### CITY OF LOS ANGELES GREEN TAXICAB IMPLEMENTATON PROGRAM



#### PROGRAM REQUIREMENTS AND STATUS OF TAXICAB GREENING AS OF APRIL 1, 2014

# FRANCHISING & TAXICAB SERVICE REQUIREMENTS

In the City of Los Angeles, taxicab transportation service is authorized through franchise ordinances to organizations who are then tasked to:

- Uphold all City rules and regulations
- Provide acceptable service performance standards in all areas of the City
- Provide for wheelchair accessible vehicle service
- Provide driver drug testing and training
- Provide for customer service programs
- IMPLEMENT THE GREEN TAXI PROGRAM

## **GREEN TAXI PROGRAM**

- In 2010, the City Council and the Mayor approved the renewal of existing taxicab franchises for a minimum five year period (through calendar year 2015) with the provision that the taxicab operators provide for an enhanced taxicab greening implementation program (as allowed in each franchise ordinance) whereby 80% of the non-wheelchair fleet would be changed into green taxis by the end of the franchise period.
- In 2010, the Board of Taxicab Commissioners approved Board Order No. 062, detailing the requirements for the green taxi program including the initial types of vehicles that could be included in the program.
- All taxicab operators accepted the new terms and conditions of the franchise renewals, and the green taxicab implementation program officially began on January 1, 2011.

## WHAT CONSTITUTES A GREEN TAXI

In order to be considered as a green taxicab, vehicles had to provide for reductions in both smog pollution and green house gas emissions.

<u>Smog Pollution</u> – Green vehicles had to obtain a rating of Super Ultra Low Emission Vehicle (SULEV) or cleaner by the California Air Resources Board in order to reduce smog pollution. Most of the taxicabs in service in 2010 were only considered as Low Emission Vehicles (LEV) or Ultra Low Emission Vehicles (ULEV).

<u>Green House Gas Emissions</u> – Green vehicles also had to be either high mile-per-gallon fuel efficient vehicles (starting at 24 mpg average), or alternative fueled vehicles such as compressed natural gas fueled vehicles in order to emit lower amounts of green house gases (CO2) during carbon fuel burns. Most of the taxicabs in service in 2010 were Ford Crown Victoria sedans and minivans at 16 mpg fuel economy.

The highest level green vehicles were considered as CNG vehicles or SULEV hybrid vehicles at minimum 28 mpg fuel economy.

### **PROGRAM CONDITIONS**

- Each taxicab operator was provided with an annual green taxi implementation requirement with 16% of the total green vehicle target to be established at the end of year one, followed by a 21% increase each year. Each franchised taxicab operator must meet their individual requirements.
- The total taxicab industry minimum green taxi requirement is 1,703 vehicles to be in service by end of calendar year 2015 out of the total fleet size of 2,361 taxicabs. This included annual targets of 272; 632; 988; 1,346; and 1,703 green vehicles in program years one through five (2011 through 2015).
- A limited number of non-hybrid, high mpg fuel efficient vehicles could be added as green taxicabs as part of the program (maximum of 20% of the vehicles added 2011, max of 15% for 2012, and max of 10% in 2013-2015) but these vehicles do not get to stay in service as long as hybrid or CNG fueled green taxis.

### **PROGRAM INCENTIVES**

- <u>Added Airport Service Year One Vehicles</u> The highest rated green vehicles (SULEV hybrids or CNG fueled vehicles) that were added to the fleets just prior to or during the first year of the program (2010 – 2011) were granted added trip status at the Los Angeles International Airport. 322 total vehicles were allowed to have added evening access on Sunday nights for a six month period when it was most typical to request added cabs at the airport. These 322 vehicles were given access during one of three different six month rotations.
  - <u>Vehicle Age (In/Out) Changes</u> The highest rated green taxicabs were allowed to be placed into service up to five years from the model year of the vehicle (as compared to a four year start rule for other vehicles), and were allowed to operate up to 10 years from the model year of the vehicle (as compared to eight to nine years for other vehicles).

## THE ECONOMICS OF THE PROGRAM

- <u>Vehicle Costs</u> A typical used Ford Crown Victoria was purchased at a cost to the vehicle owner (and member in one of the taxicab franchises) at approximately \$7,000 (not including painting and equipment). A typical used Toyota Prius Hybrid (the most common green taxi) costs approximately \$14,000 to \$18,000.
- <u>Fuel Savings</u> At approximately 55,000 to 60,000 miles driven per year in a taxicab, fuel costs for a typical Ford Crown Victoria (16 mpg) were more than \$240 per week. The average mpg for the fleet of green taxis was 45.8 mpg in 2013, equating to a weekly fuel cost of only \$90. This leads to a fuel savings of more than \$150 per week.
- <u>Lease Surcharges</u> Vehicle owners that are also the driver reap the fuel saving themselves in order to pay for the higher cost of the vehicle, the potential for increased maintenance costs in the future (batteries, etc.), and added insurance cost for collision/comprehensive. If the vehicle is leased, than a weekly surcharge for a single driver at \$70 to \$120 per week (\$100 average) is assessed as income to the vehicle owner towards the added purchase and maintenance costs.

## WHERE ARE WE NOW

- The Los Angeles Green Taxi Program is thriving. Most of the taxicab operators have met and are exceeding the program requirements. Both drivers and customers are reporting that the smaller hybrid vehicles (mainly Toyota Prius and Camry hybrids) have more room than expected. The use of cameras in lieu of typical safety shields has also brought a higher degree of comfort to both the driver and the customer.
- The minimum green target goal of 988 green taxis by end of calendar year 2013 was exceeded with a green taxi count of 1,450 vehicles.
- Compared to the fleet of vehicles in service in June 2010, as of end of program year 2013, the taxicab industry provided for a 68% reduction in smog pollution and a 41% reduction in green house gas emissions.
- As of April 1, 2014, there were 1,546 green taxis in service in Los Angeles, roughly 2/3rds of the entire fleet.

### METRICS – VEHICLE BREAKDOWNS VEHICLE INSERTION RATES & VEHICLE EMISSION CHANGES

#### **GREEN TAXI VEHICLE IMPLEMENTATION STATUS with VEHICLE TYPE**

Updated Green Taxi Status Thru March 2014											
				Green V	ehicles lı	n Service No. of Gasoline Fueled Level 1-3 Cabs In Service 0 2 0 16 0 10 10 0 10 29					
Operator	Current Green Count	Total No. Req'd by 12/31/14	% of Req'd 2014 Green Count	on Status No. of Green Cabs Needed by 12/31/14	No. of non ADA cabs still due for replcmnt for 2014		No. of Older CNG's In Service	No. of Newer CNG's In Service	No. of Hybrids In Service	No. of Gasoline Fueled Level 1-3 Cabs In	
Bell Cab	185	160	11 <b>6</b> %	0	18		0	0	185	0	
Bev Hills Cab	118	90	131%	0	3		0	0	116	2	
L. A. Checker Cab	220	155	14 <b>2</b> %	0	1		0	0	220	- /// 8	
ΙΤΟΑ	178	142	1 <b>25</b> %	0	4		0	0	162	16	
United Chkr Cab	52	42	1 <b>2</b> 4%	0	0		0	0	52	0	
United Ind. Taxi	168	151	111%	0	9		0	0	158	10	
City Cab	84	100	84%	16	8		0	4	80	0	
Untd. Taxi S. F. Valley	61	49	124%	0	5		0	0	60	1	
Yellow Cab	498	457	109%	0	18		0	0	498	0	
Total	1564	1346	116%	16	66		0	4	1531	29	
Hybrid Vehicle Types	Toyota Prius Sedan	Toyota Prius V Wagon	Toyota Camry Sedan	Nissan Altima Sedan	Ford Fusion / Lincoln MKZ Hybrid	Honda Insight Hybrid	Ford Escape SUV	Merc Mariner SUV	Total In Service		
Bell Cab	162	Ĩ	13	9	0	0	0	0	185		
Bev Hills Cab	98	10	7	0	1	0	0	0	116	1	
L. A. Checker Cab	145	3	70	1	0	0	1	0	220	1	
ΙΤΟΑ	137	9	15	0	0	0	0	1	162		
United Chkr Cab	46	0	1	0	0	0	5	0	52		
United Ind. Taxi	121	21	11	2	1	0	2	0	158		
City Cab	80	0	0	0	0	0	0	0	80		
Untd. Taxi S. F. Valley	50	2	6	0	0	0	2	0	60		
Yellow Cab	429	14	23	0	1	1	28	2	498	1	
Total Hybrid Taxis	1268	60	146	12	3	1	38	3	1531		
% of Hybrid Type	82.8%	3.9%	9.5%	0.8%	0.2%	0.1%	2.5%	0.2%	100%		



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#### Green Cab Requirements and Monthly In-Service Vehicle Updates

	Minimum Green Cabs Required (80% of all non-wheelchair accessible vehicles)					Total Green Cabs In Service Each Month (not necessarily subsidized)							Level 4 11/12	Level 4 12/13	Level 4 13/14
Operator	Req'd 12/31/11	Req'd 12/31/12	Req'd 12/31/13	Req'd 12/31/14	Req'd 12/31/15	Ttl Green 12/31/13	Ttl Green 1/31/14	Ttl Green 2/28/14	Ttl Green 3/31/14	Ttl Green 4/30/14	Ttl Green 5/31/14	Ttl Green 6/30/14	Level 4 Green Added 7/1/11 thru 6/30/12	Level 4 Green Added 7/1/12 thru 6/30/13	Level 4 Green Added 7/1/13 thru 6/30/14
Bell Cab	32	75	117	160	202	167	170	181	185				53	52	48
Beverly Hills Cab	18	42	66	90	114	107	109	115	118				37	51	28
L. A. Checker Cab	31	73	114	155	196	209	214	217	220				74	86	43
Independent Taxi	29	67	104	142	180	168	171	174	178				59	61	36
United Checker Cab	8	20	31	42	53	52	52	52	52				18	11	2
United Independent Taxi	31	71	111	151	191	152	159	163	168				43	64	49
City Cab	20	47	73	100	126	78	80	82	84				10	40	30
United Taxi S.F. Valley	10	23	36	49	62	56	58	61	61				13	30	14
Yellow Cab	93	214	336	457	579	461	476	486	498				129	191	130
Total Count	272	632	988	1346	1703	1450	1489	1531	1564						
Percentage Compliance	16%	37%	58%	79%	100%	85.1%	87.4%	89.9%	91.8%				436	586	380
						Note: A small percentage of vehicles added as "green" taxicabs may be Level 1 to Level 3 rated vehicles (SULEV emission with high MPG values, but non-hybrid or alternative fuel). Level 1 to Level 3 vehicles are not eligible for any type of subsidy should one be approved in the future. Level 4 vehicles (minimum SULEV and either high MPG Hybrids or Alternative Fuel Vehicles) are the top rated "green" vehicles. A total of 1,535 of the current 1,564 green taxis are considered Level 4. 133 Level 4 vehicles were placed into taxicab service prior to fiscal year 11/12; 436 of the current Level 4 vehicles were first placed into taxicab service in fiscal year 11/12; 586 of the current Level 4 vehicles were first placed into taxicab service in fiscal year 12/13; and 380 additional Level 4 vehicles have been placed into taxicab service in fiscal year 13/14 as of March 31, 2014.									



Estimated Reductions in Smog Pollution and GHG Emissions - Average Taxi Fleet Emissions	Vehicle Mix (at estimated 55K miles per year average)	Smog (Ibs/yr)	Smog Reduce	GHG (tons CO2/yr)	GHG Reduce	Ttl Reduce
Average Fleet Vehicle Emissions from 1999 to 2003	Tier 1 Vehicles Only	41.8	n/a	32.7	n/a	n/a
Average Fleet Vehicle Emissions as of June 1, 2010	mix of Tier 1 & Tier 2 vehicles	28.7	n/a	33.3	n/a	n/a
Average Fleet Vehicle Emissions Dec 31, 2011 (363 green)	1st year of green taxi program	20.2	30%	30.2	9%	39%
Average Fleet Vehicle Emissions Dec 31, 2012 (926 green)	2nd year of green taxi program	13.9	52%	24.5	26%	78%
Average Fleet Vehicle Emissions Dec 31, 2013 (1450 green)	3rd year of green taxi program	9.1	68%	19.5	41%	110%
Average Fleet Vehicle Emissions Dec 31, 2014 (estimated)	4th year of green taxi program	7.7	73%	18.0	46%	119%
Average Fleet Vehicle Emissions Dec 31, 2015 (1705 green)	5th year of green taxi program	6.6	77%	17.2	48%	125%

#### Smog Pollution and Green House Gas Vehicle Emission Reductions for LA Taxicabs

