



**THE PORT
OF LOS ANGELES**
Executive Director's
Report to the
Board of Harbor Commissioners

DATE: MARCH 27, 2014

FROM: EXECUTIVE OFFICE

SUBJECT: RESOLUTION NO. _____ - REPORT TO LOS ANGELES CITY COUNCIL, TRADE, COMMERCE, AND TOURISM COMMITTEE, ON THE TRAPAC TERMINAL DEVELOPMENT PROGRAM

SUMMARY:

In November 2013, the Los Angeles City Council (City Council) considered and adopted the Second Amendment to Permit No. 881 with TraPac, Inc. to deliver container terminal facility improvements at Port of Los Angeles (Port) Berths 136-147. During its consideration the City Council requested that the City of Los Angeles Harbor Department (Harbor Department) report back on a) specific procedural changes that will be made to rectify the issues raised in the reporting of this program to ensure that such issues do not reoccur, b) the impacts of container terminal automation, and c) a plan for integrating a liaison between Labor and the Harbor Department vendors.

RECOMMENDATION:

It is recommended that the Board of Harbor Commissioners (Board):

1. Discuss the recommendations included in this report and its transmittals, and provide staff with direction on any modifications concerning these recommendations;
2. Forward this report and its transmittals, as modified by the Board, to the Los Angeles City Council, Trade, Commerce, and Tourism Committee, for their information; and
3. Adopt Resolution No. _____.

DISCUSSION:

Background/Context - On November 19, 2013, the City Council considered and adopted the Second Amendment to Permit No. 881 (Second Amendment) with TraPac, Inc. (TraPac) to design, entitle, and construct container terminal facility improvements to TraPac's existing terminal located at Port Berths 136-147. This Second Amendment allowed the Harbor Department to modify and amend the TraPac Terminal Development Program's scope of work to accommodate new automated container

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terminal operations. This City Council action also approved corrections, clarifications, technical changes to the project scope, and ratification of past Harbor Department actions related to this program. The modified TraPac Terminal Development Program consists of 10 capital projects delivering new wharves, rail facilities, buildings and gate complexes, Alternative Maritime Power ("AMP" or shore power) systems, an automated intermodal container transfer facility (ICTF) rail yard, and the first automated container terminal on the West Coast.

Previous to this City Council action, on September 19, 2013, the Board approved the Second Amendment and increased the \$364 million TraPac Terminal Development Program budget by \$146 million for a total budget of approximately \$510 million.

During its consideration the City Council Trade, Commerce, and Tourism Committee (TCT) recommended that the Harbor Department take the following three actions and report back on the results/findings of these actions. An excerpt of City Council File No. 13-1501 containing this request is attached as Transmittal 1.

- a. Memorialize the "Lessons Learned" and report back on specific procedural changes that will be made to rectify the issues raised in the reporting of this program to ensure that such issues do not reoccur.
- b. Perform a study of the impacts of container terminal automation, specifically impacts on the Port, workforce, community, etc., and a cost/benefit analysis that takes into consideration the competitive challenges facing the Port. Provide a report to the City Council on this study.
- c. Develop a plan for integrating a liaison between Labor and the Los Angeles Harbor Department vendors.

This report provides the specifics on these City Council requests and presents the next steps in implementing recommendations.

TraPac Lessons Learned and Procedural Changes

Approach - Through the late summer and fall 2013, the Harbor Department reviewed the lessons learned from the TraPac Terminal Development Program through an After Action Review (AAR) facilitated by the Inspector General of the City of Los Angeles. As this process neared completion it was decided that an independent consultant would best be able to provide the necessary review and recommendations to provide the necessary "best practices" and address the City Council's requests. In December 2013,

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the Harbor Department selected the Bronner Group LLC (Bronner) through an expedited competitive proposal process to perform this assessment. Bronner began work on this assessment in January 2014, and completed its report in late February 2014. Bronner started its work by reviewing the AAR along with the supporting source documents. Bronner conducted over 40 stakeholder interviews with Harbor Department staff, managers, executives, and commissioners along with the AAR facilitator. Bronner provided weekly progress reports and circulated several draft reports that were reviewed at stakeholder meetings. Transmittal 2 is a copy of Bronner's TraPac Terminal Program Assessment dated February 28, 2014.

Results - Between 2009 and 2013 the TraPac Terminal Development Program changed from a "conventional" container terminal to an automated terminal with program estimates increasing from \$245 million to \$510 million. Bronner's report summarized the events and timeline leading to these changes and, in combination with the fall 2013 AAR, highlighted gaps in the Harbor Department's operating framework including the following:

- Substantial increases in program construction cost estimates;
- Significant delay in permit amendment filing;
- Failure to follow established tenant lease policies and procedures;
- Communication gaps between Harbor Department divisions, management, and the Board;
- Lack of single point accountability for project ownership across a project lifecycle;
- Lack of clarity regarding the roles and responsibilities of project manager through the project lifecycle; and
- Ineffective action taken to revise tenant lease to adequately protect the Harbor Department against financial risk.

Major elements of the construction cost estimate escalation, as described in Bronner's report, the AAR, and the Executive Director's report to the Board in September 2013, include:

- \$52 million – Electrical and communication system infrastructure (12.5 vs. 4.16 kV)
- \$44 million – Construction phasing, specialty design, construction management
- \$21 million – Concrete paving and foundation due to poor soil conditions
- \$13 million – Storm drain system (to comply with local/state/federal regulations)
- \$8.6 million – Construction inflation
- \$4.8 million – Fire protection system
- \$3.1 million – Safety and secured access (fencing and gates)

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Most but not all of the revised budget increase stems from the Automated Rail Mounted Gantry Stacking Cranes and other infrastructure required for delivering an automated container terminal. The electrical system requires 12.5 kV in order to deliver enough power to operate this new equipment; a typical port terminal uses 4.16 kV. Previously unknown poor soil conditions required stronger and more durable concrete and foundations. Due to soil and groundwater contamination, additional storm drain measures were required at an additional cost of \$13 million to ensure compliance with the City of Los Angeles Watershed Protection Program, the Standard Urban Storm-Water Mitigation Plan and Harbor department environmental standards. Lastly, an additional \$44 million has been added to accommodate more complex construction phasing as a result of a) higher than anticipated levels of cargo in the terminal due TraPac adding to its customer base while under construction, b) incorporating new safety measures required for the automation infrastructure, and c) acceleration costs needed to meet grant funding deadlines (over \$60 million in grant funding has been obtained to help offset increased costs). Cost estimates escalated despite the Harbor Department engaging outside support from consultants who had been involved in the only other automated container terminal previously constructed in the United States in Norfolk, Virginia.

Bronner identified a set of “best-practices” components for organizational effectiveness based on its years of experience evaluating the delivery of public-sector infrastructure. Bronner applied these “best-practices” to the lessons learned through its study and the AAR, then developed a set of recommended actions entitled “Building Better Governance Initiative (BBGI).” This initiative/action item list includes six individual actions focused on two basic themes, 1) improved integration across the entire Harbor Department organization, and 2) strengthened risk management. The six recommended actions and their relative priorities are as noted below and are detailed in Bronner’s report:

<i>Recommended Action</i>	<i>Relative Priority</i>
1. Restructure and re-institutionalize the Project Development Committee	High
2. Create a project lifecycle ownership structure	High
3. Implement independent validation and verification in project budgeting and control	Medium

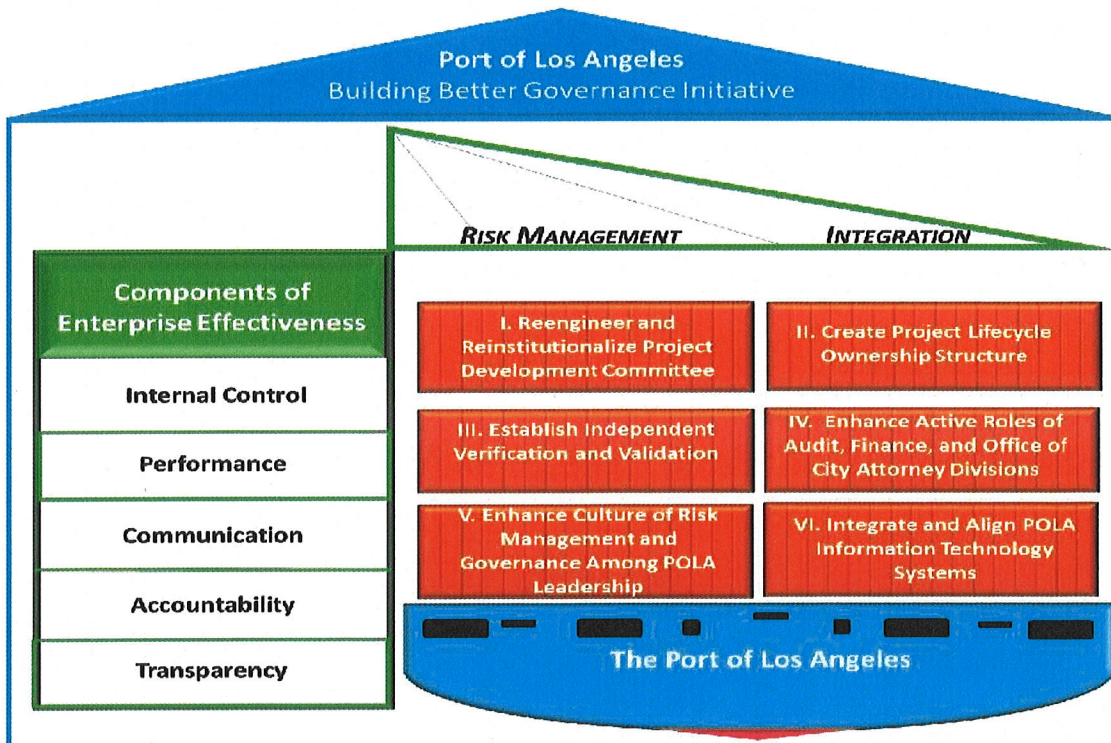
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4. Establish active roles in project control for finance and audit	Medium
5. Promote a culture of risk management across the Harbor Department	Medium
6. Explore opportunities to integrate and align information technology systems	Low

Bronner created the following graphical depiction of these recommendations within the context of the themes of improved integration and strengthened risk management.

Bronner noted that the Harbor Department has implemented many of these recommendations including executive management team realignment, establishing single-point accountability of project managers, and starting implementation of Project Development Committee restructuring.

Recommendations - Our recommended “next steps” are to a) review and accept the recommendations included in this report, b) establish and seat a BBGI implementation steering committee, c) assign accountability and timeframe for individual key action items, and d) establish monitoring framework to ensure tasks are accomplished.



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Impacts of Container Terminal Automation

Approach - Harbor Department planning and marketing staff conducted a study on the status of container terminal automation both worldwide and in the San Pedro Bay. Staff extensively researched available studies, conducted in-house working sessions on this subject, and met with stakeholders including terminal operators and labor representatives. Staff summarized the findings and made recommendations in the Container Terminal Automation Study included as Transmittal 3.

Results - Twelve container terminals have been automated, worldwide, with three domestic terminals due to open in the months and years ahead (Port of Los Angeles – TraPac; Port of Long Beach – Middle Harbor; and Port of New York/New Jersey – Global Container Terminals). Each automated container terminal is unique; however, some standards for automation are emerging. Decisions to automate are based on a number of considerations including vessel size, labor costs, terminal efficiency, and property available. The Harbor Department neither encourages nor discourages automation due to our role as a landlord that is not involved in the operation of terminals. Rather, terminal operators choose their mode of operation based on their own internal business models which balance the level of service they can provide to their shipping line and cargo-owning customers against the costs of providing that level of service.

Working with the limited information available, staff can make the following statements about the impacts of automation on the Port of Los Angeles, the workforce, and the community:

- **Capacity Impacts** - Because the ultimate capacity of the Port appears to be constrained (primarily) by its berth capacity, automating the Port does not expand the total volume of container cargo that the Port can handle in the long-term.
- **Efficiency/Throughput Impacts** - Automation can improve the efficiency of cargo handling and speed the velocity of cargo, especially as volumes increase. Automation speeds the handling of the newer Super-Post-Panamax vessels. However, full automation is not always required, and terminals can improve efficiency to some degree in partnership with labor.
- **Environmental Impacts** - Automation results in decreases in emissions and greenhouse gases through switching to more use of electricity versus fossil fuels. The TraPac Environmental Impact Report (EIR) addendum, which analyzed the change from conventional to automated terminal, showed a 68% reduction in CO₂, 93% reduction in CH₄, and an 82% reduction in N₂O. Automation is not required to meet Port air emission goals.

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- **Terminal Operating Cost Impacts** - Terminal operating costs are likely to go down under automation. The amount of reduction depends on labor cost savings versus cost of capital employed. The Harbor Department cannot currently provide an estimate, which would require detailed information on automation used and terminal cost structures.
- **Labor/Workforce Impacts** - Automation leads to a reduction in the amount of International Longshore and Warehouse Union (ILWU) labor required. The amount of reduction depends on types of automation employed. The amount of reduction can be offset by new jobs in repair and maintenance of automated equipment. The ultimate impact of automation on the labor force depends upon agreements between labor and management regarding staffing levels and workforce retraining.
- **Harbor Department Financial Impact** - Automation should not impact the Port's income, if volumes are unchanged. Terminal operators are responsible for investment in automation equipment. The Harbor Department is only responsible for terminal improvements. Under the Harbor Department rate of return policy, terminal improvement investments should be recouped by increased revenue from the terminal operator.
- **Competitive Impact** - Automation, if it reduces terminal costs and/or increases terminal efficiency, can provide a competitive advantage to a terminal that implements it. Conversely, if competing ports automate and the Port of Los Angeles does not, it may find itself at a competitive disadvantage. The amount of cargo at risk depends upon the level of cost savings or efficiency gains, which in turn depends on the level of automation and how well it works. Cargo losses (and related job losses) could be significant, but too little is known at present to prepare reliable estimates.

Estimating Automation Impacts: an Example Using TraPac - As noted above, a significant amount of information necessary to provide an accurate cost-benefit analysis of future automation is still unknown at present. However, it is possible to prepare a rough estimate of automation impacts using what is known about the TraPac automation project.

- ILWU and TraPac representatives agree that automation at TraPac is likely to result in a 40 to 50% reduction in the number of longshore jobs at the TraPac terminal.
 - Using unmanned straddle carriers instead of manned vehicles reduces the number of workers needed per crane by about 53%.
 - Automating the container backland reduces the number of workers needed per transtainer by 85%.

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- TraPac is only automating a portion of the terminal, with the remainder operating as a traditional manned terminal; thus, the overall impact is between 40 and 50% fewer workers needed at TraPac.
- Based on Pacific Maritime Association reporting on hours and wages, in 2011 the Ports of Los Angeles and Long Beach were served by the equivalent of approximately 9,000 fulltime longshore workers (at 2,080 hours per year).
- Assuming longshore hours are allocated proportionately across terminals based on their container volumes, TraPac was served by the equivalent of 400 longshore workers in 2011.
 - A 40 to 50% reduction in longshore labor equates to a reduction of the equivalent of 160 to 200 longshore jobs
 - Additionally, because longshore jobs are dispatched from a hiring hall, the loss of jobs can be translated into reduced working hours across the pool of longshore labor
 - A loss of 200 longshore jobs equates to a loss of 416,000 hours of work. Spread across 9,000 longshore workers, that is a loss of less than one hour of work per week, or a 2.2% reduction in hours (and pay) overall.
 - Some of this job loss has been offset by the hiring of additional mechanics to service the automated equipment.
- If container volume moves to TraPac from other San Pedro Bay terminals until TraPac reaches its capacity of approximately 2 million TEUs, and the volumes are split evenly between the automated and non-automated portions of the TraPac terminal, job losses would be as high as approximately 600 jobs (or a 7% reduction in hours and pay overall).
 - Growth at other non-automated container terminals could partially or entirely offset this job loss.

The ILWU Local 13 provided data on the geographical distribution of its longshore workers. According to this data, approximately 27.7 percent of the Local 13 workers live in San Pedro and 9.8% live in Wilmington. Assuming the lost jobs match the distribution of Local 13 workers by place of residency, San Pedro and Wilmington could expect to see direct job losses equal to approximately 37.5 percent of the predicted job losses due to automation – between 60 and 75 jobs at current volumes and up to 225 jobs if TraPac reaches capacity by taking volume from other Port terminals.

These job losses will be significant to the local community because longshore jobs pay approximately 85% more than the median household income for the communities of San Pedro and Wilmington. However, the impact will be muted because of the relatively

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low number of jobs lost. While Wilmington and San Pedro have very strong ties to the Port, the Port is not the primary source of employment for these communities.

Occupational Breakdown by Place of Residence

	San Pedro (90731)	San Pedro (90732)	Wilmington (90744)
Construction	6.63%	4.22%	6.89%
Manufacturing	12.77%	12.95%	22.24%
Transportation & Warehousing	10.80%	12.71%	8.06%
Retail Trade	10.32%	8.56%	9.83%
Education, Health & Social Services	18.38%	21.94%	12.42%

(Source: U.S. Census Bureau Summary File (SF3), 2000.)

Recommendations - Given the amount that is unknown about how automation is likely to proceed at the Port of Los Angeles and its competitors, Harbor Department staff has developed the following recommendation on dealing with existing and potential future container terminal automation projects:

- Complete TraPac's first phase (31 acres of 146 acres) of Autostrad automation by mid-2014. The remainder will be completed by 2016.
- Eagle Marine Services/APL has an approved EIR with automated guided vehicle (AGV) automation, as an option, in the 40 new acres. If Eagle Marine Services/APL chooses to automate the 40 acres, the Harbor Department will provide the infrastructure as described in the current scope of work.
- Prepare an EIR for Yang Ming that includes the assessment of automation.
- If terminal operators want to automate their facilities they may do so using their own capital. The Harbor Department will evaluate each such proposal on a case-by-case basis.
- Based on an assessment of (1) the performance outcomes from automated operations at TraPac and other automated terminals, (2) the evolution of shipping alliances and their impacts on future terminal needs and infrastructure, and (3) other competing ports' approaches to terminal automation, the Harbor Department will proceed to develop a terminal automation strategy.

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Labor Liaison

Approach - Labor issues at the Port are divided into two broad categories. Category one includes labor relations with the organizations that represent Harbor Department employees through a Memoranda of Understanding negotiated by the City of Los Angeles. Harbor Department management is often directly involved in discussions and negotiations with these organizations. The second category includes labor relations between our customers (terminal operating companies and shipping lines) and our contractors and their operating unions. The Harbor Department has no direct relationship in these discussions and negotiations. Nevertheless, our enterprise is directly impacted by the outcome of these relationships and negotiations. It is in this second category that Harbor Department staff focused its efforts in developing a plan to establish a labor liaison. Harbor Department staff determined that the most effective means to provide labor liaison capabilities would be to select a consultant to provide the services discussed below.

Results - The Harbor Department has determined that further strengthening of relationships with labor organizations are of strategic importance for its ongoing competitiveness. Recent developments and upcoming contract negotiations indicate the need for a deliberate effort to strengthen relations with our labor stakeholders. Key labor related issues/developments include:

- The ILWU master contract will expire on July 1, 2014. Negotiations with the Pacific Maritime Association (PMA) commence in May 2014. While the Port does not have a seat at the negotiating table, these negotiations could have long-term impact on its competitiveness.
- Negotiations with ILWU Local 56 are also underway.
- The Harbor Department's Master Project Labor Agreement (PLA) will be up in 2015 and discussions will need to commence in the near future.

Recommendations - The Port of Los Angeles' Labor Liaison will provide outreach, education, and advocacy services to the Harbor Department. The Labor Liaison's contract will cover services for a six-month period, for a total amount not to exceed \$30,000. This amount covers all costs (travel and other expenses) associated with the performance of the duties defined in the Scope of Work. The Labor Liaison will:

- A. Prepare a written report identifying labor organizations with the ability to directly or indirectly impact the operations and productivity of the Port of Los Angeles, including but not limited to the ILWU, International Brotherhood of Teamsters, International

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- Brotherhood of Electrical Workers (IBEW), Building Trades, the Harbor Coalition and its affiliated unions, and the LA County Federation of Labor. The report should include an evaluation of each organization's potential impact on Port productivity.
- B. Develop a written outreach strategy, benchmarks, and implementation work plan to cultivate and strengthen relations with organizations identified in (A).
 - C. Implement the outreach strategy defined in (B) and produce verbal and written reports as agreed to in the implementation work plan.
 - D. Educate labor organizations about Port priorities and mobilize support for the Port's legislative and advocacy efforts.
 - E. Educate Harbor Department staff and appointed leaders on the issues and priorities of labor organizations identified in (A).
 - F. Support implementation of the Harbor Department's community outreach and education efforts where a labor-outreach component is involved.
 - G. Train and transition duties performed in this Scope of Work to a Harbor Department employee(s).

The Labor Liaison will be selected by the Executive Director with the contract term and amount falling within the Executive Director's authority limits (not to exceed one year or \$150,000).

ENVIRONMENTAL ASSESSMENT:

The proposed action is to provide staff with direction on any modifications concerning TraPac Terminal Program Assessment recommendations. As an administrative activity, Director of Environmental Management has determined that the proposed action is exempt from the requirements of the California Environmental Quality Act (CEQA) in accordance with Article II Section 2(f) of the Los Angeles City CEQA Guidelines.

ECONOMIC BENEFITS:

This Board action will have no employment impact.

FINANCIAL IMPACT:

The financial impact of the TraPac Terminal Development Program was previously presented in the Board action recommending approval of the Second Amendment to Permit 881. The Labor Liaison proposed will be selected by the Executive Director with the agreement term and amount falling within the Executive Director's authority limits (not to exceed one year and/or \$150,000). Funding in the amount of \$30,000 for the current fiscal year will from Account 54290, Center 0260, Program 000. Funding in the amount of \$150,000 for Fiscal Year 2014/2015 has been requested to be budgeted as

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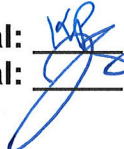
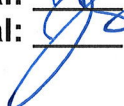
part of the annual budget adoption process in Account 54290, Center 0260, Program 000.

CITY ATTORNEY:

The Office of the City Attorney has reviewed this Board report and finds there are no legal issues at this time.

TRANSMITTALS:

1. Excerpts from Los Angeles City Council File Number 13-1501
2. Final Draft of TraPac Terminal Program Assessment Report, February 28, 2014, by Bronner Group LLC
3. Container Terminal Automation Study

FIS Approval:  (initials)
CA Approval:  (initials)


FOR MICHAEL R. CHRISTENSEN, P.E.
Deputy Executive Director

APPROVED:


GARY LEE MOORE, P.E.
Interim Executive Director

AUTHOR: M. Christensen
BOARD MEETING: 4/3/2014