



Assessment of the Efficiency & Effectiveness of the City of Corpus Christi Fire Department



City Council Presentation
March 25, 2014



Overview of Review Process



- Annually select departments or services.
 - Do assessments: identify gaps & benchmark.
 - Departments develop & implement an *Action Plan* to close competitive gap.
 - Action Plans are integrated into Annual Business Plans.
 - To provide accountability, departments will be periodically reassessed.
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Fire Department



General objectives of review:

- Assess overall efficiency and effectiveness of operations, including results of benchmarking.
 - Review service demands and responses to demands, distribution of resources, response performance, and reasonableness of costs.
 - Identify specific recommendations to close the gaps identified.
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Fire Department



Specific objective of review:

- Determine how the Fire Department can best meet its mission while cost-effectively delivering services.
- Provide answers to 11 specific questions.



MGT America, Inc.



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Overview

- 80% of the CCFD's workload is medically related (2,850 medical calls per month compared to 80 fire calls per month) while FF's can opt out of paramedicine.
- There continue to be artificial distinctions between 'operations' and 'medical calls.'
- Station locations, deployment and staffing are appropriate.
- Significant issues with CCFD fleet and fleet maintenance facility.
- Need to position the City to address future challenges – this includes the collective bargaining agreement.
- Significant technology gaps and lapses will need to be addressed.

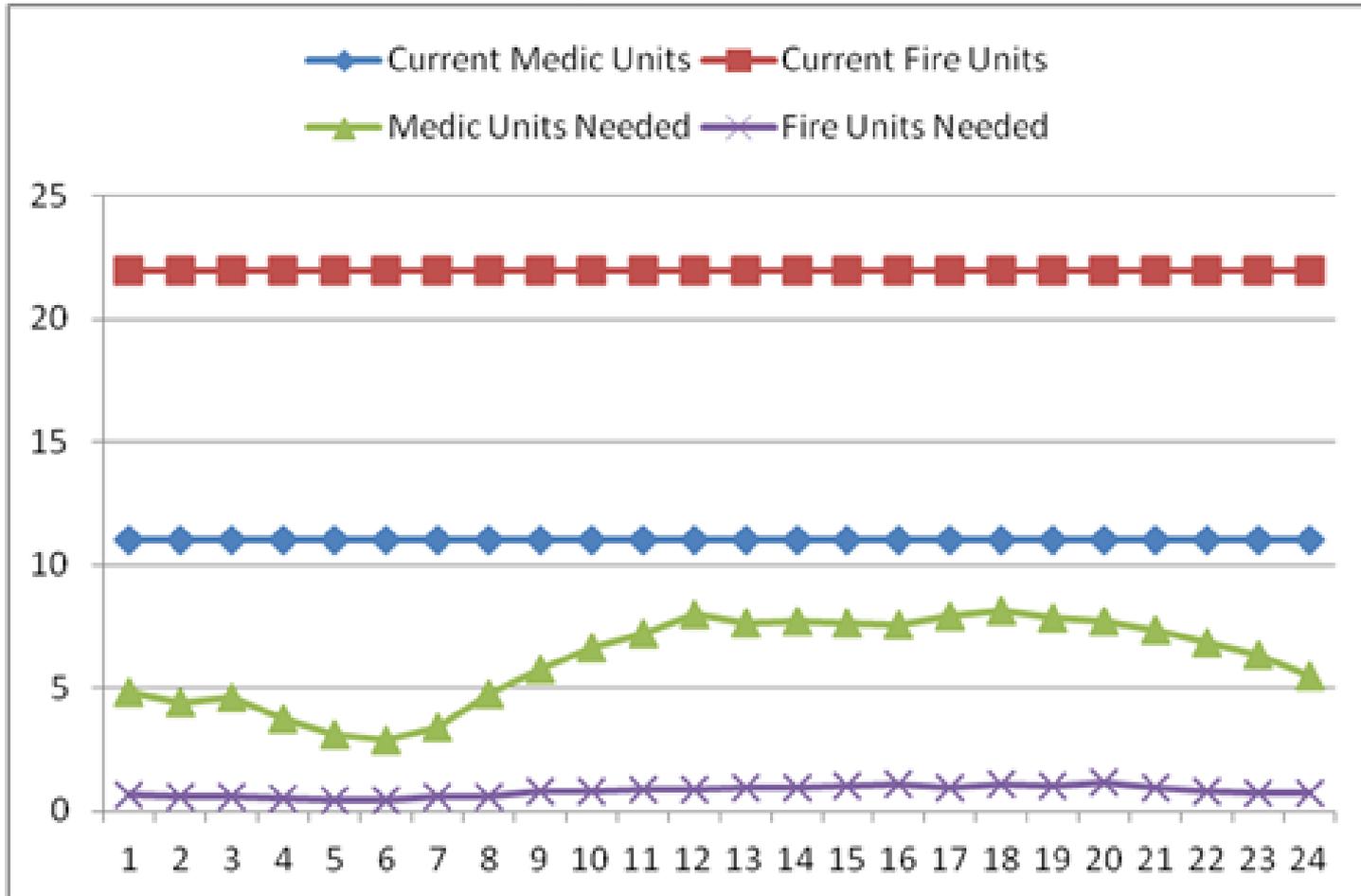
Q1. What is the best way for the Department to be organized to efficiently and effectively provide responses to EMS and Fire calls for service?

- Work to erase lines between EMS and 'operations.'
- Eliminate distinction between EMS Captain & Battalion Chiefs.
- Expand roles of Battalion Chiefs to include roles of EMS Captains.
- Contract for physicians assistant or nurse practitioner for program oversight.
- Eliminate Assistant EMS Director.
- Rebrand the Fire Department:
 - Focus on broader mission
 - “Emergency Services Department”
 - “Medical, Rescue and Fire Department”

Q2. Should the department consider alternative delivery models for services provided?

- Dynamic deployment of ambulances to address peaks in activity.
- Re-locate Battalion Chiefs to enhance response *and* management coverage.
- Fully implement emergency medical dispatch (EMD) in MetroComm.
- Adjust response time objectives according to criticality.
- Re-focused public education on alternatives to 911.

Peak Load Analysis: Demand by Service by Hour of Day

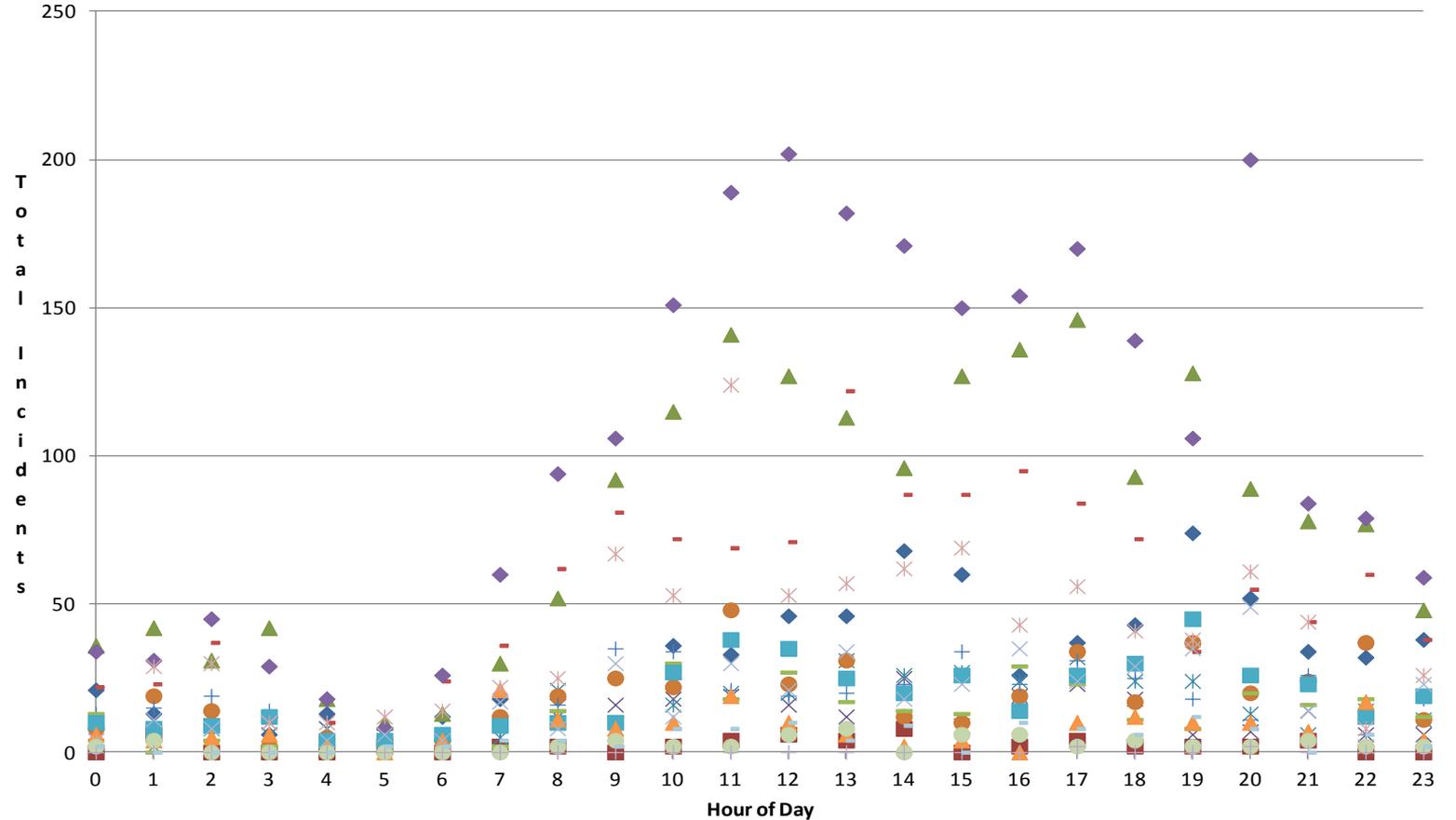


CCFD Response Performance

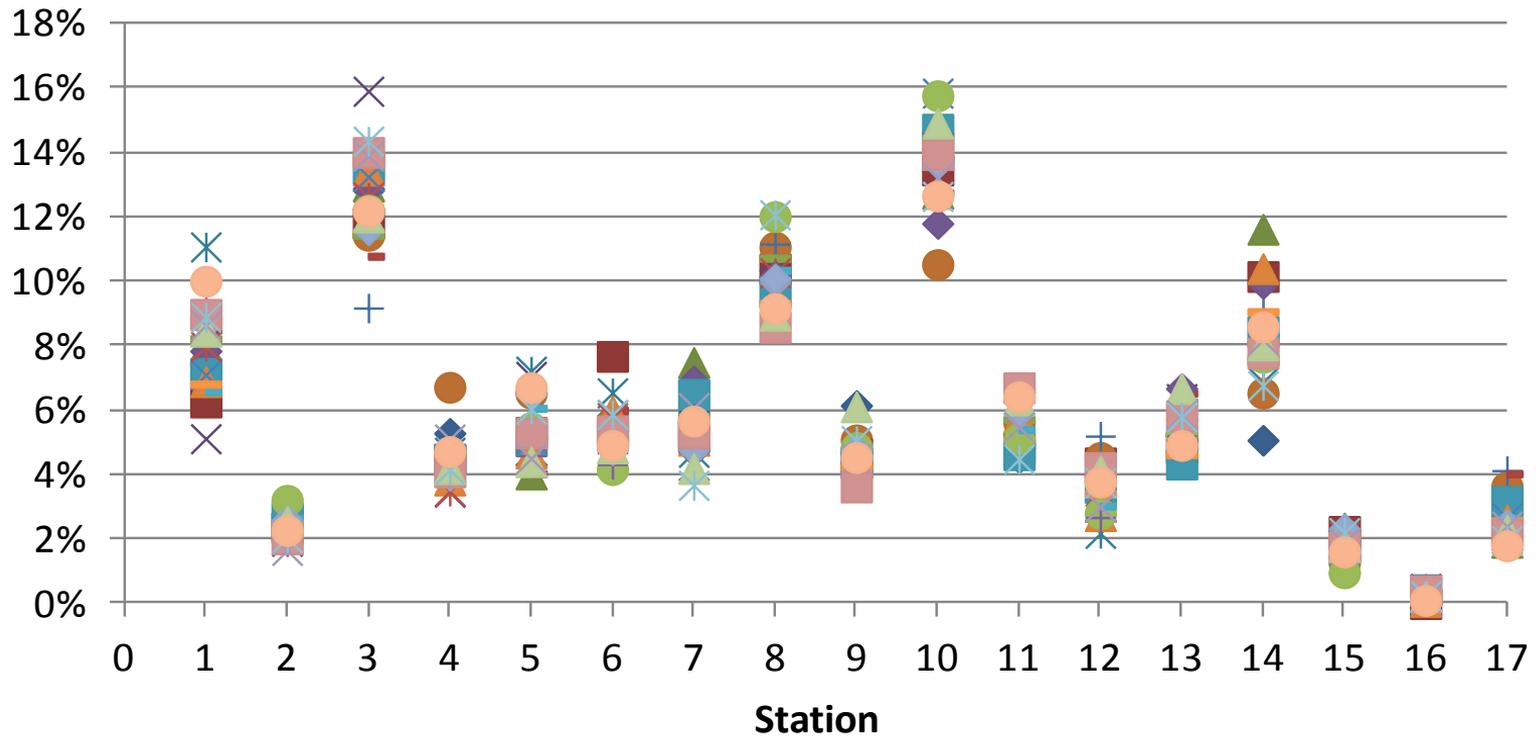
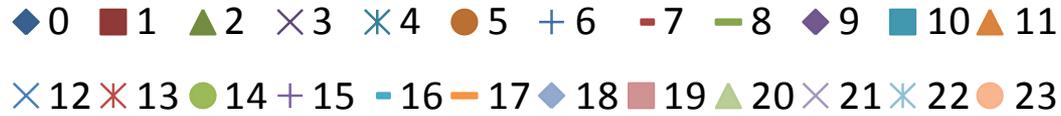
| | Demand | | Fire Calls | | EMS Calls | | Turnout Time | |
|------------------|----------------|------------------|----------------|------------------|----------------|------------------|----------------|-------------------|
| | <i>Average</i> | <i>90th PCTL</i> | <i>Average</i> | <i>90th PCTL</i> | <i>Average</i> | <i>90th PCTL</i> | <i>Average</i> | |
| CCFD Goal | | | 5:00 | | 5:00 | | 1:00 | |
| NFPA 1710 | | | | 5:00 | | 5:00 | 1:20 | |
| Overall | 5:05 | 7:28 | 3:48 | 6:08 | 5:25 | 8:27 | | |
| | | | | | | | 1:28 | <i>Fire Units</i> |
| | | | | | | | 1:09 | <i>EMS Units</i> |

Total Incidents of Concurrency by Station by Hour of Day

- ◆ Station 1
- Station 2
- ▲ Station 3
- × Station 4
- ✦ Station 5
- Station 6
- + Station 7
- Station 8
- Station 9
- ◆ Station 10
- Station 11
- ▲ Station 12
- × Station 13
- ✦ Station 14
- Station 15
- + Station 16
- Station 17

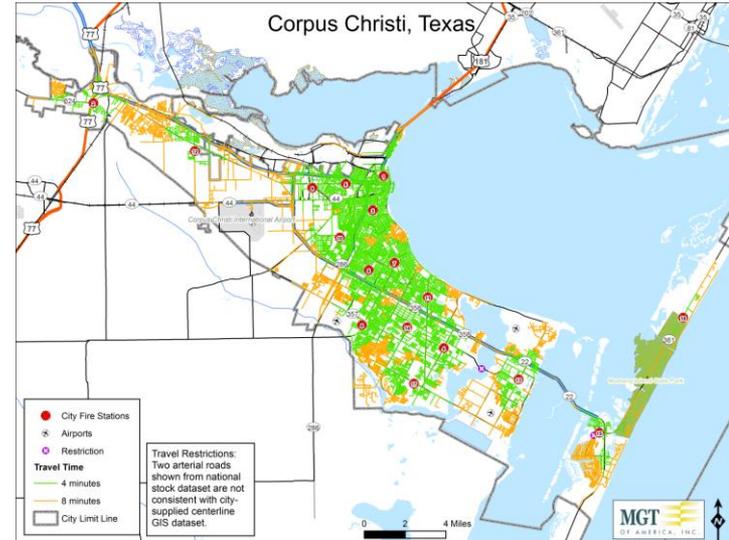


Closest Station Area Workload by Hour of Day

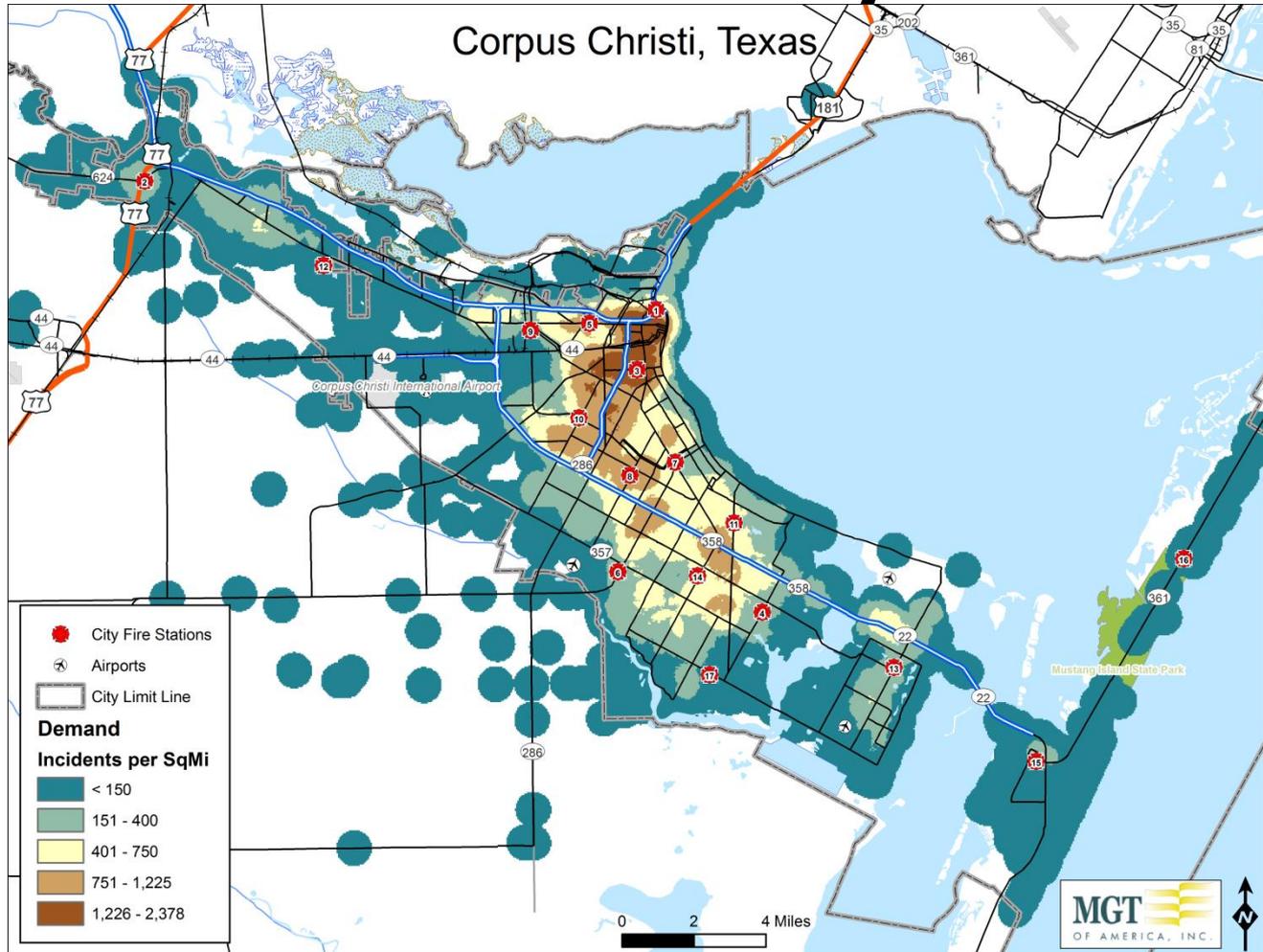


Q3. Are stations optimally located?

- No need for additional station or stations at this time.
- Continued growth will demand periodic station location/deployment assessments.



Incident Density



Q4. Can efficiency and effectiveness be improved through changes in apparatus configuration and deployment, including use of quints?

- Continue to utilize current vehicle classifications.
- Shifting to quints or other 'alternative' units is not justified at this time.
- Continue utilizing the Type I ambulances.
- SUV's and other optional vehicles add to operational and capital expense.

Quint Truck



Side Mount Pumper Truck



Ladder Truck



Q5. Can improvements be made in efficiency and effectiveness of apparatus maintenance?

- Current CCFD fleet maintenance facility was intended to be used as a warehouse.
- Current facility is not suitable for maintenance.
- Pursue co-located facility with City fleet maintenance operations.
- Technicians should receive formal certifications.
- Develop comprehensive apparatus and vehicle replacement plan.
- Consider bonding for fire vehicles.
- This is consistent with findings documented in the Mercury study.

Q6. Can the City improve Insurance Services Office (ISO) rating and if so what needs to be done?

- Fewer than 1% of communities have an IS rating of 2 or 1.
- The City could make improvements that could potentially improve the ISO rating.
- These improvements would be very costly – difficult to justify in the face of other needs.
- State of Texas reports that a move from an ISO-2 to an ISO-1 would result in *no savings* for taxpayers.
- Fire Department and Water Utilities are discussing transitioning hydrant maintenance back to Water Utilities.

Q7. Are there opportunities to reduce personnel costs by increasing relative use of civilian personnel to perform duties currently done by sworn personnel?

- Collective Bargaining Agreement enables the City to use civilians in most non-operational roles.
- Opportunities exist to civilianize several positions (EMS Supplies, SCBA Maintenance, etc.).
- Estimate savings: \$50k per year.
- Ability to use civilians in some non-fire operations roles will become more important in the future.

Q8. Is the City making best use of training available from Del Mar College?

- Hiring process should coincide with the graduation of FF/EMS trained cadets from Del Mar.
- Overall hiring process should be examined for improvement & speed.
- Consider contracting with Del Mar for all continuing education /new cadet training for CCFD.
- Work with Del Mar to enhance the on-line learning experience.
- Form a 'learning council' comprised of staff to ensure that the CCFD incorporates lessons learned into training programs.

Q9. What needs to be done now to prepare to meet fire service needs over the next decades?

- Enhanced technology in the Department and in the City.
- Improved human resources: recruiting, hiring, training, and retaining staff.
- Integration with broader community health initiatives in recognition of the CCFD's role in a holistic approach to health and safety.
- Address organizational structure and focus to recognize increasing role of EMS.
- Improved utilization of data, management reporting, and analysis in staffing, deployment and operations.

Q10. Is the Fire Department using appropriate measures for the City Performance Report?

- Averages should be supplemented with fractal performance.
- Where possible, express data as a factor of the population (i.e., fires/1,000).
- Outcome measures as well as program measures.
- Given scope of EMS services, include EMS outcomes (i.e., % of cardiac cases with return to spontaneous circulation).

Q11. Are there provisions of the CBA that are detrimental to the efficient operation of the department or should consideration be made for modification?

- Eliminate reference to past practices.
- Ensure that definition of overtime in the contract matches the methods allowed in the FLSA for fire staff.
- Verify that donation of PL time for the union president is sufficient to cover the time lost.
- Remove pay for certification. Pay for performing functions (EMS, hazmat, etc.) each shift.
- Paramedic a job requirement for non-driver firefighters. Eliminate opt-out provisions.
- Expand roles that civilians can work to include non-fire and non-rescue functions (EMS specifically).



Fire Chief's Response



- Concurs with many of the recommendations made by MGT America, Inc.
- An *Action Plan* has been developed to implement recommendations
- Recommendations will enhance operations & incorporate EMS & Fire command into a unified structure



Fire Chief's Comments



Question 1 – Fire Department Efficiency

- Emphasize the emergency medical response mission of the department
- Convert EMS Supervisor (C623) from Captain to Battalion Chief rank
- Rebrand the department to better define the mission



Fire Chief's Comments



Question 5 – Fleet Maintenance

- Develop plan to integrate facilities/operations into the City Plan
- Integrate fire vehicle replacement plan into an overall City Capital Equipment Replacement Plan



Fire Chief's Comments



Question 7 - Duties/Responsibilities of Uniform Personnel

- Evaluate all Fire Department Support positions



Fire Chief's Comments



Question 9 – Long Term Planning

- Seek formal Fire Department accreditation – CFAI
- Evaluate the adequacy of current technology
- Review organizational structure & modify to match mission



Action Plan - Example



City of Corpus Christi FIRE Draft



| GENERAL RECOMMENDATION | SPECIFIC ACTIONS | Implementation Plan | | | | | PERIODS (May is 1, June 2, etc.) | | | | | | | | | | | | | |
|--------------------------------------|------------------|--|---------------|--------------|-----------------|------------------|----------------------------------|---|---|---|---|---|---|---|---|----|----|--|--|--|
| | | Plan Start | Plan Duration | Actual Start | Actual Duration | Percent Complete | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | | | |
| | | | | | | | | | | | | | | | | | | | | |
| 1. Fire Department Efficiency | 1a | Eliminate the shift-supervision distinction between EMS and Fire by re-classifying the EMS Captain position into a Battalion Chief position. | | | | | | | | | | | | | | | | | | |
| | 1b | Strengthen the responsibility of Battalion Chiefs to include on-scene supervision of EMS calls (life threatening and otherwise). | | | | | | | | | | | | | | | | | | |
| | 1c | Eliminate the Assistant EMS Director position and replace with position described immediately below. | | | | | | | | | | | | | | | | | | |
| | 1d | Provide additional funding to the Medical Director to retain a Nurse Practitioner or Physician's Assistant to provide day-to-day clinical oversight of the EMS providers in the Department. | | | | | | | | | | | | | | | | | | |
| | 1e | Re-brand from the Corpus Christi Fire Department to the Corpus Christi Medical, Rescue and Fire Department (or, alternatively, the Corpus Christi Emergency Services Department). | | | | | | | | | | | | | | | | | | |
| 2. Alternate delivery models | 2a | The effectiveness of the Fire Department could be improved by employing some form of dynamic deployment as it relates to the demand for EMS Services during peak hour demand. | | | | | | | | | | | | | | | | | | |
| | 2b | The Battalion chief positions should be relocated and enhanced to improve span of control, EMS/Medical Supervision and first alarm assembly geographic coverage. | | | | | | | | | | | | | | | | | | |
| | 2c | Fully implement Emergency Medical Dispatch (EMD) protocols and continue to evaluate and evolve response alternatives currently employed by the CCFD. | | | | | | | | | | | | | | | | | | |
| | 2d | Response time performance objectives should also be adjusted based upon criticality. | | | | | | | | | | | | | | | | | | |
| | 2e | A public education program to educate the public about the correct use of emergency resources may aid in the reduction of non-critical calls for service. Our findings indicate that there is no need for a new station at this time. Future growth and development will require this to be re-examined. | | | | | | | | | | | | | | | | | | |



Questions

