City of Grand Island



Tuesday, November 1, 2016 Study Session Packet

City Council:

Linna Dee Donaldson

Michelle Fitzke

Chuck Haase

Julie Hehnke

Jeremy Jones

Vaughn Minton

Mitchell Nickerson

Mike Paulick

Roger Steele

Mark Stelk

Mayor:

Jeremy L. Jensen

City Administrator:

Marlan Ferguson

City Clerk:

RaNae Edwards

7:00 PM Council Chambers - City Hall 100 East 1st Street

Call to Order

This is an open meeting of the Grand Island City Council. The City of Grand Island abides by the Open Meetings Act in conducting business. A copy of the Open Meetings Act is displayed in the back of this room as required by state law.

The City Council may vote to go into Closed Session on any agenda item as allowed by state law.

Invocation

Pledge of Allegiance

Roll Call

A - SUBMITTAL OF REQUESTS FOR FUTURE ITEMS

Individuals who have appropriate items for City Council consideration should complete the Request for Future Agenda Items form located at the Information Booth. If the issue can be handled administratively without Council action, notification will be provided. If the item is scheduled for a meeting or study session, notification of the date will be given.

B - RESERVE TIME TO SPEAK ON AGENDA ITEMS

This is an opportunity for individuals wishing to provide input on any of tonight's agenda items to reserve time to speak. Please come forward, state your name and address, and the Agenda topic on which you will be speaking.



City of Grand Island

Tuesday, November 1, 2016 Study Session

Item -1

Presentation and Discussion regarding the Grand Island Fire Department

Staff Contact: Cory Schmidt, Fire Chief

Council Agenda Memo

From: Marlan Ferguson, City Administrator

Meeting: November 1, 2016

Subject: Review Grand Island Fire Department Operations

Presenter(s): Fire Chief Cory Schmidt

Background

During the budget process for the 2017 Fiscal Year Budget much discussion was concerning future budgets and sustainability. The Mayor and City Council have determined to have a balanced budget for Fiscal Year 2018. In order to accomplish that goal there will need to be some tough decisions made. Currently the City's expenditures in the general fund are growing at a faster rate than the revenues in the General Fund. This is the result of a number of events, including becoming an MSA community which causes salaries to increase substantially by way of comparing to a different array of Cities. At the same time the City made the decision after a recommendation from a Public Safety Study completed by the ICMA; to increase the number of police officers and support staff in the police department by 17 FTE since 2012. In the FY 2017 Budget 62% of the expenditures in the General Fund is for the Public Safety Departments. In addition 77% of the expenditures are for personnel costs. It is the administrations intent to review each department's operational activities to determine the level of service provided versus the cost of service.

Discussion

Tonight's study session is for the purpose of discussing and reviewing the Grand Island Fire Department. As you know the GIFD includes fire suppression, ambulance, and fire prevention. Members of this department serve on 24 hours shifts with the exception of the Chiefs, so is different than other departments. We want the City Council to have a good understanding of the current operating procedures in order to identify potential cost savings and what level of service is most desirable and at what cost. Chief Schmidt will provide details on the history, response times, rolling stock, department structure, operating budget, call volumes, future demands, and cost recovery options.

Conclusion

This item is presented to the City Council in a Study Session to allow for any questions to be answered and to create a greater understanding of the GIFD.





All-Hazards Department





History of GIFD

- ₹ 1874 organized as a fire department
- ₹ 1921 changed from all volunteer to all career
- ₹ 1980 ALS ambulance service started
- 2000 paramedics assigned to engine companies
- 2002 fire stations and crews began to specialize



Dept. Summary

- **3** shifts, 24 hours long (0700-0700)
 - 21 personnel on each shift, assigned to 4 stations
 - ₹1 Shift commander
 - 4 fire apparatus staffed
 - ₹2 ALS ambulances, 3rd staffed when possible

Why 24 hour shifts?

- Section 7k of the FLSA exempts cities from paying firefighters overtime for hours worked greater than 40 hours per week. Allows up to an average of 53 hours without requiring overtime pay.
- Reduces overtime costs and/or number of personnel

Dept. Summary

Four stations strategically located

Station 1, 409 E. Fonner	(2007))
--------------------------	--------	---

Personnel minimum staffing

- Minimum staffing level is 17 per shift (4 stations)
 - ₹ Shift commander (1)
 - ₹ Paramedic and firefighter on each ambulance (4)
 - Captain, firefighter/EMT, and firefighter/paramedic on each frontline engine/aerial
 (12)

17

Fire

Personnel (70 total)

Admin (5)

- Fire Chief
- 3 Division Chiefs
- 1 Admin Assistant

2 life safety inspectors*

Shift personnel (63)

- 3 shift commanders
- ₹ 12 Captains
- 27 firefighter/paramedics
- 21 firefighter/EMTs

How do we compare?

Firefighters per 1000 population

▼ Nationwide: 1.67

록 GIFD: 1.25

₹ Array: 1.28

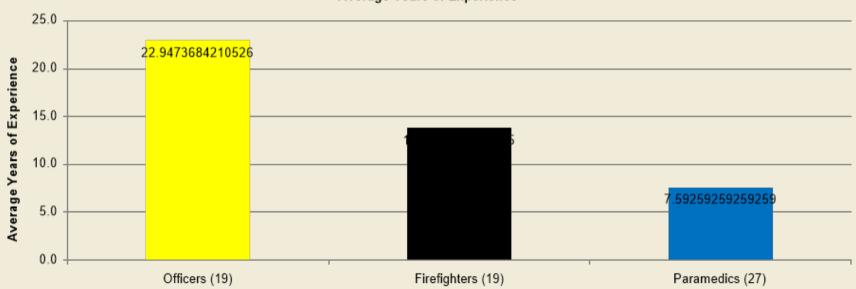


Personnel Changes

- ₹ 1985-87 Added 6 firefighters (opened Sta. #3)
- ₹ 1996 Added 9 firefighters (opened Sta. #4)
- ₹ 2000 Added 6 firefighters (69 total)
- 2013 Eliminated Division chief, reclassified 3 Captains to Shift Commanders, added life safety inspector (69 total)
- ₹ 2014 Added life safety inspector (70 total)

Experience of employees

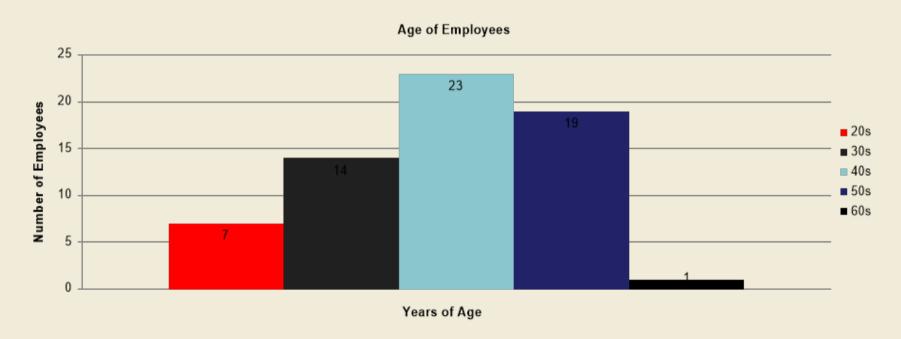
Average Years of Experience





Fire

Employee age



Response time standards (Fire)

➡ NFPA 1710: Fire department's fire suppression resources shall be deployed to provide for the arrival of an engine company within a 2 minute travel time to 90 percent of the incidents.

➡ GIFD: Average time is 3:34, 90 percent is 6:25

Response time standards (EMS)

■ NFPA 1710: Fire department's EMS for providing a first responder with AED shall be deployed to provide for the arrival of a first responder with AED company within 4 minute travel time 90 percent of the time; 8 minutes for ALS.

➡ GIFD: Average time is 2:57, 90 percent is 4:43



Rolling Stock

- **2016** Quint
- 2014 Engine
- 2013 Rescue/pumper
- 2000 Engine
- ₹ 1999 Engine*
- 1999 Aerial Platform*
- ₹ 1996 Engine*

- 2016 ambulance
- 2014 ambulance
- 2012 ambulance
- 2009 ambulance
- 2003 ambulance
- 2000 ambulance
- 2000 ambulance



Reserve Apparatus

Three units (aerial platform, two pumpers)

- ➡ Aerial first out on large, commercial fires
- Fire Engines—shift changes, recalls, break downs

Dual Purpose Vehicles

- 2013 Rescue pumper
 - ₹ Took place of 1987 pumper and 1998 Rescue truck

- **2016** Quint
 - ₹ Provide 2nd aerial and 1999 engine placed in reserve



Ambulance Fleet

- 2 front line units (staffed daily)
- ₹ 1 additional unit staffed when possible
- ₹ 4 reserves one at each station
 - ➡ Break downs, recalls, cross-staffing

Vehicle replacement plan

Fire Engines: 20 years of total service

Aerials: 25 year service life

Ambulance: Purchase one every other year, goal is to have units not older than 14 years



Vehicle needs

- Fire Engine (within 3 years)
- Ambulance every other year (FY 2018)



Dept. Structure

- Three major divisions, each under Division Chief supervision
 - Fire Operations and training
 - Emergency medical services (EMS)
 - Fire Prevention



Fire

Fire Operations Division

Grand Island Fire Department



Emergency Responses

- Fire Suppression
- Hazardous Materials
 - One of ten state MOU teams
 - **₹** Funded by NEMA
- **₹** Technical Rescue
 - Auto and machinery extrication
 - Ice rescue



Emergency Responses

- **Trench** rescue
- Confined space rescue and standby
- ₹ High and low angle rope rescue
- **₹** Tower rescue
- Severe weather response
- Aircraft rescue and firefighting (ARFF)
- Medical Responses (including vehicle accidents)



Non-emergent Responses

- Service Calls
 - Elevator rescue, smoke and water removal
- Public Education
 - Fire Prevention Week activities
 - Civic and social group talks
 - ₹ Fire extinguisher classes
 - Business/public events

Station Staffing and Specialization

- **▼** Station One Technical Rescue
 - ₹ E1/L1 (1 Capt, 1 FF, and 1 FF-P)
 - **⇒** A1 (1 FF and 1 FF-P)
 - Shift Commander
- Station Two ARFF
 - ₹ E2 (1 Capt, 1 FF, and 1 FF-P)
 - **₹** A-2 (1 FF and 1 FF-P)



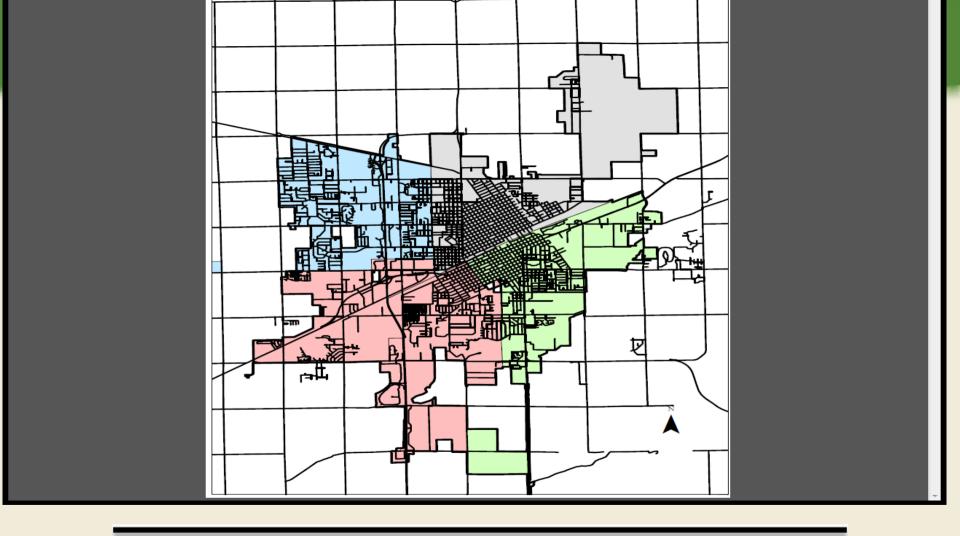
Station Staffing and Specialization

Station Three - Heavy RescueR3 (1 Capt., 1 FF, and 1 FF-P)

Station Four - Hazmat

E4 (1 Capt., 1 FF, and 1 FF-P)

₹A4 (1 FF and 1 FF-P [when staffing allows])



Fire

Recruit Training Cost

Total	wage	package	 \$27	.100
1 0 0001			 · · · · · · · · · · · · · · · · · · ·	,

- ₹ Equipment and Uniform.....\$3,400
- ₹ Total costs for recruit training....\$30,500

Grand Island Study Session - 11/1/2016 Page 33 / 94



Initial Recruit Training

- Six week academy
 - ₹ Firefighter I certification
 - Hazmat Operations certification
 - Basic technical rescue training
 - Rapid Intervention/Safety
 - Emergency Medical Training
 - Emergency vehicle operations training



Initial Recruit Training

- On shift
 - Streets and maps
 - ₹ Firefighter II
 - ▼ In depth technical rescue/specialty training
 - **₹** Live burns whenever possible

Continuous Training

➡ Driver/Operator	20 hours
₹ Technical Rescue	20 hours
■ ARFF	10 hours
Rapid Intervention	16 hours
➡ Hazardous Material	18 hours
₹ Fire Operation	54 hours
■ Emergency Medical	68 hours
Total	

Grand Island Study Session - 11/1/2016 Page 36 / 94



- **Structure** Fires
 - ₹ 3 fire engines and 1 aerial
 - ₹ 1 ambulance
 - ₹ 1 shift commander
 - ₹15 personnel minimum



- Motor vehicle crash
 - ₹ 1 ambulance
 - ₹ 1 fire engine
 - 1 rescue truck if extrication is needed
 - ₹ 1 shift commander
 - ₹6 personnel minimum



- Automatic Alarms
 - 1 fire engine and 1 additional engine or aerial
 - ₹6 personnel minimum
- Vehicle and Grass Fires
 - ₹1 fire engine
 - ₹3 personnel minimum



- Medical (depends on nature of call)
 - ₹1 ambulance
 - ₹1 fire engine (If criteria is met)
 - Shift Commander (very serious calls)
 - 2 personnel minimum, ALS calls normally 5 personnel

Emergency Medical Services Division

Grand Island Fire Department

Emergency Medical Technician Training

- ₹ 120 hours Classroom education
 - = +10 hours of field experience with 5 patient contacts
- 40 hours of continuing education every two years
 - 20 hours of topics set by the National Registry of EMT
- Nebraska state licensed



Paramedic Training

- ₹ EMT 500 hours classroom education
 - ₹ +600 hours of field experience
 - Ambulance, Emergency Department, ICU, Surgery, OB
- 60 hours of continuing education every two years
 - 30 hours of topics set by the National Registry of EMT
- Nebraska state licensed



EMT Probation Training

- **▼** Third person on ambulance —three shifts
- **₹** Watch, learn, skills
- Documentation
- Driving ambulance after Emergency Vehicle Operations Class (EVOC).



Paramedic Probation Training

- ₹ Phase 1- watch, learn, skills third person
- ➡ Phase 2- team leader, documentation third person
- ₹ Phase 3- specific call types (61)
- Phase 4- driving ambulance after EVOC, crew integration



Cardiopulmonary Resuscitation

- 27% "clinical" save rate
- Lucas Device
- Emergency Department lead time7.6 minutes





Severe Trauma

- Scene Time 11.28 minutes
- Emergency Department lead time 9.1 minutes
- Notification of Trauma Team
 - Surgeon(s)
 - Portable x-ray



Stroke

- Cincinnati Stroke Scale assessment
- **▼** Blood glucose check
- Document "last known well" time
- Lead time 6.2 minutes
- Notification of CT scanner technician

ST Segment Elevation Myocardial Infarction

- Care starts upon arrival of EMS
- ₹ 12 lead EKG transmitted in 10.1 minutes of arrival
- Hospital notification lead time 7.5 minutes
- Notification of Interventional Cardiologist and Heart Catheterization Lab personnel

4 Ambulances on calls at the same time

- **Saturday**, August 27, 2016 6:32 pm
 - Two car accident at 10th St. and Lincoln Ave.-11 patients
 - ₹ Initial response 1 ambulance, 1 engine, 1 Shift Commander
 - Second ambulance requested 6:35pm
 - ₹ Third ambulance requested 6:39pm
 - Fourth ambulance requested 6:51pm
- One engine still in station- recall of personnel

4 Ambulances out at the same time

- Saturday, August 13, 2016
 - 2:45am ambulance and engine to Chest Pain
 - 2:51am ambulance to COPD (County call)
 - 2:55am back-up ambulance and engine to COPD
 - 3:11am second back-up ambulance, Shift Commander, and same engine to cardiac arrhythmia
- ▼ No personnel in station- recall of personnel

4 Ambulances out at the same time

- Saturday, August 13, 2016
 - 2:45am help arrived in 5:54 minutes of 9-1-1 call
 - 2:51am help arrived in 13:31 minutes (county call)
 - 2:55am help arrived in 6:55 minutes
 - 3:11am help arrived in 9:14 minutes (secondary districts)

Medical Physicals

- Hazardous Waste Operations and Emergency Response, 29 CFR Part 1910.120
- IDLH or Immediately dangerous to life or health means an atmospheric concentration of any toxic, corrosive, or asphyxiant substance that poses an immediate threat to life or would interfere with an individual's ability to escape from a dangerous atmosphere.
- (f)(3)(i)(B) At least once every twelve months for each employee covered unless the attending physician believes a longer interval (not greater than biennially) is appropriate;



Fire

Fire Prevention Division

Grand Island Fire Department



- Code Enforcement
- Arson Investigation
- Public Education

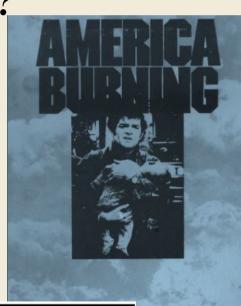
Grand Island

Fire

Importance of the Fire Prevention or

what difference does it make?

- America Burning "72"
 - Fire Deaths
 - Injuries
 - Property Loss
 - Burn Victims and Cost Associated





Importance of the Fire Prevention

- America Burning Revisited "87"
 - Fire Deaths
 - Injuries
 - Property Loss
 - Burn Victims and Cost Associated

America Burning Revisited

National Workshop - Tyson's Corner, Virginia November 30 - December 2, 1987





Where don't we inspect?

- We do not inspect single and two family dwellings
- ➡ We don't typically inspect multifamily residential property if no commons areas under 11 units.
- ➡ We don't inspect buildings and structures on private residential property used under residential permits

Where do we inspect?

- Commercial Buildings New and Existing (2637)
 - Factories, Mercantile Stores, Businesses, Body Shops, Malls, Restaurants, Strip Malls, Hospitals, Adult Care, Health Care, Child Care, Home Child Care, State Fair Grounds....etc.
 - Building Code vs Fire Codes
- Delegated Authority
- **₹** Fire Protection Systems

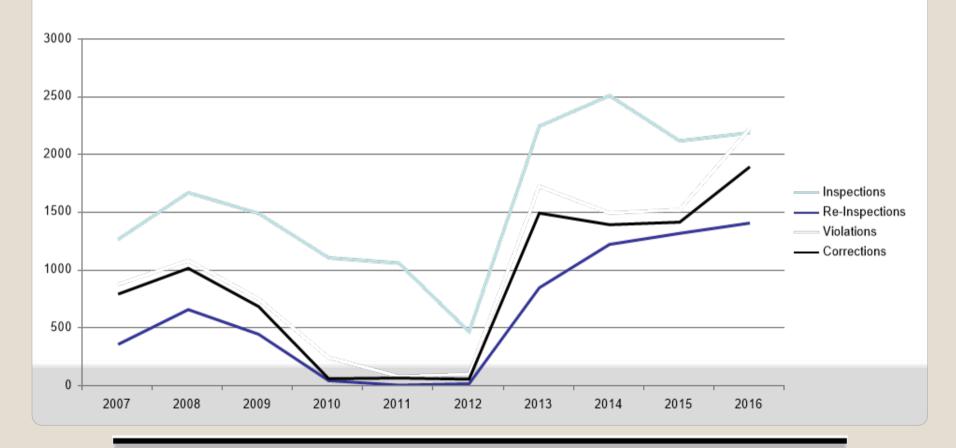


- Suppression Crews vs. Fire Code Inspectors
 - 2 inspectors replacing 12-15 Captains
 - **▼** More Personal Contact
 - The Quality of Inspections
 - Privatize (legal authority)
 - Privatize (non commissioned inspectors/contractors)

Fire

Fire







New Assignments:

- Patio Grills
- Fire Protection System Deficiencies
- Private Hydrant Maintenance
- Apartment Smoke Alarm and CO Detectors
- Underground Storage Tanks

Delegated by State Fire Marshal's Office

- Health Facilities:
 - Assisted Living Facilities
 - ➡ Hospitals, Alcohol and Drug Centers, Surgery
 - Adult and Child Care Centers and Homes
- Liquor Licensures
- Corrections Facilities
- Underground Storage Tanks



Fire Protection Systems

- Suppression Systems
 - Fire Water Service Lines
 - Automatic Sprinkler Systems
 - Hood Suppression Systems
 - Computer Rooms
 - Spray Booths
- Alarm Systems



Plan Reviews

- Commercial Buildings(Architect & Engineers Act)
 - Building Plans
 - Fire Protection Systems

Permits (\$92,000 in 2015)

- Commercial Buildings to Build
- Commercial Building to Occupy
- New Occupancy Permits in existing buildings
- Open burning
- Fireworks Stands/Trailers



- Arson Investigation
 - ATF Trained Individuals
 - Nebraska Arson Investigation Association
 - City Police Department
 - State Fire Marshal's Office Assistance

- **▼** Public Education
 - Assisted Living
 - Adult Day Care
 - Fire Extinguisher Hands on Classes
 - ₹ Fire Prevention Week Public Schools
 - Pre-School Tours
 - Smoke Alarm Programs

Fire Prevention Education Public Schools

- ▼ Visit Public and Private Schools (5,000 kids)
- ▼ Tour trucks and ambulance for Pre-k 1st grade
- \blacksquare Firefighter visits classroom with PPE 2^{nd} grade
- ➡ Great Escape program/contest 3rd graders
- ▼ Visit Classrooms with FPW theme (new smoke alarms every 10 years) 4th&5th graders



Great Escape







Fire Prevention Division

- Code Enforcement
- Arson Investigation
- Public Education



Insurance Services Office (ISO)

- Evaluate fire departments and helps determine the fire insurance premiums for property owners in the department's jurisdiction
- Rates departments from 1 to 10
- **☞** GIFD is currently rated at 3
 - Scheduled for Nov 29 evaluation

Insurance Services Office

4 areas evaluated:

₹ Emergency communications (10 points)

₹ Fire Department (50 points)

■ Water supply (40 points)

Peak Staffing

- Very difficult to predict emergencies
- Could be utilized for LDT's and transports

Peak Staffing

Number of calls by the hour of the day





Volunteer Department?

- Recruitment and retention is very difficult
- Availability of volunteers during business hours
- Number of personnel available can vary
- Amount of time required substantial
- Level of proficiency is hard to maintain



Volunteer Department?

- Trend in Nebraska, as cities grow, they tend to transition from volunteer to career departments
- Response times are critical
- Insurance rates



Why provide EMS?

- Geographical location of stations
- Cross-trained personnel benefit both fire and EMS
- System capabilities higher than private provider
- Decrease scene time
- Seamless patient care



Why provide EMS?

- Extremely high level of service
- Subsidize providers when not fire based
- Excellent source of cost recovery

Other Nebraska Cities' EMS Service

- 2001 Lincoln changed from private to Fire Dept.
- 2006 Omaha evaluated private EMS provider, stayed with Fire Dept.
- 2011 Hastings changed from private to Fire Dept.
- 2016 Hamilton County evaluated private EMS provider over county based EMS pending



Why do fire engines respond on medical calls?

- Dispatch Info
- Patient Care
- **₹** Time
- Readiness
- Discretion

Personnel Budget

2007

2017

\$5,362,033

Reg salaries: \$3,464,035

▼ Health Ins.: \$814,044

\$7,390,467

Reg salaries: \$4,844,654

➡ Health Ins: \$1,142,596

Operating Budget

2017

2007

\$665,761

\$569,161

Reduced \$89,400 compared to 2016 budget



Cutting costs?

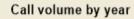
Operating budget: made significant reductions

Personnel budget: minimum staffing, terms of contract, rising insurance costs, and increased call volume make cost reduction difficult

Rising call volume

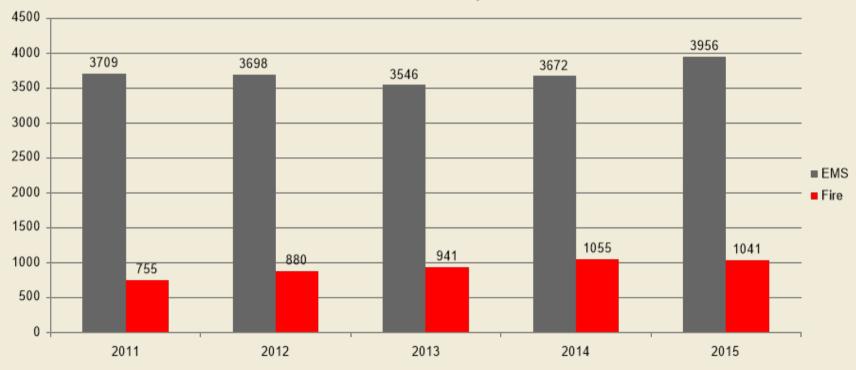
₹ Recalls for 2015: 37

Recalls for 2016: 44 (as of 10-26-16)





Fire and EMS calls by Year



How to meet future demands?

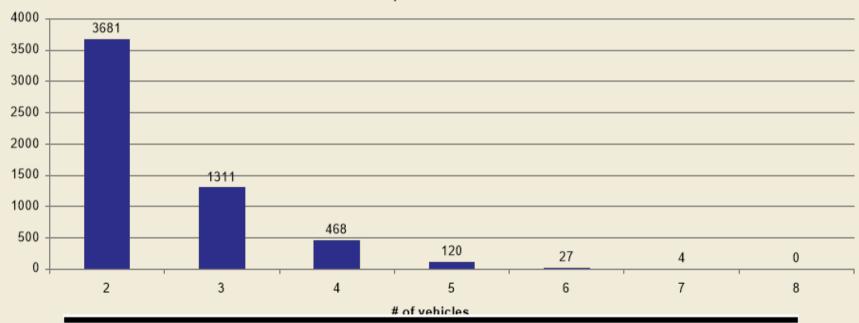
- ▼ Need to staff an additional ALS ambulance
 - 2015 and 2016: Requested six additional personnel
 - (2 per shift x 3 shifts)



Fire

Crews assigned at same time 2016 YTD

Multiple units on calls





Cost Recovery Options

- Fees for service
 - Discussed at previous study session
- Increase EMS transports (local and LDT)
 - Staff isn't adequate to take on more calls require additional personnel
- Contract with Hall County
 - **▼** Currently: \$196,200

MVCs

Motor Vehicle Accidents per Year



Fire

Questions?

