

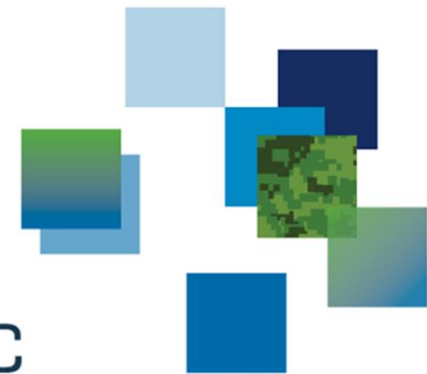


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Re-examining the Surge: What SIGACT Data Tell Us

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Canada

Outline

- Rationale
- Narratives/Theories
- Methodology
- Results
- Alternative Hypotheses
- Conclusions

Rationale

■ The “Surge”

- one of the most significant military events in recent history
- increase in US troops (> 20,000 over Jan-May 2007) using COIN doctrine

■ Lessons Learned

- incorporated in military field manuals
- Afghanistan
- US TRADOC currently revising COIN FM 3-24

■ Grand Debate about COIN vs. Conventional Warfare

- considerable uncertainty on best strategy to reverse escalating violence in Iraq
- lessons learned today can have decisive impact in future conflicts

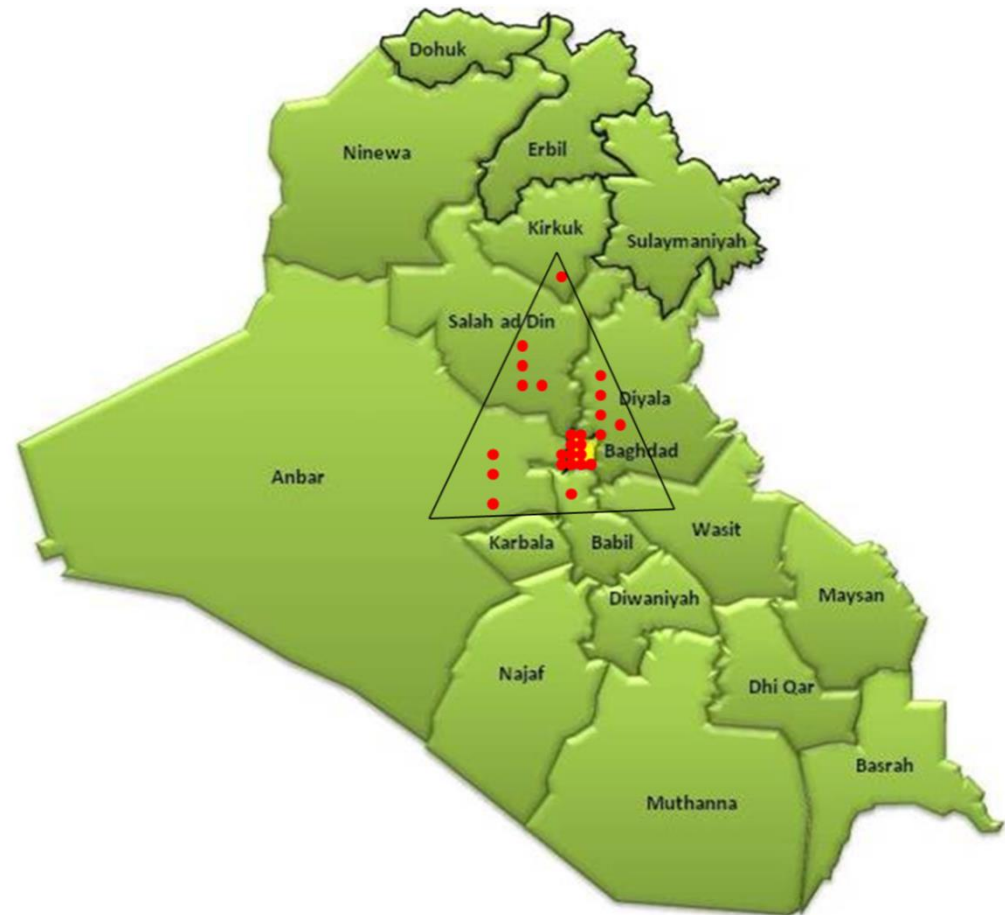
Iraq Reduction of Violence: Narratives/Theories

- The Surge
 - 'Bridge' using COIN doctrine until ISF achieved critical, self-reliant capability
- Synergy of Surge & Standup of SOI (Biddle et al. 2012)
 - Mix of qualitative and quantitative analyses highlight importance of SOI
- Anbar 'Awakening'
 - Sunni tribal uprising against al-Qaida in 2006
- Sectarian Cleansing
 - 'Unmixing' of neighbourhoods

Other possibilities? Re-examine SIGACT Data

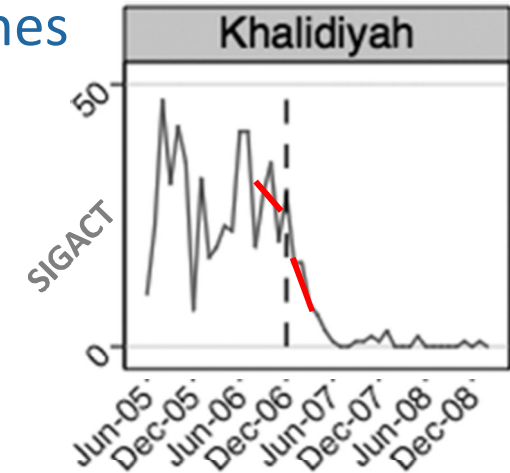
Data

- SIGACT data 2004-08
- Geographical coverage – Sunni triangle
 - 38 Areas of Operation (AOs)
 - Spans 22 districts and 6 provinces – Anbar, Babil, Baghdad, Diyala, Salahaddin, Tamim (Kirkuk)
- Limitations
 - SIGACTs vary widely in intensity
 - AOs vary widely in coverage



Critical Analysis

- Biddle et al. (2012) comparison of 3-month trend lines
 - post-SOI trend lines lower than pre-SOI in 24 of 38 AOs (63%)
- Shortcomings
 - arbitrariness of trend period (3 months)
 - weakness of test (no statistical rigor)
- Re-examination with t-test



N = 38	Mean*	SD	Median	Minimum	Maximum
Pre-SOI	-2.5	12.4	-0.2	-34.3	16.8
Post-SOI	-5.8	8.8	-5.6	-27.9	20.0

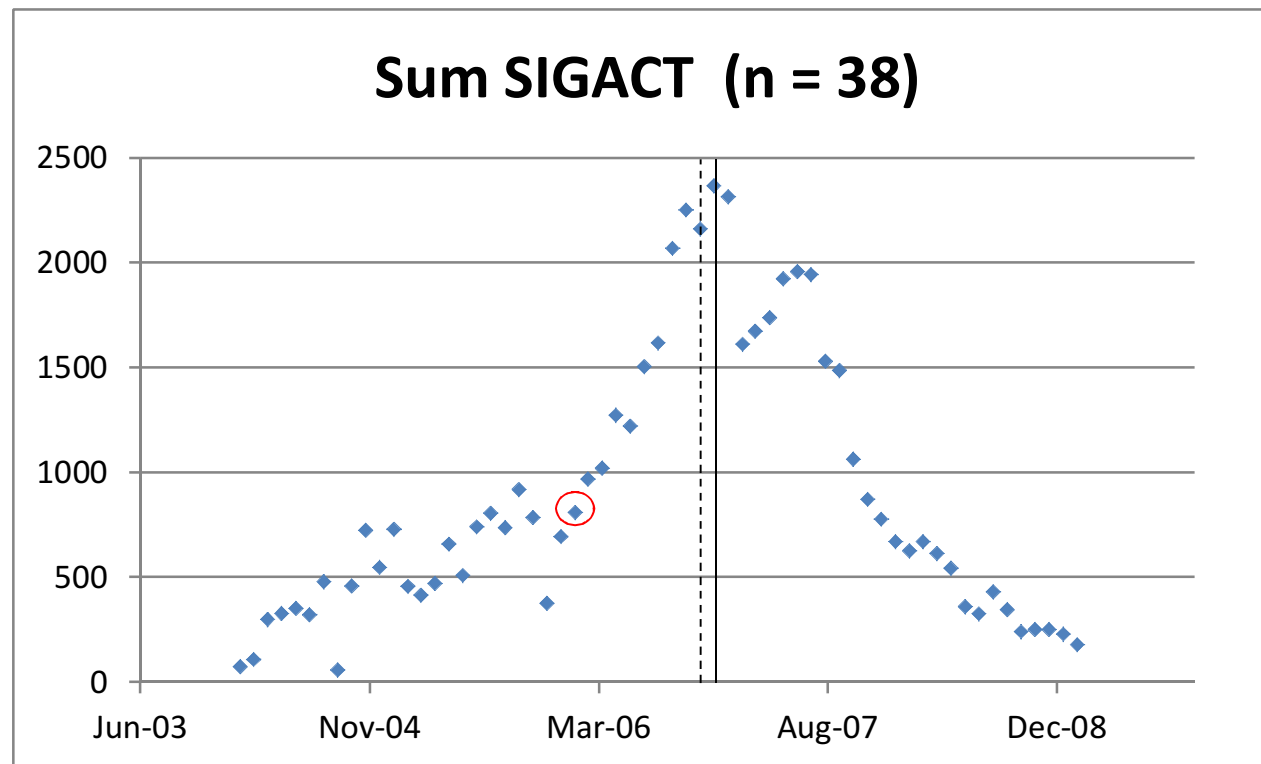
*p-value = 0.283, no statistical difference between trend lines

Methodology

- Analysis of overall SIGACT
- Timeline analysis by AO

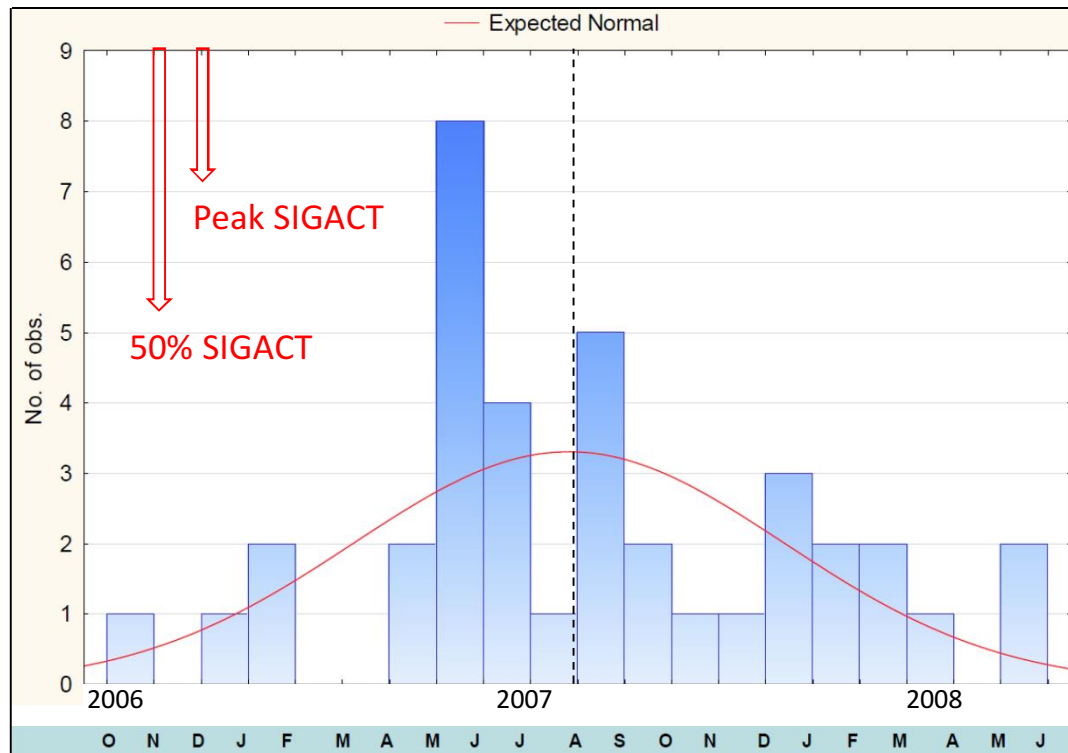
Overall SIGACT

- 50% of total SIGACT (53,822) occurred by end of Nov 06 (dashed bar)
- Peak of 2,366 SIGACT occurred in Dec 06



Standup of SOI

- 50% of total SOI standups occurred by end of Jul 07, 8 months after 50% SIGACT
- Peak of 8 SOI standups occurred in May 07, 5 months after peak SIGACT



Timeline Analysis

Province	Mean SIGACT /Month	Mean Peak SIGACT	Mean Month at 50% SIGACT	Mean Month of Peak SIGACT	Mean % SIGACT at SOI standup	Mean Month of SOI standup	Lag of SOI Standup to Peak & 50% of SIGACT
Anbar (n = 6)	20.9	95.0	29.3	31.3	86.8%	36.7	5.4 & 7.4

Timeline Analysis

Province	Mean SIGACT /Month	Mean Peak SIGACT	Mean Month at 50% SIGACT	Mean Month of Peak SIGACT	Mean % SIGACT at SOI standup	Mean Month of SOI standup	Lag of SOI Standup to Peak & 50% of SIGACT	Surge
Anbar (n = 6)	20.9	95.0	Jun 06	Aug 06	86.8%	Jan 07	5.4 & 7.4	no
Salahaddin (n = 5)	29.5	82.8	Jan 07	Dec 06	70.4%	Aug 07	7.8 & 7.0	no
Baghdad (n = 18)	21.9	98.1	Dec 06	Feb 07	78.9%	Jul 07	4.7 & 6.9	Jan-07, effective Jun 07
Babil (n = 1)	3.8	18	Oct 06	Apr 07	86.5%	Aug 07	4 & 10	no
Diyala (n = 6)	21.7	66.7	Jan 07	Jan 07	87.1%	Jan 08	11.3 & 11.5	April 07
Tameem (n = 2)	40.5	108.5	Nov 06	Jun 07	91.7%	Mar 08	9.0 & 15.5	no
All (n = 38)	23.2	89.1	Nov 06	Jan 07	81.2%	Jul 07	6.5 & 8.2	

Summary

- Overall peak and 50% of SOI standup lag peak and 50% of total SIGACT by 5 and 8 months, respectively.
- Peak and 50% of SOI standup by AO lag peak and 50% of total SIGACT by means of 6.5 and 8.2 months, respectively.
- (Trendline analysis by AO indicates a significant change in SIGACT between 6 and 9 months prior to SOI standup.)

Also

- 50% SIGACT by Nov 2006
- SIGACT peaked Dec 2006 – Jan 2007

Alternative Hypotheses

- The 'Awakening'
 - early Sunni withdrawal of support to AQ (fall 2006)
- Cleansing Peaked
 - JAM (Mahdi Army) attacks against Sunnis peaked in west Baghdad in fall 2006
- Early Adoption of COIN Doctrine
 - Tal Afar (2005) and Ramadi (summer/fall 2006)
 - "28 COIN Articles" (Kilcullen) exert influence in 2006

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 - "28 COIN Articles" (Kilcullen) exert influence in 2006
- Increased Tempo of US SOF in 2006
 - from 10 ops/month (Aug 04) to 300 ops/month (Aug 06)
- Build up of the Iraqi Security Forces (ISF) in 2006
 - troop numbers and readiness levels
 - combined CF & ISF troop density of 15/1,000 population crossed July 06

Security Forces Build Up

Month	Coalition Total (K)	ISF Total (K)	ISF readiness (weighted)	CF and ISF per 1,000
Dec-05	183	224	17.3	14.5
Jan-06	157	227	20.2	13.7
Feb-06	153	232	20.5	13.8
Mar-06	153	251	20.8	14.4
Apr-06	152	254	21.8	14.5
May-06	152	266	23.5	14.9
Jun-06	147	265	24.3	14.7
Jul-06	149	270	26.0	15.0
Aug-06	157	298	28.2	16.3
Sep-06	162	308	28.3	16.8
Oct-06	161	312	30.3	16.9
Nov-06	158	323	31.2	17.2
Dec-06	155	323	33.3	17.1

← Minimum readiness threshold crossed

← Minimum troop density threshold crossed

Conclusion

■ SIGACT Decline

- Fundamental shift in the security situation occurred before the full deployment of surge troops and 6 to 9 months prior to the SOI standup.
- Synergy between the Surge and SOI is not excluded as a (strong) contributor to a continued decline in SIGACT, but it cannot explain the start of the decline.
- Alternative hypotheses/causes:
 - awakening of Sunni insurgents
 - decreased tempo of JAM
 - early adoption of COIN
 - increased tempo of SOF
 - growth of ISF

■ COIN vs. Conventional Warfare

- “Fog of War” was especially dense in late 2006, making it very difficult to identify a winning strategy.
- Key question is whether the Surge was necessary or whether a change in operational doctrine (i.e., adoption of COIN) would have sufficed with the 140K troops in Iraq – considering that violence had started to decline prior to the Surge, the latter would likely have worked, albeit at a slower pace.
- While it is apparent that COIN and conventional warfare both contributed to the decline in violence, what remains unknown is the optimal mix of the two and the quantification of alternative causes, which collectively were primarily responsible for initiating the decline in violence.

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Surge Troop Deployment

Month of Deployment	# of troops	Unit	Location of Deployment
January 2007	3,447	2nd Brigade, 82nd Airborne Div	Baghdad
February 2007	3,447	4th Brigade, 1st Infantry Division	Baghdad
March 2007	3,784	3rd Brigade, 3rd Infantry Division	southern Baghdad Belts
April 2007	3,921	4th Brigade, 2nd Infantry Division	Diyala
May 2007	3,784	2nd Brigade, 3rd Infantry Division	southeast of Baghdad

Trendline Analysis by AO

- Observed and predicted total SIGACT: 3, 6, 9, and 12 months

N = 38	Mean	SD	t	p
obs 3	95.2	101.0		
pred 3-3	118.6	157.3	-1.4	0.164

