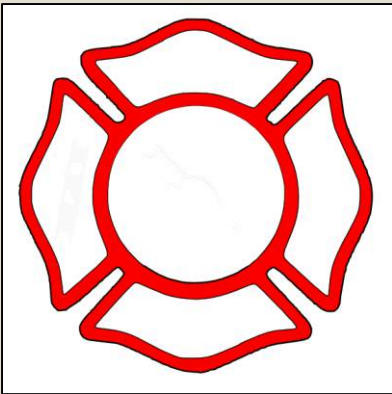


# Tompkins County Department of Emergency Response



## DEVELOPMENT OF EMERGENCY MEDICAL SERVICES





**EMERGENCY**  
**POLICE CALL**  
**FIRE 911**  
**MEDICAL**



# 2016 (1999)

- **PHONE TRAFFIC** 151,521 (51,530)
- **CALLS TO 911** 34,248 (15,836)

**(100 %)**



**76%**

- **RADIO TRANSMISSIONS** 3,078.600



# ALL CALLS DISPATCHED

**2006**

**49,537**

**2016**

**66,226**

# CALLS DISPATCHED PER DISCIPLINE



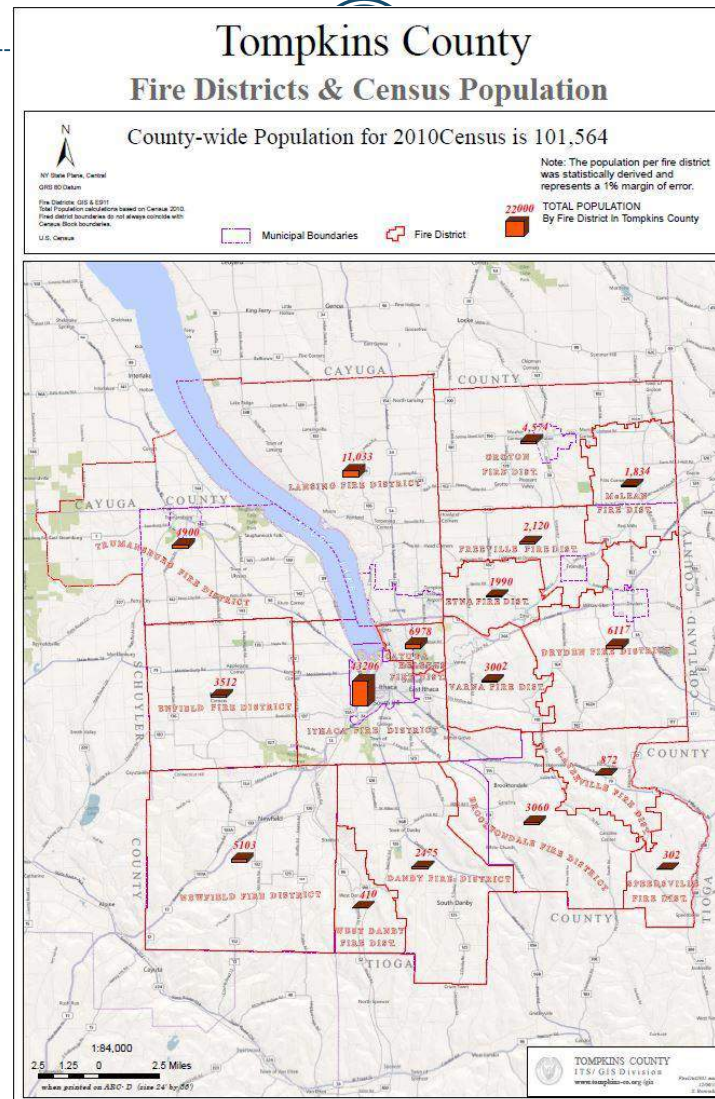
• <b>LAW</b>	<b>34,315</b>		<b>45,149</b>
• <b>FIRE</b>	<b>4,436</b>		<b>5,017</b>
• <b>EMS</b>	<b>10,786</b>		<b>16,060</b>

# **LAW ENFORCEMENT AGENCIES COORDINATING ON TOMPKINS COUNTY 800 MHz RADIO SYSTEM**



- **Tompkins County Sheriff**
- **New York State Police**
- **Ithaca Police Department**
- **New York State Park Police**
- **Cayuga Heights Police Department**
- **Dryden Police Department**
- **Groton Police Department**
- **Trumansburg Police Department**
- **TC-3 Police**
  
- **Cornell Police**
- **Ithaca College Police**
- **New York State DEC**

# FIRE DISTRICTS IN TOMPKINS COUNTY





# CIVIL WAR



**In 1777, the Congress of the United States passed a bill “devising ways and means for preserving the health of the troops ... that a suitable number of covered and other wagons necessary for removing the sick and wounded ...”**

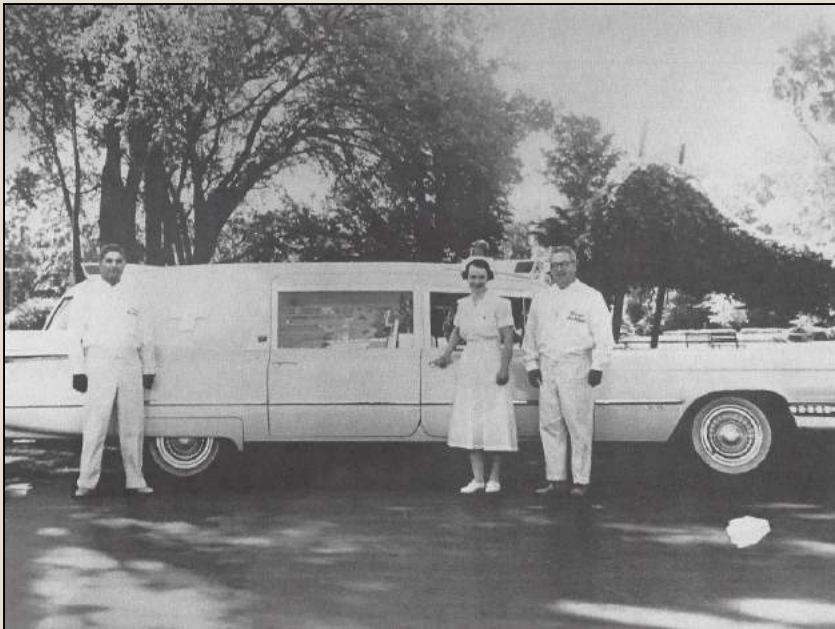




# 1905 – First Gasoline Ambulance



# BANGS AMBULANCE



# COUNTY and “HOSPITAL” AMBULANCES



# ALMEDA/LANSING AMBULANCE





# SLATERVILLE AMBULANCE



**NEW AMBULANCE** — Members of the Slaterville Springs Fire Department pose in front of their new ambulance. The Department will hold Field Days Thursday through Saturday to raise money to buy additional equipment for the ambulance. Left to right are Gordon Ryan, Guy Blackburn, Dennis Armstrong, Francis Hamilton, Howard Durboa and Ray Griffin.



# GROTON AMBULANCE





# TRUMANSBURG AMBULANCE

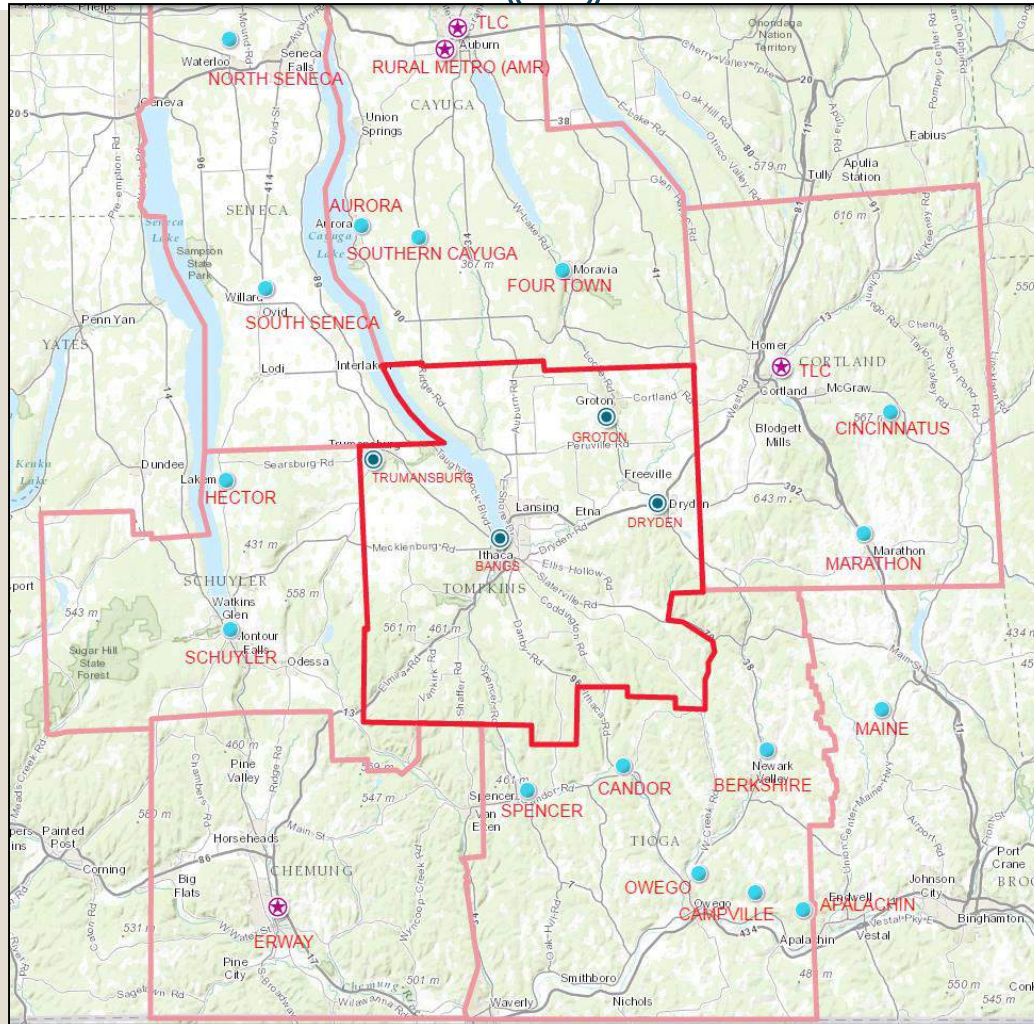


# DRYDEN AMBULANCE





# 2017 AMBULANCE DISTRICTS



# TWO-TIER



## Tompkins County Fire Districts & Census Population


County-wide Population for 2010 Census is 101,564



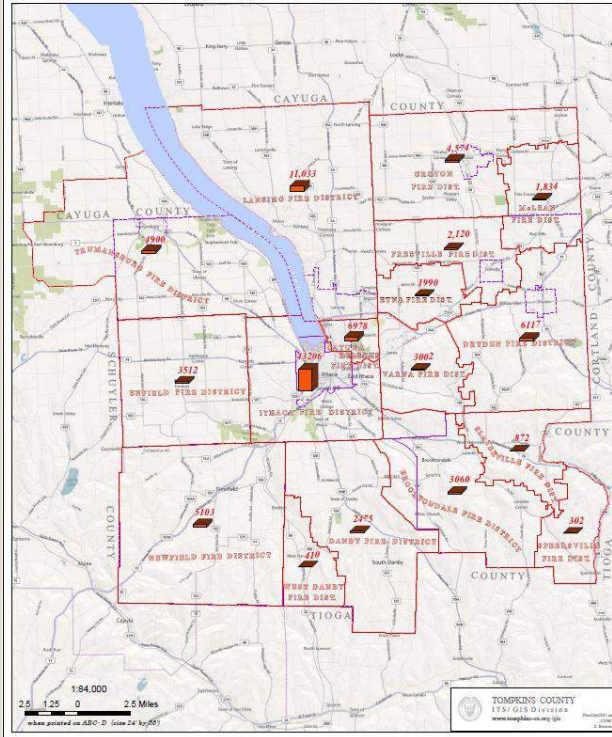
NY State Plans, Central  
GIS 03/03/08  
Fire Districts GIS 6/5/07  
Total Population and Census based on Census 2010  
Fire District boundaries do not always coincide with  
Census tract boundaries.  
U.S. Census

Note: The population per fire district  
was statistically derived and  
represents a 1% margin of error.

**22689** TOTAL POPULATION  
By Fire District in Tompkins County

 Municipal Boundaries

 Fire District



# FIRE RESPONSE TRENDS



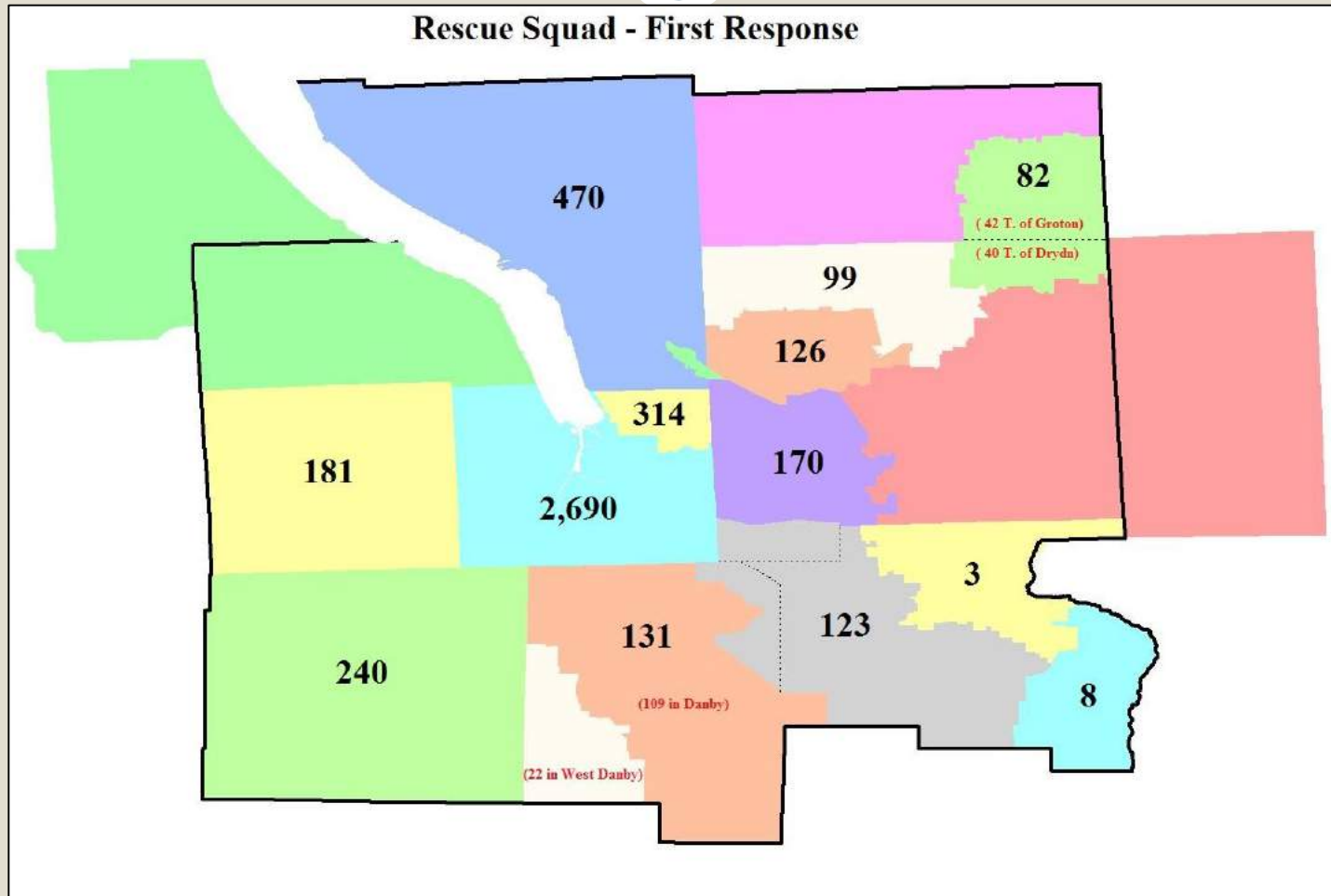
Fire	1976	2016	Alarms	Adjusted
Brooktondale	45	67	7	60
Cayuga Heights	112	194	102	92
Etna	45	60	11	49
Danby	55	75	11	64
Dryden	114	320	187	133
Enfield	57	82	8	74
Freeville	36	129	76	53
Groton	101	109	25	84
Ithaca	990	2,410	1,366	1,044
Lansing	172	358	161	197
McLean	39	46	4	42
Newfield	71	102	8	94
Slaterville	39	32	3	29
Speedsville	5	10	1	9
Trumansburg	130	277	89	188
Varna	58	95	18	77
Ithaca	990	2,410	1,366	1,044
All Others	1,078	1,956	711	1,245
Fire	2,068	4,366	2,077	2,289
Rescue	436	4,739		
Total	2,068	9,105		
Mutual Aid	221	774		

# EMS DISPATCHED IN COUNTY

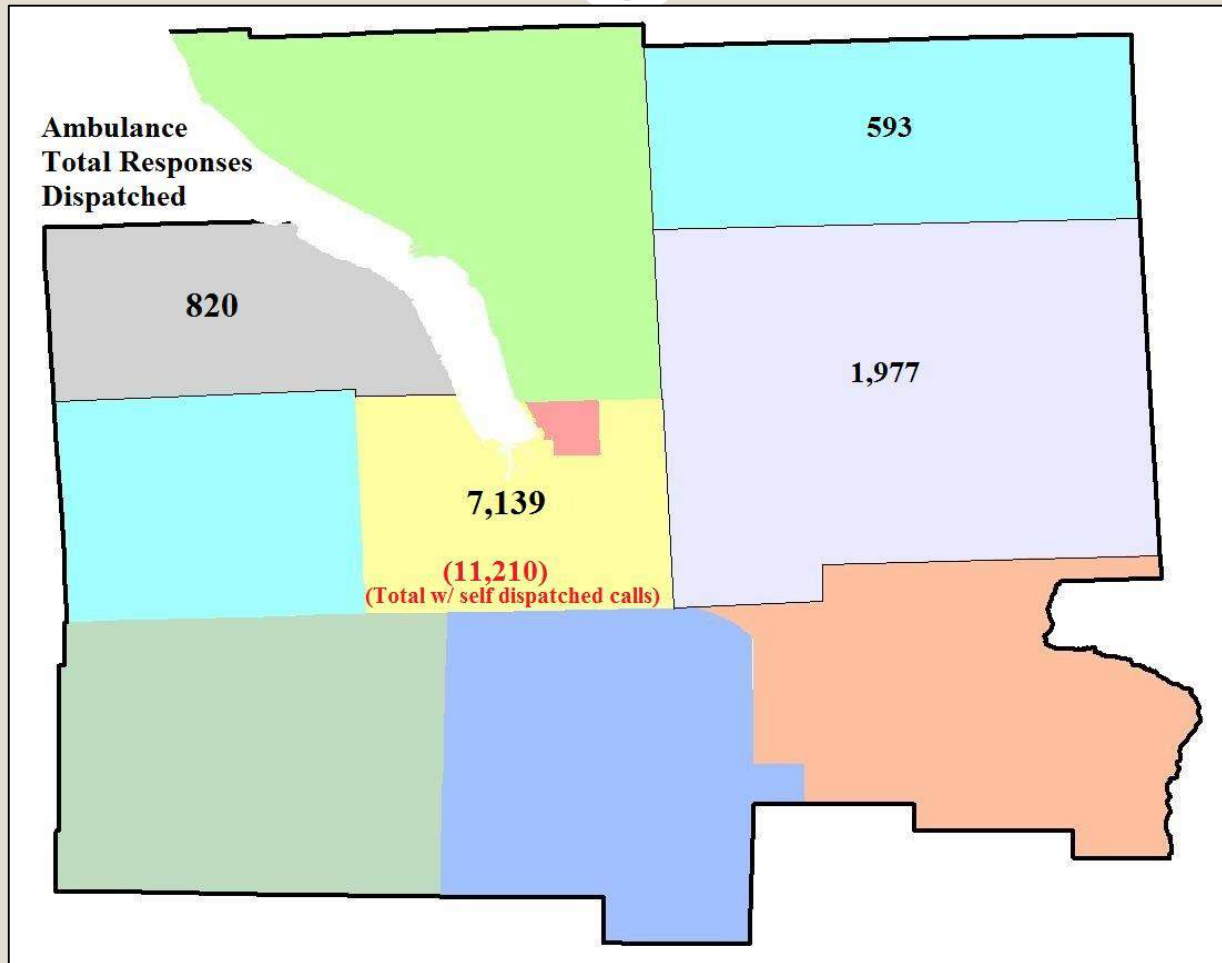
EMS Dispatched in County	1976	1984	2016	Fire*	
				2016	2015
Groton	194	367	571	109	77
Lansing	209	394	0	358	421
Slaterville	112	144	0	32	40
Trumansburg	250	274	691	277	237
County	332				
Bangs	365	1,324	7,193		
Dryden/Perkins	176	499	1,507	320	313
Brooktondale		59	123	67	71
Cayuga Heights		103	314	194	201
Etna		70	126	60	38
Danby		54	153	75	86
Enfield		68	181	82	101
Freeville		57	99	129	120
Ithaca		432	2,690	2410	2,436
McLean		58	82	46	62
Newfield		102	240	102	183
Speedsville		13	8	10	8
Varna		49	170	95	89
Rescue	0	1,065	4,739	4,366	4,483
Ambulance Only	1,638	3,002	9,962		
EMS All Calls (in county)	1,638	4,067	14,701		
Mutual Aid (out of county/Stand-by)			1,359		
EMS Responses			16,060		
*Excludes Mutual Aid and EMS Assists					



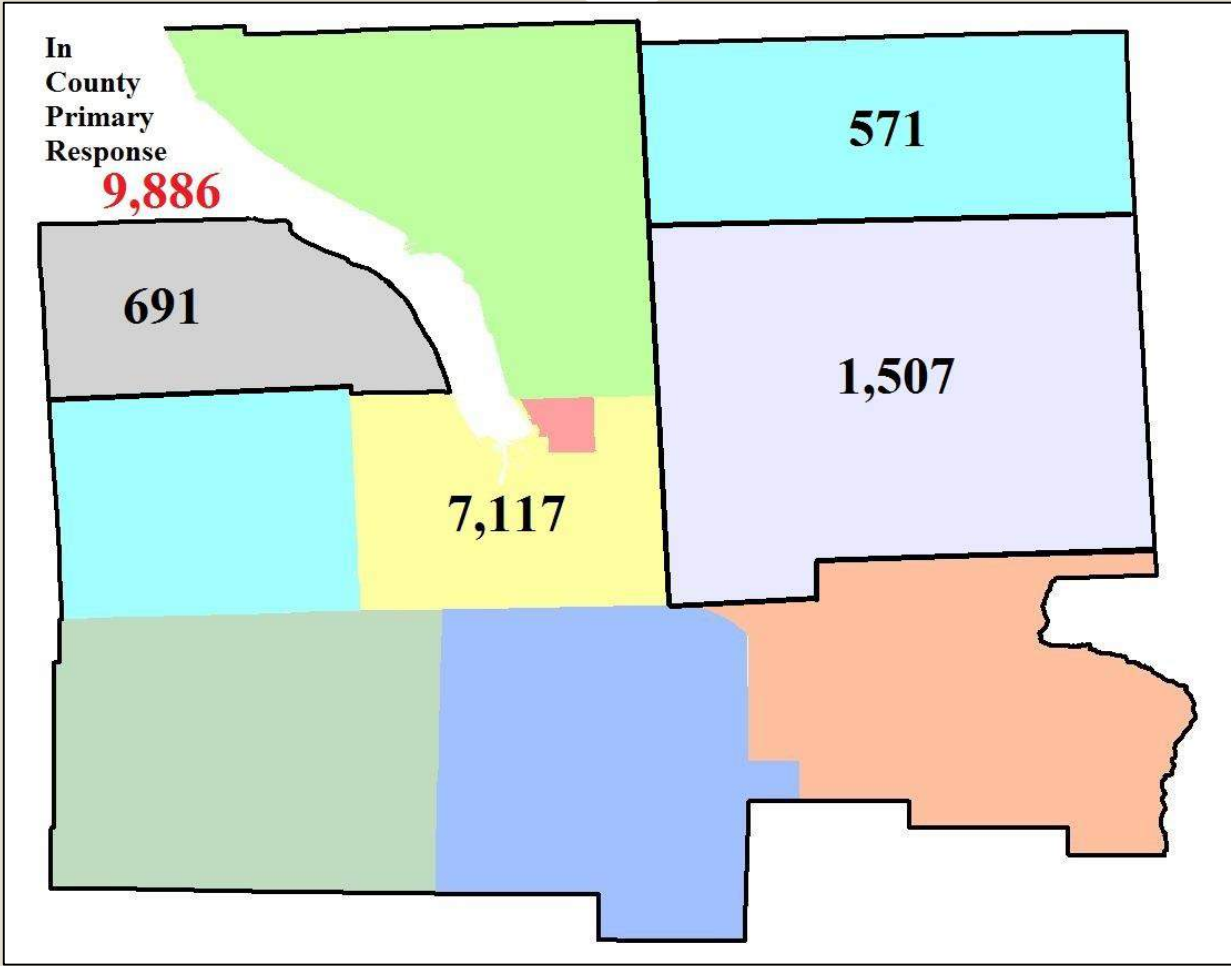
# RESCUE SQUAD – FIRST RESPONSE



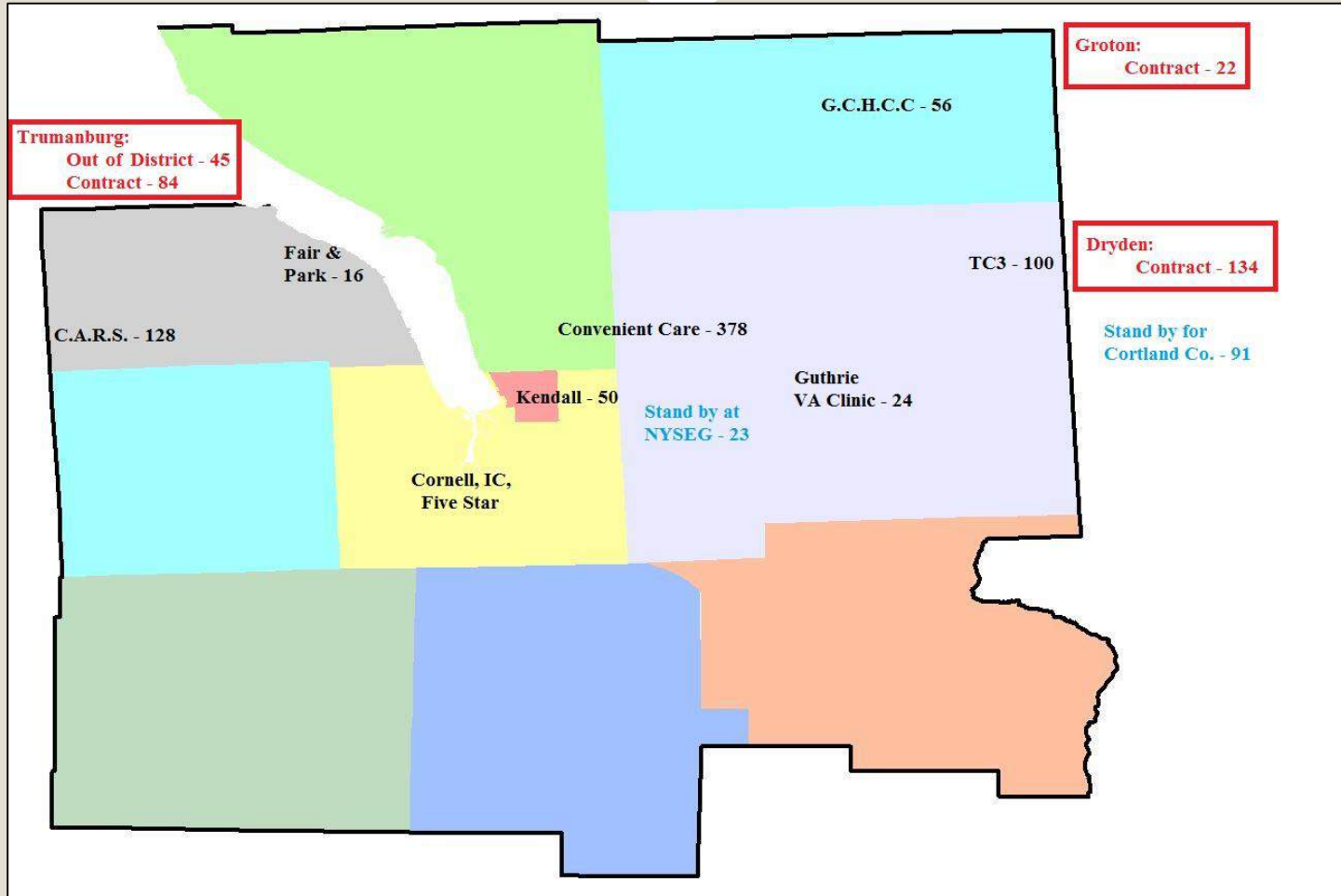
# 2016 – TOTAL AMBULANCE RESPONSES DISPATCHED



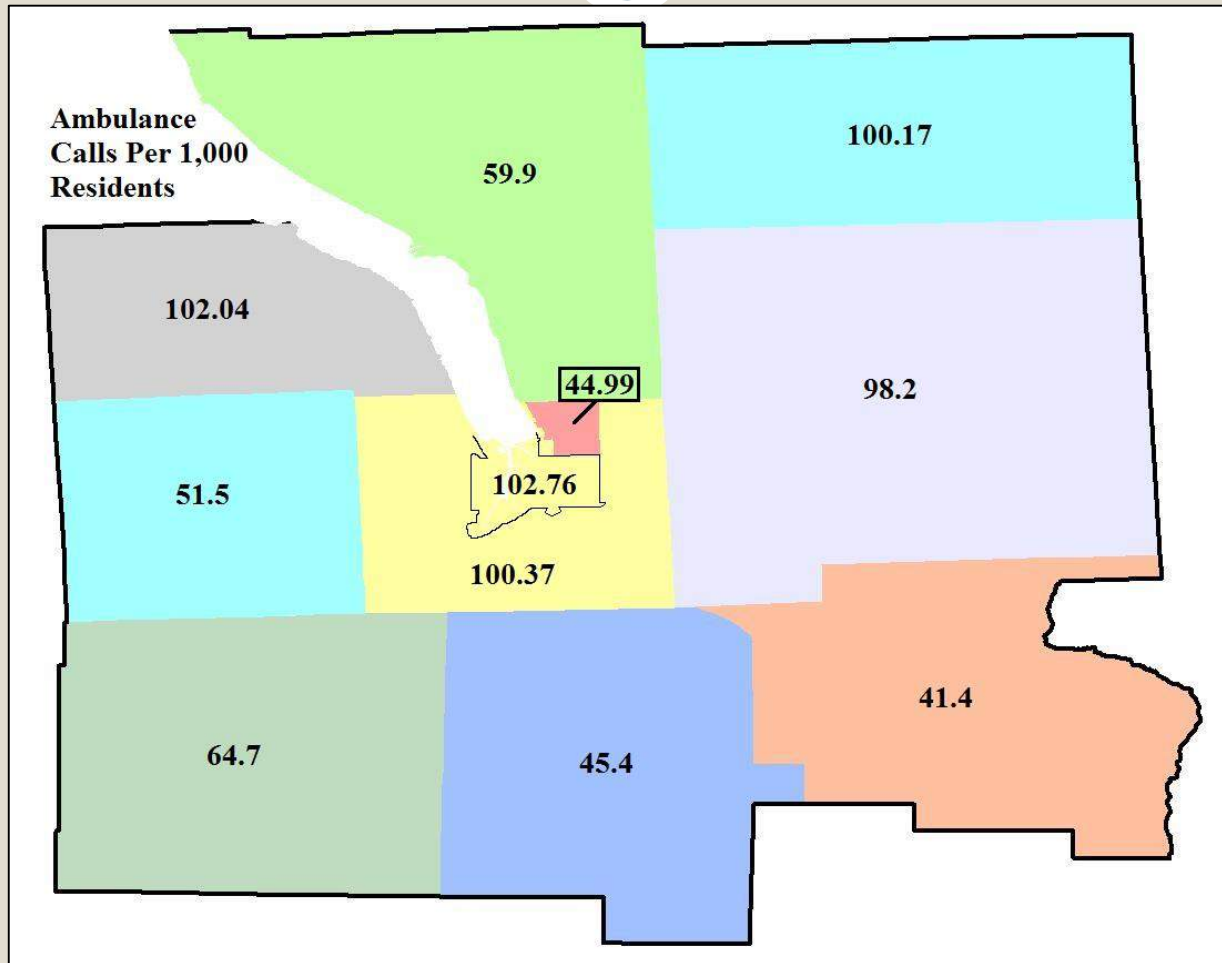
# IN COUNTY – PRIMARY RESPONSE



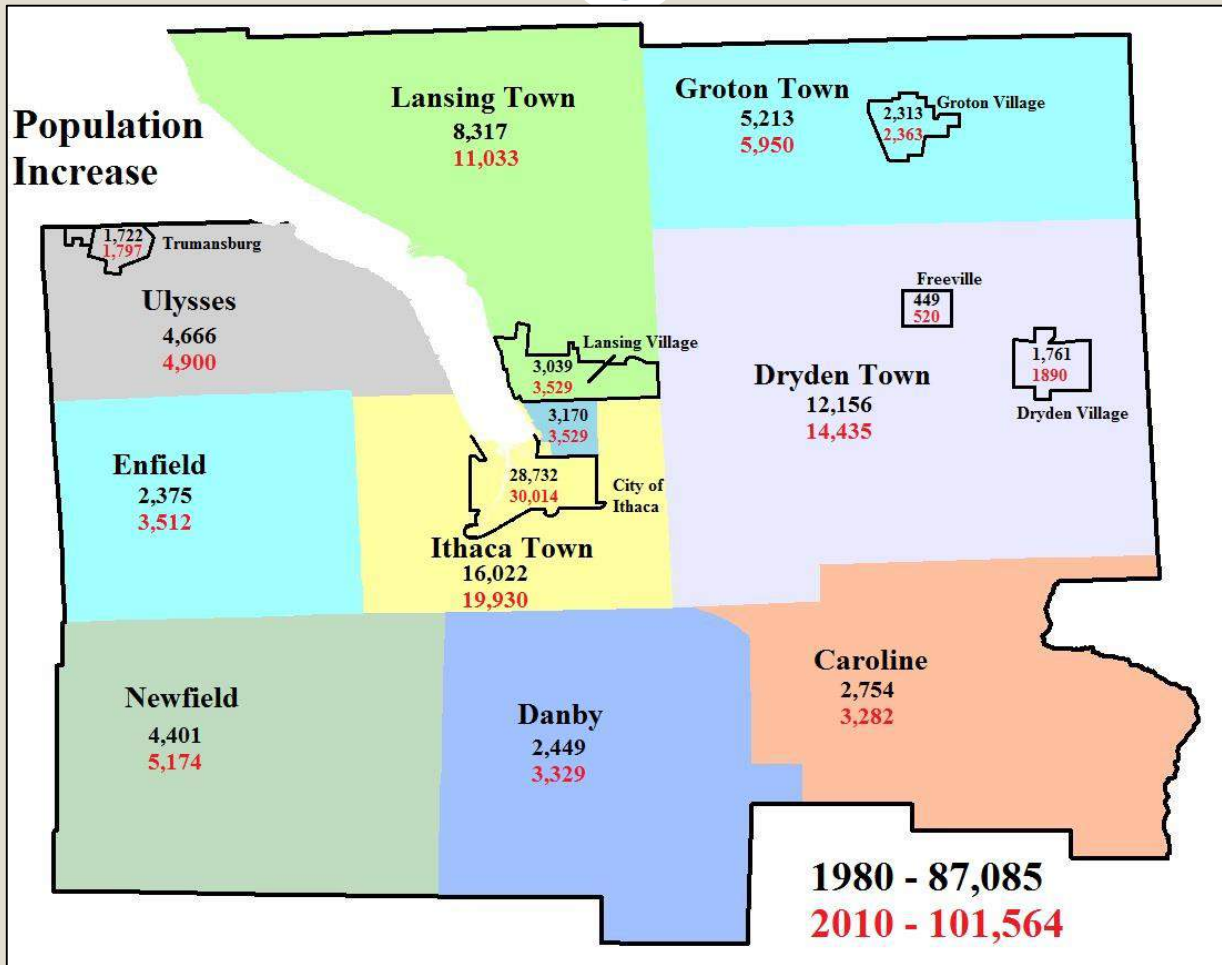
# CONSIDERATIONS



# AMBULANCE CALLS / 1000 RESIDENTS



# POPULATION INCREASE



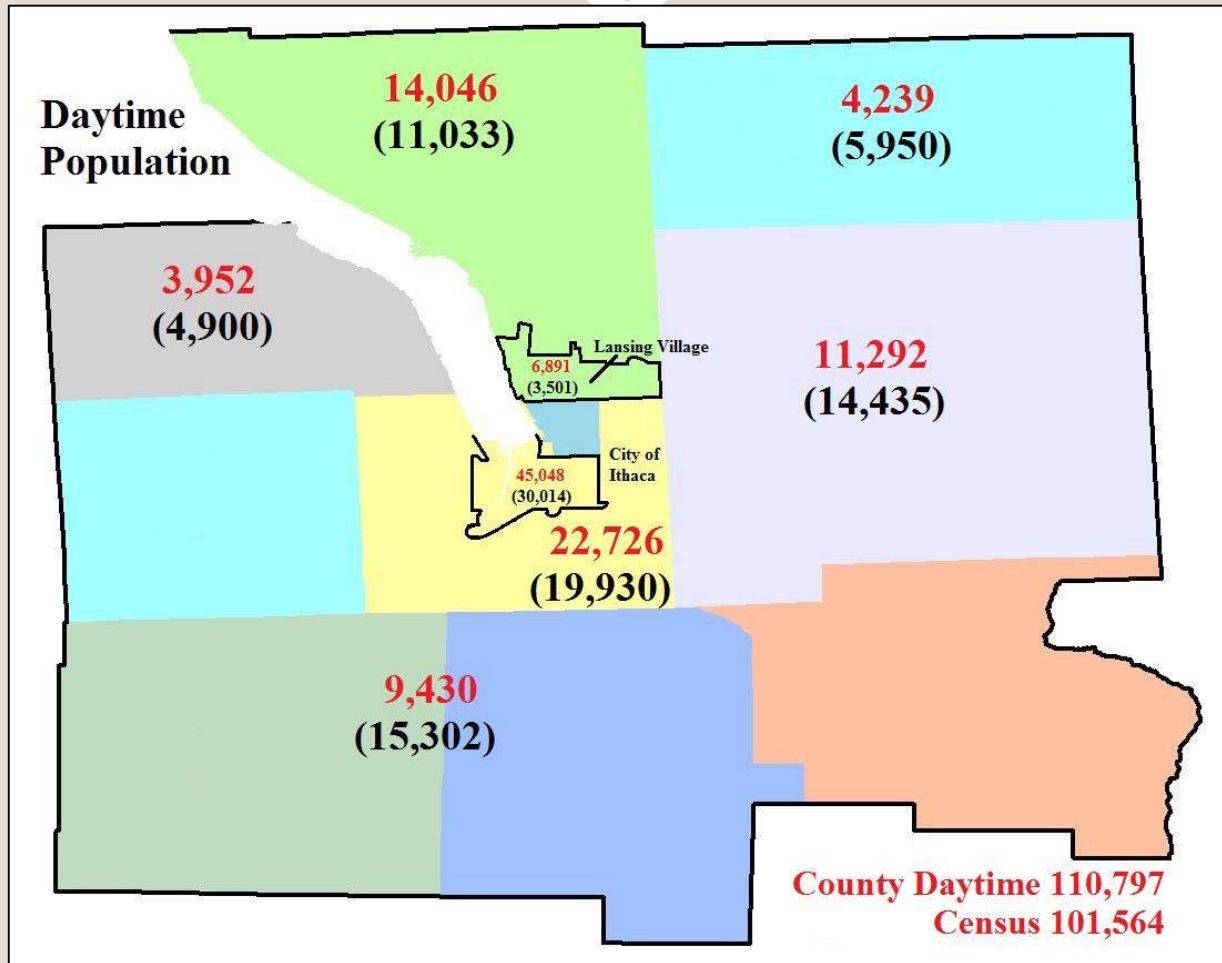


# POPULATION AGES

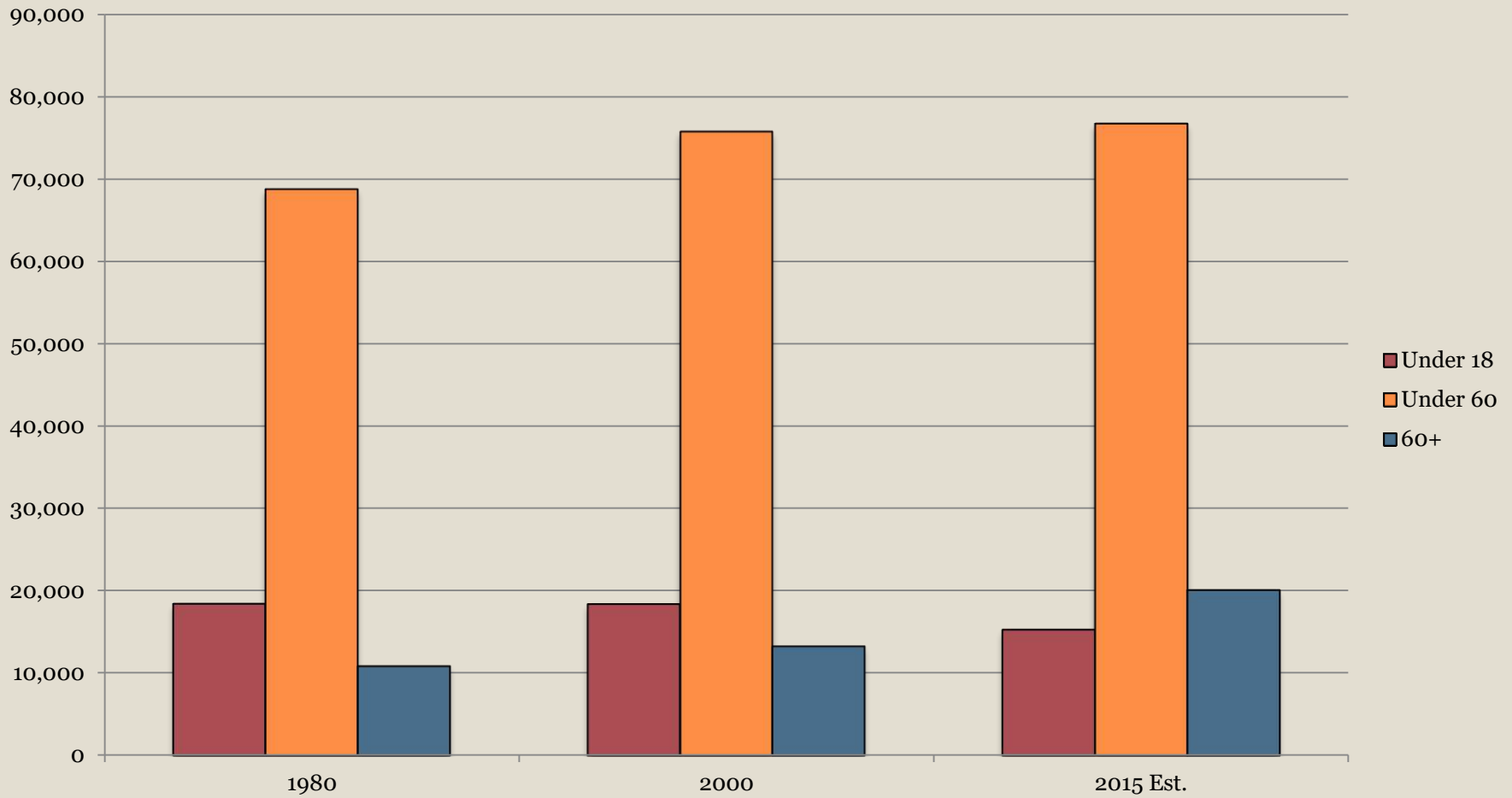


	Median Age	Calls	Per 1000/Pop	Per 1000/Pop	
City of Ithaca	22.4	4,415.00		102.8	* Direct, Health care
Ulysses	45.9	500.00		102.4	* CARS/Parks/MVA
Village	46.4	192.00	106.8		
T-O-V	45.9	307.00	98.9		
Town of Ithaca	27.5	1,300.00		100.4	
Groton	41.3	596.00		100.2	* Nursing Home/MVA/14-15
Village	40	367.00	155.3		
T-O-V	41.3	204.00	56.9		
Dryden	37.9	1,311.00		98.2	* TC3/VA/MVA
Village	41.4	298.00	154.5		
T-O-V	37.9	1,209.00	104.9		
Bangs	29.8	6,128.00		80.3	* Convenient Care/Guthrie/5-Star/Kendall
Newfield	40.4	335.00		64.7	
Lansing	39.6	631.00		59.9	* Convenient Care
Enfield	41.2	242.00		51.5	
Danby	43.5	134.00		45.4	
Cayuga Heights	34.7	314.00		45	* Kendall
Caroline	40.3	185.00		41.4	

# DAY TIME POPULATION



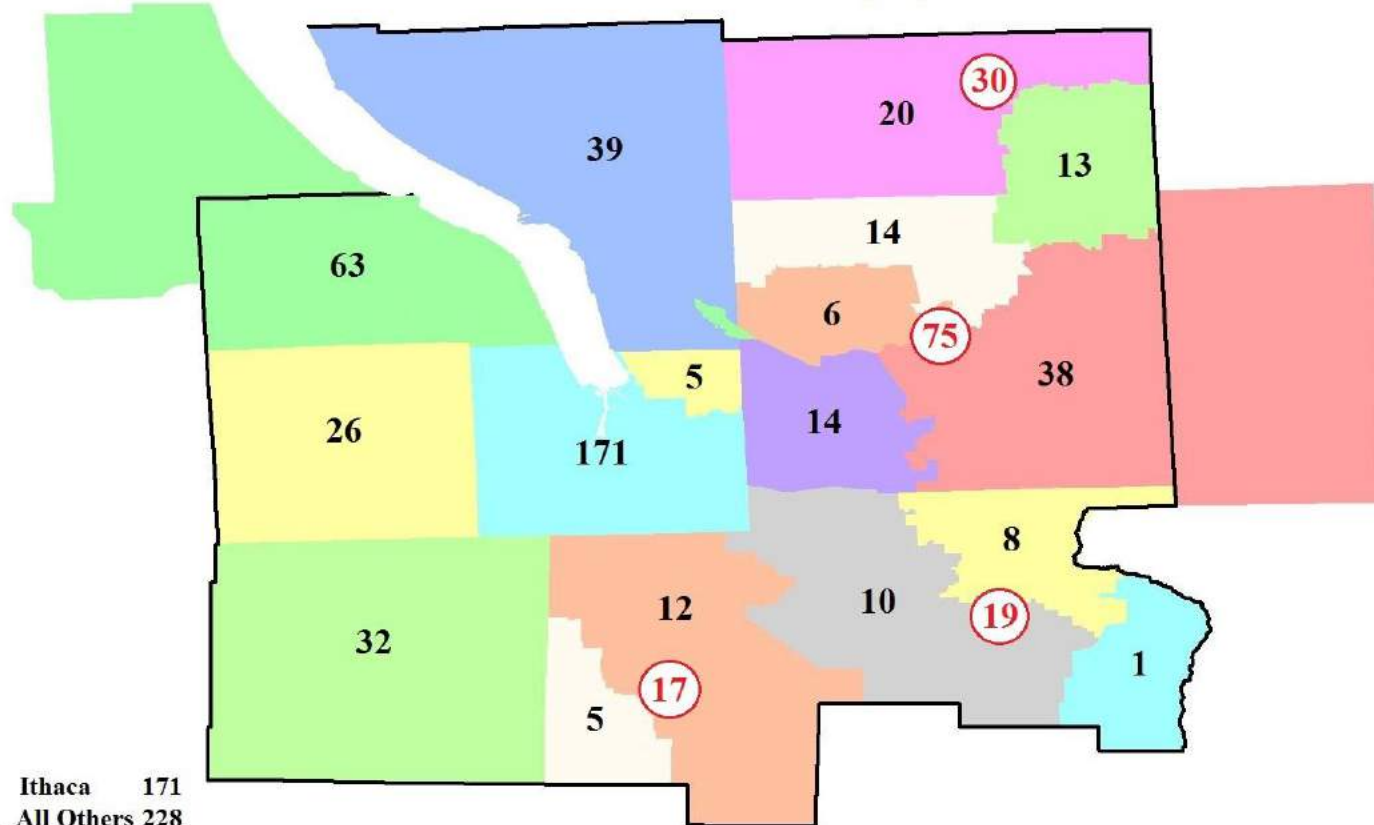
# AGE DEMOGRAPHICS



# MOTOR VEHICLE CRASHES W/ INJURIES



Motor Vehicle Accidents with Injury 2016



Ithaca	171
All Others	228
<b>Total</b>	<b>479</b>

# MOTOR VEHICLE CRASHES

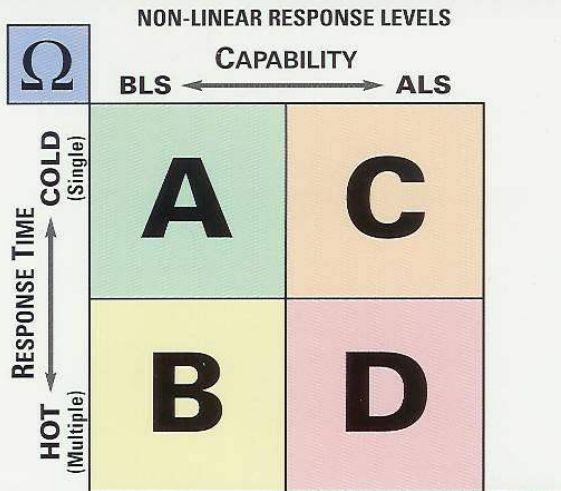
MVAs			
	Total	State Highway	Road Mile
Trumansburg	63	37.07	253.99
Lansing	39	23.69	195.27
Dryden	38	15.84	89.98
Newfield	32	14.83	145.07
Enfield	26	11.95	84.75
Groton	20	11.63	97.13
Danby District	17	12.03	105.96
Freeville	14	10.08	47.31
Varna	14	6.07	47.74
McLean	13	5.22	47.29
Brooktondale	10	4.46	62.23
Slaterville	8	4.82	29.52
Etna	6	1.46	25.95
Cayuga Heights	5	1.49	44.48
Speedsville	1	0	20.43
Ithaca	171		

# EMD DETERMINANTS



Protected by U.S. Patents 5,857,966; 5,989,187; 6,004,266; 6,010,451; 6,053,864; 6,076,065; 6,078,894; 6,106,459; 6,607,481

AMPDS® v11.2, NAE-std, 041214



In establishing **local** routine vs. emergency **response assignments** to match each MPDS code, consider the following:

1. Will time make a difference in the outcome?
2. How much time-leeway exists for that type of problem?
3. How much time can be saved driving in lights-and-siren mode?
4. When the patient gets to the hospital, will the time saved be significant compared with the time spent waiting for care such as X-rays, lab tests, etc.?

All actual response assignments and emergency modes are decided by **local Medical Control** and **EMS Administration**.

## Notifications

- ★ Police
- 🔥 Fire
- ⚡ Electrical
- ☢️ HAZMAT
- ☠️ Poison Control

## Responses

- ★ Police
- 🔥 Fire
- ⚡ Electrical
- ☢️ HAZMAT
- ☠️ Poison Control

## Directors & Warnings

- ✓ Verify
- \* Critical EMD Information
- ↪ Shunt, Go To
- ➔ Add Suffix to Determinant Code
- 🦋 Go to PDIs, then DLS links
- ⊕ Unconscious or Arrest
- 👁️ INEFFECTIVE BREATHING & Not Alert
- 👁️ Send & go to PDIs
- 👁️ Send, PDIs & return to questioning
- 👁️ Send & return to questioning
- ? Determining AGONAL BREATHING
- ❤️ Take pulse & return to sequence
- ⚡ AED Support
- ⚠️ Scene Safety
- 📞 Routine Disconnect
- 📞 Urgent Disconnect
- 📞 Stay on Line
- 💧 Cooling & Flushing
- 🩸 Control Bleeding

LEGEND OF SYMBOLS

**9886 – Ambulance calls dispatched in County and preliminarily coded**

**7564 – processed by Dispatch as full PRO-QA**

**1173 – “send”**

**1149 – taken by 3<sup>rd</sup> party, assist, fire, standby**

**The NATIONAL ACADEMY EMD Protocol**



# 2016 TOP 12 PROTOCOLS



## PRO QA Top Twelve Types

	Pro QA		All Coded	
Falls	1,228	16.23	15.51	1,533
Sick Person	1,063	13.70	15.41	1,523
Breathing	628	8.30	8.49	840
Unconscious/Fainting	594	7.85	6.83	675
Chest Pain	527	6.97	7.24	716
Unknown	489	6.46	6.20	613
Traffic Accident	415	5.49	5.67	561
Psychiatric	350	4.63	4.76	471
Seizures	301	3.98	4.19	414
Abdominal	271	3.58	3.51	347
Overdose	252	3.33	3.03	300
Hemorrhage	220	2.21	2.87	283
All Others	1,253	16.57	16.28	1,610
	7,564			9,886

# SEND PROTOCOL



## SEND™ Protocol

Secondary Emergency Notification of Dispatch™



The EMS/Ambulance service relies on you to provide the following information:

1. **Chief Complaint and incident type?**
  - a. Is there **more** than **one** person injured?
2. **Approximate age?**
3. **Conscious: Yes / No... or alert?**
4. **Breathing: Yes / No... or difficulty?**

5. ***(Illness case – age 35 or over):***  
**Is there chest pain?**
6. ***(Accident or injury case):***  
**Is there severe bleeding (spurting/pouring)?**
7. ***(Response mode):***  
**Do you need a lights-and-siren response?**

*For Police, Security, Military & Federal Agents when calling in from the field*

© 1984–2013 Priority Dispatch Corp., Salt Lake City, Utah, USA 131202

**The International Academy EMD Protocol System™**

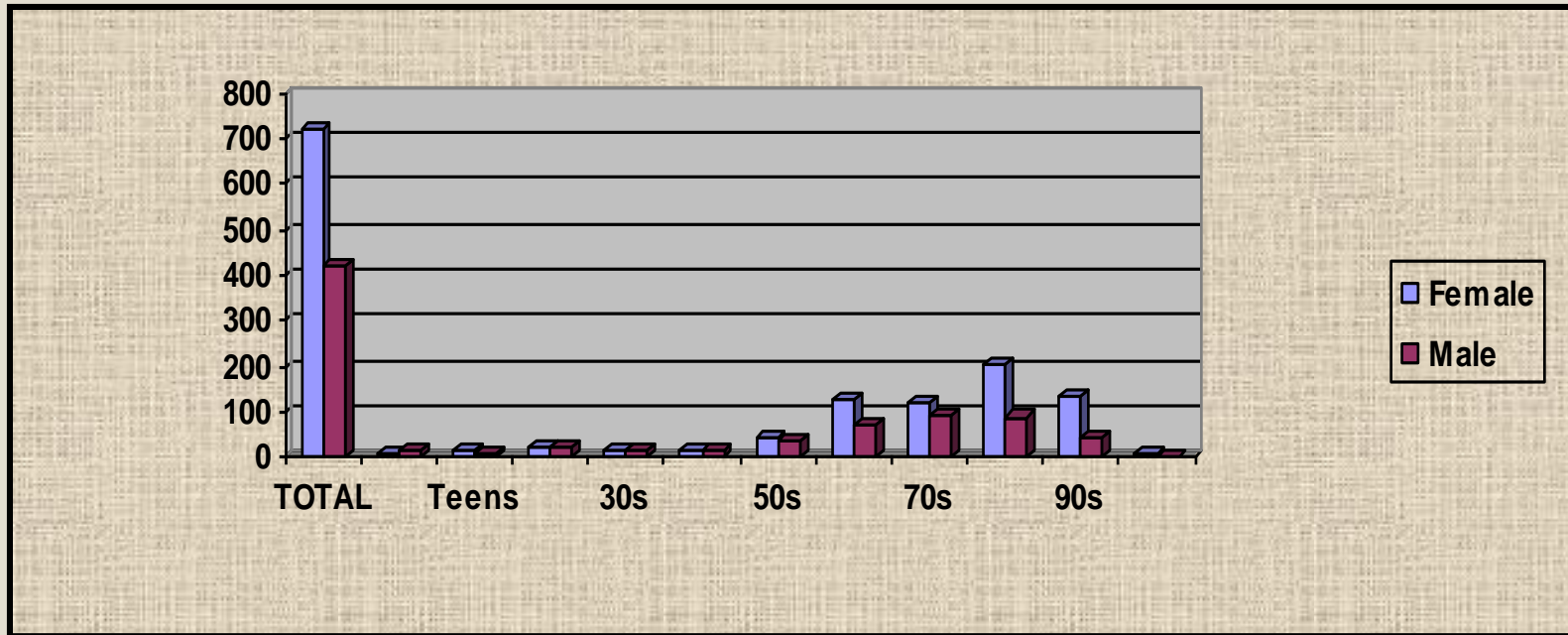
NAE, AUE

# CALLS BY PROTOCOL



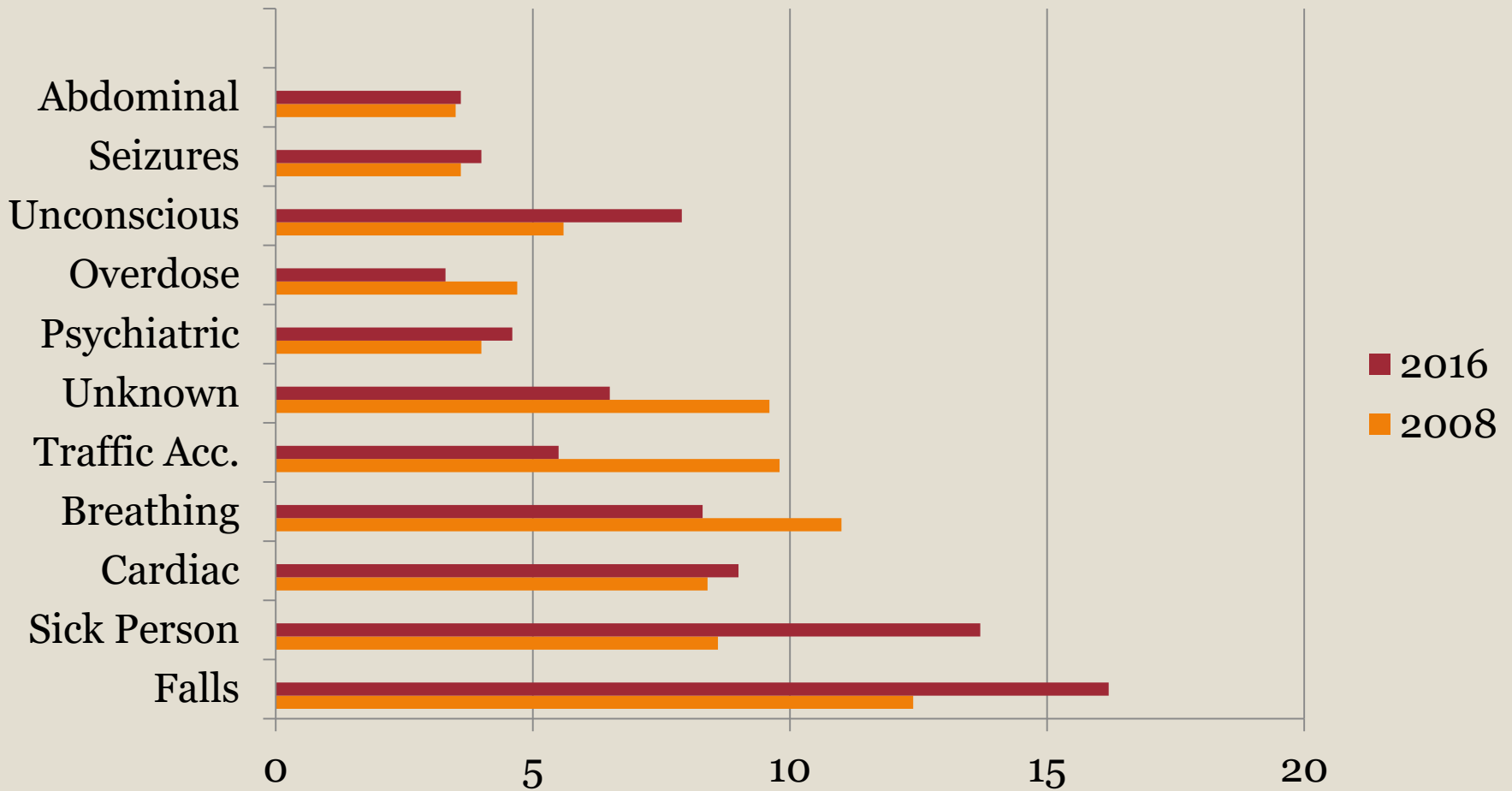
PROTOCOL	TOTAL
Abdominal Pain	271
Allergies/Reactions	144
Animal Bites	9
Assault	42
Back Pain	132
Breathing Problems	628
Burns/Explosions	9
CO/Inhalation/Hazmat	16
Cardiac/Resp Arrest	127
Chest Pain (No Trauma)	527
Choking	24
Seizures	301
Diabetic Problems	119
Drowning	4
Electrocution	3
Eye Problems	12
Falls	1228
Headache	37
Heart Problems	151
Heat/Cold Exposure	11
Hemorrhage	220
Inaccessible Incident	2
Overdose/Poisoning	252
Pregnancy	27
Psychiatric/Suicide	350
Sick Person (Specific)	1036
Stab/Gunshot	12
Stroke (CVA)	173
Traffic Accident	415
Traumatic Injuries	199
Unconscious/Fainting	594
Unknown Problem	489
	<b>7564</b>

# FALLS in 2016 – 1,228

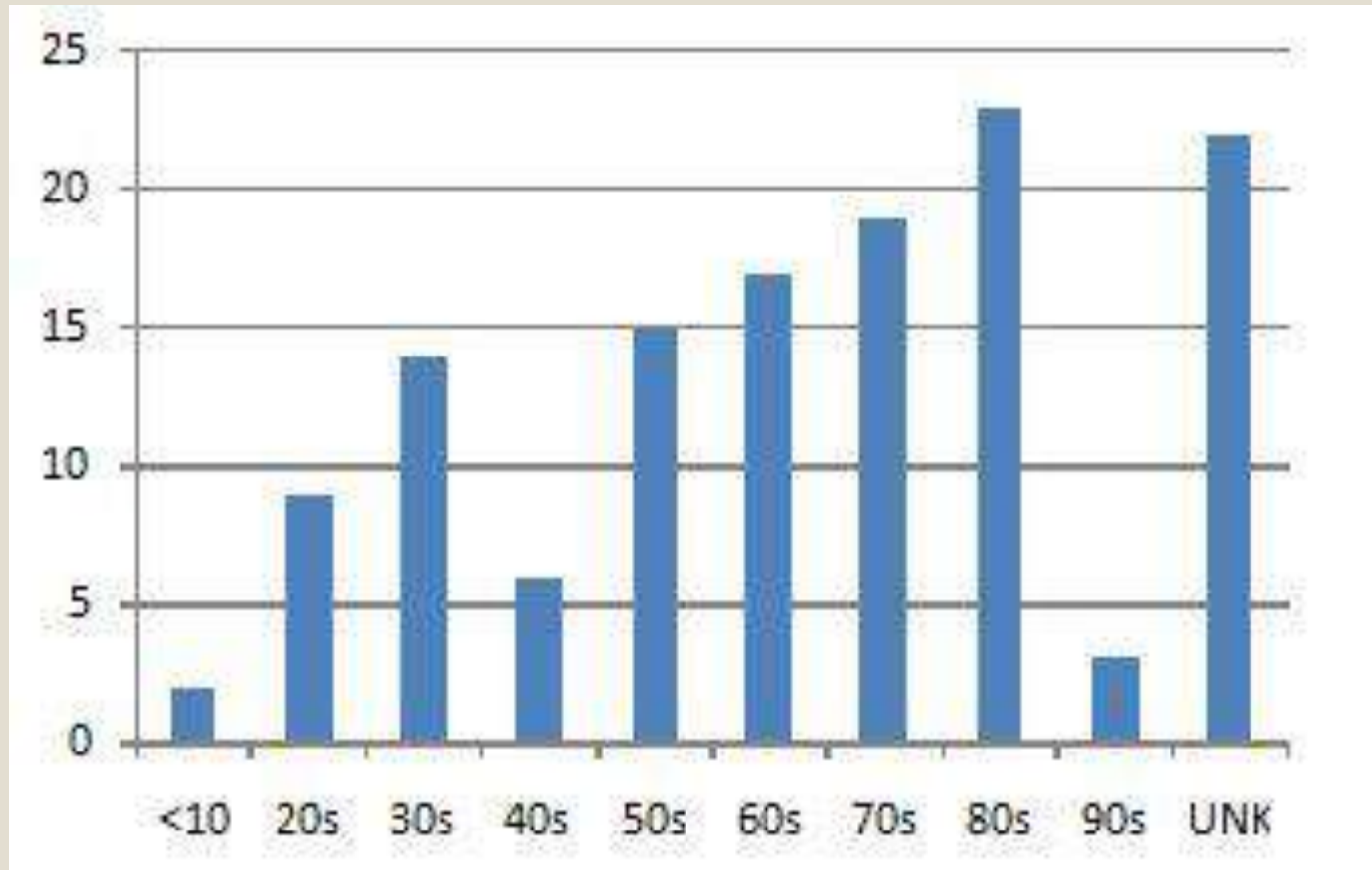


**Of note: 399 or 32.5% of all calls occurred in a “congregate” living site ... and almost half of that number occurred in one site**

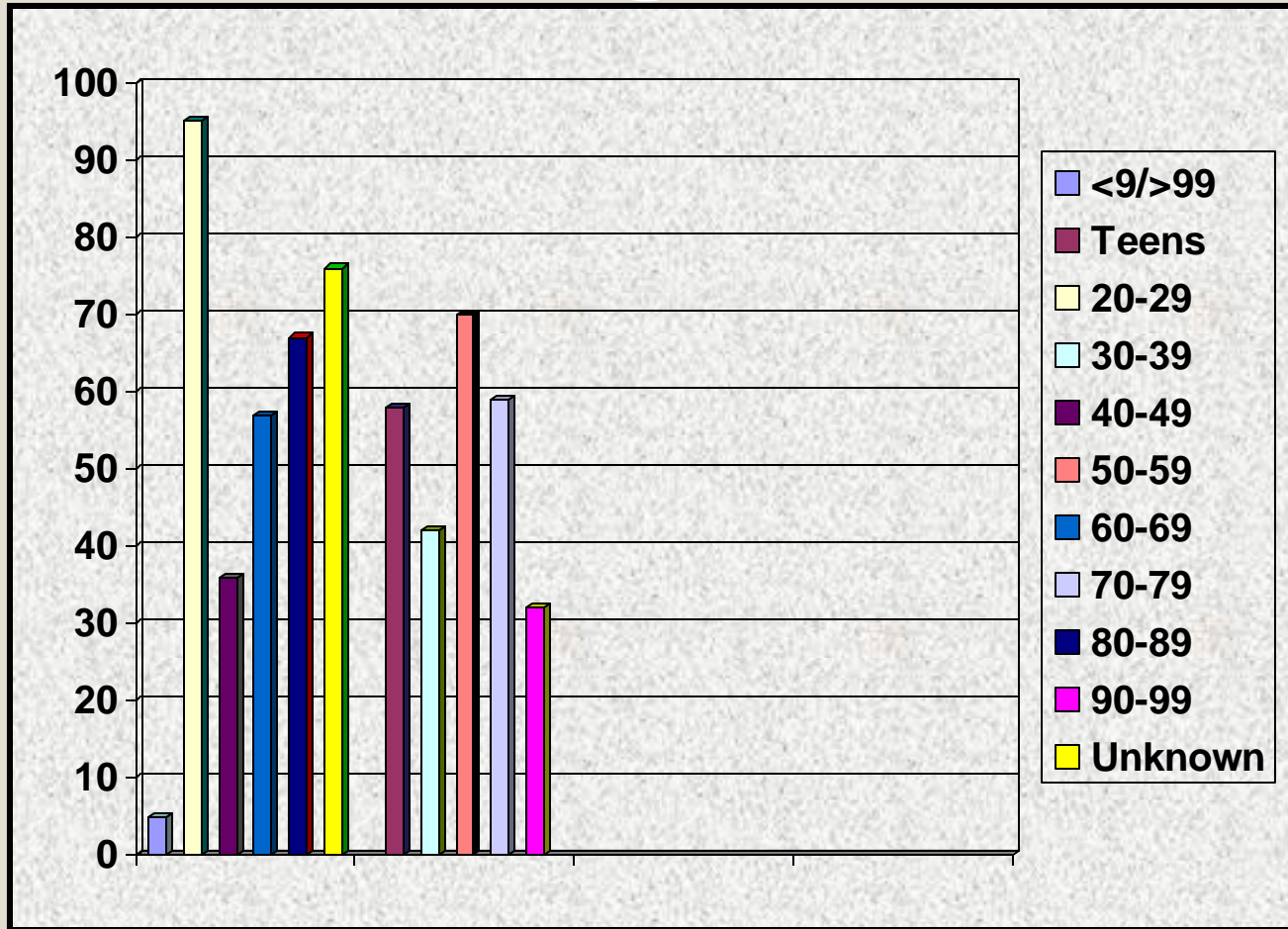
# % OF ALL EMD CALLS BY PROTOCOL



# 2016 – ECHO CALLS

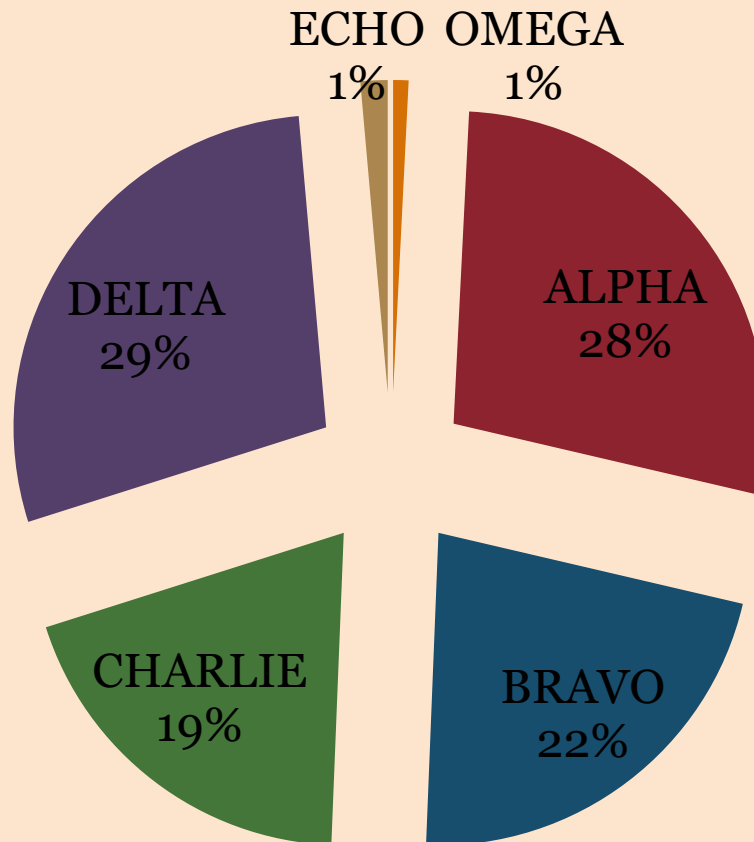


# PROTOCOL 31 – UNCONSCIOUS PERSON

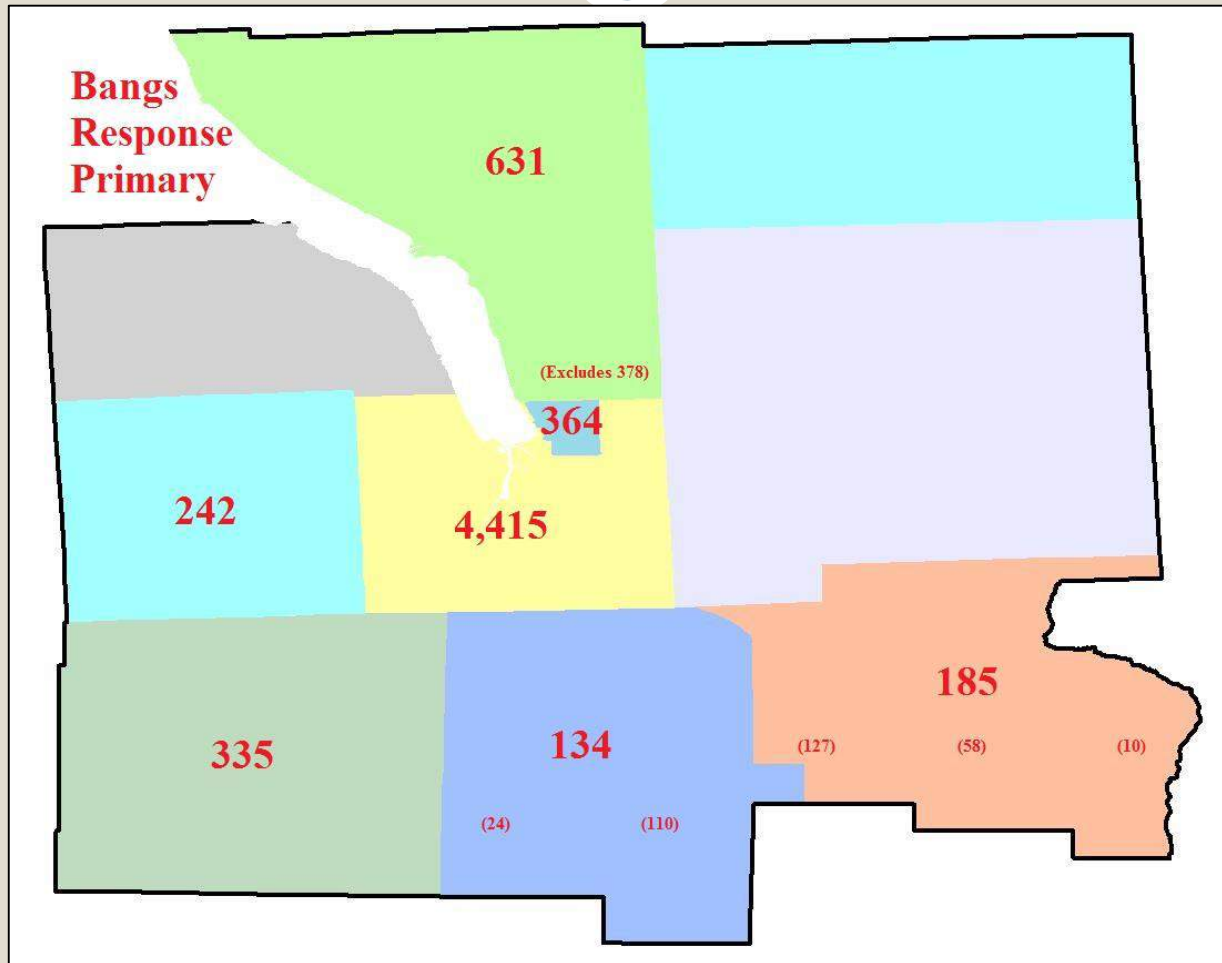




# EMD DETERMINANTS



# RESPONSES BY BANGS AMBULANCE



# EFFECTS OF ALPHA RESPONSES



Service	In-Town EMS Total	Minus MVA	Minus other	Adjusted	Pop	Per/1,000	
Trumansburg	691	63	128	500	4900	102.04	
Dryden	1507	72	124	1311	13352	98.18	
Groton (2yr 14/15)	672	20	56	596	5950	100.17	
Groton (3 yr)	645	20	56				
Groton	571	20	56				
					Housing	Per/100 Unit	
Ulysses				500	2383	2.01	
Dryden				1311	6418	2.04	
Groton				596	2448	2.43	
		MVA	Standby NYSEG	to area	Rescue	No Rescue	% of total
Dryden (T-O-V)	611	32	N/A	579	N/A		
Village	298	6	N/A	292	N/A		
Freeville	155	14	N/A	141	99	42	0.298
Etna	189	6	N/A	183	126	37	0.202
Varna	214	14	21	179	170	9	
McLean	40	3		37	33	4	
Dryden Total							
Enfield				242	181	61	0.252
Newfield				335	240	95	0.283
Lansing				671	470	161	0.240
Ithaca				4287	2690	1597	0.373

NOTES: Trumansburg Minus CARS & Parks  
 Groton Minus N.H.  
 Dryden Minus Guthrie, VA, TC3  
 Mental health, bravo, George Jr.

# THANK YOU

