

**FRANKLIN COUNTY**

**DEPARTMENT OF PUBLIC SAFETY**

**STRATEGIC PLAN**

## *The Big Question*

What is the level of emergency services that we should be providing???

# VISION STATEMENT

Franklin County's Public Safety Department is dedicated to providing emergency services, to include, but not limited to, **Fire**, **EMS**, **Animal Control** and **Emergency Management**, that are delivered in a timely and efficient manner by well-trained and dedicated career and volunteer professionals.

# GOALS TO ACCOMPLISH THE VISION

- Provide consistent county-wide emergency services response within service response standards.
- Develop Strategy to recruit, retain, educate and motivate quality staff and volunteers while improving utilization of human resources.

**WHERE ARE WE TODAY?**

# 12 EMS AGENCIES

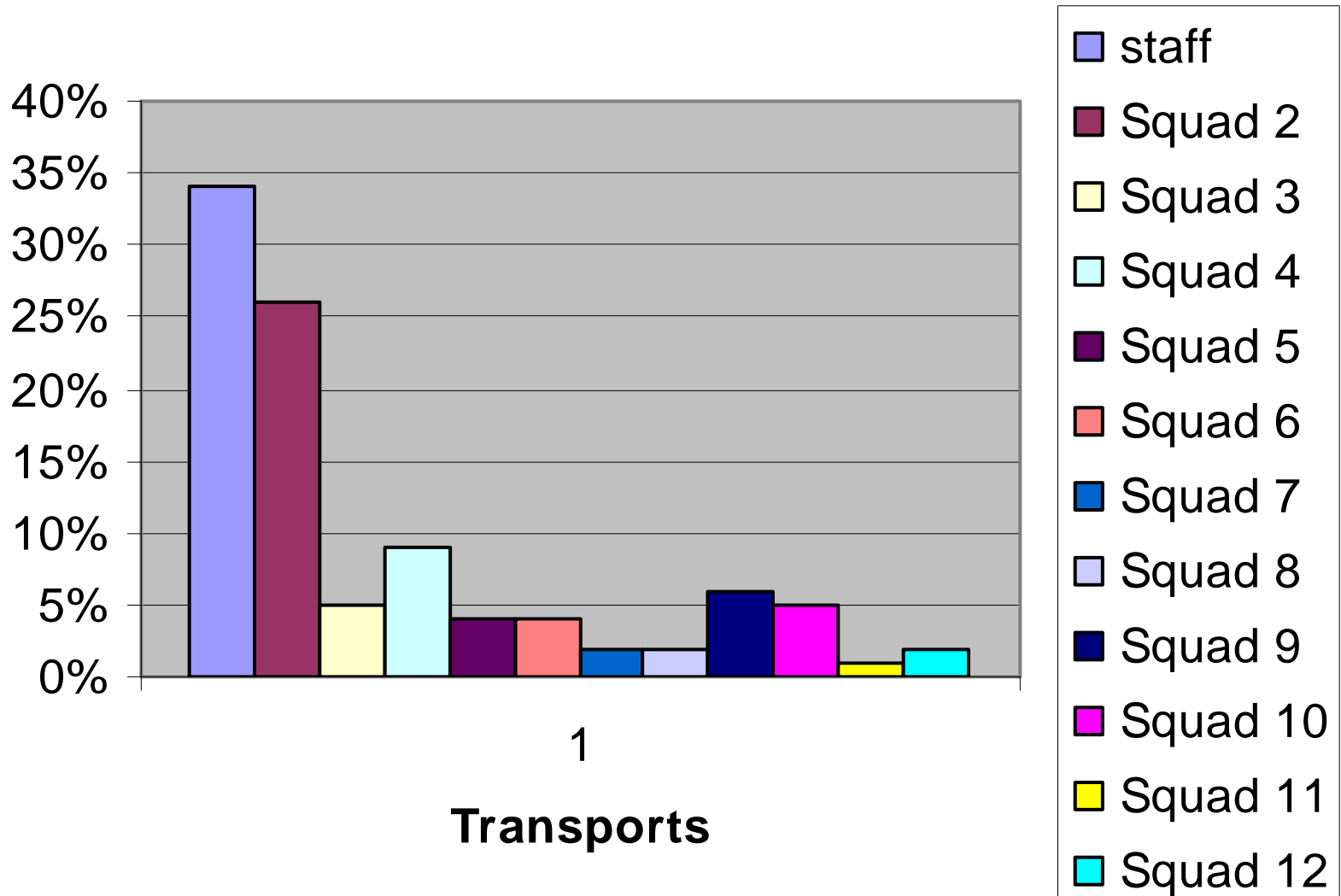
- AGENCY AND 2003 TRANSPORT VOLUME

– FRANKLIN COUNTY RESCUE SQUAD	915	21%
– FERRUM RESCUE SQUAD	220	5%
– GLADE HILL RESCUE SQUAD	332	9%
– CALLAWAY RESCUE SQUAD	136	3%
– SNOW CREEK RESCUE SQUAD	154	4%
– BOONES MILL RESCUE SQUAD	200	5%
– FORK MTN RESCUE SQUAD	164	4%
– RED VALLEY RESCUE SQUAD	188	4%
– SCRUGGS RESCUE SQUAD	210	5%
– HARDY RESCUE SQUAD	82	2%
– COOL BRANCH RESCUE SQUAD	75	2%
– CAREER STAFF	1509	36%

## 2004 EMS Transports

• Staff	1229	34%
• Franklin Co Rescue	920	25%
• Ferrum Rescue	180	5%
• Glade Hill Rescue	329	9%
• Callaway Rescue	150	4%
• Snow Creek Rescue	145	4%
• Boones Mill Rescue	96	2%
• Fork Mtn Rescue	83	2%
• Red Valley Rescue	205	6%
• Scruggs Rescue	184	5%
• Hardy Rescue	14	1%
• Cool Branch Rescue	65	2%

# 2004 EMS Transports by Department



**RESPONSE DATA FROM DECEMBER 6,2004 – JANUARY 31, 2005**

AGENCY	CALLS	CALLS MISSED CAREER HOURS	CALLS MISSED VOLUNTEER HOURS	AVERAGE REACTION TIME	AVERAGE RESPONSE TIME
SQUAD 2	238	100	2	2.8 min.	7.7 min.
SQUAD 3	36	16	3	2.9 min.	12.0 min.
SQUAD 4	42	8	1	5.4 min.	13.6 min.
SQUAD 5	19	6	0	8.6 min.	18.8 min.
SQUAD 6	26	5	0	8.1 min.	16.9 min.
SQUAD 8	25	8	2	12.5 min.	19.9 min.
SQUAD 9	51	15	4	8.1 min.	16.0 min.
SQUAD 10	30	2	0	4.7 min.	13.4 min.
SQUAD 12	9	7	0	10.5 min.	17.5 min.
SQUAD 13	5	0	0	11.4 min.	21.4 min

TOTAL CALLS:

COUNTY WIDE AVERAGE REACTION TIME:

COUNTY WIDE AVERAGE RESPONSE TIME:

487

7.8 MINUTES

15.4 MINUTES

CAREER RESPONSE DATA DECEMBER 6, 2004 – JANUARY 31, 2005

AGENCY	CALLS	CALLS MISSED	AVERAGE REACTION TIME	AVERAGE RESPONSE TIME
SQUAD 1	202	0	1.7 min.	10.6 min.

# EMS call data Dec 04 – June 05

AGENCY	CALLS	CALLS MISSED CAREER HOURS	CALLS MISSED VOLUNTEER HOURS	AVERAGE REACTION TIME	AVERAGE RESPONSE TIME
SQUAD 2	937	389	3	2.2 MIN.	6.6 MIN.
SQUAD 3	149	64	3	3.6 MIN.	12.3 MIN.
SQUAD 4	170	38	1	4.4 MIN.	11.3 MIN.
SQUAD 5	89	37	4	5.9 MIN.	15.2 MIN.
SQUAD 6	93	16	2	5.7 MIN.	15.6 MIN.
SQUAD 8	139	67	6	5.8 MIN.	11.9 MIN.
SQUAD 9	225	93	8	5.6 MIN.	12.0 MIN.
SQUAD 10	145	12	0	3.6 MIN.	11.1 MIN.
SQUAD 12	32	20	4	5.0 MIN.	13.4 MIN.
SQUAD 13	26	7	1	5.2 MIN.	14.5 MIN.

TOTAL EMS CALL: 2035

AVERAGE REACTION TIME: 5.0 MINUTES

AVERAGE RESPONSE TIME: 12.8 MINUTES

# Strength of the System

- Medical Director is very involved and wants to have a system that excels.
- Career Staff are very experienced and have increased scope of practice due to Medical Director.
- Trained and experienced volunteers are very willing and want to further their training.
- Staff and Volunteers that are committed to developing a quality system.

# Response times

- Studied EMS calls from May 1 to June 31, 2004
- 543 total EMS calls
- 192 or 35% were 15 minutes or more to get an ambulance on scene after being dispatched.
- 18 or 3% were over 30 minutes to get an ambulance on scene after being dispatched.
- Additional findings:
  - Of the 79 calls that it took over 20 minutes to get an ambulance on scene it took longer to get the ambulance to respond in 21 cases than it did to actually drive to the scene.
  - 2 difficulty breathing calls were over 40 minutes getting an ambulance to the scene.

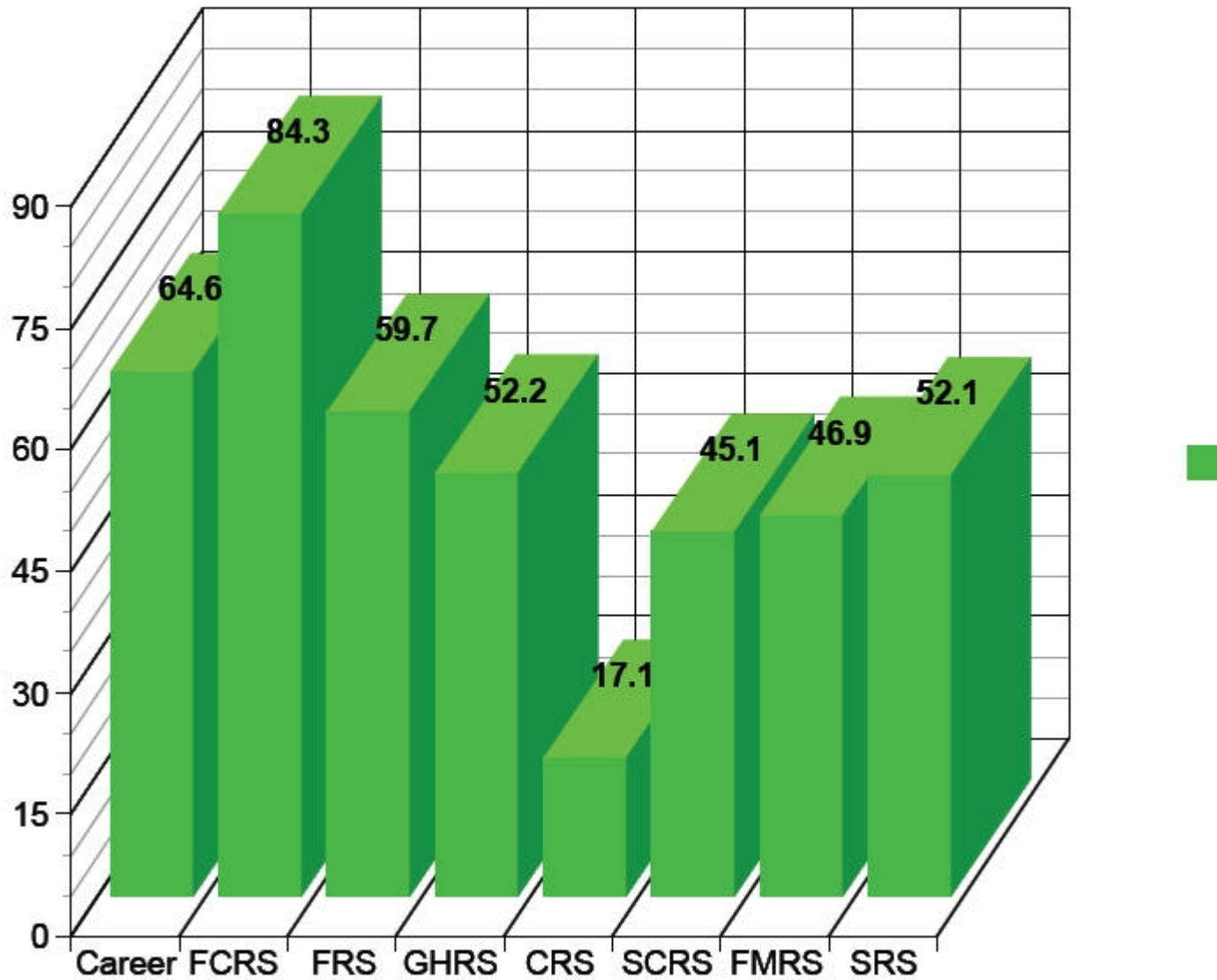
# Reasons behind poor response

- No standard for response; career staff have 2 minute reaction time standard unless they are tied up on other call.
- Lack of staff and/or volunteers.
- Most EMS stations do not have facilities to house volunteers over night.
- Some agencies discourage their members from staying at building. (co-ed quarters)
- No Emergency Medical Dispatch system.
- Training & Experience

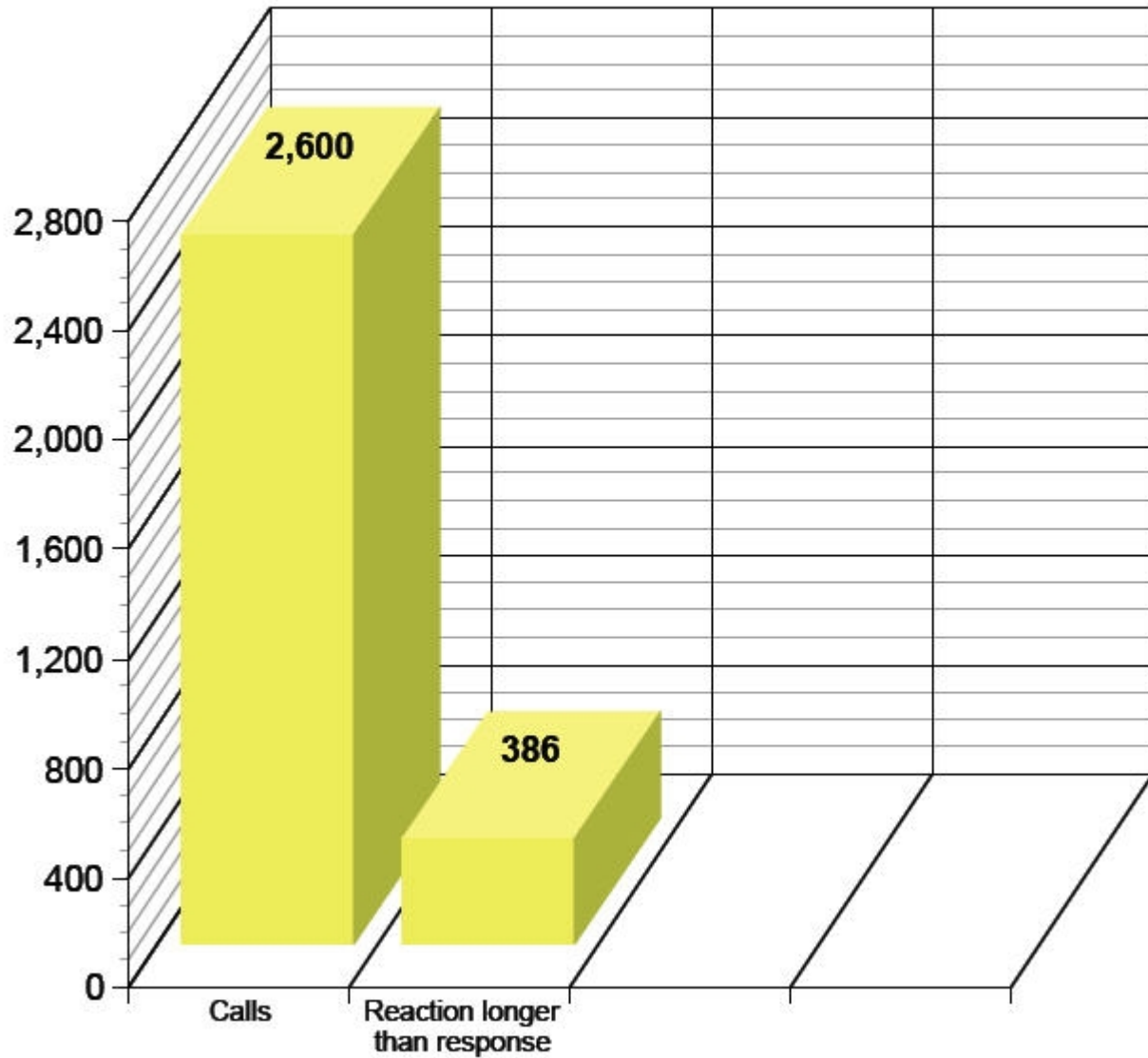
# Reasons for poor response (con't)

- Terrain and distance.
- Weather
- Additional duties of volunteers within agency that take away from running calls. (i.e. business, equipment, maintenance and training duties)
- Human factors
- Out of 125 certified EMS providers only 81 are active according to July 04 stipend payments.

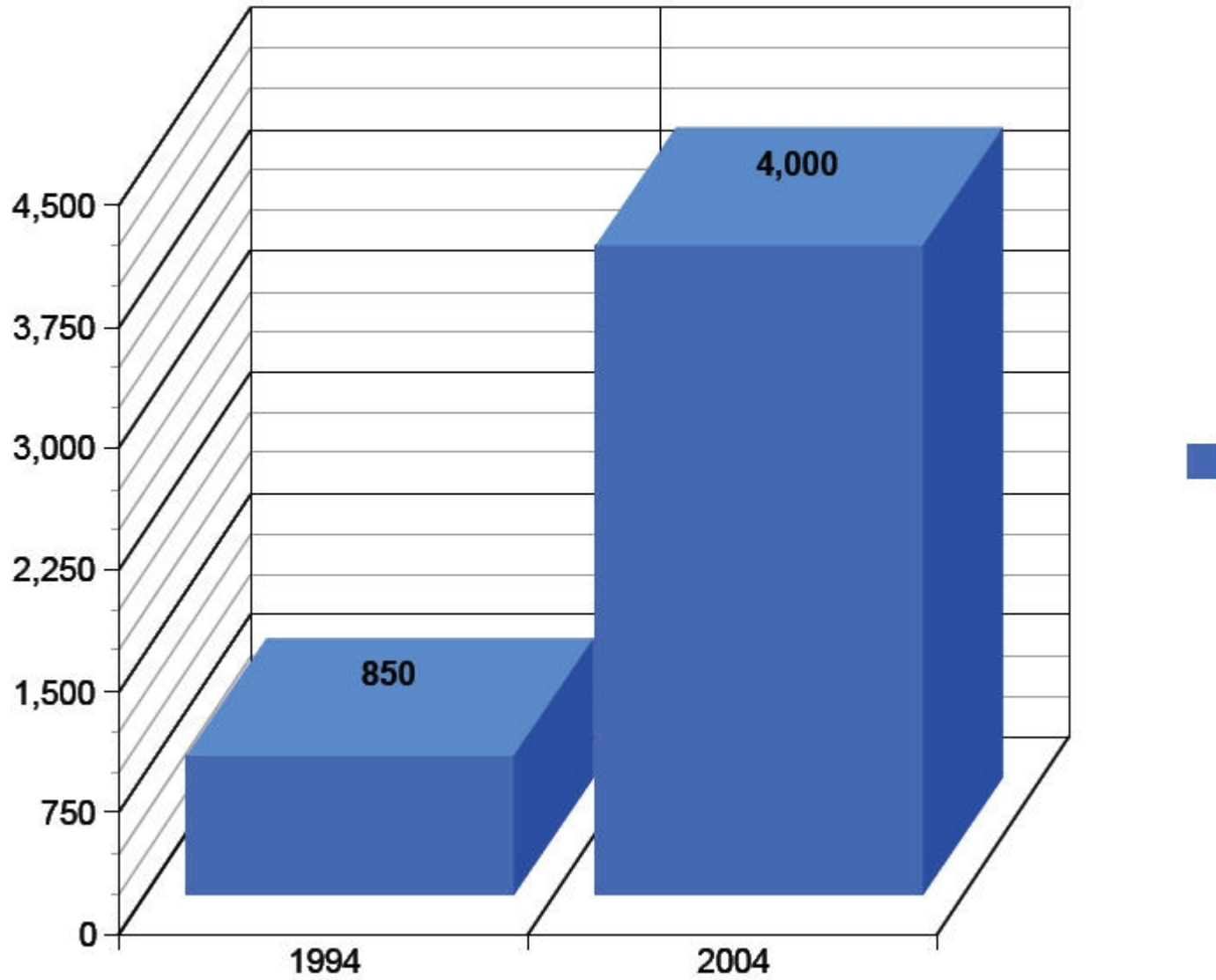
### 10 Minute Or Less Response Time



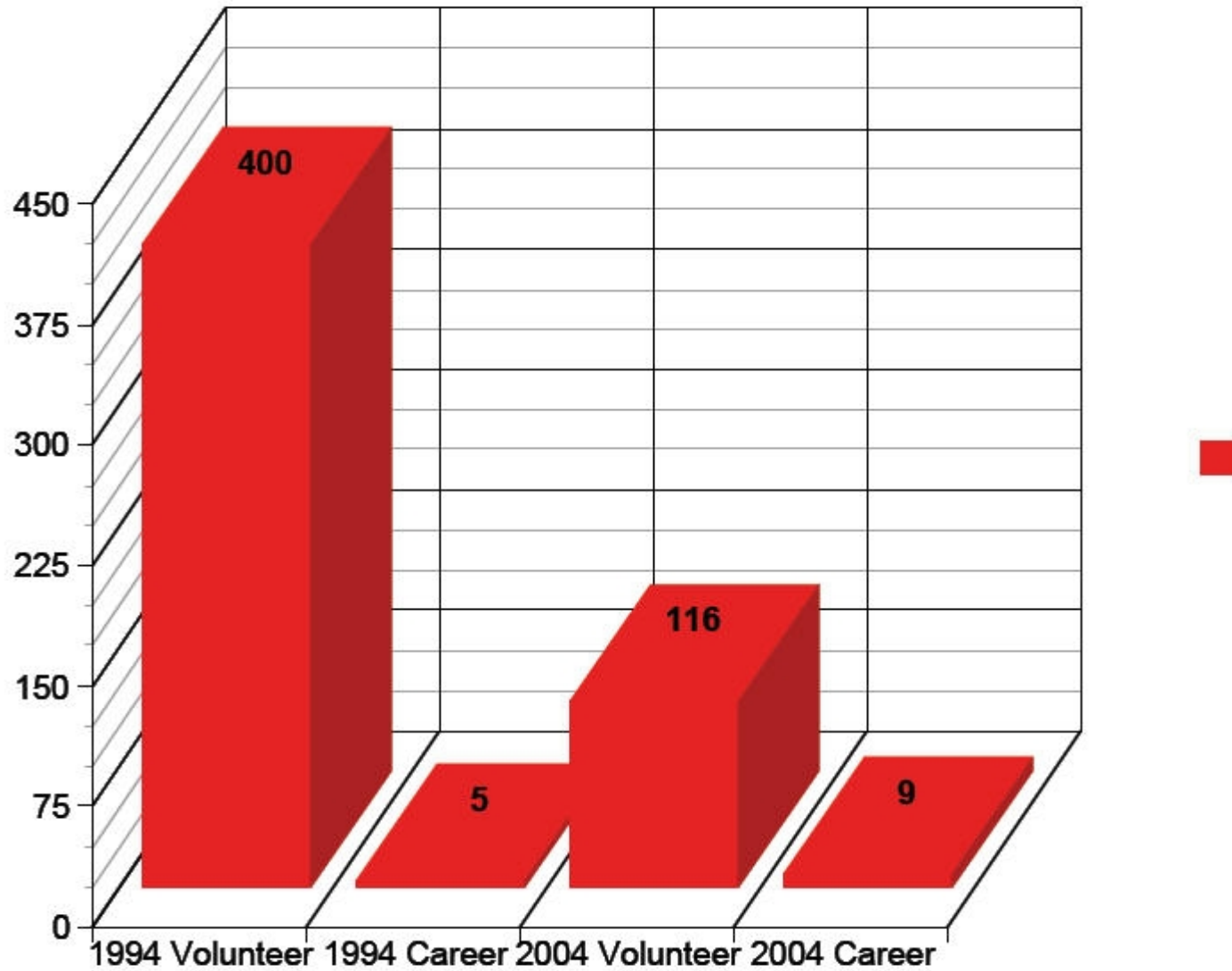
**Calls Where Reaction Time Longer Than Response Time**



### Calls For Service



Number Of Providers

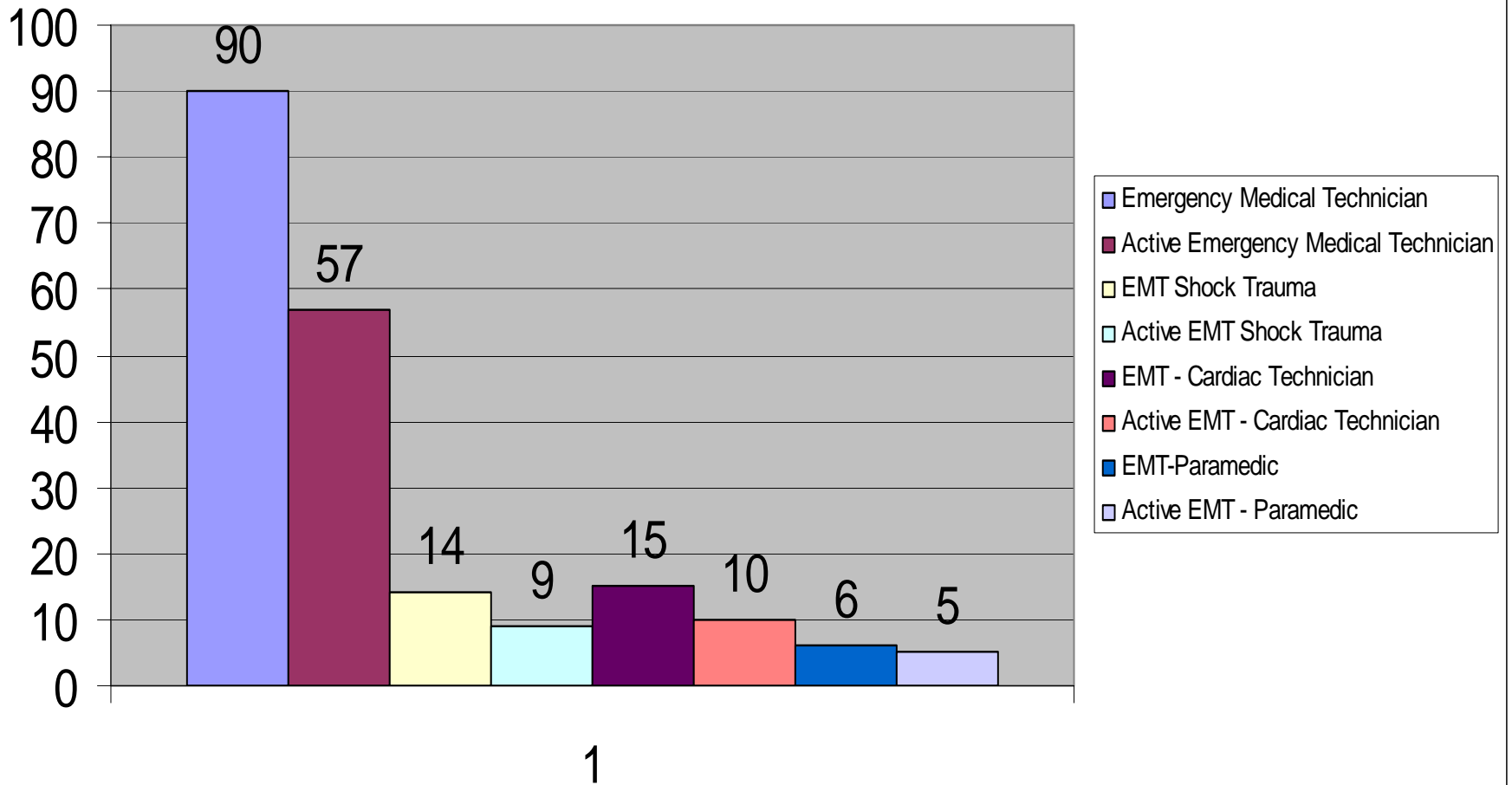


# Squad Membership as of July 2004

	On Roster	Active	%Active
Franklin Co Rescue	29	23	79%
Ferrum Rescue	18	11	61%
Glade Hill Rescue	14	11	78%
Callaway Rescue	17	13	76%
Snow Creek Rescue	32	13	40%
Fork Mtn Rescue	13	9	69%
Red Valley Rescue	11	7	63%
Scruggs Rescue	22	7	31%
total	156	94	60%
		81 (certified)	

\* Rosters include members that are active in other ways.

# Status of Volunteer EMS in Franklin County







# ADVANCED LIFE SUPPORT

- Approximately 20 volunteer ALS providers with only  $\frac{3}{4}$  being active.
- Classes somewhat difficult to obtain because of the need for accredited site since there is none in county (Intermediate and paramedic require accredited site).
- No designated training staff at present.
- Public Safety is working with EMS council, Martinsville and Henry County on regional accreditation of ALS training.
- Greater amount of time needed for continuing Ed.

# EMS Certification hours

Level	Initial hours	CE hours	Cost
EMT Basic	120	36 every 4 yrs	\$100
EMT Enhanced	87	36 every 3 yrs	\$500
EMT Intermediate	201	48 every 2 yrs	\$1500
Paramedic	676	72 every 2 yrs	\$36,000
EVOC	16		
Extrication	20		
MCI	16		
BTLS	16	16 every 2 yrs	\$100
ACLS	16	16 every 2 yrs	\$120

# FIRE COMPANIES

- 2003 CALL DATA

<b>DEPARTMENT</b>	<b>STRUCTURE</b>	<b>BRUSH</b>	<b>WRECK</b>	<b>OTHER</b>
ROCKY MOUNT FD	19	17	68	90
FERRUM FD	18	7	34	40
GLADE HILL FD	18	8	36	28
CALLWAY FD	3	3	11	2
SNOW CREEK FD	8	6	26	14
BOONES MILL FD	10	11	51	25
FORK MTN FD	4	6	16	8
BURNT CHIMNEY FD	17	5	52	53
SCRUGGS FD	5	9	37	41
HENRY FD	3	5	3	5
SMITH MTN LAKE FD	26	12		3
HARDY FD	NO REPORT			
COOL BRANCH FD		4	3	6

**FIRE RESPONSE DATA FROM DECEMBER 6, 2004 – JANUARY 31, 2005**

AGENCY	CALLS	CALLS MISSED	AVERAGE REACTION TIME	AVERAGE RESPONSE TIME
Rocky Mount FD	35	3	3.5 min.	8.4 min.
Ferrum FD	12	0	3.8 min.	8.4 min
Glade Hill FD	12	0	4.2 min.	9.6 min
Callaway FD	7	0	6.1 min.	17.1 min.
Snow Creek FD	8	0	5.7 min.	13.0 min.
Boones Mill FD	14	1	3.5 min.	11.8 min.
Fork Mtn FD	6	1	5.2 min.	12.8 min
Burnt Chimney FD	16	1	4.5 min.	11.2 min
Scruggs FD	15	0	3.5 min.	12.3 min
Hardy FD	1	0	11 min.	29 min.
Cool Branch FD	5	0	6.0 min.	15 min.
Henry FD	3	1	3.5 min.	9.5 min

TOTAL CALLS:

COUNTY WIDE AVERAGE REACTION TIME:

COUNTY WIDE AVERAGE RESPONSE TIME:

134

5.0 MINUTES

12.3 MINUTES

## December 2004 – June 2005 Fire/EMS Stats

AGENCY	CALLS	CALLS MISSED CAREER HOURS	CALLS MISSED VOLUNTEER HOURS	AVERAGE REACTION TIME	AVERAGE RESPONSE TIME
RMFD	124	4	1	3.1 MIN	6.9 MIN.
Ferrum Fd	50	0	0	3.8 MIN.	8.3 MIN.
Glade Hill FD	45	0	1	4.8 MIN.	10.7 MIN.
Callaway FD	35	0	1	5.1 MIN.	12.9 MIN.
Snow Creek FD	29	0	0	5.5 MIN.	12.6 MIN.
Boones Mill	60	2	0	3.5 MIN.	9.8 MIN.
Fork Mtn FD	40	3	2	5.2 MIN.	10.5 MIN.
Burnt Chimney	61	1	0	4.7 MIN.	10 MIN.
Scruggs FD	46	0	1	4.1 MIN.	9.9 MIN.
Marine FD	17	0	0	1.8 MIN.	11.6 MIN.
Hardy FD	9	0	0	7.0 MIN.	20.6 MIN.
Cool Branch	18	0	1	6.2 MIN.	12.5 MIN.
Henry FD	31	2	0	4.3 MIN.	9.7 MIN.

# Problems with Fire Response

- Lack of available day time volunteers.
- Fighting fire is a labor intensive job.
- Stations and equipment need to be improved.
- No required training standards.
- Local fire training center is needed; we must use Roanoke or Henry County at present.
- Need to improve leadership training opportunities within volunteer system (both management & operations).
- Lack of “county wide system and standardization” of both operations and equipment.

*“Some of these smaller fire departments do not have the training, equipment, and backup personnel to safely accomplish these dangerous tactics,” warned a 1998 report by the National Institute for Occupational Safety and Health.*

*Firehouse article of January 31, 2005*

# Fire Membership July 04

Department	On Roster	Active	%Active
Ferrum FD	13	12	92%
Glade Hill FD	35	24	69%
Callaway	no data		
Snow Creek FD	15	9	60%
Boones Mill FD	24	16	67%
Fork Mtn FD	19	10	53%
Burnt Chimney	45	21	47%
Scruggs FD	31	13	42%
Henry FD	14	10	71%
total	196	115	59%





# Fire Training Hours

Level	Hours
FF 1	130
FF 2	72
May Day	16
EVOOC	16
Haz Mat Awareness	8
Haz Mat Ops	32
Basic Pump Ops	16
Rural Water Supply	16

(no recertification hours required for fire training)

## Other areas of concern with Fire Safety

- Lack of adequate staff to perform fire inspections and safety inspections (124 inspection from May 1 to Nov 1, 2004 revealed 661 fire code violations)
- 2300 business in Franklin County and over 250 churches; code requires that places of assembly post occupancy loads approved by Fire Marshal
- Day care centers require annual inspection (15+ in County).
- Lack of staff to perform adequate fire investigations as required by code of VA (51 investigations first 5 months of 2005).

## Concerns con't

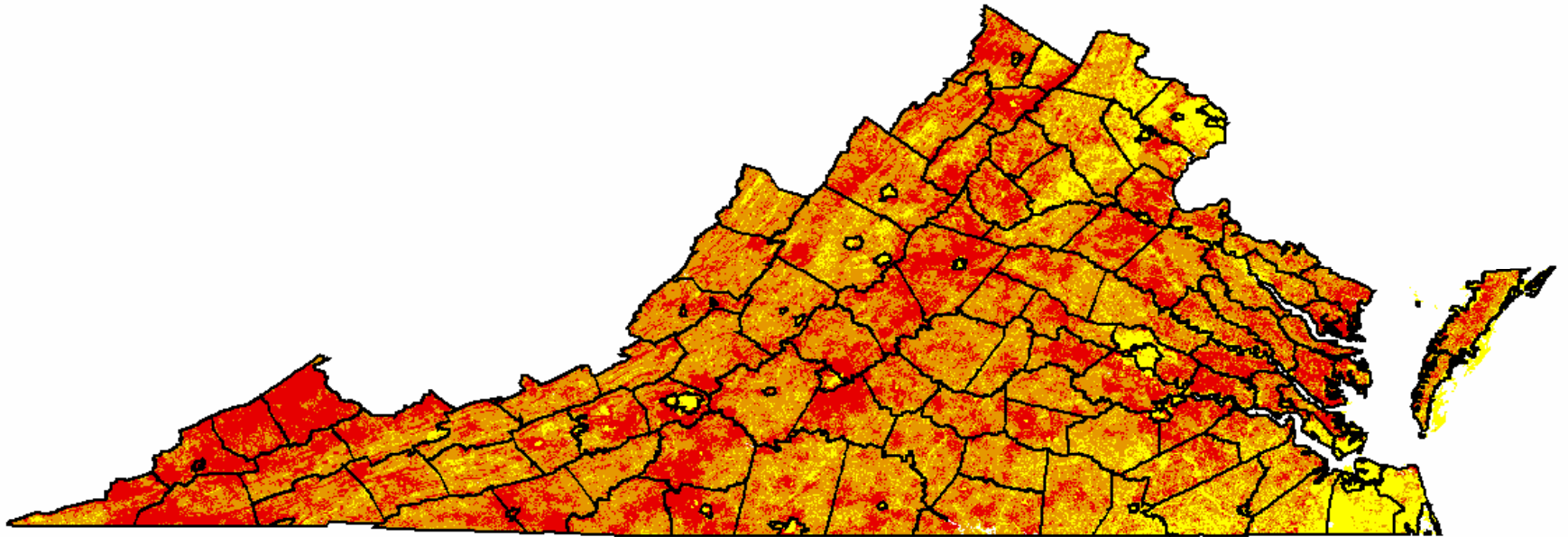
- High ISO ratings within county; dropping ISO rates could reduce insurance rates by about 10% or more.
- We are not able to consistently able to meet NFPA 1500 and 1720 minimum staffing at a fire.




# Firefighter Mayday Training



# Additional Information and Data

# Fire Rank in Virginia



 1 - Low     2 - Medium     3 - High

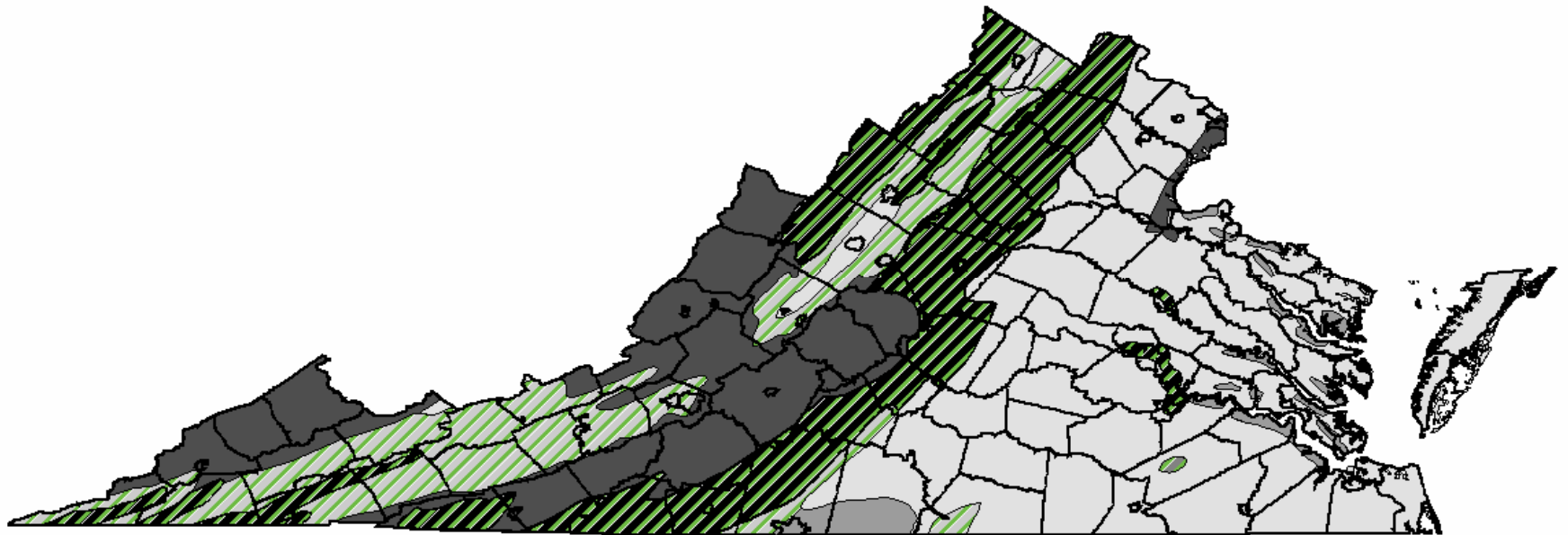


Map prepared by Virginia Tech Center for Geospatial Information Technology




Date: February 2004

Data Sources: Forestry Department fire risk mapping




# Landslide Hazards for Virginia



## Susceptibility

-  High Susceptibility & High Incidence
-  High Susceptibility & Low Incidence
-  Moderate Susceptibility & Low Incidence

## Incidence

-  High Incidence
-  Moderate Incidence
-  Low Incidence



Map prepared by Virginia Tech Center for Geospatial Information Technology

Date: February 2004

Data Source: USGS National Landslide Map





# Overall Volunteerism

- 2004 International Fire Chief's "Blue Ribbon Report" Identified the following problems:
  - Volunteers are declining across the country.
  - The average retention of a volunteer is 4 years.
  - Lack of quality leadership is the most critical issue facing the volunteer emergency services.

VA has lost over 2000 volunteer fire fighters since 1990 according to VA Dept of Fire Programs

Additional studies show that most individuals would rather volunteer for specific task and period of time rather than a lengthy period of time and several task.

Counties that have dedicated Recruitment and Retention employee have also been hiring more and more staff.

# Other Factors Affecting Volunteerism

- 41 % of county workforce drives outside the county for employment
- Large amount of citizens that remain are retired

# Training Concerns

- No dedicated training staff at present.
- Training facilities are lacking due to need for specialized facilities and equipment.
- Class room space is small at Public Safety.
- Lack of instructors for many classes.

No Pediatric Advanced Life Support Instructors (PALS).(Encouraged of ALL Advanced Life Support (ALS) Providers.

No Advanced Pediatric Life Support Instructors. (APLS)

Two Advanced Cardiac Life Support Instructors (One is not connected to EMS in Franklin County) (This is required of all Paramedics Bi-Annually)

3-5 Basic Trauma Life Support (BTLS) Instructors. (Encouraged by OMD for ALL providers)

Several CPR instructors.

3 Vehicle Extrication Instructors.

1 Farm Extrication Instructors.

3 Emergency Vehicle Operators Course Instructors. (Required by State of Virginia for ALL Fire/EMS drivers)

No Pediatric Education for Pre-hospital Provider (PEPP) Instructors.

No Heavy Rescue Instructors (confine space, cave rescue, water rescue, collapse rescue, Rope Rescue, etc)

No Geriatric Emergency Medical Instructors (GEMS)

3-4 Hazardous Materials instructors.

Several Basic Fire Instructors

1 instructor for ladder truck operations.

No Managing Company Tactical Operations (MCTO) instructors.

No MAYDAY instructors. (A self-rescue class)

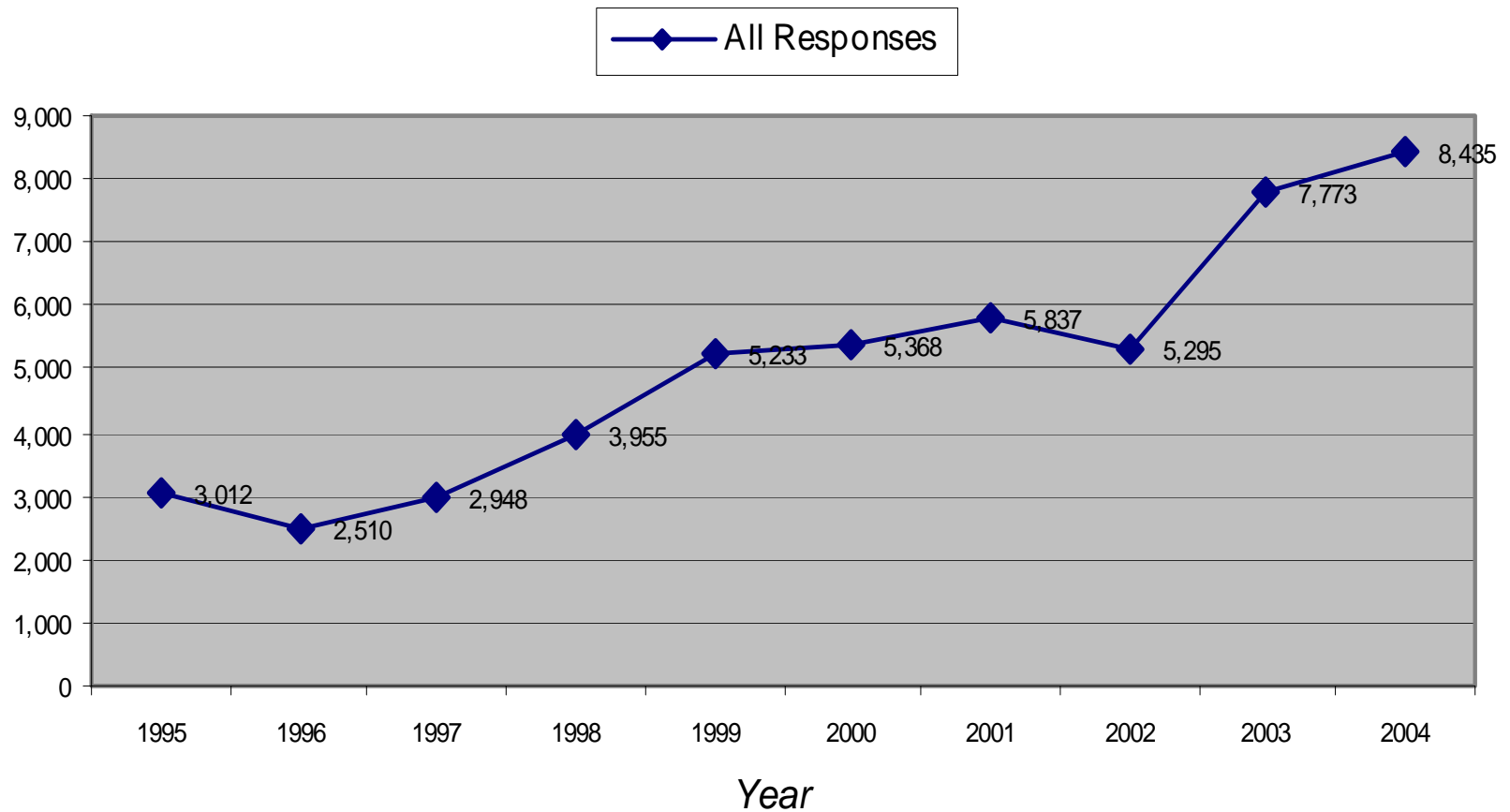
1 National Incident Management Systems (NIMS) 700 instructor which all providers will be required to have in the next year for the jurisdiction to qualify for federal money.

No Pre-Hospital Trauma Life Support (PHTLS) instructors. (Encouraged for ALL providers)

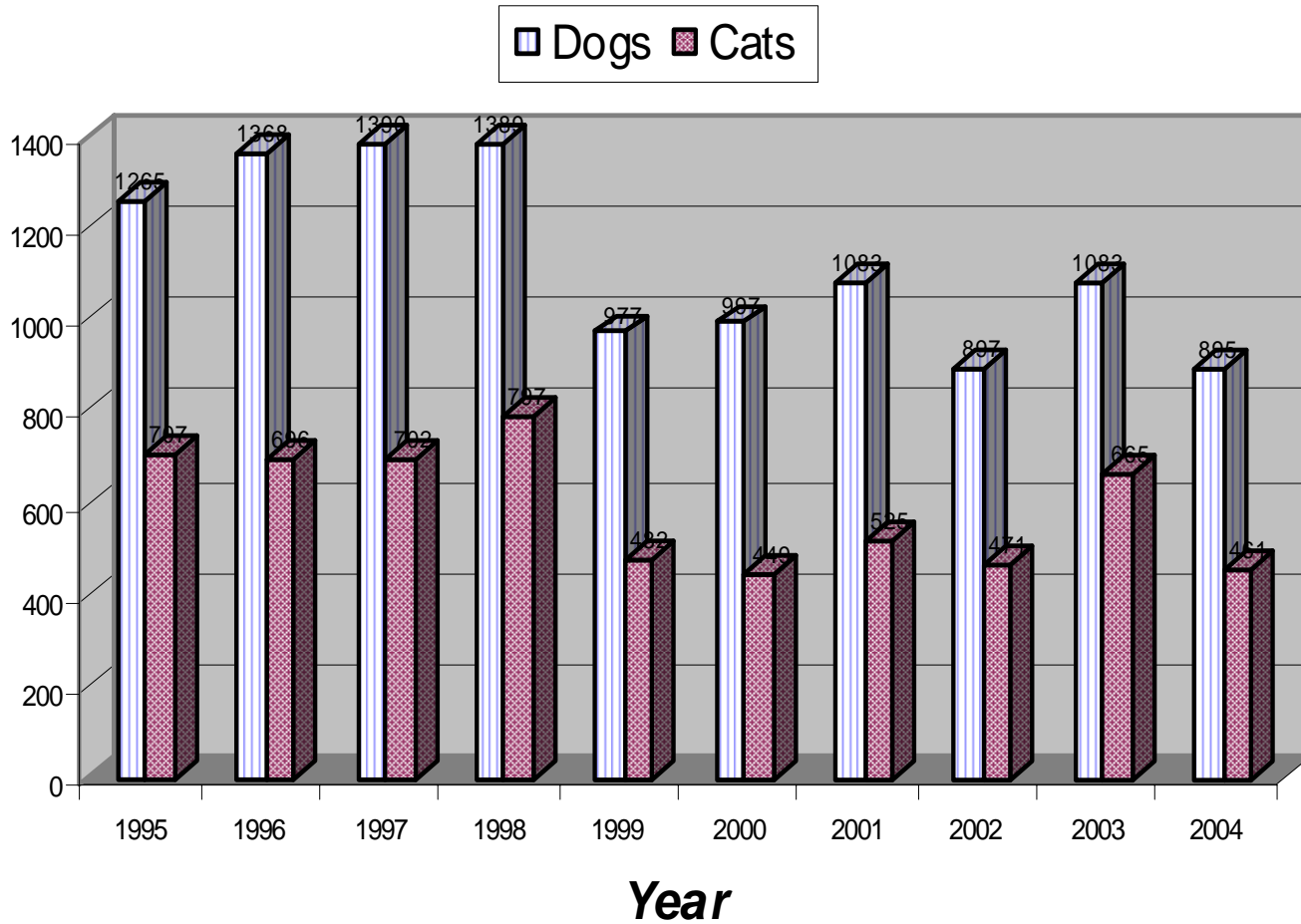
1 management instructor.. (This is major problem with recruitment/retention)

# **Animal Control Data**

# Franklin County Animal Control Calls Answered Annually

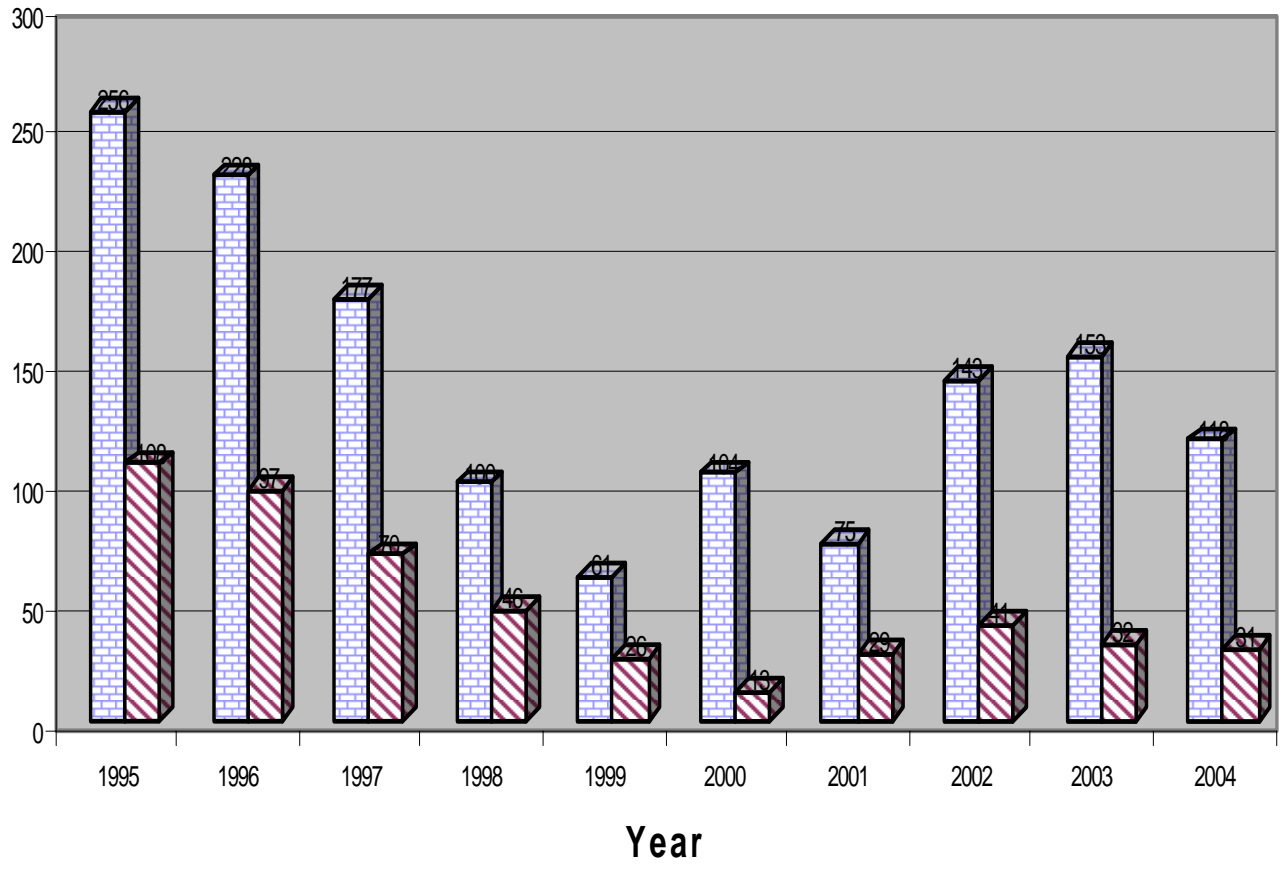


# Franklin County Animal Control Animals Picked Up Annually

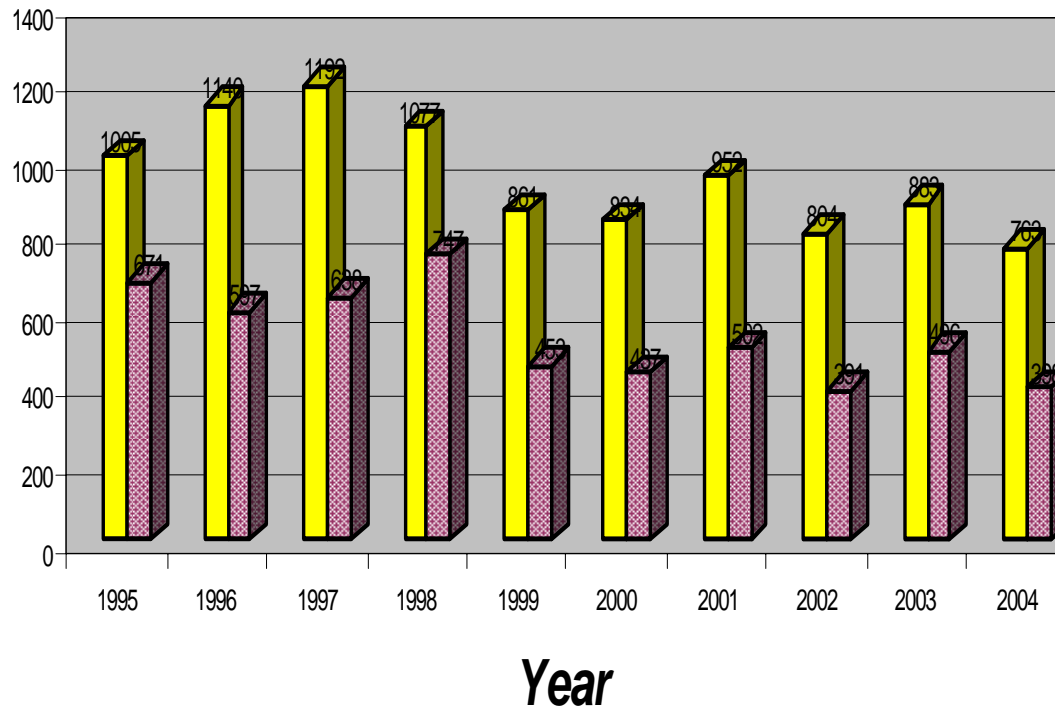


Franklin County Animal Control  
**Animals Adopted or Returned to Owner Annually**  
(Mandatory sterilization state law for adopted animals became effective 7-1-98)

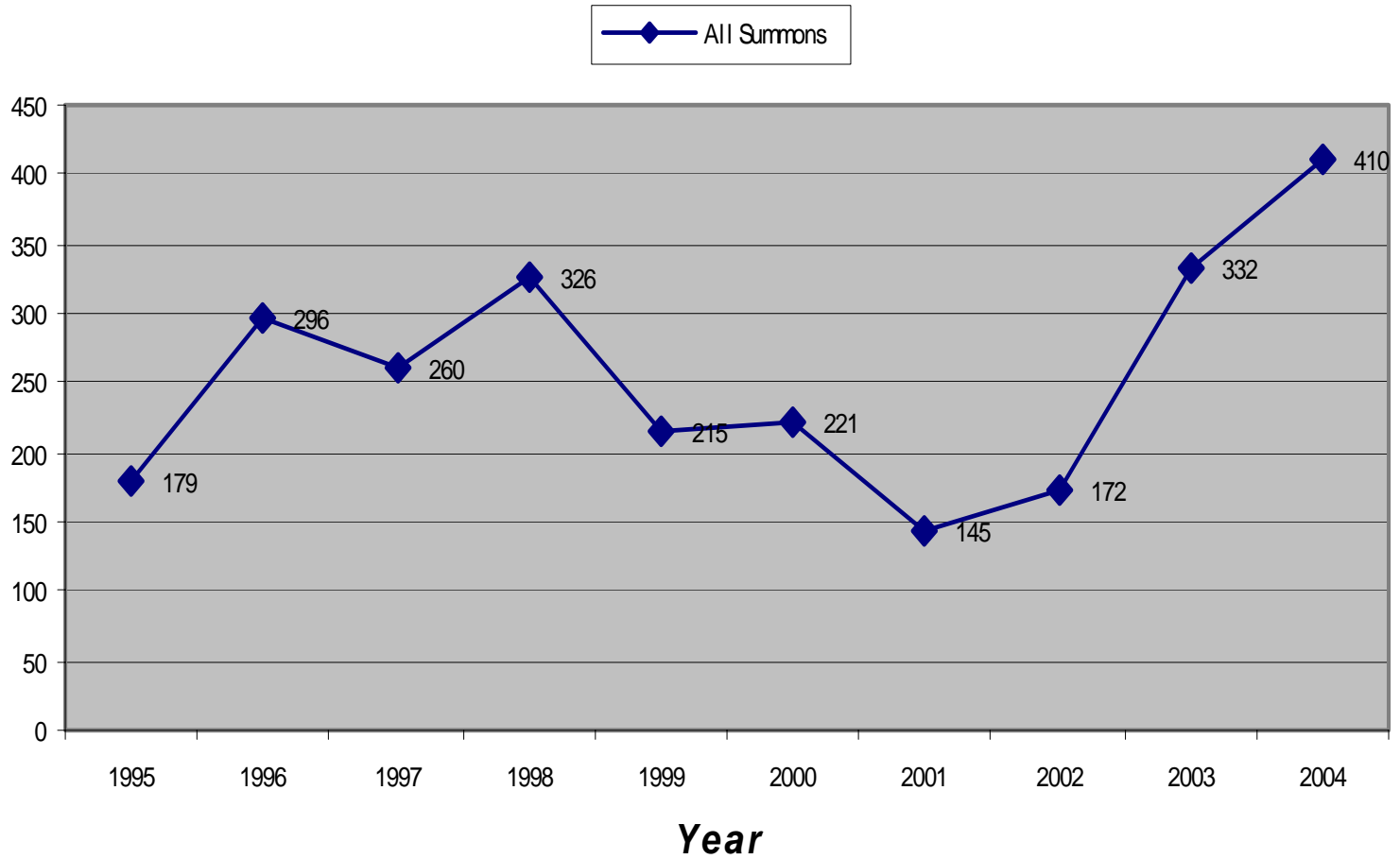
□ Dogs □ Cats



# Franklin County Animal Control Animals Euthanized Annually



# Franklin County Animal Control Summons Written Annually



# Accomplishing Our Goals

## GOAL #1

Providing consistent county-wide emergency services response within service response standards.

### Objective A

Develop response time standard for EMS of 8 minutes and Fire of 8 minutes 90% of the time within 2 miles of the county's identified population centers and 10 minute response 85% of the time outside village centers.

# Actions needed to accomplish objectives

- Increase available training for volunteers.
- Work to increase volunteer participation (some agencies have less than 12 activity members) and create minimum requirements for agency to exist.
- Hold all responders and agencies accountable to the standards by creation of policies and ordinances. (also needed to comply with NIMS)
- Look at strategic locations of stations and new and improved stations for volunteers while consolidating some EMS agencies but adding Fire Stations as dictated by growth and ISO.

- Increase day time staffing Fire and EMS (this will help to address the terrain and travel issue).
- Investigate Fire Department EMS First Response.
- Add 24 hour system's supervision.
- Create a "1" system standard and operation and not several departments "doing their own thing" type of attitude. (needed to comply with NIMS)
- Provide support staff for system.
- Create apparatus and equipment standards that guide CIP. (needed to comply with NIMS)
- Create professional standards for all providers and create orientation program for new members. (needed to comply with NIMS)

# GOAL #1

Providing consistent county-wide emergency services response within service response standards

## Objective B

Develop tiered Emergency Medical Service response system that provides that Advanced Life Support is available 90% of the time when needed.

# Actions needed to accomplish objectives

- Add night time ALS in 2006.
- Improve training facilities.
- Continue to fund ALS classes.
- Add 24 hour system's supervision.
- Investigate the implementation of Emergency Medical Dispatch.
- Mandate that all EMS agencies shall operate under one agency and recognize one medical director by ordinance.
- Create training staff in 2005.

## GOAL #2

Develop strategy to recruit, retain, educate and motivate quality staff and volunteers while improving utilization.

### Objective A

Develop and Implement a strategy for effective volunteer management.

# Actions needed to accomplish objectives

- Develop job descriptions for all volunteer positions.
- Increase management type training.
- Provide an improved delivery method for training within the county to include staffing and facilities.
- Develop standards for all officer positions.
- Provide staffing to assist volunteers with “non response” related issues (i.e. logistic staff).
- Begin Recruitment and Retention campaign.
- Set goal of 10% yearly increase in “active” volunteers.

- Pursue EMT and Firefighter training in School System
- Pursue new training facility and administration building (currently leasing P.S. offices).
- Create and implement volunteer fire academy.
- Become one agency and one operation.
- Market “professional” volunteer system.

## Other recommendations

Continue to develop Countywide Guidelines which all members and organizations operate under.

- Work to improve overall ISO ratings of departments
- Improve ability to do fire and safety inspections thus reducing economic impact of fire loss
- Add field supervision for staff and system (NFPA, ICS & NIMS recommend 1 supervisor for 3-7 people)
- Investigate “Countywide” volunteer department

# Standard Apparatus

- **Fire Departments**

- Tanker (20 yr rotation)
- Engine (20 yr rotation)
- Brush Truck (15 yr)
- Specialty as needed
  - (i.e. ladder, air utility)

- County should maintain one spare engine and one spare tanker.

- **EMS Stations**

- 1 ambulance for 300 calls unless career staff in building (10-12 yr rotation)
- Crash truck as need justifies (15 yr rotation)
- ALS Response vehicle as need justifies

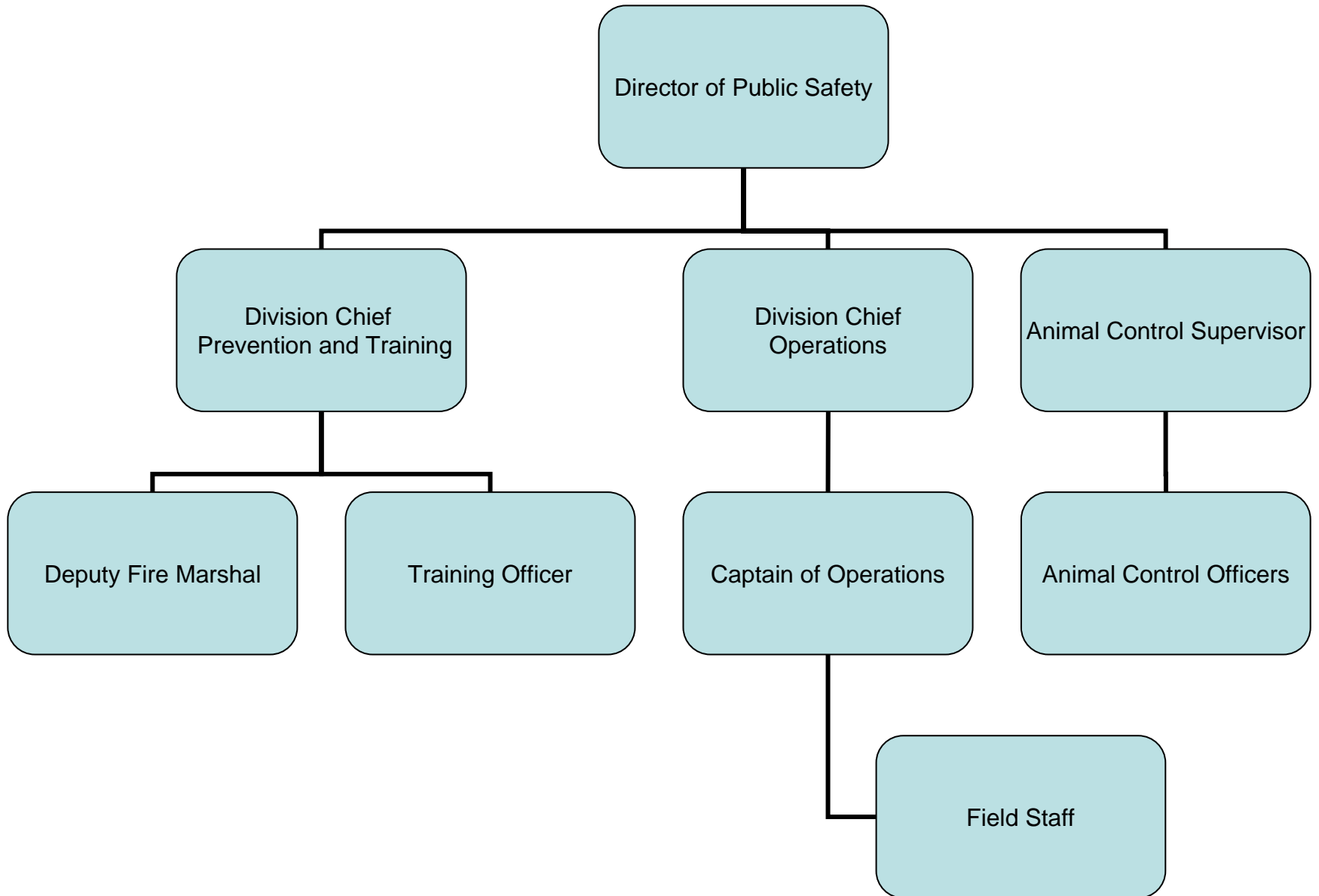
- County should maintain one spare ambulance.

# Staffing needs

- FY05-06
  - Add Training / Recruitment Staff – 1 (approved)
  - Add Fire Marshal – 1
  - Add Logistic Officer – 1
  - Additional ALS providers for night and weekend coverage (2 approved)
  - Develop staff “senior” positions to supervise staff at each “career” station and act as liaison for staff at those stations. Position would also be responsible to act as field supervisor – 3.

# Public Safety Re-organization

(approved Aug 2005)



# Staffing needs

- FY 06-07
  - Staffing for 2 Fire Stations – add 5
  - Refill Deputy Director's position – add 1
  - Add Additional Field Supervisor

# Staffing needs

- FY 07 – 08
  - Add Fire Stations – 3
  - Add Additional Training staff – 1

# How Do We Pay For It?

- Implement Countywide EMS billing.
- Grants for training facility.

**Staff only billing**

FRANKLIN COUNTY FIRE &amp; EMS

PROJECTED

PROJECTED REVENUE	# CALL	FEES	REVENUE
BLS - Non Emergency	0	<b>300.00</b>	0.00
BLS - Emergency	550	<b>300.00</b>	165,000.00
ALS - 1 Emergency	500	<b>450.00</b>	225,000.00
ALS - 2	250	<b>575.00</b>	143,750.00
<b>TOTAL BASE RATE REVENUE</b>	<b>1,300.00</b>		<b>533,750.00</b>

MILEAGE 6 MI/TRANSPORT

Mileage - urban - 6 miles	5,000.00	<b>7.00</b>	35,000.00
Mileage - Rural 1st 17 miles	0.00	<b>7.00</b>	0.00
<b>TOTAL MILEAGE REVENUE</b>	<b>5,000.00</b>		<b>35,000.00</b>

**TOTAL REVENUE BASE+MILEAGE****568,750.00****50% collection rate****284,375.00**

60% collection rate

341250

updated 07/2005

FRANKLIN COUNTY FIRE & EMS		Total system	PROJECTED
PROJECTED REVENUE	# CALL	FEES	REVENUE
BLS - Non Emergency	0	300.00	0.00
BLS - Emergency	2,300	300.00	690,000.00
ALS - 1 Non Emergency	0	450.00	0.00
ALS - 1 Emergency	1,100	450.00	495,000.00
ALS - 2	300	575.00	172,500.00
SCT - Speciality Care Trans		675.00	0.00
<b>TOTAL BASE RATE REVENUE</b>	<b>3,700.00</b>		<b>1,357,500.00</b>
MILEAGE	6 MI/TRANSPORT		
Mileage - urban - 6 miles	20,000.00	7.00	140,000.00
Mileage - Rural 1st 17 miles		7.00	0.00
<b>TOTAL MILEAGE REVENUE</b>	<b>20,000.00</b>		<b>140,000.00</b>
<b>TOTAL REVENUE BASE+MILEAGE</b>			<b>1,497,500.00</b>
<b>50% collection rate (total system billing)</b>			748,750.00
<b>60% collection rate</b>			<b>898,500.00</b>

# Division of funds

	<i>50% collection</i>	<i>60% collection</i>
	\$748,750	\$898,500
8% for billing service	\$59,900	\$71,880
15% back to squads	\$112,312.5	\$134,775.0
30% staffing	\$224,625.0	\$269,550.00
7% operations budget	\$52,412.5	\$62,895.0
40% CIP	\$299,500.0	\$359,400.0

## Proposed Funding Formula for Revenue Recovery

### Proposed sharing with squads

15% of collected amount back to volunteer rescue squads

60% divided equal

40% divided based on transports

example: \$700,000 collected

\$105,000 back to squads

60%=\$63,000 divided equal

40%=\$42,000 divided by transport volume

### **PLUS**

FY05-06

Purchase maintenance agreement on all defibs and cots.

Training staff

night time ALS staffing

additionally

FY06-07

Central purchasing of medical supplies

100% on vehicle purchases

additionally

FY 07-08

Take over maintenance on vehicles

Propose building replacement plan to BOS

# Improvements due to add'l funds

- More ALS providers
- Improved response times
- Better equipment
- More funds to squads
- Better stations
- Improvements to radio system
- More training
- Recruitment and retention

# Decision left to discuss

- Shift we need ALS and staff working
- Rank / Supervision issues
- Reorganization chart
- Volunteer retirement plan
- Are we ready to implement countywide billing
- Proposed distribution of EMS billing



**“During each phase, downward pressure and negative events will occur so executives and managers must expect them”**

## **The Change Monster**

*The Human Forces that Fuel or Foil Corporate Transformation and Change*