Attachment D

Pearson Declaration

ATTACHMENT D: EVALUATION OF DIFFERENT PATHS TO CLEANER AIR USING A BENEFIT-COST FRAMEWORK

BENEFITS EVOKED BY THE PROGRAM					
Benefits evaluated through 2025	CTP-POLB (Low estimate)	CTP-POLB (High estimate)	CTP-Actual (Low estimate)	CTP-Actual (High estimate)	Primary Source Citations
Public health benefits					
Premature deaths avoided per year	38	49	38	49	Husing (2007)
Applicable years	14	14	14	14	
Value of each death avoided	$ 8,200,000	$ 8,200,000	$ 8,200,000	$ 8,200,000	Husing (2007)
Health (death reduction) benefits	$ 4,362,400,000	$ 5,625,200,000	$ 4,362,400,000	$ 5,625,200,000	Computation
Other health benefits	$ 218,120,000	$ 281,260,000	$ 218,120,000	$ 281,260,000	Husing/Computed
Total health benefits	**$ 4,580,520,000**	**$ 5,906,460,000**	**$ 4,580,520,000**	**$ 5,906,460,000**	
Other community benefits					
Anti-poverty payments avoided	$ -	$ -	$ 1,248,024,175	$ 1,248,024,175	LAANE
Driver insurance benefits	$ 70,560,000	$ 176,400,000	$ 123,480,000	$ 264,600,000	BCG
Improved road safety (better driver training)	$ -	$ -	$ 45,120,517	$ 90,241,034	BCG
Traffic congestion reduced	$ -	$ -	$ -	$ 1,183,681,232	BCG
Traffic accidents reduced	$ -	$ -	$ -	$ 451,205,226	BCG
Total community benefits	**$ 70,560,000**	**$ 176,400,000**	**$ 1,416,624,692**	**$ 3,237,751,667**	
Safety benefits					
Port damage recovery - insurance, indemnity	$ 56,000,000	$ 140,000,000	$ 56,000,000	$ 140,000,000	FMC Estimate
Safety and security benefits	**$ 56,000,000**	**$ 140,000,000**	**$ 56,000,000**	**$ 140,000,000**	
Operational (supply-side) benefits					
Wait time reduction	$ -	$ -	$ -	$ 298,296,320	BCG
IOO wage rate increases (eliminated)	$ -	$ -	$ -	$ -	BCG
Operational benefits	**$ -**	**$ -**	**$ -**	**$ 298,296,320**	
TOTAL BENEFITS	**$ 4,707,080,000**	**$ 6,222,860,000**	**$ 6,053,144,692**	**$ 9,582,507,987**	

Attachment D: Evaluation of different paths to cleaner air using a benefit-cost framework (page 2, continued)

COSTS EVOKED BY THE PROGRAM Costs evaluated through 2025	CTP-POLB (Low estimate)	CTP-POLB (High estimate)	CTP-Actual (Low estimate)	CTP-Actual (High estimate)	Primary Source Citations
Truck fleet replacement costs					
Number of trucks to be replaced	16,800	16,800	12,800	12,800	CAAP
Cost to replace dirty trucks	$ 2,092,574,400	$ 2,333,184,000	$ 1,680,274,400	$ 1,920,884,000	POLA & POLB
"Incentive" trucks	0	0	4,000	4,000	BCG
Cost to attract incentive trucks	$ -	$ -	$ 120,000,000	$ 120,000,000	Computation
LNG infrastructure cost (annualized)	$ 21,168,000	$ 35,280,000	$ 21,168,000	$ 35,280,000	CARB
LNG station labor cost (assisted fueling)	$ 30,340,800	$ 50,568,000	$ 30,340,800	$ 50,568,000	CARB
Offsetting grants, Proposition 1B	$ 400,000,000	$ 400,000,000	$ 400,000,000	$ 400,000,000	CARB
Administrative cost of truck lease/loan defaults	$ 5,040,000	$ 20,160,000	$ 1,920,000	$ 3,840,000	LAANE/FMC Est.
Fleet replacement/infrastructure cost	**$ 1,749,123,200**	**$ 2,039,192,000**	**$ 1,453,703,200**	**$ 1,730,572,000**	
Concession costs					
Number of LMCs	800	800	800	800	POLA & POLB/Est.
Number of trucks	16,800	16,800	16,800	16,800	CAAP
Concession application fee, every 5 years	$ 560,000	$ 560,000	$ 5,600,000	$ 5,600,000	POLA & POLB
Truck fees	$ 35,280,000	$ 41,160,000	$ 35,280,000	$ 41,160,000	POLA & POLB
Concessions and grant administration	$ 31,500,000	$ 39,165,000	$ 31,500,000	$ 39,165,000	POLA & POLB
PortCheck administration	$ 43,300,000	$ 76,300,000	$ 43,300,000	$ 76,300,000	WCMTOA
Total concessions/administration cost	**$ 110,640,000**	**$ 157,185,000**	**$ 115,680,000**	**$ 162,225,000**	
Operational (supply-side) costs					
Employment mandate - more wages/fringe benefits	$ -	$ -	$ 2,765,662,234	$ 3,085,195,546	Husing (2007)
Employment mandate - more drivers required	$ -	$ -	$ 2,044,151,998	$ 2,044,151,998	Husing (2007)
Unionization arising from the employee mandate	$ -	$ -	$ 1,160,028,148	$ 1,353,366,172	FMC Est/Monaco
Truck parking requirement	$ -	$ -	$ 196,000,000	$ 196,000,000	FMC Estimate
Day pass (out-of-state/long distance trucks)	$ 333,575,340	$ 667,150,680	$ 333,575,340	$ 667,150,680	Ports/Starcrest
Reduced flexibility to deal with peak demand	$ -	$ -	$ -	$ 453,600,000	FMC Estimate
Impaired operational efficiency - i.e., two plans	$ -	$ -	$ 11,280,129	$ 505,855,953	FMC Estimate
Operational costs	**$ 333,575,340**	**$ 667,150,680**	**$ 6,510,697,849**	**$ 8,305,320,349**	
Safety costs					
Training and compliance via concession	$ -	$ -	$ 50,176,000	$ 65,856,000	FMC Estimate
Safety and security costs	**$ -**	**$ -**	**$ 50,176,000**	**$ 65,856,000**	
TOTAL COSTS	**$ 2,193,338,540**	**$ 2,863,527,680**	**$ 8,130,257,049**	**$ 10,263,973,349**	

Attachment D: Evaluation of different paths to cleaner air using a benefit-cost framework (page 3, continued)

SUMMARY					
BENEFIT - COST SUMMARY	**CTP-POLB Worst Case Outcome** (Lower benefit Higher cost)	**CTP-POLB Best Case Outcome** (Higher benefit Lower cost)	**CTP-Actual Worst Case Outcome** (Lower benefit Higher cost)	**CTP-Actual Best Case Outcome** (Higher benefit Lower cost)	
TOTAL BENEFITS	$ 4,707,080,000	$ 6,222,860,000	$ 6,053,144,692	$ 9,582,507,987	Computation
TOTAL COSTS	$ 2,863,527,680	$ 2,193,338,540	$ 10,263,973,349	$ 8,130,257,049	Computation
NET BENEFITS (B-C)	$ 1,843,552,320	$ 4,029,521,460	$ (4,210,828,657)	$ 1,452,250,939	Computation
BENEFIT/COST RATIO (B/C)	1.6	2.8	0.6	1.2	Computation

Cell: B5
Comment: Scope of the analysis:
The time frame selected covers a period long enough to capture all the important benefits and costs likely to arise from implementing the various plans. By 2025, the trucks replaced under these plans may be nearing the end of their economic and/or technology cycles, and more stringent emission standards most likely will be promulgated by then. The external sources used for the health benefits specifically attributable to the CTP were calculated through 2025. Costs and benefits were calculated on the basis of full implementation from January 1, 2012 onwards.

Cell: C5
Comment: CTP-POLB:
This model reflects the CTP fee (and limited exemptions) as well as the rolling ban, plus all elements of the POLB concession agreements. Using the low estimates, the benefits and costs in this model assume both ports adopt the features contained in the POLB concessions plan.

Cell: D5
Comment: CTP-POLB:
This model reflects the CTP fee (and limited exemptions) as well as the rolling ban, plus all elements of the POLB concession agreements. The benefits and costs in this model assume both ports adopt the features contained in the POLB concessions plan using the high estimates.

Cell: E5
Comment: CTP-Actual:
This model estimates the benefits and costs of the actual clean truck program agreed between the two ports using the low estimates.

Cell: F5
Comment: CTP-Actual:
This model estimates the benefits and costs of the actual clean truck program agreed between the two ports using the high estimates.

Cell: B8
Comment: Premature deaths avoided:
The CARB port drayage regulation is estimated to save 1,200 premature deaths (statewide) by 2020, at a total health cost saving of $8.7B (which values each premature death prevented at $7.25M). With respect to the CTP, the Husing Report, at Exhibit 3, claims 840 premature deaths will be avoided between 2008 and 2025, (i.e., 49 per year), and uses a value for an avoided death of $8.2M (2007 value). He also produced a second lower estimate based on the CARB methodology but using emission estimates provided by the SCAQMD.

Cell: C8
Comment: Premature deaths:
Based on a mean of 650 mean cases through 2025 using AQMP estimates of emissions (Husing Exhibit 4).

Cell: B10
Comment: Value of each avoided death:
Relying on the value of a "statistical life," we have used the Husing value for avoidance of a premature death. CARB has this figure rising to $8.4M in 2010 and $8.6M by 2014. (Note: A recent Berkeley paper evaluating drayage truck replacement programs used a much more conservative figure of just $2M.)

Cell: B11
Comment: Health (death reduction) benefits:
Approximately 75% of the health benefits shown in this row are associated with reductions in PM from direct sources (according to CARB), while the other 25% is associated with reduced NOx.

Cell: B12
Comment: Other health benefits:
Husing estimates that other health benefits are just 5 percent of the total health benefits. In other words, avoiding premature deaths account for 95% of total health benefits. The estimates on this line are derived by taking 5 percent of the estimated health benefits shown on the row above.

Cell: B13
Comment: Total health benefits:
The higher estimates represents the mean of the monetized value associated with a CARB methodology applied by Husing (Exhibit 3). The lower estimates represent the mean using the same CARB methodology but using SCAQMD staff estimates using the AQMP emissions inventory (Exhibit 4 in Husing 2007).

Cell: B15
Comment: Other community benefits:
The Los Angeles Alliance for a New Economy (LAANE) identified other unquantified community benefits potentially obtainable by achieving cleaner air, e.g., improved safety, improved school performance, lower crime rates, and higher property values. None of these benefits are

identified here; however, these non-health benefits should apply equally regardless of which specific compliance model/path to cleaner air is adopted.

Cell: E16
Comment: Anti-poverty payments avoided (CTP-Actual):
According to LAANE, the average IOO qualifies for $18,173 per year in tax payer financed anti-poverty payments which could be eliminated under the employee model (see The Road to Shared Prosperity, page 8). The same report notes that 88% of the 16,800 port drivers are IOO (p12). Social payments include EITC, WIC, Section 8 housing payments, free or reduced-price meals, and so on (p13). However, these benefits may be overstated because the income and social subsidies calculated relate to household income, but the data in the LAANE table shows just driver income (i.e., the data ignore the fact that a spouse may be working). The number of port drivers in this calculation has been adjusted to reflect the fact that 79 percent of them are married (footnote 18 in the report). Also, driver earnings data show that 25 percent of all drivers earn over $38,000 net of expenses and, therefore, may not qualify for these payments (see Monaco, 2004, p14).

Cell: B17
Comment: Driver insurance benefits:
The estimates shown here derive from the BCG spreadsheet supplied in response to RFAI Q29. An estimated insurance benefit per person per year of $3,000 (Institute of Medicine) was used. The low estimate assumes a 10 percent increase in the insured at POLB rising to 25 percent for the upper estimate. The low estimate for POLA assumes a 25 percent increase in the insured and 50 percent increase for the high estimate.

Cell: B18
Comment: Improved road safety:
Sources - BCG spreadsheet provided under the RFAI. The estimates used here are based on LA County accident costs ($10.9B annually); highway miles with heavy drayage as a percent of LAC highway miles is 20%. (BCG cite other sources for these data.) The percent of highway accidents due to trucks is said to be 33%. Average accident damage due to drayage trucking is $709M. The percent of drayage hours saved due to better matching is said to be 8% (through a 10 percentage point increase in matching, leading to fewer trips); making annual savings possible of $57.5M for increased safety. BCG applied a factor of 10% to this figure to produce a low estimate of $5,755,168 annually for increased safety beyond congestion due to (assumed) safety training and better truck maintenance. The high end estimate assumes a figure of 20% instead of 10% (per BCG spreadsheet). 56% of this figure is apportioned to POLA to reflect the percent of all drays that involve POLA.

Cell: B19
Comment: Traffic congestion (reduced):
Source - BCG spreadsheet provided under the RFAI. The claimed reduction in traffic congestion is obtained through increased matching of container loads, thereby reducing the number of trips required. BCG cites other sources showing that congestion cost in LA is $9.3 B annually, 20% of which is caused by drayage. BCG uses an average dray trip time of 4 hours and applies a low end estimate of an increase in matching from 15.9% to 25.9% and an increase from 15.9% to 65.9% for the high estimate. BCG calculated the number of trips thereby saved and the total trip hours saved. We chose to use the BCG conservative (low) estimate of $151M per year as even this estimate represents a sizeable increase in matching (which doesn't seem feasible without a drastic change in the structure of the industry).

Cell: E19
Comment: Traffic congestion reduced (CTP-Actual):
The low end estimate assumes POLA is unsuccessful at reshaping the drayage market in ways that allow it to achieve the operational efficiencies envisioned.

Cell: B20
Comment: Traffic accidents reduced:
Sources - BCG spreadsheet provided under the RFAI. The estimates used here are based on LA County accident costs ($10.9B annually); highway miles with heavy drayage as a percent of LAC highway miles is 20%. (BCG cite other sources for these data.) The percent of highway accidents due to trucks is said to be 33%. Average accident damage due to drayage trucking is $709M. The percent of drayage hours saved due to better matching is said to be 8%; making annual savings possible of $57.5M.

Cell: E20
Comment: Traffic accidents (CTP-Actual):
The BCG report elected to use a high estimate ($262M) based on the number of drayage hours saved per year. The aggressive estimates used by BCG are premised on a model of the drayage market that is quite different from the current perfectively competitive drayage market. If the latter model prevails (as we expect with 800 LMCs), no benefits will accrue to reduced traffic accidents because there is unlikely to be any reduction in trips.

Cell: F20
Comment: Traffic accidents (CTP-Actual):
The BCG report elected to use a high estimate ($262M); We use the conservative (low) estimate here ($57.6M). The aggressive estimates used by BCG are premised on a model of the drayage market that is quite different from the current perfectively competitive drayage market and are unattainable if the latter structure remains.

Cell: B24
Comment: TWIC enforcement:
DHS/CBP expects to enforce TWIC at the San Pedro Bay ports in April 2009. DHS is taking about 4 months to process the cards. Most optimistically, the ports will be ahead of DHS by 3 months or so - the net effect of which is too small to quantify: hence no estimates of the security benefits stemming from early adoption of TWIC are included here for any of the models.

Cell: B25
Comment: Port damage:
Under the concessions models, the ports are better protected for the recovery of damages caused by LMCs and drivers. The ports have not furnished any estimates of benefits stemming from these requirements. Until more reliable estimates are provided by the parties, a simple assumption is made here that $5M more in damages per year (high end) and $2 million (low end) are recovered by each port as a result of improved mandated insurance coverage imposed on drivers and LMCs.

Cell: B29
Comment: Wait time reduction:
The BCG spreadsheet supplied under the RFAI claim some time savings (and hence reduced number of trips) under the POLA concession model.

Cell: E29
Comment: Wait time reduction (CTP-Actual):
The BCG high estimate assumes an 80% reduction in idle (wait) time from 2 hours per trip (median) to just 24 minutes. Given that wait time is mostly outside the LMC's ability to control (mainly under the control of MTOs), this seems an implausibly large reduction. As a low estimate, we suggest that no wait time savings may be achievable.

Cell: F29
Comment: Wait time reduction, CTP-Actual:
This estimate allows for a potential wait time reduction of from the current 2 hours to 1.6 hours (the low end of the BCG estimate). While wait time is largely outside the driver's or LMC's ability to control, under certain scenarios it may be possible to obtain some time savings through terminal appointment systems, for example. We discount the notion that an 80 percent reduction in this factor is achievable (the BCG high end estimate). According to BCG the reduction from 2 hours to 1.6 is worth $38M annually.

Cell: B30
Comment: IOO wage rate increases:
The BCG report at p 21 and the spreadsheet provided under the RFAI furnishes estimates that appear to take IOO wages (of almost $300M annually baseline) and appropriate increases on that figure as a benefit of (projected) hourly wage rate increases per hour (presumably due to the employment mandate) from a baseline of $11.60 to $18.32 by year 5 (when the employment mandate is met). (Note: The Year 1 average hourly rate is $13.57 which should reflect the impact of TWIC.) We view any such wage hikes as a cost of the employee mandate (properly so under the Shipping Act) rather than a benefit.

Cell: B44
Comment: Number of trucks to be replaced:
Note: CARB estimated 13,800 frequent/semi trucks and 40,000 to 65,000 infrequent callers at LA-LB in 2006. (see p 38). The Starcrest report (July 2008), supplied under the RFAI, estimates the number of frequent/semi frequent callers at 19,475 (p 5) in 2006 and the number of infrequent calling trucks at 26,394 (p 8). We have elected to use the figure of 16,800 that has been used consistently by the two ports in planning and developing the CTP.

Cell: C44
Comment: Number of trucks, (CTP-POLB):
This is the expected number of CTP funded trucks.

Cell: E44
Comment: Number of trucks, (CTP-Actual):
This is the expected number of CTP funded trucks.

Cell: B45
Comment: Cost per replacement:
The estimates used in this row reflect the average cost per truck replacement based on a 50:50 or 70:30 split between clean diesel and LNG using purchase costs of $95K and $161K per truck, respectively. Purchase costs have been adjusted upwards by 8.5% to account for CA sales tax.

Cell: C45
Comment: Cost to replace dirty trucks (CTP-POLB):
This estimate assumes 30 percent of replacement trucks are LNG.

Cell: D45

Comment: Cost to replace trucks (CTP-POLB):
This estimate assumes a the ports reach their target of 50% LNG trucks (see response to Q39 in the RFAI).

Cell: E45
Comment: Cost to replace dirty trucks (CTP-Actual):
This estimate assumes 30 percent of the replacement trucks are LNG (below the ports target of 50% of all trucks being LNG).

Cell: F45
Comment: Cost to replace trucks (CTP-Actual):
This estimate assumes the ports reach their target of 50% LNG trucks (see response to Q39 in the RFAI).

Cell: B46
Comment: Incentive trucks:
On October 18, estimates became available showing that 2,000 such trucks are expected to enter service by the end of 2008 and that 100 applicants had committed to a total of 7,000. No information was forthcoming from POLA about how much funding had been set aside for this program other than $40M for the first year. BCG estimates a total of 4,000 incentive trucks by the end of 2009.

Cell: E46
Comment: Incentive trucks, (CTP-Actual):
According to BCG estimates, 2,000 trucks will enter service in 2008 and another 2,000 in 2009.

Cell: B47
Comment: Cost to attract incentive trucks:
The figures reported here are based on a figure of $30,000 per incentive truck which includes a $20,000 one-time payment and a $10 per loaded container first year subsidy (up to a maximum of $10,000).

Cell: B48
Comment: LNG infrastructure:
The CARB report on p 115 reports a cost of $800,000 per station, plus a need for one LNG station per 1,000 LNG trucks. Capitalized over 20 years at 7 percent this cost equates to about $300,000 per annum.

Cell: B49
Comment: LNG station labor:
The CARB report on p 115 estimates $5.2M to $6.9M in annualized labor cost for 12,000-16,000 trucks, or $430,000 per 1,000 trucks (per station) per year to account for the labor assisted fueling of trucks that is required at these stations. The upper estimate is based of 50% LNG, the lower estimate is based on 30 percent.

Cell: B50
Comment: Offsetting grants:
The cost of replacing existing drayage trucks is expected to be offset by $400M (spread over several years) in grants that is expected to be made to the two ports by CARB using Proposition 1B funds.

Cell: C51
Comment: Truck loan/lease defaults (CTP-POLB):
The figure used here is based on a low-range estimate of 10 percent (see Foreclosure on Wheels, p 5). The low and high end estimates are thought to be 10 and 40 percent, respectively.

Cell: D51
Comment: Truck loan/lease defaults (CTP-POLB):
The figure used here is based on a high estimate of 40 percent (see Foreclosure on Wheels, p 5). The low and high end estimates are thought to be 10 and 40 percent, respectively.

Cell: E51
Comment: Lease/loan defaults (CTP-Actual):
This lower estimate assumes no incentive trucks default, and just 5 percent of the CTP funded trucks.

Cell: F51
Comment: Loan default (CTP-Actual):
This upper estimate assumes no incentive trucks default, while 10 percent of the CTP truck financing arrangements are assumed to default.

Cell: B55
Comment: Number of LMCs:
This number changes constantly. The most recent estimate (obtained October 16 from the ports' websites) shows that about 700 LMCs have

applied to both ports, and about an additional 150 LMCs have applied only to POLB and another 50 or so only to POLA. For convenience, we assume 800.

Cell: B57
Comment: Concession application fee:
For computational purposes, this fee was converted to an average fee per year (though it is paid up front and covers 5 years).

Cell: B58
Comment: Truck fees:
An annual fee of $100 paid by each LMC for each truck registered under that LMC in the DTR per port.

Cell: C58
Comment: Truck fee (CTP-POLB):
This estimate assumes 50 percent of the trucks in the DTR serve both POLA and POLB (and, therefore, the $100 annual fee is paid twice).

Cell: D58
Comment: Truck fee (CTP-POLB):
This estimate assumes 75 percent of the trucks in the DTR serve both POLA and POLB (based on 700 out of approximately 900 LMC applicants having applied to both ports) and, therefore, the $100 annual fee is paid twice.

Cell: E58
Comment: Truck fee (CTP-Actual):
This estimate assumes 50 percent of the trucks in the DTR serve both POLA and POLB (and, therefore, the $100 annual fee is paid twice).

Cell: F58
Comment: Truck fee (CTP-Actual):
This estimate assumes 75 percent of the trucks in the DTR serve both POLA and POLB (based on 700 out of approximately 900 LMC applicants having applied to both ports) and, therefore, the $100 annual fee is paid twice.

Cell: C59
Comment: Concessions administration (CTP-POLB):
The cost of the Tetra Tech contract is $15M for concessions and grant administration (presumably over 5 years), i.e. $3M per year. This level of expense is projected for the 7 year funding cycle of grants and then is projected to fall by half for the rest of the projection period to account only for concessions administration.

Cell: D59
Comment: Concessions administration (CTP-POLB):
The cost of the Tetra Tech contract is shown as $3.73M per year in the "sources and uses of funds" spreadsheet provided by BCG. This figure is projected for 7 years (the financial cycle of trucks) and is then projected to fall by half to reflect only concessions administration thereafter.

Cell: E59
Comment: Concessions administration (CTP-Actual):
The cost of the Tetra Tech contract is $15M for concessions and grant administration (presumably over 5 years), i.e. $3M per year. This level of expense is projected for the 7 year funding cycle of grants and then is projected to fall by half for the rest of the projection period to account only for concessions administration.

Cell: F59
Comment: Concessions administration (CTP-Actual):
The cost of the Tetra Tech contract is shown as $3.73M per year in the "sources and uses of funds" spreadsheet provided by BCG. This figure is projected for 7 years (the financial cycle of trucks) and is then projected to fall by half to reflect only concessions administration thereafter.

Cell: B60
Comment: PortCheck administration:
A POLA resolution dated October 1, 2008 states that the first year reimbursement for PortCheck will be $11.5M for development and operation of the fee collection system. The PortCheck contract estimates the development costs will be $3.8M and an annual "not to exceed amount" of $7.6M for operating costs - both subject to subsequent adjustments in compensation based on actual experience. The estimates used in this row rely on the data provided by the WCMTOA as they probably better reflect what the long-term costs will be after subsequent "adjustments" to the contract take effect.

Cell: C60
Comment: PortCheck administration (CTP-POLB):
A WCMTO August 15, 2008 meeting declared PortCheck would cost $2.3M in start-up costs, plus $13 M per year to administer. It should be noted that fee collection should stop after funding of trucks is completed, but checks at gates for compliance remain (we assume $2M per year).

We note that BCG projects tariff collection costs for only two to three years. This lower estimate is based on that assumption but continues some level of cost throughout the projection period to account for the cost of gate compliance checks.

Cell: E60
Comment: PortCheck administration (CTP-Actual):
A WCMTO August 15, 2008 meeting declared PortCheck would cost $2.3M in start-up costs, plus $13 M per year to administer. It should be noted that fee collection should stop after funding of trucks is completed, but checks at gates for compliance remain (we assume $2M per year). We note that BCG projects tariff collection costs for only two to three years. This lower estimate is based on that assumption but continues some level of cost throughout the projection period to account for the cost of gate compliance checks.

Cell: F60
Comment: PortCheck administration (CTP-Actual):
A WCMTO August 15, 2008 meeting declared PortCheck would cost $2.3M in start-up costs, plus $13 M per year to administer. It should be noted that fee collection should stop after funding of trucks is completed, but checks at gates for compliance remain (we assume $2M per year).

Cell: B64
Comment: Employment mandate - wages and benefits:
The estimates here reflect the additional cost of hiring employees, including fringe benefits as calculated by Husing, net of any anticipated TWIC effect. Husing suggested that earnings would need to rise to overcome the effect of TWIC on driver supply from $12 to $20 per hour, implying an implausibly high inelastic supply curve for drivers (contradicted by the sector's ability to expand supply to deal with increased volumes with little apparent effect on drayage rates or driver earnings). BCG data suggest an anticipated TWIC effect of just $2 (see the RFAI spreadsheet) with the baseline hourly rate going from $11.60 to a projected figure of $13.57 in year 1 (with the TWIC requirement in effect). We use this figure for our low estimate. Data elsewhere in the Husing report suggests that IOO drayage drivers' earnings may need to increase by only $1 per hour to overcome the effect of TWIC (principally because there is an ample driver pool among non-employee trucking firms in Los Angeles County earning less than $13 per hour, see Exhibit 19). As a result, we use $1 per hour for the impact of the TWIC effect in our high estimate.

Cell: E64
Comment: Employment mandate - wages and benefits (CTP-Actual):
The difference in wages and benefits for employees versus IOO is about $21,000 annually. A factor of 56% was used to apportion the 16,800 drivers to employee status (POLA) versus IOO (POLB) based on the proportion of drays. It is possible that LMCs could use employee drivers at POLB for logistical convenience, in which case this proportion would be higher.

Cell: B65
Comment: Employee mandate - reduced productivity:
The reduced number of hours worked per employee driver, plus certain work rules and practices that cut into time available for work, translates into more drivers needed (28% more according to Husing) compared to the IOO driver models.

Cell: E65
Comment: Employment mandate - reduced productivity (CTP-Actual):
This estimate uses a labor split of 56:44 between POLA and POLB.

Cell: F65
Comment: Employment mandate - wages and benefits (CTP-Actual):
This estimate uses a labor split of 56:44 between POLA and POLB.

Cell: B66
Comment: Unionization:
One study of the effect of de-regulation on the work of truck drivers (Belman & Monaco, 2001) found that "Union membership remains an important determinant of wages, with members earning 18 to 21 percent more than non-union counterparts." Our high estimate assumes 21 percent more in wages, our low estimate assumes 18 percent.

Cell: E66
Comment: Unionization (CTP-Actual):
This estimate is based on an 18 percent union differential and 56 percent of drivers being employees. It assumes (based on BLS 2007 data for trucking and warehousing employment) that 12 percent of the drivers receiving the labor rate built into this formula are already unionized. The adjustment is applied to the existing driver base plus the need for 28% more drivers (according to Husing).

Cell: F66
Comment: Unionization (CTP-Actual):
This estimate is based on a union differential of 21 percent and 56 percent of drivers being employees. It assumes (based on BLS data for trucking and warehousing employment) that 12 percent of the drivers receiving the labor rate built into this formula are already unionized. Also, the driver based is expanded by 28% (according to Husing) to account for the greater number of drivers needed.

Cell: B67
Comment: Parking cost:
The POLA concession plan calls for the provision of off-street parking for each truck operated by an LMC concessionaire. The estimates here are based on annualizing the one-time purchase cost of the land needed to meet this requirement.

Cell: E67
Comment: Parking cost (CTP-Actual)):
Parking cost on a one-time basis is $21,300 per truck (Husing estimate, p. v) multiplied by the number of trucks (16,800) = $358M. The opportunity cost of this outlay at 7% is $25M annually.

Cell: B68
Comment: Day pass fees:
Trucks that call very infrequently at the ports may be able to access the terminals using a Day Pass. These passes are intended for long distance, out-of-state trucks that otherwise meet the required emission standards.

Cell: D68
Comment: Day pass fee (All Models):
The Starcrest report estimates a total of 7,942,270 trips at terminals in POLA and POLB in 2006, and also that 3% of all trucks visits are by out-of-state trucks. An added cost should be incorporated for in-state long distance visits (on top of this figure), but no estimate is available for these types of trips. Our high estimate includes an allowance for in-state long distance callers of 3%; the low estimate uses just the figure of 3% for out-of-state callers.

Cell: B69
Comment: Reduced flexibility to meet demand:
See Husing p65 for the basic argument. This feature applies to the POLA employee model. Increased truck and driver utilization rates claimed under the employee model means less ability to meet peak demands; most likely resulting in peak surcharge pricing.

Cell: E69
Comment: Reduced flexibility to meet demand (CTP-Actual):
No estimate is included here for this factor because the low estimates are based on no change in the competitive structure of the market.

Cell: F69
Comment: Reduced flexibility to meet demand (CTP-Actual):
This estimate assumes a surcharge of $30 per dray (about 20 percent of current average dray rates) for all truck trips through the ports during the peak period only (July through October).

Cell: B70
Comment: Impaired operational efficiency (CTP-Actual):
This factor reduces the operational benefits of the dedicated employee model (i.e., idle/wait time, accidents, congestion, etc) by an assumed 25 percent because split operations between the two ports is expected to induce more trips (the previously mentioned benefits were premised on a reduced number of trips because of operational efficiencies made possible by LMC asset ownership and employee drivers).

Cell: E74
Comment: Training costs (CTP-Actual):
The POLA concession plan contains specific provisions for driver training. In the absence of other details, a simplified assumption of $500 in training costs per employee per year is used here applicable only to POLA. The low estimate assumes this cost is not borne by drivers working for companies brought in under the "incentive" program (as they are more likely to already have established training programs).

Cell: F74
Comment: Training costs (CTP-Actual):
The POLA concession plan contains specific provisions for driver training. In the absence of other details, a simplified assumption of $500 in training costs per employee per year is used here applicable only to POLA.

Cell: B92
Comment: Net benefits:
The absolute size of the total net benefits, i.e., the difference between total benefits and total costs, indicates which plan is more efficient.

Cell: B94
Comment: Benefit/cost ratio:
OMB Circular A-4 (p 10), on the subject of regulatory analysis, cautions against using the B/C ratio because it is not a meaningful indicator of net benefits, and also cautions that using this ratio alone can produce misleading results.

Attachment E

Pearson Declaration

ATTACHMENT FOR RESPONSE TO QUESTION #29

		Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Option I	*Total demand (hrs) less 20%*	25,685,749	24,879,170	24,888,689	24,844,820	24,861,299	24,841,592	
Option I	Weighted average price to BCO	$ 42.68	$ 62.98	$ 62.70	$ 63.99	$ 63.51	$ 64.09	

	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Total demand (hrs) less 20%	25,685,749	24,566,605	24,331,151	24,172,748	23,991,585	23,882,863	
Weighted average price to BCO	$ 42.68	$ 70.85	$ 78.22	$ 83.42	$ 89.56	$ 93.39	
Cost of Option III		$ 1,740,602,697	$ 1,903,113,084	$ 2,016,400,621	$ 2,148,678,773	$ 2,230,352,654	
Cost of Option I		$ 1,567,012,683	$ 1,560,632,185	$ 1,589,931,310	$ 1,578,830,422	$ 1,592,054,959	
Baseline cost	$ 1,096,340,567	$ 1,096,340,567	$ 1,096,340,567	$ 1,096,340,567	$ 1,096,340,567	$ 1,096,340,567	
Incremental cost of option III		$ 644,262,130	$ 806,772,517	$ 920,060,054	$ 1,052,338,206	$ 1,134,012,088	
Incremental cost of option III vs option I		$ 173,590,014	$ 342,480,899	$ 426,469,311	$ 569,848,350	$ 638,297,696	
Truckers/LMCs							
Rate proportional to wage rate increase	$ 11.60	$ 13.57	$ 15.60	$ 16.83	$ 17.76	$ 18.32	
Indexed to Year 1		1.00	1.15	1.24	1.31	1.35	**1.35**
Idle time reduction	$ 112,741,211	$ 112,741,211	$ 129,615,053	$ 139,806,498	$ 147,506,144	$ 152,192,000	**$ 152,192,000**
Insurance benefit	$ 18,667,726	$ 18,667,726	$ 21,461,702	$ 23,149,205	$ 24,424,115	$ 25,200,000	**$ 25,200,000**
IOO wage rates	$ 297,954,686	$ 35,499,407	$ 81,732,831	$ 108,920,866	$ 128,111,703	$ 139,654,509	**$ 493,919,315**
						$ 317,046,509	
Public Health							
Rate proportional to clean/dirty	0%	52%	79%	100%	100%	100%	
Indexed to Year 1		1.00	1.52	1.92	1.92	1.92	**1.92**
Public Health benefit	$ 309,010,038	$ 309,010,038	$ 471,044,616	$ 594,117,647	$ 594,117,647	$ 594,117,647	**$ 594,117,647**
City and community							
Rate proportional to employee %	0%	30%	50%	70%	90%	100%	
Indexed to Year 1		1.00	1.67	2.33	3.00	3.33	**3.33**
Traffic/congestion	$ 171,850,479	$ 171,850,479	$ 286,417,466	$ 400,984,452	$ 515,551,438	$ 572,834,931	**$ 572,834,931**
Traffic accidents	$ 78,608,833	$ 78,608,833	$ 131,014,722	$ 183,420,611	$ 235,826,499	$ 262,029,444	**$ 262,029,444**
						$ 834,864,375	

Choose scenario	High end

Scenarios	Scenario #
Low end	1
High end	2
Average	3
Choosen scenario #	2

Cited on page 21 of 3/15 BCG report
Cited on page 79 of 3/15 BCG report

Summary of costs and benefits (Option III vs baseline)

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Total cost	$ 644,262,130	$ 806,772,517	$ 920,060,054	$ 1,052,338,206	$ 1,134,012,088	**$ 4,557,444,995**
Total benefits	$ 726,377,694	$ 1,121,286,389	$ 1,450,399,278	$ 1,645,537,546	$ 1,746,028,531	**$ 6,689,629,438**
Benefits breakdown						
Idle time reduction	$ 112,741,211	$ 129,615,053	$ 139,806,498	$ 147,506,144	$ 152,192,000	**$ 681,860,906**
Insurance benefit	$ 18,667,726	$ 21,461,702	$ 23,149,205	$ 24,424,115	$ 25,200,000	**$ 112,902,747**
IOO wage rates	$ 35,499,407	$ 81,732,831	$ 108,920,866	$ 128,111,703	$ 139,654,509	**$ 493,919,315**
Truckers/LMCs	$ 166,908,343	$ 232,809,585	$ 271,876,569	$ 300,041,961	$ 317,046,509	**$ 1,288,682,967**
Public Health benefit	$ 309,010,038	$ 471,044,616	$ 594,117,647	$ 594,117,647	$ 594,117,647	**$ 2,562,407,596**
Traffic/congestion	$ 171,850,479	$ 286,417,466	$ 400,984,452	$ 515,551,438	$ 572,834,931	**$ 1,947,638,766**
Traffic accidents	$ 78,608,833	$ 131,014,722	$ 183,420,611	$ 235,826,499	$ 262,029,444	**$ 890,900,109**
Community	$ 250,459,312	$ 417,432,187	$ 584,405,062	$ 751,377,937	$ 834,864,375	**$ 2,838,538,874**
Total Less wage benefit					$ 1,746,028,531	

Idle time reduction benefits	low	high	average	Source
5 year savings	$ 190,240,000	$ 760,960,000	$ 475,600,000	
Notes	20% reduction	80% reduction		
SPB drayage trips/yr	8,200,000	8,200,000		Starcrest Consulting Group, Draft Methodology for Estimating Heavy Duty Truck Activity ath POLA/POLB
Current IOO wage	11.6	11.6		CGR Drayage Driver Survey
OLD - Idle hrs/truck trip	2	2		Wilbur Smith Associates, Multi-County Goods Movement Action Plan, Final Technical Memorandum
% reduction in idle time	20%	80%		Estimated range
New idle hrs/truck trip	1.6	0.4		
OLD - Idle hrs/yr	16,400,000	16,400,000		
NEW - Idle hrs/yr	13,120,000	3,280,000		
Reduced idle hrs/yr	3,280,000	13,120,000		
Annual savings	38,048,000	152,192,000		
5 year savings	190,240,000	760,960,000		

Insurance benefits	low	high	average	Source
5 year savings	$ 25,200,000	$ 126,000,000	$ 75,600,000	
Notes	10% increase insured	50% increase insured		
	low	high	average	
Est. insurance benefit per person per year	$ 1,600.00	$ 4,400.00	$ 3,000	Institute of Medicine
Frequent/semi frequent drivers	16,800			
% increase insured	10%	50%		
Annualized insurance benefit	$ 5,040,000	$ 25,200,000		
5 year savings	$ 25,200,000	$ 126,000,000		

Health benefits	low	high	median	Source
5 year savings	$ 500,000,000	$ 2,970,588,235	$ 1,735,294,118	
Notes	10% increase insured	50% increase insured		

	low	high	median	
Public health benefit (2008-2025)	$ 1,700,000,000	$ 10,100,000,000	$ 5,900,000,000	Husing / SCAQMD
Timeframe (years)	17			
Annualized	$ 100,000,000	$ 594,117,647	$ 347,058,824	
5 year savings	$ 500,000,000	$ 2,970,588,235	$ 1,735,294,118	

Traffic / congestion	low	high	average	Source
5 year savings	$ 754,898,746	$ 2,864,174,655	$ 1,809,536,701	
Notes	10% increase matching	50% increase matching		

	low	high	average	
SPB drayage trips/yr	8,200,000	8,200,000		Starcrest Consulting Group, Draft Methodology for Estimating Heavy Duty Truck Activity ath POLA/POLB
SPB container throughput	9,500,000	9,500,000		Tioga Group, SPB Cargo Forecast
Average drayage trip time (hrs)	4.00	4.00		Wilbur Smith Associates, Multi-County Goods Movement Action Plan, Final Technical Memorandum
% change	10.0%	50.0%		Estimated range
Current matching %	15.9%	15.9%		Note: Similiar to Goodchild's observation of 18% matching
NEW - SPB truck trips/yr	7,548,450	5,727,941		
Matching savings (trips/yr)	651,550	2,472,059		
Matching savings (hours/year)	2,606,202	9,888,235		
Total drayage (hours/year)	32,107,186			scaled up for private fleets and infrequents
% hours saved per year	8%	31%		
Congestion costs in LA ($/year)	$ 9,300,000,000			Texas Transportation Institute, 2007 Annual Urban Mobility Report
% of congestion impacted by drayage	20%			
Annual savings	$ 150,979,749	$ 572,834,931		
5 year savings	$ 754,898,746	$ 2,864,174,655		

Traffic accidents	low	high	average	Source
5 year savings	$ 316,534,276	$ 1,310,147,219	$ 813,340,747	
Notes	10% increased matching	50% increased matching		
	low	high	average	
Total LA county accident cost (2007)	$ 10,850,000,000	$ 10,850,000,000		AAA Study (Cambridge Partners)
Freeway and highway miles in LA county	$ 909	$ 909		AAA and LADOT
Estimated miles with heavy drayage use	$ 180	$ 180		Google Maps, focus on I-710, I-110, and supporting highways (proxy for local roads)
% of freeway/highway miles	19.8%	19.8%		
% of freeway accident damage due to trucks	33%	33%		From accidents on I-710, from report by Parentela and Cheema, Commercial Goods Transport in SoCal (GIS based risk analysis)
Estimated accident damage due to drayage	$ 709,009,901	$ 709,009,901		
% drayage hours saved per year (due to match	8%	31%		NOTE: hour reduction with 10% and 50% increased matching
Annual savings before increased safety beyonc	$ 57,551,687	$ 218,357,870		
Increase safety beyond congestion	10%	20%		Assumed due to safety training, TWIC, truck maintenance, etc
Estimated annual savings	$ 63,306,855	$ 262,029,444		
5 year savings	$ 316,534,276	$ 1,310,147,219		

Attachment F

Pearson Declaration

Draft Methodology for Estimating
Heavy-Heavy Duty Diesel Truck Activity
at the Ports of Los Angeles and Long Beach – Based on 2006 License Plate Data

Following is a brief description of the analyses performed to update the estimates of heavy-heavy-duty diesel truck activity for those vehicles servicing the San Pedro Bay Ports. Although the methodology has remained unchanged since the 2005 analysis, the use of a greatly expanded dataset has resulted in an increased estimate of the truck population.

Trip per Day Activity Analysis

As in the previous analysis, Starcrest used a subset of vehicle license plate data collected through optical character recognition (OCR) technology to develop the truck trip per day activity estimate. These data were provided by seven container terminals and was assumed to be representative of all fourteen container terminals in operation in 2006. However, the current analysis includes an entire year's worth of OCR data for each terminal compared to the 37 consecutive day's worth of data from five terminals used in 2005 (October 18 to November 23, 2005). In terms of data, the 2006 dataset includes some 1.9 million trips while the 2005 dataset covered approximately 245,000 trips.

This analysis yielded close to 30,000 unique license plate readings compared to 16,000 in 2005. License plates and corresponding Port visits were eliminated from the dataset if registration information was not available from the California Department of Motor Vehicles (DMV). Duplicate records were eliminated if the same license number was observed within a fifteen minutes of a prior reading.

The remaining truck and trip records were segregated into three separate groups for analysis:

- Frequent Callers were defined as those trucks that visited the Ports one or more times per day during the year (trips/days >=1.00). Trips per day were determined by dividing the total number of trips for each truck by 300 days, the average number of terminal operating days in 2006.

- Semi-Frequent Callers were defined as those trucks that visited the Ports at least every other day, but less than once per day (0.500<= trips/days <1.00).

- Non-Frequent Callers were defined as those trucks that visited the Ports less than once every other day (trips/days <0.500).

Once segregated, the three groups were analyzed to determine their model year distribution (population of vehicles by model year) and average trip frequency. The table below presents the results of this analysis, where MY(pop) is the population weighted average model year and MY(trip) is the trip weighted average model year for each sub-group. On average, the age of the vehicles in each of the three groups differed by less than a year.

Exhibit 1 - Pearson Declaration Attachment F 000278
Dkt. 08-1895

Table 1: Summary of 2006 Truck Trip Data Evaluation

Category	Unique Trucks	Total Trips for Period	Trips/Day per Truck	% of Total Trips	MY (pop)	MY (trip)
Frequent	1,287	566,615	1.47	29.4%	1994.4	1994.5
Semi-Frequent	3,622	752,925	0.69	39.1%	1994.5	1994.5
Non-Frequent	24,632	607,972	0.08	31.5%	1994.9	1994.0
Overall	29,541	1,927,512	0.22	100.0%	1994.8	1994.7

Table 2: Summary of 2005Truck Trip Data Evaluation

Category	Unique Trucks	Total Trips for Period	Trips/Day per Truck	% of Total Trips	MY (pop)	MY (trip)
Frequent	1,946	123,220	1.71	50.4%	1993.6	1993.6
Semi-Frequent	2,844	74,156	0.70	30.3%	1993.8	1993.8
Non-Frequent	7,188	47,114	0.18	19.3%	1994.3	1994.4
Overall	11,978	244,490	0.55	100.0	1994.1	1993.8

As can be seen in Tables 1 and 2 above, the results of the 2006 analysis suggests a lower per truck activity rate compared to 2005 and a more evenly distributed fraction of trips by truck category. Given the same number of trips, a lower per truck activity estimate would result in a larger population of trucks needed to service the Ports.

The following figures illustrate the model year distribution of the Port truck fleet in terms of percentage of population and percentage of overall calls. As noted in the table above, the average model year in terms of individual trucks as well as total truck calls is between 1994.0 and 1994.9.

Figure 1: Model Year Distribution of the Port Truck Fleet

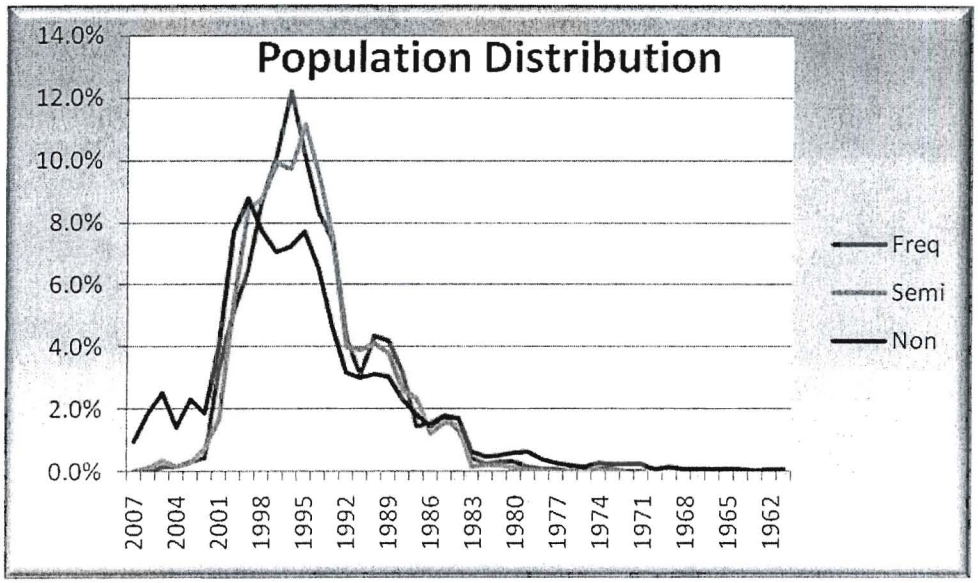


Figure 2: Trip Distribution of the Port Truck Fleet by Model Year

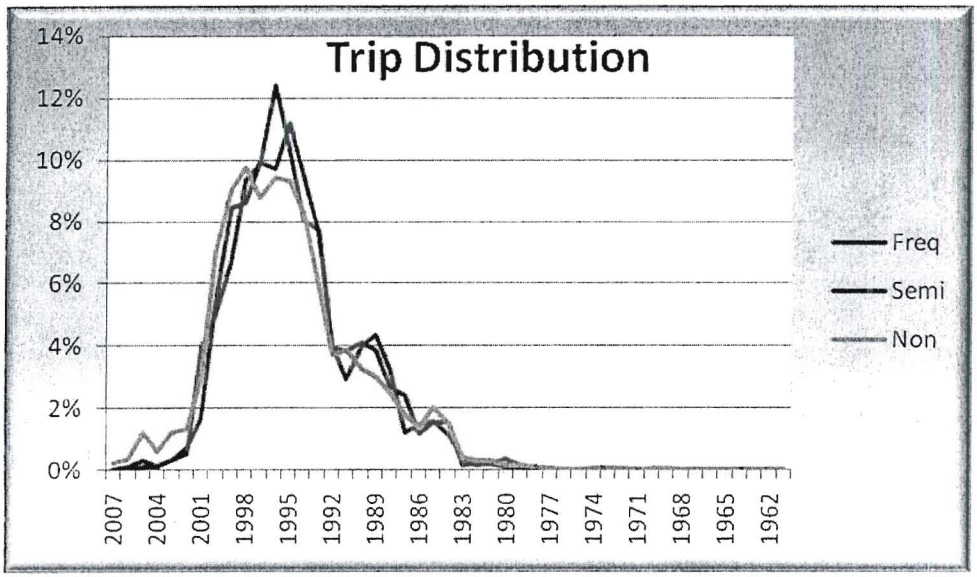


Table 3: Model Year Distribution Data

	Population Distribution				Trip Distribution			
MY	Freq	Semi	Non	Overall	Freq	Semi	Non	Overall
2007	0.0%	1.0%	0.8%	1.0%	0%	0%	0%	0%
2006	0.1%	1.9%	1.6%	1.9%	0%	0%	0%	0%
2005	0.4%	2.5%	2.2%	2.5%	0%	0%	1%	1%
2004	0.2%	1.4%	1.2%	1.4%	0%	0%	1%	0%
2003	0.3%	2.3%	2.0%	2.3%	0%	0%	1%	1%
2002	0.8%	1.9%	1.7%	1.9%	1%	1%	1%	1%
2001	1.7%	4.1%	3.8%	4.1%	4%	2%	3%	3%
2000	5.4%	7.7%	7.3%	7.7%	5%	5%	7%	6%
1999	8.5%	8.8%	8.6%	8.8%	7%	8%	9%	8%
1998	8.8%	7.7%	7.9%	7.7%	9%	9%	10%	9%
1997	9.9%	7.1%	7.6%	7.1%	10%	10%	9%	10%
1996	9.7%	7.2%	7.8%	7.2%	12%	10%	9%	10%
1995	11.2%	7.7%	8.3%	7.7%	10%	11%	9%	10%
1994	9.5%	6.5%	7.0%	6.5%	8%	10%	8%	9%
1993	7.5%	4.7%	5.1%	4.7%	8%	8%	6%	7%
1992	4.0%	3.2%	3.3%	3.2%	4%	4%	4%	4%
1991	3.9%	3.0%	3.2%	3.0%	3%	4%	4%	4%
1990	4.1%	3.1%	3.3%	3.1%	4%	4%	3%	4%
1989	3.8%	3.1%	3.2%	3.1%	4%	4%	3%	4%
1988	2.6%	2.3%	2.4%	2.3%	3%	3%	2%	3%
1987	2.4%	1.8%	1.9%	1.8%	1%	2%	2%	2%
1986	1.2%	1.5%	1.4%	1.5%	1%	1%	1%	1%
1985	1.6%	1.8%	1.8%	1.8%	2%	2%	2%	2%
1984	1.5%	1.7%	1.7%	1.7%	1%	2%	1%	1%
1983	0.2%	0.6%	0.6%	0.6%	0%	0%	0%	0%
1982	0.2%	0.5%	0.5%	0.5%	0%	0%	0%	0%
1981	0.2%	0.5%	0.5%	0.5%	0%	0%	0%	0%
1980	0.1%	0.6%	0.5%	0.6%	0%	0%	0%	0%
1979	0.1%	0.6%	0.5%	0.6%	0%	0%	0%	0%
1978	0.1%	0.4%	0.4%	0.4%	0%	0%	0%	0%
1977	0.0%	0.3%	0.3%	0.3%	0%	0%	0%	0%
1976	0.0%	0.2%	0.2%	0.2%	0%	0%	0%	0%
1975	0.0%	0.2%	0.1%	0.2%	0%	0%	0%	0%
1974	0.0%	0.3%	0.2%	0.3%	0%	0%	0%	0%
1973	0.0%	0.2%	0.2%	0.2%	0%	0%	0%	0%
1972	0.0%	0.3%	0.2%	0.3%	0%	0%	0%	0%
1971	0.0%	0.2%	0.2%	0.2%	0%	0%	0%	0%
1970	0.0%	0.1%	0.1%	0.1%	0%	0%	0%	0%

Extrapolation of Trips to All Terminals

As stated earlier the data used to determine the trip per day activity described above were analyzed for only the seven container terminals which provided license plate data. In order to estimate the fleet population for all fourteen Port of Los Angeles and Port of Long Beach container terminals, the estimated daily activity was applied to the total 7.94 million gate moves estimated by the Quick Trip Model for calendar year 2006.

Utilizing the 7.94 million gate moves and the activity characteristics of those trucks which service the Ports (described in the previous section) the total population of port trucks was estimated using the following methodology:

The daily number of truck trips = 7.94 million gate moves/300 days per year or 26,474 trips per day. In 2005 the gate moves were estimated at 22,466 trips per day (8.2 million gate moves/365 days per year).

The numbers of trucks in each of the frequency categories discussed above were then estimated as follows:

Frequent Callers =
26,474 trips per day X 29.4% of all truck trips / 1.47 average trips per truck per day
= **4,473** total trucks (2005=6,660 total trucks)

Semi-Frequent Callers =
26,474 trips per day X 39.1% of all truck trips / 0.69 average trips per truck per day
= **15,002** total trucks (2005=9,725 total trucks)

Summing the two, the number of frequent caller trucks servicing the Ports is estimated to be **19,475**. Based on the estimate of activity, these 19,475 trucks performed 69% of all trips. However, it is the desire of the Ports to impact 80% of the overall truck activity. A different methodology was used to determine how many non-frequent caller trucks would be needed to achieve this goal.

Infrequent Callers

The OCR readers have a small but measurable rate of error resulting in a higher probability of misidentification of trucks that infrequently visit the Ports. The table below presents the 2006 OCR identification rates along with DMV verification as an indicator of instrument accuracy.

Table 4: Analysis of OCR Readings

Visits/Year*	OCR Identified	DMV Verified	% Verified	Trips	Trip %	Average Age
1000	5	5	100.0%	5,641	0.28%	9.20
500	308	308	100.0%	198,414	9.96%	10.69
300	978	975	99.7%	364,047	18.27%	11.94
250	692	691	99.9%	188,094	9.44%	11.66
175	1,995	1,982	99.3%	414,691	20.81%	11.52
150	963	948	98.4%	155,582	7.81%	11.33
100	2,378	2,329	97.9%	294,754	14.79%	11.29
50	2,756	2,623	95.2%	203,293	10.20%	10.80
25	2,008	1,769	88.1%	72,184	3.62%	10.38
12	1,860	1,519	81.7%	31,866	1.60%	10.35
6	2,066	1,434	69.4%	16,527	0.83%	10.16
5	773	499	64.6%	3,865	0.19%	10.77
4	1,097	669	61.0%	4,388	0.22%	10.81
3	1,900	1,096	57.7%	5,700	0.29%	11.14
2	4,313	2,237	51.9%	8,626	0.43%	11.24
1	24,749	10,457	42.3%	24,749	1.24%	12.16
Total	**48,841**	**29,541**	**60%**	**1,992,421**	**100%**	**11.4**

*Assuming 300 days per year of Port operation, Frequent Callers would correspond to those trucks making 300 or more trips to the Ports per year, Semi-Frequent Callers would correspond to more than 150 and less than 300 calls per year, and Non-Frequent Callers would be those trucks visiting the Ports less than 150 times per year.

As can be seen in Table 4, the majority of trucks identified by OCR would be classified as Non-Frequent Callers. However, it is also obvious that the accuracy of the OCR (as measured by the percentage of readings which can be verified by DMV) decreases dramatically as frequency of visit decreases.

OCR systems read each digit of a vehicles license plate in order to make a positive identification. Since a typical truck license plate contains seven alpha-numeric characters, it follows that the OCR has seven opportunities to either correctly or incorrectly identify each character. However the misidentification of a single character would render the entire reading invalid. A misreading by the OCR system would result in one of two distinct errors;

1) The misread license plate would not be matched by records held by the DMV
2) The error would produce a reading that would be matched by the DMV but the retrieved record would not belong to the observed vehicle.

A covariant impacting both those errors listed above may reside within the DMV's methodology of the coding of registration data. However, determining the accuracy of the registration database is considered beyond the scope of this analysis. To better understand

the impact of OCR accuracy on the determination of infrequent visitors to the Port, a separate analysis was performed to further identify those 15,000 vehicles assumed to have visited the Ports five times or less in 2006.

One plausible reason for infrequent visits would be related to trucks traveling to the Ports from outside of California to pick up or deliver cargo. However, less than three percent of the 15,000 vehicles were identified by DMV records as being registered outside of the state (See Table 5 Below).

Table 5. Infrequent Trips by Out-Of-State Trucks

ORIGIN	One/Year	Two/Year	Three/Year	Four/Year	Five/Year	Total
MEXICO	56	8	3	4	1	72
OREGON	33	7	2	1	1	44
INDIANA	29	5	4	1	1	40
NEW JERSEY	33	5	1		1	40
TEXAS	26	4	1	2	1	34
ARIZONA	23	2	3	2	1	31
GEORGIA	14	5			1	20
NEVADA	10	1	1	1	1	14
ARKANSAS	11	1	1			13
WASHINGTON	11	2				13
WISSCONSIN	9	2	2			13
MINNESOTA	9	1		2		12
OTHER	52	16	4	2	2	75
TOTAL	**316**	**58**	**22**	**15**	**10**	**421**

The registration data was also analyzed to determine whether vehicles were being properly identified. Assuming that the DMV registration records were correct, an attempt was made to determine how many of the 15,000 vehicles identified by OCR and verified by the DVM were in actuality, heavy-duty trucks.

Table 6. Infrequent Visitors by Manufacturer

Manufacturer	One/Year	Two/Year	Three/Year	Four/Year	Five/Year	Total
FREIGHTLINER	3,798	948	488	321	260	5,815
PETERBUILT	1,490	324	154	82	56	2,106
INTERNATIONAL	1,420	308	152	73	68	2,021
KENWORTH	1,185	233	118	81	49	1,666
WHITE	261	58	21	25	12	377
MACK	153	33	15	8	7	216
OTHER	2,150	333	148	79	47	2,757
TOTAL	10,457	2,237	1,096	669	499	14,958

A significant number of infrequent callers (over 18%) could not be definitively determined to be heavy duty trucks. The DMV records for this subset of vehicles suggested that this group included passenger cars, motorcycles, motor homes and off-road vehicles. It is likely that the OCR systems both misidentified truck license plates resulting in erroneous readings and in addition, recorded the license plates of vehicles driven by visitors and employees passing through their gates.

Because of the uncertainty associated with infrequent callers to the Port, it is believed that the extrapolation methodology described above would be inappropriate for estimating their total population.

Alternatively, the OCR data from the seven terminals were evaluated to determine the number of trucks that corresponded with 80% of the trips. It was found that a total of 6,609 trucks (22% of the sample) performed 1.5 million trips (80% of the sample). Therefore 6,919 non-frequent caller trucks would need to be included in the Ports mitigation measures in order to impact 80% of the overall activity.

Non-Frequent Callers =
26,474 trips per day X 11.5% of all truck trips / 0.44 average trips per truck per day
= **6,919** total trucks

Table 7: Estimation of Non-Frequent Callers

Category	Unique Trucks	Total Trips per Day	Trips/Day per Truck	% of Total Trips	MY (pop)	MY (trip)
Frequent	4,473	7,783	1.47	29.4%	1994.4	1994.5
Semi-Frequent	15,002	10,351	0.69	39.1%	1994.5	1994.5
Non-Frequent	6,919	3,045	0.44	11.5%	1994.9	1994.0
Overall	26,394	21,179	0.78	80.0%	1994.5	1994.5

It is important to note that the non-frequent caller trucks were rank ordered according to trip frequency from highest to lowest for this analysis and the derived number suggests that the Ports can identify and impact the most active non-frequent callers (those making 112 trips per year or more to the Ports).

Notes

Definition of a Trip

In general a truck trip, in the context of trucks that visit the Ports, is defined as the entering and subsequent exiting of a truck from the boundary of a terminal at either Port.

OCR data

The number of times the license plate of an individual truck was identified throughout the 2006 calendar year was treated as the number of truck trips.

Gate moves data

The number of gate moves was assumed to be equivalent to number of trucks trips.

San Pedro Bay Ports Container Terminal License Plate Data

Preliminary Draft

19-Nov-07

License Plate Data Analysis for CY 2006

Status of Data Collection

Port of Long Beach		[3] # of Trips per Quick Trip
ITS (pier GJ)	√ All	599,008
SSA Pier A	√ All	567,556
SSA Pier C	√ All	191,512
SSA PCT (pier J South)	√ All	632,387
Hanjin (TTI)	Data not available	745,973
Cal United (pier D &E)	Data not available	781,264
[2] LBCT (pier F)	Data not available	

Port of LA			
YTI	√ All	548,485	
Evergreen	√ All	700,266	
Trapac	Data not available	653,876	
APM (Pier 400)	Data not available	988,028	
Yang Ming/CS	√ All	613,635	
APL (Pier 300)	Data not available	920,280	# of trips for terminals provided lic plate
		7,942,270	3,852,850

Results of Data Analysis (San Pedro Bay Ports)

Total unique Trucks (across all terminals; from all OCR records)	48,841
Total # ofTrips	2,001,904
Total # of Unique License Plates Identified Through DMV	29,540
% of Unique License Plates Not Identified by DMV	40%
Total # of Trips from Trucks Identified Through DMV	1,929,097
% of Total (all 14 terminals) Trips Identified Through DMV	24%
% of Trips from Trucks Not Identified by DMV	4%
Average Population Weighted Model Year	1995
Average Trip Weighted Model Year	1995

	FF	SF	NF	Total	FF+SF
# trucks	1,461	4,130	24,086	29,677	**5,591**
% of Total Trucks	5%	14%	81%		**19%**
[1] # trips	617,407	799,540	512,150	1,929,097	
Average # of trips/day/truck	1.41	0.65	0.07		
% of Total Trips	32%	41%	27%	100%	**73%**

[1] Reported by Terminals

[2] Pier F gatemoves/trips included with Cal United

[3] Trips = inbound and outbound together as one trip; Quick trip #s provided by Shashank)ct 4, 2007 email

Notes

OCR readings of 9483 trips were not recognizable

Only one recoerd was kept for a license plate if it appeared more than once within a terminal within 15 minutes or less.

Population estimatesfor NF is not as reliable as for FF and SF because of the nature of OCR data

Attachment G

Pearson Declaration

THE PORT OF LOS ANGELES

BCG

Sources and uses of funds for the CTP

Port of Los Angeles

October 3, 2008

For any questions regarding this model, please contact:

Simon Goodall
Partner
The Boston Consulting Group
goodall.simon@bcg.com
work +1 (213) 633-4511

Julia Cherlow
Associate
The Boston Consulting Group
cherlow.julia@bcg.com
work +1 (213) 633-4577
cell +1 (408) 209-9446

USER GUIDE:

The objectives of building this model were to:
* Gain a deep understanding of the sources and uses of funds associated with the Port of Los Angeles' Clean Truck Program
* Model out potential cash flow scenarios based on various different uptakes of POLA's financing and incentive programs

Some basics on the model layout:
*"Sources and Uses of Funds (A)" provides an annual overview of various sources and uses of funds for the Clean Truck Program, based on inputs provided on the sheet entitled "Cash Committed - Financing." The current inputs are summarized under the title of the worksheet.

*"Sources and Uses of Funds (Q)" provides a quarterly overview of various sources and uses of funds for the Clean Truck Program, based on inputs provided on the sheet entitled "Cash Committed - Financing." The current inputs are summarized under the title of the worksheet.

*"Cash Committed - Financing" provides the analysis driving the model. All rows highlighted in yellow are areas for user to input / alter information on the following: number of trucks entering the program by type; number of trucks being scrapped; % of trucks funded by each of the funding options; and % of trucks incented by each of the incentive options. Additionally, user can switch between information for POLA vs. POLB, various different container growth scenarios, monthly payments for all programs vs. upfront payment, turn the incentive programs on or off, and turn on a switch to account for a potential voucher provided to LMCs committed to purchasing alt fuel vehicles over time.

*"Cash Committed - Consultants" provides a monthly overview of funds committed to outside consultants. The information in this sheet is still preliminary and should be updated as contracts are finalized.

*"Assumptions" provides an overview of the key assumptions driving the analysis, with their requisite sources.

This model is being provided so that key inputs can be updated as POLA gains more information about the actual uptake of the various financing and incentive programs, in addition to gaining more insight on the inflow of funds from the ECF tariff.

Sources and Uses of Funds for the Clean Truck Program (Annual View)

Base Case Scenario: $37.5M in CARB Funds Utilized (Based on "Cash Committed - Financing")

Assumes 4000 trucks receive New Truck Incentives, 15% of whom receive Efficiency Incentives, 1000 CTP financed LNGs, 0 CTP financed new diesels, and 500 privately financed new diesels enter in 2010 without monetary incentives

		Program Year						
SOURCES		**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	***COMMENTS***
	Tariff Revenues	$ 24.81	$ 117.97	$ 1.57	$ -	$ -	$ -	*Assumes that initial quarter of tariff collection begins late - Nov 1, 2008*
	CARB Grants	$ 0.67	$ 11.00	$ 16.00	$ 8.00	$ -	$ -	
	Concession Fees	$ 2.09	$ 1.73	$ 0.61	$ 0.55	$ 0.55	$ 0.55	
	TOTAL SOURCES	**$ 27.57**	**$ 130.70**	**$ 18.19**	**$ 8.55**	**$ 0.55**	**$ 0.55**	
USES								
Financing related uses	CTP Financing Program	$ 0.52	$ 8.60	$ 19.37	$ 23.48	$ 23.48	$ 23.48	
	Maintenance	$ 0.13	$ 2.11	$ 3.07	$ 3.07	$ 3.07	$ 3.07	
Incentive related uses	*New Truck Incentive* Program	$ 40.00	$ 40.00	$ -	$ -	$ -	$ -	
	Efficiency Incentive Program	$ 0.64	$ 4.14	$ -	$ -	$ -	$ -	
Environmentally related uses	Scrap truck rebates	$ -	$ 25.00	$ 10.60	$ 2.77	$ -	$ -	
Program support uses	Tetra tech	$ 0.93	$ 3.73	$ 3.73	$ 3.73	$ 3.73	$ 3.73	*Assumes that contract extends over full 5 years, with same contract ter*
	Outside Consultants	$ 1.75	$ 2.10	$ 0.64	$ -	$ -	$ -	
	Tariff Collection Fees	$ 1.25	$ 5.00	$ 5.00	$ -	$ -	$ -	
	TOTAL USES	**$ 45.22**	**$ 90.68**	**$ 42.41**	**$ 33.05**	**$ 30.28**	**$ 30.28**	
NET POSITION								
	TOTAL SOURCES	**$ 27.57**	**$ 130.70**	**$ 18.19**	**$ 8.55**	**$ 0.55**	**$ 0.55**	
	TOTAL USES	**$ 45.22**	**$ 90.68**	**$ 42.41**	**$ 33.05**	**$ 30.28**	**$ 30.28**	
	NET POSITION W/O ADDITIONAL PORT REVENUES	**$ (17.65)**	**$ 22.37**	**$ (1.86)**	**$ (26.36)**	**$ (56.10)**	**$ (85.83)**	

ms

1 - due to systems delays

Sources and Uses of Funds for the Clean Truck Program (Quarterly \

Base Case Scenario: $37.5M in CARB Funds Utilized (Based on "Cash Committed - Financing")

Assumes 4000 trucks receive New Truck Incentives, up to 15% of whom receive Efficiency Incentives, 1000 CTP financed LNGs, 0 CTP financed new diesels, and 500 priva

		2008	2009			
SOURCES		**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
	Tariff Revenues	$ 24.81	$ 34.02	$ 30.94	$ 27.96	$ 25.06
	CARB Grants	$ 0.67	$ 1.50	$ 2.33	$ 3.17	$ 4.00
	Concession Fees	$ 2.09	$ 0.03	$ 0.03	$ 0.03	$ 1.63
	TOTAL SOURCES	**$ 27.57**	**$ 35.55**	**$ 33.30**	**$ 31.16**	**$ 30.69**
USES						
Financing related uses	CTP Financing Program	$ 0.52	$ 1.17	$ 1.82	$ 2.48	$ 3.13
	Maintenance	$ 0.13	$ 0.29	$ 0.45	$ 0.61	$ 0.77
Incentive related uses	*New Truck Incentive* Program	$ 40.00	$ 10.00	$ 10.00	$ 10.00	$ 10.00
	Efficiency Incentive Program	$ 0.64	$ 0.80	$ 0.96	$ 1.12	$ 1.28
Environmentally related uses	Scrap truck rebates	$ -	$ 6.25	$ 6.25	$ 6.25	$ 6.25
Program support uses	Tetra tech	$ 0.93	$ 0.93	$ 0.93	$ 0.93	$ 0.93
	Outside Consultants	$ 1.75	$ 0.66	$ 0.60	$ 0.48	$ 0.35
	Tariff Collection Fees	$ 1.25	$ 1.25	$ 1.25	$ 1.25	$ 1.25
	TOTAL USES	**$ 45.22**	**$ 21.35**	**$ 22.27**	**$ 23.11**	**$ 23.96**
NET POSITION						
	TOTAL SOURCES	**$ 27.57**	**$ 35.55**	**$ 33.30**	**$ 31.16**	**$ 30.69**
	TOTAL USES	**$ 45.22**	**$ 21.35**	**$ 22.27**	**$ 23.11**	**$ 23.96**
	NET POSITION W/O ADDITIONAL PORT REVENUES	**$ (17.65)**	**$ (3.45)**	**$ 7.59**	**$ 15.63**	**$ 22.37**

View)

tely financed new diesels enter in 2010 without monetary incentives

Program Year															
2010				2011				2012							
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1			
$ 0.39	$ 0.39	$ 0.39	$ 0.39	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -			
$ 4.00	$ 4.00	$ 4.00	$ 4.00	$ 4.00	$ 4.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -			
$ 0.03	$ 0.01	$ 0.01	$ 0.57	$ -	$ -	$ -	$ 0.55	$ -	$ -	$ -	$ 0.55	$ -			
$ 4.43	**$ 4.40**	**$ 4.40**	**$ 4.96**	**$ 4.00**	**$ 4.00**	**$ -**	**$ 0.55**	**$ -**	**$ -**	**$ -**	**$ 0.55**	**$ -**			
$ 3.81	$ 4.50	$ 5.18	$ 5.87	$ 5.87	$ 5.87	$ 5.87	$ 5.87	$ 5.87	$ 5.87	$ 5.87	$ 5.87	$ 5.87			
$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77			
$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -			
$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -			
$ 3.97	$ 3.97	$ 1.34	$ 1.34	$ 1.20	$ 1.19	$ 0.19	$ 0.19	$ -	$ -	$ -	$ -	$ -			
$ 0.93	$ 0.93	$ 0.93	$ 0.93	$ 0.93	$ 0.93	$ 0.93	$ 0.93	$ 0.93	$ 0.93	$ 0.93	$ 0.93	$ 0.93			
$ 0.23	$ 0.22	$ 0.19	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -			
$ 1.25	$ 1.25	$ 1.25	$ 1.25	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -			
$ 10.96	**$ 11.63**	**$ 9.66**	**$ 10.16**	**$ 8.77**	**$ 8.76**	**$ 7.76**	**$ 7.76**	**$ 7.57**	**$ 7.57**	**$ 7.57**	**$ 7.57**	**$ 7.57**			
$ 4.43	**$ 4.40**	**$ 4.40**	**$ 4.96**	**$ 4.00**	**$ 4.00**	**$ -**	**$ 0.55**	**$ -**	**$ -**	**$ -**	**$ 0.55**	**$ -**			
$ 10.96	**$ 11.63**	**$ 9.66**	**$ 10.16**	**$ 8.77**	**$ 8.76**	**$ 7.76**	**$ 7.76**	**$ 7.57**	**$ 7.57**	**$ 7.57**	**$ 7.57**	**$ 7.57**			
$ 15.83	**$ 8.60**	**$ 3.34**	**$ (1.86)**	**$ (6.63)**	**$ (11.39)**	**$ (19.15)**	**$ (26.36)**	**$ (33.93)**	**$ (41.51)**	**$ (49.08)**	**$ (56.10)**	**$ (63.67)**			

2013						COMMENTS
Q2		Q3		Q4		
$	-	$	-	$	-	*Assumes that initial quarter of tariff collection begins late - Nov 1, 2008 - due to systems delays*
$	-	$	-	$	-	
$	-	$	-	$	0.55	
$	**-**	**$**	**-**	**$**	**0.55**	
$	5.87	$	5.87	$	5.87	
$	0.77	$	0.77	$	0.77	
$	-	$	-	$	-	
$	-	$	-	$	-	
$	-	$	-	$	-	
$	0.93	$	0.93	$	0.93	*Assumes that contract extends over full 5 years, with same contract terms*
$	-	$	-	$	-	
$	-	$	-	$	-	
$	**7.57**	**$**	**7.57**	**$**	**7.57**	
$	**-**	**$**	**-**	**$**	**0.55**	
$	**7.57**	**$**	**7.57**	**$**	**7.57**	
$	**(71.24)**	**$**	**(78.81)**	**$**	**(85.83)**	

Cash Committed - Financing

Base Case

Current scenario assumes 4000 trucks receive *New Truck Incentives*, 15% of whom receive *Efficiency Incentives* over first 5 quarters of program. Additionally, assumes 1000 CTP financed LNGs, 0 CTP financed Diesels, and 500 new diesel trucks enter the program in 2010 without monetary incentives. All assumptions can be changed in rows highlighted in yellow.

Model Options

Toggle between the options below:

POLA		*(POLA or POLB)*
Container Growth: No Growth	4	*(Container Growth: High Growth, Container Growth: Base Case, Container Growth: Medium Growth, or Container Growth: No Growth)*
Monthly payment (lease)		*(Payment upfront or Montly payment (lease))*
New clean truck incentive		*(No incentive or New clean truck incentive)*
Efficiency incentive		*(No incentive, Efficiency incentive, or Efficiency incentive over time)*
No LNG Voucher		*(LNG Voucher or No LNG Voucher)*

		2008	2009				2010				Program Year	
TRUCK SUPPLY		Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
New entrants	LNG - CTP financed	100	125	125	125	125	100	100	100	100	-	
	Diesel - CTP financed	-	-	-	-	-	-	-	-	-	-	-
	Private LNG	-	-	-	-	-	-	-	-	-	-	-
	Private Diesel	2,000	500	500	500	500	500	-	-	-	-	-
Scrap	Number of trucks	-	1,250	1,250	1,250	1,250	793	793	267	267	240	238
Total number of trucks	CTP LNG	100	225	350	475	600	700	800	900	1,000	1,000	1,000
	CTP Diesel	-	-	-	-	-	-	-	-	-	-	-
	Private LNG	-	-	-	-	-	-	-	-	-	-	-
	Private Diesel	2,000	2,500	3,000	3,500	4,000	4,500	4,500	4,500	4,500	4,500	4,500
	Existing Diesel	11,349	11,349	11,349	11,349	11,349	132	132	132	132	-	-
	Existing Diesel w/ LNG Vouchers	125	125	125	125	100						
	Total Fleet	13,449	14,074	14,699	15,324	15,949	5,332	5,432	5,532	5,632	5,500	5,500
% Port CTP LNG Trucks by initial funding program	LNG CARB	80%	80%	80%	80%	80%	0%	0%	0%	0%	0%	0%
	LNG POLA <100	20%	20%	20%	20%	20%	100%	100%	100%	100%	100%	100%
	LNG POLA>100	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
% Port CTP Diesel Trucks by initial funding program	Diesel CARB	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Diesel POLA <100	100%	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%
% of compliant trucks with efficiency incentives	>lower bound hauls / year (LNG)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	>lower bound hauls / year (Private Diesel)	15%	15%	15%	15%	15%	10%	10%	10%	10%	10%	10%
	>upper bound hauls / year (LNG)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	>upper bound hauls / year (private Diesel)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	# efficient trucks	300	375	450	525	600	458	458	458	458	458	458
Port Financing Costs $M	LNG	$ 0.52	$ 1.17	$ 1.82	$ 2.48	$ 3.13	$ 3.81	$ 4.50	$ 5.18	$ 5.87	$ 5.87	$ 5.87
	Diesel	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Total	**$ 0.52**	**$ 1.17**	**$ 1.82**	**$ 2.48**	**$ 3.13**	**$ 3.81**	**$ 4.50**	**$ 5.18**	**$ 5.87**	**$ 5.87**	**$ 5.87**
Port Maintenance Costs $M	LNG	$ 0.13	$ 0.29	$ 0.45	$ 0.61	$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77
	Diesel	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Total	**$ 0.13**	**$ 0.29**	**$ 0.45**	**$ 0.61**	**$ 0.77**	**$ 0.77**	**$ 0.77**	**$ 0.77**	**$ 0.77**	**$ 0.77**	**$ 0.77**
Port Incentives Costs $M	New clean truck incentive	$ 40.00	$ 10.00	$ 10.00	$ 10.00	$ 10.00	$ -	$ -	$ -	$ -	$ -	$ -
	Efficiency incentive	$ 0.64	$ 0.80	$ 0.96	$ 1.12	$ 1.28	$ -	$ -	$ -	$ -	$ -	$ -
	Total	**$ 40.64**	**$ 10.80**	**$ 10.96**	**$ 11.12**	**$ 11.28**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
CARB Financing $M	LNG	$ 0.67	$ 1.50	$ 2.33	$ 3.17	$ 4.00	$ 4.00	$ 4.00	$ 4.00	$ 4.00	$ 4.00	$ 4.00
	Diesel	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Total	**$ 0.67**	**$ 1.50**	**$ 2.33**	**$ 3.17**	**$ 4.00**	**$ 4.00**	**$ 4.00**	**$ 4.00**	**$ 4.00**	**$ 4.00**	**$ 4.00**
Scrap		$ -	$ 6.25	$ 6.25	$ 6.25	$ 6.25	$ 3.97	$ 3.97	$ 1.34	$ 1.34	$ 1.20	$ 1.19
Concession administration	Tetratech	$ 0.93	$ 0.93	$ 0.93	$ 0.93	$ 0.93	$ 0.93	$ 0.93	$ 0.93	$ 0.93		
Tariff Collection	WCMTOA	$ 1.25	$ 1.25	$ 1.25	$ 1.25	$ 1.25	$ 1.25	$ 1.25	$ 1.25	$ 1.25	$ -	$ -

TRUCK DEMAND

Hauls needed	Short haul (Total)	576,650	576,650	576,650	576,650	576,650	576,650	576,650	576,650	576,650	576,650	576,650
	Long haul	192,217	192,217	192,217	192,217	192,217	192,217	192,217	192,217	192,217	192,217	192,217
Trucks needed	Short haul	2,865	2,865	2,865	2,865	2,865	1,950	1,950	1,950	1,950	1,950	1,950
	Long haul	3,495	3,495	3,495	3,495	3,495	3,204	3,204	3,204	3,204	2,957	2,957
Trucks available	Short haul - LNG	100	225	350	475	600	700	800	900	1,000	1,000	1,000
	Short/long haul - diesel	13,349	13,849	14,349	14,849	15,349	4,632	4,632	4,632	4,632	4,500	4,500
Allocation of hauls	Long haul - Existing Diesel	167,176	161,903	156,952	152,296	147,907	6,077	6,077	6,077	6,077	-	-
	Long haul - Private Diesel	25,041	30,314	35,264	39,921	44,309	186,140	186,140	186,140	186,140	192,217	192,217
	Long haul - CTP Diesel	-	-	-	-	-	-	-	-	-	-	-
	Short haul - CTP LNG	5,793	12,264	18,013	23,155	27,780	189,656	207,023	222,898	237,465	226,776	226,776
	Short haul - Private LNG	-	-	-	-	-	-	-	-	-	-	-
	Short haul - Existing Diesel	407,632	363,477	320,833	279,445	239,113	-	-	-	-	-	-
	Short haul - Private Diesel	163,225	200,909	237,804	274,050	309,757	386,995	369,628	353,753	339,185	349,874	349,874
	Short haul - CTP Diesel	-	-	-	-	-	-	-	-	-	-	-
Check allocation		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
LNG share of SH		1%	2%	3%	4%	5%	33%	36%	39%	41%	39%	39%
Shortage		-	-	-	-	-	-	-	-	-	-	-
Hauls/truck	LNG	58	55	51	49	46	271	259	248	237	227	227
	New diesel	94	92	91	90	89	127	124	120	117	120	120
	Old diesel	51	46	42	38	34	46	46	46	46	-	-

FUNDS FLOW

Total ECF Intake	CTP LNG	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
$M	CTP Diesel	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Private LNG	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Private Diesel	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Existing Diesel	$ 37.22	$ 34.02	$ 30.94	$ 27.96	$ 25.06	$ 0.39	$ 0.39	$ 0.39	$ 0.39	$ -	$ -
Total Concession fee Intake	Concession application fee	$ 0.75	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.01	$ 0.01	$ 0.01	$ -	$ -
$M	Truck registration fee	$ 1.34	$ -	$ -	$ -	$ 1.59	$ -	$ -	$ -	$ 0.56	$ -	$ -
	Total Inflow	**$ 37.22**	**$ 34.02**	**$ 30.94**	**$ 27.96**	**$ 25.06**	**$ 0.39**	**$ 0.39**	**$ 0.39**	**$ 0.39**	**$ -**	**$ -**
	Total Outflow	**$ 43.47**	**$ 20.69**	**$ 21.66**	**$ 22.63**	**$ 23.60**	**$ 10.73**	**$ 11.41**	**$ 9.47**	**$ 10.16**	**$ 7.84**	**$ 7.83**
	Net Cumulative Funding Commitment	**$ (6.25)**	**$ 7.08**	**$ 16.35**	**$ 21.67**	**$ 23.13**	**$ 12.80**	**$ 1.77**	**$ (7.30)**	**$ (17.07)**	**$ (24.90)**	**$ (32.73)**

2011		2012				2013			
Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
38	38	-	-	-	-	-	-	-	-
1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500
-	-	-	-	-	-	-	-	-	-
5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500
0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
100%	100%	0%	0%	0%	0%	0%	0%	0%	0%
0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0%	0%	0%	0%		0%	0%		0%	0%
0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
458	458	458	458	458	458	458	458	458	458
$ 5.87	$ 5.87	$ 5.87	$ 5.87	$ 5.87	$ 5.87	$ 5.87	$ 5.87	$ 5.87	$ 5.87
$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
$ 5.87	$ 5.87	$ 5.87	$ 5.87	$ 5.87	$ 5.87	$ 5.87	$ 5.87	$ 5.87	$ 5.87
$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77
$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77	$ 0.77
$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
$ 0.19	$ 0.19	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

per ban schedule
assumes 4 month delay on delivery of LNG

576,650	576,650	576,650	576,650	576,650	576,650	576,650	576,650	576,650	576,650	*Assumes containers are evenly distributed across all quarters - may need to adjust to account for peak / valley seasons*
192,217	192,217	192,217	192,217	192,217	192,217	192,217	192,217	192,217	192,217	*Assumes containers are evenly distributed across all quarters - may need to adjust to account for peak / valley seasons*
1,950	1,950	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	
2,957	2,957	2,746	2,746	2,746	2,746	2,563	2,563	2,563	2,563	
1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	
-	-	-	-	-	-	-	-	-	-	
192,217	192,217	192,217	192,217	192,217	192,217	192,217	192,217	192,217	192,217	
-	-	-	-	-	-	-	-	-	-	
226,776	226,776	209,383	209,383	209,383	209,383	196,333	196,333	196,333	196,333	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
349,874	349,874	367,267	367,267	367,267	367,267	380,318	380,318	380,318	380,318	
-	-	-	-	-	-	-	-	-	-	
100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
39%	39%	36%	36%	36%	36%	34%	34%	34%	34%	
-	-	-	-	-	-	-	-	-	-	*Check that there is not a shortage of trucks in any given year*
227	227	209	209	209	209	196	196	196	196	
120	120	124	124	124	124	127	127	127	127	
-	-	-	-	-	-	-	-	-	-	

										Fee after exemptions
$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$0.00
$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$64.75
$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$0.00
$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$0.00
										$64.75
$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
$ -	$ 0.55	$ -	$ -	$ -	$ 0.55	$ -	$ -	$ -	$ 0.55	
$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
$ 6.83	$ 6.83	$ 6.64	$ 6.64	$ 6.64	$ 6.64	$ 6.64	$ 6.64	$ 6.64	$ 6.64	
$ (39.56)	$ (46.39)	$ (53.03)	$ (59.66)	$ (66.30)	$ (72.94)	$ (79.58)	$ (86.22)	$ (92.85)	$ (99.49)	

Additional Funds Committed (Consulting / Outside Agencies)

Source: Port of Los Angeles Finance Dept (Mike Russell) August 2008

All contracts are broken out evenly over timeline stated in terms of the contract

		2008									
Funds Committed		**Jan**	**Feb**	**March**	**Apr**	**May**	**June**	**July**	**Aug**	**Sept**	**Oct**
Vendor Name	Quetico - Chris Cannon	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000
	Environ - POLA ID 2467	41,170	41,170	41,170	41,170	41,170	41,170	41,170	41,170	41,170	41,170
	Tom Shurstad	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500
	TIAX - Patrick Couch / J Leonard	15,877	15,877	15,877	15,877	15,877	15,877	15,877	15,877		
	BCG	27,083	27,083	27,083	27,083	27,083	27,083	27,083	27,083	27,083	27,083
	CGR - Tom Brightbill										8,250
	GNA - Cliff Gladstein										32,038
	Document Technologies										27,778
	SA Recycling										5,556
	Norne - Kevin Scott	28,053	28,053	28,053	28,053	28,053	28,053	28,053	28,053	14,098	14,098
	Project Control Inc - Merilee Hatfield						15,283	15,283	15,283	12,579	12,579
	Rodgers Group										62,500
	Additional Administration Fee (Daimler)										216,475
	RFID Administrator										
	Tetra tech (Concession Administrator)										311,111
Funds Paid Out											
Vendor Name	Quetico - Chris Cannon										
	Environ - POLA ID 2467	59,278	59,278	59,278	59,278	59,278	59,278	59,278	59,278		
	Tom Shurstad										
	TIAX - Patrick Couch / J Leonard										
	BCG	27,750	27,750	27,750	27,750	27,750	27,750	27,750	27,750		
	CGR - Tom Brightbill										

	GNA - Cliff Gladstein										
	Document Technologies										
	SA Recycling										
	Norne - Kevin Scott	28,053	28,053	28,053	28,053	28,053	28,053	28,053	28,053		
	Project Control Inc - Merilee Hatfield						15,283	15,283	15,283		
	Rodgers Group										
	Additional Administration Fee (Daimler)										
	RFID Administrator										
	Tetra Tech										
Payments Remaining											
Vendor Name	Quetico - Chris Cannon									30,857	30,857
	Environ - POLA ID 2467									4,954	4,954
	Tom Shurstad									37,500	37,500
	TIAX - Patrick Couch / J Leonard									31,754	31,754
	BCG									26,750	26,750
	CGR - Tom Brightbill										8,250
	GNA - Cliff Gladstein										32,038
	Document Technologies										27,778
	SA Recycling										5,556
	Norne - Kevin Scott									14,098	14,098
	Project Control Inc - Merilee Hatfield									12,579	12,579
	Rodgers Group									62,500	62,500
	Additional Administration Fee (Daimler)										216,475
	RFID Administrator										
	Tetra Tech										311,111
	TOTAL REMAINING PAYMENTS	-	-	-	-	-	-	-	-	220,991	511,088

Program Year																
2009																
Nov	Dec	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March
24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000
41,170	41,170															
12,500	12,500															
27,083	27,083	27,083	27,083	27,083	27,083	27,083	27,083	27,083	27,083	27,083	27,083	27,083	27,083			
8,250	8,250	8,250	8,250	8,250												
32,038	32,038	32,038	32,038	32,038	32,038	32,038										
27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778
5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556
14,098	14,098	14,098	14,098	14,098	14,098	14,098	14,098	14,098	14,098	14,098	14,098	14,098	14,098			
12,579	12,579	12,579	12,579	12,579	12,579	12,579	12,579	12,579	12,579	12,579	12,579	12,579	12,579	12,579	12,579	12,579
62,500	62,500	62,500	62,500	62,500	62,500	62,500	62,500	62,500	62,500	62,500						
216,475	216,475															
311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111

30,857	30,857	30,857	30,857	30,857	30,857	30,857	30,857	30,857	30,857	30,857	30,857	30,857	30,857	30,857	30,857	30,857
4,954	4,954															
37,500	37,500															
31,754	31,754															
26,750	26,750	26,750	26,750	26,750	26,750	26,750	26,750	26,750	26,750	26,750	26,750	26,750	26,750			
8,250	8,250	8,250	8,250	8,250												
32,038	32,038	32,038	32,038	32,038	32,038	32,038										
27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778
5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556
14,098	14,098	14,098	14,098	14,098	14,098	14,098	14,098	14,098	14,098	14,098	14,098	14,098	14,098			
12,579	12,579	12,579	12,579	12,579	12,579	12,579	12,579	12,579	12,579	12,579	12,579	12,579	12,579	12,579	12,579	12,579
62,500	62,500	62,500	62,500	62,500	62,500	62,500	62,500	62,500	62,500							
216,475	216,475															
311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111
511,088	511,088	220,406	220,406	220,406	212,156	212,156	180,117	180,117	180,117	117,617	117,617	117,617	117,617	76,769	76,769	76,769

2010									
Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	COMMENTS
24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	
27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778	
5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556	
12,579	12,579								
311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111	*Tetra tech accounted for separately in the "Sources and Uses" sheets*

									Tetra tech accounted for separately in the "Sources and Uses" sheets
30,857	30,857	30,857	30,857	30,857	30,857	30,857	30,857	30,857	
27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778	27,778	
5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556	5,556	
12,579	12,579								
311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111	311,111	*Tetra tech accounted for separately in the "Sources and Uses" sheets*
76,769	76,769	64,190	64,190	64,190	64,190	64,190	64,190	64,190	

Assumptions

Assumptions - Revenue from Tariff

ECF per TEU	$35.00
TEU per haul	1.85
% of ECF Collected in 2008 (since beginning 11/1)	67%

Assumtions - Revenue from Concession Fees

Concession application fee	$2,500.00	Trucks per LMC	45
Registration fee	$100.00		

Assumptions - Costs for Collection of Tariff

Annual fee	$5,000,000.00
Quarterly payment	$1,250,000.00

Assumptions - Truck Costs

Cost of Diesel (POLA)	$91,409
Cost of LNG (POLA)	$161,135

Assumptions - Financing Costs

Financing percentages for upfront payment (POLA)

# of trucks	CARB	POLA <100	POLA>100		
LNG	45%	70%	81%	Exceed 50% LNG	0%
Diesel	15%	70%		Enter program early	0%

Financing percentages for upfront payment (POLB)		*CARB Funding*	
LNG	74%	LNG	31%
Diesel	68%	Diesel	55%

Maintenance Costs for CARB Funded Trucks (POLA - Monthly)		*Maintenance Costs for CARB Funded Trucks (POLA - Capitalized)*	
LNG	400	LNG	22,346
Diesel	135	Diesel	7,542

Financing costs for monthly lease payments (POLA) - First 6 quarters		*Financing costs for monthly lease payments (POLA) - Following quarters*	
CARB LNG	1,200	CARB LNG	1,200
POLA >100 LNG	1,714	POLA >100 LNG	1,714
CARB Diesel	840	CARB Diesel	840
POLA Diesel	840	POLA Diesel	840

CARB Contribution (POLA)	
CARB LNG (Quarterly)	8,333
CARB Diesel (Quarterly)	8,333

Financing costs for monthly lease payments (POLB)	
LNG	2,061
Diesel	941

Scrap per truck	$5,000

Incentives

New clean truck (upfront)	$20,000	Upper bound trucks with Incentives	4000
New clean truck(monthly)	$1,000		

Efficiency incentive

2008-2009

>600 trips a year	$10	Average number of trips / quarter at this rate	200
>1000 trips a year	$20	Average number of trips / quarter at this rate	0
Assumed trips / year	850		

2010 - 2011

>800 trips a year	$10	Average number of trips / quarter at this rate	200
>1200 trips a year	$20	Average number of trips / quarter at this rate	0
Assumed trips / year	1,200		

2012-2013

>1000 trips a year	$10	Average number of trips / quarter at this rate	200
>1400 trips a year	$20	Average number of trips / quarter at this rate	0
Assumed trips / year	1,400		

Assumptions - Container Moves

Container Growth (Both Ports)

	2006	2008	2009	2010	2011	2012	2013	CAGR ('06-'10)
Base Case	8,104,000	8,304,129	8,406,039	8,509,200	8,613,627	8,719,335	8,826,341	1.23%
High Growth	8,104,000	9,751,530	10,696,937	11,734,000	12,871,606	14,119,503	15,488,383	9.69%
Medium Growth	8,104,000	9,078,418	9,608,721	10,170,000	10,764,066	11,392,833	12,058,328	5.84%
No Growth	8,104,000	8,104,000	8,104,000	8,104,000	8,104,000	8,104,000	8,104,000	0.00%

% of Containers moved by On-dock rail	24.10%
% Short Haul Trips	75%
% Long Haul Trips	25%
POLA or POLB Share of Containers	50%
Current % matching (short haul)	22%
Current % matching (long haul)	10%

POLA / POLB Hauls per year

		2008	2009	2010	2011	2012	2013
POLA & POLB	S. H.	788	788	788	788	788	788
	L. H.	220	220	220	220	220	220
POLA	S. H.	805	805	1183	1183	1442	1442
	L. H.	220	220	240	260	280	300

Total number of trucks available in SPB 26394

Assumptions – Exemptions

	POLA	POLB
CTP LNG	100%	0%
CTP Diesel	0%	0%
Private LNG	100%	100%
Private Diesel	100%	50%

Source

POLA
Husing Report
POLA

POLA - One time fee paid out per LMC entering the CTP; Trucks per LMC assumed based on current applicants (120 LMCs for 5,400 trucks)
POLA - Annual fee paid per truck entering the CTP

POLA - Quoted by John Holmes, 9/11/08
POLA - Quoted by John Holmes, 9/11/08

POLA
POLA

POLA

Grant amounts from POLB, quoted by Sam Joumblat (CFO of POLB) on 7/10/08

POLA - Capitalized costs for funding, assuming $400 monthly maintenance fee over 84 months, with discount rate of 6%
POLA - Capitalized costs for funding, assuming $135 monthly maintenance fee over 84 months, with discount rate of 6%

POLA - Truck Subsidies Draft 7/17/08
POLA - Truck Subsidies Draft 7/17/08

To be verified

POLA - Discussion with Mike Russell, 9/8/08, for quarterly payments over first 6 quarters

POLB - Lease Payment Subsidy Analysis, including maintenance fees, additional quarterly payment only for first 8 quarters
POLB - Lease Payment Subsidy Analysis including maintenance fees

POLA - Available for any new 2007 compliant truck entering the market, scrap required, paid upfront, limited to the first 1000 takers, minimum of 300 trips

POLA - Payment made quarterly on all trips over 150, up to 250 trips, assuming all are making 250 trips per quarter
POLA - Payment made quarterly on all trips over 250, limited by truck's haul capacity
BCG Assumption - average efficiency

POLA - Payment made quarterly on all trips over 200, up to 300 trips, assuming all are making 300 trips per quarter
POLA - Payment made quarterly on all trips over 300, limited by truck's haul capacity
BCG Assumption - average efficiency

POLA - Payment made quarterly on all trips over 250, up to 350 trips, assuming all are making 350 trips per quarter
POLA - Payment made quarterly on all trips over 350, limited by truck's haul capacity
BCG Assumption - average efficiency

POLA: 5 year projected growth rate of 5% from 2006 - 2010, other years calculated based on CAGR
Tioga Group SPB Cargo Forecast, CAGR calculated by BCG, '09 & '11-'13 calculated based on CAGR
Tioga Group SPB Cargo Forecast, CAGR calculated by BCG, '09 & '11-'13 calculated based on CAGR
BCG Assumption

Moffatt and Nichol Container Diversion and Economic Impact Study
Moffatt and Nichol Container Diversion and Economic Impact Study
Moffatt and Nichol Container Diversion and Economic Impact Study
BCG Assumption
Moffatt and Nichol Container Diversion and Economic Impact Study
Moffatt and Nichol Container Diversion and Economic Impact Study

BCG Analysis
Exisiting Diesel, Private LNG, Private Diesel, assuming 50 hours a week, 50 weeks a year, 40% matching
Assumes 50 hours a week, 50 weeks a year, with 10% matching (hauls last 10.92 hours)

CTP Financed LNG and Diesel, assuming increase from 55 hours a week, 50 weeks a year with 30% matching, to 80 hours a week, 50 weeks a year, with 60% matching
Assumes 50 hours a week, 50 weeks a year, with matching increasing from 10 -20% over time (hauls last 10.92 hours)

Source StarCrest SPBP

Attachment H

Pearson Declaration

CLEAN TRUCKS PROGRAM: PROJECTED FINANCIAL OUTLAYS AND REVENUES

PORT	POLA		POLB	
REPLACEMENT PACE	Normal	Accelerated Replacement	Normal	Accelerated Replacement
Incentive trucks, 2007	2,000	2,000	0	0
Privately funded trucks, 2007	5,350	4,800	2,775	2850
Privately funded LNG	0			
CTP funded replacements, 2007				
Lease - Diesel	1,750	4,300	8,650	9300
Lease - LNG/AFV	6,100	4,100	1,300	1550
Buy - Diesel	100	600	3,775	3100
Buy - LNG/AFV	1,500	1,000	300	0
Total Replacements	16,800	16,800	16,800	16,800
CTP PROJECTED OUTLAYS				
Incentive trucks, 2007	$60,000,000	$60,000,000	$0	$0
CTP funded replacements				
Buy - Diesel	$6,700,000	$40,200,000	$252,925,000	$207,700,000
Buy - LNG/AFV	$157,500,000	$105,000,000	$31,500,000	$0
Lease - Diesel				
Outlays for 2008 leases	$32,402,292	$32,402,292	$32,402,292	$32,402,292
Outlays for 2009 leases	$0	$432,030,559	$0	$972,068,757
Outlays for 2010 leases	$0	$0	$270,019,099	$0
Outlays for 2011 leases	$156,611,078	$0	$631,844,692	$0
Lease - LNG/AFV				
Outlays for 2008 leases	$9,258,985	$9,258,985	$9,258,985	$9,258,985
Outlays for 2009 leases	$185,179,705	$370,359,411	$37,035,941	$134,255,286
Outlays for 2010 leases	$185,179,705	$0	$37,035,941	$0
Outlays for 2011 leases	$185,179,705	$0	$37,035,941	$0
TOTAL CTP OUTLAYS	**$978,011,471**	**$1,049,251,247**	**$1,339,057,892**	**$1,355,685,321**
CTP PROJECTED REVENUES				
Incentive trucks, 2007	$0	$0	$0	$0
Privately funded trucks, 2007	$0	$0	$124,149,375	$211,365,000
Lease - Diesel	$163,327,500	$616,140,000	$785,452,500	$1,324,890,000
Lease - LNG/AFV	$0	$0	$148,680,000	$221,917,500
Buy - Diesel	$16,380,000	$87,255,000	$329,411,250	$441,630,000
Buy - LNG/AFV	$0	$0	$33,075,000	$0
Pre 2007 (dirty) trucks	$487,935,000	$97,335,000	$955,710,000	$97,335,000
CTP REVENUE	**$667,642,500**	**$800,730,000**	**$2,376,478,125**	**$2,297,137,500**
CTP OUTLAYS	**$978,011,471**	**$1,049,251,247**	**$1,339,057,892**	**$1,355,685,321**
CTP FUND BALANCE	**-$310,368,971**	**-$248,521,247**	**$1,037,420,233**	**$941,452,179**

NOTES:
Does not include Proposition 1B or concessions fee revenues
Does not include overhead or consulting costs

Source: Federal Maritime Commission, Bureau of Trade Analysis, September 2008

Attachment I

Pearson Declaration

Clean Truck Program

Overview for Licensed Motor Carriers

May 26, 2008

Purpose of these materials

The Port of Los Angeles Clean Truck Program (CTP) represents a substantial revitalization of the drayage market, allowing it to be both sustainable and "green"

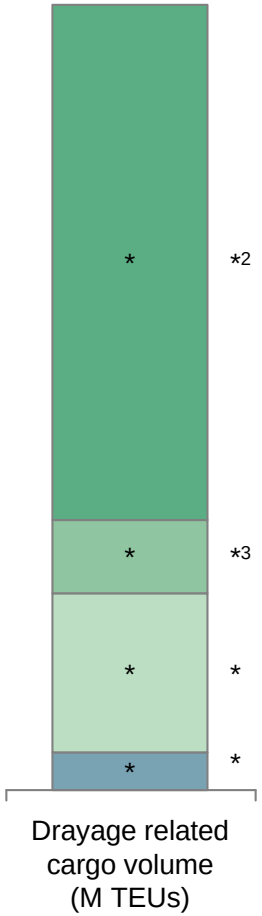
The enclosed materials are intended to describe the CTP for existing and potential LMCs and help address their questions and concerns about

- How and where they can participate i.e. which hauls, how many trucks
- The advantaged economics and how the CTP supports adoption and optimal use of alternative fuel technology
- Overall systems economics for a new or existing LMC in the market

75% of drayage volume is for trips of 50 miles or less

	Description of haul types	Average hrs/haul[1]	Average $/haul[1]
0-25 miles	• **Very short-haul:** end destination within 25 miles • **Near-dock and Off-dock rail:** drayage to near-dock (ICTF) and off-dock (Hobart facility) railyards • **Transload to rail:** warehouses and distribution centers within 25 miles where goods are resorted	1.9	$79.75
25-50 miles	• **Short-haul:** end destination 25-50 miles from the ports	4.6	$195.30
50-150 miles	• **Medium-haul:** end destination 50-150 miles from the ports	9.2	$390.59
150+ miles	• **Long haul:** end destination greater than 150 miles from the ports	19.8	$843.68

2006 POLA drayage-related cargo volume[2]



CTP is configured to make Alternative Fuel (LNG) the advantaged choice

Key conclusions: Cost structure of new diesel vs. LNG

A Operating costs

- **Minimal operating cost difference between LNG and new diesel** ✓
  - Insurance and maintenance more expensive for relatively new LNG technology, but cost of fuel relatively more expensive for diesel

B Environmental Cargo Fee (ECF)

- **For POLA, enforced only on current dirty diesel and CTP financed new diesel** ✓

C Capital costs

- **LNG trucks priced higher than new diesel, but differential offset by grants, leasing structure, and rebates** ✓
- **Lowest capital cost for CTP financed LNG (either grant or lease)**

D Indirect costs and benefits

- **Greater risks for LNG given relative lack of production, infrastructure, and proven performance** ✗

ECF exemption and low capital cost make private diesel, and CTP financed LNG the lowest cost options

For trucks servicing POLA, privately financed diesel and CTP financed LNG represent the most attractive options

1. Assumes two ECF trips per day, 5 days/week, 50 weeks/yr 2. Bars represent $150K LNG truck (CTP financed with $100K grant) and $100K diesel truck (CTP financed with $80K grant) 3. Assumes $3.95/gal for diesel and $3.30/gal for LNG driving 45,000 miles/yr.

LMC operating LNG trucks is competitive with all other participants in the market ...

P&L per truck ($)	Small LMC IOO Old diesel	Small LMC IOO CTP new diesel	Large LMC Employee Private new diesel	Large LMC Employee CTP LNG
Revenue[1]	**107,100**	**113,091**	**235,074**	**222,470**
Operating costs[2]	(50,619)	(54,557)	(66,435)	(66,435)
Labor (driver) costs[3]	(24,351)	(20,413)	(97,269)	(97,269)
Capital costs[4]	-	(5,674)	(16,934)	(5,993)
Overhead[5]	(26,775)	(26,775)	(41,650)	(41,650)
Operating income	**5,355**	**5,672**	**11,754**	**11,124**
Op margin (%)	*5.0%*	*5.0%*	*5.0%*	*5.0%*
# of hauls / year[6]	684	684	1,183	1,183
Revenue/haul ($)	156	165	198	188
ECF/haul[7] ($)	65	65		
Cost to BCO/haul	**$221**	**$230**	**$199**	**$188**

With higher efficiency cost/haul could be much lower

1. Assumes truck performs only 0-50 mi haul drayage 2. Assumes $3.95/gal for diesel and $3.30/gal for LNG, with miles varying by driving time 3. IOO receive 70% of revenues, cover operating costs. Employee labor cost accounts for options that use >1 driver/truck 4. $150K LNG truck (CTP financed with $100K grant) and $100K diesel truck (CTP financed with $80K grant) 5. Varies by number of drivers 6. Number of 0-50 mile hauls possible given efficiency and 2.2 hrs/haul 7. Average 1.8TEU/haul
Source: Husing report, Moffatt and NIchol report, POLA officials, BCG analysis

... And at or cheaper than same trips in POLB

P&L per truck ($)	Privately financed new diesel		CTP financed LNG	
	POLB (IOOs)	POLA (employees)	POLB (IOOs)	POLA (employees)
Revenue[1]	**124,923**	**235,074**	**113,408**	**222,470**
Operating costs[2]	(54,557)	(66,435)	(54,555)	(66,435)
Labor (driver) costs[3]	(20,413)	(97,269)	(20,415)	(97,269)
Capital costs[4]	(16,934)	(16,934)	(5,993)	(5,993)
Overhead[5]	(26,775)	(41,650)	(26,775)	(41,650)
Operating income *Op margin (%)*	**6,244** *5.0%*	**11,754** *5.0%*	**5,779** *5.0%*	**11,124** *5.0%*
# of hauls / year[6]	788	1,183	788	1,183
Revenue/haul ($) ECF/haul ($)	158 32	198	147 64	188
Cost to BCO/haul	**$190**	**$199**	**$209**	**$188**

1. Assumes truck performs only 0-50 mi haul drayage 2. Assumes $3.95/gal for diesel and $3.30/gal for LNG, with miles varying by driving time 3. IOO receive 70% of revenues, cover operating costs. Employee labor cost accounts for options that use >1 driver/truck 4. Assumes $100K diesel truck and $150K LNG truck with $100K grant (assuming lease option will yield similar results) 5. Varies by number of drivers 6. Number of 0-50 mile hauls possible given efficiency (IOOs: 45 hrs/wk, 22% matching, Employees: 70 hrs/wk, 50% matching) and 2.2 hrs/haul
Source: Husing report, Moffatt and NIchol report, POLA officials, BCG analysis

Improved drayage efficiency could significantly reduce needed truck volumes and decrease costs

	Rationale for change	Improvement
Improve matching	• LMC consolidation leads to better understanding of supply-demand dynamics • Most "infrequent" trucks removed from market due to high concession fee	From: 19% matching To: 40% - 60% matching
Increase truck utilization	• CTP leads to more trucking time dedicated to drayage work • "Slip-seating": employee driven trucks can have more than one driver	From: 50 driving hrs / week To: 60-80+ drayage hrs / week

Implication for truck quantity at POLA by 2012

Elimination of "infrequent" trucks from port

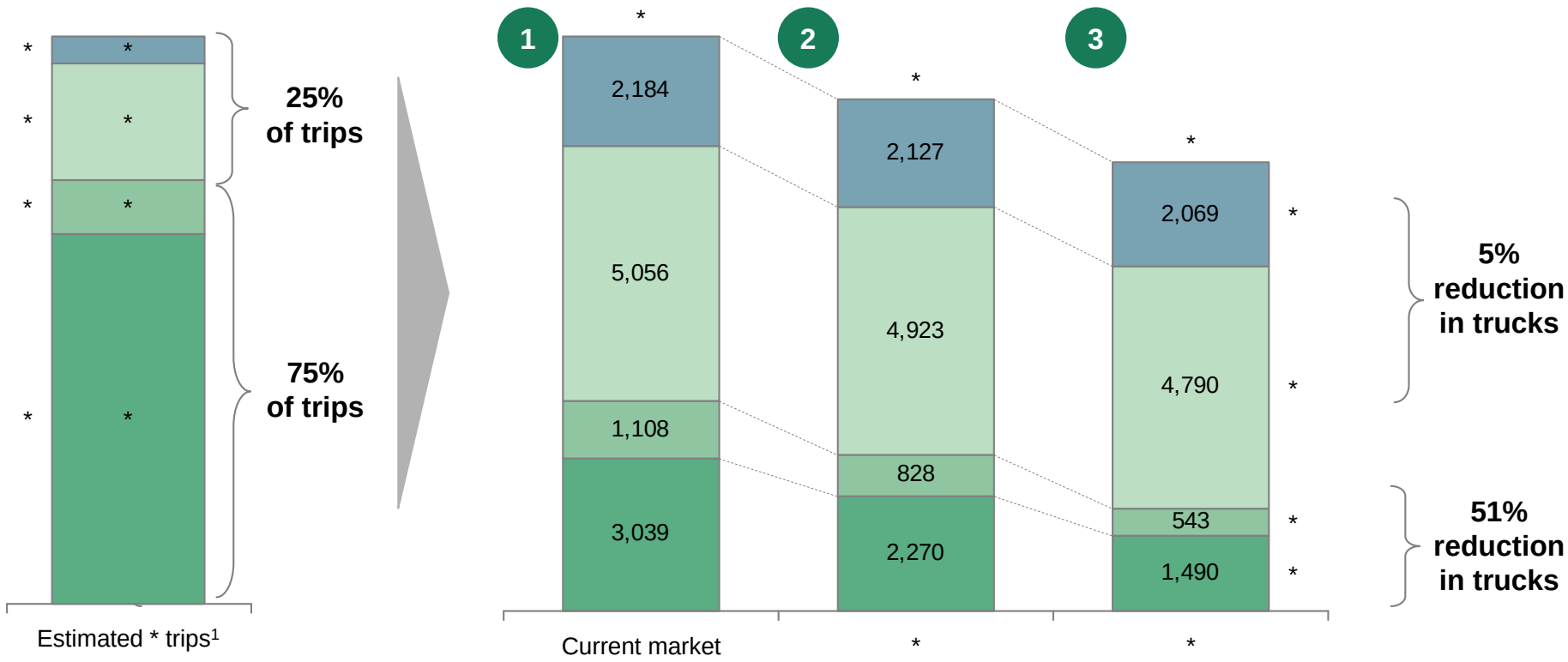
Reduction in semi-frequent and frequent trucks

More trucks fully dedicated to drayage work

With efficiency improvements ~2,000 trucks could handle all short haul drayage – 75% of POLA cargo volume

Share of 2006 POLA drayage trips[1] by haul distance

Number of FT equivalent trucks[2] needed to move 2006 POLA container volume



Short haul is also the ideal drayage focus for LNG and alt fuel trucks

1. Based on 3.5M containers moved through POLA in 2006 and 18.7% matching overall 2. Hypothetical number where each truck does 100% POLA drayage work, each truck completes hauls only within one distance range

Source: Moffatt and Nichol Container Diversion and Economic Impact Study, Goodchild and Mohan Port Productivity: Estimating the Impact of the CTP

Currently under consideration

The current program is designed to be favorable to larger companies that efficiently use resources. In addition we are currently considering additional financial incentives for

- Concessionaires with a larger percentage of alternate fuel vehicles
- Concessionaires that have a larger number of vehicles
- First entrants into the market

We are also committed to providing a favorable atmosphere to new businesses that locate to the City and County of Los Angeles