Office of the City Auditor

Cost Benefit Analysis of Wheel Clamping

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Introduction

In June 2007, the Office of the City Auditor completed the Long Beach Police Efficiency Study (Study). The purpose of the Study was to assess the Long Beach Police Department (LBPD) and to provide recommendations to help improve efficiency and cost containment. As a result of the Study, twelve initiatives were developed, with a projected fiscal impact of $3.7 million in FY 2008 and $22.2 million over the next five years. Initiative #11 was a recommendation to institute a vehicle immobilization program to be used in combination with the City of Long Beach's (City) towing program. According to the Study, the fiscal impact of the recommended booting and towing program would be $1,463,000 in FY 2008.

In order to assist City Management with their consideration of a vehicle immobilization program, we recently concluded this cost benefit analysis. This study serves to expand upon and refine the previous cost benefit analysis, and provides Council and management with specific data to consider when deciding whether to implement a wheel clamping program.

Our analysis assumes the purchase of thirty wheel clamps, the use of an existing truck within the City's Fleet equipped with Automatic License Plate Reader (ALPR) technology, and the reassignment or hiring of four Parking Control Checkers (PCC's). In addition, the analysis projects the implementation cost and revenue projections based on 10%, 15%, and 20% recovery rates. The analysis concludes that given the assumptions, the City could potentially gain net revenue of $1.1 million to $2.5 million annually.

As with any cost benefit analysis, the information presented within the attached analysis is necessarily based on assumptions regarding expected revenues and expenses. Additionally, non-monetary costs and benefits (some of which we list in the attached study) must also be considered. The City Auditor's Office looks forward to discussing this report, and to continuing to identify potential efficiencies and additional City revenues.

Wheel Clamping Analysis General Facts and Assumptions

Parking Ticket Scofflaws

- The City of Long Beach (City) currently has $11.7 million in uncollected parking tickets from approximately 18,900 vehicles with 5 or more unpaid tickets.[1] These tickets were issued between 1/1/2003 -12/31/2007.

- Based on discussion with the Long Beach Police Department (LBPD), they anticipate that 20% of the 18,900 vehicles that belong under the scofflaw category are uncollectable due to out-of-state vehicles, ownership transferred prior to re-registration, and citations issued to a rental car.

Enforcement

- California Vehicle Code Section 22651*(i)* and Section 22651.7*(a)* authorizes the City to tow or immobilize vehicles with five (5) or more unpaid citations. This study assumes that wheel clamping is implemented and that Council action is taken to impose a $100 Wheel Clamp Release Fee.

- Clamped vehicles could be allotted a certain amount of time to pay outstanding citations (e.g., 24 hours). Such clamped vehicles could then be subjected to pay a proposed Wheel Clamp Removal Fee. Thereafter, vehicles could be eligible to be towed. The City's tow yard has the capacity to store 1,500 vehicles.

Wheel Clamping Implementation

- This analysis is based on a Wheel Clamping Program with 30 wheel clamps at $500 per clamp[2] (for a total cost of $15,000) and additional training/implementation costs of approximately $50,000 as assumed from the Police Efficiency Study Report issued on June 2007.

- Based on our analysis, implementing the Wheel Clamping program has an initial cost of $65,831 which includes the purchase of 30 wheel clamps, Automatic License Plate Reader (ALPR) and wheel clamp training, and other training and implementation costs.

- Currently there are approximately 18 Parking Control Checkers (PCC) organized under the Department of Public Works.[3] The City outlines the duties of a PCC as follows: issues notices of violation of statutes of the State of California,

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[1] Financial Management, Business Services Division provided data of unpaid parking ticket issued from 1/1/2003 through 12/31/2007. Further discussion with Business Services Division led us to revise our initial revenue estimates from parking tickets. The City issues approximately 450,000 parking citations annually. The average penalty for a parking citation in the City is approximately $41.

[2] Based on our survey of selected cities, the following cities noted that the cost of standard wheel clamps could range between $300 - $500 each. In estimating implementation cost, we assumed that each boot would cost $500.

[3] According to the City of Long Beach FY 2008 Proposed Budget, Department of Public Works.

Wheel Clamping Implementation (continued)

ordinances of the City of Long Beach, or regulations issued there under relating to the parking or standing vehicles; causes vehicles to be towed away and impounded when applicable; performs other related duties as required.

  - This analysis assumes the use of four PCC's; these employees could be hired by the City for which the cost is contained within this report. As an alternative to hiring four additional employees, the duties of four PCC's could be reassigned to wheel clamping.

- Wheel Clamp detail is assumed to entail driving a Fleet Management vehicle equipped with ALPR technology to identify scofflaws and install/remove wheel clamps. A 24-hour operation may be required to remove wheel clamps after hours and weekends.

- Fleet Management currently has a pick-up truck equipped with ALPR technology. An ALPR database consisting of vehicles with five (5) or more delinquent parking tickets could be uploaded to the vehicle's on-board computer. Thereafter ALPR could be updated hourly through a wireless connection.

- The cost of four PCC's is assumed to be approximately $162,864/year ($1,566 biweekly x 26 = $40,716 x 4 FTE's). According to the Memorandum of Understanding (MOU) for International Association of Machinists and Aerospace Workers dated 10/1/2007 to 9/30/2012, Parking Control Checker's salary is expected to increase 2% per year for the next three years starting on 10/1/2009. Per MOU, additional salary compensation may take effect during night-shift operations and could increase projected salary for PCC. Additional potential salary costs due to night-shift and overtime hours are not included in this study.

Technology and Training

- Fleet Management currently has a pick-up truck equipped with ALPR technology. An ALPR database consisting of vehicles with five (5) or more delinquent parking tickets could be uploaded to the vehicle's on-board computer. Thereafter ALPR could be updated hourly through a wireless connection.

- LBPD informed us that they have the operational knowledge to operate the ALPR technology; we assume LBPD could train the four PCC's in operating the ALPR Technology.

Wheel Clamp Release Fee

- If the decision is made to proceed with wheel clamping, it is suggested that Council act to impose a Wheel Clamp Release Fee of $100. This Wheel Clamp Release Fee would be less costly and serve as an alternative to towing fees; basic tow rates are approximately $170 for vehicles less than 9,000 pounds

Wheel Clamp Release Fee (Continued)

($110 towing fee plus impound charges, $30 Storage Fee and $30 Administrative Fee).

- The Wheel Clamp Release Fee serves two additional purposes: to act as a deterrent for those who ignore their parking tickets, and to give offenders the opportunity to recover their vehicles at a fee significantly lower than the amount associated with towing and vehicle recovery.

- Additionally, we assume that if a vehicle is towed the registered owner would not be responsible to pay the Wheel Clamp Release Fee.

Wheel Clamping in Relation to Collection Agencies

- The City is pursuing a contract with a collection agency that is estimated to generate approximately $700,000 in net annual revenue from delinquent parking violations. The collection agency is compensated with 25 percent of all amounts collected. Other selected cities that we have surveyed such as Los Angeles and Boston utilize collection agencies in conjunction with booting operations, and thus we believe these efforts could potentially be complimentary.

Testimonials From Cities That Immobilize Scofflaws

City of Los Angeles:

- "Wheel clamping is an advanced step in collecting unpaid parking tickets."

City of Boston:

- "Wheel clamping is effective, particularly with out-of-state and leased vehicles which are not subject to DMV renewal."
- "Visibility of clamped vehicles serves as a deterrent and promotes voluntary compliance."

City of Huntington Beach:

- "Parking Control Officers do not have to wait for a tow truck to respond."
- "Saves registered owners towing and storage fees."
- "Cost of implementing a wheel clamp program was limited to purchasing clamps and training personnel; wheel clamp vendor provided training."
- "No additional budget for the wheel clamp program – cost is included in the Parking Control Officer program."

City of New Orleans:

- "A 30 day review of its recently implemented program reveals the following: 370 successful collections totaling $209,027 with 58 towed vehicles; 90% collection rate."
- "A program highlight of one day application of 36 wheel clamps in 12 hours generated $18,450; approximately $1,537 per hour."

Pros and Cons of Wheel Clamping

Pros:

- Wheel clamping may generate additional revenues for the City through wheel clamp fees and payment of unpaid parking citations. Based on our projections, the City could generate additional revenue within the range of $1.1 million to $2.5 million per year.
- Wheel clamping may increase the amount of enforcement actions per day.
- Additional revenues outweigh program implementation costs.
- Wheel Clamp Release Fee is less costly and a more convenient alternative to paying tow and impound charges.

Cons:

- Visibility of clamped vehicles may cause blight, if not towed in an appropriate amount of time.
- Wheel Clamp Removal Fee and tow fees are costly to financially distressed citizens.
- Increased enforcement could result in protests from citizens whose vehicles are clamped.
- Wheel clamping program could result in additional workload burden on affected departments.

OFFICE OF THE CITY AUDITOR
FOLLOW-UP ON LBPD EFFICIENCY STUDY - INITIATIVE # 11
COST BENEFIT ANALYSIS OF WHEEL CLAMPING
JULY 15, 2008

PROJECTED IMPLEMENTATION COST EXCLUDING PCC SALARIES			
Wheel Clamp Cost			
Purchase 30 wheel clamps at $500 (a)		$	15,000
ALPR Training and Wheel Clamp Training			
ALPR Training (b)	361		
Wheel Clamp Training (4 parking control checkers @ $19.58 for 6 hrs each)	470		
Total ALPR Training and Wheel Clamp Training			831
Other Training and Implementation Costs			
Other Training and Implementation costs (c)			50,000
One Vehicle with ALPR technology (d)			-
Total Implementation Cost		$	65,831

(a) Based on our survey of selected cities, the following cities noted that the cost of standard wheel clamps could range between $300 - $500 each. In estimating implementation cost, we assumed that each boot will cost $500.

(b) ALPR training is estimated at $361 ($45.16 per hour for 8 hour training). LBPD estimates that it would take approximately one work day or 8 hours to train four PCC's in operating ALPR technology.

(c) Based on the Police Efficiency Study Report issued on June 2007, implementing a wheel clamping program includes an estimated training cost of $50,000.

(d) Fleet Management currently owns a truck equipped with ALPR technology which may serve two purposes: (1) scan vehicles to identify parking ticket scofflaws and (2) carry wheel clamps to be installed to vehicles with five or more unpaid parking tickets.

REVENUE PROJECTIONS FROM WHEEL CLAMPING BY IMMOBILIZING VEHICLES AT 10%, 15%, AND 20% OF THE 18,900 SCOFFLAWS

Immobilization Rate	Number of Vehicles with Five or More Tickets (e)	Estimated Recovery Rates	Number of Immobilized Vehicles per Year	Wheel Clamp Release Fees and Total Ticket Monies Due from Vehicles	Projected Fees and Citations Recovery From Wheel Clamping Program (f)
Immobilization at 10 percent	18,900	10%	1,890	$722	$1,364,580
Immobilization at 15 percent	18,900	15%	2,835	$722	$2,046,870
Immobilization at 20 percent	18,900	20%	3,780	$722	$2,729,160

Revenue projections are categorized into three recovery rates to highlight expected revenues based on the number of immobilized vehicles. Recovery rates are projected at 10%, 15%, and 20% of the 18,900 scofflaw vehicles. The City is estimated to collect a proposed $100 wheel clamp release fee and $622 (g) from vehicles with five or more unpaid citations or approximately $722.

(e) Based on discussion with LBPD, we anticipate that 20% of the 18,900 scofflaw vehicles are uncollectable due to out-of-state vehicles, ownership transferred prior to re-registration, and citations issued to a rental car.

(f) Projected Fees and Citation recovery rate from wheel clamping program is calculated as follows: 10% Recovery Rate = $1,364,580 [($100 clamp fee + $622 value of unpaid tickets from each scofflaw) x 1,890 ten percent of total scofflaw vehicles].

(g) Based on the data provided by Financial Management, Business Services Division, each vehicle is estimated to owe the City $622. The average value of parking tickets from vehicles with five or more unpaid citations issued from 1/1/2003 through 12/31/2007 is $622.

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10% RECOVERY	Year 1	Year 2	Year 3	Year 4
Gross Revenues:				
Wheel Clamp Release Fee (1,890 vehicles per year x $100 wheel clamping fee)	$ 189,000	$ 189,000	$ 189,000	$ 189,000
Payment on Unpaid Parking Citations (1,890 Vehicles per year x $622 avg citations from vehicles with 5 or more unpaid tickets)	1,175,580	1,175,580	1,175,580	1,175,580
Total Gross Revenues	$ 1,364,580	$ 1,364,580	$ 1,364,580	$ 1,364,580
Cost of Project:				
LESS: Cost of 30 Wheel Clamps at $500 each	$ 15,000	$ -	$ -	$ -
LESS: ALPR and Wheel Clamp Training	831	-	-	-
LESS: Training/Implementation Cost	50,000	-	-	-
LESS: Salaries of 4 Parking Control Checkers (h)	162,864	166,121	169,444	172,833
Total Cost of Project	$ 228,695	$ 166,121	$ 169,444	$ 172,833
Net Revenue (i)	**$ 1,135,885**	**$ 1,198,459**	**$ 1,195,136**	**$ 1,191,747**

15% RECOVERY	Year 1	Year 2	Year 3	Year 4
Gross Revenues:				
Wheel Clamp Release Fee (2,835 Vehicles per year x $100 wheel clamping fee)	$ 283,500	$ 283,500	$ 283,500	$ 283,500
Payment on Unpaid Parking Citations (2,835 Vehicles per year x $622 avg citations from vehicles with 5 or more unpaid tickets)	1,763,370	1,763,370	1,763,370	1,763,370
Total Gross Revenues	$ 2,046,870	$ 2,046,870	$ 2,046,870	$ 2,046,870
Cost of Project:				
LESS: Cost of 30 Wheel Clamps at $500 each	$ 15,000	$ -	$ -	$ -
LESS: ALPR and Wheel Clamp Training	831	-	-	-
LESS: Training/Implementation Cost	50,000	-	-	-
LESS: Salaries of 4 Parking Control Checkers (h)	162,864	166,121	169,444	172,833
Total Cost of Project	$ 228,695	$ 166,121	$ 169,444	$ 172,833
Net Revenue (i)	**$ 1,818,175**	**$ 1,880,749**	**$ 1,877,426**	**$ 1,874,037**

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COST BENEFIT ANALYSIS OF WHEEL CLAMPING
JULY 15, 2008

20% RECOVERY	Year 1	Year 2	Year 3	Year 4
Gross Revenues:				
Wheel Clamp Release Fee (3,780 vehicles per year x $100 wheel clamping fee)	$ 378,000	$ 378,000	$ 378,000	$ 378,000
Payment on Unpaid Parking Citations (3,780 Vehicles per year x $622 avg citations from vehicles with 5 or more unpaid tickets)	2,351,160	2,351,160	2,351,160	2,351,160
Total Gross Revenues	$ 2,729,160	$ 2,729,160	$ 2,729,160	$ 2,729,160
Cost of Project:				
LESS: Cost of 30 Wheel Clamps at $500 each	$ 15,000	$ -	$ -	$ -
LESS: ALPR and Wheel Clamp Training	831	-	-	-
LESS: Training/Implementation Cost	50,000	-	-	-
LESS: Salaries of 4 Parking Control Checkers (h)	162,864	166,121	169,444	172,833
Total Cost of Project	$ 228,695	$ 166,121	$ 169,444	$ 172,833
Net Revenue (i)	**$ 2,500,465**	**$ 2,563,039**	**$ 2,559,716**	**$ 2,556,327**

(h) According to the Memorandum of Understanding (MOU) for International Association of Machinists and Aerospace Workers dated 10/1/2007 to 9/30/2012, Parking Control Checker's salary is expected to increase 2% per year for the next three years starting on 10/1/2009. Per MOU, additional salary compensation may take effect during night-shift operations and could increase projected salary for PCC. Additional potential salary costs due to night-shift and overtime hours are not included in this study.

(i) Based on the Police Efficiency Study Report - Initiative # 11, issued on June 2007, parking ticket revenue is expected to decrease substantially after its first year of operation. This initial report assumed that the number of scofflaws would decrease after initial enforcement. However, because the number of scofflaws provided by management includes only those tickets issued in the last five years, we assume here that the number of scofflaws remains constant, with the new offenders replacing those purged from the list.

SCOFFLAW CATEGORIES

SCOFFLAW CATEGORIES	TOTAL AMOUNT DUE	% OF CITATION DUE	NUMBER OF VEHICLES	% OF VEHICLES W/ UNPAID CITATIONS	AVERAGE AMOUNT DUE
Scofflaw with 5 unpaid tickets	$ 2,230,699	19.0%	5,421	28.7%	$ 411.49
6-10 unpaid tickets	$ 6,823,133	58.0%	11,131	58.9%	$ 612.98
11 or more unpaid tickets	$ 2,707,254	23.0%	2,353	12.4%	$ 1,150.55
Grand Total	$ 11,761,086	100.0%	18,905	100.0%	

Average Value of Tickets from Vehicles with five or more unpaid citations issued between 1/1/2003 - 12/31/2007 **$622**

According to the data provided by Financial Management, Business Services Division, the majority of unpaid citations are from scofflaws with 6 to 10 unpaid citations with a total balance due of $6.8 million, from tickets issued between 1/1/2003 - 12/31/2007.

OFFICE OF THE CITY AUDITOR
FOLLOW-UP ON LBPD EFFICIENCY STUDY - INITIATIVE # 11
SURVEY OF SELECTED CITIES THAT USE WHEEL CLAMPS
JULY 15, 2008

CITY	POPULATION SIZE	YEAR WHEEL CLAMP INTRODUCED	HRS BOOT REMAINS ON VEHICLE	BOOT RELEASE FEE FY2007	NUMBER OF VEHICLES BOOTED PER YEAR	GROSS REVENUE FROM BOOT RELEASE FEE - FY2007	CONTACT
Los Angeles, CA	3,849,378	1987	24	$125	7,000	$625,835*	Wayne Garcia (213) 972-4925 wayne.garcia@lacity.org
Chicago, IL	2,833,321	1987	24	$60	58,886	$21.7 million **	Matt Darst (312) 742-2827 mdarst@cityofchicago.org
Houston, TX	2,144,491	1995	72	$100	1,400	$246, 276 **	Melonie Curry (713) 853-8271 melonie.curry@cityofhouston.net
San Francisco, CA	744,041	1989	72	$75	4,195	$3.3 million **	James Lee (415) 553-7962 james.lee@sfmta.com
Boston, MA	590,763	1982	48	$56	5,700	$319,000	Gina Fiandaca (617) 635-3660 gina.fiandaca@cityofboston.gov
Long Beach (Projected, at 20% recovery rate)	472,494	2008	24	$100	3,780	$378,000	
Fresno, CA	466,714	2007	24	$100	37	$3,700	Carl Farmer (559) 621-8813 carl.farmer@fresno.gov
New Orleans, LA	223,388	2008	48	$75	370	$209,027**	Robert C Mendoza (504) 658-8000 rmendoza@cityofno.com
Huntington Beach, CA	194,436	1999	72	$100	148***	$14,800***	Lt. John Cottriel (714) 563-5661 jcottriel@hbpd.org
Syracuse, NY	140,658	2008	24	$50	1,110	$200,000 **	Richard Scheutzow (315) 448-8310 rscgeutzow@ci.syracuse.ny.us
Santa Monica, CA	84,084	1993	24	$115	75	$8,625	Lt. Kathy Keane (310) 458-8430 kathy.keane@smgov.net
Laguna Beach, CA	23,727	1990	72	$35	120	$5,000**	Sergeant Bob Rahaesuer (949) 464-8430 brahaeuser@lagunabeachcity.net

* Represents net revenue from booting operation which includes operational costs.
** Revenue amount includes paid citations and other fees.
*** Amount represents vehicles towed within the last two years from the date surveyed; calculated revenue based on the data provided.