

6th Penny Work Session



- Welcome & Thank You
- SME & Questions
 - Participants
- Topics
 - Fleet Replacement Plan
 - Fire Station Replacement & Relocation
 - Phase I (1-5 Years) 6th Penny Request
 - Phase II (5-10 Years)
 - Phase III (10-15 Years)
 - Summary



Fleet Replacement

- Why the Need?
 - Current Fleet Status (Critical)
 - System Status
 - 84.5 Days Out of Service Avg
 - Days @ System Level 0
 - 2019 = 35
 - 2020 = 9
 - 2021 = 12
 - Continuity of Operations
 - Potential Station Closure
 - Safety Items
 - Pump Test Failures
 - Liability of not meeting Standard to pass
 - Front Line Apparatus
 - Age 11.2 years
 - Reserve Apparatus
 - Age 22.75 Years
 - Fleet repair cost are increasing
 - Prior to 2020 averaged \$275,000
 - 2020 increased to \$351,000 age and maintenance frequency



Fleet Replacement



- Start doing things different
 - Dynamic Resourcing (multi-use functions)
 - Formalize Vehicle Replacement Plan
 - Empirical Method – life cycle cost analysis of each apparatus (Vehicle Matrix Point System)
 - Based on data/usage 12-year rotation cycle (front-line to reserve)
 - Re-evaluate past practice – move away from critical purchasing to a planned approach
 - Catch the problems early
 - Formalize preventive maintenance procedures
 - Coordinate response data/usage early to determine potential problems/solutions
 - All but 2/10 Apparatus qualify for immediate replacement or recommended
 - Preserve our Fleet
- \$4,262,000.00

Fleet Replacement



Type 1 Engine

- \$712,000
 - Requested through AFG for purchase. April 28th
 - Replaces front line E-1 or E-6, which both are at critical to be moved to reserve status
 - Collective average 209.5 days out of service between 2018-2020

Fleet Replacement



107' Quint Single Axle

- \$1,100,000
 - ISO Credit for Ladder Service
 - Fire Suppression Rating Schedule (FSRS) in 2016 recognized 2 Ladder Companies in Service, which is recommended based on city demographic.
 - Meet NFPA 1710 of 2.5 miles with a needed fire flow of 3500 gpm or 3 stories or more in height.
 - Credit for Reserve Ladder Service
 - Central Location for Business Corridor

Fleet Replacement



110' Platform Single Axle

- 1,500,000
 - Replace current L-1 and place it in as a reliable Reserve Apparatus
 - 358 days out of service between 2018 and 2020.

Fleet Replacement



Squad Mini Pumper

- \$450,000
 - Medical Calls
 - Small Fires (Dumpster, Car, etc....)
 - Vehicle Accidents
 - Brush Fires (Spray Bars)
 - Light Rescue Capability
 - Nuisance Calls (Fire Alarms)
 - Rapid Intervention
 - Service Calls
 - Foam Capability
 - Multi-Use
 - Maneuverability

Fleet Replacement



Type 3 Engine

- \$500,000
 - 4-Wheel Drive
 - Pump and Roll Capability
 - Multi-Use
 - Structural Fire Protection
 - Brush Capability
 - EMS
 - All Hazard Response
- Station-2 Replacement Engine
 - Bison Run
 - Sweetgrass
 - Belvoir Ranch
 - Swan Ranch
 - Southern Annexation
 - Mutual Aid (Laramie County)
 - *** 3 grass fires in the Response District in last 2 days ***

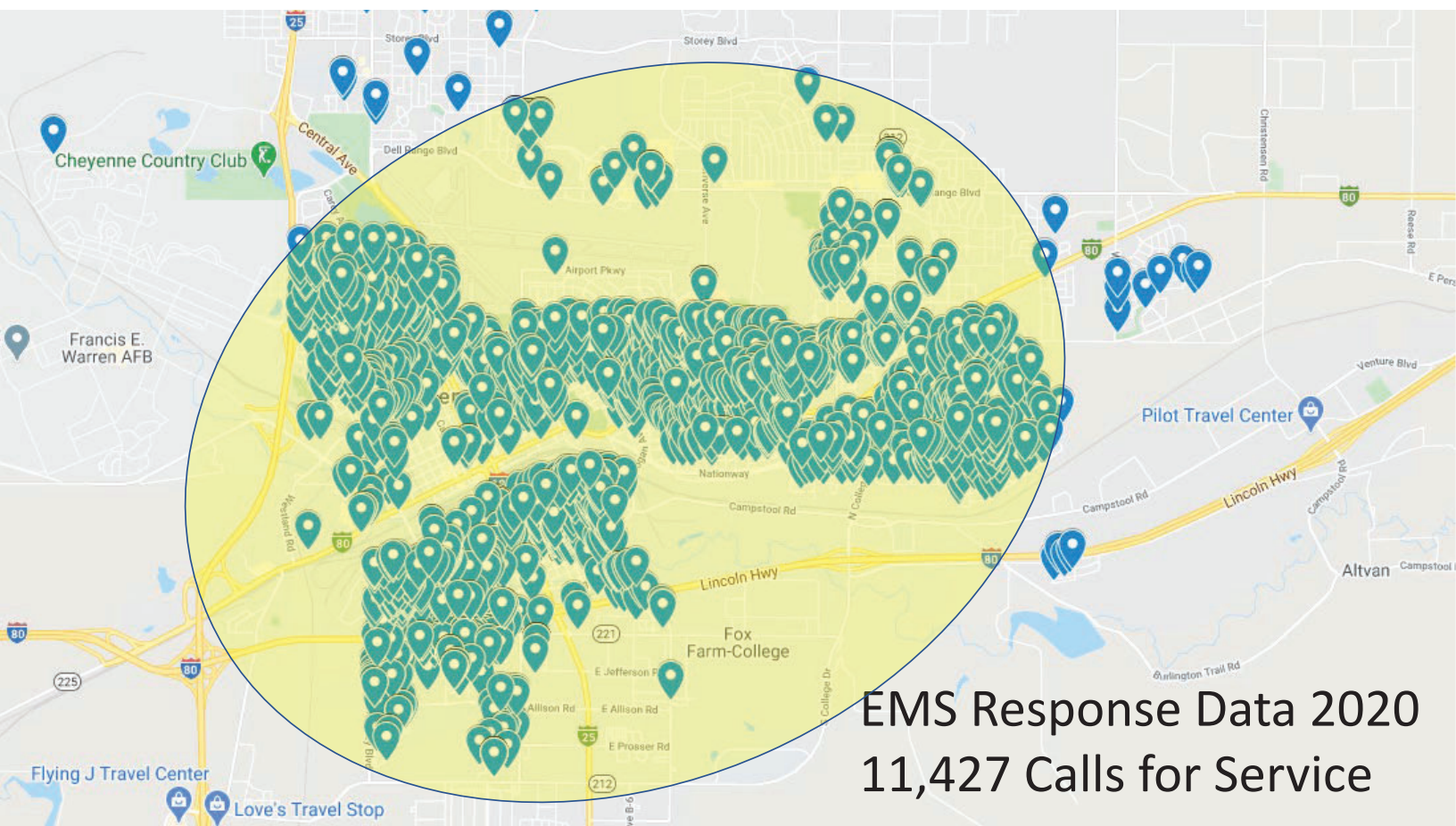
Fire Station Replacement/Relocation



- Current Station Locations

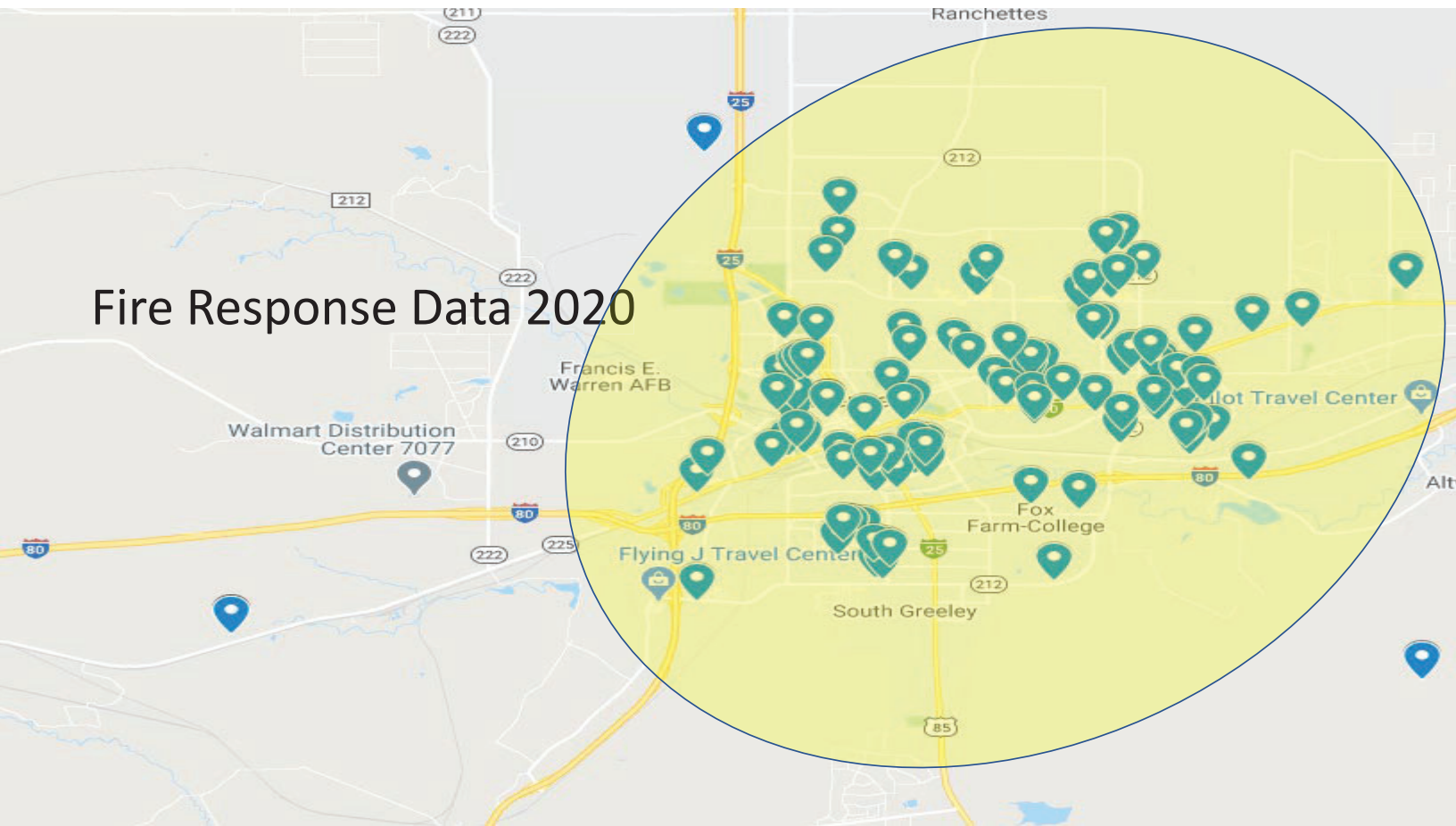
- History
- Limiting Factors
- Efficiency
 - Size
 - Poor coverage
- Growth (Annexation)
- “Central Hole”
- Gaps in Response Districts
- Flatten the Responses Out
- Insurance Services Office (ISO) & National Fire Protection Association (NFPA) 1710

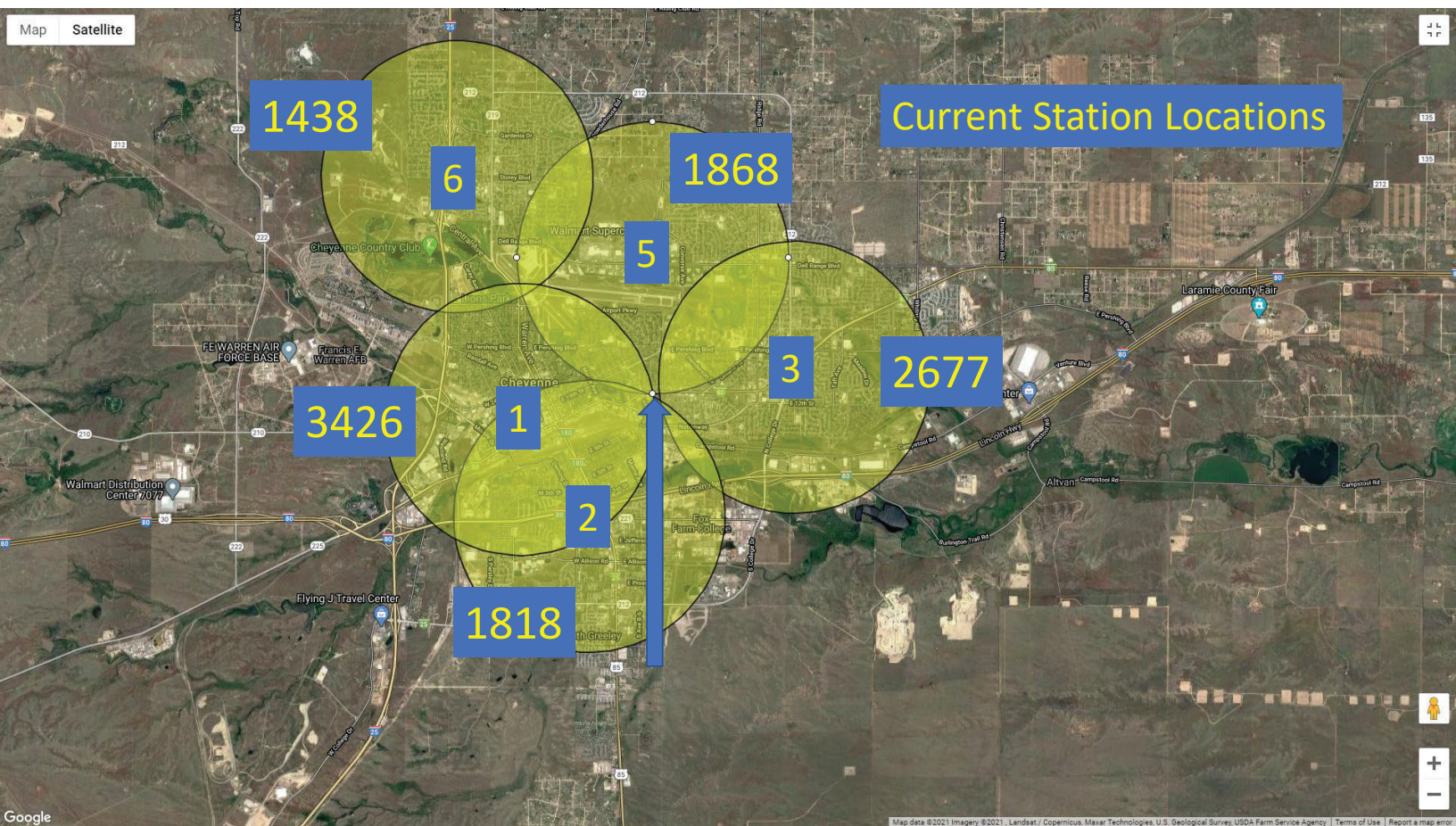




EMS Response Data 2020
11,427 Calls for Service

Fire Response Data 2020





Fire Station Replacement/Relocation

Built in 1963 (58 years)

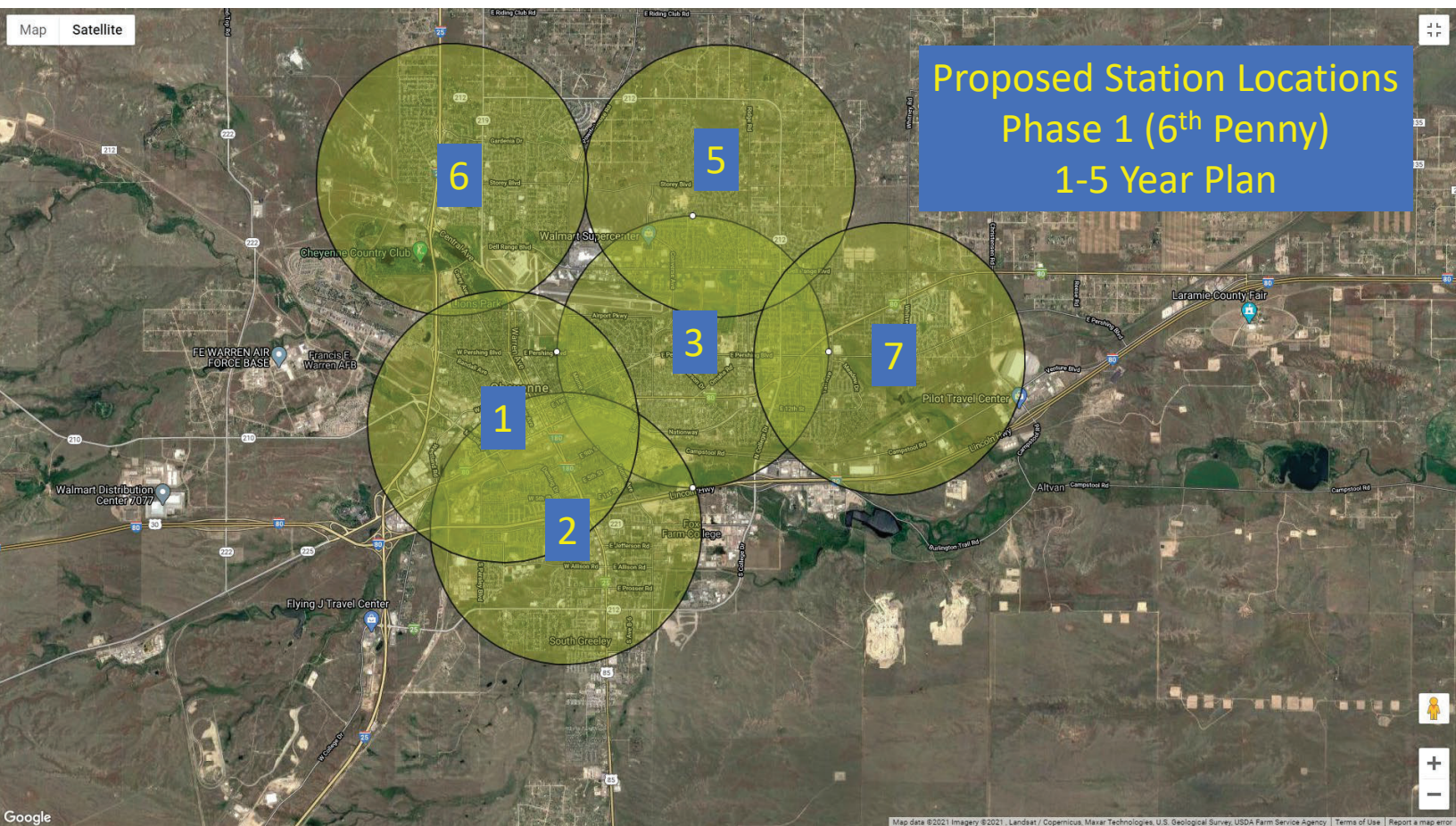


Built in 1981 (40 years)

Phase I (6th Penny 1-5 Years)

- Station 5 Replacement/Relocation (North Cheyenne)
- Station 3 Replacement/Relocation (Central Cheyenne)
- Station 7 Proposed (New East Cheyenne)
- Goal is to flatten out our Response Districts (1650 Calls for Service)
 - Reduced response times
 - Reduced travel distances
 - Reduced exposure risk (accidents)
 - Reduced movements
 - Reduced maintenance costs
 - Reduced fuel consumption
 - Increased life cycles of apparatus
 - Reduced firefighter fatigue and burnout
 - Increase training opportunities
 - Better and more efficient Service Delivery
 - Districts become more familiar with there area of assignment





Phase I (1-3 years) 6th Penny Request



- Station 1
 - Ladder/Tower (4)
 - Battalion Chief (1)
 - Rescue Squad Mini Pumper (2)
 - Ambulance (2) Secondary Post
 - RERT Response Apparatus
- Station 2
 - Engine Type 3 (3)
 - Ambulance (2) Primary Post
- **Station 3 (Relocation Central Cheyenne)**
 - Quint (3)
 - Ambulance (2) Primary Post
- Station 4 (Training Facility)
 - Unstaffed
- **Station 5 (Relocation North Cheyenne)**
 - Engine Type 1 (3)
 - Ambulance (2) Secondary Post
- Station 6
 - Engine Type 1 (3)
- **Station 7 (Proposed New East Cheyenne)**
 - Engine Type 1 (3)
 - Ambulance (2) Primary Post

Re-aligns our equipment & stations with no increase in staff

AMR Posting Plan

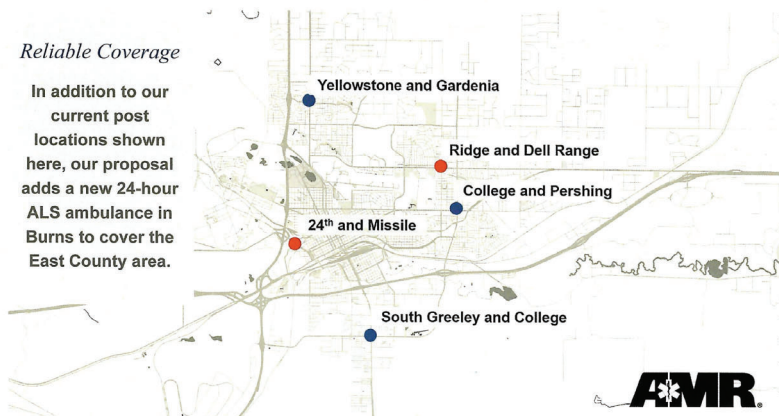


Posting Plan

Please see below for our local posting plan, based on years of experience and collaboration with system partners. On the map, our primary posts are shown in **blue**. Our secondary posts – used when demand begins to exceed normal levels – are shown in **red**.

Reliable Coverage

In addition to our current post locations shown here, our proposal adds a new 24-hour ALS ambulance in Burns to cover the East County area.



• Collaborative Approach to Response

- Remove ambulance off streets, get them back into fire stations
- Increased collaboration
- Reduced duplication of effort
- Better Service Delivery
- Stronger Relationships
- Resource distribution
- Potential Revenue Stream
- Increased System Efficiency

City of Cheyenne
EMERGENCY RESPONSE FACILITIES

FLOOR PLAN



City of Cheyenne Fire Rescue
EMERGENCY RESPONSE FACILITIES
Cheyenne, Wyoming

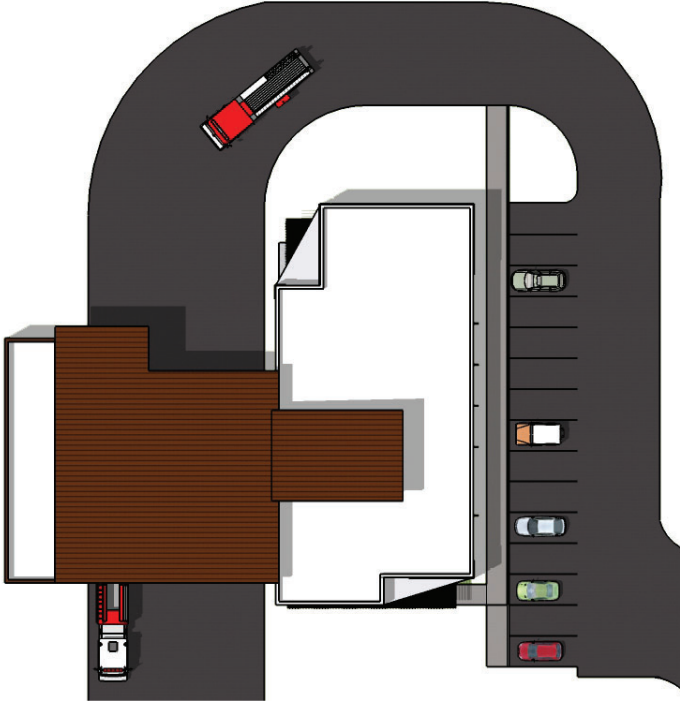


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TRAFFIC FLOW



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FRONT RENDERING

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Cheyenne, Wyoming



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City of Cheyenne
EMERGENCY RESPONSE FACILITIES

- ESTIMATED PRICE PER STATION
WITH 4 YEARS OF ESCALATION
- \$5,253,887

COST ESTIMATE

ESTIMATE SUMMARY				
CITY OF CHEYENNE FIRE & RESCUE				
PROJECT:	EMERGENCY RESPONSE FACILITY	CSI DIVISION:	SUMMARY	
PHASE:	DESIGN DEVELOPMENT	BLDG SF:	12,225	Page 2 of 19
BID DATE:	AUGUST 2019	ESTIMATE DATE:	JANUARY 20, 2017 (revised 3/5/19)	3/5/2019
PREPARED BY:	J.R. CONKEY & ASSOCIATES			10:30 AM
				Cheyenne Fire Station DD Estimate 1_20_17 revision 3_5_19
		COST / SF	TOTAL	
CSI DIVISION 1	GENERAL REQUIREMENTS (SEE BELOW)	\$0.00	\$0	
CSI DIVISION 2	SITE CONSTRUCTION	\$49.37	\$603,505	
CSI DIVISION 3	CONCRETE	\$15.46	\$188,945	
CSI DIVISION 4	MASONRY	\$3.64	\$44,529	
CSI DIVISION 5	METALS	\$26.87	\$328,482	
CSI DIVISION 6	WOOD & PLASTICS	\$0.45	\$5,501	
CSI DIVISION 7	THERMAL & MOISTURE PROTECTION	\$9.40	\$114,951	
CSI DIVISION 8	DOORS & WINDOWS	\$23.41	\$286,150	
CSI DIVISION 9	FINISHES	\$33.04	\$403,898	
CSI DIVISION 10	SPECIALTIES	\$2.66	\$32,478	
CSI DIVISION 11	EQUIPMENT	\$1.07	\$13,050	
CSI DIVISION 12	FURNISHINGS	\$7.86	\$96,126	
CSI DIVISION 13	SPECIAL CONSTRUCTION	\$23.61	\$288,620	
CSI DIVISION 14	CONVEYING SYSTEMS	\$0.00	\$0	
CSI DIVISION 15	MECHANICAL	\$65.12	\$796,125	
CSI DIVISION 16	ELECTRICAL	\$55.12	\$673,844	
SUBTOTAL HARD COSTS		\$317.07	\$3,876,204	
CONTINGENCY				
	ESTIMATING CONTINGENCY 5.00%		\$193,810	
	MARKET FACTOR 0.00%		\$0	
SUBTOTAL CONSTRUCTION COSTS			\$4,070,014	
MARK-UPS				
	GENERAL CONDITIONS 8.00%		\$325,601	
	OVERHEAD & PROFIT 6.00%		\$263,737	
	INSURANCE & BONDS 0.60%		\$27,956	
SUBTOTAL MARK-UPS			\$617,294	
SUBTOTAL CONSTRUCTION COSTS & MARK-UPS			\$4,687,308	
ESCALATION				
	5 MONTHS AT 5% ANNUAL 2.08%		\$97,652	
	(FROM ESTIMATE DATE TO ASSUMED BID DAY OF 8/19)			
	4 MONTHS AT 5% ANNUAL 1.67%		\$79,749	
	(FROM BID DATE TO MIDPOINT OF CONSTRUCTION)			
SUBTOTAL CONSTRUCTION COSTS, MARK-UPS & ESCALATION			\$4,864,710	
TOTAL BASE BID ESTIMATE		COST PER SF: \$397.93	\$4,864,710	

City of Cheyenne Fire Rescue
EMERGENCY RESPONSE FACILITIES
Cheyenne, Wyoming



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City of Cheyenne EMERGENCY RESPONSE FACILITIES

The aging facilities do not meet current service demands and are antiquated. They do not support operational and equipment needs, or meet applicable safety codes and standards.

The new stations will:

- Support current and future growth for the next 50 years
- Increase turnout efficiency and provide for a quicker response to increase community safety
- Mitigate current code and safety issues within the current facilities
- Be designed for energy efficiency for long-term cost savings
- Mitigate firefighter contaminate exposure and cancer risks with separate decontamination
- Incorporate durable and low maintenance materials to reduce operations and maintenance costs
- Provide for insurance cost reductions for the city
- Be designed as proto-type facilities to minimize the expenditure of public funds
- Energy efficient buildings
- Four fold doors are high cycle, low maintenance energy efficient – open/ close 7 seconds

City of Cheyenne Fire Rescue
EMERGENCY RESPONSE FACILITIES
Cheyenne, Wyoming



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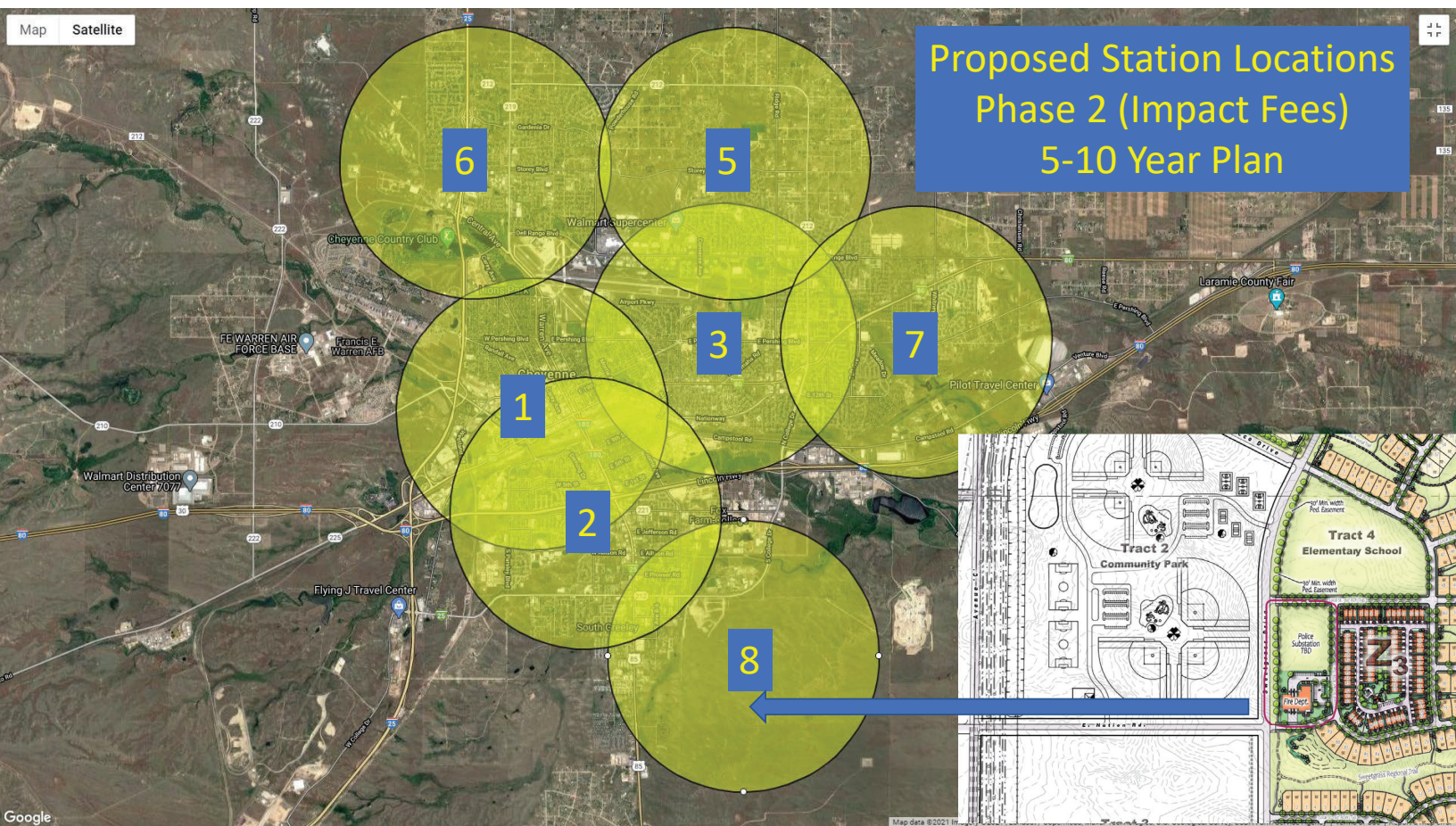
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Phase II (5-10 years) Development Impact Fees



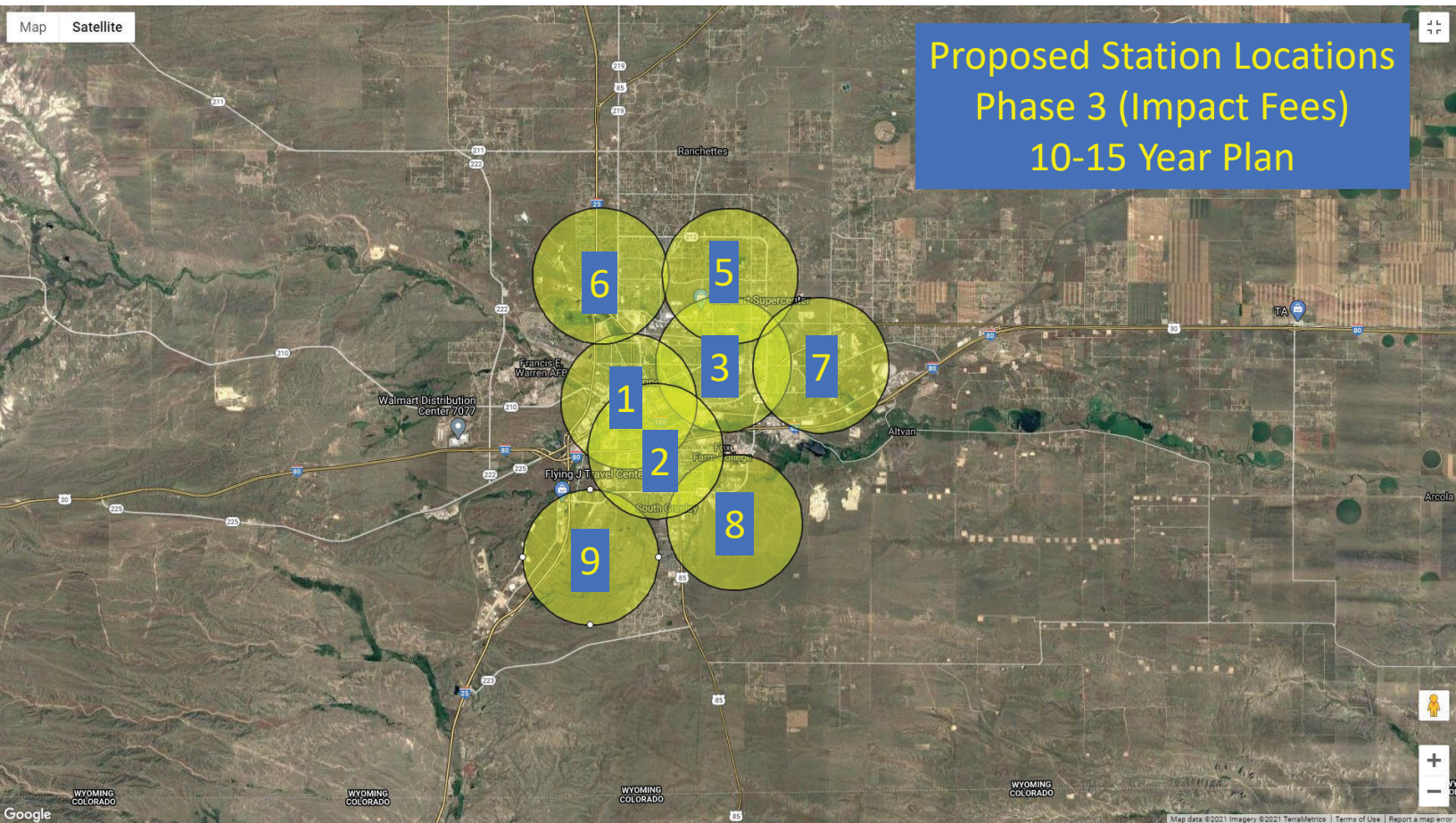
- Station 8 Proposed (Sweetgrass & South Cheyenne)
 - Moving Engine-2 and personnel to new Station (keeping existing station for radio infrastructure, squad or ambulance)
 - Single Family
 - Retail/Commercial
 - Hospitality
 - School/Parks
 - High Risk/Low Frequency vs. Low Risk/High Frequency (90%)
 - Installed Fire Protection Systems
 - Developed Emergency Response Plans
 - Response Teams
 - Utilization of Mutual Aid/Automatic Aide Agreements



Phase III (10-15 years) Development Impact Fees



- Swan Ranch
 - Industrial/Business Park
- South Cheyenne Development future annexation
 - Single Family Development
 - Business/Light Industrial
- Bison Run Expansion
 - Critical Infrastructure
- Current Station 6 Replacement





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Summary



- Criticality of our Situation
- Fleet Replacement Plan ← 6th Penny Request \$20,762,000.00
- Fire Station Replacement/Relocation Plan ←
- Phase I (1-5 Years)
- Phase II (5-10 Years)
- Phase III (10-15 Years)
- Thank You!

