

Through the analysis, survey, and discussions with partner agencies, the general consensus is that call boxes are now a lifeline for motorists regardless of cell phone ownership and provide an important service specifically in areas that are remote and have unreliable cellular service but are less depended on by motorists because of other services available and the increase in freeway surveillance. Other conclusions that can be drawn include:

- Call box requests for roadside assistance have decreased from 45% in 2006 to 41% in 2010 and emergency calls on call boxes have decreased from 10% to 6% over the same period.
- Other motorist aid programs that operate in urban areas and provide similar services as call boxes are able to help motorists more efficiently.
- 78% of call box calls are made between the hours of 6AM and 8PM when other services are available.
- Cellular signal is more reliable in urban areas which allow motorists to access their roadside assistance through their cell phones instead of a call box.
- Call boxes in rural areas, bridges and tunnels are still a necessary service because of their currently isolated location.

Key Survey Results

Cell Phone Ownership			
All Respondents	94%		
Income	Low (<\$25,000)	High (\$150,000+)	
	86%	98%	
Drivers	Disabled	Non-disabled	
	88%	93%	
Roadside Assistance Subscription	All Drivers	Disabled Drivers	No Cell Phone
	89%	83%	70%
Program Awareness	Call Box	FSP	511 Freeway Aid
	90%	37%	32%

Strategies

In developing a recommended plan of action, staff followed three guidelines: 1) maintain a call box system in areas with unreliable cell service, limited surveillance and access, 2) invest in other programs that provide greater benefits to motorists, and 3) minimize changes to motorists' expectations. Because inefficiencies do exist in the call box system as the analysis reveals, a status quo approach is not sustainable and staff recommends a phased action plan that addresses the inefficiencies experienced by the urban call boxes but limits the impact to motorists' expectation by gradually reducing the call box system. This phased action plan lays out defined strategies that allows for sound decisions to be made and achieves the largest cost savings.

Recommended Phased Action Plan

Strategies		
1	Reduce urban call boxes by 50%	2013
2	Installation of 511 Freeway Aid signs at removed call box sites	2013
3	System-wide spot removal of call boxes as appropriate	2014
4	Removal of call boxes by urban corridors	2015
5	Reassess entire call box system	2016
10-Year Cost Savings		\$1,700,000

Alternatives to the recommended phased action plan include implementing only the first two strategies of the recommendation or continue maintaining the existing system after a system-wide spot removal of call boxes as appropriate.

Pending input from this Council, the complete evaluation and the recommended phased action plan will be presented to the Operations Committee in December 2011 for approval.

/SP

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Call Box Program Evaluation

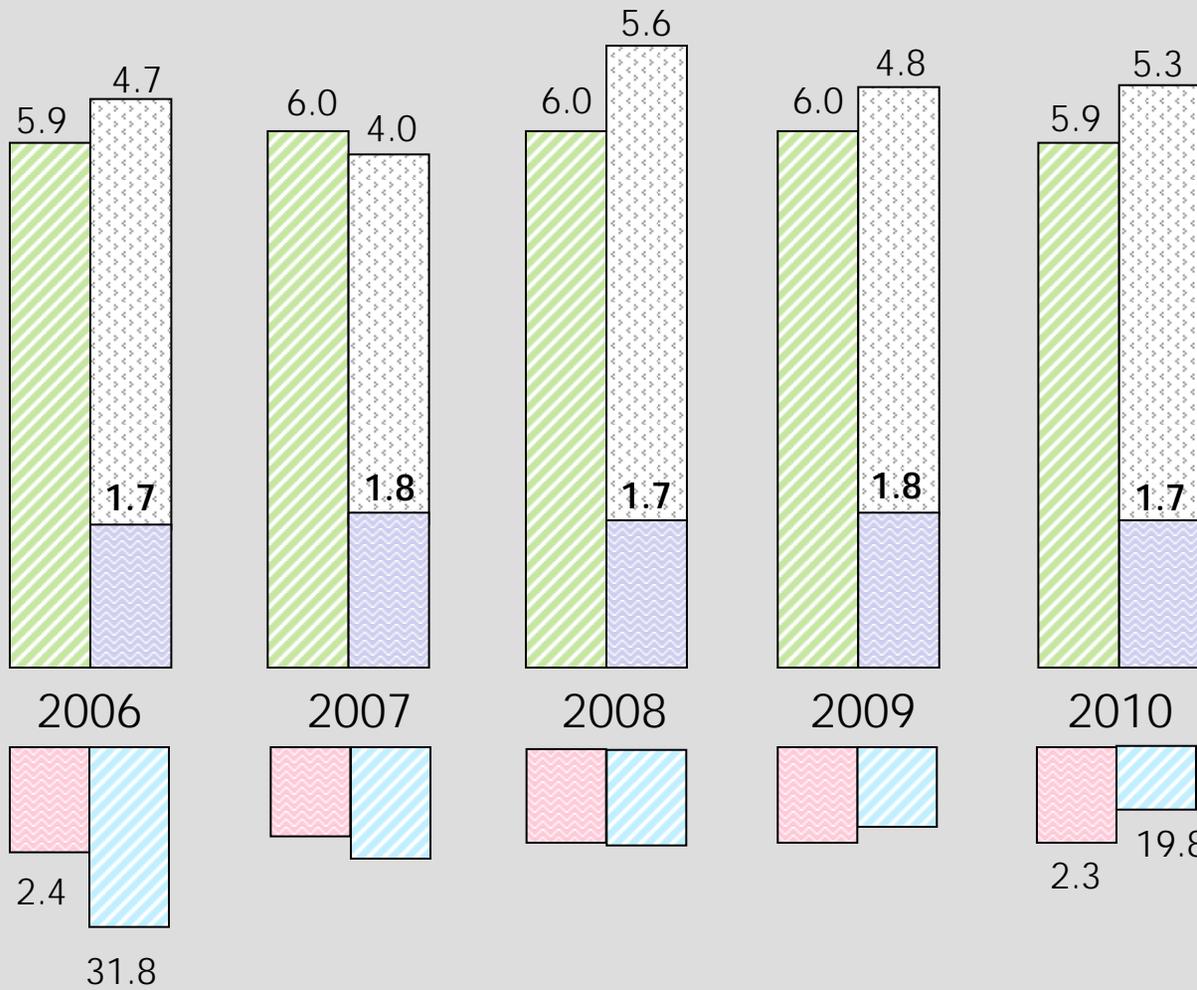
Stefanie Pow – Highway & Arterial Operations
Policy Advisory Council
November 9, 2011



Evaluation Purpose

- Consider modifications to call box system, last reviewed in 2006
- Identify usage trends
- Explore opportunities that reflect current telecommunication trends
- Maintain safety

Program Trend



SAFE Finances

- Revenue
- Other Programs
- Call Box Expense

Figures in million dollars

Call Box Calls

- Call Volume
- Active Call Boxes

Figures in thousands

Program Milestones

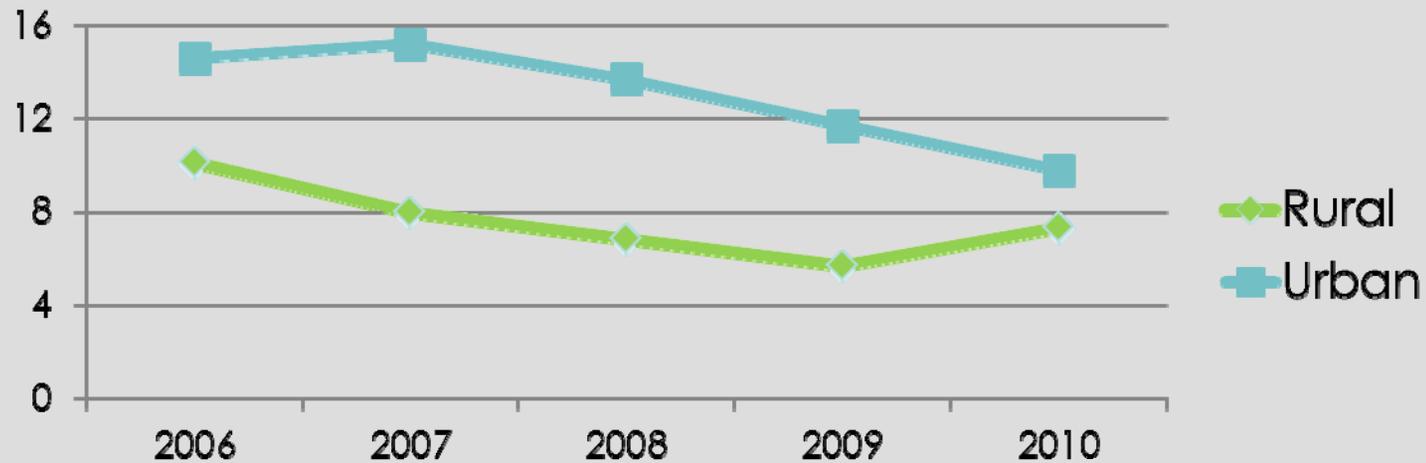
- 2001** Began installation of bridge and tunnel call boxes
- 2004** Removal of 900 call boxes in response to decline in call box call volumes
- 2006** Completed TTY upgrades and removal of 550 call boxes
- 2008** Start of 511 Freeway Aid, which allows for motorists to access call box services by using the 511 phone service
- 2009** Senator Yee sponsored SB 1731 to increase DMV reg. fee by \$1 for MTC SAFE. Bill vetoed by Gov. Schwarzenegger
- 2010** SB 1418 proposed to increase DMV reg. fee by \$1 for SAFEs and allow greater flexibility within call box program. Bill failed.
- 2011** Implementation of call box site mitigation project to improve access.

Evaluation Process

- Analyzed call data provided by call center and maintenance provider
- Conducted survey on Bay Area motorists to gauge cell phone penetration and driving behavior
- Discussed call box program's direction with partner agencies: Caltrans and CHP

Call Box Call Trends

Call Rates



Call Times

Type	6:01AM-8:00PM	8:01PM-6:00AM
Rural	81%	19%
Urban	77%	23%
All Calls	78%	22%

Call Box Call Trends

Call Types

Call Types	Roadside Assistance		Emergency		All Calls
	Percentage	Count	Percentage	Count	
2006	45%	14,062	10%	3,125	31,249
2007	47%	11,835	10%	2,518	25,180
2008	46%	10,652	8%	1,852	23,156
2009	43%	8,573	6%	1,196	20,094
2010	41%	8,002	6%	1,171	19,517

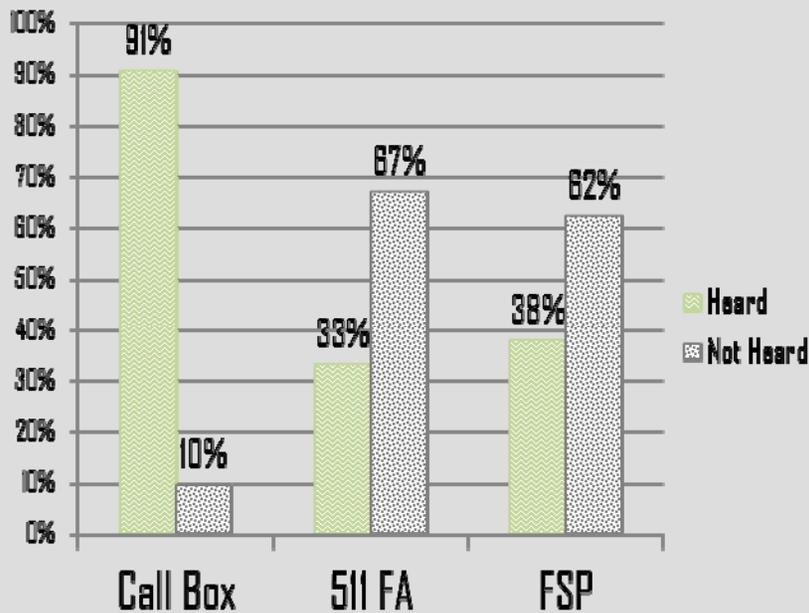
- Other calls include: false calls, maintenance checks, etc.
- Motorists use call box expecting free service
- Emergency call box calls are often reporting of incidents not involving the caller, duplicate events

Survey

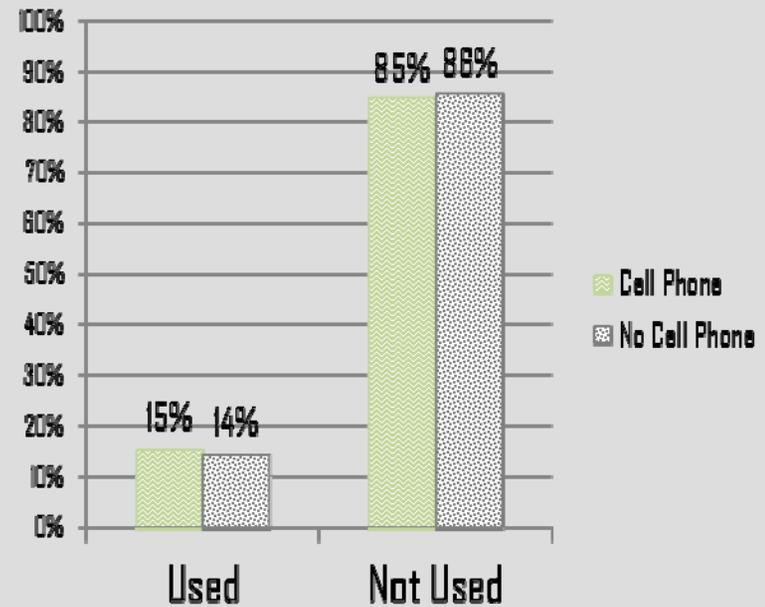
- Gather cell phone penetration rates & gauge driving behavior
- Conducted surveys via email and telephone to randomly selected motorists of the Bay Area
- Received 3,627 completed surveys, 95% confidence rate

Survey Results

Public Awareness of Programs

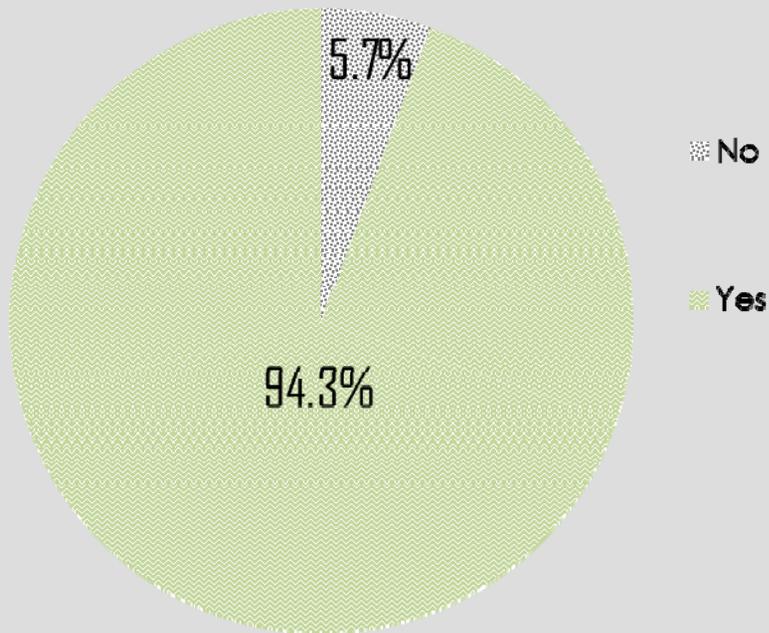


Call Box Usage

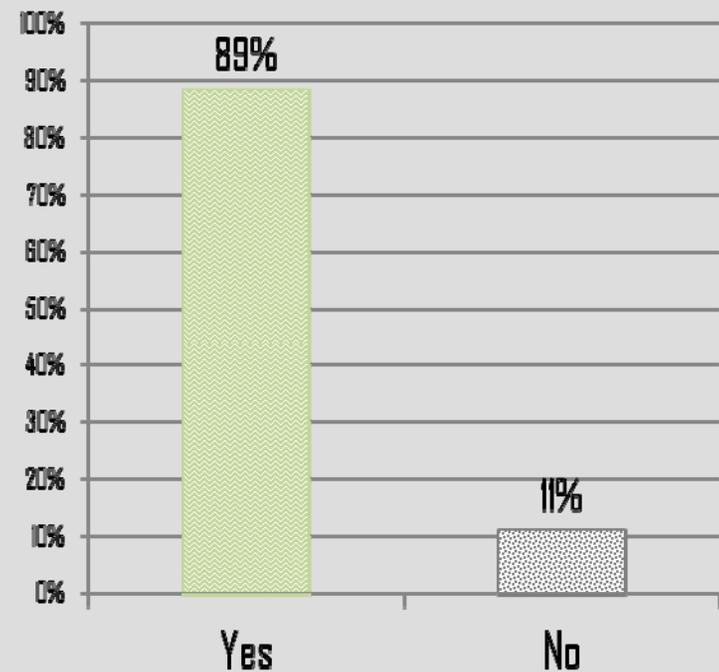


Survey Results

Cell Phone Ownership



Roadside Assistance Subscription



Survey Results

- Demographics of respondents parallel that of the Bay Area census
- In an incident not involving injuries, majority would find other means before using a call box
- Cell ownership rates decrease with household income
- The disabled and those without cell phones drive less frequently on freeways

Overall Conclusions

- Call boxes are still being used to request services but at a significantly lower rate
- Emergency calls through call boxes have declined along with all call types
- Cell phone ownership and roadside assistance subscription is high
- Motorists are becoming less dependent on call boxes as other motorist aid services emerge

Recommendation

- Maintain a lifeline system in areas with unreliable cell service and limited surveillance and access
- Invest in other programs that provide greater benefits to motorists
- Minimize changes to motorists' expectations

Recommendation

Strategies		A Phased Action Plan (Recommended)
1	Reduce urban call boxes by 50%	2013
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Next Steps

- Return to Operations Committee in December 2011 for input and final approval of recommendation
- Discuss with CHP at the end of November 2011