



Predictable is Preventable®

2011 COPS Conference

'Data-Driven Decision Making: Reducing Operating Costs While Maintaining Mission Excellence'

Lexipol CEO Dan Merkle
Police Chief Jim Bueermann (ret)
Capt. Michael Garner / Henderson (NV) Police Department

August 1, 2011

PREDICTABLE IS PREVENTABLE®

Briefing Overview

Economic Reality in Context

Emerging Trends

Re-engineering

Successful Solutions

Q&A



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USA Inc.

‘Our country is in deep financial trouble.

Federal, state and local governments are deep in debt yet continue to spend beyond their means, seemingly unable to stop.

Our current path is simply unsustainable.

What to do?’

- George P. Schultz, Paul Volcker, Michael Bloomberg, Richard Ravitch & John Doerr

February 2011



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Revenue, Spending Trends

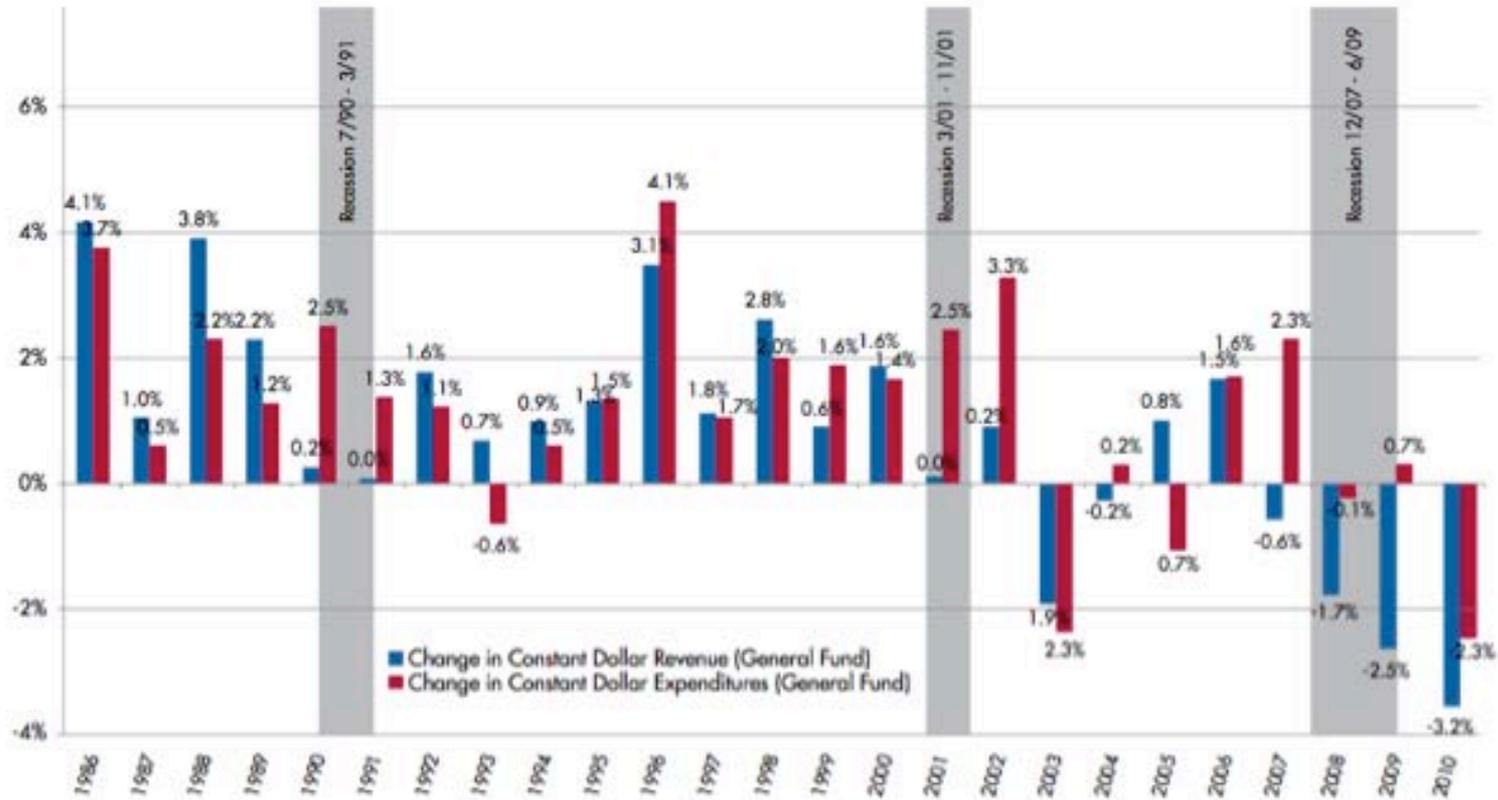


Figure 2: Year-to-Year Change in General Fund Revenues and Expenditures (Constant Dollars)

Economic Constraints

Impacts on law enforcement

Seven key revenue sources, all curtailed

- Property tax
- Sales tax
- State income tax
- Fees
- State and federal funding transfers
- Budget reserves
- Bond sales



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Economic Constraints

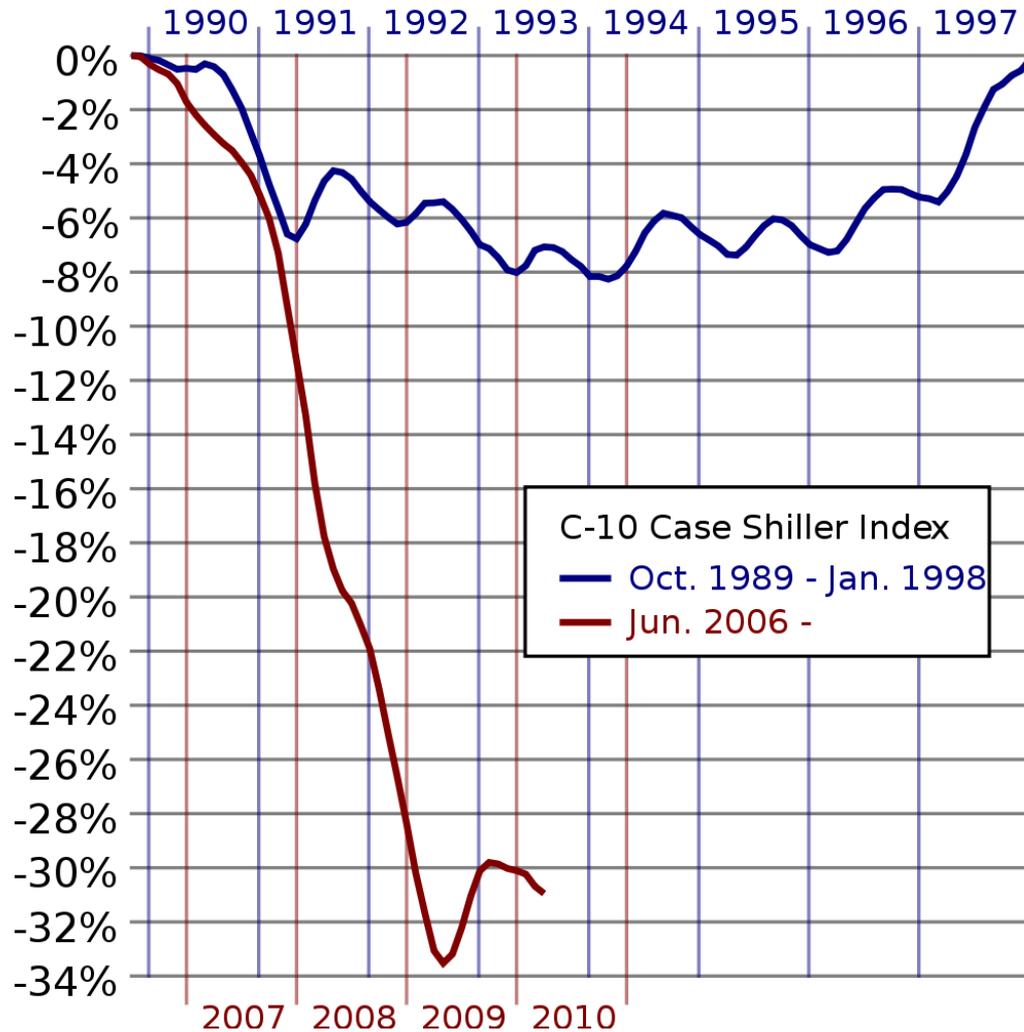
Curtailed revenue sources

Property tax

- Property taxes ~45% of local government revenue
- Property tax bills, collections lag at least 18 months behind market
- Record foreclosures in Q4 2010, slowed in 2011
- Banks foreclosing again – 1 million+ for 2012
- Fourth consecutive year of declining values
- 30% of houses valued below mortgage balances



Home Price Index



Curtailed Revenue Sources

Property tax

Sales tax

- About 70% of U.S. GDP from consumer spending
- In Q2, household purchases rose 0.1% – terrible
- U.S. consumer confidence index lowest in two years
- Household debt as percentage of disposable personal income: 130% in '07; 115% now
- Average household debt 1975-2000: 75%
- Consumers paying down debt, not purchasing



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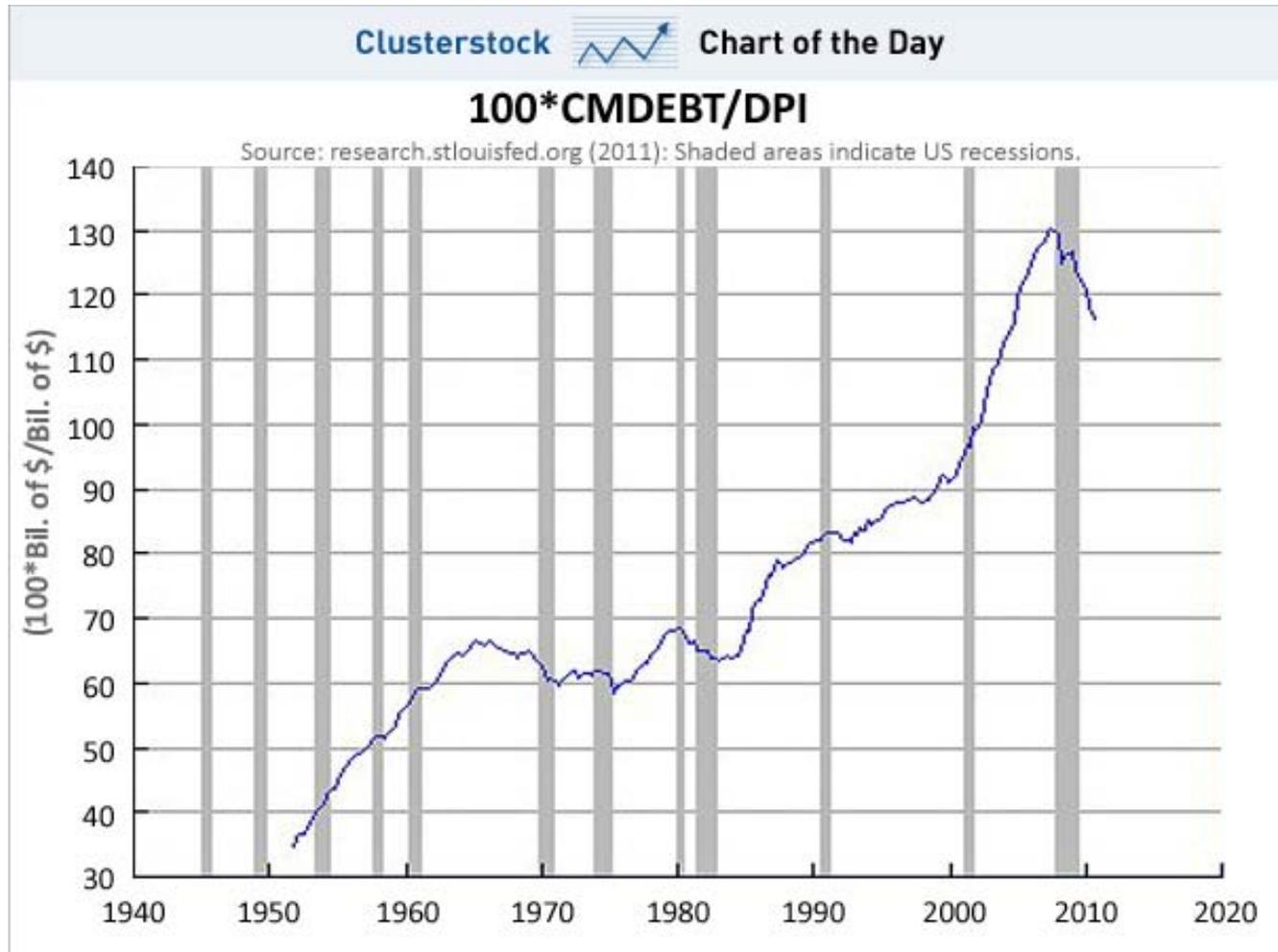
Across America

Long-term economic structural reset

- 2010 downturns, cutbacks worst in 25 years
- 17 states face shortfalls of more than 20%
- From '09-'11, 40 states have raised various taxes
- Nationally, state tax collections still 7.8% below pre-recession levels (inflation adjusted) for 2011
- 25% of cities cut public safety spending in 2010
- Only 58.2 percent of U.S. population employed, a 25-year low



Household Debt



Curtailed Revenue Sources

Property tax, Sales tax

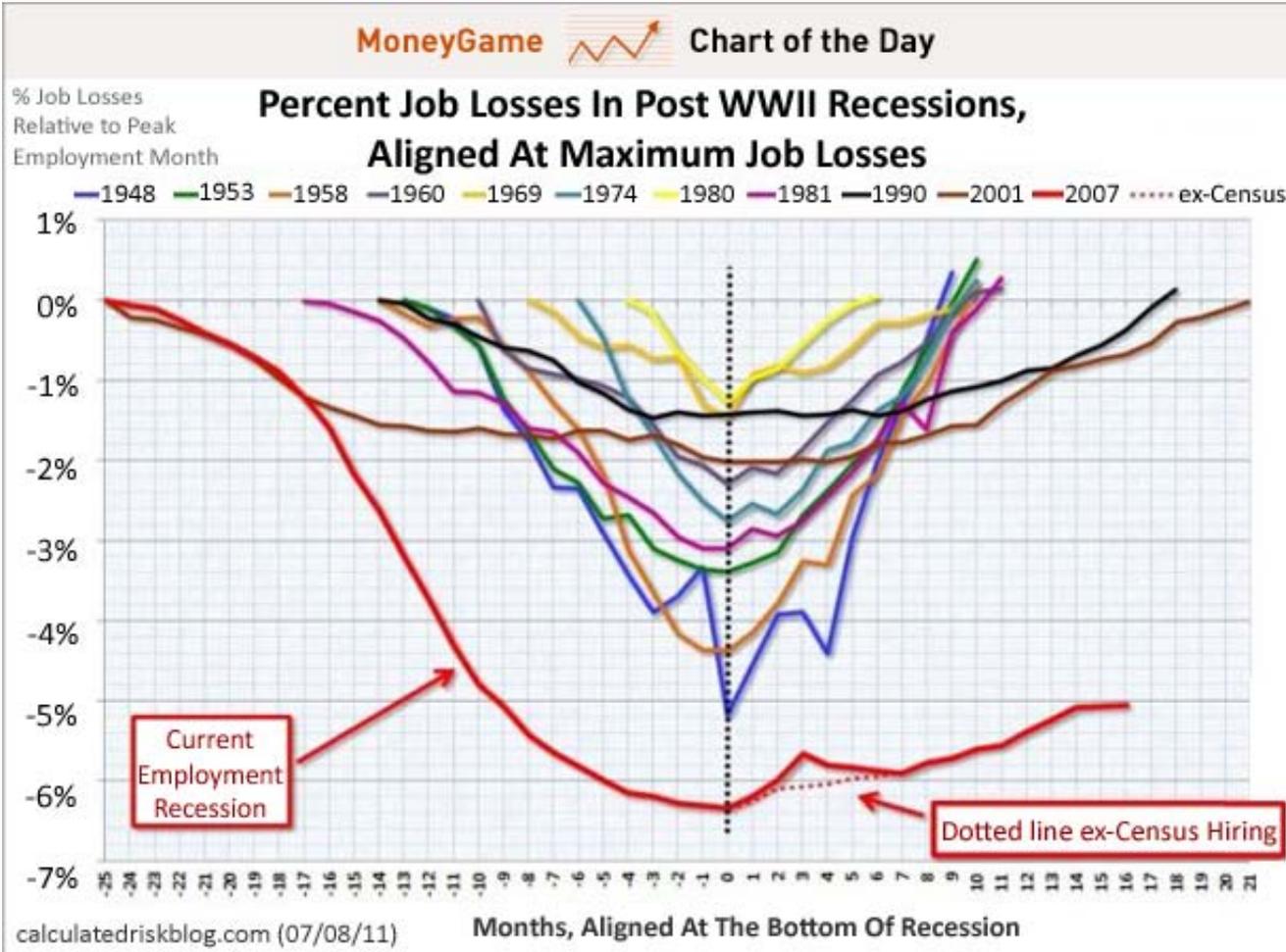
State income tax

- Income tax revenue based on *employed* workers
- Only 58.2% of U.S. population working; lower than when recession ended in 2009
- 14 million+ unemployed; far more not even looking
- Job growth effectively stopped
- Wage growth effectively stopped
- Average real hourly earnings down 1.1% '09-'11



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Percent Job Losses



Curtailed Revenue Sources

Property tax, Sales tax, State income tax

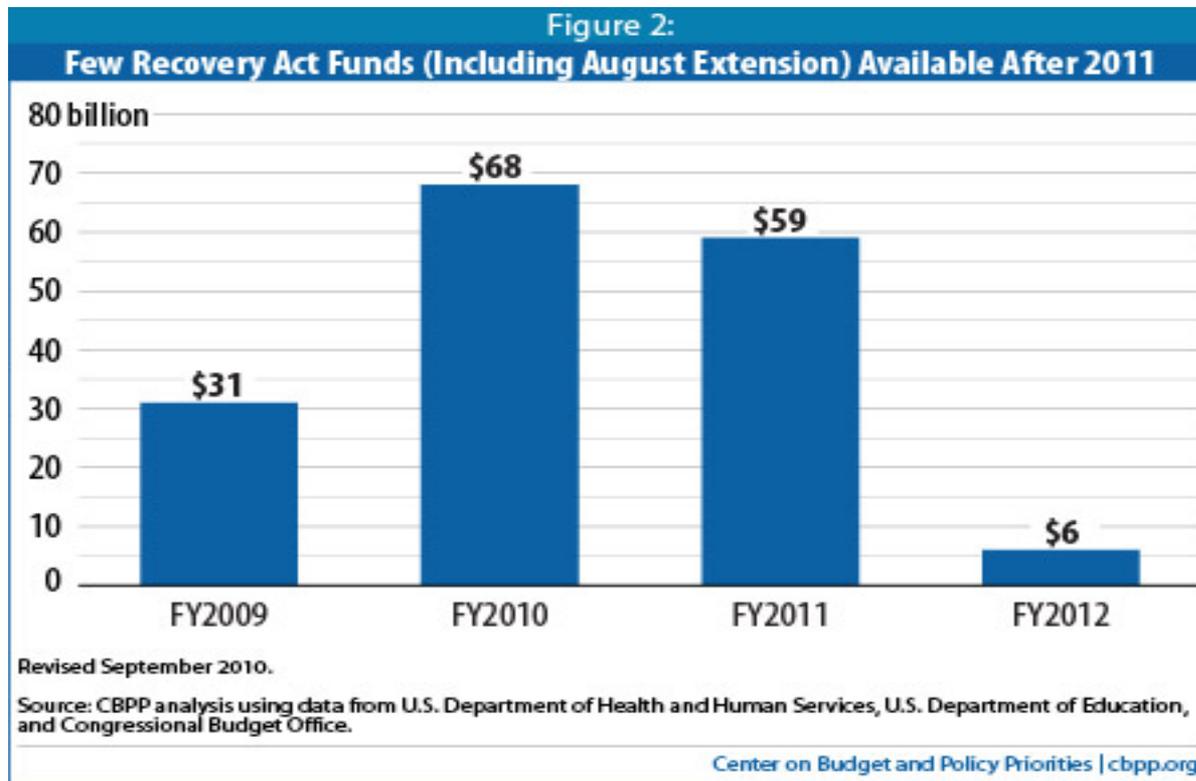
Fees

- Fees harder to track, easier to add than taxes
- No good national trending data; localized issue
- California increased fees on parks, universities
- New \$150 fire fee on 850,000 rural homeowners
- 2/3 legislative vote for new taxes; only 1/2 for fees
- 2010's Prop 26 tightened definition of 'fees'



Curtailed Revenue Sources

Property tax, Sales tax, State income tax, Fees
State and federal funding transfers



Curtailed Revenue Sources

Property tax, Sales tax, State income tax, Fees,
State and federal funding transfers

Budget reserves

- After recession, ~75% states used 'rainy day funds'
- CA RDF balance FY 06: \$10,816 (millions)
- CA 'rainy day fund' balance FY 10: \$0
- At least nine states planned to use 'rainy day funds' to balance FY 11 budgets



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Curtailed Revenue Sources

Property tax, Sales tax, State income tax, Fees,
State and federal funding transfers,
Budget reserves

Bond sales

- State budget deficits expected to grow from \$120 billion to \$140 billion in 2012
- Muni bonds have not faltered as much as predicted
- Still vital to monitor muni bond volume, price
- Adversely affected by federal actions



Economic Trends

Impacts on law enforcement

- A scrutinizing society
- Inflation in core commodities
- Operational impacts
- New and expanding challenges

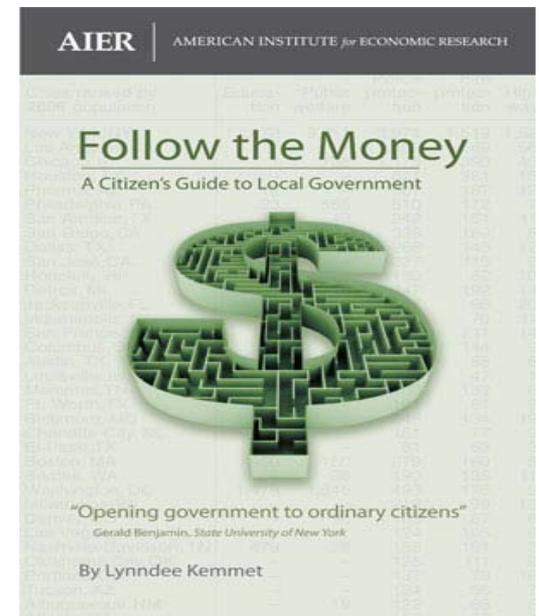


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Scrutinizing Society

Increasing Transparency Demand

- Everyone has a cell phone with recorder including your officers and employees
- Increased public records requests
- WikiLeaks, YouTube, OpenWatch
- Pensions, cost of service, GASB
- Early warning systems, community oversight panels
- Media



Economic Threats

Inflation in core commodities

Fuel

- U.S. price per gallon January \$3.383
- U.S. price per gallon last week \$3.699 (+.95 year)
- Regular gas \$4.339 per gallon now in Santa Monica
- Gas prices rose 67.3% from 2009-2010
- How many miles per gallon is your fleet getting?
- How many personnel have take-home cars?
- Each 10-cent rise = \$14 billion from economy



Economic Threats

Inflation in core commodities

Fuel

Food

- Global Food-Price Index record high in Feb 2011
- Food prices 39% higher June '11 than June '10
- Serves as barometer for general consumer prices
- Higher food prices key factor in measuring U.S. inflation
- Analysts predict continued price increases



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Economic Threats

Inflation in core commodities

Fuel, Food

Metals

- Copper, gold at all-time highs in 2011
- Gold up 29.8% to \$1,400 – 10th up year in a row
- As of July 29, gold up to new high: \$1,628.30/oz
- Palladium (used in gas engines) up 97.3% in 2010
- Silver surged 83.8% in 2010
- Steel and aluminum at pre-recession levels



Predictable is Preventable™

Economic Threats

Inflation in core commodities

Fuel, food, metals

Medical

- Aging prisoner population spikes medical costs
- Fed & state prisoners age 55+ up 76% 1999-2008
- Age-related serious/chronic health problems up
- CA prison care up from \$1.2 B to \$2.5B in 3 years
- Gov Brown budget shifts prisoners to local jails



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Economic Threats

Operational impacts

Workers compensation

- Local government workers had the highest rate of occupational illness & injury in 2009 – by far

Vehicle operations

- Fatal traffic accidents leading cause of officer deaths for 13th straight year in 2010

Employment law

- Don't make HR decisions without legal counsel



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New and Expanding Challenges

- Jihadists and radicalized individuals



- Criminal drug cartels and gangs
- Cyber-facilitated crime
 - China, Iran, Russia, hackers

'Geohot' aka George Hotz



Process Adaptation

Financial triage

Investigate & monitor local economic drivers

Priority planning

Craft solutions

Technology

Consolidation/Regionalization

Privatization

Alternative Delivery & Policing Models



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Solutions

Instant, near-term, extended

Technology

- Weapons
- Intelligence
- Enforcement
- Custody

Admonitions: Rapid adoption; public expectations; data protection; ongoing technical competency



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Solutions

Instant, near-term, extended

Consolidation & regionalization

- Basic operations
- Special operations (hazmat, bomb, SWAT)
- PSAP / dispatch
- Custody
- True 'public safety' departments

Admonitions: Contractual liability; command & control; cultural compatibility; standardization



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Solutions

Instant, near-term, extended

Privatization

- May have access to higher skill sets
- Cost efficiency
- Faster system improvement
- Greater flexibility
- Reduced costs

Admonitions: Tort caps & immunities; analytics; transparency; improvement model



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Solutions

Instant, near-term, extended

Privatization case study * Lexipol

- National League of Cities chapter in Oregon
- City/County Insurance Services (CIS)
- Three-year controlled LE comparison study
- Claims down 51%
- Severity of claims down 70%
- ZERO HR claims



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Sources

Primary, secondary

Review primary data – don't rely on 'spin'

- Financial literacy, savvy a must going forward
- Do your own research – beware all 'spin'
- Does your department have a dedicated MBA?
- Research, risk management can help reduce claims
- Question *status quo* – review contracts, budgets
- Develop your own high-risk 'dashboard' of data, stats to monitor and react to



Redlands Police Department

'Four Strategic Pillars for Tough Times'

- Technology
- Research
- Volunteers
- Partnerships

Taxpayer Expectations

- Mission maintenance
- Government should be better stewards of their investment (taxes)
- Crime has been trending down since early 1990s
- Public confidence has remained stable around 50%

Focus On Outcomes

- Requires a 'new view' of how we deliver services
- Moves our perspective from strictly 'law enforcement' to 'public safety'
- Helps engage others in co-producing public safety

Technology

- Information
- Less lethal
- Surveillance
- Communication
- Forensic advances
- Does it help?

Research

- Evidence-based policing
- IACP
- COPS
- National Institute of Justice (NIJ)
- Bureau of Justice Assistance (BJA)
- George Mason University 'Matrix'
- 'What works' to control crime

Volunteers

- Lots of them
- Can work in almost every area of policing
- Tremendous department cheerleaders
- Essence of community based policing
- Support infrastructure
- Require a level of attention & maintenance

Partnerships

- Common interests
- Trust
- What 'real' partnerships mean
- Knowledge management
- Better outcomes
- Share victories and failures
- 'We' co-produce public safety

'There's No Free Lunch!'

- Unintended consequences
- Assess potential costs & benefits
- Manage the risk
- Track the costs & benefits
- Evaluate
- Act on the evaluation

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City History

- The Henderson Police Department was created in 1953 after the City of Henderson was incorporated
- In 1990, there were 82 police officers; in 1995 there were 140 police officers; in 2000 there were 212 police officers
- During the 2004 'boom,' a voter-approved tax initiative funded the hiring of officers for all of Clark County police departments in an attempt to keep up with the rapidly growing population
- After the 'crash' and reductions in tax income, hiring was frozen
- Currently Henderson has 391 authorized sworn officers and 347 actual filled positions (as of September, we will be carrying 50 vacancies)

City Growth

HISTORICAL POPULATION TRENDS AND FUTURE GROWTH PROJECTIONS

The City's population has increased by almost 50% since 2000.

Year	89002	89011	89012	89014	89015	89044	89052	89074	Total	# of New Residents	Percent Change
1998	-	92	16,013	79,255	62,016	-	-	-	157,376	12,818	8.9%
1999	-	256	24,943	82,102	63,775	-	-	-	171,076	13,700	8.7%
2000	-	356	18,307	83,513	65,442	-	18,055	-	185,673	14,597	8.5%
2001	-	504	21,015	38,573	67,105	-	24,398	46,631	198,226	12,553	6.8%
2002	-	621	24,217	39,063	68,780	-	30,287	47,238	210,206	11,980	6.0%
2003	-	654	25,672	38,892	71,332	-	36,566	47,120	220,236	10,030	4.8%
2004	-	847	26,438	39,363	74,468	1,589	42,357	48,444	233,506	13,270	6.0%
2005	-	967	27,510	39,529	78,145	4,586	44,573	48,587	243,897	10,391	4.4%
2006	29,345	13,816	28,510	39,943	41,018	8,307	46,256	48,933	256,128	12,231	5.0%
2007	31,525	16,165	28,567	40,120	41,138	12,202	48,207	47,866	265,790	9,662	3.8%
2008	32,355	17,320	29,376	40,818	41,339	14,535	48,139	48,181	272,063	6,273	2.4%
2009	32,843	18,670	28,713	40,170	41,523	15,858	49,315	48,042	275,134	3,071	1.1%
2010	32,165	19,187	28,829	40,423	40,876	16,486	49,987	48,475	276,428	1,294	0.5%

Source: City of Henderson Community Development Department, July 2010

City Growth

U.S. CENSUS POPULATION COUNTS (April 1, 1950 - 2000)

Year	Population	Population Increase	Percent Increase
1950	5,717	-	-
1960	12,525	6,808	119%
1970	16,400	3,875	31%
1980	23,376	7,976	49%
1990	64,942	40,566	166%
2000	175,381	110,439	170%
2011	277,502	167,063	63%

Source: U.S. Census Bureau

Officer To Citizen Ratio*

Year	Sworn Officers	Population	Officers Per 1,000
1995	140	116,482	1.20%
1996	160	130,116	1.23%
1997	174	144,558	1.20%
1998	192	157,376	1.22%
1999	204	171,076	1.19%
2000	212	185,673	1.14%
2001	219	198,226	1.10%
2002	251	210,206	1.19%
2003	259	220,236	1.18%
2004	267	233,000	1.15%
2005	273	252,516	1.08%
2006	363	256,127	1.42%
2007 (Jan)	371	263,983	1.41%
2007 (July)	391	263,983	1.48%
2008	391	269,245	1.45%
2008	391	269,826	1.45%
2009	391	273,804	1.43%
2009	391	274,293	1.43%
2010	391	276,792	1.41%

* Based on authorized positions

Ri\$k
Management
In Law Enforcement

Another tool in budgeting

Even with all the current technology, risk is greater in this job than ever before. We face a different type of criminal; faster cars; multi-tasking; amateur videographers; and much more. There are increases in traffic-related officer deaths, uses of force, and other liabilities. To change, it will take a department-wide commitment to understand risk management.

Purpose

To increase safety and reduce the financial impact to the department budget through awareness, education, and prevention.

If it's predictable,
it's preventable!

Performance Measures

- Reduced officer at-fault accidents
- Reduced unintended discharges
- Reduced workers' compensation claims

Tactics

Two-prong approach:

Data Collection/Statistics

Gathering data that is prioritized to identify the leading incident resulting in expenditures, e.g., accidents, ergonomics, etc.

Education and Training

Educating department personnel about how to avoid these incidents, thus keeping themselves safer and limiting expenditures.

HPD Vehicle Accidents

Total Accidents	2008	2009	2010	2011	% change
January	3	4	5	2	25%
February	7	5	3	3	-40%
March	4	2	5	1	150%
April	1	2	2	3	0%
May	8	3	3	2	0%
June	6	6	5	5	-17%
July	6	5	7	2	40%
August	7	5	1		-80%
September	1	5	3		-40%
October	5	4	7		75%
November	8	6	4		-33%
December	5	6	4		-33%
Totals	61	53	49	18	-8%

HPD At-Fault Accidents

At-Fault Accidents	2008	2009	2010	2011	% change
January	2	0	4	1	400%
February	5	3	2	2	-33%
March	2	2	4	1	100%
April	0	1	2	2	100%
May	4	3	2	0	-33%
June	5	5	3	3	-40%
July	4	3	5	1	67%
August	4	3	0		-300%
September	0	4	2		-50%
October	3	1	5		400%
November	4	4	3		-25%
December	3	6	2		-67%
Totals	36	35	34	10	-3%

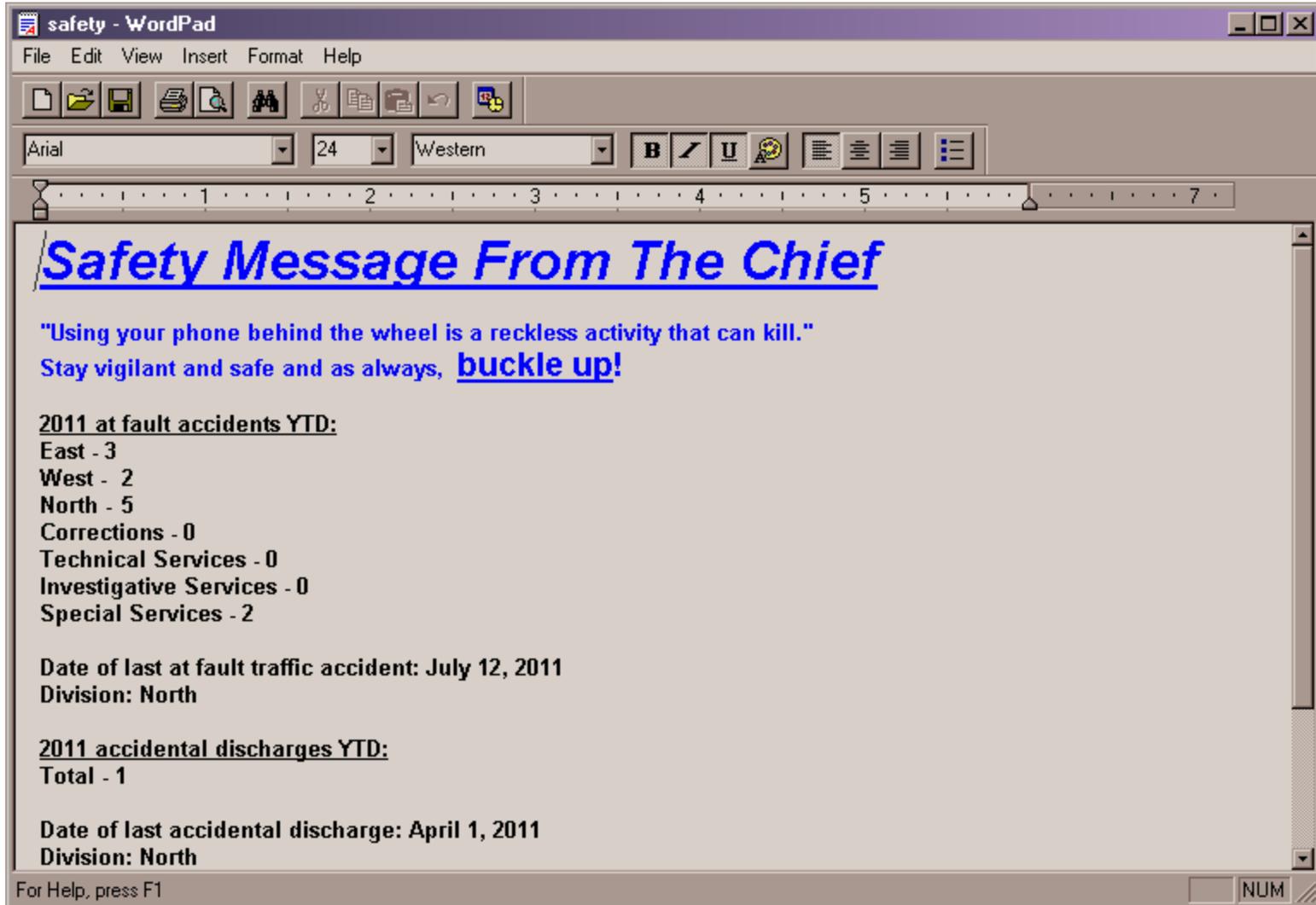
HPD Vehicle Repair

City Cost for Vehicle Repair				
	2008	2009	2010	2011
Henderson Police Vehicles	\$104,855.05	\$84,967.56	\$72,164.71	\$15,630.76
City Paid - Citizen Vehicles	\$210,135.52	\$33,652.82	\$67,896.62	\$29,250.06
Total Repair Expense	\$314,990.57	\$118,620.38	\$140,061.33	\$44,880.82

Education & Training

- Altered EVOC training to address the causes of vehicle accidents as determined in the Data Collection & Statistics phase
- Posted daily safety reminder that pops up each time employees log on to their computer
- Focused on increased seatbelt usage
- Ahead of curve on cell phone usage restrictions – instituted policy BEFORE the new cell phone law (Note: 70% of Nevada agencies will NOT be exercising the police exception to the law)
- Looking to the future: Voice-activated computers may reduce attention needing to be paid to display

Education & Training



Unintended Discharges

	2008	2009	2010	2011
Total Unintended Discharges	2	6	0	1

Education & Training

- Instead of keeping it quiet, unintended discharges are displayed on the pop-up safety box so officers are aware of them
- Increased focus on gun safety
- Range training days include training in handling and use of guns, plus accuracy and speed scenarios

Workers' Comp Claims

	2008	2009	2010	2011 (01/01-07/25)
YEARLY TOTALS	\$694,637	\$323,215	\$458,638	\$123,997

Of the 112 claims for 2010 and 2011,
28 claims (25%) could have been prevented
with improved officer fitness

Education & Training

- Many of our workers' compensation claims are due to the fitness of our officers. To improve officer fitness, the Training Division instituted voluntary CrossFit / P90X fitness classes available four times per day
- Defensive Tactics classes also include a short CrossFit portion so officers can judge their fitness level

Summary

In the past 18 months, we focused on accidents, unintended discharges and workers' compensation-related injuries; through the initiatives we implemented, we improved officer safety and health and were able to save the City taxpayers hundreds of thousands of dollars

In addition to continuing these efforts, our next areas of focus will be in lost/stolen/damaged property and uses of force

Conclusion

To effectively use risk management as a budgeting tool, the mindset of the supervisors, managers, and executives must change first in order to change the mindset of the entire department

Thank you

We welcome your questions, comments and suggestions

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