



MEMORANDUM

TO: Mayor and Council Members

FROM: Rhoda Mae Kerr, Fire Chief *Rhoda Mae Kerr*
Ed Van Eenoo, Deputy Chief Financial Officer *EV*

DATE: March 30, 2018

SUBJECT: Response to Resolution No. 20160324-009: Future Fire Stations

On March 24, 2016, the City Council directed the City Manager to develop a comprehensive plan for consideration during the budget process with proposed funding mechanisms and timelines for building fire stations in five areas of immediate need identified by the Austin Fire Association (Local 975) and the Austin Fire Department. The five areas include the Travis Country area, the Del Valle/Moore's Crossing area, the Loop 360/ Davenport area, the Goodnight Ranch area, and the Canyon Creek area. The intent of the following information is to update you on the plan to build five fire stations over the next ten years.

Attachment A is a map showing the recommended locations for future fire stations. The locations are based on a "Standard of Coverage" analysis that focuses on response times. The areas in purple have responses that exceed the department/national goal of arriving in eight (8) minutes or less, 90% of the time.

Attachments B.1 shows service needs in the recommended station areas including the number and type of incidents in 2017, population and density in the area, and the number of residents who do not benefit from the City's superior (Class 1) Insurance Services Office (ISO) rating.

Attachment B.2 provides answers to typical questions regarding why the area needs a fire station. The Fire Department recommends that stations be constructed in the following order based on incident volume, response times, ISO rating and growth/density: Travis Country, Del Valle/Moore's Crossing, Loop 360/ Davenport, Goodnight Ranch, and Canyon Creek.

Attachment C.1 describes the necessary station type, staffing and apparatus, co-habitation of Fire and EMS services, as well as construction costs, one-time equipment purchases and annual operating costs.

Attachment C.2 provides an estimate of the costs associated with constructing and staffing five stations, one opening every two years.

The potential funding sources for construction costs of the five stations is voter-approved bonds or certificates of obligation (COs). The Bond Election Advisory Task Force has recommended \$31 million for construction of three fire stations in the 2018 Bond. Another consideration relevant to this resolution is the ongoing work by staff from Financial Services and the Office of Real Estate Services to implement a public private partnership (P3) model for the acquisition of new City facilities. The P3 approach has already been approved by Council for a new Planning and Development Center and work continues on the

application of the model to a new Austin Energy Headquarters and a new Municipal Court building. Using the P3 approach is anticipated to reduce the time and potentially the costs of bringing new facilities online. If the P3 model proves unworkable for the acquisition of new fire stations, the 10-year timeline presented in this memo may not be achievable.

In summary, the construction and operating costs (in millions) are shown below based on the first new station opening in October 2020 and each subsequent station opening every two years. This compressed timeline assumes successful application of the P3 approach to deliver new stations. The timeline to deliver five new stations in ten years would be impacted should the City use its traditional capital delivery process.

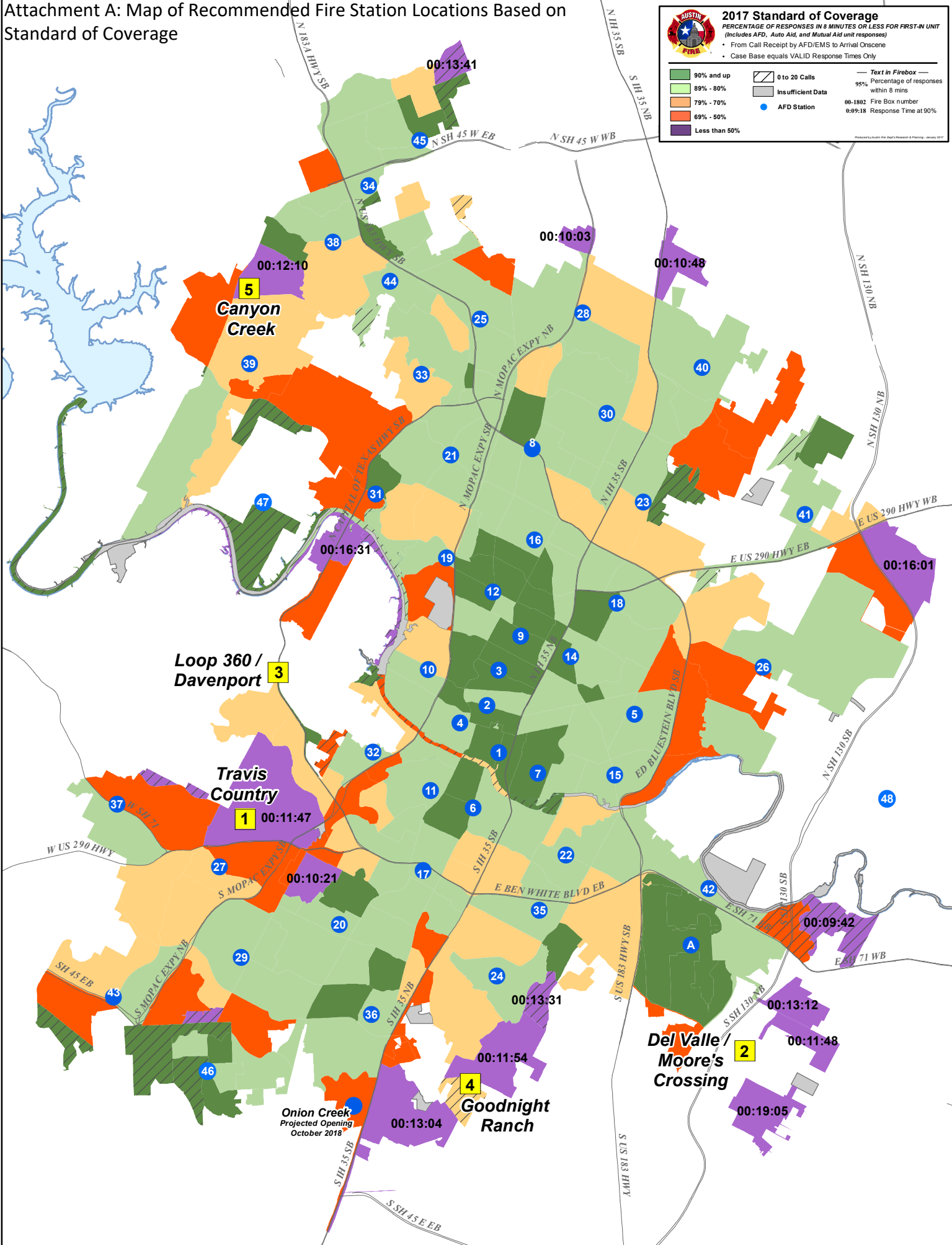
Estimated Station Costs and Operating Budget Impact
(in millions)

	1. Travis Country	2. Del Valle / Moore's Crossing	3. Loop 360 / Davenport	4. Goodnight Ranch	5. Canyon Creek	Total Station Costs
Projected Opening Date	Oct. 2020	Oct. 2022	Oct. 2024	Oct. 2026	Oct. 2028	
Construction Costs	\$14.7	\$11.4	\$20.5	\$12.5	\$18.1	\$77.2
One-time Equipment	\$1.4	\$2.6	\$2.4	\$1.4	\$1.4	\$9.2
Total	\$16.1	\$14.0	\$22.9	\$13.9	\$19.5	\$86.4

Year	Annual Operating Costs					Total Annual Operating Costs
<i>FY 2019</i>						\$0.0
<i>FY 2020</i>	\$3.0					\$3.0
<i>FY 2021</i>	\$3.1					\$3.1
<i>FY 2022</i>	\$3.2	\$5.2				\$8.4
<i>FY 2023</i>	\$3.3	\$5.3				\$8.6
<i>FY 2024</i>	\$3.4	\$5.5	\$4.3			\$13.3
<i>FY 2025</i>	\$3.5	\$5.7	\$4.5			\$13.7
<i>FY 2026</i>	\$3.6	\$5.8	\$4.6	\$3.6		\$17.7
<i>FY 2027</i>	\$3.7	\$6.0	\$4.8	\$3.7		\$18.2
<i>FY 2028</i>	\$3.8	\$6.2	\$4.9	\$3.8	\$3.8	\$22.6
Total 10-year	\$30.8	\$39.7	\$23.1	\$11.2	\$3.8	\$108.6

cc: Spencer Cronk, City Manager
Rey Arellano, Assistant City Manager over Public Safety
Elaine Hart, Chief Financial Officer

Attachment A: Map of Recommended Fire Station Locations Based on Standard of Coverage



Attachment B.1: Constructing Five Fire Stations - Service Needs in the Area

	1. Travis Country	2. Del Valle / Moore's Crossing	3. Loop 360 / Davenport	4. Goodnight Ranch	5. Canyon Creek
Incidents	1,870	284	133	385	382
Incident Breakdowns	Fire - 5%, Medical - 59%, Rescue - 2%, Hazmat - 1%, Other* - 33%	Fire - 6%, Medical - 73%, Rescue - 0%, Hazmat - 1%, Other* - 20%	Fire - 6%, Medical - 51%, Rescue - 1%, Hazmat - 3%, Other* - 39%	Fire - 6%, Medical - 68%, Rescue - 1%, Hazmat - 2%, Other* - 24%	Fire - 5%, Medical - 66%, Rescue - 1%, Hazmat - 1%, Other* - 27%
COA Full Purpose Response Times 90%	11 minutes, 47 seconds	13 minutes, 12 seconds	16 minutes, 31 seconds	11 minutes, 54 seconds	12 minutes, 10 seconds
Percent of Area Developed	48%	20%	22%	19%	28%
Population <i>(Census ACS 2017)</i>	17,083	6,871	6,715	11,413	11,211
Building Sq Footage <i>(TCAD 2017)</i>	13,792,944	4,002,557	5,540,388	7,076,291	9,861,734
Homes at Risk <i>(Wildfire & Flood)</i>	397	117	293	299	242
ISO - Residents with Class 10	0	175	0	0	0

*Other incidents include: fire alarm activations, broken water pipe, bee/swarm attack, lift assist, smoke investigations, and public assist

Attachment B.2: Constructing Five Fire Stations - Service Needs in the Area

	1. Travis Country	2. Del Valle / Moore's Crossing	3. Loop 360 / Davenport	4. Goodnight Ranch	5. Canyon Creek
Current Growth in Area	Office Buildings (Southwest Crossing, ARM/Encino Trace), Residential (Harper Park - being built)	School (Expansion of DVHS), Residential (Lexington Park expansion, Oak Ranch expansion)	Residential (Villas at Davenport Ranch expansion), Office Buildings (Spiceworks)	Residential (Goodnight Ranch), New Streets (Slaughter Extension, Vertex Blvd)	Commercial (ExtraSpace Storage), Residential (Grandview Hills expansion)
Why do the residents need this station?	Continued increase in both incident volume and response times. Limited street network impact closest station's ability to access area within 8 mins. Response times are consistently above our 8 min goal, now reaching +11-12 mins (+3 to 4 mins over.)	Future growth in area is projected (commercial along Hwy 71, residential expansion). Continued increase in both incident volume and response times. Distance from current stations are impacting response times. Response times are consistently above our 8 min goal, now reaching +13 mins (+4 to 5 mins over.)	Continued increase in both incident volume and response times. The next closest station's ability to access area within 8 mins is impacted by both distance and limited street network. Response times are consistently above our 8 min goal, now reaching +16 mins (+5 to 7 mins over.)	Significant growth in area (Goodnight Ranch). Continued increase in both incident volume and response times. Distance from current stations is impacting response times. Response times are consistently above our 8 min goal, now reaching +11-12 mins (+3 to 4 mins over.)	Continued increase in both incident volume and response times. The next closest station's ability to access area within 8 mins is impacted by both distance and limited street network. Response times are consistently above our 8 min goal, now reaching +12 mins (+3 to 4 mins over.)
Why do the residents need these units at these stations?	Engine & Ambulance - needed for first-due and advanced life support response. BC & Commander - These existing units (St 27, St 902), will be moved from other stations. This area will have better access to provide incident command to the west (71), east (71/290), and Mopac for north & south response.	Engine & Ambulance - needed for first-due and advanced life support response. Ladder - Closest Ladder to this area is FS42, which is greater than 5 miles away. Area has two schools and COTA. Location would allow for good access to Hwy 71 & 130. Brush Truck - Due to the grasslands, a Brush Truck is needed to cover this area of the city. Closest BT is at FS24 (Dove Springs)	Engine & Ambulance - needed for first-due and advanced life support response. Ladder - Closest Ladder to this area is FS17 & FS19, which is greater than 5 miles away. Area has large commercial, multi-story buildings, and schools. Location would allow for good access to 360, FM2244, and FM222 Brush Truck - Due to the topography & vegetation, a Brush Truck is needed to cover this area of the city. Closest BT is at FS21 (Spicewood Springs)	Engine & Ambulance - needed for first-due and advanced life support response.	Engine & Ambulance - needed for first-due and advanced life support response.
How much will response times improve with this station?	3-4 min improvement 11-12 min current - improved to 8-9 mins	4-5 min improvement 13 min current - improved to 8-9 mins	5-7 min improvement 15-16 min current - improved to 8-10 mins	3-4 min improvement 11-12 min current - improved to 8-9 mins	3-4 min improvement 12 min current - improved to 8-9 mins
Will the residents see an improved ISO rating with this station?	No impact. Entire area receiving a Class 1	Yes, significant reduction. With a station closer than 5 miles, the current Class 10's will improve to Class 1's. This will reduce the resident's insurance rates by >50%	No impact. Entire area receiving a Class 1	No impact. Entire area receiving a Class 1	No impact. Entire area receiving a Class 1
Is there COA-owned land nearby?	Only parkland (Oakhill Neighborhood Park, Gaines Creek Neighborhood Park)	Yes. 6 acre tract in Moore's Crossing MUD.	None	Yes. Soon-to-be dedicated lot by Goodnight Ranch PUD	Yes. Small (1 acre) lot off Boulder. Dedicated for public safety use by Canyon Creek. Also, parkland in area.
How did you rank this station? Rank is based on the following: Incidents - 40%; Response Times - 40%; Homes at Risk (Wildfire, Flood) - 10%; ISO Class 10 - 10%	Travis Country has high incident volume (MoPac, 290, 71, commercial, residential) and long response times.	Moore's Crossing has moderate incident volume and long response times. Plus, approximately 175 homes or 7% of residents in the area have ISO Class 10 Rating (double insurance rates)	Loop 360 has moderate/low incident volume (360, commercial, residential) and very long response times.	Goodnight Ranch has moderate incident volume and long response times. This area is experiencing significant growth in residential and commercial (Goodnight Ranch PUD)	Canyon Creek has moderate incident volume (620, commercial, residential) and long response times. The closest units are single unit stations and fairly far away.

Attachment C.1 : Detail of Estimated Station Costs and Operating Budget Impact
(in millions)

	1. Travis Country	2. Del Valle / Moore's Crossing	3. Loop 360 / Davenport	4. Goodnight Ranch	5. Canyon Creek
Projected Opening Date	Oct. 2020	Oct. 2022	Oct. 2024	Oct. 2026	Oct. 2028
Station Type	4 Bay Station (10,596 sq ft)	4 Bay Station (10,596 sq ft)	4 Bay Station (10,596 sq ft)	3 Bay Station (9,650 sq ft)	3 Bay Station (9,650 sq ft)
Lot Acquisition	To be Purchased	6 acre lot dedicated by Moore's Crossing MUD	To be Purchased	Lot being dedicated by Goodnight Ranch PUD	Small lot donated by Canyon Creek (1 acre)
Department	AFD & EMS	AFD & EMS	AFD & EMS	AFD & EMS	AFD & EMS
Unit Types	1 Engine, 1 BC, 1 Ambulance, 1 EMS Commander	1 Engine, 1 Ladder, 1 Ambulance, 1 Brush Truck	1 Engine, 1 Ladder, 1 Ambulance, 1 Brush Truck	1 Engine, 1 Ambulance	1 Engine, 1 Ambulance
CONSTRUCTION COSTS					
Construction Estimate	\$11.7	\$8.7	\$13.6	\$8.0	\$11.0
Contingency	\$2.3	\$1.7	\$4.1	\$2.4	\$3.3
Cost Escalation	\$0.7	\$1.0	\$2.8	\$2.1	\$3.8
Total Construction Costs	\$14.7	\$11.4	\$20.5	\$12.5	\$18.1
ONE-TIME EQUIPMENT COSTS					
2018 Apparatus Purchase Cost	Engine - \$0.725, Ambulance - \$0.40 <i>(BC and Commander moved from other stations)</i>	Engine - \$0.725, Ladder - \$1.20, Ambulance - \$0.40 <i>(Brush Truck moved from another station)</i>	Engine - \$0.725, Ladder - \$1.20, Brush Truck - \$0.191 <i>(Ambulance moved from FS902)</i>	Engine - \$0.725, Ambulance - \$0.4	Engine - \$0.725, Ambulance - \$0.4
Apparatus (AFD & EMS)	\$1.1	\$2.3	\$2.1	\$1.1	\$1.1
Equipment / Furnishing Costs <i>(IT, alerting, furniture, SCBA)</i>	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3
Equipment & Apparatus Total	\$1.4	\$2.6	\$2.4	\$1.4	\$1.4
ANNUAL OPERATING COSTS					
Average Apparatus Maintenance Costs	1 AFD Unit - \$0.065 1 EMS Unit - \$0.016	AFD - \$0.16 Engine, Ladder, Brush Truck 1 EMS Unit - \$0.016	AFD - \$0.16 Engine, Ladder, Brush Truck	\$0.065 Engine 1 EMS Unit - \$0.016	\$0.065 Engine 1 EMS Unit - \$0.016
Average Facility Operations Cost	\$0.054/Year	\$0.054/Year	\$0.054/Year	\$0.054/Year	\$0.054/Year
Personnel Costs <i>(based on 2018 staffing costs)</i>	\$2.90 Total <i>(Engine - \$1.90, Ambulance - \$1.00)</i>	\$4.65M Total <i>(Engine - \$1.90, Ladder - \$1.75, Ambulance - \$1.00)</i>	\$3.65 Total <i>(Engine - \$1.90, Ladder - \$1.75)</i>	\$2.90 Total <i>(Engine - \$1.90, Ambulance - \$1.00)</i>	\$2.90 Total <i>(Engine - \$1.90, Ambulance - \$1.00)</i>
Annual Operating Total	\$3.0	\$4.9	\$3.9	\$3.0	\$3.0

**Attachment C.2 : Summary of Estimated Station Costs and Operating Budget Impact
(in millions)**

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