City of Long Beach
Working Together to Serve

Memorandum
R-16

Date: January 9, 2006

To: Honorable Mayor and City Council

From: Councilmember Suja Lowenthal, Chair, Tidelands and Harbor Committee

Subject:
1. **REPORT FROM ROTEC INCORPORATED ON THEIR "BOLT-AND-GO" SYSTEM – REDD- AN ENGINE-MOUNTED MECHANICAL EMISSION REDUCING SYSTEM**
2. **REPORT ON PROPOSITION 1B FUNDING BY THE PORT OF LONG BEACH**
3. **DISCUSSION REGARDING "PORT TRUCK FLEET OPTIMIZATION"**

The Tidelands and Harbor Committee, at its meeting held December 19, 2006, considered communications relative to the above subject.

It is the recommendation of the Tidelands and Harbor Committee to the City Council that the communications be received and filed.

Respectfully submitted,

TIDELANDS AND HARBOR COMMITTEE

Councilmember Suja Lowenthal, Chair

Prepared by:
Jan Davey

Unanimous vote

Technology for a cleaner world.

-- December 15, 2006 --

Presentation to City of Long Beach

Forward Looking Statements

This presentation contains forward-looking statements that involve risks and uncertainties. The forward-looking statements contained herein represent the judgment of Rotec as of the date of this presentation. These forward looking statements are not guarantees of future performance. Actual results could differ materially from those currently anticipated to due to a number of factors.

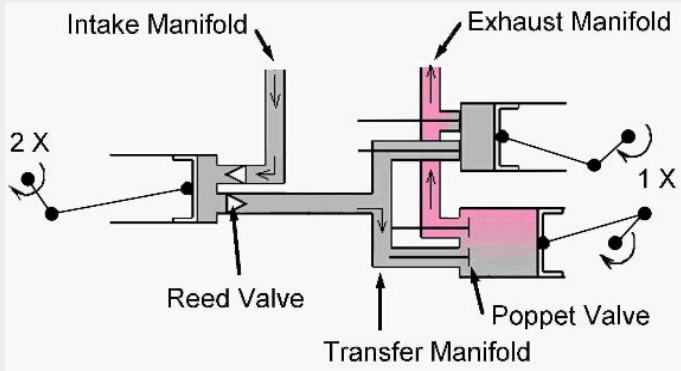
Rotec's Technology – HDV application

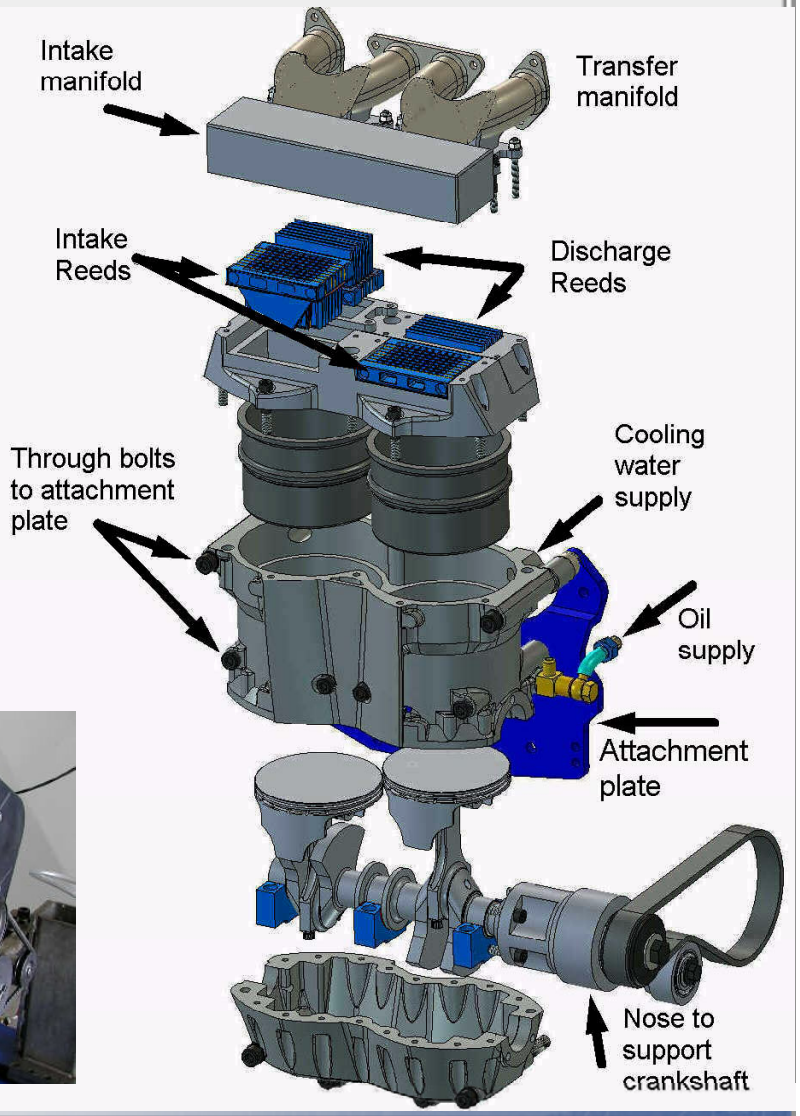
- Suitable for older, high PM, low temp engines
- Simultaneously reduces PM, NOx, HC, CO
- Offers the lowest capital and operating cost per ton of pollutant removed
- Is not temperature or duty-cycle dependent
- Requires no dosing system (fuel or additive)
- Requires no ash disposal or maintenance (other than yearly drive belt change)
- Durable for engine life & does not reduce engine life
- Tamperproof – engine won't run if disconnected

- No increase in NO_2/NO ratio (now regulated by CARB)
- No “plug-in regeneration” needed (like active filters)
- Small increase in engine efficiency and fuel economy at higher loads
- No exhaust backpressure increase so has no adverse effect on engine power or drivability
- Mechanical simplicity, reliability & durability
- Reduces ultra-fine particulates as well as larger visible PM – filters thought to substantially increase ultra-fines
- Not sensitive to fuel sulfur level
- Backed by a national parts distribution network

Technology Overview

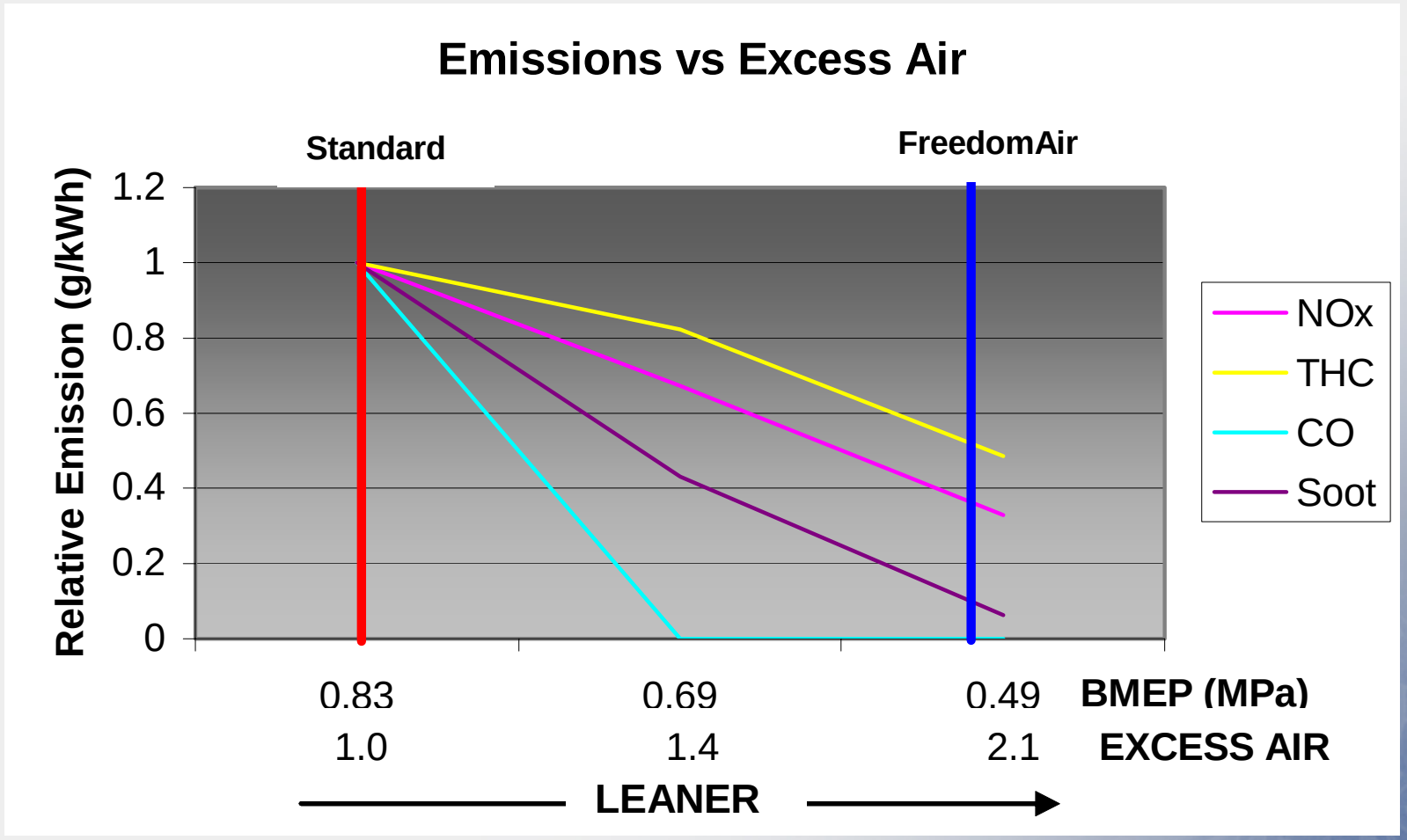
- Mechanical air delivery system that uses a reciprocating piston pump to “pulse” a diesel engine cylinder with fresh air on every piston upstroke

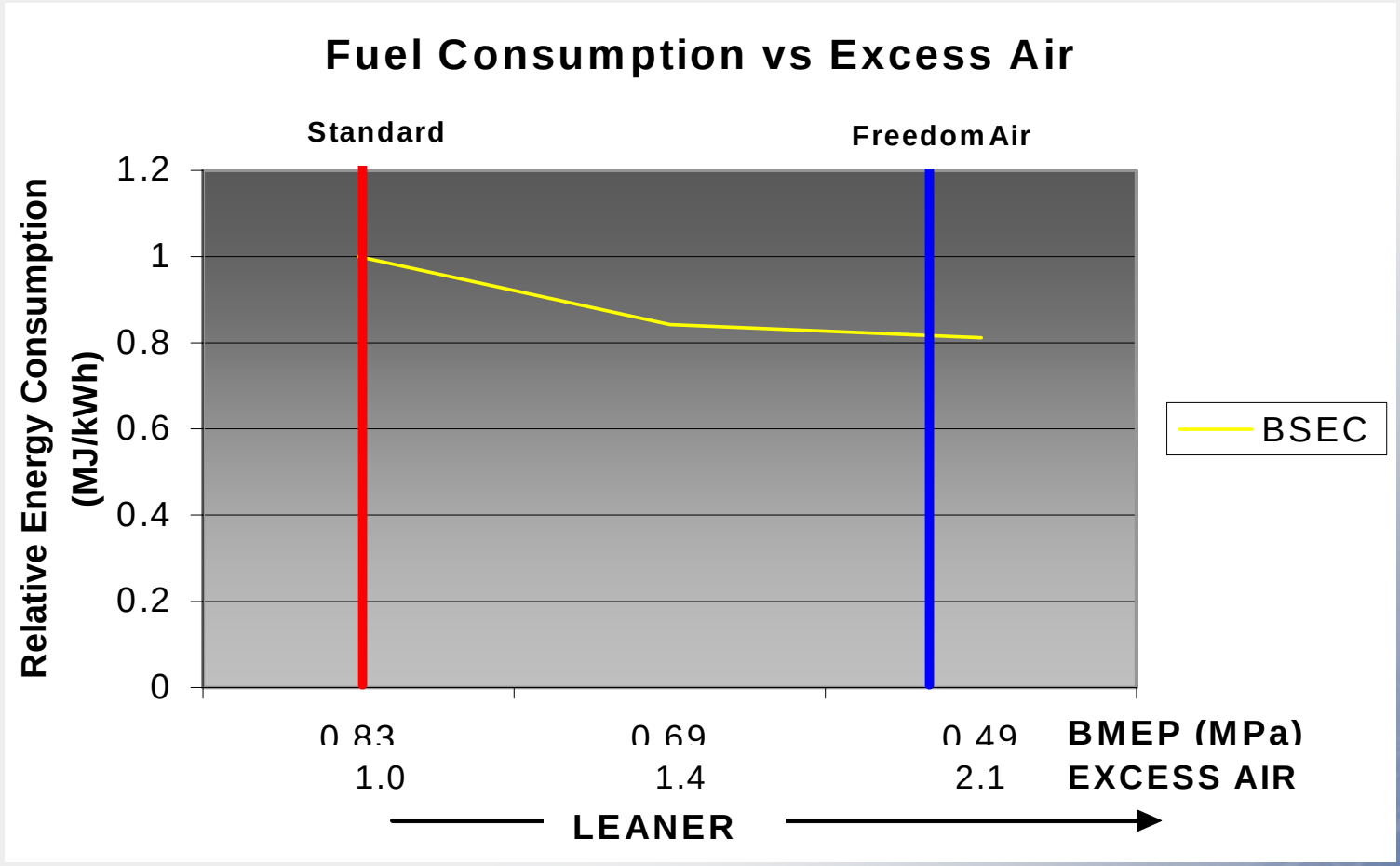




How the Technology Works

- Mechanism for clean air to be injected into the cylinder and exhaust air to be expelled simultaneously
- This means every piston upstroke generates power, doubling the number of combustion events
- The amount of fuel is now spread across two piston strokes rather than one with no power loss
- This process doubles the air to fuel ratio in the engine which can either be used to simultaneously reduce PM, NOx and other pollutants, increase power, or a combination of both.

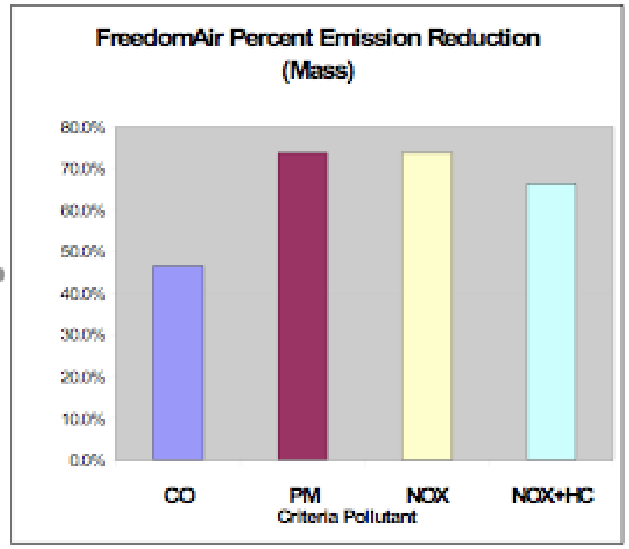

Emissions vs Excess Air
Standard
FreedomAir
Relative Emission (g/kWh)
1.2
1
0.8
0.6
0.4
0.2
0
NOx
THC
CO
Soot
0.83
1.0
0.69
1.4
0.49
2.1
BMEP (MPa)
EXCESS AIR
LEANER


Fuel Consumption vs Excess Air
Standard
Freedom Air
Relative Energy Consumption (MJ/kWh)
1.2
1
0.8
0.6
0.4
0.2
0
BSEC
0.83
0.69
0.49
BMEP (MPa)
1.0
1.4
2.1
EXCESS AIR
LEANER

SUMMARY

LOAD POINT				% REDUCTION BY MASS												WEIGHTED
SPEED	TORQUE	WEIGHTING	TIMING	CO			PM			NOX			HC			NOX+HC
				ppm		mass	mg/m^3		mass	ppm		mass	% conc.		mass	
				before	after		before	after		before	after		before	after		
2000	35	20%	2.5	431	353	46.8%	133	41	76.2%	220	51	73.8%	0.12	0.05	22.0%	68.2%
1750	120	20%	2.5	1067	320	36.4%	330	86	79.6%	547	84	67.3%	0.34	0.10	55.9%	66.1%
1500	60	35%	2.5	449	174	47.0%	104	36	67.0%	285	54	75.0%	0.10	0.10	-50.0%	61.6%
900	IDLE	25%	4.5	251	79	57.0%	42	11	82.0%	613	65	79.0%	0.10	0.03	60.0%	77.0%
WEIGHTED TOTAL REDUCTIONS						**47.3%**			**75.1%**			**74.2%**			**13.1%**	**67.7%**

Load point weightings and NOx/HC ratio weighting reflect Euro drive cycle for medium gvm car



External Validation

- Independent verification of the Rotec technology emission reductions, ability to increase power, and mechanical durability (Gilmore Engineers)
- Texas Emerging Technology Fund award of $1m
- Innovative Clean Air Technologies (ICAT) Program grant ($225k) to demonstrate heavy-duty diesel engine emission reductions
- Prof. John Johnson report per CARB request

How We Can Help the SPBP CAAP

- Heavy-duty vehicle retrofit:
  - Initially target older, high PM, low-temp applications i.e. where passive PM filters not effective
  - Expect Level 3 PM reduction with >50% NOx reduction
  - Around $7,500 per unit capital cost (HHD 6 cyl)
  - Only maintenance is belt replacement ($100/yr)
- How and When:
  - Installation by vendor facility (2 days), or by kit (offsite)
  - First engine family verified by CARB in 12 months
  - 2 new families per year over 3 years covering 90% of HDV fleet

Contribution to CAAP Emission Goals

- Scenario 1 – REDD/FreedomAir fitted to 94% of 1983 to 1993 frequent and semi-frequent callers
- Scenario 2 – PLUS replace pre-1983 trucks with 2007-2010 MY trucks
- Scenario 3 – PLUS fit passive filters to post 1993 trucks

	PM	**NOx**
HDV business as usual	100%	100%
Scenario 1 – REDD only	53%	33%
Scenario 2 – add truck replacement	60%	40%
Additional benefit of Scenario 2	*7%*	*7%*
Scenario 3 – add passive filters	65%	40%
Additional benefit of Scenario 3	5%	0%

Implementation Strategies

- 80% of port visits made by 16,800 frequent & semi-frequent callers
- 65% of this group span the 1983-1993 period making 74% of the HDV NOx and 83% of the HDV PM
- 90% in 5 engine family groups

2006/07	*2007/08*	*2008/09*	*2009/10*	*2010/11*	Total
0	300	1650	4200	4230	10380
0%	3%	16%	40%	41%	100%

Implementation Strategies

- Install at dedicated facility located close to port, and if needed some outsourcing in kit form
- To make early progress, focus on post-1993 engines with passive DPF's in yr1 and buy out some pre-1983 trucks
- Any lagtimes or delays could be made up by both fitting DPFs and new purchases in yr 2 on
- Possible incentive is to pay for/loan some/all of engine re-manufacture cost co-incidental with fitment of REDD ($4 to $7 thousand)

Where is Rotec in the process? What timelines?

- CARB verification needed for Port to claim emission credits – four steps:
  - Produce retrofit kits for Detroit 60 Series (popular engine in port trucks) – 7 months
  - Emission testing by CARB approved lab – 1 month
  - In-service demonstration (port trucks) – 3 months
  - 2nd test of same engines – 1 month

Estimated Budget Requirements

Cost Assumptions	
Unit cost of REDD	$7,500
Installation	$800
New truck cost	$129,500
Passive filter cost inc. installation	$8,500

Cost per Scenario		Total for Combined
Scenario 1 REDD	$86,154,000	$86,154,000
Scenario 2 increase - add truck replacement	$108,780,000	$194,934,000
Scenario 3 increase - add filters	$39,984,000	$234,918,000

Cost Benefit Comparison	$m per % Point Pollution Reduction	
	PM	NOx
REDD	$162	$258
Truck Replacement	$1,477	$1,695
Passive Filter	$852	n/a

Estimated Budget Requirements

- Carl Moyer may contribute other than through SCAQMD depending on ARB regulations at the time

How We Can Help the SPBP CAAP

- Ocean Going Vessels - auxiliary engines retrofit:
  - Where shore-power solutions not cost-effective
  - Similar benefits to HDV engines (scaling factors OK)
  - Requires engineering and feasibility study
    - Space claim, engine family spread?
    - Installation – during transit by vendor team?
    - Effect of fuel density?
    - Benefits travel with vessel?
    - Finance options?

Benefit Summary

- Can retrofit older as well as newer HDVs
- Substantially contribute to both PM and NOx targets
- Funding saved can be redirected to other/new programs (opportunity cost)
- Potential for OGV auxiliary retrofit where other solutions not available

Going Forward

- Demonstration program with HDVs
- Feasibility analysis for OGV auxiliaries
- MOU for HDV fitment – contingent on demo program outcomes
- Support with government agencies – finding the right people
- Overall benefit is to SPBPs and its stakeholders corporate reputation – right outcomes at lowest cost

Contact

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  - Web www.rotecdiesel.com

City of Los Angeles/City of Long Beach

Goods Movement Advisory Taskforce

September 27, 2006

Mayor Antonio R. Villaraigosa
City of Los Angeles
200 N. Spring Street
Los Angeles, CA 90012

Mayor Bob Foster
City of Long Beach
333 West Ocean Blvd., 14th Fl
Long Beach, California 90802

Dear Mayors Villaraigosa and Foster:

On May 16, 2006 an unprecedented opportunity was created that officially placed Proposition 1B, a $19.925 billion Transportation and Air Quality bond, on the November 2006 ballot. Recognizing the importance of an infrastructure bond, Mayor Villaraigosa and past Mayor Beverly O'Neill requested the Executive Directors from the Port of Los Angeles and Port of Long Beach to form a Goods Movement Advisory Taskforce. The role of the Taskforce was intended to advise both Mayors goods movement projects and priorities that could be used in securing our fair share of bond money resources from the State of California. The Taskforce included representation from labor, environment/environmental justice, and business/industry groups.

The Los Angeles-Long Beach Goods Movement Advisory Taskforce (Taskforce) appreciates the opportunity to provide input and advice on goods movement priorities and projects. In preparing our set of criteria and recommendations, the Taskforce members subscribed to the spirit of collaboration and mutual respect of opinions and perspectives. The Taskforce reached consensus on the criteria for trade infrastructure and emission reductions projects. While complete consensus was not reached on all the proposed projects, certain Taskforce members felt that some projects would facilitate efficient goods movement and provide environmental benefits to the region. Some Taskforce members expressed dissenting views, which are highlighted within the project list. The process undertaken by the Taskforce is a credible example of how to balance the need of infrastructure with environmental improvements.

The recommendations of this Taskforce reflect the understanding that goods movement activities, while driven by forces at the international and national level,

have significant environmental, public health and economic impacts in Southern California. And while we prepare our ports to accommodate expected growth in international trade and prosper in the increasingly global market place, we must ensure that this growth occurs in a green and sustainable manner, so as to improve the quality of life for our communities.

The Taskforce convened on five occasions to discuss and develop a set of recommendations to advise both Mayors. The Taskforce submitted the following:

1) A set of criteria to serve as a policy framework for establishing priority goods movement projects;
2) A list of key projects, along with a narrative identifying opportunities, challenges and views highlighted by the Taskforce members.

Should you have questions, please contact Geraldine Knatz, Executive Director, Port of Los Angeles.

Sincerely,

Geraldine Knatz, Ph.D.
Executive Director
Port of Los Angeles

Richard Steinke
Executive Director
Port of Long Beach

City of Los Angeles/City of Long Beach

Goods Movement Advisory Taskforce

PREAMBLE

BACKGROUND

On May 16, 2006, the Governor approved SB 1266 (Perata), the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006. The Act calls for $19.925 billion in transportation general obligation bonds including $3.1 billion for California ports infrastructure, security and air quality improvements. A Los Angeles/Long Beach Goods Movement Advisory Taskforce was convened by the Mayors of Los Angeles and Long Beach to advise the two cities and two ports on goods movement projects and priorities. The Taskforce has developed a set of recommendations that aims to maximize the benefits to the Los Angeles/Long Beach region from the proposed state bonds.

The Taskforce has focused on the $2 billion for the proposed Trade Corridors Improvement Fund and on the $1 billion proposed for projects that reduce emissions and improve air quality in trade corridors "commencing at the state's airports, seaports and land ports of entry."

With respect to the bond funds, there are three major issues to consider:

1) Eligibility: addresses the intent of the legislature as to what types of projects could receive funds;
2) Allocation Formula: relates to how funds should be distributed by region or by major categories of funds;
3) Project Evaluation Criteria: relates to the relative merits of projects competing for the funds.

The California Transportation Commission (CTC) will allocate the infrastructure funds while the California Air Resources Board (CARB) will distribute the air quality funds.

PREAMBLE

The movement of goods through the San Pedro Bay ports impacts the lives of residents in communities throughout the southern California region. It impacts the

air we breathe, the jobs we create, and the economic climate we foster. With an estimated 43% of all seaborne goods that enter the United States passing through the San Pedro Bay port complex, we are tasked with addressing both the opportunities and challenges posed by this tremendous volume of trade.

As this trade continues to grow, we must address our infrastructure needs to accommodate the increasing volume of goods movement, and we must address the profound environmental and health impacts caused by it. With cargo valued at over $218.0 billion, the Ports of Los Angeles and Long Beach combined were the leading waterborne gateways in the Untied States for international trade, according to the USDOT. This value generates economic benefits and opportunities for every geographic area of the country. In 2005, the Ports of Los Angeles and Long Beach ranked number five in the world and number one and two in the nation, in terms of container volume. The direct economic benefits of the logistics sector in Southern California included $90.7 billion in total economic activity, over 687,000 jobs, $52.6 billion in earned income, $11 billion in sales taxes, property taxes, fees, licenses, and excise taxes paid to government. Each new logistics job supports a total of 2.19 new jobs in the economy. A $1.00 increase in logistics activity sets off a total of 1.97 times that amount in the local economy. (Source: John E. Husing, PhD., Draft Report, Economic Impact of Goods Movement on Southern California, May 29, 2006). Considering the many economic benefits of international trade and goods movement, there must be a commitment to the growth of the state's goods movement industry and modernization of freight facilities while concurrently working to protect public health and the environment. (Source: CALMITSAC, Growth of California Ports: Opportunities and Challenges, Interim Report to the California State Legislature, January 2006). While we prepare our ports to compete and prosper in the increasingly global market place, we must ensure that the growth in goods movement occurs in a green and sustainable manner, so as to improve the quality of life for our communities.

The environmental, public health and economic reality of the goods movement activities at the international and national levels have significant impacts in Southern California. In March 2006, the California Air Resources Board (CARB) reported that ports and goods movement activities cause 2,400 premature deaths statewide; 360,000 loss work days; over 1 million school absences and will have an aggregate health impact of approximately $200 billion by 2020. Further, approximately half of these costs are projected to occur in our air basin as a direct result of trade through the Ports of Los Angeles and Long Beach. Further, the location of goods movement facilities directly impact neighboring communities and can create serious environmental justice concerns. There are communities and neighborhoods that are adversely impacted by pollution related to goods movement activities and should be protected from potential environmental justice concerns and impacts as to not cause, negative environmental, health and economic impacts stemming from these activities. There are opportunities to improve the existing environment and public health (including worker health), that should be implemented. Additionally, there are air quality goals and reduction targets (such as those articulated in the Governor's

Goods Movement Action Plan, and the CARB's Emissions Reductions Plan for Ports and Goods Movements) that should guide these efforts.

Public resources must be expended with concern for the benefit of the general public. Public funds should be invested on behalf of taxpayers with concern for the best return possible. The return on investments should be maximized though the selection of the most necessary and useful projects providing support for the current and future goods movement through Los Angeles and Long Beach Ports and the region.

Federal, State and Local funds should be combined to extend the funding available to build necessary infrastructure projects and to positively affect the value of capacity enhancement in the future. Investing in the goods movement infrastructure and determining the best projects for our region must be done with the proper consideration for maximizing the public good through public participation and community outreach, fulfilling the permitting and environmental processes and fully assessing the cost and benefits returned with each project.

The members of the Los Angeles/Long Beach Goods Movement Advisory Taskforce, in presenting their set of recommendations to the Mayors of Los Angeles and Long Beach submit that:

- A balance between environmental mitigation and managing growth is the desired result of any new infrastructure project in the state.
- Environmental groups request full mitigation of air quality and other environmental impacts as the desired result of any new infrastructure project in the state
- The most environmentally sound and least polluting projects should be the model of growing and greening the port.
- Public resources should benefit the public good.
- Ensure that the cost of infrastructure investments and environmental mitigation are not solely funded by public resources.
- Public resources should promote innovative technology that does not add to the existing environmental and economic burden on the communities and neighborhoods where the projects are located.
- Land Use Guidelines should be incorporated into any proposed infrastructure project.
- Each of the individual recommended projects will be subject to the detailed environmental review consistent with Federal and State regulations.
- Infrastructure and environmental projects should be based on reasonable rates of return and that the bond money should be spent on projects with reasonable useful lives.

City of Los Angeles/City of Long Beach

Goods Movement Advisory Taskforce

CRITERIA/PROJECTS

On May 9, 2006, the Mayors of Los Angeles and Long Beach convened a Los Angeles/Long Beach Goods Movement Advisory Taskforce (Taskforce) to advise the two cities and two ports on goods movement projects and priorities. The Taskforce consists of representatives from the industry, labor, environmental and community (See Attachment #1 – List of Taskforce members). The Mayors asked to the Taskforce to develop a set of recommendations aimed to maximize the benefits to the Los Angeles/Long Beach region from the proposed state bonds. Toward that end, the Taskforce has developed a set of criteria to guide their discussions on goods movement projects and priorities (i.e. trade infrastructure and air emission reduction projects). The Taskforce, headed by the Executive Directors of the Port of Los Angeles and the Port of Long Beach, met on five occasions to develop a set of recommendations on trade infrastructure and air emission reduction priority projects.

On July 24, 2006, the Taskforce completed its work and submit the following set of recommendations and perspectives on trade infrastructure and emission reduction projects to inform the Mayors in their decision-making process.

RECOMMENDATIONS

The Taskforce developed and reach consensus on a set of criteria for trade infrastructure and emission reduction projects. The criteria, found on the next page, were developed to inform and guide the Taskforce's decision-making process on potential projects. The Ports of Los Angeles and Long Beach provided the Taskforce members with a series of proposed goods movement projects that will benefit the region (see Attachment #2 – Goods Movement Projects). Additionally, the NRDC and Long Beach Alliance for Children with Asthma provided some alternative opinions on Environmental considerations for the proposed projects (see Attachment #3 – NRDC and LBACA Alternative Opinions). The Taskforce also reviewed a list of off-port community infrastructure projects submitted by Environmental Representatives, but other Taskforce members felt this list was not beneficial to the region (see Attachment #4 – Port Area Projects). The California Trucking Association (CTA) has offered additional views (see Attachment #5).

CRITERIA

TRADE INFRASTRUCTURE PROJECTS

Allocation Formula Criteria

In SB 1266, the allocation of the funds for trade infrastructure is outlined. SB 1266 states that:

1. The commission shall allocate funds for trade infrastructure improvements as follows:
    a) addresses the state's most urgent needs
    b) balances the demands of various ports (between large and small ports, as well as between seaports, airports, and land ports of entry)
    c) provides reasonable geographic balance between the state's regions
    d) places emphasis on projects that improve trade corridor mobility while reducing emissions of diesel particulate and other pollutant emissions.

The LA/LB Goods Movement Advisory Taskforce suggests the following additional allocation criteria for consideration:

2. Allocate infrastructure funds by port region in proportion to their relative cargo volumes for the most recent calendar year as measured by a weighted index of:

    a) Annual TEUs of containerized cargo
    b) Annual tonnage for non-containerized, non-liquid bulk cargo
    c) Road and rail congestion related to freight goods movement.

Project Evaluation Criteria

In SB 1266, the project evaluation criteria for trade infrastructure is outlined. SB 1266 states that:

1. Velocity - the speed by which large cargo would travel from the port through the distribution system

2. Throughput - the volume of cargo that would move from the port through the distribution system

3. Reliability - reasonably consistent and predictable amount of time for cargo to travel from one point to another on any given day or at any given time in California

4. Congestion reduction - reduction in recurrent daily hours of delay to be achieved.

5. The commission shall allocate funds to projects that have identified and committed supplemental funding from appropriate local, federal or private sources.

6. Improvements funded with moneys from this fund shall have supplemental funding that is at least equal to the amount of the contribution from the fund.

The LA/LB Goods Movement Advisory Taskforce suggests the following additional allocation criteria for consideration:

7. The relative merits of projects should be based on the following performance and cost-effectiveness measures:

    a) Annual reduction of vehicle hours of delay
    b) Annual reduction in train hours of delay
    c) Annual reduction in diesel PM, SOx, NOx and CO2 emissions from all vehicles, ships, and locomotives
    d) Annual reduction in vehicle and train hours of delay divided by annualized capital costs
    e) Annual reduction in PM, SOx, NOx and CO2 emissions divided by annualized capital costs
    f) Percentage of matching funds pledged above required match
    g) Estimated increase in economic benefits of the ports to surrounding communities
    h) Give greater weight to projects that demonstrate a quantifiable (measurable) reduction in health risks (immediate and long term)

i) Priority given to projects that reduce cumulative environmental and public health impacts

8. Ensure that projects do not generate disproportionate and/or adverse environmental or health impacts on communities

9. Focus on clean and innovative goods movement technologies

10. Provide immediate and long term reductions in emissions and health risks (with particular focus on cumulative impacts); and congestion

11. Promote alternative fuel use and fuel diversity.

12. Promote alternative energy/power sources

13. Avoid disproportion adverse impacts to certain communities by ensuring compliance with environmental principals, as defined by Government Code Section 65040.12 - “the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of all environmental laws, regulations, and policies.”

14. Prioritize projects with system wide benefits

15. Focus on projects that promote highway and rail safety

CRITERIA

EMISSIONS REDUCTION PROJECTS

Eligibility

In SB 1266, the eligibility for emissions reduction funds is outlined. SB 1266 states that:

1. One billion dollars ($1,000,000,000) shall be made available to the State Air Resources Board for emission reductions from activities related to the movement of freight along California's trade corridors.
2. Funds are intended to supplement existing funds used to finance strategies and public benefit projects that reduce emissions and improve air quality in trade corridors commencing at the state's airports, seaports, and land ports of entry.

Allocation Formula

In SB 1266, the allocation of the funds for emissions reduction provides no details on allocation by formula.

The LA/LB Goods Movement Advisory Taskforce suggests the following emissions reduction criteria for consideration:

1. Allocate air quality mitigation funds by port region in proportion to the following based on the most calendar year: :
   a. Health risks/impact on population
   b. Annual TEUs of containerized cargo
   c. Annual tonnage for non-containerized, non-liquid bulk cargo
   d. Annual number of vessel calls
   e. Non-attainment

2. Leverage funds to maximize benefits by prioritizing projects with matching funds.

Evaluation Criteria

In SB 1266, the evaluation criteria for emissions reduction projects are not articulated.

The LA/LB Goods Movement Advisory Taskforce suggests the following emissions reduction criteria for consideration:

1. The relative merits of emission reduction projects should be based on the following performance and cost-effectiveness measures:

    a. Annual reduction in all goods movement diesel related PM, SOx, NOx and CO2 emissions from all vehicles, ships and locomotives
    b. Annual reduction in all goods movement related diesel PM, SOX, NOX and CO2 emissions divided by annualized capital costs
    c. Focus on local sources, not global, health risks/impact on population, and areas with the greatest health impact

2. Include clean and innovative goods movement technologies
    a. Promote alternative fuel use and fuel diversity
    b. Promote alternative energy/power sources

3. Provide immediate and long term reductions in emissions and health risks (with particular focus on cumulative impacts);

4. Avoid disproportion adverse impacts to certain communities by ensuring compliance with environmental principals, as defined by Government Code Section 65040.12 - “the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of all environmental laws, regulations, and policies.”

5. Prioritize projects with system wide benefits

6. Focus on areas that promote highway and rail safety

7. Ensure that projects do not generate disproportionate and/or adverse environmental or health impacts on communities.

TRADE INFRASTRUCTURE PROJECTS

The Taskforce had extensive dialogue on the economic, environmental, workforce and community issues related to each of the projects. The Taskforce perspectives vary with respect to these projects. While the Taskforce is in agreement traffic congestion impacts both the environmental and economic aspects of regional port activity, there were varied perspectives on how the projects impact various constituencies (i.e. community, industry and labor). Each of the individual projects will be subject to detailed environmental review consistent with Federal and State regulations. The environmental process could result in enforceable mitigation and community enhancements. While the intent was to develop consensus agreement on a set of projects to recommend, the taskforce discussed and offer the following projects recommendations and views:

Project 1: Gerald Desmond Bridge Replacement

Description: The Bridge is located in the Port of Long Beach and has an estimated cost of $800,500,000. The CTC has designated the bridge as a "Project of National & Regional Significance" as well as a "High-Priority Project." The Gerald Desmond Bridge has already been awarded $320 million in public funding. This project would benefit both Ports.

Project 2: Seaside Avenue/Ocean Blvd (SR47) and Navy Way Interchange

Description: The interchange is located on Terminal Island. The last traffic signal would be removed on the main thoroughfare connecting Terminal Island and Long Beach. The estimated cost of this project is $40 million. This project would benefit both Ports.

Project 3: SR47 Expressway includes replacing Schuyler Heim Bridge

Description: The Bridge is located on Terminal Island and Wilmington and the estimated cost of the bridge is $535 million. SAFETEA-LU designated the bridge a "High Priority Project" and was awarded $10 million. The bridge has gained $157 million in programmed state funds. This project benefits both Ports.

Project 4: I110/SR47 Connector Improvement Program (in San Pedro and Wilmington)

Description: The estimated cost for this connector improvement is $184 million. The improvements include a grade separation at Fries Avenue and work on the I110/SR47/Harbor Blvd interchange, C Street/I110 access ramp, I110 northbound ramp/John S. Gibson intersection, SR47 on and off ramp at Front Street, and I110 southbound on-ramp at Miraflores and Gaffey Street. This project benefits the Port of Los Angeles.

Taskforce perspectives on Projects 1 to 4:

Waterfront Coalition views:

- Supports the above projects.

CTA views

- Supports the above projects.

Environmental membership views:

- The environmental groups appreciate the opportunity to advise the Mayors through participation in this task force. Participation was fueled by the desire to ensure that as we grow the ports and its associated infrastructure, we "grow green."
- Making certain that only the most environmentally sound infrastructure projects are selected for bond funding is essential as tax payer dollars will be spent on projects. Only those projects providing the most benefits to the state should be selected.
- Project criteria was established through the work of this task force as a means of evaluating projects on their merits, while considering the interests of all groups involved. Due to a lack of time, no infrastructure projects have been subject to the criteria established. This lack of detailed analysis is unfortunate and we believe that advocating for infrastructure projects prior to application of the criteria does not allow for a meaningful understanding of the true environmental and health impacts of projects nor does it allow for those projects with true merit to rise to the top.
- We, therefore, recommend that as a condition to receiving bond funding, the allocation criteria be applied to all infrastructure projects, and that project applicants incorporate mitigation measures up front as part of the project costs, allowing for the most environmentally sound projects to receive bond funds. It should not be assumed that bond projects will adopt all appropriate mitigation measures later, as part of the CEQA or NEPA process. **It is important to note that none of the costs associated with the listed port infrastructure projects include mitigation costs.**
- Additionally, we caution the Mayors from supporting projects that have not fully undergone the CEQA or NEPA process. Lending support to projects not yet ripe for approval strips the public of their leverage to require project applicants to adopt additional mitigation measures, or consider alternatives to the proposed project.
- Furthermore, we are concerned that all infrastructure projects #1-8 (See Attachment 2) characterize themselves as being "emission reducing." In fact, these assertions are both inaccurate and misleading for the following reasons:
    - History demonstrates that any emission reduction from, for example, a freeway expansion, is temporary at best. And that over time, an occurrence known as "induced traffic" occurs wherein those additional freeway lanes become congested leading to an even greater air

pollution problem than that which existed prior to expansion. This concern is particularly acute here given the massive growth expected at both ports and associated goods movement facilities.

- Some of the projects listed in Attachment 2 are designed to facilitate port growth, which would lead to additional air pollution if appropriate mitigation is not adopted. For example, the Gerald Desmond Bridge Project is characterized as one that will reduce emissions. However, the Draft EIR for the project makes clear that the project's purpose is to enable port growth to allow for larger ships to enter the harbor—leading to ever greater amounts of air pollution. While we are not opposed to port growth per se, we take issue with the Ports' portrayal of infrastructure projects as projects benefiting air quality. Accordingly, we strongly encourage the Mayor to not take the proposed projects at face value and make an independent determination as to whether they will truly benefit air quality.

- Furthermore the concept that faster freight will result in automatically cleaner air is a misnomer. For example, when cars and trucks travel at faster rates NOx emissions actually increase. This was recently demonstrated when on July 11, 2006 CARB announced that the EMFAC model used for emissions predictions, is actually seriously underestimating the true emissions.

- Finally, air pollution levels are already high in the immediate vicinity of the infrastructure projects listed in Attachment 2. It is unsound scientifically to assert that by adding truck lanes and/or expanding bridge capacity to sustain additional truck traffic through these areas will decrease air pollution.

o Residents living in the San Pedro Bay Communities are already suffering from devastating health impacts as a result of goods movement. Without fully mitigating the impacts of these projects designed to expand throughput, these health impacts will only increase.

Project #5: Port Rail Systems (to supporting on-dock rail yards)

Description: The estimated cost for the port rail system is $660 million. These projects are either close to the Ports or within close proximity to Port property. The project includes Pier B Intermodal rail yard expansion, New Cerritos Channel rail bridge, Thenard rail junction, Reeves Avenue highway/rail grade separation, other mainline improvements and additions, and computerized train control. The projects would benefit both Ports.

Taskforce perspectives on Project 5:

Waterfront Coalition views:

o Supports the above project.

CTA views

- Supports the above project.

Environmental membership views:

- **See attachment #3 - Alternative opinions from the NRDC and LBACA**

Project 6: Advance Transportation Management Information and Security Systems

Description: The estimated cost for this project is $13 million. The MTA has funded Phase I at $4.24 million. The Federal government has provided $.41 million. The project includes up to 16 closed circuit TV cameras in the Port area and 9 changeable message signs to improve traffic operation on the I710, I110, and SR47/103. This project would benefit both Ports.

Taskforce perspectives on Project 6:

Waterfront Coalition views:

- Supports the above project.

CTA views

- Voiced concerns as to whether there are plans to see some alternative approaches to providing information to truck drivers.

Teamsters views:

- There is concern in regards to safety of the project (includes safety of the drivers using cell-phones touch screens?).
- Safety issues cannot be discounted at the expense of speed.

Project 7: I710 Early Action Projects— Port Terminus

Description: The estimated total cost of this project is $300 million. This project was designated $2.4 million as a "High Priority Project" in SAFETEA-LU. To better accommodate truck movements, the project includes reconfiguration of the PCH and Anaheim interchanges, as well as the reconfiguration of the Shoemaker Bridge and southern ramps, providing the added benefit of significantly expanding and enhancing green space (Cesar Chavez Park) in a dense, highly impacted community. This project would benefit both Ports.

Project 8: I710 Early Action Projects—Mid-corridor Interchange

Description: The estimated cost of the project is $200 million. This project is also considered a "High Priority Project." The project includes the Firestone Blvd. interchange reconfiguration, Atlantic/Bandini interchange reconfiguration, and better connection between freeway and the rail yards. The Mid-corridor Interchange has partial environmental clearance. This project would benefit both Ports.

Taskforce perspectives on Project 7 and 8:

Waterfront Coalition views:

- Supports the above projects.

CTA views

- Supports the above projects

Environmental membership views:

- Reservation on these projects includes a concern related to congestion issues. Some members of the taskforce also noted that since the Cesar Chavez Park will be enhanced and expanded meaning the 710 ramp must be moved so that it will not go through the park.
- A school is located near the park and therefore an essential need to include mitigation costs to the construction of these projects. The taskforce has also discussed the emission concerns that will occur during the construction phase.
- **See attachment #3 - Alternative opinions from the NRDC and LBACA**

Project 9: Green Container Transportation

Description: This project enables the use of environmentally friendly technology as a means to move containers on a guideway system between the Ports and one designated location. Further studies are needed to determine feasibility and viability. The POLB/POLA recently issued a Request for Proposals to conduct such a study. Initial cost estimates are over $125 million a mile. This project would benefit both Ports.

Taskforce perspectives on Project 9:

Waterfront Coalition views:

- Supports the development of new technology, and support technology to reduce the environmental footprint of freight transportation. Studying guideway systems is a useful thing to do, but using bond financing to fund this is not appropriate. With so many infrastructure needs facing the Southern California region, including environmental and congestion mitigation projects like grade crossings, which have been notoriously difficult to fund, they believe this study is not a high priority.

Environmental membership views:

- Supports the above project

CTA views:

- **See attachment #5 - Alternative opinions from CTA**

EMISSION REDUCTION PROJECTS

Project 10: Green Container Transportation

Description: This project enables the use of environmentally friendly technology as a means to move containers on a guideway system between the Ports and one designated location. Further studies are needed to determine feasibility and viability. The POLB/POLA recently issued a Request for Proposals to conduct such a study. Initial cost estimates are over $125 million a mile. This project would benefit both Ports.

Taskforce perspectives on Project 10:

Waterfront Coalition views:

- Supports the development of new technology, and support technology to reduce the environmental footprint of freight transportation. Studying guideway systems is a useful thing to do, but using bond financing to fund this is not appropriate. With so many infrastructure needs facing the Southern California region, including environmental and congestion mitigation projects like grade crossings, which have been notoriously difficult to fund, they believe this study is not high priority.

Environmental membership views:

- Supports the above project

CTA views:

- **See attachment #5 - Alternative opinions from CTA**

Project 11: Clean Locomotives (in Port, not mainline)

Description: Clean Locomotives include Tier 2 or better locomotives. In this project ULEL units should be used. Hybrid locomotives are also being considered. This project would benefit both Ports.

Taskforce perspectives on Project 11:

Waterfront Coalition views:

- Remains neutral on whether this specific project is appropriate but generally supports efforts to help fund clean locomotives and ocean vessels

Environmental membership views:

- Supports the above project

CTA views:

- **See attachment #5 - Alternative opinions from CTA**

Project 12: Shore Power (AMP/Cold Ironing)

Description: Shore power is the transferring of electrical generation for ocean going vessels while at berth from onboard diesel-electric generators to the cleaner shore-side power grid, which provides power from regulated/controlled stationary sources. This project would benefit both Ports.

Taskforce perspectives on Project 12:

Waterfront Coalition views:

- Remains neutral on whether this specific project is appropriate but generally supports efforts to help fund clean locomotives and ocean vessels

Environmental membership views:

- Supports the above project

CTA views:

- **See attachment #5 - Alternative opinions from CTA**

Project 13: Capturing Vessel Stack Emissions

Description: This project incorporates gas scrubbing technologies. The vessel stack will capture stack emission while at berth and remove pollutants from exhaust streams. This project will demonstrate good usage for vessels with infrequent calls to San Pedro Bay. This project would benefit both Ports.

Taskforce perspectives on Project 13:

Waterfront Coalition views:

- Remains neutral on whether this specific project is appropriate but generally supports efforts to help fund clean locomotives and ocean vessels

Environmental membership views:

- **See attachment #3 - Alternative opinions from the NRDC and LBACA**

CTA views:

- **See attachment #5 - Alternative opinions from CTA**

Project 14: Heavy-Duty On-Road Vehicles/Trucks

Description: The project requires the replacement of heavy duty trucks with specific vehicles that meet or exceed EPA's 2007 on-road PM emission standards. This project would benefit both Ports.

Taskforce perspectives on Project 14:

Waterfront Coalition views:

- Supports programs that would help independent truckers improve the efficiency and the quality of their equipment.

- Inappropriate to use 30-year funding mechanism to replace property that can be depreciated over five years. It is not a good bargain for the taxpayers to fund truck replacement programs via long-term debt.
- Significant issues related to the private sector match on such a project. It is inappropriate to have one industry pay for the capital expenditures of another industry. It would be better to mandate changes and have the private sector pay for the change in freight rates.
- Believes tax incentives and privately financed leasing programs are a much better way to help truckers get better equipment.
- The State of California should consider emission standards for intra-state trucking, mandating the use of new trucks, thereby ensuring that the private sector funds the change exclusively through freight rates.

Teamster views:

- Requires a stabilized workforce and currently there are issues with having the public sector involved with stabilizing the workforce.
- Recommended that the issue of a stable workforce in the trucking industry be addressed. The key issue is sustainability; sustainability of funds to replace trucks, and the needed trucking rates to sustain the use of clean trucks over time. The Ports have begun to develop a comprehensive truck program, in which it is uncertain at this time if the workforce issue can be addressed.

CTA views:

- **See attachment #5 - Alternative opinions from CTA**

Additional views by all Taskforce members:

- More information is required prior to offering support of the above project.
- Intra-state pollution standards are acceptable, however there are competitive issues related to the Medallion program.
- Retrofit programs should be extended not only to trucking companies but to carrier and shippers (so that the cost is not only on the trucking companies).

OTHER ISSUES/COMMENTS

- The Ports point out that all CEQA requirements will be fulfilled and mitigation measures implemented in the projects.
- The Ports encourage the need to connect the Los Angeles/Long Beach efforts with other cities in the five county area to ensure a system-wide approach and support for goods movement initiatives are achieved.
- The Environmental taskforce members would like to ensure the CTC Commissioners perform outreach to the public in order to gain input on the bond measures. If such public outreach is not achieved then requests a CTC public oversight committee, which focuses specifically on the bond measure.

ATTACHMENT 1

LOS ANGELES-LONG BEACH GOODS MOVEMENT ADVISORY TASKFORCE

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Attachment #3

Alternative Opinions from NRDC and LBACA

Environmental and Health Considerations

- The environmental groups appreciate the opportunity to advise the Mayors through participation in this task force. Participation was fueled by the desire to ensure that as we grow the ports and its associated infrastructure, we "grow green."
- Making certain that only the most environmentally sound infrastructure projects are selected for bond funding is essential as tax payer dollars will be spent on projects. Only those projects providing the most benefits to the state should be selected.
- Project criteria was established through the work of this task force as a means of evaluating projects on their merits, while considering the interests of all groups involved. Due to a lack of time, no infrastructure projects have been subject to the criteria established. This lack of detailed analysis is unfortunate and we believe that advocating for infrastructure projects prior to application of the criteria does not allow for a meaningful understanding of the true environmental and health impacts of projects nor does it allow for those projects with true merit to rise to the top.
- We, therefore, recommend that as a condition to receiving bond funding, the allocation criteria be applied to all infrastructure projects, and that project applicants incorporate mitigation measures up front as part of the project costs, allowing for the most environmentally sound projects to receive bond funds. It should not be assumed that bond projects will adopt all appropriate mitigation measures later, as part of the CEQA or NEPA process. **It is important to note that none of the costs associated with the listed port infrastructure projects include mitigation costs.**
- Additionally, we caution the Mayors from supporting projects that have not fully undergone the CEQA or NEPA process. Lending support to projects not yet ripe for approval strips the public of their leverage to require project applicants to adopt additional mitigation measures, or consider alternatives to the proposed project.
- Furthermore, we are concerned that all infrastructure projects #1-8 (See Attachment 2) characterize themselves as being "emission reducing." In fact, these assertions are both inaccurate and misleading for the following reasons:
    - History demonstrates that any emission reduction from, for example, a freeway expansion, is temporary at best. And that over time, an occurrence known as "induced traffic" occurs wherein those additional freeway lanes become

congested leading to an even greater air pollution problem than that which existed prior to expansion. This concern is particularly acute here given the massive growth expected at both ports and associated goods movement facilities.

- Some of the projects listed in Attachment 2 are designed to facilitate port growth, which would lead to additional air pollution if appropriate mitigation is not adopted. For example, the Gerald Desmond Bridge Project is characterized as one that will reduce emissions. However, the Draft EIR for the project makes clear that the project's purpose is to enable port growth to allow for larger ships to enter the harbor—leading to ever greater amounts of air pollution. While we are not opposed to port growth per se, we take issue with the Ports' portrayal of infrastructure projects as projects benefiting air quality. Accordingly, we strongly encourage the Mayor to not take the proposed projects at face value and make an independent determination as to whether they will truly benefit air quality.

- Furthermore the concept that faster freight will result in automatically cleaner air is a misnomer. For example, when cars and trucks travel at faster rates NOx emissions actually increase. This was recently demonstrated when on July 11, 2006 CARB announced that the EMFAC model used for emissions predictions, is actually seriously underestimating the true emissions.

- Finally, air pollution levels are already high in the immediate vicinity of the infrastructure projects listed in Attachment 2. It is unsound scientifically to assert that by adding truck lanes and/or expanding bridge capacity to sustain additional truck traffic through these areas will decrease air pollution.

- Residents living in the San Pedro Bay Communities are already suffering from devastating health impacts as a result of goods movement. Without fully mitigating the impacts of these projects designed to expand throughput, these health impacts will only increase.

Attachment #4

POLA / POLB
High Priority Trans Projects
Taskforce Environmental Representatives Suggestions
Port Area Infrastructure / Community Infrastructure

With respect to the off-port community infrastructure projects, the Taskforce was not able to determine whether the projects fell within the scope of the bond measure. The Taskforce did not reject these projects from further consideration but recommended that Mr. Jesse Marquez meet with the Port of Los Angeles to discuss these projects further. A meeting did occur on August 18, 2006.

It is important to consider that the community has requests for infrastructure projects as well, and that these projects fall within the guidelines for the infrastructure bond to improve throughput and velocity, etc. As the Taskforce did not meet again to consider these off-port projects, this Taskforce report does not include final recommendations as to these off-port community projects. The Taskforce understands that recommendations on these projects may be made separately by Port staff after review of the projects.

If the assertion is that the projects on this list lack sufficient detail, port staff and/or consultants could assist with the technical details and these projects, in some cases, could be added to existing port projects. With a list of infrastructure projects only generated by the Ports of Long Beach and Los Angeles, this seems not to implement the Mayors' goals for sustainable growth and addressing historic inequities and impacts. These projects should be subject to the same scrutiny as other listed infrastructure projects in that the allocation criteria should be applied to all projects.

Gaffey St. SR-110 Improvements	$35,000,000
Amerigas Tanks Relocation	$45,000,000
Knoll Hill / Skills Center / Rail Relocation	$45,000,000
Wilmington B Street Surface Tunnel	$50,000,000
Wilmington Waterfront-Avalon Corridors	$75,000,000
Wilmington McFarland Line / Watson Yard Relocation	$50,000,000
Wilmington Port Serving Facilities Improvements	$150,000,000
Consolidated Slip - Dominguez Channel	$50,000,000
Sub Total	$500,000,000
Goods Movement New Technology	
21st Century Technology Demonstration Projects	$-
21st Century Technology Projects Phase 1	$-
21st Century Technology Projects Phase 2	$-
Sub Total	$-
Total	$500,000,000

Admin & Community Reinvestment

Oversite Committee (15 years @ $1.0 m year)	$15,000,000
Community Jobs / Reinvestment Program	
Harbor Area Component	$30,000,000
Trans Corridors Component	$30,000,000
Sub Total	$75,000,000
Total	$575,000,000

PORT OF LONG BEACH/LOS ANGELES HIGH PRIORITY TRANSPORTATION PROJECTS
ATTACHMENT 2

2

PROJECT	DESCRIPTION	BENEFITS/COMMENTS	COST ($MILLIONS)	STATUS
1. Gerald Desmond Bridge Replacement Project	A new bridge with expanded traffic capacity: • From existing four lanes (two-lanes without shoulder per direction) to six travel lanes (three lanes and shoulder per direction) • Reduced approach grades of five percent (5%)	• Will be relinquished to Caltrans and designated as SR 710 • Designated "Project of National & regional Significance" and "High-Priority Project" with following benefits: ▪ Reduces recurrent and non-recurrent (from accidents) delays and emissions; ▪ Improves Levels of service from unacceptable F to acceptable D; ▪ By 2025, Vehicle Hours Traveled (VHT) reduced by 5,115 (hours); ▪ By 2025, Vehicle Miles Traveled (VMT) reduced by 28,245 (miles); and ▪ Reduces accidents due to widened roadways and provision of shoulders.	$800.5M	• Awarded $319.8M in public funding • DEIR/EA to be released for public review: November 2006 • Proposed Construction begin/end: 2008/2013
2. Seaside Avenue/Ocean Boulevard (SR 47) & Navy Way Interchange	• Removal of last signal on Ocean Boulevard	• Reduces delays and emissions, and improves safety and access	$40M	• Currently in Planning Phase • Proposed construction begin/end: 2008/2009
3. Terminal Island Fwy (SR 47) including Schuler Heim Bridge Replacement	• Construct a four-lane elevated expressway between Ocean Boulevard and Alameda Street at Pacific Coast Highway including replacement of Schuyler Heim Bridge	• Designated "High-Priority Project" with following benefits: ▪ Creates an expressway between Terminal Island and the ports of Los Angeles and Long Beach that would enhance mobility on local freeways; ▪ Diverts trucks from local arterials (200 peak-hour truck trips) , commercial and residential areas; ▪ Eliminates five at-grade crossings and three traffic signals; and ▪ Facilitates future improvements to the I-710 Freeway ▪ By Year 2020 the following benefits in cost savings are anticipated: o Travel time savings: $11.9M o Fuel and Non-fuel cost savings: $1.3M o Emissions savings: 0.7M o Savings in accident costs of $1.3M	$557M	• Awarded $10M in SAFETEA-LU • $298M from Caltrans • Proposed construction begin/end: 2008/2011
4. I-110/SR 47 Connector Improvement Programs	• Fries Avenue Grade Separation • I-110/SR 47/Harbor Blvd. interchange improvements • C Street/I-110 access ramp intersection improvements • I-110 NB Ramp/John S. Gibson Intersection improvements • SR 47 On-&Off-Ramp at Front Street	• Reduces delays and emissions, and improves safety and access	$134M	• Fries Avenue: Currently in Design Phase; Cost $53M; Construction end: 03/2009 • I-110/SR 47/Harbor Boulevard interchange improvements: Currently in Planning Phase; Cost $13M, $4M in public funds awarded; Construction end: 01/2009 • C Street/I-110 Access Ramp intersection improvements: Currently in Planning Phase; Cost $30M; Construction end: 10/2010 • I-110 NB Ramp/John S. Gibson intersection improvements: Currently in Planning Phase; Cost $18M; Construction end: 10/2010 • SR 47 On-&Off-Ramp at Front Street: Currently in Planning Phase; Cost $20M; Construction end: 12/2012

PORT OF LONG BEACH/LOS ANGELES HIGH PRIORITY TRANSPORTATION PROJECTS
ATTACHMENT 2

PROJECT	DESCRIPTION	BENEFITS/COMMENTS	COST ($MILLIONS)	STATUS
5. Ports Rail Systems (Excludes On-Dock Rail Improvements)	The following projects are being considered which are essential for efficient on-dock rail operations: • Pier B Street intermodal rail yard expansion • New Cerritos Channel rail bridge • Triple track s/o Thenard • Reeves grade separation • Other mainline improvements and additions • Computerized train control	▪ Provides for additional lift facility ▪ Critical for railcar staging and storage ▪ Facilitates additional rail shipments and reduce truck traffic on the I-710 corridor (reduction in 2.7m containers/year moved via truck on I-710) ▪ Reduces train delays and emissions ▪ Improves velocity and reliability for cargo ▪ Supported by MTA, SCAG and State	$619M	• Pier B Rail yard & mini-ICTF (supported by MTA) - $258M • New Cerritos Channel rail bridge (by 2015) - $91M • Triple track s/o of Thenard - $16.5M • Reeves grade separation - $61M • Other mainline within Harbor District - $172.7M • Computerized Train Control - $20M
6. Advanced Transportation Management Information and Security Systems	• Addition of up to 16 Closed Circuit TV Cameras and 9 Changeable Message Signs to improve traffic operations on the I-710, I-110, & SR 47/103 Freeways. • Part of the overall Intelligent Transportation Systems (ITS) program for the I-710 Corridor/Gerald Desmond Bridge Gateway Program (Designated “High-Priority Project”)	▪ Improves security & safety ▪ Improves incident response time ▪ Improves reliability and predictability of transportation system ▪ Improves multimodal mobility ▪ Enhances goods movement ▪ Reduces travel delay and emissions	$15M	• Awarded/Committed $8M in funding (POLB/POLA/ACTA-$3.15M; MTA-$4.24M; Federal-$0.41M) • Design Phase Commenced/Completion: 2009/2010
7. I-710 “Early Action Projects”: Ports Terminus	• PCH and Anaheim interchange reconfiguration • Expanded open/green space (Ceasar Chavez park)	• Designated “Project of National & Regional Significance” and “High-Priority Project” • Improves operating conditions & safety • Reduces delay & emissions	$300M	• Awarded $2.4M in SAFETEA-LU
8. I-710 “Early Action Projects”: Mid-Corridor - Interchange Reconfigurations	• Firestone Blvd. Interchange • Atlantic/Bandini Interchange	• Designated “Project of National & Regional Significance” and “High-Priority Project” • Improves operating conditions and safety • Reduces delay & emissions	$200M	• Firestone Blvd. Interchange ($100M) - partial design/contruction completed • Atlantic/Bandini Interchange ($100M) – partial design completed

Ports of Long Beach/Los Angeles

State Prop.1B
Trade Corridor Improvement Fund

Priorities/Recommendations

THE PORT OF LONG BEACH

Overview

- Regional Coordination
- Prop. 1B Criteria Recommendations
- Environmental Projects
- Transportation Projects
- Security Projects

State General Obligation Bonds Proposition 1B: $19.925 Billion

- $2 billion for trade corridors infrastructure (CTC to develop application process)
- $1 billion for trade-related emissions reductions (CARB & Leg. To define process)
- $100 million for port security (State Office of Emergency Services)
- ***$4.5 billion for corridor mobility improvements (projects already nominated by Caltrans & MTA)***
- ***$2 billion in new STIP funding (Ports/COLB projects via MTA)***
- $1 billion for SR 99
- $200 million for school bus retrofit
- $4 billion for public transit
- ***$1 billion for state-local partnership program (Ports/COLB via MTA)***
- $1 billion for transit safety and security
- ***$125 million for local bridge seismic retrofit (Ports/COLB via Caltrans)***
- $250 million for railroad grade separations
- $750 million for SHOPP funds
- ***$2 billion for local streets and roads (direct subvention to COLB & via MTA)***

Ports Policy/Planning Efforts

- BT&H-CA/EPA Goods Movement Action Plan: Integrating Committee
- California Marine and Intermodal Transportation System Advisory Council (CALMITSAC)
- Multi-County Goods Movement Action Plan (joint effort by CTCs, MPOs, and Caltrans in 7 counties)
- SCAG: RTP/RTIP, "So. CA Goods Movement Plan & Strategy", Goods Movement Task Force and Executive Round Tables
- So. CA National Freight Gateway MOU
- Senator Feinstein's Goods Movement Task Force
- *POLB/POLA/COLB/COLA Goods Movement Task Force (Prop 1B criteria & projects)*

Trade Corridors Improvement Fund

Ports' *Allocation Criteria Recommendations*

- Allocate funds by port region in proportion to current cargo volumes
  - Annual TEUs of containerized cargo
  - Annual tonnage of non-containerized, non-liquid bulk cargo
  - Road & rail congestion

Trade Corridors Improvement Fund

Project Evaluation Criteria Recommendations

- Reduction of: emissions/health risk, motorist delays
- Leveraging of private funding
- Federal trade corridors of national significance
- system-wide benefits
- Safety improvement

Prop. 1B Emission Reduction Projects
CAAP 5-Year Commitments

- Vessels
  - VSR, engine mod., fuels, AMP
  - **$201,000,000**

- Locomotives & Cargo Equipment
  - New engines/equipment, engine mod., fuels
  - 12/2011: frequent/semi-frequent trucks meet or exceed EPA 2007 PM standards
  - **$10,000,000+**

- *Truck Retrofit/Replacement*
  - *seek Prop 1B funds*

Truck Retrofit/Replacement

- Estimated Population
  - ~41,000 Trucks Servicing Both Ports
  - ~7,000 Frequent Callers (1+ calls/day); ~50% of All Calls
  - ~9,800 Semi-Frequent Callers (0.5-<1 calls/day); ~30% of All Calls
- Measure:
  - Replace frequent/semi-freq. MY<1993: ~10,600 trucks, diesel/LNG
  - Retrofit semi-frequent MY1993-1997: ~5,100
  - Retrofit semi-frequent MY1998-2003: ~850
- Cost ($1.805 billion), Implementation & Funding
  - Emblem Program + Incentive Program + Impact Fee
  - Ports - $170 M (first 5 years); AQMD – $36 M
  - State G.O. Bonds & impact fee to cover $1.6 billion shortfall

International Gateway Transportation Solution Set

Proposed Project	Lead Agency	Cost
Gerald Desmond Bridge (SR 710)	POLB	$800,500,000
SR 47 Truck Expressway/Heim Bridge	ACTA, Caltans	$557,000,000
I-110 Connectors Program	POLA	$134,000,000
SR 47/Navy Way Interchange	POLA	$ 40,000,000
Ports Rail Systems	Ports, ACTA	$631,100,000
I-710 "Early" Action Projects • Anaheim/PCH/Shoemaker interchanges • Firestone & Atlantic Bandini interchanges	Caltrans/COLB Caltrans	$300,000,000 $200,000,000
TOTAL		$2,662,600,000

I-710 Corridor/Gerald Desmond Bridge Gateway Program
Desmond Bridge Replacement ($800.5 M)

Need and Benefits

- Integral component of the "trade gateway" to the nation; will be the first 1-710 Gateway Program project to be constructed-estimated 2013
- Gerald Desmond Bridge and Ocean Blvd. westerly extension of the I-710; will be relinquished to Caltrans and designated as SR 710
- Physically deteriorated and functionally deficient bridge will be replaced with a technologically, seismically, and architecturally advanced bridge; warrants replacement based on State/Fed criteria
  - Expand from present 4 through-lanes to 6 lanes
  - Reduce approach grades to 5 percent
- Gerald Desmond Bridge project will reduce traffic delays, accidents, and emissions (particularly diesel) and is consistent with the POLB's "Green Port Policy"

THE PORT OF LONG BEACH

I-710 Corridor/Gerald Desmond Bridge Gateway Program
Desmond Bridge Replacement ($800.5 M)

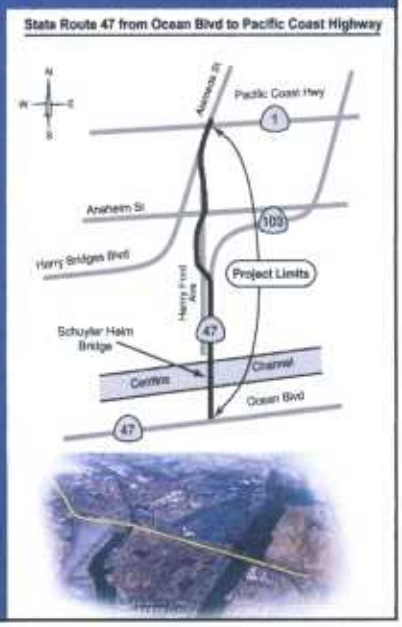
National, Regional and Local Significance

- "Project of National & Regional Significance" in SAFETEA-LU
- Fed. Designated National Highway System Intermodal Connector
- Bridge carries 10% of all U.S. waterborne containers, I-710 carries 15%; benefits non-port motorists, which represents 40% of bridge traffic
- High priority project: BT&H/CalEPA Goods Movement Action Plan & SCAG's "Southern California Regional Strategy for Goods Movement"
- Included in SCAG's Regional Transportation Improvement Program & Regional Transportation Plan

THE PORT OF LONG BEACH

SR 47 Truck Expressway ($557m)

- ACTA/Caltrans project: elevated, 1.7 mile long viaduct between Terminal Island and Pacific Coast Highway
- Includes replacement of Heim Bridge (seismic need)
- Facilitates future improvement to the Long Beach Freeway
- Benefits:
  - Diverts trucks from local arterials (200 peak-hour truck trips)
  - Eliminates 5 at grade crossings and 3 traffic signals
  - Facilitate future improvements to I-710



SR 47 Truck Expressway ($557m)

I-110 Connectors Program ($134m)

- Fries Avenue Grade Separation
- I-110/Thomas Bridge Interchange
- C Street/I-110 Access Ramp
- I-110/Gibson Bl Interchange

Ocean Bl. (SR 47)/Navy Way Interchange ($40m)

Schedule:

- In prelim. engineering phase
- Complete 12/2009

Ports Rail System Projects ($631.1m)
Essential For On-Dock Rail

- Pier B Railyard & mini-ICTF (supported by MTA) - $257.9 m
- New Cerritos channel rail bridge- $91m
- Triple track s/o of Thenard - $16.5m
- Reeves grade separation - $61m
- CP Mole reconfiguration - $20m
- Other in-port mainline - $184.7m
- Benefits:
  - Additional on-dock rail capacity
  - Critical for rail car staging and storage
  - Reduces truck traffic on I-710 (reduction of 2.7 million containers/yr)
  - Reduces train delays and emissions
  - Supported by MTA, SCAG & State

Other S. CA Goods Movement Projects

- Colton Xing (BNSF/UP/Metrolink) - $150,000 m
- Alameda Corridor East (LA, SB, Orange, Riverside Counties) - $2.4 B

Ports Security Projects

Future Projects	*Cost*
*Virtual Land Perimeter for IED Sensors	$12,450,000
*Virtual Water Perimeter for IED Sensors	$18,900,000
*TWIC Compliant Readers/Systems	$ 9,800,000
*Shelter-in-Place Plng/Infrastructure	$ 8,200,000
New POLA Port Police Command Center	$10,000,000
POLA Joint Container Inspection Facility Design	$10,000,000
POLB Virtual Port -Maritime Domain Awareness	$ 2,300,000
	$71,650,000

*Joint POLA/POLB Project