4 CTP components

# Concession

**Definition** A set of requirements LMCs must meet in order to receive a concession to provide drayage services at the Port

| Levers | Illustrative range of choices |
|---|---|
| Criteria | • Parking requirement (off street, designated lot, etc.)?<br>• Healthcare offering (none, proof of offer, mandate)?<br>• Place of doing business (Y/N)?<br>• Types of trucks in fleet?<br>• Truck maintenance and insurance requirements?<br>• Frequency of drayage for trucks/fleet?<br>• Employee commitment (0-100%, or ratio of truck to employees)? |
| Recipient | • Per LMC? Per truck? Allowance for flex capacity? |
| Number of concessions | • 1-unlimited (#)<br>• Transferable (Y/N) |
| Fee | • $0-$10,000+ per LMC? Fixed or auction price? Variable per truck? |
| Term | • One to 5 or more years |

Source: "Concession Operations Requirements" from memo titled *RFP San Pedro Ports Drayage Permit Administration*; interviews with POLA staff

5 CTP components

# Truck financing program

**Definition** A one time subsidy program financed by the ECF to help applicants acquire new, cleaner trucks

| Levers | Illustrative range of choices |
|---|---|
| Amounts | • $-$$$ for each truck type (i.e., clean diesel, alt. fuel, hybrid)?<br>– Given as grant for purchase or lease option<br>• 0-$ for eligible retrofits?<br>• 0-$ for eligible banned scrap trucks? |
| Financing criteria | • Financial or credit score?<br>• Dray frequency going forward for new truck (e.g., certain number of trips per month for X years)?<br>• Scrapping requirement or fee without a trade-in? |
| Financing recipient | • LMCs and/or IOOs?<br>• Differential programs for larger or smaller enterprises?<br>• Favoring frequent visitors with history of drayage?<br>• Favoring firms with employees? |

Source: Proposed Clean Trucks Program Funding Program, memo dated 2/15/2008; interviews with POLA staff

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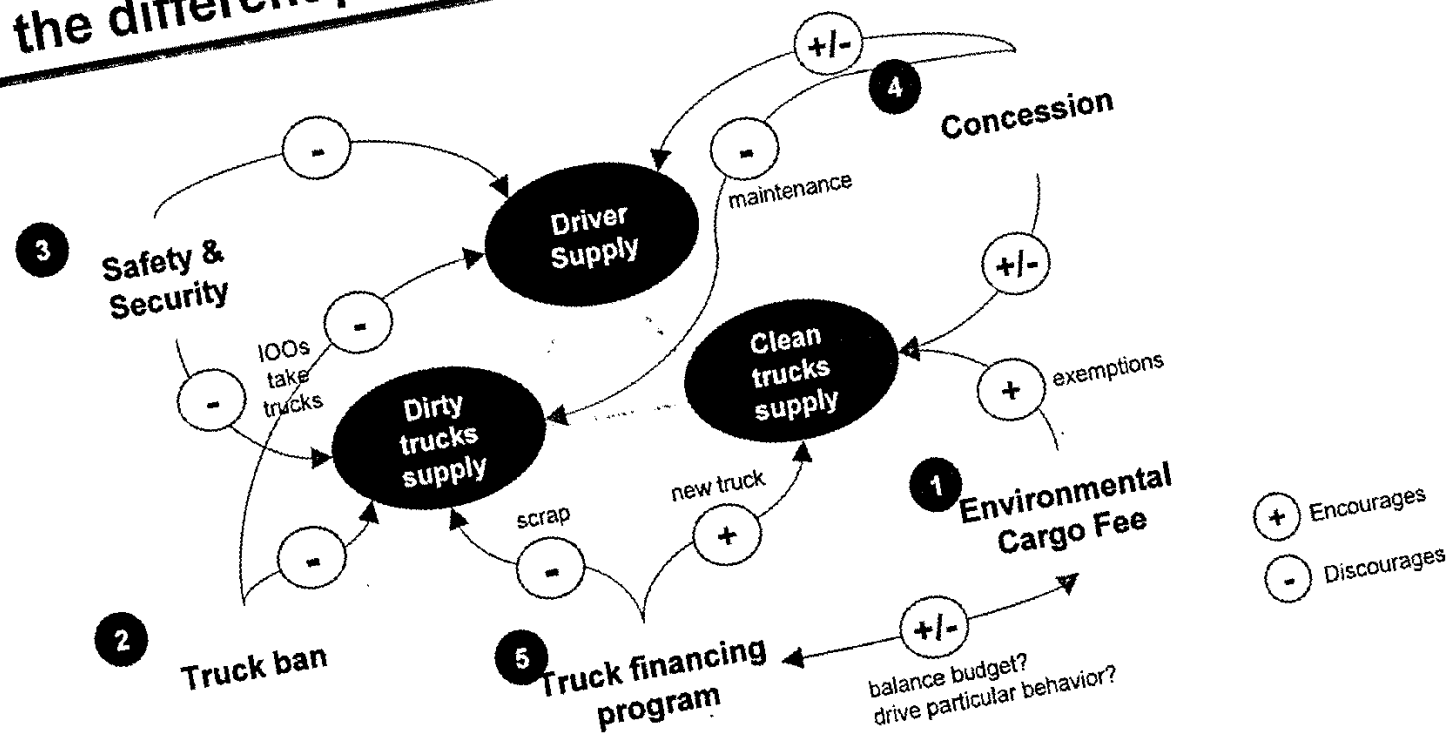
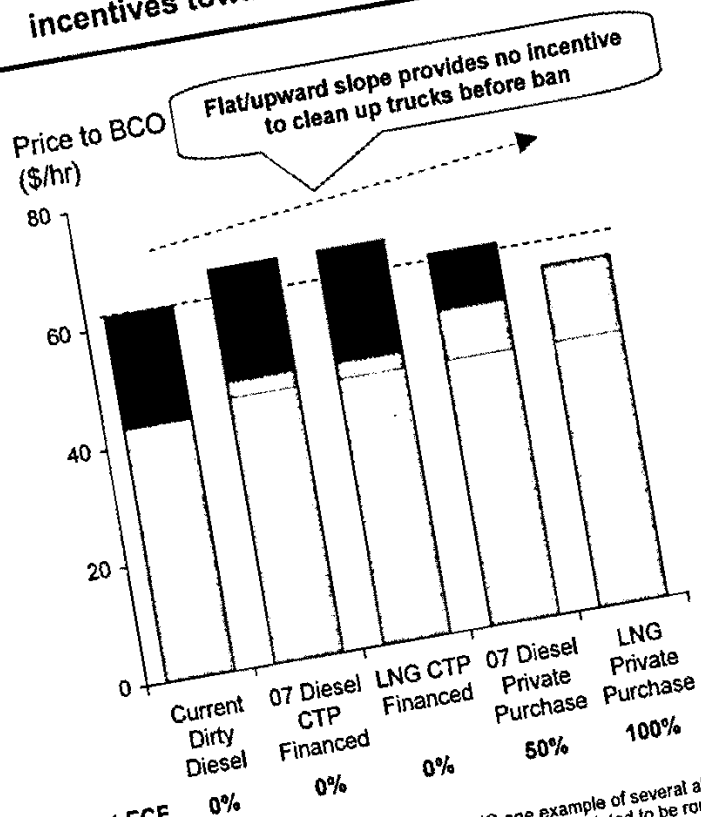
# Our evaluation carefully considered the interactions between the different pieces of the CTP ...



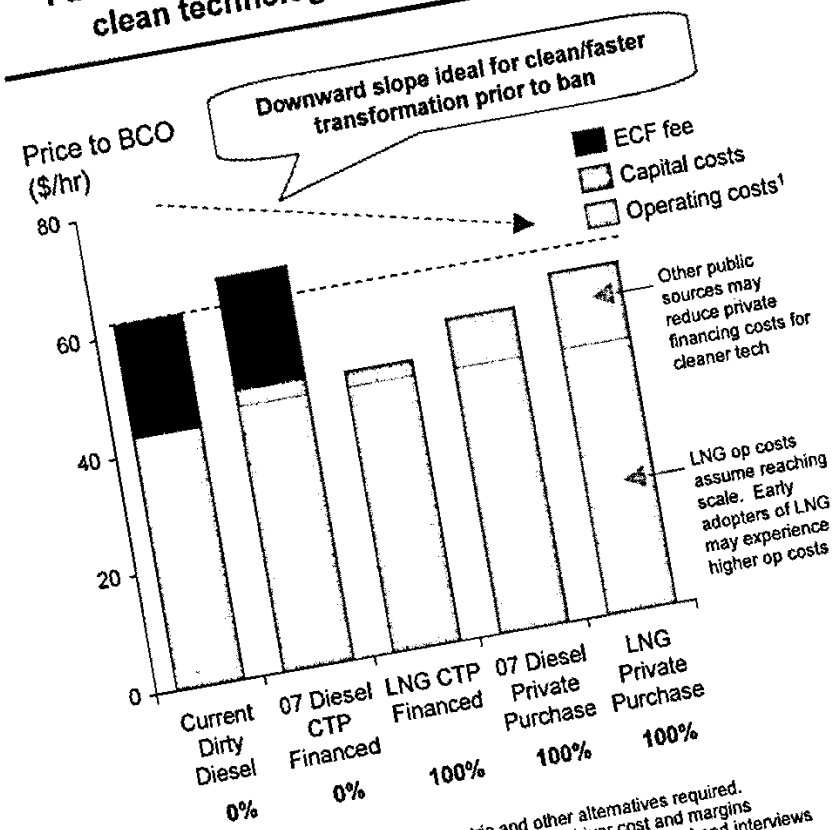

Source: BCG analysis; Moffet and Nichols Data "Container Breakdown by Mode with ACTA data.xls, "Economic Analysis of the Proposed SPB Clean Trucks Program", by John Husing and CGR Consultants

# Example: ECF exemptions and financing programs can be optimized to incentivize green growth before the bans

## Partial exemptions provide limited incentives towards clean technologies




## Further reduced exemptions incentivize clean technologies *before the ban*




Notes: "07 Diesel" trucks meet 2007 standards; LNG one example of several alternative fuel options, additional analysis for CNG, Hybrid, Electric and other alternatives required.
1. Annual operating costs for 2007 Diesel and LNG trucks calculated to be roughly equal using a variety of secondary and primary sources; also includes driver cost and margins
Sources: CTP Technical report, Husing SPBP CAAP Economic Impact Report, CGR SPBP Driver Survey, Tom Brightbill, CRT and LMC interviews, BCG economic model and interviews

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# If CTP levers not well-defined, many things could go wrong

Potential risks

1. **Lack of orderly progression from dirty trucks to clean trucks**
   - Too many trucks leave market at once leading to truck shortage
2. **Disruption in market for trucking services**
   - Too many LMCs leave market abruptly and others do not enter
3. **Loss of flexibility needed to meet fluctuations in goods movement demand**
4. **Lack of supply of potential truckers**
   - Incomes insufficient to attract and retain truckers in drayage
5. **Challenges in implementation and/or enforcement of CTP levers**
6. **Excessive public financing burden and lack of private investment**
7. **Lack of sustainability if market participants do the bare minimum needed to comply and do not build up capital to maintain and upgrade trucks**
8. **Unintended consequences or gaming of the system (e.g. dray-off)**
9. **BCOs divert cargo based on <u>perception</u> of above risks**



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# Agenda

## BCG's analytical approach

Analytical approach

# In evaluating the likely impact of CTP we have examined two distinct time periods

| | Short-Medium Term Years 1-5 | Long Term Years 6+ |
|---|---|---|
| | **From program start to 2012** | **From 2012 and beyond** |
| **Environ-mental** | **Will the emissions goals for trucks be met or exceeded?** | **Will drayage operators continue to upgrade trucks after CTP financing complete?** |
| **Port Operations** | **Will CTP cause cargo diversion, Port disruption?**<br>• Which CTP levers greatly impact the GM system?<br>• Is there a sufficient supply of trucks and drivers with CTP levers applied?<br>• Are fluctuations in demand met?<br><br>**How will the drayage and labor markets evolve as CTP levers are applied?** | **Is the CTP operating model scalable to meet future demand?**<br><br>**Will the objectives of the CTP be sustained in the long run?**<br>• Are driver incomes adequate to attract required supply? |
| **Safety/ Security** | **Are safety and security standards met?** | **Are safety and security standards maintained?** |



Exhibit 2 - Blair Declaration

Attachment 57

000945
Dkt. 08-1895

# We used information from many previous studies

## Sources of secondary information used by BCG


*American Shipper: The Monthly Journal of International Logistics*. February 2007.

CGR Management Consultants. *A Survey of Drayage Drivers Serving the San Pedro bay Ports*. 2007.

*Clean Air Action Plan Technical Report*. San Pedro Bay Ports. 2006. http://www.portoflosangeles.org.

Goodchild, Anne, and Karthik Mohan. "The Clean Trucks Program: Evaluation of a Policy to Influence Marine Terminal Operations." Working Paper (2008).

*Goods Movement Action Plan*. CARB. 2007.

Haveman, Jon and Christopher Thornberg. *Clean Trucks Program*. Beacon Economics. 2008

Husing, John E. *Economic Analysis of Proposed Clean Truck Program*. 2007.

Leachman, Robert C., Theodore Prince, Thomas Brown, and George R. Fetty. *Port and Modal Elasticity Study*. Southern California Association of Governments. Los Angeles. 2005.

Moffatt & Nichol, and BST Associates. *Container Diversion and Economic Impact Study*. 2007. http://www.portsoflosangeles.org

Monaco, Kristen. *Incentivizing Truck Retrofitting in Port Drayage: a Study of Drivers At the Ports of Los Angeles and Long Beach*. Metrans. 2007.

Southern California Association of Governments. *Goods Movement in Southern California: The Challenge, The Opportunity, and the Solution*. 2005

Starcrest Consulting Group. *Draft Methodology for Estimating Heavy Duty Diesel Truck Activity at the Ports of Los Angeles and Long Beach*. 2006

The Tioga Group. *San Pedro Bay Cargo Forecast*. 2007

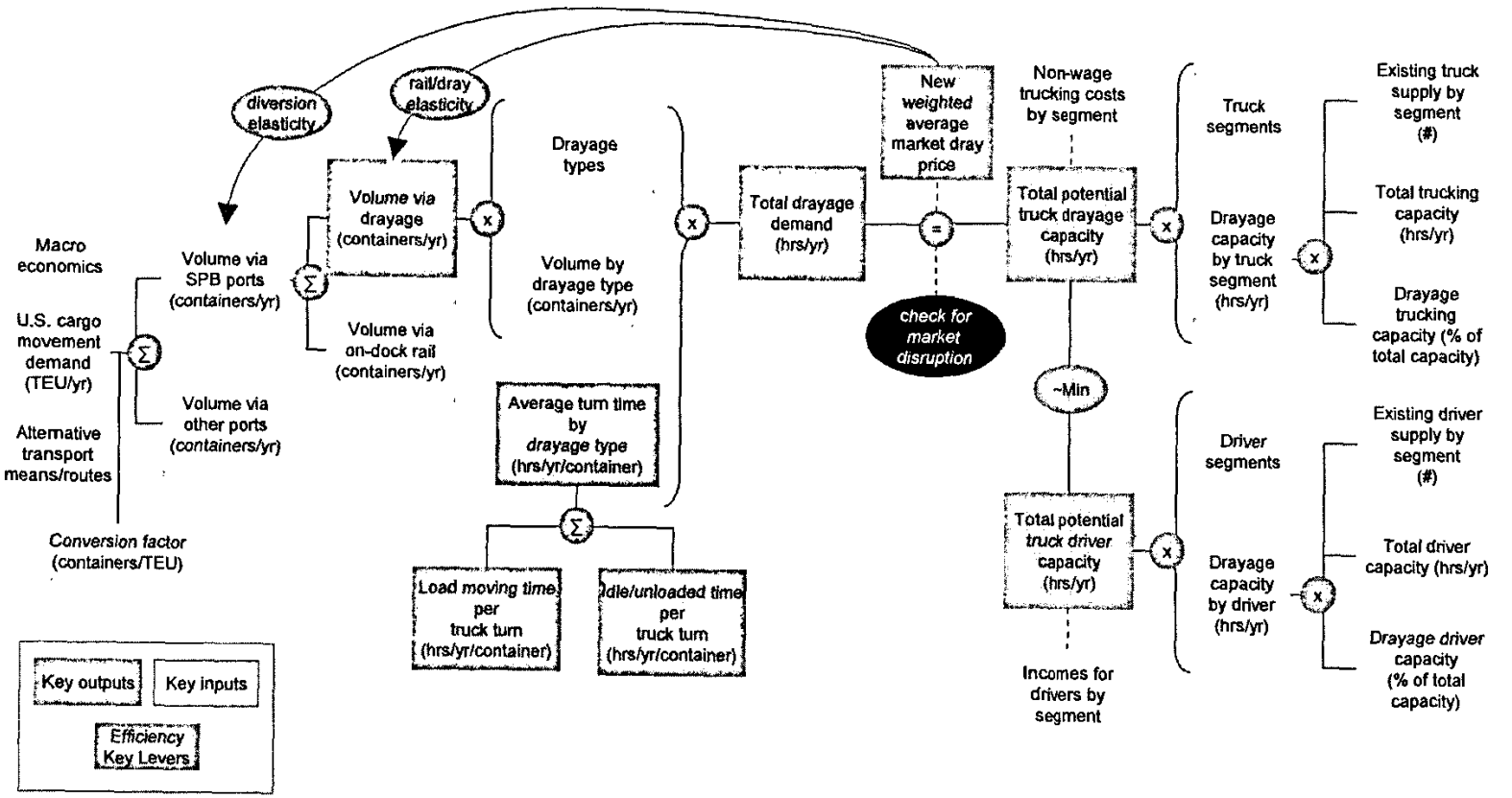
U.S. Department of Energy. *Norcal Prototype LNG Truck Fleet: Final Results*. 2004


**Our research was supplemented by interviews with many study authors and market participants**

Analytical approach

# We built a rich drayage system model to evaluate the CTP

Analytical model couples drayage supply changes to pricing, cargo movement demand



# Overall assumptions for our drayage system model

**Private trucking fleets are utilized primarily based on their BCO's discretion (not market pricing)**

- Fixed percentage of cargo is drayed by private fleets, unaffected by price changes

**A fraction of infrequent drayage trucks act similar to private trucking fleets (not market pricing)**

**Open drayage market utilizes capacity primarily based on price, independent of clean/dirty distinction**

**All drayage haul types (e.g. off-dock, transload, etc) are performed by all trucks, independent of truck segment (e.g. model year, ownership type)**

**Drayage price to BCO is the only variable cost. Non-drayage costs do not change in our analyses (ship, dock equipment, rail, etc)**

**On-dock rail is roughly at capacity, therefore there is essentially no elasticity between drayage and rail**

**Drivers are modeled as FTEs, working 50 hours per week and 50 weeks per year**

**Overall port volume forecasted as flat through 2012 to allow isolation of pricing and diversion impacts**

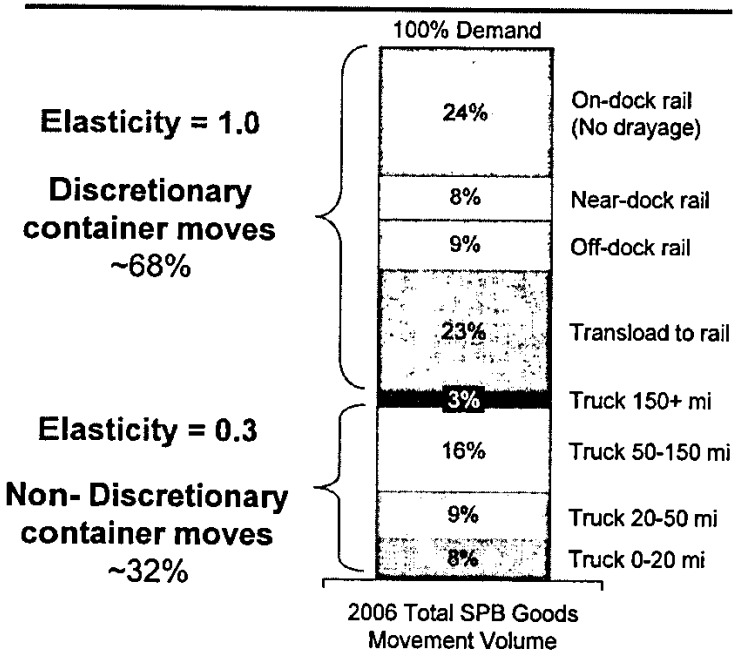
***Operational efficiencies or drayage capacity improvements are not included in model***

Analytical approach

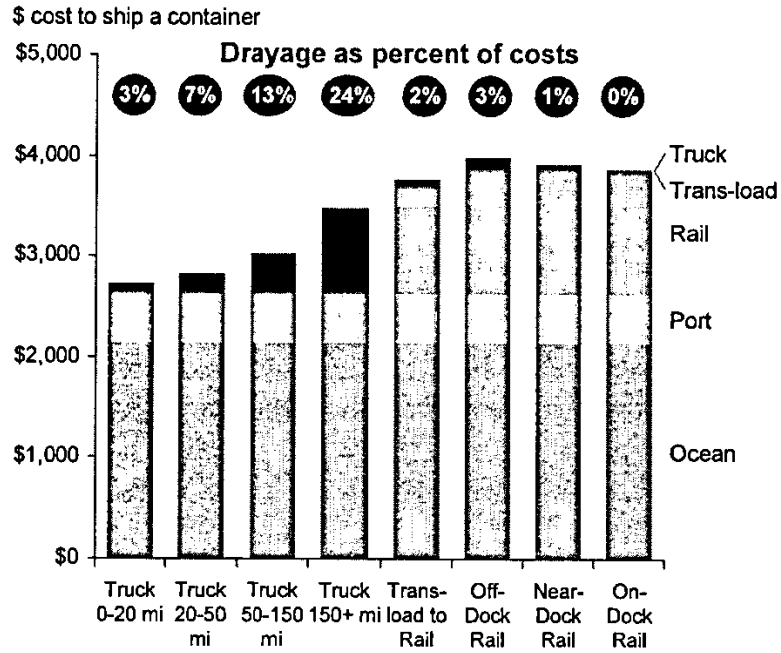
# Our model is grounded on the price elasticity of SPB...

SPB 2006 container movement drayage costs and share of demand by transport segment

## Non-discretionary cargo is relatively price inelastic[1]




## Trucking costs are a small portion of overall costs to ship a container[1]




**Little elasticity between truck and rail due to supply constraints and high cost for local rail transport**

Source: Moffet and Nichols Data "Container Breakdown by Mode with ACTA data.xls, "Economic Analysis of the Proposed SPB Clean Trucks Program", by John Husing and CGR Consultants

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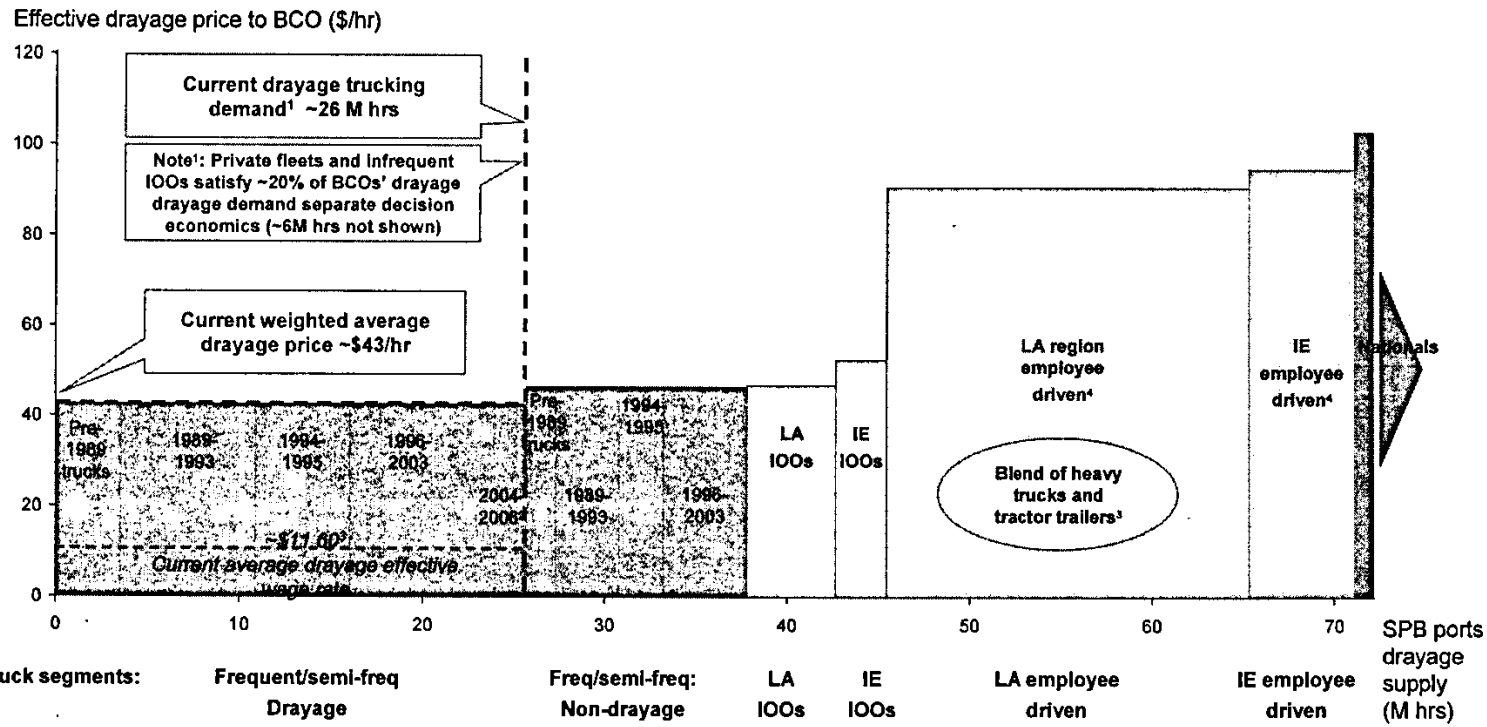
Analytical Approach

# ...A detailed understanding of trucking supply...

Illustrative trucking supply stack for current market segments to participate in SPB drayage



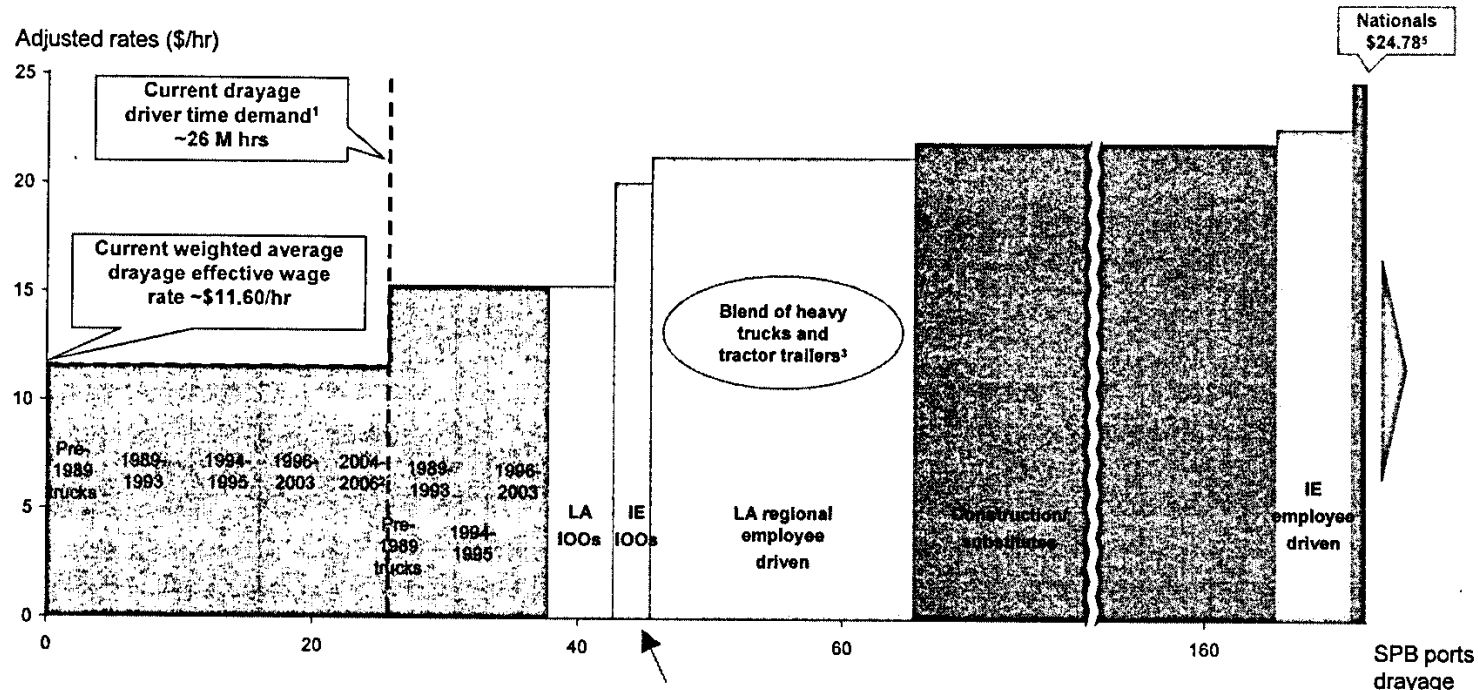

| Truck segments: | Frequent/semi-freq Drayage | Freq/semi-freq: Non-drayage | LA IOOs | IE IOOs | LA employee driven | IE employee driven |
|---|---|---|---|---|---|---|
| Trucks | ~16K | ~16K | ~8K | ~11K | ~32K | ~23K |
| % total utilization time[3] | ~70% | ~30% | ~25% | ~10% | ~25% | ~10% |
| Supply hours | ~25.6 M hrs | ~11.3 M hrs | ~4.9 M hrs | ~2.8 M hrs | ~19.9 M hrs | ~5.8 M hrs |

(1) Private fleets and infrequent IOOs account for ~6M hrs demand. (2) 2004-2006 supply to small to be seen on chart (3) Median income divided by typical hours worked per year. Estimates based on reports and conversations with John Husing and Tom Brightbill (4) Includes extra costs associated with employment including benefits and hour restrictions/overtime - Husing study
Sources: CTP Technical report, Husing SPBP CAAP Economic Analysis Proposed CTP, CGR SPBP Driver Survey, Tom Brightbill, CRT and LMC interviews, BCG economic model

Analytical Approach

# ... And the market for truck drivers

Illustrative trucker supply stack shows potential drivers and their required rates for drayage labor




| Labor segments: | Frequent/semi-freq Drayage | Freq/semi-freq: Non-drayage | LA IOOs | IE IOOs | LA regional employee driven | Construction and other substitutes | IE employee driven |
|---|---|---|---|---|---|---|---|
| Drivers:[3] | ~16K | ~16K | ~8K | ~11K | ~32K | >150K[4] | ~23K |
| Rate to attract to drayage:[3] | $11.60 | $15.32 | $15.32 | $20.08 | $21.27 | $21.97 | $22.67 |

(1) Private fleets and infrequent IOOs account for ~6M hrs demand. (2) 2004-2006 supply to small to be seen on chart (3) Estimates based on reports and conversations with John Husing and Tom Brightbill and scaled by utilization % to arrive at supply hours (4) 2006 CA EDD data – for Los Angeles County construction (5) Average wage rate for UPS and Yellow trucking
Sources: CTP Technical report, Husing SPBP CAAP Economic Analysis Proposed CTP, CGR SPBP Driver Survey, Tom Brightbill, CRT and LMC interviews, BCG economic model

Analytical approach

# Impact of CTP levers calculated for each year

Model mechanics rely on prior year output as input for following year

**Year 0 market (10/07-10/08) baseline**

Baseline SPB drayage market:
- *Current* cargo demand
- *Current* trucks/labor servicing demand by segment
- *Current* drayage pricing by segment

**Potential CTP effects starting Year 1 (2008)**

CTP effects starting in 2008[1]
- Environmental Cargo Fee
- Pre-1989 truck ban
- TWIC regulations
- Concessionary requirements
- Grant program

**Estimated impacts of CTP used as model inputs**

Impacts estimated using existing studies/analysis:
- Net change of trucks by segment
- Net change of incomes and LMC costs by segment

**Year 1 market (10/08-10/09) model output**

Year 1 SPB drayage market:
- *New* weighted avg pricing based on Year 0 demand
- *New* trucks/labor servicing demand by segment
- *New* drayage pricing by segment
- *New* cargo diversion to be applied to Year 2 demand

**Potential CTP impact starting Year 2 (10/09-10/10)**

CTP impacts starting in 2009:
- Continued grant program
- Continued concessionary requirements

**Model estimates impact of CTP through Year 5**

Estimated impacts of CTP as inputs for all 5 years of program

SPB drayage market as output for all 5 years of program

1. Impacts of CTP levers accounted for within the year they are implemented

# Agenda

## CTP operating model options and evaluation

# We evaluated three options for the CTP

| | I: Basic plan | II: Enhanced model with market incentives | III: Enhanced model with market incentives and employee commitment |
|---|---|---|---|
| **Approach to achieve CTP objectives** | **Levers designed to minimize disruptions to drayage market** | **Create sustainable and orderly asset based market, incent faster adoption of clean tech.** | **PLUS: Require employees and asset based market to ensure long term sustainability** |
| 1 **Environmental Cargo Fee** | $35 / TEU, exemptions based on truck technology, funding source, and timing of purchase | $35/TEU, optimized exemptions to encourage cleaner technology and private funding | |
| 2 **Truck ban** | Progressive truck ban as outlined | | |
| 3 **Safety and security** | TWIC criteria as mandated by TSA | | PLUS: added control, training and compliance among employees (via concession) |
| 4 **Concession** | Basic operational criteria allowing LMCs to use employee and IOO drivers | More stringent operational criteria to help maintain oversight (without employee commitment) | PLUS: explicit commitment for drivers to become employees over a set period of time |
| 5 **Truck financing program** | Subsidies to IOOs and LMCs to fund upgrade of banned trucks (scrap required) | Subsidies given to authorized concessions only (scrap required)<br>PLUS: dirty truck buyback program for IOOs and LMCs<br>PLUS: business outreach program for transition assistance | |



Exhibit 2 - Blair Declaration

Attachment 57

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# Option I: "Basic model"

| | Lever | Rationale |
|---|---|---|
| 1 Environmental Cargo Fee | • $35 / TEU fee with some exemptions:<br>– Privately funded (post 10/08): CD with scrap ($17.50 fee), LNG / alt. fuel with scrap ($0 fee), (pre 10/08 same exemptions but scrap not required)<br>– CTP funded: No exemptions | • Encourage rapid adoption of cleaner truck technology<br>• Promote the use of private investment |
| 2 Truck ban | • Progressive ban on the dirtiest trucks:<br>– Oct 1, 2008: All pre-89 trucks<br>– Jan 1, 2010: All 89-93 and un-retrofitted 94-03<br>– Jan 1, 2012: All trucks not meeting 07 standards | • Ensure heaviest polluters are removed from the Port drayage market |
| 3 Safety & Security | • Comply with TWIC criteria as mandated, but full enforcement not active till January, 2009 | • Compliance required by law, but the infrastructure required for enforcement may take time to implement |
| 4 Concession | • Requirements: TWIC/registered drivers, prove health insur. offered, clean truck compliant, RFID tags, truck maint. schedule, and follow existing on-street parking restrictions<br>• concession for 5 years, fee of $250 plus $100/year/ truck<br>• Allows LMCs to use employee and/or IOO drivers, preference for drivers with previous port drayage work | • Provides Ports with greater oversight of trucking operations<br>• Allows opportunity for large portion of current drayage operators (LMCs and IOOs) to continue serving the market |
| 5 Truck financing program | • Criteria for financing: scrap old trucks, must be frequent / semi-frequent, priority given to oldest trucks (pre-89) and applicants with previous port drayage work<br>• Financing options:<br>– Lease to own (7 years, $500-700/mo),<br>– Grant for purchase ($60-75K / CD, $90-120K / LNG),<br>– Grant for retrofit (up to $20K, can re-apply for purchase grant in future net of retrofit funds) | • Subsidies will provide one time assistance to ensure sufficient truck supply<br>• Most IOOs assumed to need financial assistance to switch to using a clean truck |

# Option I evaluation: Environmental

| Benefit/ risk | What we think will happen... | ..and why |
|---|---|---|
| + | Satisfy near term environmental goals as triggered by truck ban; continued emissions reductions dependent on CARB schedule | ECF exemptions and financing insufficient to favor cost structure of cleaner trucks; lack of IOO financial capabilities to invest |
| - | Risk of failure to create a sustainable long term drayage market that will enable continued progress in improving environmental outcomes and enabling green growth | Concession requirements for LMCs are minimal and IOOs are enabled to get new trucks but with limited requirements to maintain them, risk that IOOs unable to maintain trucks to standards |
| - | Newer diesels used but risk that cleanest technologies (e.g. LNG, Electric, Hybrids, others) minimally adopted | Majority of IOOs unable/unwilling to privately fund cleanest alternative fuel trucks; lack of exemption for CTP funded alt fuel vehicles |

# Option I evaluation: Port operations

| Benefit/ risk | What we think will happen... | ..and why |
|---|---|---|
| + | No transformative change in port operations or drayage market | Minimal concession requirements and broad access to financing will not materially impact current market participants |
| + | Total diversion will be minimal – approximately 1% based on direct economic-based decisions resulting from drayage price increase | Very fragmented and competitive market will not result in significant drayage price increases |
| - | Risk that future growth and efficiency improvements are limited | Enforcement of standards and operational improvements more difficult with highly fragmented market; low pricing and low barriers to entry prevent investment of needed capital |



Exhibit 2 - Blair Declaration Attachment 57

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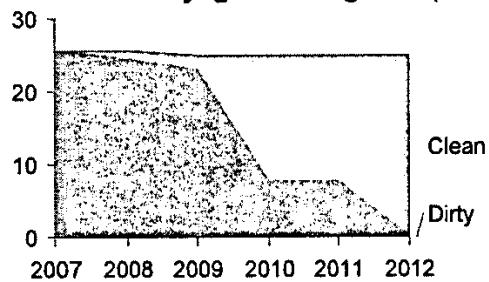
# Option I evaluation: Safety and security

| Benefit/ risk | What we think will happen... | ..and why |
|---|---|---|
| - | Drayage market will continue to be very fragmented with marginal economics driving returns for both LMCs and truckers | Concession requirements for LMCs are minimal and IOOs are enabled to get new trucks but with limited ability/motivations to maintain and replace them |
| - | Risk that local community will continue to bear the negative externalities of a fragmented IOO pool (e.g., neighborhood parking) | Very fragmented market with marginal economics results in similar community externalities to current market; LMCs have no incentives to internalize costs |
| - | Risk that enforcement of safety/security across many IOOs/LMCs continues to be challenging | No reciprocal obligations: LMCs not accountable for safety/security; IOOs incentivized to cut corners |

# Option I: Analytical evaluation

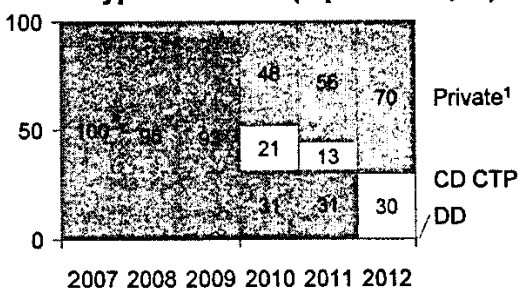
## Environmental

### Total SPB drayage trucking time (M hrs)




- Dirty trucks leave system when banned
- Un-banned dirty trucks pick up some slack during early years

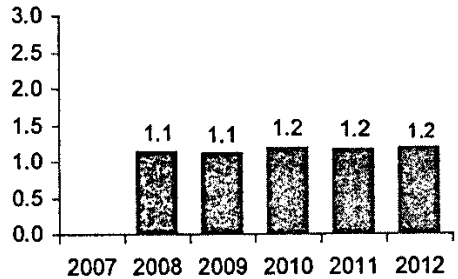
### Truck type utilization (equivalents, %)




- Lack of exemptions on CTP funded "clean" truck incentivizes private funding

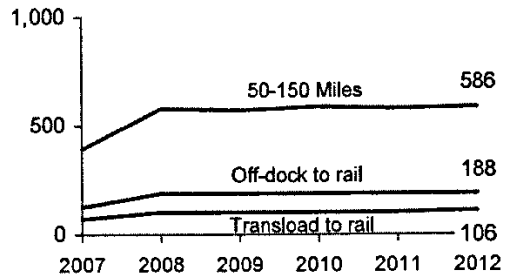
## Operations

### Cumulative Diversion (% SBP demand)




- Cumulative diversion reaches ~1.2%

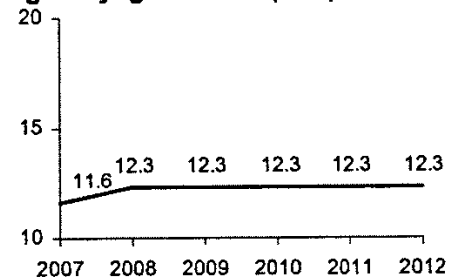
### Avg. drayage costs per container ($)




- Spike in first year due to impact of ECF and TWIC

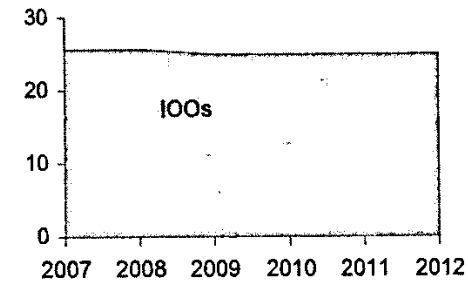
## Drayage market

### Avg. drayage income ($/hr)




- Income increases to ~$12.3/hr in first year due to TWIC, but stays flat in out years due to un-restricted driver supply

### Driver time required (M hrs)




- 100% IOOs throughout all 5 years

1. Private includes blend of clean diesel and alt fuel, mix will depend not only on CTP incentives (e.g. ECF exemptions) but also factors not modeled such as private funding, tax treatment etc
Source: BCG drayage market supply and demand economics model, March 2008

# Option II optimizes the CTP levers in an effort to accelerate achievement of a sustainable drayage solution

| Component | Design principle | Possible model levers |
|---|---|---|
| 1 Environmental Cargo Fee | • Incent cleaner trucks ahead of ban, green growth<br>• Encourage private investment | • More exemptions on cleaner trucks to help level costs<br>• More exemptions on privately funded trucks |
| 4 Concession | • Create orderly market<br>• Cover admin costs<br>• Ensure sufficient supply of trucks and drivers<br>• Improve security<br>• Improve safety<br>• Improve worker conditions<br>• Reduce negative impacts on local community | • Concessions available only to LMCs that meet criteria<br>• Concession priced to ensure LMC commitment and adequate administration/ enforcement<br>• Concession requirements need to prevent LMCs from creating a drayage labor spot market |
| 5 Truck financing program | • Subsidize cleaner trucks<br>• Reinforce orderly market<br>• Support upstanding small businesses<br>• Reinforce sustainable market | • More financing on cleaner trucks<br>• Truck financing only available to LMCs<br>• Financing needed for a small business program for IOOs to become LMCs<br>• Scrap program open to all SPB drayage participants, oldest vehicles first |

Sustainable, Scalable

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Option II

# Our rationale in Option II is to encourage long term development of an *asset based* drayage model ...

| | LMC asset based | IOO ownership |
|---|---|---|
| **Market dynamics** | • LMCs own and maintain trucks, employ drivers<br>– Higher barriers to entry | • Drivers own and maintain trucks, independently contract with LMCs<br>– Low barriers to entry |
| **Incentives** | • LMC motivated to maximize efficiency<br>– Of truck and driver<br>• LMC must internalize costs: total costs integrated into decision making | • LMC and IOO motivated to minimize costs, IOO motivated to maximize work<br>• Many costs externalized: only variable costs integrated into decision making |
| **Risks** | • Higher cost of employees and assets<br>– Higher compensation and wage rates to attract employees<br>– Overhead costs of employee drivers, trucks and maintenance<br>• Less flexibility to cope with peaks, e.g.<br>– Overtime, temp, part time<br>– Access to additional trucks | • Unreliability of supply as IOOs service many different markets<br>• Few incentives for system wide operational efficiency<br>• High administrative costs and burden<br>• Risks if marginal LMCs/IOOs unable to comply with new standards |
| **Enforcement** | • Easier as LMC is accountable for both employees and assets | • More difficult with large number of IOOs |

Source: BCG analysis; Haveman and Thomberg (Beacon Economics), Clean Trucks Program, February 2008

# Asset based trucking firms are likely to make their own environmental and efficiency improvements

Illustrative examples

| | S.C. Johnson | Wal-Mart and logistics partners |
|---|---|---|
| Description | • Multi-national manufacturer of consumer products and chemicals | • Largest retailer in the world |
| Key transport issues | • Trucks were not used at their optimized load capacity | • Aging truck fleet<br>– Mainly diesel trucks<br>– High greenhouse gases footprint |
| Initiative | • Truck-load optimization<br>– Definition of optimal load per truck<br>– Introduction of multi-product loads | • Upgrade truck fleet<br>– Auxiliary power units<br>– Energy-efficient tires<br>– Enhanced trailer aerodynamics |
| Results | • 1,900 tons of greenhouse gases eliminated<br>• Used 2,100 fewer trucks<br>• Used 170K gallons less diesel<br>– $1.6M cost savings | • 7M tons of greenhouse gases eliminated<br>• Less 600M gallons of diesel used<br>– $1.8B saved |

Source: Company websites; other web research

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# Option II: Key adjustments to Option I to encourage a long term sustainable asset based drayage market

1. **Incent cleanest trucks faster**
   - More ECF exemptions on cleaner trucks to lower all below "dirty" diesel
   - Grandfather ECF exemption on all clean trucks prior to October 1, 2008
   - Payout for scrap of trucks

2. **Create sustainable orderly market and enable productivity gains:**
   - More ECF exemptions on private investment in cleaner trucks
   - Strict concession criteria to enable more effective enforcement
     - with day-passes to ensure minimal port disruptions
   - Adjusted concession fee to enable effective administration and market oversight
   - CTP financing only to LMCs for new trucks

3. **Allow pathway for small businesses to grow**
   - Business outreach program providing transition assistance to current drayage participants

Note: "Clean trucks" are those complying with 2007 emissions standards

# Option II: "Enhanced model with market incentives"

| | Lever | | Rationale |
|---|---|---|---|
| 1 Environmental Cargo Fee | Exemption amount (net fee) | • Privately funded: CD ($0 to 17.50 TBD), LNG / alt. fuel / hybrid ($0)<br>• CTP funded: CD ($35), CD after financing paid off ($0), LNG / alt. fuel, hybrid ($0)<br>• Prior to Oct 1 ($0) grandfathered for any clean truck | • Cleaner ahead of ban, green growth<br>• Encourage private investment |
| | Exemption timing | • Flat across time with rights to adjust in future as needed | |
| 4 Concession | Concession recipients | • LMCs only | • Create orderly market<br>• Cover admin costs<br>• Ensure sufficient supply<br>• Improve security<br>• Improve safety<br>• Improve worker condition<br>• Reduce negative impacts on local community |
| | Concession criteria | • Parking requirement (inspected off street)<br>• Strict revocation if trucks not properly maintained<br>• Identifiable place of doing business | |
| | Price of a Concession | • ~$2000-3000 TBD for concession, $100 annually per truck<br>• Right to change price of concession in future | |
| | Concession term | • 5 years standard<br>• May be revoked for any infractions | |
| | Exceptions | • Day passes for trucks servicing port less than X visits per year | |
| 5 Truck financing program | Financing recipient | • LMCs only for new trucks<br>• LMCs or IOOs for truck buyback for scrap<br>• Business outreach program for transition assistance | • Cleaner trucks<br>• Reinforce orderly market<br>• Support upstanding small businesses<br>• Reinforce sustainable market |
| | Amount of CTP financing | • CTP Grant: ~80% for New Diesel, Up to 80% for LNG/Alt. Fuel/Hybrids/New technology<br>• Truck scrap program: starting with ~$5000 per pre-89 truck, requires prior SoCal registration and history of SPB drayage<br>• No retrofit financing, unless technology meets 2007 standards | |
| | Financing criteria | • Financial requirements set by commercial partner<br>• Dray frequency going forward for new truck of at least (#) visits/week | |

Note: Truck ban schedule and TWIC security requirements as per Option I

# One specific element of Options II is provision of a Business Outreach Program for LMCs

***Illustrative description of Business Outreach Program***

| Example benefits | Description |
|---|---|
| **Educational resources** | **Business seminars to provide education on best practices under the new CTP program.**<br>**Illustrative seminar examples:**<br>• **Compliance with new CTP regulations**<br>• **Operational efficiency best practices**<br>• **Managing finances / CTP funding**<br>• **Human resources guidelines for employees**<br><br>**Driver safety training courses and truck maintenance options** |
| **Financing**<br>**[At Port's discretion]** | **Short term, low interest rate loans to cover educational seminars and business transition expenses** |
| **Criteria** | **Open to any LMC, with preference for financing given to those with a history of drayage work** |

Source: interviews with POLA staff

# Option II evaluation: Environmental

| Benefit/ risk | What we think will happen... | ..and why |
|---|---|---|
| + | Conditions created to accelerate switch to greenest trucks ahead of ban schedule | Economics favor cleaner trucks: Full exemption on all privately purchased clean trucks and full exemption on all alternative fuel vehicles regardless of funding source |
| + | "Dirty" diesels rapidly removed from SPB region | Scrap program will provide good money and an exit strategy for IOOs facing ban/restriction; LMCs will be incentivized to scrap old trucks |
| + | Participants should continue to invest in truck improvements | Concession criteria will enable stringent and ongoing oversight; asset based model promotes investment in up-to-date technology |
| - | Risk that long term sustainable environmental and operational stability undermined | No employee requirement: risk that LMCs choose not to hire employees and under-capitalized IOOs remain significant factor in market |



Exhibit 2 - Blair Declaration Attachment 57

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# Option II evaluation: Port Operations

| Benefit/ risk | What we think will happen... | ..and why |
|---|---|---|
| + | Continual improvement in the efficiency of the port drayage market are likely with LMC consolidation and move to asset-based | Larger more well capitalized LMCs with employees able to invest in and push for efficiency improvements; LMCs have more skin in the game; efficiency efforts in consolidated market more likely to be implemented and rewarded |
| + | Orderly transition to asset based market with limited change to port operations and ability to absorb swings in demand | Flexibility with IOOs or employees servicing market and transition assistance through the implementation of business outreach program |
| + | Labor market incomes improve and mix shifts towards employees | Financial benefit for LMCs to buy clean trucks and hire employees as IOO rates increase |
| + | Migration to a mix of IOO and employee based trucking market | Asset owning LMCs will seek out employee drivers for their trucks |
| + | Migration of trucker incomes towards prevailing comparable levels according to mix of IOOs and employees | Prevailing wage required to attract additional IOO and employee drivers |
| - | Total diversion will be slightly greater than Option I – approximately 2% based on rational economic decisions resulting from drayage price increase | More consolidated market will result in drayage price increases especially due to labor changes |
| - | Risk that private players continue to fund and support marginal IOOs and/or create a "marginal contractor" labor market for truckers who sub-lease LMC controlled trucks | No explicit employee requirement allows for opportunities to 'game the system' |
| - | Risk that LMCs do not pass on gains to IOOs or employees | No control over contractual dynamics between LMCs and IOOs |

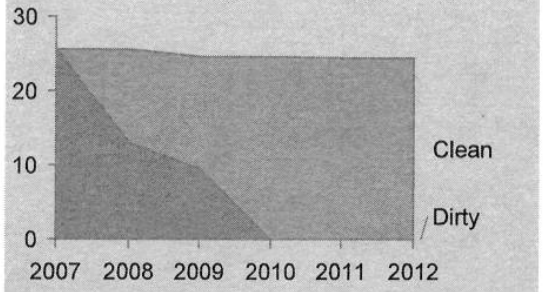
# Option II evaluation: Safety and security

| Benefit/ risk | What we think will happen... | ..and why |
|---|---|---|
| + | Improved port security | Stricter concession criteria with improved oversight; reciprocal obligations with port grant concessions to only those LMCs accountable for safety/security |
| + | Improved driver and community safety | Improved maintenance and driver training |
| - | Risk that the mix of employees and IOOs complicates the enforcement of safety and security requirements | Potential difficulty in maintaining oversight and transparency due to different mechanisms for dealing with employees and IOOs |

# Option II: Analytical evaluation

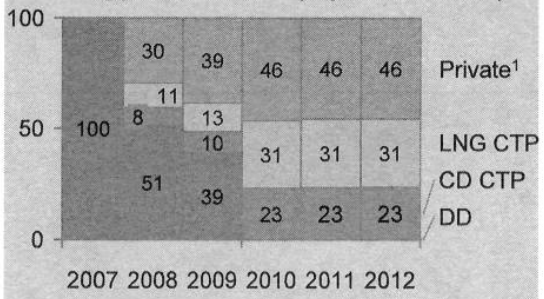
## Environmental

### Total SPB drayage trucking time (M hrs)




- Clean trucks enter system more quickly than Option I due to optimized exemptions

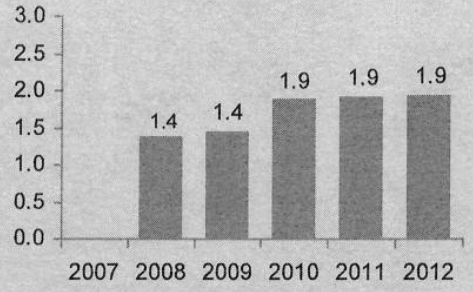
### Truck type utilization (equivalents, %)




- Optimized exemptions encourage private trucks to enter market earlier
- Grandfather clause for CDs pre-Oct 1st

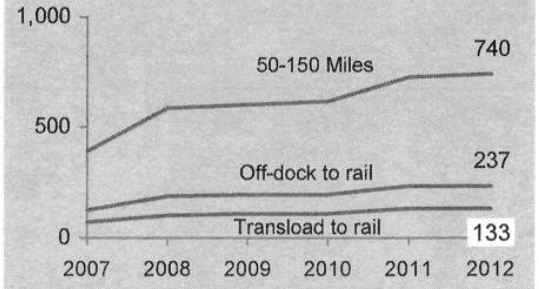
## Operations

### Cumulative Diversion (% SBP demand)




- Cumulative diversion reaches ~2.0% due to higher wage rates and employee costs (vs. ~1.2% in Option I)

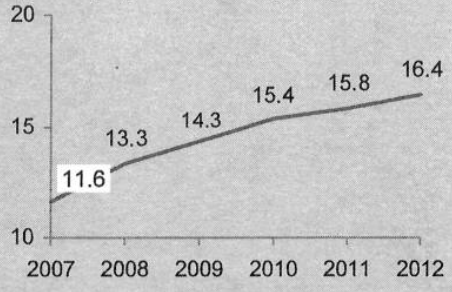
### Avg. drayage costs per container ($)




- Spike in first year due to ECF and TWIC
- Continued increase as employees added to system in out years

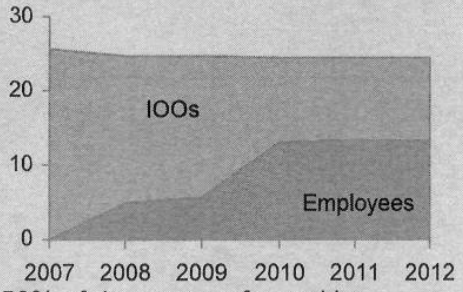
## Drayage market

### Avg. drayage income ($/hr)




- Rate increases to ~$16-17/hr mix of IOOs and employees hired by asset based LMC (vs ~$12.3/hr in Option I)

### Driver time required (M hrs)




- ~50% of drayage performed by employees after 5 years

1. Private includes blend of clean diesel and alt fuel, mix will depend not only on CTP incentives (e.g. ECF exemptions) but also factors not modeled such as private funding, tax treatment etc

Source: BCG drayage market supply and demand economics model, March 2008

Option II

# With move to more of an asset based model we will expect improvements in operational efficiency: examples

| Efficiency improvement | Action required | Result |
|---|---|---|
| **Increase matching of inbound and outbound loads** | LMC investment in GPS systems for trucks and routing or scheduling software | Reduction in miles driven without a load (bobtail) |
| **Decreased time spent within the port terminal** | Terminal operator application of appointment systems or investment in terminal redesign | Less wait times at the port and therefore shorter turn times |
| **Improve truck operating efficiency** | LMC investment in newer trucks, wholesale fuel purchasing, and high maintenance standards | Lower fuel costs, as well as less time lost due to truck repairs |
| **Higher daily truck utilization** | Slip-seating management by LMCs or IOOs voluntarily allowing others to drive their trucks | Near 24 hour driving time of each truck, increasing usage capacity |
| **Increase drayage during off-peak time periods** | Direction by LMCs to pick-up and drop-off containers during non-traditional hours | Less traffic leading to overall mile per hour increase during driving time |
| **Increased truck speeds, reduced wait times, and improved matching combined** | Generous investment and commitment in all categories above | No net change in overall drayage rates as efficiency improvements mitigate price increases |

Source: Haveman and Thornberg (Beacon Economics), Clean Trucks Program, February 2008

# However, Option II carries some specific risks

**Risk of emergence of some new form of labor market which continues to be unattractive to the long term supply of truckers e.g.**

- "Taxi cab" like contract employees
- LMC truck lease to IOOs
- "IOO cooperatives" in which IOOs have little stake in incomes earned

**Risk that BCOs directly perpetuate existing market by stepping in to fund IOO trucks**

- BCOs have signaled willingness to encourage these sorts of options
  - example: Coalition for Responsible Transportation

**Risk that Ports' ability to ensure safety and security is compromised by continued existence of a complex market structure with large numbers of both employees and IOOs**

**Risk that long term sustainable environmental and operational stability undermined if under-capitalized IOOs remain a significant factor in market**

# Example: BCOs willing to make investments in drayage

## Coalition for Responsible Transportation supports BCO investment in cleaner trucks

**Mission statement**

- "To allow private sector companies to address goods movement-related environmental issues by implementing innovative solutions to alleviate diesel-related emissions and promoting sustainable business practices in communities surrounding our nation's ports."[1]
- "C.R.T. encourages and invites shippers, trucking companies and ocean carriers to join the Coalition so we can collectively provide cleaner, safer and more reliable drayage service at the Ports of Los Angeles and Long Beach."[1]

**Action plan details**

- "1. Trucking Company would arrange for all Clean Truck purchases or leases.
- 2. Trucking Company would provide the independent owner operator with a loan for the down payment or facilitate direct financing from third parties, as provided for in "Business Model" above, in exchange for a service commitment from the independent owner operator.
- 3. A Market Adjustment Fee would be charged to all BCO's.
- 4. Fees would be billed and collected by the Trucking Company and then disbursed to the truck manufacturers or leasing companies and independent owner operators.
- 5. Trucking Companies would be subject to Clean Vehicle audits by the Ports or any other government agency. Fleets could be converted within 12 months.
- 6. Owner-Operator status could still be preserved and companies would still be subject to fines or restricted from Port access for failure to comply."[2]

**Key players**

- "TTSI (Total Transportation Services Inc.) will help the owner-operator truckers lease-to-buy or outright purchase low-emission vehicles through financial assistance and/or by obtaining public grant funds."[3]
- "TTSI will purchase LNG (liquefied natural gas) vehicles and new 2007 model diesel trucks, or retrofit 2000 model or newer trucks with cleaner engines. All of these vehicles will meet the ports' rigid standards contained in the Clean Air Action Plan."[3]
- "NYK Line, Target, and other members will be prepared to contribute to higher adjusted market freight rates in order to compensate the owner operators for the added costs."[1]

1. CRT website 2. CRT Inagural Press Conference, Aug 3, 2007 3. Peter Keller (NYK Line North America), interview with Journal of Commerce, Aug 27, 2007

# ... Option III builds on Option II and creates the requirement for an *employee based* drayage market

**Objectives of the employee commitment:**

- Ensure continued supply of drivers through creation of positions offering attractive incomes and benefits, while
- Maintaining a reliable and responsive supply of trucks and truckers to accommodate peaks and troughs in demand, and
- Ensuring LMCs held accountable for safety and security

**Benefits of an asset <u>and</u> employee based drayage system**

- Creates *reciprocal obligations*
  - Port provides concession and demands performance in return
  - LMC invests in drayage capacity (trucks and employees) and obtains benefit from income generated through concession
- Creates *aligned incentives* – e.g. both parties benefit from improvements in operational efficiency through better utilization of assets/trucks and employees
- Strongest basis for *ensuring highest levels of accountability*
  - Environmental e.g. truck maintenance to keep up green performance
  - Safety and security e.g. employer accountable for employee

# A range of different types of employee commitments were considered

| Employee commitment option | Key considerations |
|---|---|
| **A. 100 % of LMC utilized drivers serving port** | • How to phase in? (e.g. 20% for 5 years)<br>• How to meet fluctuations in demand? (e.g. peak exemptions, flexible workers, overtime etc) |
| **B. Fixed proportion (e.g. 80%) of LMC utilized drivers serving port** | • What is the appropriate level to set to accommodate flexibility?<br>• How to phase in? (e.g. 20% for 4 years)<br>• How to measure and monitor? |
| **C. Set ratio of LMC controlled trucks: employees serving port** | • What is the appropriate ratio? (e.g. 1:1 or 1:2)<br>• Will this slow move to cleaner trucks? |
| **D. Link CTP financed trucks to employees** | • Will this slow move to cleaner trucks?<br>• What will happen to drivers for privately funded trucks?<br>• Why would LMCs take advantage of such a program with restrictions? |

# Option C – Why link employees to LMC controlled trucks?

Idea anchored in observation of structure of national trucking fleets

| Trucking firm | # IOOs | # Employees | # Company Trucks | % IOOs | Employee to truck ratio | Union status |
|---|---|---|---|---|---|---|
| **YRC Worldwide** (formerly Yellow) | 0 | 66,000 | 27,786 | **0%** | **2.4** | Yes, Teamsters |
| **JB Hunt Transportation** | 1,107 | 17,150 | 10,961 | **6%** | **1.6** | Non-union |
| **Swift Transportation** | 2,950 | 21,900 | 14,977 | **13%** | **1.5** | Non-union |
| **Werner Enterprises** | 820 | 14,326 | 8,180 | **6%** | **1.8** | Non-union |
| **Old Dominion Freight Line** | n/a | 10,762 | 4,643 | **NA** | **2.3** | Non-union |

Source: Company 10-Ks, Transport Topics Top 100 For-Hire Carriers of 2007

# Pros and cons of different forms of employee commitment

| | A 100% of drivers serving the port | B ~80% of drivers serving the port | C Set ratio of trucks to employees | D Link CTP funded trucks to employees |
|---|---|---|---|---|
| + | • Guarantees employee commitment<br>• Monitoring employee status less complex<br>• Encourages employers to maximize employee flexibility | • High level of employee commitment<br>• Some supply flexibility for peak demand periods<br>• Matches patterns of employment in other trucking markets | • Clear logic of one truck = 1+ employee<br>• Matches employment and truck ownership pattern in other trucking markets<br>• Allows for flexibility via IOOs | • Enables tight control over commitment through financial means |
| − | • Requires clearly defined alternatives to scale drivers up for peak demand e.g. mechanism to relax commitment under peak load | • Complexity in measuring compliance<br>• No simple way to set the cut off point – for firms preferring to operate below this the cut off restricts flexibility | • Complex to administer: requires measurement of both truck and employee status<br>• Provides incentive not to upgrade/purchase trucks in advance of ban therefore undermines environmental goals | • Companies able to privately fund can avoid employee requirement<br>• LMCs may not take advantage of funding with this restriction<br>• May slow move to cleaner trucks |
| | ✓ | ✗ | ? | ✗ |

**100% commitment is simplest and most direct target, phase in of commitment over time gives opportunity to measure and fine tune the above mechanisms**

# Option III: "Enhanced model with market incentives and an employee commitment"

| Component | Lever | | Rationale |
|---|---|---|---|
| 1 Environmental Cargo Fee | Exemption amount (net fee) | Privately funded: CD ($17.50 or less), LNG / alt. fuel / hybrid ($0)<br>CTP funded: CD ($35), CD after financing paid off ($0), LNG / alt. fuel, hybrid ($0)<br>• Prior to Oct 1 ($0) grandfathered for any clean trucks | • Cleaner ahead of ban, green growth<br>• Encourage private investment |
| | Exemption timing | • Flat across time with rights to adjust in future as needed | |
| 4 Concession | Concession recipients | • LMCs only | • Create orderly market<br>• Cover admin costs<br>• Ensure sufficient supply<br>• Improve security<br>• Improve safety<br>• Improve worker condition<br>• Reduce negative impacts on local community |
| | Concession criteria | • Parking requirement (inspected off street) and identifiable place of bus.<br>• Strict revocation if trucks not properly maintained<br>• 100% employee commitment (phased in over 5 years) – priority to be given to existing truckers when creating new employees<br>• Certification of employees having completed mandated safety training | |
| | Price of a concession | • ~$2000-3000 TBD for concession, $100 per truck,<br>• Right to change price of concession in future, or offer seasonal | |
| | Concession term | • 5 years standard<br>• May be revoked for any infractions or lack of performance | |
| | Exceptions | • Day passes for trucks servicing port less than X visits per year<br>• Option to relax employee commitment at times of peak load | |
| 5 Truck financing program | Financing recipient | • LMCs only for new trucks<br>• LMCs or IOOs for truck scrap<br>• Business outreach program for transition assistance | • Cleaner trucks<br>• Reinforce orderly market<br>• Support upstanding small businesses<br>• Reinforce sustainable market |
| | Amount of CTP financing | • CTP Grant: ~80% for New Diesel, Up to 80% for LNG/Alt. Fuel/Hybrids/New technology<br>• Truck scrap program: starting with ~$5000 per pre-89 truck, requires prior SoCal registration and history of SPB drayage<br>• No retrofit financing, unless technology meets 2007 standards | |
| | Financing criteria | • Financial requirements set by commercial partner<br>• Dray frequency going forward for new truck of at least (#) visits/week | |

# Option III evaluation: Environmental

| Benefit/ risk | What we think will happen... | ..and why |
|---|---|---|
| + | Conditions created to accelerate switch to greenest trucks ahead of ban schedule | Economics favor cleaner trucks: Full exemption on all privately purchased clean trucks and full exemption on all alternative fuel vehicles regardless of funding source |
| + | "Dirty" diesels rapidly removed from SPB region | Scrap program will provide good money and an exit strategy for IOOs facing ban/restriction; LMCs will be incentivized to scrap old trucks |
| + | Participants should continue to invest in truck improvements | Concession criteria will enable stringent and ongoing oversight; asset based model promotes investment in up-to-date technology |
| + | Most likely to guarantee sustainable environmental and operational improvements | Asset based LMCs with 100% employees creates increased ability/incentives for investment and operational efficiencies. |

# Option III evaluation: Port operations

| Benefit/ risk | What we think will happen... | ..and why |
|---|---|---|
| + | Continual improvement in the efficiency of the port drayage market is likely with LMC consolidation and move to asset-based market | Larger more well capitalized LMCs with employees able to invest in and push for efficiency improvements; LMCs have more skin in the game; efficiency efforts in consolidated market more likely to be implemented and rewarded |
| + | Labor market incomes improve and mix shifts towards 100% employees | Financial benefit for LMCs to buy clean trucks and hire employees as IOO rates increase |
| + | Migration of trucker incomes towards prevailing comparable levels for employee truckers | Prevailing employee trucker wage required to attract employee drivers |
| - | Total diversion will be slightly greater than Option I and II – approximately 3% based on rational economic decisions resulting from drayage price increase | More consolidated market with 100% employees will result in highest drayage price increases (vs. Options I and II) especially due to labor changes |
| - | Risk of lack of orderly transition to asset based market with ability to absorb swings in demand | If there is a rapid exit of IOOs servicing market the ability to handle swings in demand may be threatened |

# Option III evaluation: Safety and security

| Benefit/ risk | What we think will happen... | ..and why |
|---|---|---|
| + | Improved port security (better than options I and II) | Stricter concession criteria with 100% employee requirement will improve oversight; reciprocal obligations with port grant concessions to only those LMCs accountable for safety/security |
| + | Improved driver and community safety (better than options I and II) | Improved maintenance and driver training |

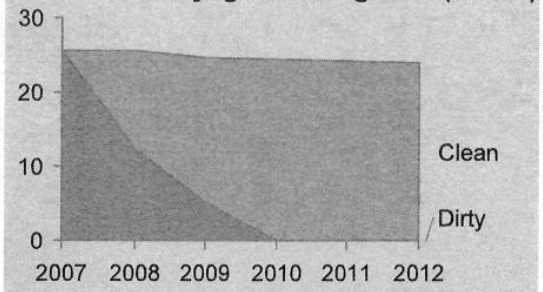


Exhibit 2 - Blair Declaration Attachment 57 000980
Dkt. 08-1895

# Option III: Analytical evaluation

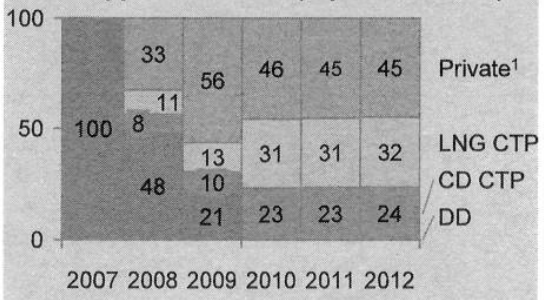
## Environmental

### Total SPB drayage trucking time (M Hrs)




- Similar outcome to Option II
- Due to exemptions, LMCs choose clean trucks in line with commitment schedule

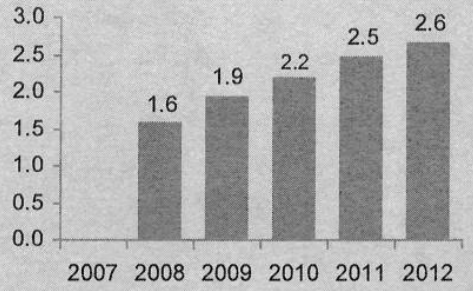
### Truck type utilization (equivalents, %)




- Similar outcome to Option II

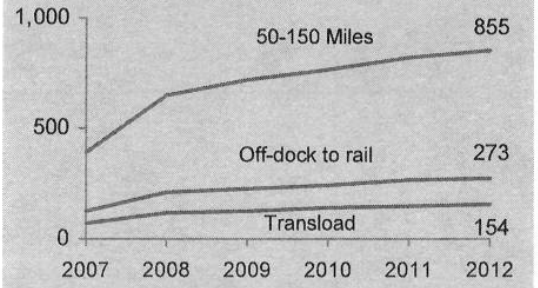
## Operations

### Cumulative Diversion (% SBP demand)




- Cumulative diversion reaches ~2.7% due to higher costs under commitment schedule (vs. ~2.0% in Option II)

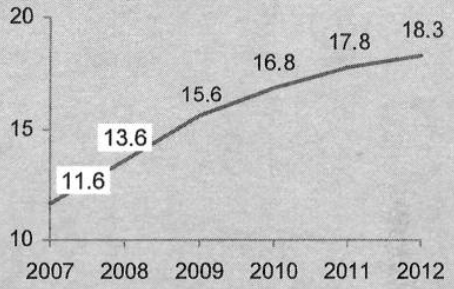
### Avg. drayage costs per container ($)




- Highest rates of all options based on 100% employee rate and associated costs

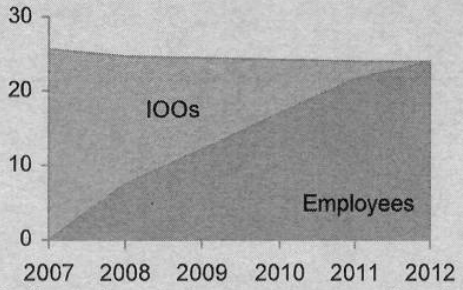
## Drayage market

### Avg. drayage Income ($/hr)




- Rate increases to ~$18/hr due to 100% employee commitment (slightly higher than Option II)

### Driver time required (M hrs)




- % of employees increases according to commitment schedule

1. Private includes blend of clean diesel and alt fuel, mix will depend not only on CTP incentives (e.g. ECF exemptions) but also factors not modeled such as private funding, tax treatment etc
Source: BCG drayage market supply and demand economics model, March 2008

# However, Option III also carries some specific risks

**Risks of additional loss of trucking supply, e.g.:**

- Drivers and trucks as IOOs leave the market as they do not wish to become employees
- Risk that trucking firms do not enter the market due to concerns over regulation/costs

**Risks of lack of flexibility in supply to meet peak demands, e.g.:**

- Failure to create appropriate pools of flexible workers to accommodate peaks and/or
- Employers hiring to minimum rather than peak without part-time employees

**Risk of BCOs diverting discretional cargo**

- Some BCOs state that the employee commitment makes their supply chain less reliable

**Notwithstanding these risks, employee commitment provides best *guarantee* of long term market sustainability**

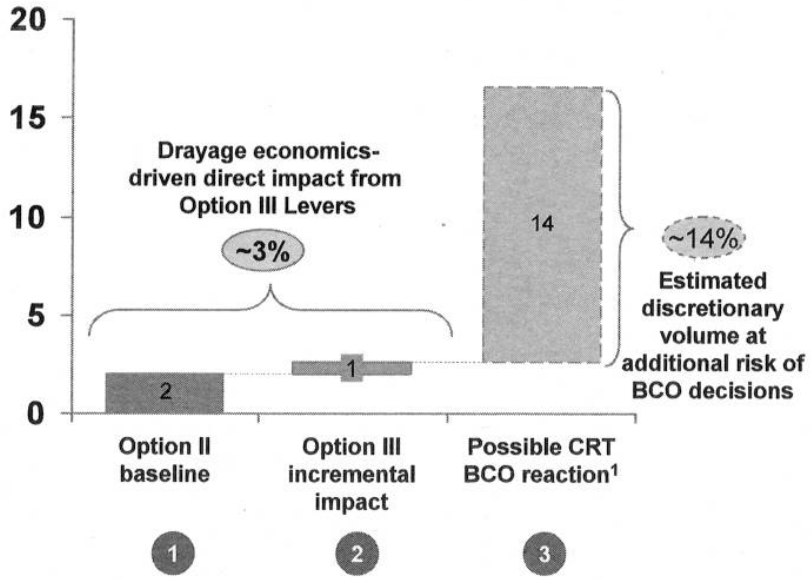


Exhibit 2 - Blair Declaration Attachment 57 000982
Dkt. 08-1895

# Key risk in option III is of BCO diversion over and above that driven by drayage pricing alone

## Employee commitment has wide range of potential impacts on diversion ...

**Potential % SPB cargo diversion**




## ... Primary risk is of BCO driven diversion not loss of current drivers

1. **Option II without employee commitment impacts price of drayage**
   - Price increases result in ~2% diversion
2. **Employee commitment in Option III may have additional impact on drayage pricing**
   - Incremental loss of up to ~40% existing truckers results in ~0.6% diversion as new workers drawn in at higher wages
3. **Employee commitment may also be considered a threat to BCOs**
   - Risk that CRT (coalition for Responsible Transportation) BCOs decide to divert discretionary cargo, estimated at ~14% of SPB total volume[1]
   - Other BCOs may also divert discretionary cargo

**Risk of diversion is exacerbated if POLA and POLB adopt different programs – as non discretionary also at risk**

1. Coalition for Responsible Transportation participants estimated to comprise ~20% SPB container demand, of which ~70% is estimated to be discretionary
Source: Cargo Demand study, POLA interviews

# Implications of a mixed model from POLA's perspective

## Initial observations

| | Short-medium term Years 1-5 | Long term Years 5+ |
|---|---|---|
| | **From program start to 2012** | **From 2012 and beyond** |
| **Drivers** | IOOs who value independence may leave for POLB. However, increasing wages in POLA will create incentive for IOOs to become employees and attract workers from outside current drayage labor pool | Higher driver wages and benefits in POLA due to the employee commitment and move to asset-based LMCs that own trucks ensure a reliable and scalable supply of drivers and trucks |
| **LMCs** | Smaller undercapitalized LMCs may exit POLA and focus their attention on POLB. Larger LMCs should be attracted due to market consolidation and exit of marginal players. Existence of mixed model may accelerate LMC rationalization | Presence of large, well capitalized LMC's enables better implementation of operational efficiencies and overall provides high reliability; Marginal LMCs continue to find it difficult to keep up with rising environmental, safety and security standards and over time withdraw from POLB also |
| **BCOs and demand** | As drayage prices increase, some price sensitive BCO's may switch to POLB; but those who value reliability and timeliness are likely to be attracted to POLA | BCO appreciate sustained cost improvements and reliability of supply in POLA and switch higher share of work from other ports |
| **Scalability with Growth** | Operational efficiencies start to take hold as well-capitalized LMCs can afford to spend money improving driver and truck utilization; As market consolidates POLA should have greater ability to work together with participants | POLA is able to move cargo at reasonable prices, due to implementation of operational efficiencies by TOs and large LMCs |

# Agenda

## Comparison of options and conclusions



Exhibit 2 - Blair Declaration Attachment 57

000985
Dkt. 08-1895

# We considered the benefits and risks for each model in both the near and longer term

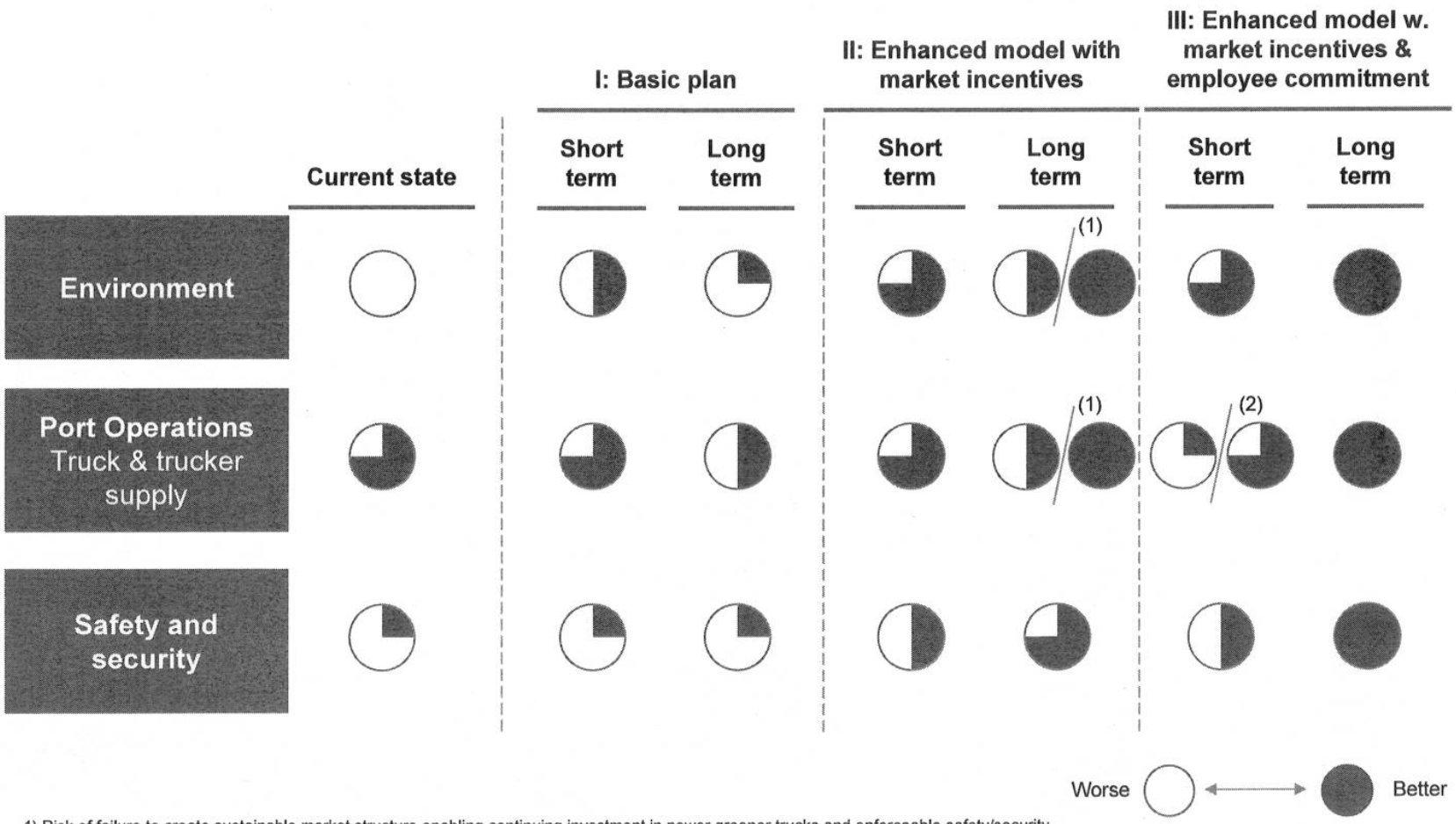
| Option I<br>Basic plan | Option II<br>Enhanced model with market incentives | Option III<br>Enhanced model with market incentives and employee commitment |
|---|---|---|
| **Near term** (1-5 years)<br>• Ban satisfies immediate environmental changes<br>• No change in port operations and minimal improvements in safety and security | **Near term** (1-5 years)<br>• Creates conditions to accelerate switch to greenest trucks<br>• Limited change in port operations<br>• Discourages marginal LMCs | **Near term** (1-5 years)<br>• Creates conditions to accelerate switch to greenest trucks<br>• Potential risk of diversion as BCOs face uncertainty of employee commitment |
| **Long term** (5+ years)<br>• Fails to create a sustainable long term drayage market that will enable continued progress in improving environmental outcomes and enabling green growth | **Long term** (5+ years)<br>• If LMCs hire employees will create conditions for sustainable green growth, <u>but</u><br>• Risk that long term sustainable environmental and operational stability undermined if under-capitalized IOOs remain significant factor in market | **Long term** (5+ years)<br>• Most likely to guarantee sustainable environmental and operational improvements<br>• Employee and asset based model enhances ability to improve safety and security |

**Benefits**
**Risks**



Exhibit 2 - Blair Declaration Attachment 57 000986
Dkt. 08-1895

# Our overall conclusion: Option III provides the best path to long term sustainability, but with near term risks




1) Risk of failure to create sustainable market structure enabling continuing investment in newer greener trucks and enforceable safety/security
2) Risk of near term disruption caused by BCO diversion
Note: Short-term represents a 1-5 year time span and considers system condition and risks, while long-term represents 5+ years and is primarily based on sustainability

# Total added costs of move to option III are justified given the benefits realized

**Incremental costs of recommended option III over status quo are appx. $1.1B per annum in terms of additional drayage costs**

- Cumulative sum of all added drayage costs (ECF, labor rates, employee costs) assuming no change in mix beyond predicted diversion
- Compares to $0.6B under Option I

**Additional $0.5-1.1B is less than externalities offset by changed drayage market**

- Cost impact of externalities estimated at $0.5-1.7B per annum
  - Externalities include not only annualized health costs but also costs of inefficiency and lost benefits for truckers and LMCs, and community impact

**Option III delivers positive cost:benefit ratio from year 3 onwards**

- Estimate of cumulative added costs of option III in years 1-5 is $4.6B
- Cumulative benefits over same five year period are in the range of $1.8-6.7B[1]

1.Benefits phased in in proportion to changes in numbers of employees, income levels, and proportion of clean to dirty trucks
Sources: Multi-County GMAP Final Technical Memorandum 3, Tioga Group SPB Cargo Forecast, Starcrest Consulting Methodology for Est HDV Truck Activity at POLA/POLB, John Husing SPB CAAP Economic Analysis Proposed CTP, AAA/Cambridge Systematics: Crashed vs. Congestion: What's the Cost to Society, Texas Transportation Institute 2007 Annual Urban Mobility Report, Parentela and Cheema GIS-Based Risk Analysis for Commercial Goods Transport in Southern California; studies on costs of uninsured by studies by the State of Maryland, State of Texas, Kaiser, and the Institute of Medicine; BCG analysis

# Conclusions

1. Option I will not create a sustainable long term drayage market that will deliver reliable supply, ensure continued progress in improving environmental outcomes, and enable green growth (e.g. through creating incentives for operational efficiency)
2. Both Options II and III have the potential to create a drayage market that meets the CAAP and CTP objectives (environmental, operational and safety/security) not only in the near term (the terms of the ban) but also in the long term (creates a sustainable drayage market)
3. Option II carries the risk that long term sustainability is undermined if market participants or third parties find ways to hold employee incomes below prevailing levels needed to ensure a reliable supply of truckers (e.g. by financing existing IOOs)
4. Option III directly addresses this risk and offers the best guarantee of long term sustainability, but at the cost of introducing a new element of operational uncertainty
5. One potential outcome could be that the ports of Long Beach and Los Angeles adopt different programs. The Port of Long Beach has adopted a program like Option I. Were the Port of Los Angeles to adopt either of Options II or III there is risk that volume of containers and supply of truckers could divert from Los Angeles to Long Beach.
6. In conclusion we recommend that decision makers seek a unified approach to the San Pedro Bay Clean Truck Program. Decision makers' preference between Options II and III will hinge on the relative weight they give to risk of LMC/BCO actions versus risk of market participants exploiting loopholes to sustain a lower wage, marginal economics based SPB drayage market and failure to achieve sustainable advantages in line with CAAP goals