can be found in Appendix B. In 2018, the actual turnout time for all stations was quicker than the two-minute objective. The average turnout time for all calls in 2018 was one minute and 58 seconds.²

The second metric is the response time. The response time begins when the unit is en route to the emergency incident and ends when the unit arrives on the scene. CPFR has identified target response time based on the type of incident.

Table 2 shows the response time reporting for high-risk incidents in 2018. CPFR is at or near target objectives for fire-suppression incidents; however, the actual response times for emergency medical incidents are slower than the response time objective. In response to these metrics, CPFR will conduct an EMS Systems study in 2020 to provide a thorough review of all portions of CPFR’s EMS system and provide strategic recommendations as to how it can best meet the current and future goals.

Figure 4: 2018 Incidents by Type



¹ NFPA 1710 3.3.64.8.

² Actual turnout times reflect the 90th percentile of responses.

Table 2: 2018 Response Time Reporting by Incident Type (High-Risk Incidents)

Incident Type	Number of Incidents	Response Time Objective	Actual Response Time*
Fire-Suppression Incident			
First arriving engine company	35	6:35	7:13
Full first alarm assignment on scene	32	16:00	10:28
Emergency Medical Incident			
BLS: first arriving unit with first responder or higher medical training	3,207	7:15	9:06
ALS: first arriving unit with paramedic	6,188	6:00	10:38
Special Rescue Incident			
First arriving unit with special operations technician	1	10:30	11:19

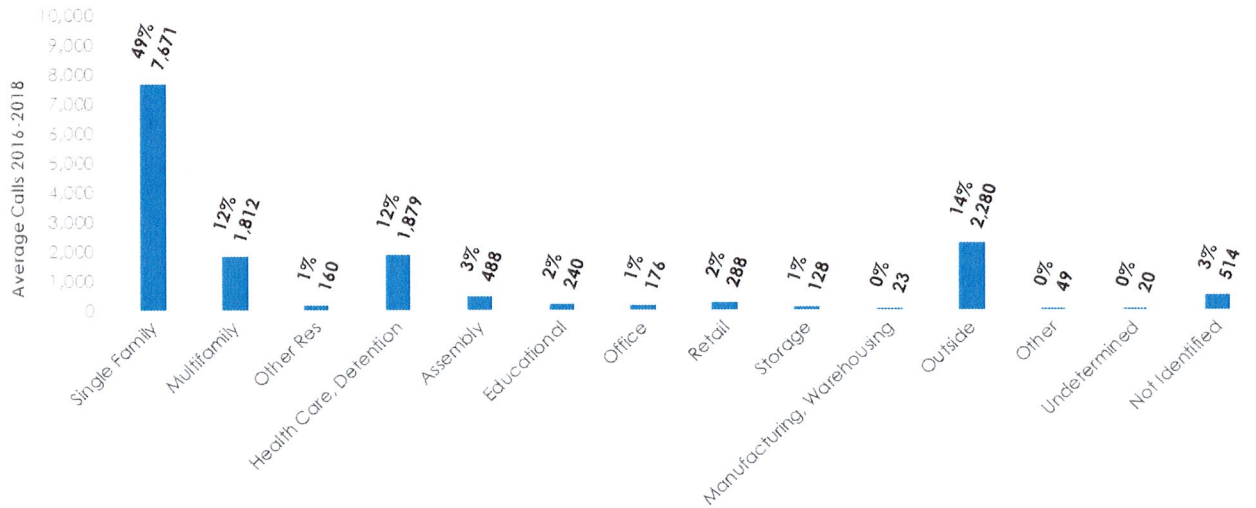
*Actual response times reflect the 90th percentile of responses.
Times highlighted in red exceeded the established performance objectives.

3.3 Incidents by Land Use Category

Another perspective on how CPFR responds to incidents is where incidents occur. Figure 5 illustrates the distribution of high-risk incidents over the three years from 2016 through 2018. This chart shows:

- On average about 50 percent of incidents were at single-family residences.
- Multifamily development and retirement homes combined (Health Care, Detention) comprise an additional 24 percent of calls.
- The other major driver of incident numbers is the number of occurrences outside in public settings such as streets and parks. Calls to these areas account for 15 percent of all calls.
- Taken together, these land uses, which are driven directly by population growth, account for 87 percent of all high-risk incidents.

Figure 5: 2016-2018 Distribution and Average Annual Count of High-Risk Incidents by Land Use Category



3.4 Revenue Sources

The law allows fire districts a range of potential funding sources for new capital facilities. The following section summarizes sources that are likely to support this Plan, as well as sources that are authorized but not currently used. Figure 6 shows the 2019 budget revenue for CPFRR by current funding source.

3.4.1 Current Funding Sources

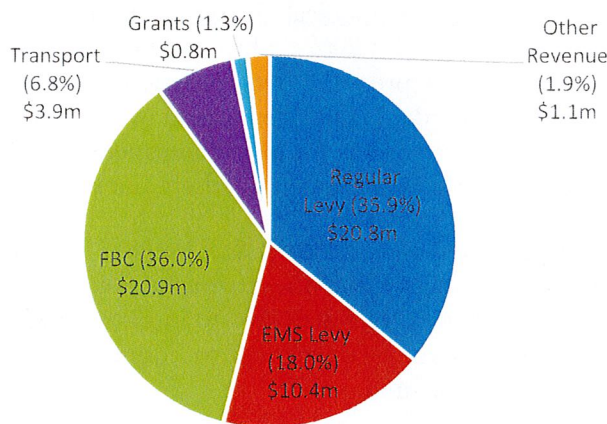
Levies—Property taxes are the primary source of revenue for CPFR. CPFR collects at a tax rate of \$1.00 per \$1,000 of assessed value for fire levies and an additional maximum tax rate of \$0.50 per \$1,000 of assessed value for EMS levies.

Washington State law limits the increase in property taxes by individual taxing districts to 1 percent per year, plus tax revenue generated by new construction (RCW 84.55). Voter approval is required to exceed the 1 percent annual increase.

CPFR’s 2019 budgeted revenues from levies are \$31 million. The projected revenue from levies is estimated to be \$38 million in 2020 and is anticipated to increase steadily to \$48 million by the end of 2025 or at a compounded annual growth rate of 4.3 percent.

CPFR’s property tax forecast assumes a lid lift (regular) in 2025 and a lid lift (EMS) in 2022, as well as revenue from new construction, based on the historical pace of development.

Figure 6: 2019 Budget Revenue



Fire Benefit Charges—Fire benefit charges (FBCs) for fire districts are authorized by RCW 52.18, with voter approval needed every six years. The next renewal vote for CPFR is in Spring 2022. It is a charge reasonably proportioned to the benefit received by a residential or commercial property from the provision of fire service. It can be used in lieu of the fifty-cent Ad Valorem tax authorized by RCW 52.16.160 (often called the “third fifty-cents”). The aggregate amount of the FBCs in any one year cannot exceed an amount equal to 60 percent of the operating budget for the year in which the benefit charge is to be collected. CPFR has traditionally been in the 33 to 35 percent range of total operating budget using the FBC.

CPFR’s 2019 budgeted revenues from FBCs are estimated to be \$20.9 million. The projected total revenues are estimated to be \$22.6 million in 2020 and are anticipated to increase steadily to \$26.2 million by the end of 2025.

CPFR Transport fees—CPFR transports over 12,000 patients to area hospitals annually. Patients and their insurance companies are billed for this service, based on severity. These fees are returned to the general fund as revenue.

CPFR’s 2019 budgeted revenues from transport fees are estimated to be \$3.9 million. The projected total revenues for 2020 are estimated at \$4 million and are anticipated to increase steadily to \$4.2 million by the end of 2025.

Grants—Grants are dependent on availability of federal and state funding sources, such as funding from the Federal Emergency Management Agency. Because of the uncertainty associated with grant

applications, only a small portion of the financing plan relies on grants as a source of funding. CPFR has been successful through the years in securing federal funding, both for special projects and to hire firefighters. CPFR will continue to apply for special need/equipment grants on an annual basis.

CPFR utilized approximately \$780,000 in grant funds in 2019 and is expected to have \$315,000 in grant funding in 2020.

Ground Emergency Medical Transportation—During the 2015 session, the Washington State Legislature passed HB2007, which authorized the Ground Emergency Medical Transportation (GEMT) payment program. This program provides supplemental cost-based payments to eligible providers that render GEMT services to Medicaid enrollees. CPFR receives federal funds to increase the payment per transport for Medicaid patients. While this will be an annual revenue, the amount will vary based on Medicaid patient numbers and reimbursable amounts set by the federal government.

GEMT generated approximately \$15.2 million in revenue in 2019. A large portion of revenue in 2019 consists of retroactive one-time payments. Revenues from GEMT payments are projected to be \$5.7 million in 2020 and are anticipated to increase to \$6.8 million by the end of 2025. A large portion of this funding source is earmarked to address service-level gaps in 2020 and 2021 and fund new apparatuses and stations.

General Obligation Bond—Per RCW 52.16.80, fire protection districts may incur general indebtedness for capital purposes and to issue general obligation (GO) bonds. This debt may be used for the purchase of capital facilities, provided that the district indebtedness does not exceed three-fourths of one percent of the taxable value of all property in the district. CPFR's last successful bond campaign, for \$39.8 million, was in 2013. For 2020, CPFR projects \$173 million in bonding capacity.

Current bond payoff estimates indicate that CPFR will have 88 percent of its bonding capacity available, or \$206 million, available to it in 2024. Should the voters approve a 10-year GO Bond for \$80.7 million CPFR would still have approximately 54 percent of its bonding capacity remaining. It is CPFR's policy to maintain at least 50 percent of its bonding capacity.

OTHER AVAILABLE FUNDS

Reserves—CPFR's accumulated budget surpluses from previous years makes up its reserves. As of January 2019, CPFR's reserve balance was \$5.4 million. The projected reserve balance is estimated to be \$2.3 million in 2020, increasing steadily to \$9.5 million by the end of 2025 because of the service areas' increasing assessed values. In addition to the reserve balance, CPFR maintains a minimum cash flow reserve of \$9 million and an operating reserve of \$3 million. A portion of these funds is set aside each year to cover any significant unforeseen expenses or shortfalls, with the remainder available for investment in programs or capital improvements.

3.4.2 Authorized but Currently Not Used Funding Sources

Excess Levies—Excess levies are voter-approved property taxes allowed by the Washington State Constitution and statutes in addition to the three fifty-cent (\$1.50 total) Ad Valorem tax levies authorized by RCW 52.16.130, RCW 52.16.140, and RCW 52.16.160. These are more commonly

known as M&O Levies. Historically, CPFRR has avoided excess levies because they are limited to a two- to six-year term and do not provide a sustained and predictable revenue stream.

Impact Fees—Pierce County and the City of Puyallup currently do not have fire impact fee ordinances to allow collection of impact fees for new developments pursuant to RCW 82.02.050–100. House Bill 1080, enacted in 2009, broadened the definition of “public facilities” to include all fire protection facilities, rather than only facilities within jurisdictions that are not part of a fire district. Impact fees are designed so that new developments pay their proportionate share of the cost of new facilities needed to serve growth.

Impact fees are assessed by a local general-purpose government (City or County), not a special purpose district, such as a fire district, school district or water/sewer district. The County and/or City must adopt an impact fee ordinance providing for the assessment of impact fees. The impact fee must be identified in the City or County’s Capital Facility Element and financing plan of that government’s Comprehensive Plan. See RCW 36.70A.070(e). The Capital Facility Plan must conform to the GMA 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(7), and RCW 82.02.070(2). The City or County may adopt or incorporate by reference the special purpose district capital facility plan. The Capital Facility Plan must be GMA compliant. RCW 36.70A.070(3).

Fire Mitigation Fees—A fire district may request mitigation fees pursuant to RCW 82.02.020 (voluntary agreements) and/or RCW 43.21C.060 (State Environmental Policy Act [SEPA] mitigation) during SEPA review of non-exempt projects. However, these mechanisms do not effectively capture the incremental impacts to Fire/EMS services. SEPA review also exempts many smaller-scale development proposals submitted to local governments.

Local Improvement Districts—Local Improvement Districts (LIDs) are authorized by RCW 52.20 to finance capital improvements. LIDs may or may not involve the sale of bonds, but usually do include annual assessments payable by benefited property owners in the improvement area. A large percentage of the benefiting property owners must agree to the establishment of the LID.

4 2018 RESOURCE INVENTORY

CPFR currently has 11 staffed fire stations strategically located throughout the district. Each station is staffed 24 hours a day with professional firefighter/ emergency medical technicians (EMTs) and paramedics. Emergency response apparatuses include 16 total engines (11 are front line engines and five are reserve), three ladders (two front line and one for reserve), two battalion chiefs, 12 medic units (eight front line units and four reserve), and two low-acuity aid units. Each front line unit is staffed as follows: engine/ladder companies are staffed with three personnel, medic and low-acuity units are staffed with two personnel, and each battalion chief unit is staffed with one battalion chief.

In addition to their roles in fire suppression, technical rescue, and hazardous materials mitigation, CPFR's firefighters are certified EMTs and paramedics, providing basic and ALS medical intervention. CPFR also provides emergency medical transports to area hospitals as patients' conditions indicate. To provide these services to their response area, CPFR employs 274 uniformed personnel, all of whom are trained as firefighters. Of these 274 firefighters, 195 are certified as EMTs and 79 are paramedics. These highly trained individuals must continually educate themselves in the techniques, dangers, and advancing technologies within the scope of the services they provide.

The stations, staff, and equipment are summarized below, with additional details provided in Appendix C.

4.1 Stations

CPFR has 11 staffed fire stations, two unstaffed stations, and five facilities for training and maintenance. Table 3 shows the size and age of each station and other buildings.

Table 3: CPFR Station Summary

Station	Location	Year Built/ Remodeled	Condition	Square Footage	Beds	Bays	Acres	
Staffed Fire Stations								
Station 60	17520 22nd Ave E	2013	Excellent	19,498	6	4	4.5	
Station 61	100 114th St S	1968	Fair/Poor	14,250	14	4	1.1	
Station 63	1704 97th St E	2015	Excellent	8,378	6	3	1.5	
Station 64	3421 224th St E	1985	Good	6,590	5	2	7.0	
Station 65	301 146th St S	2006	Excellent	9,880	8	4	1.1	
Station 67	8005 Canyon Rd E	2007	Good	10,334	8	4	4.0	
Station 68	5401 136th St E	2006	Good	10,500	7	4	1.9	
Station 69	17210 110th Ave E	1985	Good	9,400	5	3	2.6	
Station 71*	902 7th St NW	1992	Good	13,635	7	2	2.1	
Station 72	3809 5th St SE	2019	Excellent	17,674	12	5	2.0	
Station 73*	311 West Pioneer	1968	Fair	5,000	6	2	0.7	
				Staffed Station Total	125,139	84	37	28.5
Other Stations								
Station 62	1410 Brookdale Rd E	1986	Fair	3,530	2	0	0.8	
Station 70	Puyallup Fair Grounds	1969	Good	1,028	2	0	N/A	
				Other Station Total	4,558	4	0	0.8
Other Facilities								

Station	Location	Year Built/ Remodeled	Condition	Square Footage	Beds	Bays	Acres
Station 66— Logistics	9813 128th St E	1984	Poor	10,000	7	5	2.2
Maintenance Shop 69	17210 110th Ave E	1985	Fair	6,963	-	4	-
Classroom 67	8005 Canyon Rd E	1974	Poor	3,600	-	2	-
Training Tower 67	8119 Canyon Rd E	1987	Poor	8,232	-	-	-
Classroom 60	17520 22nd Ave E	2017	Excellent	1,456	-	-	-
Training Tower 60	17520 22nd Ave E	2017	Excellent	5,600	-	-	-
Other Facilities Total				35,851	7	11	2.2

*Facilities are owned by the City of Puyallup.

4.2 Apparatus

The front line apparatuses used to support CPFR's mission are summarized in Table 4. Apparatuses are vehicles used by CPFR for incident response. The types of apparatus include engines, ladders, battalion chief vehicles, and support rigs for fire responses as well as medic units and low-acuity aid units, brush trucks, and rescue boats.

Table 4: Current Apparatus Inventory Summary

Type	Purchase Year	Life (years)	Type	Purchase Year	Life (years)
SUPPRESSION			MEDIC		
Engines			Medic Units		
E18-1	2018	10	M19-1	2019	7
E18-2	2018	10	M19-2	2019	7
E18-3	2018	10	M19-3	2019	7
E18-4	2018	10	M19-4	2019	7
E18-5	2018	10	M17-1	2017	7
E18-6	2018	10	M17-2	2017	7
E18-7	2018	10	M17-3	2017	7
E18-8	2018	10	M15-1	2015	7
E15-1	2015	10	Low-Acuity Aid Units		
E04-1	2004	10	M19-5	2019	7
E03-1	2003	10	M19-6	2019	7
Ladders			OTHER APPARATUS		
L12-1	2012	10	Brush Trucks		
LT07-1 KME Tiller	2007	10	BT16-1 Brush Truck	2017	15
Battalion Chief Vehicles			BT16-2 Brush Truck	2017	15
Battalion Chief 1	2017	10	Pickup/Brush 69	2002	15
Battalion Chief 2	2017	10	Rescue Boats		
Support Rigs			WC17-1 Zodiac	2017	15
AL04-01 Air Light Rig w/fill station	2004	25	MK2 Grand Boat		
WT17-1 Water Tender Pierce	2017	25	WC 07-1 MARK II / Inflate Boat PUY	2007	20
81-1 R61 Heavy Rescue	1981	25			

CPFR maintains reserve apparatuses in addition to those listed in Table 4. These vehicles are used when front line vehicles are down for maintenance, or they may be used on an as-needed basis. Once

an apparatus has surpassed its frontline lifespan outlined above, it is often used as a reserve unit. CPFR determines the average expected life of each apparatus based on guidance from National Fire Protection Association guidance (NFPA, 2016) and regular assessment of each apparatus. Reserve apparatuses are not on a replacement schedule. CPFR purchased three new engines for delivery in 2020 and purchased two ladder trucks for delivery in 2021. These are replacement apparatuses.

4.3 Equipment

Equipment includes staff and support vehicles, mobile equipment, special operations equipment, fire-suppression gear, breathing air systems, technology, and radio equipment. Table 5 summarizes CPFR’s equipment, purchase year, and lifespan.

Table 5: Current Equipment Inventory Summary

Type	Purch Year	Life (years)	Type	Purch Year	Life (years)
Staff/Support Vehicles			Other Mobile Equipment		
614 - BC Ops, Explorer	2015	12	FL 88-1 (Clark) Forklift @ 60	1988	15
615 - Fire Chief, Impala	2014	12	Training Tower		
616 - AC Trng, Explorer	2015	12	FL 93-1 (Nissan) Forklift at	1993	15
617 - AC Ops, Explorer	2016	12	Training Center		
618 - AC EMS, Explorer	2016	12	FL 80-1 (Alice Chalm) Forklift at	1980	15
619 - AC Logistics, Explorer	2017	12	Shop		
FM17-1	2017	12	FL 96-01 (Crown) Forklift in	1996	15
FM17-2	2017	12	Central Stores		
643 - DFM, F15 PU	2006	12	SP 02-1 Skid-Mounted Pump	2016	15
644 - Captain Logistics, F15 PU	2006	12	Extrication Tools (Hydraulic	2016	8
645 - AC H&S, Explorer	2017	12	Rescue)		
646 - AC P&E, Explorer	2017	12	Spec Ops		
649 - IT, Transit	2015	20	16-1 Mahindra	2016	15
SC18-1 DC Admin, Chev 1500	2018	12	16-2 Mahindra	2016	15
SC18-2 Capt Ford Explorer	2018	12	98-1 Fac Maint Mgr	1998	20
SC18-3 DC Ops Ford Explorer	2018	12	IZUZ/CS042/WNPR		
650 - Pool Car, SUV	2004	12	Station Breathing Air Systems		
656 - Shop Truck	2001	20	Training Center Compressor/Fill	2011	15
RV17-1 Runner Van-Mercedes	2017	7	Station		
683 - Capt EMS, Explorer	2015	12	Technology		
846 - Pool, SUV	2003	12	Admin Portables/Desktops	2016	7
854 - Pickup (F350)	2008	15	Copiers	2013	7
Fire Suppression			IT Infrastructure (switches,	2016	7
SCBA Packs, Bottles and	2016	15	servers)		
Masks			Accounting Software	2017	7
Bullard Thermal Imager	2017	7	Storage Array	2017	5
			Fuel Delivery System	2019	20
			Station Alerting System	2018	20
			Radios and Batteries	2016	10

4.4 Replacement Schedule

In order to maintain the serviceability of its equipment, CPFR has an equipment replacement plan that is updated annually and adopted each year by the Commission as part of the budget process. CPFR’s 20-year plan estimates the number of apparatuses and equipment that require replacement

and projects future costs based on the replacement schedule. The equipment replacement plan does not consider station renovations or replacement; however, this Plan accounts for needed investments in station renovation and replacement. Table 6 summarizes the equipment replacement plan, including the estimated costs for planned station renovation and replacement. The detailed six-year equipment replacement plan can be found in Appendix D.

Table 6: Six Year (2020 to 2026) Equipment Replacement Plan Summary

	COUNT					COST			
	6-yr Period 2020 to 2026	Mid-Term 2026 to 2030	Long-Term 2030 to 2040	Total		6-yr Period 2020 to 2026	Mid-Term 2026 to 2030	Long-Term 2030 to 2040	Total
New—Modeled (current zoning)									
Apparatus									
Suppression	0	11	15	26	\$0	\$11,643,000	\$23,344,000	\$34,987,000	
Medic	6	5	15	26	\$2,411,000	\$2,835,000	\$12,439,000	\$17,685,000	
Other	1	1	3	5	\$202,000	\$31,000	\$597,000	\$830,000	
Other Vehicles and Equipment									
Support Vehicles	6	12	14	32	\$440,000	\$955,000	\$1,538,000	\$2,933,000	
Equipment	--	--	--	--	\$3,164,000	\$4,545,000	\$13,242,000	\$20,951,000	
Station & Support Buildings Remodel/Replacement									
Facilities	3	6	0	9	\$29,023,000	\$10,685,000	\$0	\$39,708,000	
TOTAL:					\$35,240,000	\$30,694,000	\$51,160,000	\$117,094,000	

The station facilities and associated cost estimates included in Table 6 are needed to maintain current levels of service. The facilities that will need improvements over the next ten years are listed as follows:

6-yr Period (2020 to 2026)

- Training Building (2021) on 60 drill ground
- Station 61 replacement (2025)
- Logistics center (2025)

Mid-Term (2026 to 2030)

- Stations 64 & 69 remodel (2027)
- Station 65 remodel (2027)
- Station 67 remodel (2027)
- Station 68 remodel (2028)
- Station 71 remodel (2028)
- Station 60 remodel (2028)

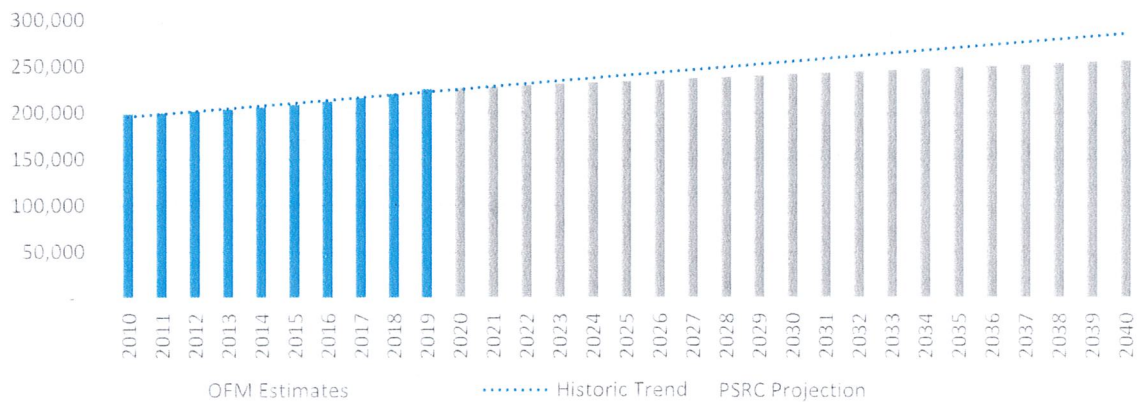
Station 73 will be constructed and will be completed in 2022. This station is funded by the voter-approved 2013 GO bond and GEMT one-time funding.

5 LAND USE PROJECTIONS AND ANALYSIS

5.1 Population

The population of the CPFR is expected to grow by about 30,700 by 2040 (PSRC, 2017). However, the rate of population growth since 2010 has exceeded the PSRC’s projections. If this historic growth rate continues, then the service area could grow by as many as 59,700 people by 2040. Figure 7 illustrates the projected population growth trends.

Figure 7: CPFR Service Area Population Growth Estimates

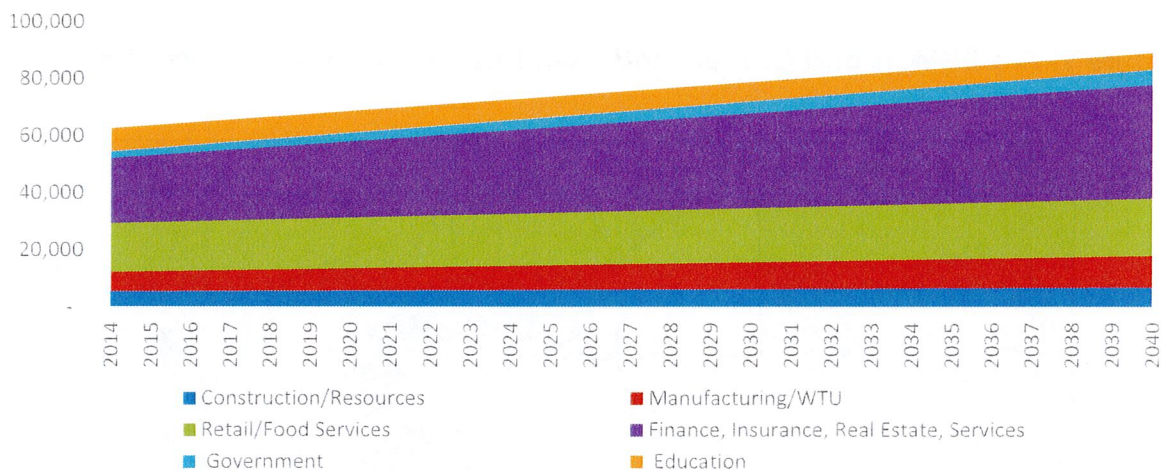


Data Source: OFM, 2019; PSRC, 2017

5.2 Employment Growth

Based on PSRC (2017) projections, CPFR’s service area is projected to experience significant job growth. It is anticipated that over 26,500 new jobs will be added to the local economy between 2014 and 2040 (Figure 8). This represents a 30 percent increase. Much of this growth is a result of finance, insurance, real estate, and service sector employment, which is anticipated to increase by 42 percent, adding 17,000 jobs. The manufacturing and government sectors are also expected to experience strong growth, increasing by 38 and 55 percent, respectively, by 2040.

Figure 8: CPFR Service Area Estimated Employment Growth



Data Source: PSRC, 2017

5.3 Pierce County Community Plan Zoning Changes

Pierce County is currently considering zoning changes that could increase population and jobs in the CPFR service area above and beyond the growth anticipated by the PSRC projections (Pierce County, 2019a). The proposed zoning changes are the result of amendments to the community plans for the Fredrickson, Mid-County, South Hill, and Parkland-Spanaway-Midland neighborhoods. These zoning changes are particularly relevant to CPFR capital facilities needs because almost all of the area that would be rezoned is located in the CPFR service area.

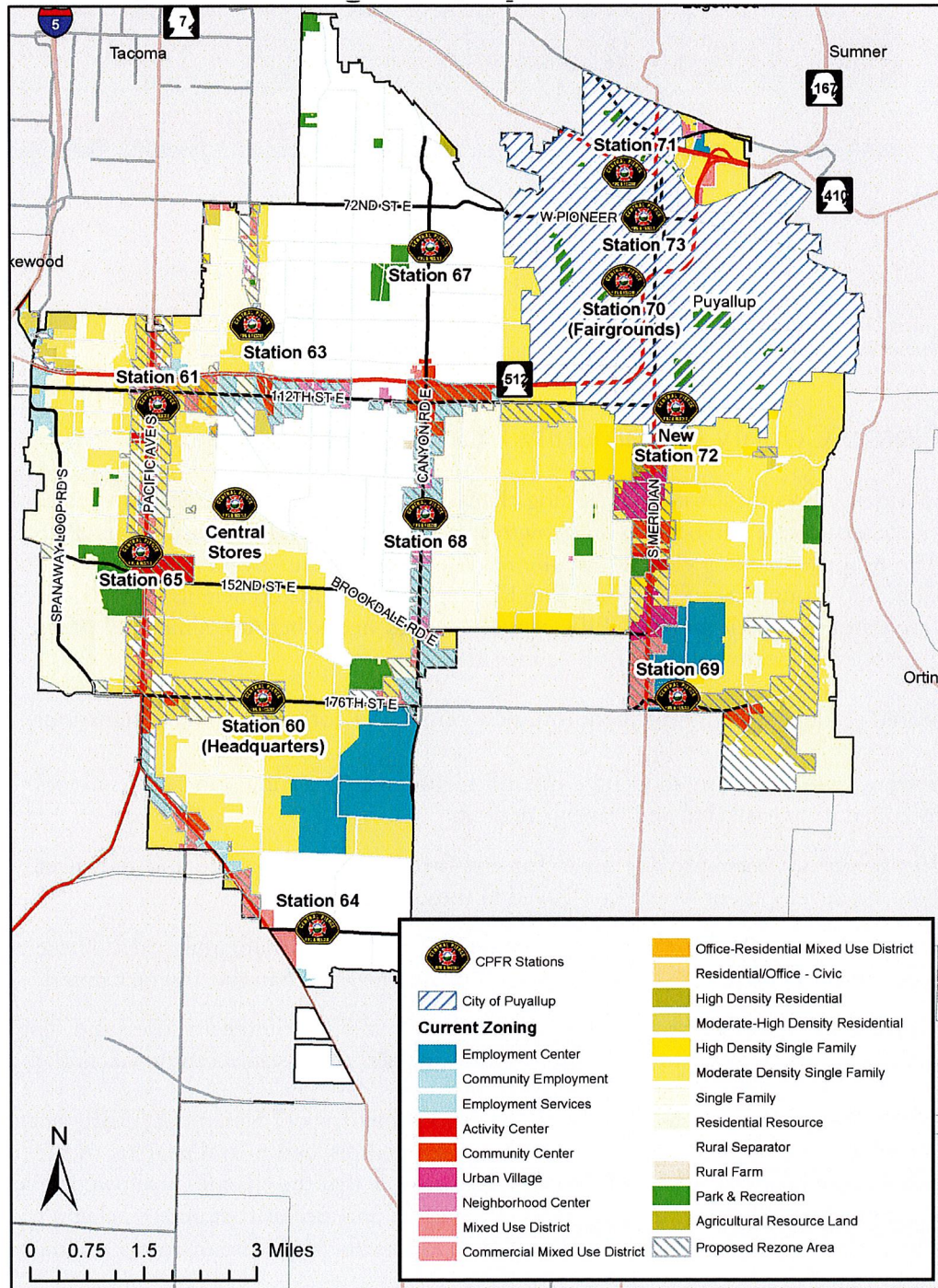
The proposed rezones would implement four new center and corridor zoning designations:

- *Towne Centers* focus on allowing a mix of high-density housing, jobs, and services. They are intended to be walkable and transit-oriented.
- *Employment Corridors* provide areas for employers, including office and industrial. No new housing development would be allowed in these areas.
- *Urban Corridors* allow for a mix of commercial, civic, and multifamily uses. These zones are more auto-oriented, with lower allowable building heights than the Towne Centers.
- *Neighborhood Corridors* provide a transition between higher-intensity uses and single-family neighborhoods. They allow for a mix of housing and small-scale commercial and civic uses.

In April 2019, Pierce County released a Draft Environmental Impact Statement (DEIS) that assessed the impact of the proposed changes. The DEIS had limited discussion and analysis of the impact of the proposed zoning changes on CPFR services. It does note that the changes in allowed development intensity and building height would create a need for additional fire district personnel and equipment. Several of the alternatives outlined in the DEIS increase traffic in the fire district, creating a negative

impact on response times. Figure 9 illustrates the proposed locations of the zoning changes in the service area.

Figure 9: Fire Districts and Centers and Corridors Proposed for Zoning Changes



As noted previously in this Plan, the CPFR is an integrated system (see Figure 2). The station that can respond most quickly to a reported incident will answer that call even if the incident is not in its response area.

Potential impacts to CPFR's response times from the rezone proposals include:

- **Increased Demand for Fire Services:** Pierce County's DEIS for the community plan updates estimates that the zoning changes could lead to an additional 3,425 households or an additional 9,000 people in the area by 2040 (Pierce County, 2019a).³ This represents a 34 percent increase over PSRC population estimates for the area. More people in the CPFR service area will lead to more response incidents and staffing and equipment needs.

The DEIS does not quantify the impact of the proposed policy changes on employment. It assumes that any increase in employment resulting from the zoning changes would be within the margin of error of existing employment projections. The DEIS also speculates that additional employment in the area could reduce traffic volumes in the area by reducing the distance that households travel to work.

- **Roadway Congestion and Level of Service:** In addition to estimating the increased demand for fire services as a result of population growth, the DEIS models the impact of growth on roadway congestion. As a part of this analysis, Pierce County projected where new housing units are likely to be built, the number of new trips generated, and the impact of planned roadway improvement projects.

Based on the DEIS, congestion on major arterials in the CPFR service area is expected to increase by 2040. Projected traffic volumes would exceed the road's level of service including on sections of 160th Street East, Canyon Road East, Pioneer Way East, and Spanaway Loop Road South (Pierce County, 2019a, p. 103).⁴ Increases in traffic congestion will negatively impact emergency response times.

The DEIS includes mitigation measures to alleviate projected traffic congestion including those funded by traffic impact fees. Pierce County's 2020-2025 Transportation Improvement Program includes several capacity improvement projects planned for the CPFR service area that may help to alleviate traffic (Pierce County, 2019b).

5.4 Capital Facility Needs Based on Growth Estimates

Based on future growth estimates in the service area and response time objectives described above, CPFR will need one new suppression apparatus, one additional medic unit, and 8,400 square feet of new station building area over six years, from 2020 to 2026. This anticipates the construction of Station 66. These estimates are in addition to the equipment replacement plan and facilities needs identified by CPFR to preserve current response times. In addition to station construction, all of the associated

³ According to 2013-17 American Community Survey five-year estimates. The average household size in Pierce County is 2.64 persons.

⁴ See Table 3-18 of Pierce County's DEIS. Each route referenced is anticipated to exceed the volume to service concurrency threshold of 1.0 by 2040 under both the no action alternative and alternative 2. Alternative 2 adds 3,426 additional housing units and results in a 1.4% increase in traffic volumes.

resources, special equipment, and tools needed to perform its mission from these sites are required and are factored into all current cost estimates.

To arrive at these estimates, the incidents by land use were used to create an index that estimated the number of additional incidents that likely will occur as growth continues. Based on the number of incidents, suppression, medic and new station facilities were estimated. The methodology for this approach is described further in Appendix E. This analysis was augmented with the practical knowledge of CPFR’s near-term needs and available funding sources.

This Plan also considers future growth under a scenario in which Pierce County adopts the corridors and centers zoning amendments that allow for additional residential and commercial development capacity. Under this scenario, CPFR assumes that growth in the centers and corridors will occur at a pace similar to the pace currently expected without the rezone through 2025. This lag is assumed because developers will need time to respond to these code changes and because, for projects to be feasible, real estate market fundamentals needed to support new development at this denser scale will have to improve. For the years beyond 2025, as development occurs at or near the allowed scale, the county has projected that up to 3,425 new housing units could be supported in rezoned areas of the CPFR service area through 2040 (Pierce County, 2019a, p. 103).

Based on these assumptions, CPFR will need the same number of apparatuses and station square footage over the six years between 2020 and 2026 to support its current response times. It is anticipated that, between 2026 and 2040, CPFR will need one additional suppression apparatus, one additional medic unit, and approximately 10,000 more square feet of station area to support the added demand caused by proposed rezone. This new square footage in the out years would be tied directly to new growth and would be needed to maintain current levels of service.

Table 7 below summarizes CPFR’s projected capital facility needs from 2020 to 2040 based on future growth projections. This table shows the count of needs by planning period; the six-year period from 2020 to 2026, the four-year mid-term period from 2026 to 2030, and the ten-year long-term period from 2030 to 2040. It provides the count of suppression units, medic units, and new stations needed, along with the estimated costs. Finally, this table shows two development scenarios of needs driven by growth under the current zoning and the capital facility needs under a scenario with an approved corridors and centers zoning.

Table 7: Projected Capital Facility Needs Based on Growth Estimates

	COUNT				COST			
	6-yr Period 2020 to 2025	Mid-Term 2025 to 2030	Long-Term 2030 to 2040	Total	6-yr Period 2020 to 2025	Mid-Term 2026 to 2030	Long-Term 2030 to 2040	Total
New (current zoning)								
Apparatus								
Suppression	1	1	4	6	\$1,681,000	\$1,765,000	\$8,364,000	\$11,810,000
Medic	1	1	4	6	\$624,000	\$655,000	\$3,106,000	\$4,385,000
Stations								
Facilities (SqFt)	8,400 1 station	5,000	36,625	50,025	\$10,408,000	\$6,443,000	\$82,002,000	\$98,583,000
TOTAL:					\$12,713,000	\$8,863,000	\$93,472,000	\$115,048,000

COUNT					COST			
	6-yr Period 2020 to 2026	Mid-Term 2026 to 2030	Long-Term 2030 to 2040	Total	6-yr Period 2020 to 2026	Mid-Term 2026 to 2030	Long-Term 2030 to 2040	Total
New (with proposed centers and corridors zoning)								
Apparatus								
Suppression	1	1	5	7	\$1,681,000	\$1,765,000	\$11,692,000	\$15,138,000
Medic	1	1	5	7	\$624,000	\$655,000	\$5,359,000	\$6,638,000
Stations								
Facilities (SqFt)	8,400 1 station	5,000	46,625	60,025	\$10,408,000	\$6,443,000	\$88,969,000	\$105,820,000
TOTAL:					\$12,713,000	\$8,863,000	\$106,020,000	\$127,596,000

Appendix D provides cost estimates and year of delivery/construction for the apparatuses and three proposed stations for the six-year period from 2020 to 2026. These cost estimates include all equipment needed to make the planned new Station 66 fully functional. This station will be located near the southern area of Meridian Avenue in the service area.

It should be noted that the medic unit apparatus count may be adjusted in 2020. CPFR will be conducting a study to assess more effective approaches to reaching medical emergency incidents. This could involve acquiring more medic units, new types of units, or a combination of both. The current projected needs assume that current level of services will be maintained.

6 CAPITAL FACILITY PLANNING

6.1 Introduction

This section identifies CPFPR's capital facility needs over the six-year period from 2020 through 2025. The financing plan that follows focuses on the identified six-year capital facility needs detailed in Appendix D. Table 8 summarizes the six-year needs and places these costs into (1) costs of maintaining the current level of service without new growth and (2) costs of supporting new growth in the service resulting from the county's proposed new zoning, as development occurs. Costs associated with the first category can be described as maintenance and replacement capital expenditures while the second category are new facilities and related apparatus needed to support the demands created by growth. Both categories assume that current levels of service are maintained.

Table 8: Six-Year Capital Facility Needs Summary

	Year 1 2020	Year 2 2021	Year 3 2022	Year 4 2023	Year 5 2024	Year 6 2025	TOTAL
(1) CAPITAL FACILITIES NEEDED TO MAINTAIN LEVEL OF SERVICE <i>(Maintain current levels of service)</i>							
Apparatus							
Suppression	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Medic	\$0	\$0	\$444,000	\$0	\$1,467,000	\$500,000	\$2,411,000
Other Apparatus	\$0	\$0	\$0	\$0	\$0	\$202,000	\$202,000
Stations (Remodel, Replacement, & New Support Buildings)							
Stations	\$0	\$1,040,000	\$0	\$0	\$0	\$27,983,000	\$29,023,000
Other Capital Needs							
Support Vehicles	\$170,000	\$156,000	\$63,000	\$50,000	\$0	\$0	\$439,000
Equipment	\$681,000	\$389,000	\$226,000	\$636,000	\$1,044,000	\$189,000	\$3,165,000
TOTAL (1):	\$851,000	\$1,585,000	\$733,000	\$686,000	\$2,511,000	\$28,874,000	\$35,240,000
(2) CAPITAL FACILITIES NEEDED TO SUPPORT NEW GROWTH WITH PROPOSED NEW ZONING <i>(Maintain current levels of service)</i>							
Apparatus							
Suppression	\$0	\$0	\$0	\$0	\$0	\$1,681,000	\$1,681,000
Medic	\$0	\$0	\$0	\$0	\$0	\$624,000	\$624,000
Stations							
Stations	\$0	\$0	\$0	\$0	\$0	\$10,408,000	\$10,408,000
TOTAL (2):	\$0	\$0	\$0	\$0	\$0	\$12,713,000	\$12,713,000
(1) + (2) CAPITAL FACILITIES NEEDED TO MAINTAIN & SUPPORT NEW GROWTH							
Apparatus	\$0	\$0	\$444,000	\$0	\$1,467,000	\$3,007,000	\$4,918,000
Stations	\$0	\$1,040,000	\$0	\$0	\$0	\$38,391,000	\$39,431,000
Other Capital	\$851,000	\$545,000	\$289,000	\$686,000	\$1,044,000	\$189,000	\$3,604,000
TOTAL (1) + (2):	\$851,000	\$1,585,000	\$733,000	\$686,000	\$2,511,000	\$41,587,000	\$47,953,000

The allocation of these costs appropriated to new development assumes that new development will drive additional incidents. Using the land use development modeling to estimate future growth in the service area, CPFPR estimates a 6.8 percent increase in incidents, i.e., more than 2,000 additional incidents, between 2020 and 2026 attributable to growth.

Growth will impact service levels for CPFR, and existing capital facilities will be impacted by the increased call volume, resulting in quicker degradation of services. Not all elements of capital facilities needed to support new growth should be borne by the new development, as those already living and working in the service area benefit from CPFR. The six-year capital facility plan described below will expand on how CPFR will allocate capital facility costs to growth.

6.2 Six-Year Capital Facility Plan

The capital facilities needed to maintain level of service are estimated to cost \$35.2 million over the next six years. The capital facilities needed to support new growth are estimated to cost \$12.7 million over the next six years. In total, the CPFR anticipates capital facility costs at \$47.9 million.

The six-year capital facility plan will be supported with GO bonds, grant funds, CPFR revenues, and, in part, impact and/or mitigation fees. Table 9 summarizes the allocation of costs between impact fees and other sources. The schedule of items and the year in which the cost is anticipated to occur are detailed in Appendix D. The 6.8 percent allocation rate to support capital costs associated with new growth is applied to all capital facilities listed in Appendix D. Note that the capital facility cost increase in Year 6 is due to the planned construction of a new Station 66.

Table 9: Six-Year Capital Facility Allocation

Allocation	Year 1 2020	Year 2 2021	Year 3 2022	Year 4 2023	Year 5 2024	Year 6 2025	Total
(1) CAPITAL FACILITIES NEEDED TO MAINTAIN LEVEL OF SERVICE							
Impact Fee or Mitigation Fee	\$78,000	\$95,000	\$40,000	\$40,000	\$176,000	\$1,950,000	\$2,379,000
Other Sources	\$1,075,000	\$1,324,000	\$565,000	\$568,000	\$2,433,000	\$26,895,000	\$32,860,000
(2) CAPITAL FACILITIES NEEDED TO SUPPORT NEW GROWTH							
Impact Fee or Mitigation Fee	\$0	\$0	\$0	\$0	\$0	\$859,000	\$859,000
Other Sources	\$0	\$0	\$0	\$0	\$0	\$11,854,000	\$11,854,000
(1) + (2) CAPITAL FACILITIES NEEDED TO MAINTAIN & SUPPORT NEW GROWTH							
Impact Fee or Mitigation Fee	\$78,000	\$95,000	\$40,000	\$40,000	\$176,000	\$2,809,000	\$3,238,000
Other Sources	\$1,075,000	\$1,324,000	\$565,000	\$568,000	\$2,433,000	\$38,749,000	\$44,714,000

6.2.1 Existing Revenue Sources Funding

The primary funding source for the \$44.7 million identified in the other sources row in Table 9 are GO bonds and CPFR revenues that comprise its equipment replacement fund (ERF). GO Bonds can support investment in facilities and apparatus, but not in equipment or fleet vehicles. Other sources of operating revenue include the FBC, transport fees, GEMT fees, grants, and levy funds. Currently the ERF is funded at an average of \$2 million per year. For 2020 through 2023, CPFR has planned for these costs in its ERF.

CPFR is concluding a \$39 million issuance from 2013 that was used to construct Stations 60, 63, and 72, a large part of the planned Station 73, and modernization of 60 training facilities. It is expected that this bond will be paid off by the end of 2035. CPFR intends to place a GO bond on the ballot in

2024 for an estimated \$80.7 million that will project out ten years for major capital facility costs. Appendix F details CPFR’s 20-year funding plan and shows how this estimate is derived.

As noted in Section 3.4.1, CPFR may bond up to three-quarters of one percent of the total assessed value in the service area. CPFR estimates that by 2024 it will have up to \$206 million in GO bond funding that could be accessed, or nearly 90 percent of its total debt capacity.

Financing an \$80.7 million GO bond in 2024 would require voter approval, and the district’s excess levy rate would increase. The current GO bond levy rate is 0.09 per \$1,000 of assessed value or a fraction of CPFR’s overall levy and levy equivalent of \$2.32.

6.2.2 Mitigation or Impact Fees

A special district such as CPFR may collect SEPA mitigation fees or GMA impact fees. SEPA mitigation fees are established as part of a specific environmental review process, either at a project-level review (most typical) or as part of a Planned Action Environmental Impact Statement (EIS) process completed by a city or county. This would result in a planned action ordinance that outlines the required mitigation for that specific area, possibly including a mitigation fee for something that was analyzed in the Planned Action EIS—for example, mitigation fees associated with the new growth for fire, emergency response and rescue service. Additionally, mitigation fees through SEPA can be imposed only by the lead agency’s responsible official on a case by case basis. While CPFR can recommend mitigation fees to the lead agency, it would have to appeal their decision if these fees were not imposed.

Impact fees are one-time charges assessed by a local government against a new development project to help pay for new or expanded public facilities that will directly address the increased demand for services created by that development. RCW 82.02.050 - .110 and Washington Administrative Code (WAC) 365-196-850 authorize counties, cities, and towns planning under the GMA to impose impact fees for public needs, including fire-protection facilities. Impact fees may be imposed only for “system improvements”—public capital facilities in a local government’s capital facilities plan that are designed to provide service to the community at large (not private facilities), that are reasonably related to the new development, and that will benefit the new development (WAC 365-196-850). Impact fees cannot exceed a proportionate share of the cost of the system improvements, and municipalities must have additional funding sources and may not rely solely on impact fees to fund the improvements (RCW 82.02.050).

Based on the projected capital facility needs and available existing and projected revenue sources, CPFR urges the County to adopt fire impact fee ordinances, as it has for schools, parks and traffic so that the impact of new growth and development can be proportionately assigned to the developers creating the new growth. Based on projected single family, multifamily, and commercial development in the service area, impact fees would support new apparatus investments estimated to reach \$3.2 million over the next six years.

Table 10 depicts how impact fees were estimated using CPFR response data and estimated growth by land use. The total six-year capital facility need as a result of growth (column 1) is multiplied by the share of emergency responses projected to be generate by each land use category in 2026 (column 3). This total is then divided by the projected unit growth (column 5) for each between 2019 and 2026 to

arrive at the cost Per unit impact fee amount (column 6). The fees are structured below rates observed in other local jurisdictions (summarized in Appendix G). For a new single-family home, the fee would be \$300 per unit. For a multifamily project, the fee would be \$150 per unit, and the fee for commercial space would range from \$0.01 per square foot for industrial and warehouse space to \$1.37 per square foot for new office space.

Table 10: Impact Fee Estimate

Use Type	6 Year CF Need from Growth	2026 Emergency Responses	Share of Responses 2026	Response Share Cost	Estimated Unit Growth 2019-2026	Cost per Unit
Column Number	1	2	3	4	5	6
Residential (Unit)						
Single Family	\$3,238,000	16,898	59%	\$1,920,893	6,497	\$296
Multifamily	\$3,238,000	4,046	14%	\$459,869	3,137	\$147
Business (Square Foot)						
Health Care, Detention & Correction	\$3,238,000	4,164	15%	\$473,288	464,724	\$1.02
Assembly	\$3,238,000	942	3%	\$107,083	282,363	\$0.38
Office	\$3,238,000	1,054	4%	\$119,802	87,363	\$1.37
Retail	\$3,238,000	302	1%	\$34,376	534,742	\$0.06
Manufacturing, Industrial, and Warehousing	\$3,238,000	1,079	4%	\$122,688	23,287,880	\$0.01

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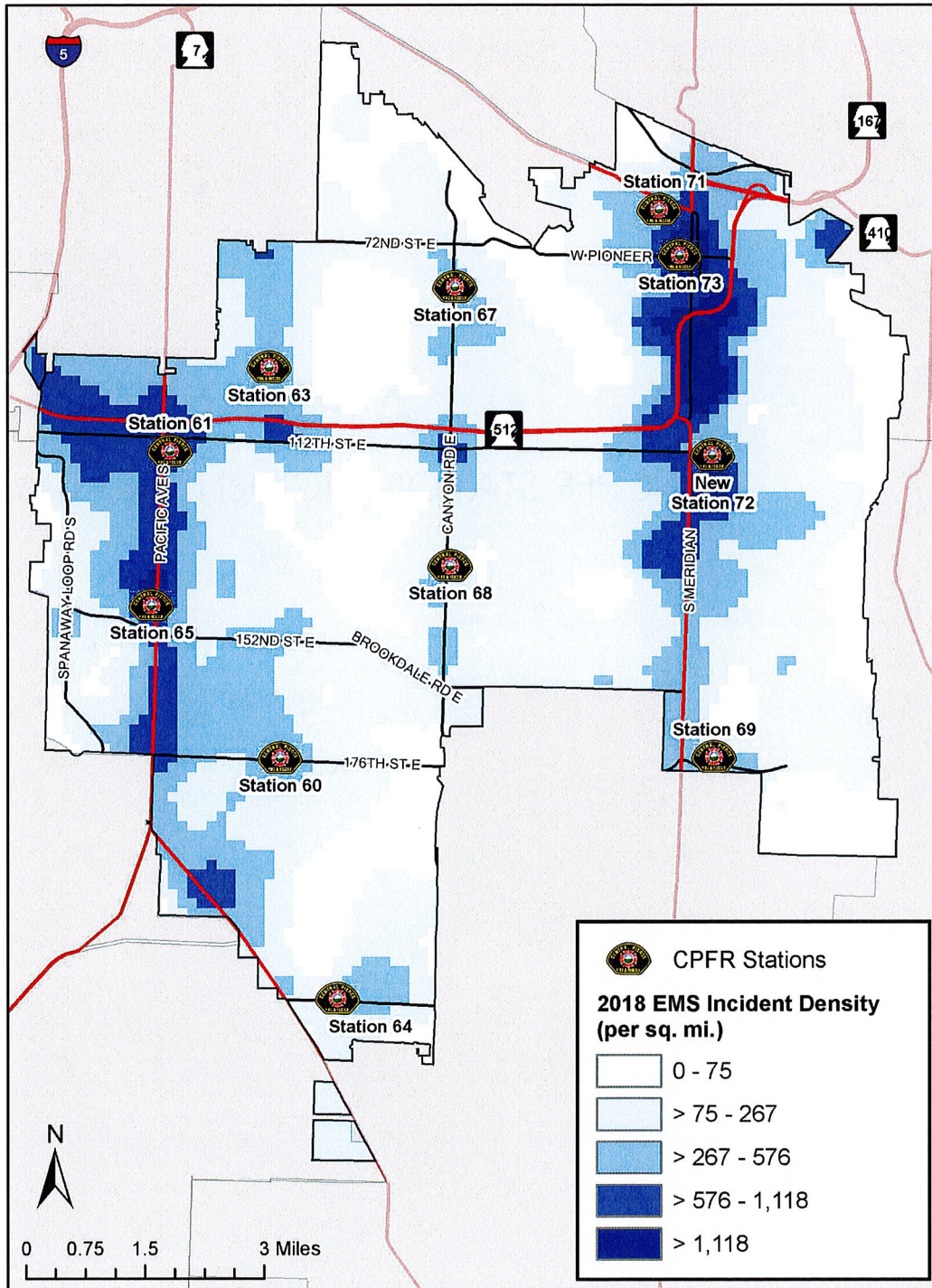
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APPENDIX A

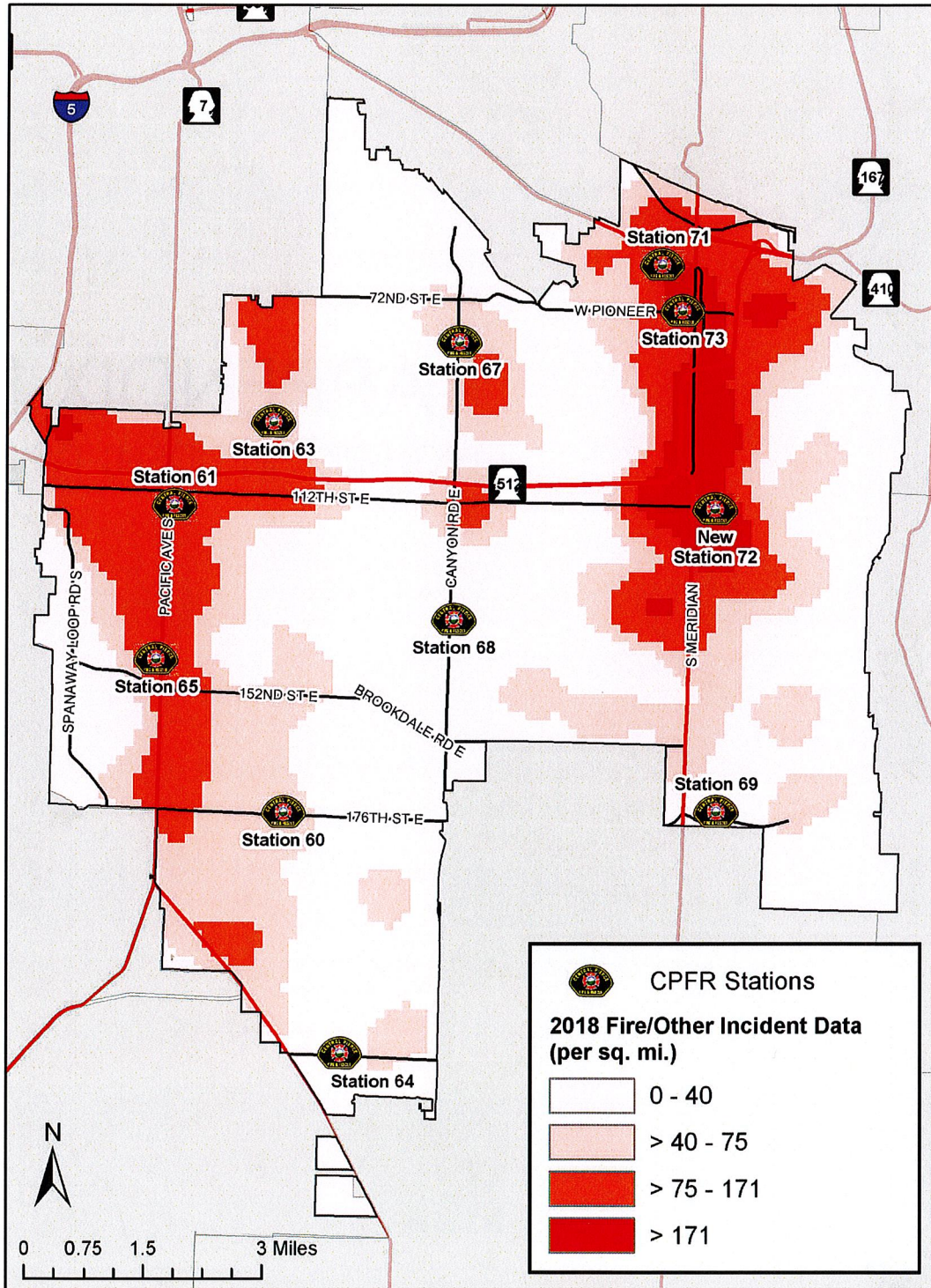
CPFR STATION INCIDENT HEAT MAPS



CPFR STATION EMS INCIDENT HEAT MAP



CPFR STATION FIRE INCIDENT HEAT MAP



APPENDIX B

HIGH-RISK INCIDENT TYPES



#	Type Description	#	Type Description
1	ALS - ABDOMINAL PAIN	47	COMMERCIAL STRUCTURE FIRE WITH ENTRAPMENT
2	ALS - ALLERGIC REACTION	48	CONFINED-SPACE RESCUE
3	ALS - ALTERED LOC	49	CONFIRMED PLANE CRASH
4	ALS - Assault Multiple Patients	50	Cerebrovascular Accident
5	ALS - Assault Multiple Patients Violent	51	Dock Fire
6	ALS - Assault Victim	52	ENTRAPMENT
7	ALS - Assault Violent Patient	53	Extrication Rescue
8	ALS - BACK PAIN	54	FREIGHT TRAIN FIRE OR DERAILMENT
9	ALS - BURN PATIENT	55	HEAVY RESCUE
10	ALS - DIABETIC PROBLEM	56	High-Angle Rescue
11	ALS - EXPOSURE PATIENT	57	High Life Hazard Structure Fire
12	ALS - FALL PATIENT	58	High Life Hazard Structure Fire with Entrapment
13	ALS - Head Pain	59	HIGH- OR LOW-ANGLE RESCUE
14	ALS - HEART PROBLEM	60	HIGH-RISE FIRE
15	ALS - HEMORRHAGE	61	HIGH-RISE FIRE WITH ENTRAPMENT
16	ALS - MOTOR VEHICLE ACCIDENT	62	High-Rise Structure Fire
17	ALS - Motor Vehicle Accident Multiple Patients	63	High-Rise Structure Fire with Entrapment
18	ALS - MOTOR VEHICLE ACCIDENT WITH ENTRAPMENT	64	Ice Rescue
19	ALS - Multiple Burn Patients	65	LARGE PLANE CRASH
20	ALS - MULTIPLE EXPOSURE PATIENTS	66	LARGE VAPOR LEAK
21	ALS - MULTIPLE PATIENT MOTOR VEHICLE ACCIDENT	67	LARGE VEHICLE FIRE WITH ENTRAPMENT
22	ALS - MULTIPLE PATIENT TRAUMA	68	LARGE VEHICLE FIRE WITH EXPOSURE
23	ALS - Multiple Trauma Patients	69	MAJOR HAZMAT INCIDENT
24	ALS - OB EMERGENCY	70	Marina Fire
25	ALS - Overdose	71	Mass Casualty Incident
26	ALS - Overdose Violent Patient	72	Military Plane Crash
27	ALS - OVERDOSE WITH VIOLENT PATIENT	73	PASSENGER TRAIN FIRE OR DERAILMENT
28	ALS - POSSIBLE STROKE	74	PERSON ILL - SPECIAL RESPONSE
29	ALS - PSYCHIATRIC PROBLEM	75	Person Ill Special Response
30	ALS - PSYCHIATRIC PROBLEM WITH VIOLENT PATIENT	76	Pool Rescue
31	ALS - Psychological Problem Violent Patient	77	Railroad Emergency Major
32	ALS - Respiratory Distress	78	RESIDENTIAL FIRE WITH ENTRAPMENT
33	ALS - SEIZURE	79	RESIDENTIAL GARAGE FIRE
34	ALS - TRAUMA PATIENT	80	RESIDENTIAL STRUCTURE FIRE
35	ALS - TRAUMA PATIENT WITH ENTRAPMENT	81	Residential Structure Fire with Entrapment
36	ALS - TRAUMA WITH VIOLENCE	82	Ship Fire
37	ALS - UNCONSCIOUS PERSON	83	SHIP FIRE ON A LAKE
38	ALS - ASSAULT	84	SHIP FIRE ON A TRAILER WITH EXPOSURE
39	APARTMENT FIRE	85	SHIP FIRE ON A TRAILER
40	APARTMENT FIRE WITH ENTRAPMENT	86	Ship Fire on Puget Sound
41	BLS - TRAUMA PATIENT WITH ENTRAPMENT	87	SMOKE IN A COM STRUCT
42	CARDIAC ARREST	88	Smoke in a Commercial Structure
43	Chimney Fire	89	SMOKE IN A RES STRUCT
44	Commercial Structure Fire	90	SMOKE ODOR IN A COMMERCIAL STRUCTURE
45	Commercial Structure Fire with Entrapment	91	Structural Collapse Rescue
46	COMMERCIAL STRUCTURE FIRE	92	STRUCTURE COLLAPSE


#	Type Description
93	Swift Water Rescue
94	TANKER TRUCK FIRE
95	Trench Rescue
93	Swift Water Rescue
97	VEHICLE FIRE WITH ENTRAPMENT
98	VEHICLE FIRE WITH EXPOSURE
99	Water Rescue
100	WATER RESCUE - POOL
101	WATER RESCUE ON A LAKE
102	WATER RESCUE ON LAKE TAPPS
103	WATER RESCUE ON PUGET SOUND
104	BLS - MOTOR VEHICLE ACCIDENT WITH ENTRAPMENT
105	EMERGENCY LANDING
106	HAZMAT INCIDENT
107	PLANE CRASH
108	Railroad Emergency
109	STANDARD HAZMAT INCIDENT - FIRE
110	VAPOR LEAK

APPENDIX C

CPFR STATION PROFILES




Fire Station 60 & Headquarter—Spanaway/Fredrickson
 17520 22nd Avenue East, Tacoma, WA 98445
 Parcel Number: 0319278043



Building Information	
Year Built (Remodeled):	1975 (2013)
Station Condition:	Excellent
Total Square Footage:	19,498
Number of Bays:	4
Beds Available:	6
Land Area:	4.5 acres

NOTE: The station operates one fire engine and one paramedic unit. A utility vehicle, rehab vehicle and brush truck are available as needed. A training tower and classroom are on site.


Fire Station 70
 Puyallup Fair Grounds
 Parcel Number: N/A



Building Information	
Year Built (Remodeled):	1969
Station Condition:	Good
Total Square Footage:	1,028
Number of Bays:	0
Beds Available:	2
Land Area:	N/A

NOTE: Located at the Washington State Fairgrounds. The activity at the fairgrounds dictates the staffing hours, as well as, which units will be staffed. Available units include one engine, two paramedic units, and on large crowd days, two


Fire Station 61 --- Parkland
 100 114th Street South, Tacoma, WA 98444
 Parcel Number: 2240004501



Building Information	
Year Built (Remodeled):	1968 (1985)
Station Condition:	Fair
Total Square Footage:	14,250
Number of Bays:	4
Beds Available:	14
Land Area:	1.1 acres

NOTE: This station houses administrative offices for the Battalion Chiefs. The station operates one fire engine, one ladder truck, one paramedic unit and a command (Battalion Chief) vehicle. A special operations (Rescue) vehicle is stored at this station.


Fire Station 71 --- River Road
 902 7th Street NW, Puyallup 98371
 Parcel Number: 7210000477



Building Information	
Year Built (Remodeled):	1992
Station Condition:	Good
Total Square Footage:	13,635
Number of Bays:	2
Beds Available:	7
Land Area:	2.1 acres

NOTE: The station operates with one ladder truck, one paramedic unit, a special operations rescue unit and a marine rescue unit. Public Education, Prevention, Inspection and Investigation offices are on-site and are opened during business hours. The property is owned by the City of Puyallup.


Station 62 --- Central Stores
 1410 Brookdale Road East, Tacoma 98445
 Parcel Number: 0319151051



Building Information	
Year Built (Remodeled):	1986
Station Condition:	Fair
Total Square Footage:	3,530
Number of Bays:	0
Beds Available:	2
Land Area:	0.8 acres

NOTE: Currently used to store and manage supplies. CPFR may use this station again, but it needs replacement


Fire Station 72
 3809 5th St SE, Puyallup
 Parcel Number: 0419102124



Building Information	
Year Built (Remodeled):	2019
Station Condition:	Excellent
Total Square Footage:	17,674
Number of Bays:	5
Beds Available:	12
Land Area:	2.0 acres

NOTE: --


Fire Station 63 --- Midland
 1704 97th St E, Tacoma Wa. 98444
 Parcel Number: 7745001781



Building Information	
Year Built (Remodeled):	2015
Station Condition:	Excellent
Total Square Footage:	8,378
Number of Bays:	3
Beds Available:	6
Land Area:	1.5 acres

NOTE: This station operates one fire engine and one paramedic unit.


Fire Station 73 --- Downtown Puyallup
 311 West Pioneer, Puyallup 98371
 Parcel Number: 5745001671



Building Information	
Year Built (Remodeled):	1968
Station Condition:	Fair
Total Square Footage:	5,000
Number of Bays:	2
Beds Available:	6
Land Area:	0.7 acres

NOTE: The building is primarily operated by the Puyallup Police Department, but Fire and EMS personnel operates one engine out of this station. The property is owned by the City of Puyallup.


Fire Station 64 --- Elk Plain
 3421 224th Street East, Spanaway 98387
 Parcel Number: 0318114021



Building Information	
Year Built (Remodeled):	1985
Station Condition:	Good
Total Square Footage:	6,590
Number of Bays:	2
Beds Available:	5
Land Area:	7.0 acres


NOTE: This station operates one fire engine.


Fire Station 66 --- South Hill Logistics
 9813 128th Street East, Puyallup 98373
 Parcel Number: 4320003060





Building Information	
Year Built (Remodeled):	1977 (1984)
Station Condition:	Poor
Total Square Footage:	10,000
Classroom Area:	3,794
Tower Area:	6,206
Number of Bays:	4

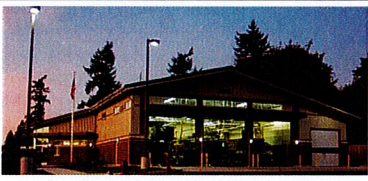
NOTE: --


Fire Station 65 --- Spanaway	
301 146th Street South, Tacoma 98444 Parcel Number: 9835000413	
	Building Information
	Year Built (Remodeled): 2006 Station Condition: Excellent Total Square Footage: 9,880 Number of Bays: 4 Beds Available: 8 Land Area: 1.1 acres
NOTE: This station operates one fire engine and one paramedic unit. A water rescue unit is available as needed. This station also houses the PCSORT (Pierce County Special Operations Team) unit which is utilized throughout the County for	


Station 69 Fleet Maintenance/Shop	
17210 110th Avenue East, Puyallup 98374 Parcel Number: 0419273019	
	Building Information
	Year Built (Remodeled): 1985 Station Condition: Fair Total Square Footage: 6,963 Classroom Area: 0 Tower Area: 0 Number of Bays: 0
NOTE: --	


Fire Station 67 --- Waller/Summit	
8005 Canyon Road East, Puyallup, WA 98371 Parcel Number: 0420312013	
	Building Information
	Year Built (Remodeled): 2007 Station Condition: Good Total Square Footage: 10,334 Number of Bays: 4 Beds Available: 8 Land Area: 4.0 acres
NOTE: This station operates one fire engine, one paramedic unit, one water tender and the Medical Services Officer vehicle. Adjacent to this station is our Training Division office and the training tower.	

Station 67 Training Support Building	
8119 Canyon Road East, Puyallup 98371 Parcel Number: 0420312013	
	Building Information
	Year Built (Remodeled): 1974 Station Condition: Poor Total Square Footage: 3,600 Classroom Area: 3,600 Tower Area: 0 Number of Bays: 0
NOTE: --	

Fire Station 68 --- Summit/Collins	
5401 136th Street East, Puyallup 98373 Parcel Number: 0419182129	
	Building Information
	Year Built (Remodeled): 2006 Station Condition: Good Total Square Footage: 10,500 Number of Bays: 4 Beds Available: 7 Land Area: 1.9 acres
NOTE: This station operates one fire engine and one part-time paramedic unit.	

Station 67 Training Tower	
8119 Canyon Road East, Puyallup 98371 Parcel Number: 0420312013	
	Building Information
	Year Built (Remodeled): 1987 Station Condition: Poor Total Square Footage: 8,232 Classroom Area: 0 Tower Area: 8,232 Number of Bays: 0
NOTE: --	

Fire Station 69 --- Sunrise	
17210 110th Avenue East, Puyallup 98374 Parcel Number: 0419273019	
	Building Information
	Year Built (Remodeled): 1985 Station Condition: Good Total Square Footage: 9,400 Number of Bays: 3 Beds Available: 5 Land Area: 2.6 acres
NOTE: This station operates one fire engine. The station also houses our hazardous materials unit and a brush truck. The vehicle maintenance shop is located next to the station.	

Station 60 Training Tower and Classroom	
17520 22nd Avenue East, Tacoma, WA 98445 Parcel Number: 0319278043	
	Building Information
	Year Built (Remodeled): 2017 Station Condition: Excellent Total Square Footage: 7,056 Classroom Area: 1,456 Tower Area: 5,600 Number of Bays: 0
NOTE: --	

APPENDIX D

DETAILED SIX-YEAR CAPITAL FACILITIES COSTS (2020
THROUGH 2025)



Detailed 6-Year Capital Facilities Costs (2020 through 2025)

Category	Type	Description	Purchase Year	Cost	Fee Portion	Other Sources Portion
			GRAND TOTAL:	\$47,952,000	\$3,238,000	\$44,714,000
CAPITAL FACILITIES REPLACEMENT (to maintain level of service)						
Apparatus			TOTAL:	\$2,613,000	\$177,000	\$2,436,000
Medic	Medic Units	M15-1	2022	\$444,000	\$30,000	\$414,000
	Medic Units	M17-1	2024	\$489,000	\$33,000	\$456,000
	Medic Units	M17-2	2024	\$489,000	\$33,000	\$456,000
	Medic Units	M17-3	2024	\$489,000	\$33,000	\$456,000
	Low Acuity Aid	M19-5	2025	\$250,000	\$17,000	\$233,000
	Low Acuity Aid	M19-66	2025	\$250,000	\$17,000	\$233,000
Other	Brush	652 - Pickup/Brush 69	2025	\$202,000	\$14,000	\$188,000

Other Vehicles and Equipment			TOTAL:	\$3,603,000	\$241,000	\$3,362,000
Support	Staff	643 - DFM, F15 PU	2020	\$57,000	\$4,000	\$53,000
Vehicles	Staff	644 - Captain Logistics, F15 PU	2020	\$57,000	\$4,000	\$53,000
	Staff	846 - Pool, SUV	2020	\$56,000	\$4,000	\$52,000
	Staff	656 - Shop Truck	2021	\$156,000	\$11,000	\$145,000
	Staff	RV17-1 Runner Van-Mercedes	2022	\$63,000	\$4,000	\$59,000
	Staff	854 - Pickup (F350) - Facilities	2023	\$50,000	\$3,000	\$47,000
Equipment	Mobile	Forklifts (FL 88-1, FL 93-1, and FL 96-01)	2021	\$492,000	\$33,000	\$459,000
	Mobile	Extrication Tools (Hydraulic Rescue)	2024	\$465,000	\$31,000	\$434,000
	Tech	Admin portables/desktops	2020-2025	\$774,000	\$52,000	\$722,000
	Tech	IT Infrastructure (Switches,ups,servers)	2020-2025	\$359,000	\$24,000	\$335,000
	Tech	Storage Array	2022	\$37,000	\$2,000	\$35,000
	Tech	Acctg Software Replacement	2024	\$250,000	\$17,000	\$233,000
	Suppression	Bullard Thermal Imager	2024	\$140,000	\$9,000	\$131,000
	Wellness	Cardio Equipt	2021	\$151,000	\$10,000	\$141,000
	EMS	Lead Defib-Engines and Defi-Medic Unit	2020	\$49,000	\$3,000	\$46,000
	shop	Lifts (Portable)	2023	\$447,000	\$30,000	\$417,000

Station & Support Buildings Remodel/Replacement			TOTAL:	\$29,023,000	\$1,961,000	\$27,062,000
Facilities	Station	Station 61	2025	\$21,900,000	\$1,480,000	\$20,420,000
	Support	Training Building on 60 drill ground	2021	\$1,040,000	\$70,000	\$970,000
	Support	Logistics Center	2025	\$6,083,000	\$411,000	\$5,672,000

CAPITAL FACILITIES NEEDED TO SUPPORT NEW GROWTH						
New Apparatus			TOTAL:	\$2,305,000	\$156,000	\$2,149,000
Suppression	Engine	New Engine: Station 66	2025	\$1,681,000	\$114,000	\$1,567,000
Medic	Medic Units	New Medic Unit: Station 66	2025	\$624,000	\$42,000	\$582,000

New Stations			TOTAL:	\$10,408,000	\$703,000	\$9,705,000
Facilities	Station	New Station 66	2025	\$10,408,000	\$703,000	\$9,705,000

APPENDIX E

NEW FACILITY AND VEHICLE NEED METHODOLOGY



Significant growth in the CPFR service area is anticipated. The analysis undertaken for the CPFR Capital Facilities Plan (the Plan) seeks to quantify the pace of growth anticipated in the area and its impact on the need for new emergency response facilities and vehicles. The output of the analysis described below helped to inform the facility and vehicle needs identified in the Plan.

Development Projection

Pierce County Assessor data were used to estimate the historical trends in development across different land use types from 2008 to 2018, based on the year in which the structure was built. For example, between 2008 and 2018 an estimated 6,480 single-family and duplex housing units and about 103,000 square feet of office uses were added to CPFR's service area, representing an annual growth rate of 1.0 and 0.5 percent respectively. These historical development trends serve as the basis for projecting new development to 2040.

Emergency Unit Responses, Equipment, and Station Square Footage

To assess CPFR's current level of service, this analysis relies on the number of annual unit responses and the equipment available to meet this demand for services in 2018. A single emergency incident can generate multiple unit responses. For example, multiple fire engines and medical units may be dispatched to a large fire. In 2018, CPFR had 16,580 priority 1 and 2 fire-suppression unit responses and 14,500 priority 1 and 2 medical unit responses. These overall unit responses were broken down by the property use categories assigned to each incident. To service this demand, CPFR had 12 active fire-suppression apparatuses, eight medical apparatuses, 43,700 station square feet dedicated to fire response, and about 30,000 station square feet dedicated to medical response.

Base Analysis

The development projections and unit response data were broken down into seven land use categories, including single-family housing; multifamily housing; office; and healthcare, detention, and correction uses. Given the unit response volumes and the number of equipment and station areas available to respond in 2018, ratios were created to reflect CPFR's current level of services. For example, CPFR had one fire-suppression unit response for every 7.6 single-family housing units in the service area, and one fire-suppression apparatus for every 1,280 suppression unit responses generated from single-family housing units.

These ratios were used to estimate the number of new unit responses generated by new development for each land use type and the additional number of apparatuses needed to service the new demand. For example, it is anticipated that 18,560 new single-family units will be added to the service area by 2040. These new units are projected to generate an additional 2,450 fire-suppression unit responses between 2019 and 2040 and necessitate two new fire-suppression apparatuses and about 7,000 square feet of new station area to meet this new demand. A similar analysis was completed for all seven land use types for both fire-suppression and medical unit responses.

Analysis of Impact of Proposed Zoning Changes

Pierce County's initial analysis of the zoning changes that would result from the Fredrickson, Mid-County, South Hill, and Parkland-Spanaway-Midland community plan updates estimates that as many as 3,425 additional households could be added to the area by 2040. The base analysis described above was repeated to model the impact of these new households on new emergency service facility and vehicle needs. It was assumed that the zoning changes would slightly increase the pace of development in the CPFR service area, beginning in 2022.

APPENDIX F

20-YEAR FUNDING SCHEDULE



20-year Schedule by Funding Source

TOTAL	GO Bond		Cost Category		Impact		ERF		BOND			
	Period	Maintain	New Growth	Annual Total	Fees	Appartus	Other	ERF Total	Apparatus	Facilities	Bond Total	Bond Cummu
1	2020 1-6 years	\$784,542		\$784,542	\$53,003			\$731,539				
2	2021 1-6 years	\$1,416,736		\$1,416,736	\$95,713	\$969,739	\$351,284	\$1,321,023				
3	2022 1-6 years	\$754,776		\$754,776	\$50,992	\$413,688	\$290,096	\$703,784				
4	2023 1-6 years	\$762,601		\$762,601	\$51,521		\$711,080	\$711,080				
5	2024 1-6 years	\$2,642,582		\$2,642,582	\$178,530	\$68,414	\$1,095,780	\$1,164,194	\$1,299,858		\$1,299,858	\$1,299,858
6	2025 1-6 years	\$28,878,657	\$12,713,480	\$41,592,137	\$2,809,927	\$140,204	\$180,411	\$320,615	\$2,663,876	\$35,797,720	\$38,461,596	\$39,761,453
7	2026 7-10 years	\$4,071,390	\$8,863,633	\$12,935,023	\$873,878	\$163,125	\$2,790,650	\$2,953,776	\$3,099,382	\$6,007,987	\$9,107,369	\$48,868,822
8	2027 7-10 years	\$8,558,709		\$8,558,709	\$578,219	\$68,495	\$475,450	\$543,945	\$1,301,403	\$6,135,143	\$7,436,546	\$56,305,368
9	2028 7-10 years	\$15,483,707		\$15,483,707	\$1,046,065	\$471,007	\$1,189,164	\$1,660,172	\$8,949,141	\$3,828,329	\$12,777,470	\$69,082,839
10	2029 7-10 years	\$2,581,453		\$2,581,453	\$174,401	\$86,688	\$673,289	\$759,978	\$1,647,075		\$1,647,075	\$70,729,914
11	2030 11-20 year	\$2,902,655		\$2,902,655	\$196,101	\$113,082	\$444,919	\$558,001	\$2,148,554		\$2,148,554	\$72,878,467
12	2031 11-20 year	\$8,941,468		\$8,941,468	\$604,077	\$247,997	\$3,377,444	\$3,625,441	\$4,711,950		\$4,711,950	\$77,590,417
13	2032 11-20 year	\$3,295,566		\$3,295,566	\$222,645	\$95,219	\$1,168,548	\$1,263,767	\$1,809,154		\$1,809,154	\$79,399,571
14	2033 11-20 year	\$1,866,937		\$1,866,937	\$126,129	\$70,755	\$325,714	\$396,468	\$1,344,340		\$1,344,340	\$80,743,911
15	2034 11-20 year	\$1,898,087	\$35,321,064	\$37,219,151	\$2,514,492	\$241,011	\$284,004	\$525,014	\$4,579,200	\$29,600,444	\$34,179,645	\$34,179,645
16	2035 11-20 year	\$385,017	\$32,734,509	\$33,119,526	\$2,237,525	\$175,054	\$359,006	\$534,060	\$3,326,025	\$27,021,917	\$30,347,942	\$64,527,586
17	2036 11-20 year	\$6,092,762		\$6,092,762	\$411,621	\$40,954	\$4,862,065	\$4,903,019	\$778,122		\$778,122	\$65,305,708
18	2037 11-20 year	\$926,466	\$25,416,514	\$26,342,980	\$1,779,708	\$218,558	\$352,649	\$571,207	\$4,152,607	\$19,839,458	\$23,992,065	\$89,297,773
19	2038 11-20 year	\$21,473,848		\$21,473,848	\$1,450,754	\$933,430	\$1,354,492	\$2,287,922	\$17,735,173		\$17,735,173	\$107,032,945
20	2039 11-20 year	\$3,376,931		\$3,376,931	\$228,142	\$94,818	\$1,252,423	\$1,347,242	\$1,801,547		\$1,801,547	\$108,834,492

20-year Schedule by Cost Category

TOTAL	Facilities		Suppression	Suppression	Suppression	Suppression	Medic	Medic	Other Appr	Other Appr	Support	Vehicles	Equipment	Equipment	Equipment	Equipment	Equipment	Equipment	Equipment
	Facilities	Engine	Ladder	Battalion Ct	Support Rig	Medic Units	Low Acuity	Brush	Water	Staff	Mobile	Tech	SpecOps	Wellness	Suppression	Air System	EMS	shop	
1	2020 1-6 years										\$170,402	\$491,035							\$123,105
2	2021 1-6 years	\$1,040,000									\$155,919	\$48,870	\$22,942	\$25,900					\$123,105
3	2022 1-6 years										\$63,400	\$97,674	\$26,936						\$123,105
4	2023 1-6 years										\$50,000	\$110,569	\$31,511						\$123,105
5	2024 1-6 years					\$1,467,408	\$624,275	\$500,000	\$202,158		\$465,320	\$537,200	\$159,400	\$32,771	\$139,883				\$447,416
6	2025 1-6 years	\$38,391,409	\$1,680,813			\$2,275					\$159,400	\$34,082							\$34,082
7	2026 7-10 years	\$6,443,290	\$1,764,854			\$1,734,035					\$62,053	\$2,832,314	\$35,445		\$63,032				\$35,445
8	2027 7-10 years	\$6,579,659			\$305,296	\$1,132,474			\$31,382		\$234,558	\$238,477	\$38,863						\$38,863
9	2028 7-10 years	\$4,105,707	\$10,102,676								\$164,190	\$180,500	\$38,338						\$38,338
10	2029 7-10 years					\$1,235,105	\$624,276				\$494,400	\$187,800	\$39,872						\$39,872
11	2030 11-20 year		\$2,425,500								\$240,288	\$195,400	\$41,467						\$41,467
12	2031 11-20 year			\$3,254,520		\$2,064,795					\$95,036	\$636,220	\$122,466	\$43,126	\$2,725,305				\$43,126
13	2032 11-20 year							\$1,445,356	\$558,816	\$38,180	\$306,016	\$636,820	\$265,527	\$44,851					\$44,851
14	2033 11-20 year					\$1,517,624					\$29,256	\$273,412	\$46,645						\$46,645
15	2034 11-20 year	\$31,745,115	\$2,607,493			\$2,561,962						\$256,070	\$48,511						\$48,511
16	2035 11-20 year	\$28,979,763	\$2,737,867			\$1,016,879					\$96,266	\$238,300	\$50,451						\$50,451
17	2036 11-20 year					\$878,421					\$63,400	\$101,604	\$3,775,680	\$52,469					\$52,469
18	2037 11-20 year	\$21,276,906	\$3,018,499	\$548,266		\$1,121,109						\$323,632	\$54,568						\$54,568
19	2038 11-20 year					\$2,905,377					\$315,653	\$837,993	\$56,751	\$242,233					\$242,233
20	2039 11-20 year						\$2,033,764				\$421,236	\$552,989	\$106,775	\$59,021	\$203,146				\$203,146

APPENDIX G

FIRE IMPACT FEE PRECEDENTS POLICIES



INTRODUCTION

RCW 82.02.050 allows cities and counties to collect impact fees to fund public facilities system improvements, including fire-protection facilities, that are needed as a result of new development. Impact fees cannot exceed the proportionate share of the cost of system improvements that are a result of new development. Funds can be collected and spent only on public facilities needs addressed in an adopted capital facilities element of a comprehensive land use plan.

FEE STRUCTURE

This section examines other cities' and counties' code to better understand how other jurisdictions have implemented fire impact fees. The most common way of structuring impact fees is to charge a per housing unit and/or per square foot of new construction rate. Fire impact fees for new housing units ranged from \$121 to \$2,259 for new single-family units and \$205 to \$2,062 for new multifamily units. Fees for commercial development were similarly varied, ranging from \$0.02 per square foot for new manufacturing in Redmond to \$5.60 per square foot for certain types of commercial development that pose an elevated emergency response risk in Shoreline (see table below).

Fire Impact Fee Comparison Table

Jurisdiction	Residential Fee	Commercial Fee
Thurston County	\$0.36 per square foot for all new development	
City of DuPont	\$941 per unit	\$2,697 per acre
City of Tukwila	Single-family: \$1,683 per unit Multifamily: \$2,062 per unit	Office: \$0.78 per SF Retail: \$2.05 per SF Industrial: \$0.17 per SF
City of Shoreline	Single-family: \$2,259 per unit Multifamily: \$1,957 per unit	Commercial 1: \$2.79 per SF Commercial 2: \$1.79 per SF Commercial 3: \$5.60 per SF
City of Redmond	Single-family: \$121 per unit Mobile/Manufactured Homes: \$145 per Unit Multifamily: \$205 per unit Residential Suites: \$103 per suite	Office: \$0.17 per SF Retail Trade: \$0.20 per SF Manufacturing: \$0.02 per SF

The ordinances often reference the adopted capital facilities plan on which the fees are based, with some providing a detailed explanation of how the fee is determined. For example, in DuPont the fire impact fees are calculated based on the following assumptions (from DuPont Municipal Code Chapter 26.05 Impact Fees):

- Total fire service capital facilities need for the period 2004 through 2009 as identified in the city of DuPont capital facilities plan equals \$5,410,000.
- Allocation of the \$5,410,000 is divided as 50 percent residential responsibility and 50 percent commercial/industrial responsibility.

- The 2004 population of the city of DuPont is 4,425, or 52 percent of the estimated 2009 population of 8,500. Population growth will account for 48 percent of the total 2009 population.
- Population growth between 2004 and 2009 will be housed in approximately 1,380 new dwelling units.
 - Residential Impact Fee Formula Per New Dwelling Unit
 $(\$2,705,000 \times 0.48) \div 1,380 = \940.87 per dwelling unit
- There are 1,003 acres of commercial/industrial zoned land in the city of DuPont south of Sequalitchew Village, excluding environmentally sensitive areas, streets, and the Consent Decree Area Golf Course.
 - Commercial/Industrial Impact Fee Formula
 $\$2,705,000 \div 1,003 \text{ acres} = \$2,696.91$ per acre

The City of Shoreline’s approach is similar to that of DuPont, but capital and equipment costs (C&E) are divided between residential and commercial uses, based on their respective annual share of emergency responses (Res/Com Share in table below). The rates are also adjusted for each proposed use, based on an index of the emergency response shares, usage factors, and effective response force requirements (Measure of Impact of Development in table below). This is intended to reflect the proportionate impact of each type of development on system needs relative to single-family housing (Residential 1).

Land Use Type	System-Wide C&E	New Dev C&E	Res/Com Share	Res/Com Split	Projected Development 2018 - 2037	Cost Per Unit	Measure of Impact by Development	Adjustment	Impact & LOS Contribution Fee Amount
Residential									
Residential 1 (Low Risk)	\$41,217,424	\$21,354,000	64%	\$13,666,560	5,000 units	\$2,733.31	100%	20%	\$2,187 per dwelling unit
Residential 2 (High Risk)	\$41,217,424	\$21,354,000	64%	\$13,666,560	5,000 units	\$2,733.31	87%	20%	\$1,895 per dwelling unit
Commercial									
Commercial 1 (Low Risk)	\$41,217,424	\$21,354,000	36%	\$7,687,440	1,500,000 sq ft	\$5.12	66%	20%	\$2.69 per sq ft
Commercial 2 (Medium Risk)	\$41,217,424	\$21,354,000	36%	\$7,687,440	1,500,000 sq ft	\$5.12	42%	20%	\$1.73 per sq ft
Commercial 3 (High Risk)	\$41,217,424	\$21,354,000	36%	\$7,687,440	1,500,000 sq ft	\$5.12	132%	20%	\$5.42 per sq ft

Shoreline Fire Department, Draft Capital Improvement Plan 2018-2037, City of Shoreline City Council Staff Report: 2017, <http://cosweb.ci.shoreline.wa.us/uploads/attachments/ccs/council/staffreports/2017/staffreport112017-8c.pdf> (accessed December 3, 2019).

The fire impact fee ordinances also outline administrative processes of assessment and collection of the fee, appeal, credits and refunds. Because Pierce County currently collects parks, schools, and traffic impact fees, many of the administrative processes for fee collection are already outlined in Pierce County Code Title 4A: Impact Fees. Each impact fee has its own chapter that includes the purpose of the fee, the relevant capital facilities plan section, the service area where the fee will be collected, the methods used to determine the fee amount, and the fee schedule.

