Effects of Changing MPDS "Bravo" Response Modalities

Copyright 2007, Nadine Levick, nlevick@attglobal.net

Service Description

- CCPA serves roughly 100,000 population in rural Southeast Missouri
- First Responder / BLS / ALS multi-tiered system for majority of response area
- 911 provider; operates own dispatch center that is end point for three different 911 systems in response area
- Has used MPDS since early 90's

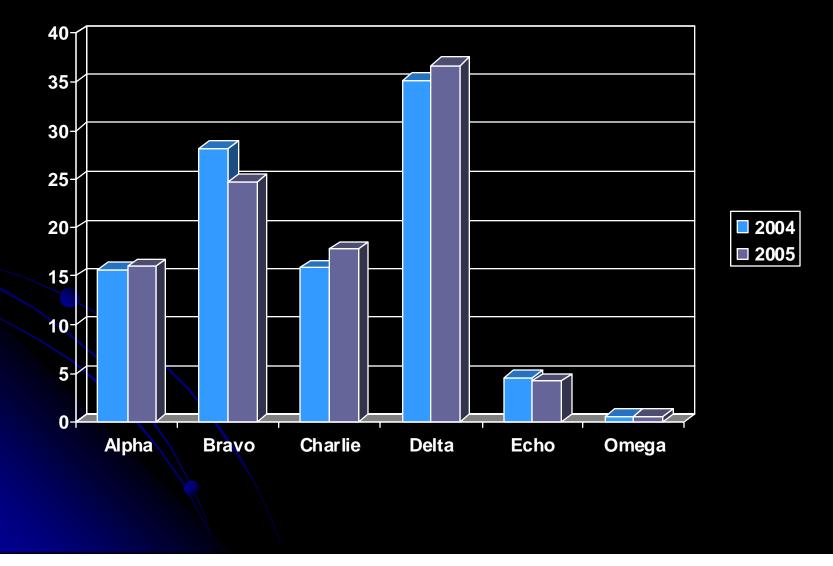
MPDS Response Methodology

Omega	BLS > increasing capability > ALS					
Response Time	Alpha	Charlie				
	Bravo	Delta				
		Echo				

Background

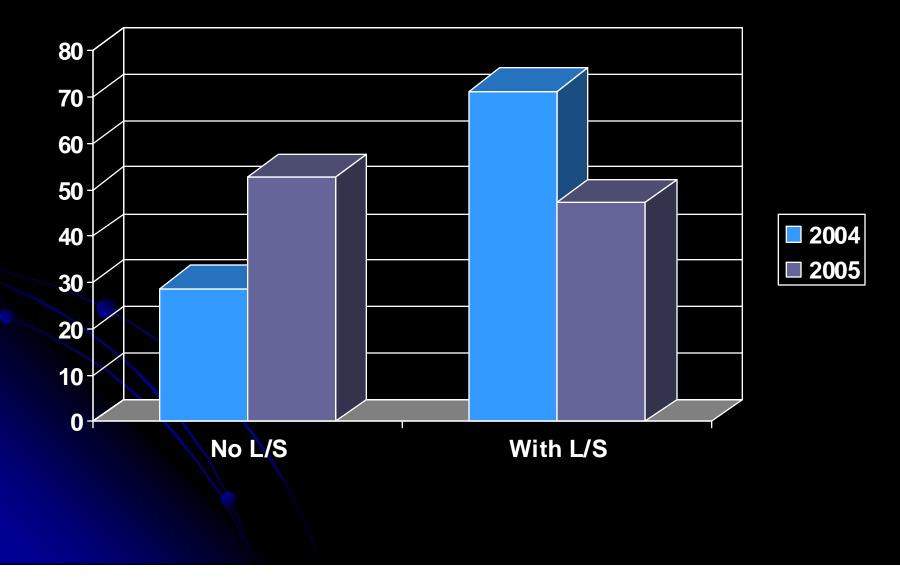
- Studies have shown that red light & siren use decreases safety for EMS vehicles as well as others on road.
- Compared last 6 months of 2004 to last 6 months 2005 after making response modality change in March 2005.
- Similar trip numbers, weather, and demand factors.
- "Alpha" trips have been run No L/S since 1992

Distribution by Dispatch Determinant as %



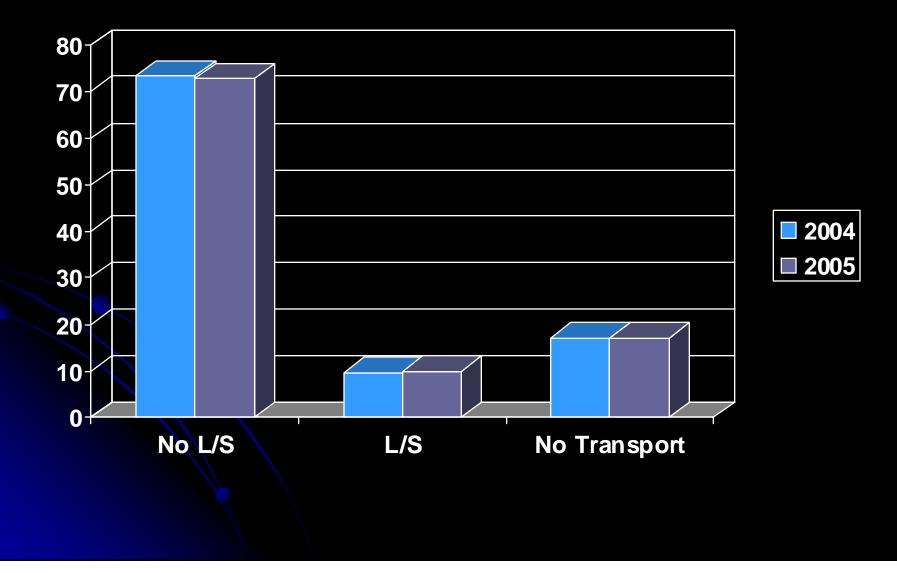
Copyright 2007, Nadine Levick, nlevick@attglobal.net

Response To Scene

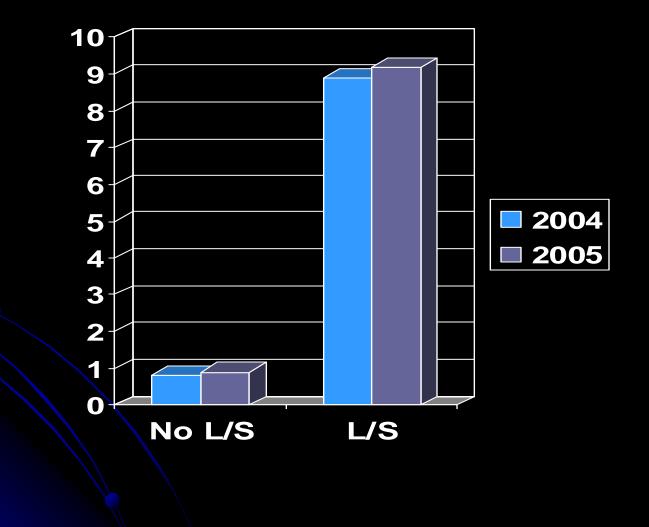


Copyright 2007, Nadine Levick, nlevick@attglobal.net

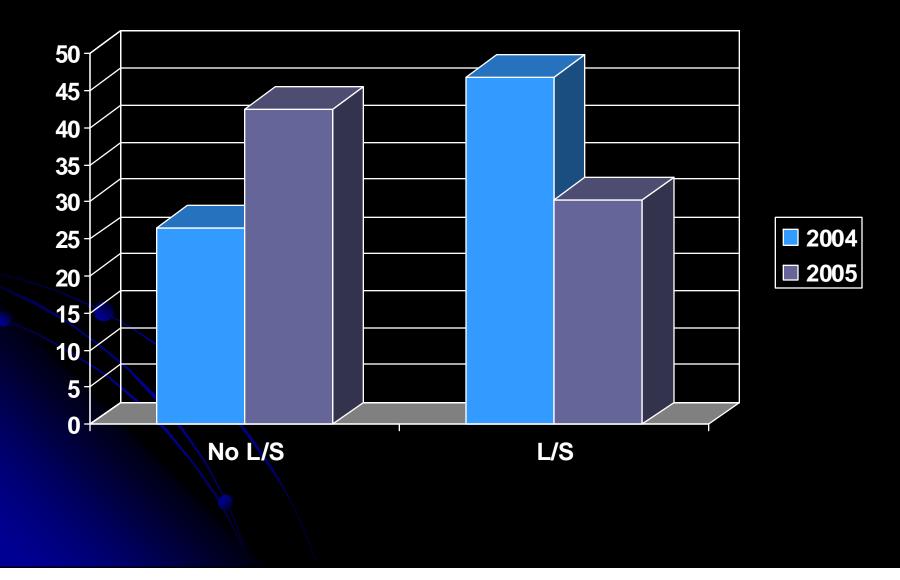
Response From Scene as %



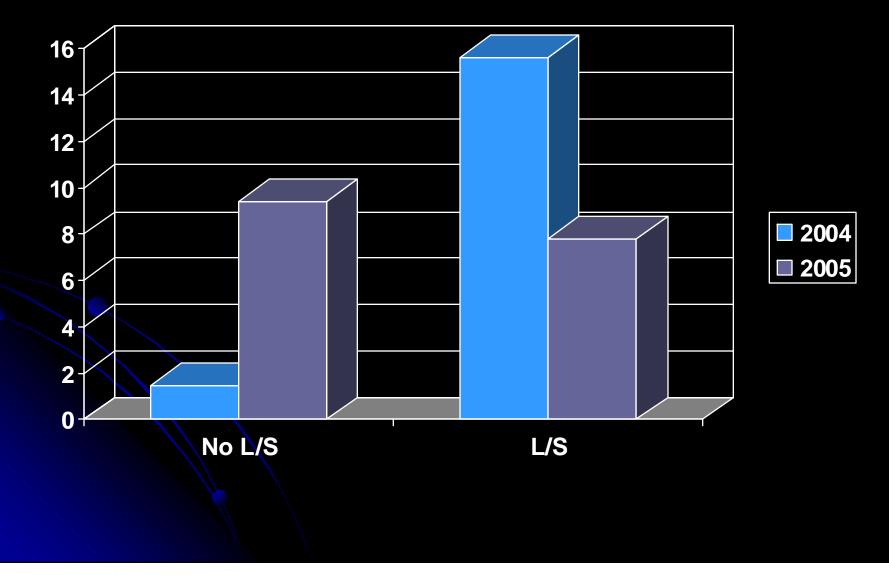
From Scene with L/S



From Scene without L/S



No Transport / No Patient Found



Copyright 2007, Nadine Levick, nlevick@attglobal.net

Conclusions

- Changing "Bravo" responses to a no L/S immediate response modality resulted in a predictable decrease in L/S responses.
- It appears that there was not a change in "false negatives" i.e. No L/S response resulting in L/S transport
- A significant number of No transport / No patient found trips now have a no L/S response.

Take Home Message

- 911 = Emergency = Red Lights and Siren response thinking needs to changed
- Think instead in terms of immediate response.
- Response Time contractual parameters need to be very clear about what counts as an "Emergency" or "Immediate Response". Preexisting contracts may need to be modified or renegotiated for safety purposes
- Defining response modalities is where prioritization of dispatch pays safety dividends.

CCPA Current Modalities

Omega	BLS > Increasing Capability > ALS						
No L/S	Alpha						
		Bravo					
			Charlie				
				Delta			
L/S					Echo		

2004 Raw Data

'04		From:								
To:		No L/S	%	L/S	%	No Tran	%	Total	%	
	No L/S	661	26.5	20	0.8	37	1.5	718	28.8	
	L/S	1167	46.8	221	8.9	389	15.6	1777	71.2	
	Total	1828	73.3	241	9.7	426	17.1	2495	100	

2005 Raw Data

ʻ05		From:							
To:		No L/S	%	L/S	%	No Tran	%	Total	%
	No L/S	1182	42.5	24	0.9	260	9.4	1466	52.7
	L/S	843	30.3	255	9.2	216	7.8	1314	47.3
	Total	2025	72.8	279	10.0	476	17.1	2780	100