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GROWTH AND EXPANSION FEASIBILITY MASTER PLAN

Prepared for

Gainesville, Florida

Presented by

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Project Overview

- City retains ESCI, February 2021 for Growth & Expansion Feasibility Study
- ESCI team included WSKF Architects (and associated engineering firms PKMR Engineers for MEP, Bob D. Campbell for structural and Tillman & Associates for Civil/LA), Levrum, and Dynamix
- Six-month project timeline (April-September)
 - Kick-off meeting April 2021 to ensure full project understanding
 - Reviewed considerable staff supplied information: historical incident data, demographic data, local hazard mitigation studies, capital assets/maintenance programs, financial data, and population/community growth projections
 - Multiple site visits by architectural/engineering and fire rescue SME teams
 - Biweekly ESCI/GFR team meetings
 - Multiple review periods for 85% and final draft documents
- ESCI hopes this study provides city leaders with data-driven options for consideration and development of sound, long-term policy for improving fire, rescue and EMS services to its neighbors
- The members of GFR, an ISO Class 2 fire department provide outstanding service to their neighbors, both within the city and its surrounding region



Project Understanding

- Primary focus of Growth and Expansion Feasibility Master Plan
 - Comprehensive analysis of all existing facilities
 - Optimal location for all facilities
 - Prioritization of new, replacement or renovated facilities
 - Estimate costs of notional facilities master plan
- Secondary focus on GFR operations with other recommendations and strategies provided
 - Based upon detailed observation and analysis of department operations and administration
 - Short- to Mid-term in nature (0-3 years)
 - Some are easy to implement, others may take serious commitment of time and resources (including financial)
- Final report divided into four major sections with an executive summary provided as a quick overview of major findings



Report Format

- Evaluation of Current Conditions
 - Review of existing facilities
 - Detailed analysis of GFR service delivery and response performance
 - Many other aspects of GFR operation and administration
- Growth and Expansion Considerations
 - Historical population data, census information, comprehensive plans and past incident history used to project future workload and community risk
 - Station location optimization study including traffic calming
 - Space needs analysis
 - Conceptual fire station plan



Report Format

- Recommendations and Financial Impacts
 - Financial basis for cost projections
 - Notional facilities master plan
 - Other recommendations and strategies
- Supporting Information as Appendices
 - Development of Future Service Demand Models
 - Financial Analysis and Status Quo Projection
 - Current Staffing Analysis
 - Capital Apparatus Inventory
 - Capital Facility Inventory



Assessment of Existing Facilities

- 16 Facilities Assessed
 - 9 Fire Stations (includes airport fire station)
 - 1 Tactical Training Facility
 - 3 Administrative Facilities
 - 1 Logistics & Support Services Facility
 - 1 Temporary Facility
 - 1 Outdoor Educational Facility



Assessment of Existing Facilities

- Major Assessment Categories
 - Overall Structure (age/general conditions)
 - Building Function (industry use conformance)
 - Health & Wellness (includes personnel safety & security)
 - Risk Assessment (building & site assessment)
 - MEP Assessment (mechanical/electrical/plumbing)
 - ADA Assessment (interior & site assessment)



Assessment of Existing Facilities

- Assessment summary (conditions rating assessment)

Station/Facility	Condition				Notes/Comments
	Exceptional	Good	Fair	Poor	
Fire Station #1	X				Newest Facility
Logistics & Supply Warehouse	X				Co-located at Station 1
Fire Station #2				X	46 Year Old Facility
Fire Station #3				X	61 Year Old Facility
Training Tower/Burn Building			X		Co-located at Station 3
Fire Station #4			X		57 Year Old Facility
Fire Station #5				X	56 Year Old Facility
Fire Station #6	X				3 Year Old Facility, Airport Authority
Fire Station #7				X	40 Year Old Facility
Fire Station #8		X			10 Year Old Facility
Fire Station #9				X	Temporary Facility
Annex - Bldg. A				X	45 Year Old Facility
Annex - Bldg. B				X	45 Year Old Facility
Annex - Bldg. C				X	45 Year Old Facility
Modular Training Classroom			X		Temporary Facility
Safety City		X			Educational Campus Facilities



Assessment of Existing Facilities

- Overview Assessment Summary
 - Average Age – 34¹
 - Adjusted Average Age – 45²
 - Fire Station Condition – 5 of 9 rank in the “Poor” column³
 - Condition Age Mode – 45

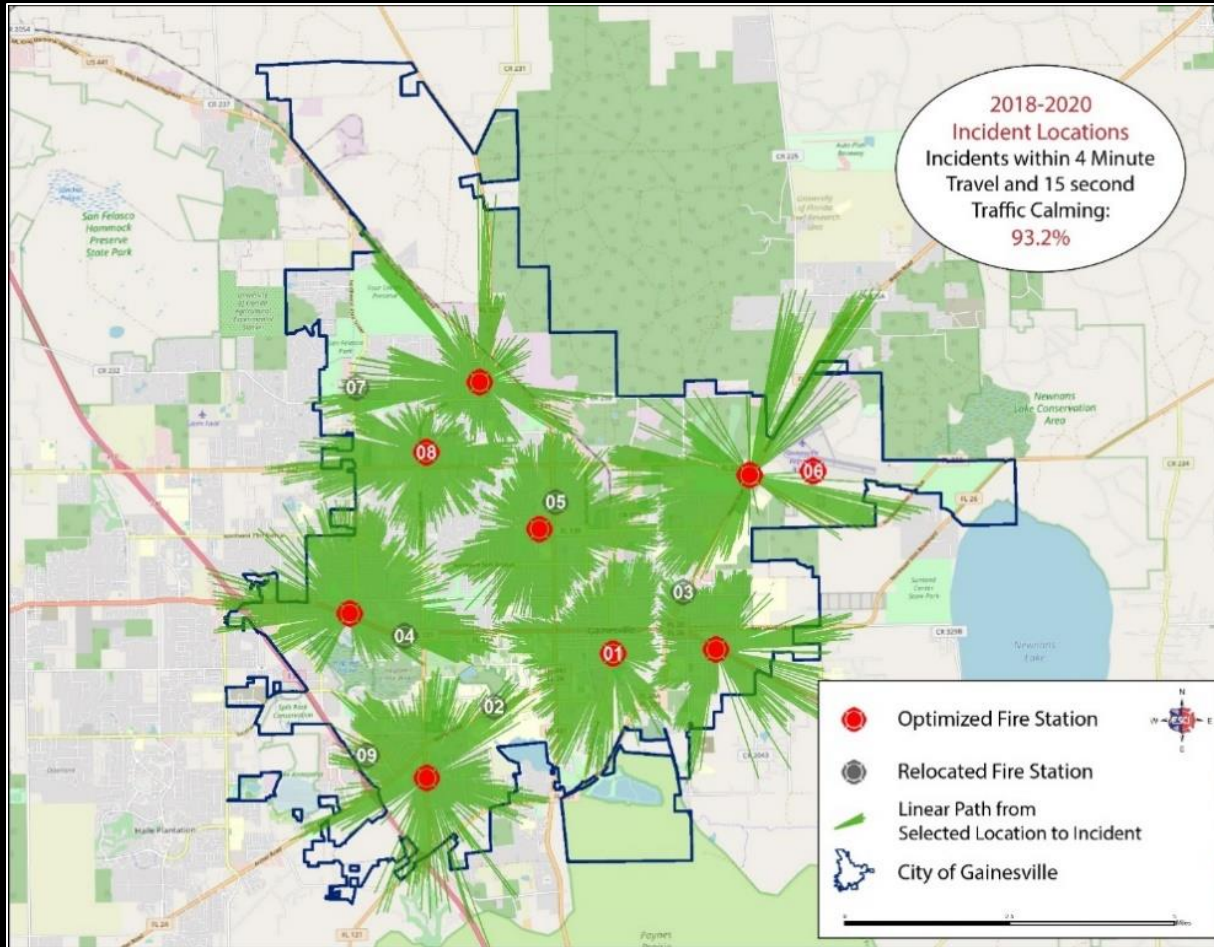
¹ Excludes Tactical Training, Modular & Safety City

² Excludes Station 1, 6 (Airport Fire Station) & 8

³ Excludes Tactical Training, Fire Administration, Modular Classroom



Fire Station Location Optimization

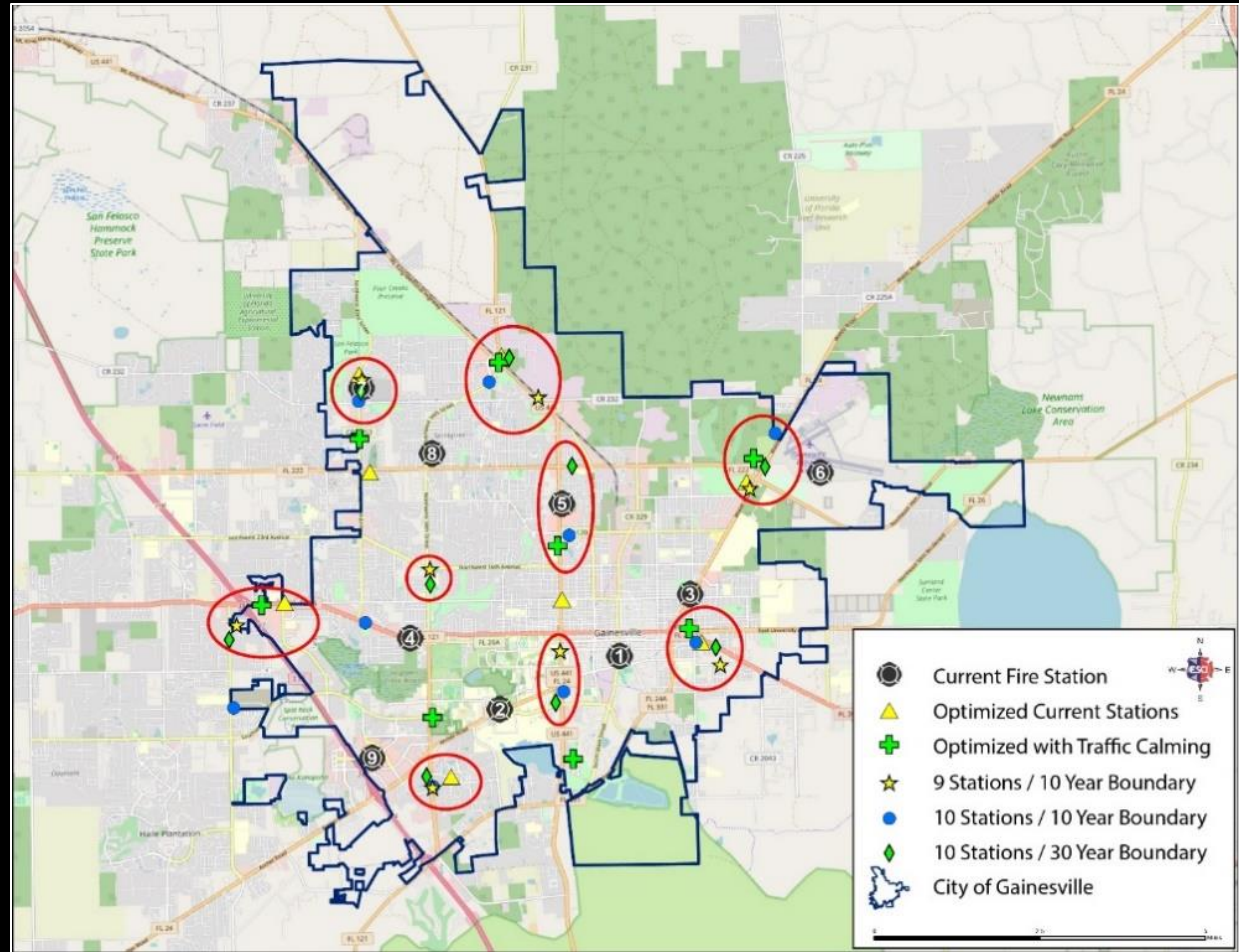


- GIS model created showing optimal station locations with a 4-minute travel time (assuming units in station and ready to respond)
- All incidents from 2018-2020
- Current and planned traffic-calming devices accounted for (adds 15-second delay)
- Station 6 (Airport Fire Station) not included
- Stations 1 and 8 “pinned”, all others allowed to move
- 93.2% of all incidents within 4-minute travel of a station

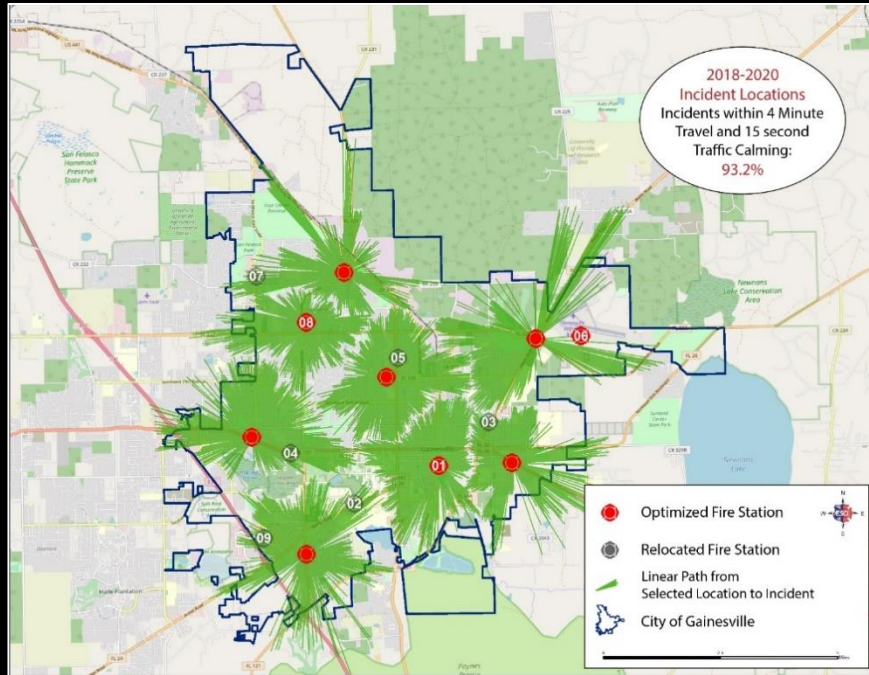


Fire Station Location Optimization

- Multiple iterations of model run using both nine- and ten-stations and city ten- and thirty-year boundaries
- Station 6 (Airport Fire Station) not included for response analysis off airport property
- Models appeared to cluster in the same general areas as shown in red

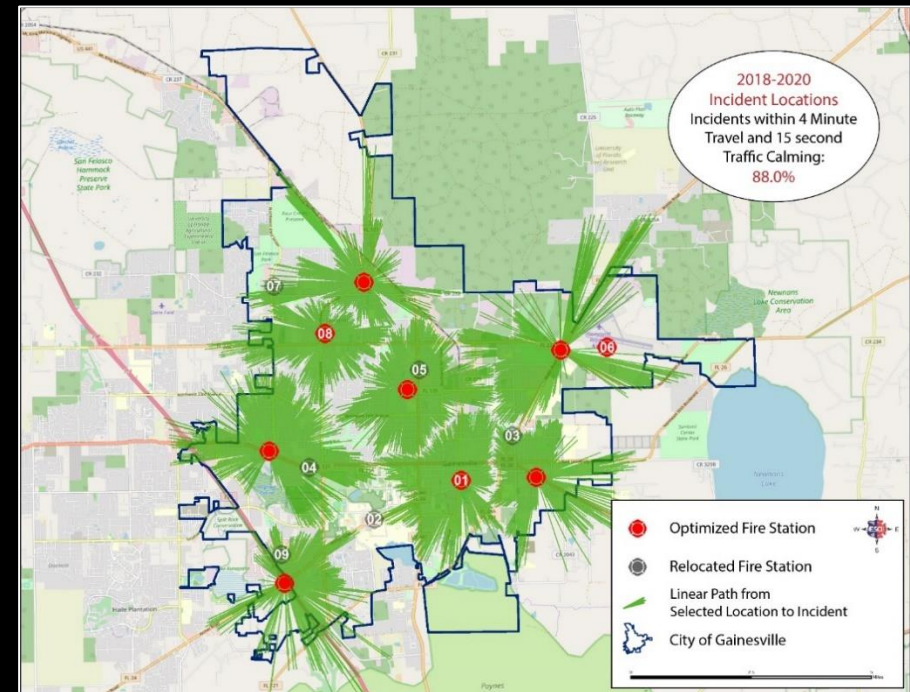


Fire Station Location Optimization



- Further discussions with GFR staff resulted in slight adjustment
- 88% of calls were accessible within 4-minutes based upon agreed upon new locations as shown

- Based on modeling and staff discussions, Stations 1, 6 (Airport Fire Station) and 8 were pinned
- 93% of calls were accessible within 4-minutes based upon new locations as shown



Space Needs Analysis

- Proto-Typical Fire Station
- Community Resource Paramedic (CRP) Program
- Public Safety Hub
- Fire Training



Space Needs Analysis – Prototype Station

- Space Needs Objectives
 - Replicate Typical Spaces (indifferent to location)
 - Flexibility for number of personnel & apparatus
 - Plan for the future
 - Integral Community Resource Service (prevention/wellness)
 - 21,000 SF - \$8.925 - \$9.45M*

*Excludes Furniture, Equipment, Land, Design, Apparatus



Space Needs Analysis – Prototype Station



Space Needs Analysis – CRP Program

- Space Needs Objectives
 - Provide space for Community Resource Paramedic services
 - Provide space for both on-site clinical and telemedicine services
 - Provide space for CRP support vehicles, including mobile clinics (ambulances)
 - 9,200 SF - \$3.0 - \$3.25M*

*Excludes Furniture, Equipment, Land, Design, Apparatus



Space Needs Analysis – Public Safety Hub

- Space Needs Objectives
 - Provide space for central administration, and support services
 - Provide space for community risk reduction
 - Provide space for event command center and related support services
 - 13,000 SF - \$4.85 - \$5.25M*

*Excludes Furniture, Equipment, Land, Design; Includes “hardened space”



Space Needs Analysis – Training Space

- Space Needs Objectives
 - Provide space for administrative and training support services
 - Provide space for “clean & dirty” (indoor & outdoor) training
 - Provide space for “community risk” training (fire training props, hazmat, EMS, driver skills, etc.)
 - 53,000 SF - \$14.4 - \$15.6M*

*Excludes Furniture, Equipment, Fire Props, Land, Design, etc.



Notional Facilities Master Plan

- Priority 1 (1 to 3 years)
 - Replace Stations: 2, 5, & 7
\$33.0 - \$36.0M (Design and Construction)
- Priority 2 (4 years)*
 - Replace Station: #9
\$10.0 - \$11.0M (Design and Construction)

*Consider Master Planning Fire Training Campus



Notional Facilities Master Plan

- Priority 3 (5 to 7 years)
 - Replace Station: 3
 - Develop Tactical Training Complex
 - Replace Community Resource Paramedic (CRP) Program facility

\$16.0 - \$17.6M (Design and Construction)



Notional Facilities Master Plan

- Priority 4 (8 to 9 years)
 - Replace Station: 4
 - Replace Training Building
 - Replace Administration Building

\$19.0 - \$20.9M (Design and Construction)



Questions?

