

FORT WORTH FIRE DEPARTMENT (FWFD)

CAPITAL MASTER PLAN

(Excluding Facilities)

FY2016 - FY2020



November 2015

PURPOSE:

- To identify current and future capital needs (excluding facilities) for FWFD;
- To identify priorities and recommend appropriate timetables for capital purchases; and
- To guide the development of future City of Fort Worth planning efforts related to the funding of capital purchases.

EXECUTIVE SUMMARY:

As part of the FY2016 City of Fort Worth budget process, FWFD participated in a Citywide, 5-year capital planning effort. Every City department submitted current and future capital purchase requirements and descriptions which were then prioritized and ranked across the City by a committee of peer department representatives. Those recommendations were then passed along to the City Manager's Office to use in the development of a 5-year capital plan for the City of Fort Worth.

FWFD has developed a separate facility master plan. This Capital Master Plan details the department's capital purchase requirements for the next five years to be utilized in the development of funding plans.

The following summarizes the department's capital purchase needs over the course of the next five years:

- Continued implementation of annual Fire Apparatus Replacement Plan at a cost of approximately \$4 million annually.
- Replacement of Fire Station Alerting System at 42 fire stations at a cumulative cost of approximately \$2 million.
- New Fire Apparatus for new fire stations 42 and 43 at a cumulative cost of approximately \$2 million.
- New equipment required in support of new Public Safety Training Complex at a cost of approximately \$225,000.
- The encryption of the City's outdoor warning sirens - approximately \$500,000.
- The expansion of outdoor warning siren system to include 10 additional sirens and protective barriers for vulnerable siren pole locations throughout the city at a cost of approximately \$395,000.
- Replacement of aging 911 emergency communications dispatch consoles, to include the addition of two consoles - approximately \$401,000.
- Creation of simulation lab for use at new Public Safety Training Complex to include fire apparatus driving, incident command and other training at a cost of approximately \$500,000.

(This list does not include vehicle replacement needs funded through the VERF)

CAPITAL PURCHASE REQUIREMENTS BY YEAR:

FY2016

1. Continued implementation of annual fire apparatus replacement plan - \$4,000,000

The FWFD apparatus replacement plan began in 1999 and is designed to provide consistent, scheduled replacement of front-line emergency response apparatus to avoid crisis replacement that would require emergency funding and to maintain a safe and efficient apparatus fleet. FWFD has 117 fire apparatus with a front-line life cycle of 10-12 years and an additional 5-8 years as a reserve apparatus. Funding is proposed for FY2016 utilizing debt mechanisms instead of a “pay-as-you-go” approach.

2. Purchase equipment to support new and expanded Public Safety Training Complex - \$225,000

With the significantly enhanced training environment at the new Public Safety Training Complex, that includes a state-of-the-art burn tower and other training equipment, the following support equipment is required to transport supplies and equipment throughout the campus as well as trainees and other staffing: 1 Skylift; 4 Gators/Mules; 1 People-Mover. Funding has been approved in the FY2016 general fund budget for purchase.

3. Phase One of 911 Dispatch Console Replacement Plan - the purchase of one additional consoles with equipment for one additional dispatcher - \$126,000

Purchased in 2002 with an anticipated life-span of 10 years, seven 911 communications consoles are in need of replacement to include technological updates. Due to expanding service demands and the need for temporary staffing expansions during peak call times, an additional two consoles are required. Tarrant County 911 funding will be utilized for this purchase. No additional staffing will be required.

4. Encryption of outdoor warning siren system - \$500,000

Due to cyber-security risks, encryption has been recommended to ensure the integrity of the system, which consists of 153 sirens. Homeland security funding is being pursued to support this capital expense.

FY2017

1. Continued implementation of annual fire apparatus replacement plan - \$4,200,000

The FWFD apparatus replacement plan began in 1999 and is designed to provide consistent, scheduled replacement of front-line emergency response apparatus to avoid crisis replacement that would require emergency funding and to maintain a safe and

efficient apparatus fleet. FWFD has 117 fire apparatus with a front-line life cycle of 10-12 years and an additional 5-8 years as a reserve apparatus.

2. New fire apparatus for new fire station 42 – approximately \$1,062,302

Located in far south Fort Worth, Fire Station 42 is scheduled to be in service during FY2017. The purchase of one Quint (\$882,302) and one brush truck (\$179,000) is required for the station to be fully operational.

3. Replacement of Fire Station Alerting System at 42 fire stations – approximately \$2,000,000.

Due to aging technologies and maintenance challenges, the emergency alerting system at every fire station requires replacement. Cost per station - approximately \$50,000.

4. Phase Two of 911 Dispatch Console Replacement Plan - the purchase of equipment for one additional dispatcher - \$100,000

Purchased in 2002 with an anticipated life-span of 10 years, seven 911 communications consoles are in need of replacement to include technological updates. Due to expanding service demands and the need for temporary staffing expansions during peak call times, an additional two consoles are required.

5. Purchase of a fire apparatus driving simulator for utilization in enhanced training environment - \$150,000

The new Public Safety Training Complex can support a variety of enhanced training tools. An identified departmental training need is expanded fire apparatus driving training in a simulation environment.

FY2018

1. Continued implementation of annual fire apparatus replacement plan - \$4,410,000

The FWFD apparatus replacement plan began in 1999 and is designed to provide consistent, scheduled replacement of front-line emergency response apparatus to avoid crisis replacement that would require emergency funding and to maintain a safe and efficient apparatus fleet. FWFD has 117 fire apparatus with a front-line life cycle of 10-12 years and an additional 5-8 years as a reserve apparatus.

2. New fire apparatus for new fire station 43 – approximately \$938,000

Located in far south Fort Worth, Fire Station 42 is scheduled to be in service during FY2017. The purchase of one Engine (\$759,000) and one brush truck (\$179,000) is required for the station to be fully operational.

3. Phase Three of 911 Dispatch Console Replacement Plan - the replacement of seven existing consoles - \$175,000

Purchased in 2002 with an anticipated life-span of 10 years, seven 911 communications consoles are in need of replacement to include technological updates.

4. Purchase and installation of five additional outdoor warning sirens to locate in geographic and population growth areas. Additionally, purchase bollards to place at various siren locations to secure site from potential damage – approximately \$197,500.

With the city's geographic boundaries continuing to expand through annexations and continuing population growth, additional outdoor warning sirens are required to expand coverage. This is phase one of a two-phase project to ultimately expand from 153 sirens to 163 sirens by the end of FY2019.

FY2019

1. Continued implementation of annual fire apparatus replacement plan - \$4,630,500

The FWFD apparatus replacement plan began in 1999 and is designed to provide consistent, scheduled replacement of front-line emergency response apparatus to avoid crisis replacement that would require emergency funding and to maintain a safe and efficient apparatus fleet. FWFD has 117 fire apparatus with a front-line life cycle of 10-12 years and an additional 5-8 years as a reserve apparatus.

2. Purchase and installation of five additional outdoor warning sirens to locate in geographic and population growth areas. Additionally, purchase bollards to place at various siren locations to secure site from potential damage – approximately \$197,500.

With the city's geographic boundaries continuing to expand through annexations and continuing population growth, additional outdoor warning sirens are required to expand coverage. This is phase two of a two-phase project to ultimately expand from 153 sirens to 163 sirens by the end of FY2019.

FY2020

1. Continued implementation of annual fire apparatus replacement plan - \$4,862,025

The FWFD apparatus replacement plan began in 1999 and is designed to provide consistent, scheduled replacement of front-line emergency response apparatus to avoid crisis replacement that would require emergency funding and to maintain a safe and

efficient apparatus fleet. FWFD has 117 fire apparatus with a front-line life cycle of 10-12 years and an additional 5-8 years as a reserve apparatus.

5-Year Plan Summary:

Planning Item / Project Name	Approx. Cost	Short Description	FY16	FY17	FY18	FY19	FY20
Annual Fire Apparatus Replacement Plan	\$ 22,102,525	Previously Equipment Note Funded - Funded using debt mechanism in FY16. Long term funding undetermined.	\$ 4,000,000	\$ 4,200,000	\$ 4,410,000	\$ 4,630,500	\$ 4,862,025
Replace Existing Fire Station Alerting System	\$ 2,000,000	Existing fire station alarm/alerting system is antiquated and requiring replacement/upgrade at 42 fire stations. Financing/funding could be identified utilizing Tarrant County 911 reimbursement funds of approximately \$126,000 annually.		\$ 2,000,000			
PSTC Capital Equipment	\$ 225,000	1 Skylift, 4 Gators/Mules, 1 People-Mover - FUNDED as part of FY2016 General Fund Budget.	\$ 225,000				
Encrypting Warning Siren System	\$ 500,000	Due to security risks, encryption recommended - may be able to identify grant funding source	\$ 500,000				
New Fire Apparatus for Fire Station 42	\$ 1,062,302	Two fire apparatus (one quint and one brush truck)		\$ 1,062,302			
911 Dispatch Console Replacement Plan	\$ 180,000	Purchased in 2002, lifespan of 10 years, total of 7 consoles, to be replaced - 2 new consoles needed. Cost = \$20,000 per console.	\$ 126,000	\$ 100,000	\$ 175,000		
New Apparatus for Fire Station 43	\$ 938,000	Two fire apparatus (one engine and one brush truck)			\$ 938,000		
Outdoor Warning Siren System Expansion	\$ 395,000	The expansion of outdoor warning siren system to include 10 additional sirens and protective barriers for vulnerable siren pole locations throughout the city.			\$ 197,500	\$ 197,500	
Fire Training Simulation Lab	\$ 500,000	Fire Apparatus Driver Training, Incident Command Structure Training, and other emergency response training.			\$ 250,000	\$ 250,000	
TOTALS	\$ 27,902,827		\$ 4,851,000	\$ 7,362,302	\$ 5,970,500	\$ 5,078,000	\$ 4,862,025

