

York Area United Fire & Rescue -- Staffing Study

Kramer & Associates

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Thanks!

Necessary Input received:

- Initial kickoff with YAUFR Board support
- Chief Hoff was able to provide documents and detailed data as needed; and updated it as the report progressed
- Phone calls and teleconferencing assisted
- Ongoing cooperation from all department members during study
- YAUFR Citizens are supportive of their department and appreciate efforts to improve staffing and enhance their protection

“Business” Perspective

- Improvements in staffing must be based on commensurate community growth, and be “affordable”
- An understaffed department that has not grown with the community can be expensive
 - Higher Insurance rates for business
 - Potential liability if there has been no analysis of escalating responses and overlapping calls
 - Potential liability if there has been no attention to national standards or industry best practices

Common Theme

- In discussions with YAUFR Board Members, Chief Hoff and his staff of officers, current active fire department members, area business leaders, and ordinary citizens, however, the Consultant found a common theme:

All desire to see quality fire protection and EMS service throughout YAUFR

Existing YAUFR Strengths:

- Recent Improvements Represented by Improvement in ISO from 4 to 3 rating
- Quality Apparatus and Equipment
- “Economy of Scale” in providing emergency fire and EMS service across three contiguous townships
- Political and Administrative support
- Community support
- Regional cooperation

Challenges and Changes needed

- Shrinking part-time and volunteer firefighter base
- Need for more full-time staffing
- Need for agreement among board members on appropriate staffing levels
- Possible compromise among three townships

CBS Pittsburgh 11/4/22

- According to the Pennsylvania Fire and Emergency Services Institute, the number of volunteer firefighters has dramatically dropped
- 300,000 in the 1970s
- 60,000 in the 2000s
- 38,000 now.

Areas needing Attention:

- ❑ **Additional on-duty staffing**
- ❑ **New Fire/EMS Station in Manchester; Replacement in Spring Garden**
- ❑ **Noncompliance with NFPA safety and staffing standards**

Six-Module Staffing Study

**MODULE 1: INTRODUCTION; FIRE DEPARTMENT
STAFFING ANALYSIS**

**MODULE 2: FIRE STATION LOCATIONS, AND
APPARATUS CONFIGURATIONS**

MODULE 3: POPULATION, DEMOGRAPHICS AND ISO RATINGS

**MODULE 4: GENERAL ORDERS, OPERATIONS AND
PERSONNEL DEVELOPMENT**

**MODULE 5: SERVICE DEMAND ANALYSIS, BUDGETS,
FUNDING AND GRANTS**

**MODULE 6: FUTURE OUTLOOK, ORGANIZATIONAL
ENHANCEMENTS**

Six-Module Page Count

PAGE COUNT – YAUFR STAFFING STUDY			11-1-22
Module	Text	Appendices	Module Total
1	28	29	57
2	29	50	79
3	35	42	77
4	20	66	86
5	38	41	79
6	22	41	63
Overall Total	172	269	441

Highlights and Key Points

- It is difficult to condense a 441-page report into a single power-point presentation
- Nonetheless, key issues are found in these slides.
- The fact that this study was commissioned indicates that YAUFR is seeking a path toward continuing improvement.

New Stations for the Future

- A New Station in Manchester is feasible; Cousler Park is one possible location
- A replacement station for Spring Garden should be planned for.
- Current stations are functional, but all stations will, over time, need to continue to add staffing.

YAUFR Benefits from "Regionalism"

- **Service to the larger community is a priority**
- **Takes precedence over wishes of individual townships, stations or their members**
- **Mutually advantageous, especially during multiple calls. There is a 42.38 % overlap.**
- **When paid personnel are on-duty, automatic aid with adjacent communities, such as York City, becomes feasible.**

Should YAUFR Bill for Mutual Aid?

City of Defiance City Manager Jeff Leonard, when evaluating the formation of a Fire District with three Townships:

"We have a sense of Community here. I don't necessarily mind subsidizing our neighbors. I would hope that if Defiance residents are seriously injured in an accident outside the City limits, they would still get quality care."

**We encourage this
"Sense of Community"**

Module 1 – Introduction; Fire Department Staffing Analysis

- **Future staffing in YAUFRR will be toward the augmentation of full-time paid personnel.**
- **The safety of the citizenry and the firefighters themselves should make these expenditures a necessary high priority.**

Staffing Needed Now

- **Currently York Area United Fire and Rescue can rarely meet OSHA and NFPA recommended numbers of firefighters needed for a working structure fire.**
- **Ten years ago, staffing in the Springettsbury-Spring Garden portion went from 32 to 30 persons and has remained stagnant, even as the community and command staff have grown**

YAUFR -- Relevant Standards

- **NFPA 1500 "Safety in Numbers"**
- **OSHA 2 + 2 "Rapid Intervention Teams"**
- **NFPA 1710 "Adequate staffing, rapid response"**
- **ISO (Insurance Services Office)**

Pre-YAUFR "Back Then": NFPA 1720 Standard (Primarily Volunteer Depts.)

- ✓ **Minimum six (6) personnel on the fire scene**
- ✓ **First fire unit arrives within 14 minutes 80% of time**
- ✓ **Fire department should determine the required number of personnel on scene to operate safely and efficiently**
- ✓ **The fire department should have a formal training program that trains personnel to deliver services provided by the fire department**
- ✓ **Minimum 2-person Rapid Intervention Team**

YAUFR Now: Should strive for: NFPA Standard 1710 (Primarily Full-time Career)

- ✓ **Four (4) personnel per fire apparatus**
- ✓ **First fire unit arrives within 4 minutes 90% of time and the remainder of the assignment within 8 minutes 90% of the time.**
- ✓ **Eighteen personnel on first alarm within eight minutes**
- ✓ **Quality and safety parameters**

The consultants believe that ideally, the numbers above are representative of the needed workforce at an incident. There is a balancing act, however, between ideal and affordable. YAUFR can afford to move closer to the “Ideal” even though it will likely remain short of literal compliance.

Module 2 – Station Locations and Apparatus Configurations

- ❑ *We do note an unusually high percentage of overlap calls in YAUFR, 42.38%.*
- ❑ *This is another reason to try to accelerate additional staffing, a factor that will help units clear a scene more quickly.*
- ❑ *A new station in Manchester will assist with response times and reduce the overlap percentage.*

Estimated Construction Costs for 8500 Sq. ft. Station

Sq. Ft.	Cost per Sq. Ft.	Const. Costs	Soft Costs	Total Costs
8500	\$375	\$3,187,500	\$637,500	\$3,825,000
8500	\$400	\$3,400,000	\$680,000	\$4,080,000

Building vs. Staffing Costs

- While a new fire station may seem to be a major investment, if the building will last 50 years, the cost per year on a simplified straight-line basis is figured as follows:

Building: $4 \text{ million} \div 50 = \$80,000$ per year

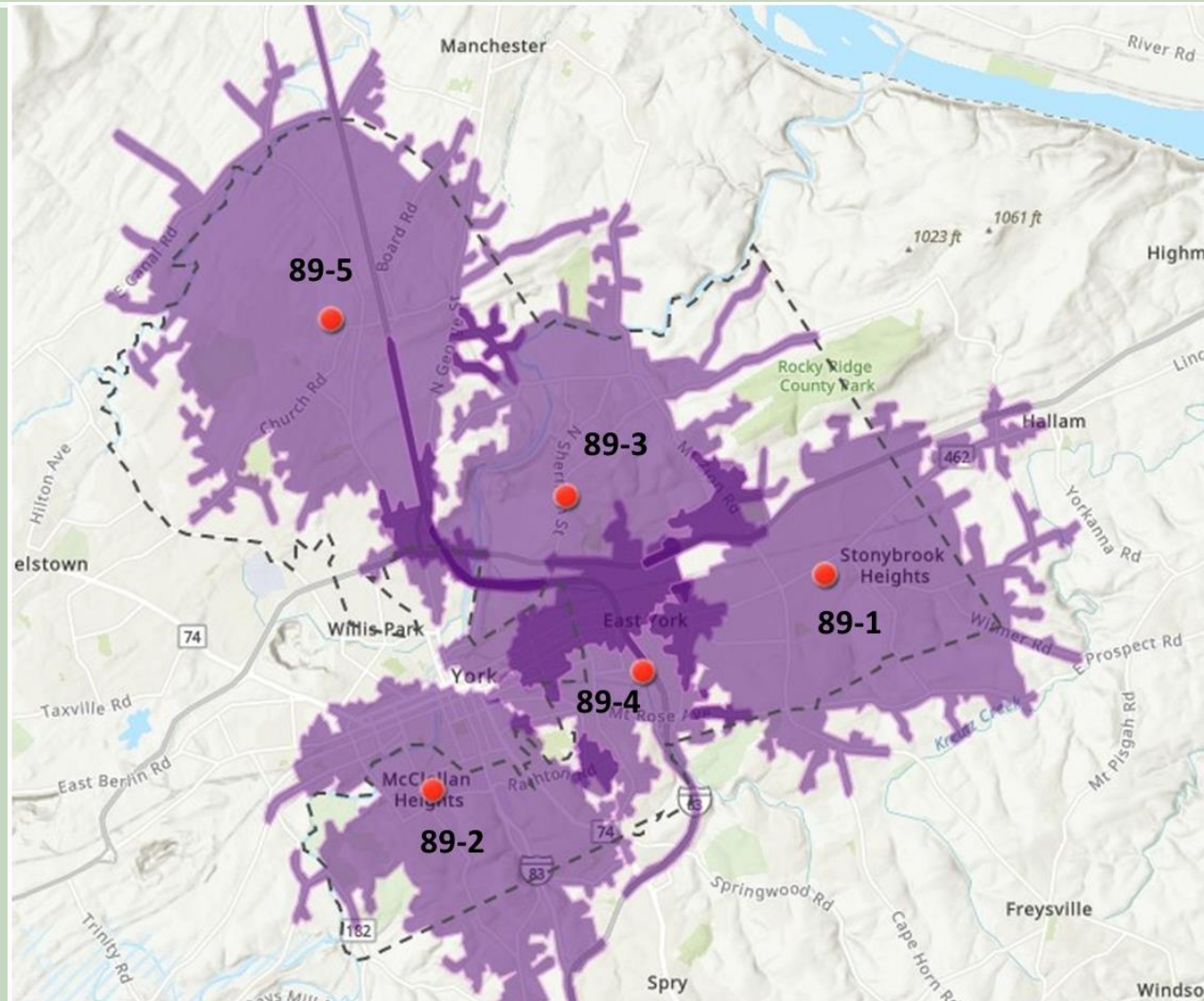
- Let's say this building will conservatively house an average crew of five persons, for 24 hours a day, earning an average of \$55,000 per year. Three shifts plus earned days off, sick time, vacation leave and an overtime factor create a multiple of four. Hence the following calculation:

Salaries: $5 \times 4 \times \$65,000 = \$1,300,000$ per year

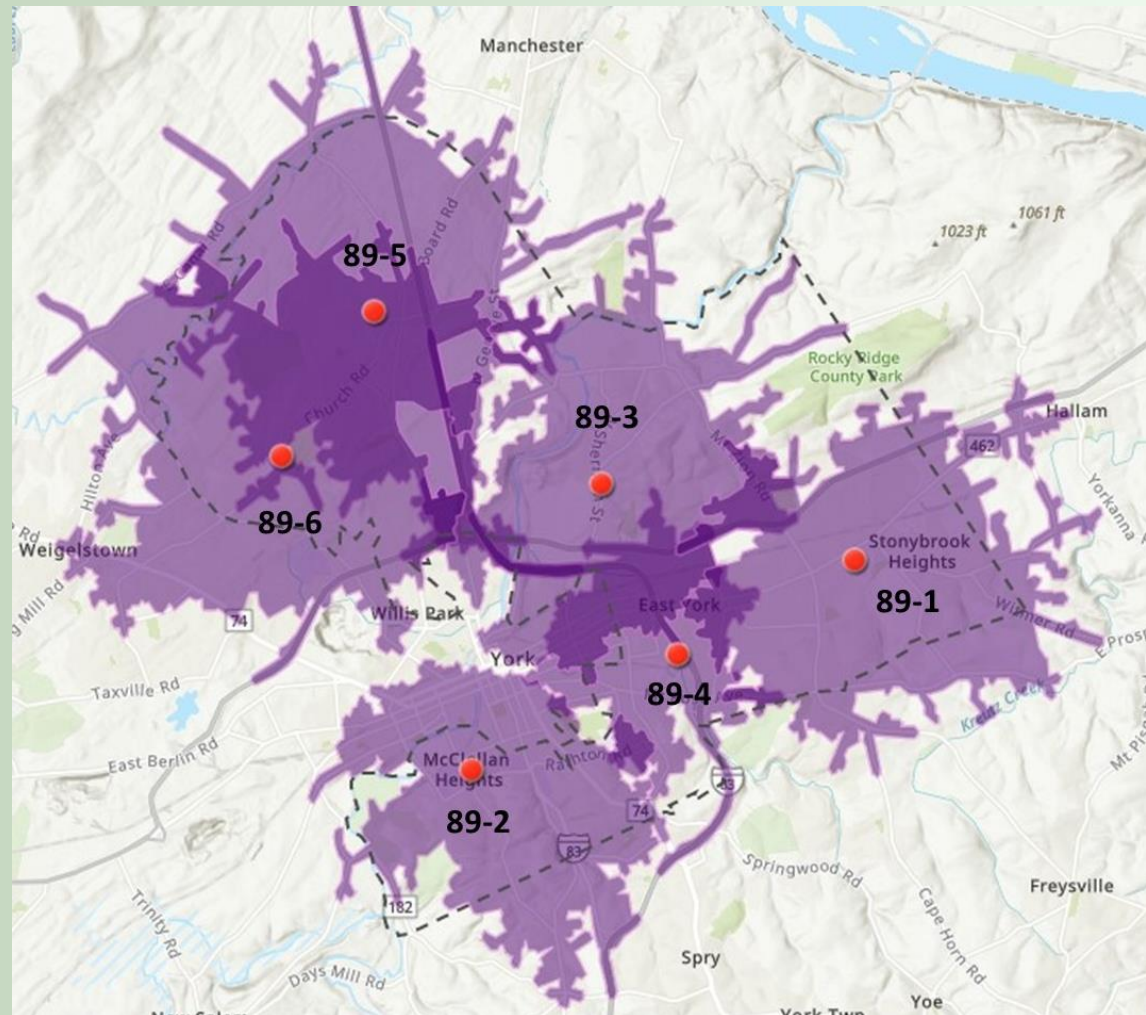
Module 2 – Stations; Response

- Both ISO and NFPA use 4-minute and 8-minute benchmarks for various response parameter times.
- ISO also references the need for all properties to be within 5 miles to receive a decent Insurance rating, and within 6 miles to have any rating at all
- Most of the national standards would like to see an immediate arrival of a first fire unit with four minutes, and a full complement within 8 minutes
- For mapping purposes, we utilize the median of the 4-minute and 8-minute metrics, and show 6-minute polygons

Six-minute Response Polygons , now



Six-minute Response Polygons , with additional station in Manchester



Apparatus and Equipment

- **There is plenty of equipment. There are enough apparatus units, and overall locations of stations are good. There are two reserve pumpers that are available for any of the five stations.**
- **Chief Hoff shared the apparatus plans for the current configuration and the consultant concludes that there are sensible formal apparatus replacement plans. Proper attention is being paid to a balance between escalating maintenance costs and the need for replacement. The goal of replacing apparatus units at the 12-to-13-year age is sound.**
- **The additional equipment that would be recommended would be items such as the “Lucas” chest compression devices that would be effective in preserving life when the department arrives first and there is a delay because ambulance units are not readily available.**

Module 3 -- Population, Demographics and ISO Ratings

- YAUFR Mirrors the County
- Growth primarily in Manchester for YAUFR considerations
- York County Growth projected in this table:

1860	1900	1940	1980	2020	2060
68,200	116,413	178,022	312,963	456,438	582,779
←-----Actual Census Figures -----→					Projected

- Staffing has been stagnant as the community grows
- Is YAUFR “on borrowed time” ?

Module 3 – Population, Demographics and ISO Ratings

YAUFR Growth by Township:
Average: 12.03 % per decade

	Springetts-bury		Spring Garden		Manchester	
<u>2000</u>	23,883		11,974		12,700	—
<u>2010</u>	26,668	11.7 %	12,578	5.0 %	18,161	43.0 %
<u>2020</u>	27,058	1.5 %	13,683	8.8 %	19,511	2.2 %

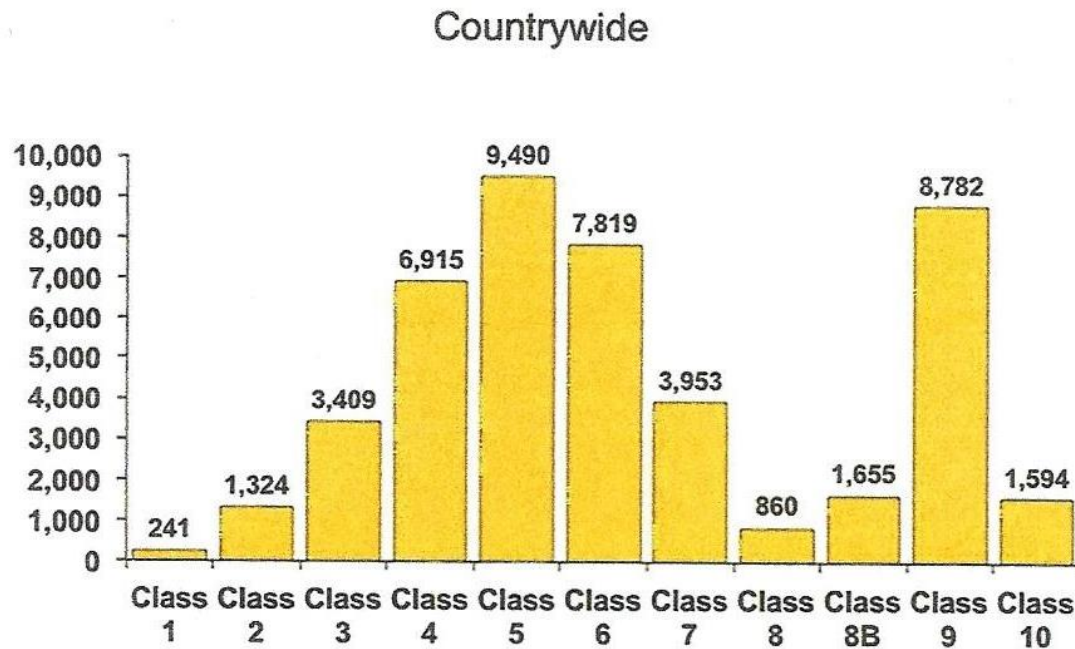
MODULE 3 – ISO Section (Insurance Services Office)

- Last Rating brought YAUFR from “4” to “3”.
- Scale: 1 to 9; (Lower better, like golf)
- Favorable Rating, but room for improvement
- City of York improved its rating from “3” to “2”, which included movement toward three-person crew sizes
- The consultant believes that additional on-duty personnel and training enhancements will maintain or improve YAUFR ratings

Nation's ISO Distribution

Distribution of PPC Grades

The 2017 published countrywide distribution of communities by the PPC grade follows:



Module 4: General Orders

YAUFR General Orders				
		TOPICS	NUMMER OF REVISIONS	PERCENTAGE OF REVISIONS
1	Administration	37	21	56.8 %
2	Health and Safety	24	8	33.3 %
3	Emergency Operations	16	11	68.8 %
4	Apparatus/Equipment	11	4	36.4 %
5	Communications	5	4	80.0 %
6	Special Operations	6	5	83.3 %
7	Emergency Medical Services	26	2	07.7 %
8	Volunteer Services	6	2	33.3 %
9	Emergency Management	4	0	00.0 %
TOTAL		135	57	42.2 %

York County Fire Training Academy

We believe there is much to be gained with the York County training facility located inside the YAUFR District. Members of the Fire Department do not have to leave the district to attend meaningful training at this facility. The amenities are plentiful, including the opportunity for live fire training



Module 5: Service Demand, Budgets, Funding and Grants

The hard data shows that calls are frequent, cover a variety of incident types, and point to the need for adequate staffing. 100% of members agreed that they need additional personnel.

Activity Level of YAUFR Department		
Year	Run Volume	
2020	3817	Actual Call Volume
2021	4228	Actual Call Volume
2022	4371	Projected from ten months of YTD data

Community Risk Assessment

1. **Places of Worship**
2. **Urban Housing**
3. **Tall buildings (3 stories and above)**
4. **Apartments, Condos, Hotels and Motels**
5. **Dining and Assembly areas**
6. **Senior Living Facilities**
7. **Educational Facilities**
8. **Manufacturing/Distributions Centers**
9. **Interstate 83**
10. **Rail hazards**

2023 Budget Income

2023 TENTATIVE BUDGET INCOME

450.00 · SPRINGGETTSBURY INTERGOVMENTAL	\$3,089,999
451.00 · SPRING GARDEN INTERGOVMENTAL	\$2,087,837
452.00 · MANCHESTER INTERGOVMENTAL	\$3,173,512
INTERGOVMENTAL SUBTOTAL	\$8,351,348
OTHER	\$696,133
TOTAL	\$9,047,481

Control Costs; New Revenues

- **Budget Controls to Ensure Solvency**
- **Grant Funding; E.g., The staffing for Adequate Fire & Emergency Services (SAFER) Grant**
- **Billing available from Plan Reviews and Inspections**
- **New billing options for Fires and other fire department activities e.g. Community Outreach; Industrial Brigade Training; Paramedicine**

2023 Budget Expenses

511.00 · SALARIES - FIRE ADMIN	\$694,891
512.00 · SALARIES - FIRE PROTECTION	\$3,514,895
513.00 · SALARIES - PART TIME	\$54,000
514.00 · OVERTIME	\$140,000
514.01 · OVERTIME-TRAINING	\$21,548
515.01. SICK LEAVE PAYMENT	\$8,000
516.00 · SOCIAL SECURITY EXPENSE	\$338,538
516.50 · UNEMPLOYMENT COMPENSATION	\$4,000
517.00 · WORKERS COMP INSURANCE	\$165,457
ALL 518 -- HEALTH INSURANCE	\$2,170,646
519.00 PENSION	\$493,779
523.00 UNIFORMS	\$90,510
PERSONNEL SUBTOTAL	\$7,696,264
OTHER	\$1,237,345
TOTAL EXPENSE	\$9,047,581

Grants for Staffing and Equipment

- **The Staffing for Adequate Fire and Emergency Response (SAFER)** ACT is comparable to the COPS grant for police departments in the 1980's. One part of this funding will provide \$65 Million for personnel in this year's funding period. The Report provides tips on successful applications for SAFER funding and tips on applying for SAFER grants
- **The Assistance to Firefighters Act**, commonly called the Fire Act Grant, has been available since 2001, and provides about \$650 Million in funding for specific equipment, apparatus, and public education funds. The application period begins at the end of March and closes in early April.
- Sharon, PA recently applied for and received nearly \$1 million for needed equipment

Module 5 – Budgets, Funding and Grants

From a “Rule of thumb” perspective consultants believe that in YAUFR, funding should be prioritized as follows:

- 1. On-duty staffing*
- 2. Facility upgrades and replacements*
- 3. Apparatus replacements*

YAUFR should be willing to entertain new members from adjacent communities but only if both Municipal leaders and Fire Department leaders are on board and cooperate to make it happen.

Module 6: Future Outlook

YAUFR Technical Rescue

Specialty	Availability
Haz-Mat	AVAILABLE IN YAUFR (Ops level)
Trench Rescue	AWARENESS
Water Rescue	AWARENESS, WET SUITS
Confined Space Rescue	OPERATIONS
High angle rope rescue	NEAR OPERATIONS LEVEL
Low angle rope rescue	NEAR OPERATIONS LEVEL
Rescue, Heavy-Medium	AVAILABLE IN YAUFR
Grain Bin Rescue	AWARENESS

Module 6 – The Future: Fire Department Role with EMS

- Nationally many fire departments provide Emergency Medical Service directly as do stations in YAUFR
- On-duty personnel are more likely to save lives with EMS than with fire response.
- In YAUFR a “MFR” (Medical First Responder) program can be enhanced.

Possible Enhancements

- **Use of Body Cameras by Firefighting personnel and EMS First Responders.**
- **Drone technology and how it can be adapted to fireground operations and search-and- rescue situations.**
- **Training for electric-driven and self-driving vehicles.**
- **Virtual reality tied to training opportunities.**
- **New Pediatric Emergency Standards which will allow for firefighters to act quicker and more efficiently when it comes to treating the smallest patients.**
- **Adjusting deployment to account for combustion properties of newer materials in modern home and office construction.**
- **New, high-tech automatic chest-compression devices for CPR.
(Lucas Devices)**
- **Life-saving device for children trapped in hot cars.**

Conclusion

- It was a pleasure to work with the fire service professionals in YAUFR
- Happy to address immediate questions or concerns
- On a gratis basis Kramer remains available for any follow-up issues that may arise.