



Analysis of PierPASS' OffPeak program cost calculation

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1.0 Introduction

1.1 Background

PierPASS, Inc. ("PierPASS") is a not-for-profit company created as result of the enactment of the West Coast Marine Terminal Operators Agreement ("WCMTOA").¹ The OffPeak program was launched in 2005, with the participation of 12 marine terminal operators ("MTOs"),² as a private-sector solution to address congestion and pollution on surrounding roadways and freeways caused by trucks picking up and delivering containers at the Ports of Los Angeles and Long Beach primarily during the day. Under the program, the WCMTOA members established a second shift during the week and on weekends (referred to in this document as the OffPeak program shift). As an incentive to use the OffPeak program shift and to cover the added cost, a Traffic Mitigation Fee ("TMF") is assessed to most cargo movement during peak/day hours.³

1.2 Scope of engagement

PierPASS retained KPMG LLP ("KPMG") to analyze various aspects of the calculations, assumptions, and methodology associated with its OffPeak program for the calendar year of 2015. Specifically, KPMG's tasks included:

1. Collection and review of pertinent documents and data related to the operational and administrative costs of the OffPeak program;
2. Interviews of participating MTOs from the Ports of Los Angeles and Long Beach, the Pacific Maritime Association⁴ ("PMA"), PierPASS' auditor (Windes, Inc.⁵), key PierPASS personnel, and SC Analytics⁶ to gather and evaluate data and information related to cost calculations and assumptions, including gate, yard, and administrative costs of the OffPeak program; and
3. Testing of methodology and assumptions used to calculate gate and yard costs, peak/day shift cost reductions and total TEUs⁷ subject to TMF.

Preliminary findings were discussed with PierPASS management and interested parties, including representatives from SC Analytics and chief financial officers from the Ports of Los Angeles and Long

¹ Under this agreement the U.S. Federal Maritime Commission authorized marine terminal operators from the Ports of Los Angeles and Long Beach to work together on "policies, actions and procedures" to address multi-terminal issues such as congestion, security, and air quality.

² Marine Terminal Operators (MTOs) provide wharfage, dock, warehouse, or other marine terminal facilities to ocean common carriers moving cargo in the ocean-borne, foreign commerce of the U.S. MTOs include: (i) public port authorities that own and maintain the docks and other facilities, and sometimes directly operate the marine terminal that ocean common carriers use; and (ii) private terminal operators that lease terminals from a public port authority (which acts as a landlord) and operate the leased terminals as a private business.

³ Monday through Friday, 3 AM to 6 PM.

⁴ The Pacific Maritime Association (PMA) is a non-profit organization based in San Francisco, California which represents employers of the shipping industry on the Pacific Coast. The principal business of the PMA is to negotiate and administer maritime labor agreements with the International Longshore and Warehouse Union (ILWU).

⁵ Windes, Inc. offers accounting and advisory services. Windes, Inc. was formerly known as Windes & McClaughry Accountancy Corporation and changed its name to Windes, Inc. in December 2013. The company was founded in 1926 and is based in Long Beach, California.

⁶ SC Analytics is a maritime industry consulting firm engaged by PierPASS to assist in the calculation of the OffPeak program costs.

⁷ TEU refers to a twenty-foot equivalent unit. It is a unit of cargo capacity often used to describe the capacity of container ships and container terminals. It is based on the volume of a twenty-foot-long intermodal container.

Beach during periodic update meetings held throughout the duration of the project. In the course of our analysis, the existing OffPeak program cost methodology was also discussed with representatives from the Federal Maritime Commission.

1.3 Data and information collected

KPMG requested and was provided with data and information about the methodology and assumptions used to calculate the OffPeak program costs, including: (i) terminal gate and yard costs for the 12 participating MTOs, (ii) administrative costs, and (iii) assumptions about cost exclusions and allocations. KPMG was assisted by SC Analytics and PierPASS in the effort to collect relevant data and information.

1.3.1 Terminal gate and yard costs

There are two categories of operational costs included in the OffPeak program cost calculation: labor and equipment. Labor costs included in the calculation are comprised of activities associated with the operation of the OffPeak program, such as longshoremen, guards, and mechanics. PierPASS obtains labor cost data for the OffPeak program cost calculation from the payroll database of the PMA and from participating MTOs.

Labor cost data is classified as International Longshore and Warehouse Union (“ILWU”) or non-ILWU. ILWU man-hour percentages related to dock work, mechanics, and guards, to be excluded from the OffPeak program cost calculation, are provided to SC Analytics by participating MTOs. In addition, participating MTOs provide non-ILWU man-hour and costs associated with the OffPeak program.

Equipment costs are estimated by using PMA payroll data and selected assumptions per the Army Corps of Engineers. SC Analytics compiles these data sources on a periodic basis and uses them as part of its calculation of the OffPeak program costs.

KPMG was provided with the underlying gate and yard costs data and related calculations for the period from January through December of 2015.

1.3.2 Administrative costs

KPMG was provided with the fiscal year ended 2015 (“FY2015”) audited financials, prepared by Windes, Inc., which include information on the administrative costs. KPMG understands that the only costs included in this category are those directly related to the OffPeak program operation. For instance, in deriving the administrative costs recorded in relation to the OffPeak program, PierPASS subtracts expenses related to the RFID tags as they are utilized during all shifts.⁸

1.3.3 Assumptions incorporated into the OffPeak program cost calculation

Various assumptions are incorporated into PierPASS’ methodology for assessing the OffPeak program cost. Data and information about these were provided to KPMG, primarily by SC Analytics.

1.4 Interviews

To validate the source and nature of the data and information collected, KPMG conducted interviews with the providers of the underlying data and assumptions we reviewed, including representatives from:

⁸ Radio Frequency Identification tags.

(i) participating MTOs, (ii) the PMA, (iii) PierPASS' auditors (Windes, Inc.), (iv) PierPASS management, and (v) SC analytics.

1.4.1 Marine Terminal Operators

KPMG understands that participating MTOs provide SC Analytics with labor cost information for both ILWU and non-ILWU labor, as well as information on the occurrence of OffPeak program shifts. For the ILWU labor cost information, MTOs provide information sheets, submitted to SC Analytics on a quarterly basis, which define exclusion and allocation percentages for the ILWU labor categories included in the OffPeak program calculation (i.e., dock work, guards, and mechanics). For the non-ILWU labor cost information, MTOs provide information from their internal tracking and payroll systems.

KPMG interviewed 11 of the 12 participating MTOs and learned or confirmed the following:

- Data on OffPeak program shifts for non-ILWU labor (i.e., average man-hours per shift and average labor rates) are recorded via internal tracking systems.
- Terminals typically operate 4 to 5 of the OffPeak program shifts based on operational needs.
- ILWU guard exclusion percentages: any individual MTO exclusively hires ILWU or non-ILWU guards. Of the 12 terminals, we understand that 5 terminals use ILWU guards. On a quarterly basis, each participating MTO reports an exclusion percentage, which relates to guard activity not spent on OffPeak program shifts. These exclusion percentages are used to estimate the share of the OffPeak program labor cost related to guard activity.
- Some terminals employing non-ILWU guards reported that they do not segment non-ILWU guard costs by OffPeak program and non-OffPeak program activities, thus, resulting in a potential overestimation of non-ILWU guard costs.
- Yard exclusion percentages: dock work is considered unrelated to the OffPeak program and, as such, is excluded from the program cost calculations. Estimated exclusion percentages are allocated either by headcount or time spent.
- Mechanic percentage allocations: Some MTOs employ ILWU mechanics exclusively, while others employ a combination of ILWU and non-ILWU mechanics. MTOs allocate ILWU mechanics costs for the following OffPeak program activities: power, roadability, and reefer. Also, they allocate ILWU mechanics costs for non-OffPeak program activities, such as container chassis and vessel gantry crane repairs. Allocations are made using the average headcount per activity per shift. Only OffPeak program mechanic activities are included in the cost estimation.

1.4.2 Pacific Maritime Association

Based on KPMG's discussions with SC Analytics, we understand that the PMA provides SC Analytics with payroll information for ILWU labor. KPMG interviewed representatives from the PMA and learned or confirmed the following:

- The ILWU payroll data, which is used for analysis by SC Analytics in its estimation of the OffPeak program cost, is provided by the PMA. The PMA payroll data is collected from participating MTOs.
- Compilation of the PMA payroll data is comprised of various steps. First, timecards are completed and submitted for approval of the walking boss. Next, the timecards are sent to the payroll department and payroll clerks input the timecard data into the payroll system, this includes a second level of management approval. At this point, the payroll data is uploaded to the PMA system, which includes various automated system audit checks (e.g., a twenty-hour shift would be automatically kicked out). In addition to the automated system audit checks, PMA payroll management must sign off on the accuracy of the data on a weekly basis. Thus, the payroll data is subject to various levels of internal

approval from the point when the timecards are compiled at the terminals to when it is uploaded to the PMA system and processed into the payroll database.

- Routine adjustments to the payroll data are made on a weekly basis. As a safeguard, SC Analytics waits a full week after a payroll period ends to request data.
- PricewaterhouseCoopers, LLP (“PwC”) audited the PMA payroll data for year ended June 2016. As part of this audit, a SSAE No. 16 audit was completed.⁹ Also, PwC conducted a separate audit of the benefit plans for the PMA. Neither audit indicated issues of concern.

1.4.3 PierPASS’ auditors (Windes, Inc.)

KPMG interviewed Windes, Inc. to confirm details about the various components of expenses included as part of the operating expenses section of PierPASS’ combined statement of operations for FY2015. Windes, Inc. corroborated the PierPASS’ position that, except for the RFID expenses, all other operating expenses are exclusively related to the operation of the OffPeak program.

1.4.4 PierPASS management

KPMG had numerous discussions with PierPASS management, including periodic project progress update meetings. During these discussions, KPMG learned/confirmed information about various aspects of the OffPeak program and its cost methodology.

Based on our discussions with PierPASS management, KPMG understands that the primary purpose for the OffPeak program cost calculation is to provide a general assessment of the magnitude of the incremental costs incurred by participating MTOs related to the operation of the OffPeak program shifts, and is treated as one of various factors for setting the TMF value. Other factors include trends in the macroeconomic environment and commercial considerations.

1.4.5 SC Analytics

In 2008, PierPASS engaged Palazzolo and Associates, who was succeeded by SC Analytics in 2015, to review and assess the OffPeak program costs on a quarterly and annual bases. As such, SC Analytics provided KPMG with the majority of the data reviewed as part of this engagement. SC Analytics explained the nature of the various calculations and analyses it has performed and provided clarifying background information about related data and assumptions. With the exception of TEU volume and PierPASS administrative costs (which were provided by PierPASS management), all data used by KPMG to review the OffPeak program cost calculations, assumptions, and methodology were provided by SC Analytics.

KPMG understands that Palazzolo and Associates and subsequently SC Analytics:

- Gathers payroll data for ILWU labor from the PMA; and non-ILWU OffPeak-related payroll data, ILWU OffPeak-related payroll exclusion and allocation percentages for yard, guard, and mechanic costs from participating MTOs.
- Adjusted equipment hourly costs based on ownership and operating cost schedules for construction machinery issued by the US Army Corps of Engineers (“USACE”).¹⁰

⁹ An SSAE No.16 audit entails the reporting on controls at organizations that provide services to user entities when those controls are likely to be relevant to user entities’ internal control over financial reporting.

¹⁰ US Army Corps of Engineers. (2011). *US Construction Equipment Ownership and Operating Expense Schedule – Region VII*. EP 1110-1-8, Volume 7.

- Applies exclusion and allocation percentages related to yard, guard, and mechanic costs provided by the various MTOs to determine the ILWU labor costs specifically related to the operation of the OffPeak program.
- Uses equipment rates per hour, per occupation code to determine equipment costs specifically related to the OffPeak program based on the PMA payroll data.
- Collects administrative costs for the OffPeak program by PierPASS management.
- Calculates the peak/day shift cost reductions related to the transfer of ILWU man-hours from peak/day to OffPeak shifts.

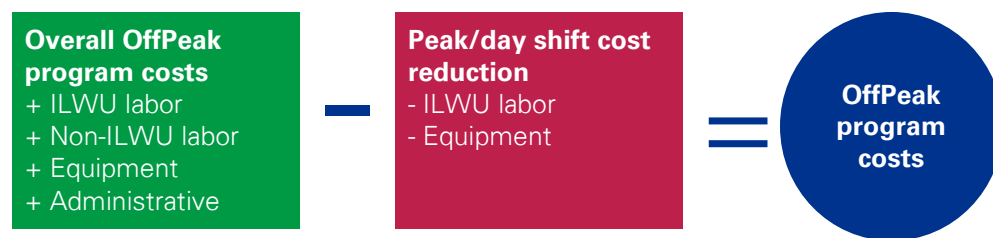
Also, based on our discussions with SC Analytics, we understand that the estimated reduction in the total number of ILWU man-hours resulting from the enactment of the OffPeak program has been held constant since 2008.

2.0 Description of analyses

2.1 The OffPeak program formula

Based on the review of data and information gathered, KPMG observed that the OffPeak program cost calculation is comprised of two main elements: (i) the quantification of the operational and administrative costs associated with the OffPeak program; and (ii) the estimation of the cost reduction in the peak/day shift resulting from the transfer of container volume (i.e., TEUs) to the OffPeak program shift. Figure 1 describes the components of the OffPeak program formula.

Figure 1: OffPeak program formula



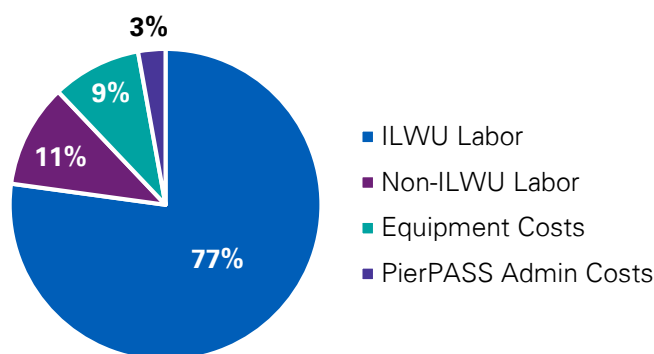
According to the existing methodology, costs of the OffPeak program fall into three categories: labor, equipment, and administrative. In quantifying the cost the OffPeak program, PierPASS subtracts any savings (i.e., reductions in peak/day shift cost) resulting from volume transferred to the OffPeak program shift. There are two cost categories accounted for in the estimation of peak/day shift cost reduction: labor and equipment.

Based on the OffPeak program formula, the net result of subtracting the peak/day shift cost reduction from the overall OffPeak program costs, represents an estimation of the incremental costs associated with the operation of the OffPeak program.

Currently, approximately 44 percent of the total TEUs are processed during the OffPeak program shift. Also, the overall TEU volume in 2015 is about 8 percent greater than in 2005, when the OffPeak program was enacted.

Review of the data for 2015 indicates that the majority of the OffPeak program cost before accounting for estimated peak/day shift cost reductions (approximately 77 percent of the total) is comprised of ILWU labor costs. Figure 2 provides a breakdown of the 2015 OffPeak program cost components before peak/day shift reduction.

Figure 2: 2015 OffPeak program costs before peak/day shift reduction - percentage of total OffPeak program costs



2.2 Analysis of selected data and assumptions

KPMG performed replications of selected data steps and calculations to test completeness of the data and to assess the assumptions associated with the OffPeak program cost calculation, including aspects of (i) the derivation of OffPeak program costs as well as (ii) the estimation of the peak/day shift cost reduction.

2.2.1 Review of the OffPeak program cost components

2.2.1.1 ILWU labor

The PMA extracts unfiltered data from its payroll database for all employees working during each cost estimation period. This data is provided to SC Analytics who, in turn, checks the data for completeness and applies certain adjustments, including allocations and exclusions for certain gate and yard functions such as dock work, guards, and mechanics to derive ILWU labor and equipment costs exclusively related to the operation of the OffPeak program. Based on the review of the data collected and interviews performed, KPMG observed that the ILWU labor costs reported for 2015 are consistent with the data from the PMA payroll and the existing methodology.

As discussed above, SC Analytics applies certain allocations and exclusions to the ILWU payroll data when determining the labor costs attributable to the OffPeak program. These are intended to filter out any non-OffPeak program labor costs from the calculation. For instance, any mechanic or guard hours which are not directly attributable to the operation of the OffPeak program are excluded from the estimation of OffPeak program labor costs. To determine the applicable exclusions or allocations, SC Analytics relies on data reports from participating MTOs and systematic data filters.

KPMG's review of the estimated exclusion data indicated a significant level of variation over time and across MTOs. In the interviews of SC Analytics and the representatives of participating MTOs, KPMG learned that the observed variation could be attributed to operational differences across MTOs. For instance, some MTOs hire exclusively non-ILWU guards, thus, explaining the zero percent ILWU guard exclusions.

KPMG also learned that exclusion percentages are allocated either by headcount or by time spent on a given function. We spoke with representatives from participating MTOs and discussed the reported zero percent yard exclusion percentages for 2015. We learned that these percentages were set to zero because no dock work was performed during OffPeak program hours, as labor is generally more expensive during that period.

KPMG understands that there is no formal process in place to independently confirm the estimated allocations or exclusions provided by participating MTOs.

2.2.1.2 Non-ILWU labor

Based on the review of the data collected and interviews performed, KPMG observed that non-ILWU labor costs are derived from participating MTOs' internal tracking and payroll systems. This data is provided to SC Analytics who checks it for completeness. Based on the review of the data collected and interviews performed, KPMG observed that the non-ILWU labor costs reported for 2015 are consistent with the data from the various MTOs and the existing methodology. Similar to the ILWU labor data, we learned that there is no formal process in place to independently test the accuracy of the estimated allocations or exclusions provided by the various MTOs.

2.2.1.3 Equipment

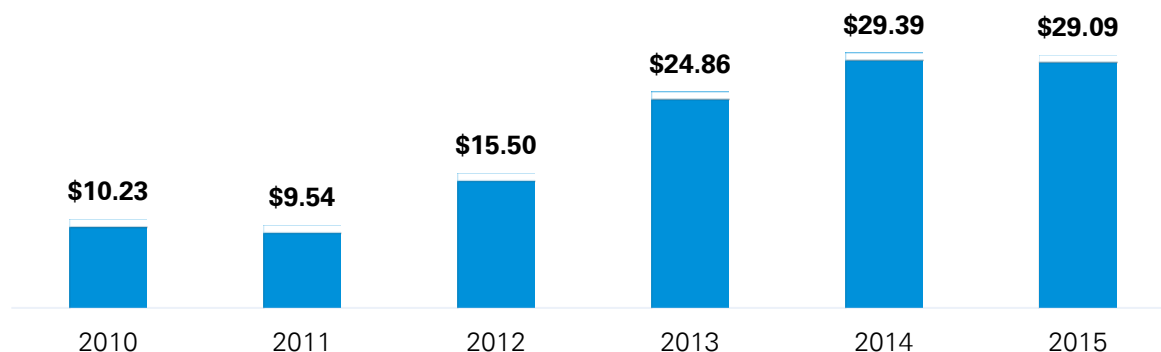
Equipment costs for the OffPeak program are calculated based on estimated equipment use hours and estimated cost per machine hour. First, SC Analytics uses the ILWU payroll data to identify the number of equipment hours during the OffPeak program shift based on calculated man-hours for certain occupation codes which utilize terminal equipment. Next, using the assumed number of workers required to operate any given type of equipment, SC Analytics estimates the cost of operating various equipment per shift by multiplying the hours of equipment operation by estimated equipment hourly rates based on a USACE 2011 study.

KPMG analyzed the data sources used in the estimation of equipment costs and observed that the reported 2015 estimates are consistent with the data and methodology in use.

KPMG's review of PierPASS' methodology for estimating equipment cost indicates that the calculated value represents both fixed and variable elements. That is, it makes no attempt to isolate the variable portion of the equipment cost.

KPMG's review of the trend in equipment cost for recent years shows a significant (near threefold) increase between 2010 and 2015 (see Figure 4). According to SC Analytics, this increase is attributable to: (i) changes in the calculation in Q2 2012 to correct for under-reporting of certain equipment categories related to omitted occupation codes; and (ii) increases in equipment cost per hour.

Figure 4: Evolution of OffPeak program equipment costs (in millions)



2.2.1.4 Administrative

KPMG observed that the 2015 administrative costs described in the OffPeak program calculation are consistent with values stated in the 2015 audited financials. Furthermore, KPMG observed that the 2015 audited financials included no going concern opinions.

2.2.1.5 Sensitivity analysis of estimated OffPeak program costs

The calculated OffPeak program costs are estimates and, as such, can vary according to alternative assumptions and data sources used. KPMG did not quantify the degree of variability resulting from alternative assumptions or data. However, a comparison of the *calculated* TMF to the *actual* TMF charged in 2015 indicates that the actual TMF is approximately 25 percent lower than the calculated TMF. Therefore, the OffPeak program cost estimate would have to be overstated by more than 35 percent in order for the calculated TMF to exceed the actual TMF charged in 2015.

2.2.2 Analysis of the estimated peak/day shift cost reductions

Based on the data and information gathered, KPMG understands that peak/day shift cost reductions are estimated as follows:

Formula 1: Peak/day shift cost reductions

$$\text{Peak/day shift cost reduction}_t = \text{ILWU man-hours reduced}_{t=2008} * \text{ILWU labor rate per hour}_t$$

According to Formula 1, peak/day shift cost reduction is defined by two factors: (i) the number of ILWU man-hours reduced during the peak/day shift (resulting from TEU volume transferred to the OffPeak program shifts) and (ii) the respective labor cost per hour.

Based on our discussions with SC Analytics, man-hour reduction was first derived from a 2007 study commissioned to estimate peak/day shift cost reduction. The study compared operating costs from a four-week period prior to the launch of the OffPeak program (i.e., June 2005) to a peak/day shift from a period after the implementation of the OffPeak program. In 2008, Palazzolo and Associates modified the original approach for estimating man-hours reduced.¹¹ This modified approach assumes that man-hour

¹¹ In 2008, PierPASS engaged Palazzolo and Associates to review the DMJM Harris' "Draft Final Report PierPASS Gate Cost Audit for 4th Quarter 2007 – 1st Quarter 2008," dated August 6, 2008. Palazzolo and Associates, in a report, dated February 5, 2009, outlined observations and additional analysis related to the DMJM audit of the OffPeak program. Palazzolo and Associates determined

reduction is constant over time. That is, man-hour reduction in year t (e.g., 2015) is the same as in 2008.¹²

KPMG's review of the data and information about the 2008 modified estimates indicates that man-hours reduced may be overstated, since it includes cost reductions attributed to unrelated mechanic hours and implicit equipment cost reductions. Furthermore, the current approach does not capture the potential temporal impacts of changes in technology and/or operations.

2.2.2.1 Sensitivity analysis of estimated peak/day shift cost reduction

Based on the available data and information, KPMG developed two sensitivity analysis scenarios for testing the sensitivity of the 2015 peak/day shift cost reduction estimates. These scenarios are intended for discussion purposes only and are **not** meant as suggested alternative approaches to the current methodology.

Scenario 1: Efficiency assumption. In this scenario, KPMG calculated a hypothetical estimate for the 2015 peak/day man-hour reduction by assuming that the labor efficiency in 2015 (defined as man-hours divided by TEUs) was equal to the efficiency observed in a period prior to the enactment of the OffPeak program in 2005. After adjusting for the increase in TEUs between 2005 and 2015, we computed the total additional man-hours needed during the peak/day shift to process the total 2015 TEUs (See Figure 5).

Figure 5: Derivation of hypothetical 2015 peak/day man-hour reduction

A	2005 Peak/Day & Other Man-hours	4,569K
B	2005 Peak/Day & Other TEUs	14,467K
C=A/B	2005 Efficiency Rate	0.32
D=C	Hypothetical 2015 Efficiency Rate	0.32
E	2015 Peak/Day TEUs	8,763K
F	2015 OffPeak TEUs	6,885K
G=E+F	2015 Total TEUs	15,648K
H=D*G	Hypothetical 2015 Peak/Day Man-hours	4,941K
I	2015 Peak/Day Man-hours	4,623K
J=I-H	Hypothetical 2015 Peak/Day Man-hour Reduction	318K

The peak/day man-hour reduction calculated in this scenario is approximately 318K (See Figure 5), significantly lower than the estimated value by SC Analytics for the same period. This difference may partially be due to the inclusion of unrelated mechanic hours in the SC Analytics estimate. The

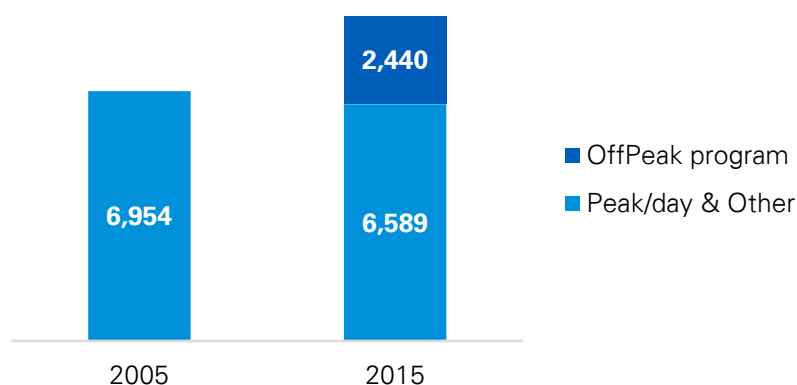
that the TMF per TEU calculated by DMJM was inflated and did not specifically measure costs associated with the OffPeak program. As part of its work, Palazzolo and Associates conducted a cost allocation study of the OffPeak program and determined a lower TMF per TEU.

¹² According to our discussions with SC Analytics, the rationale for this assumption is that, as of 2008, all significant peak/day shift cost reductions had been achieved.

hypothetical decrease in peak/day shift cost reduction would in turn increase estimated 2015 TMF from \$92 to approximately \$108 (approximately 17 percent higher).

According to our analysis, the overall labor efficiency observed in 2015 is lower than that observed in 2005. Also, our analysis suggests lack of a strong direct correlation between man-hours and container volume. Figure 6 indicates that despite the fact that about half of the container volume (i.e., TEUs) was shifted to the OffPeak program, man-hours for the peak/day and other shifts was reduced by approximately 5 percent between 2005 and 2015.

Figure 6: ILWU man-hours by shift type (in thousands)¹³



Based on our discussions with PierPASS management, this finding is consistent with the fact that (i) staffing for a shift (i.e., peak/day or OffPeak program) is set to meet maximum demand for that period; and (ii) there may be significant volatility in container volume during the course of a shift/week. Furthermore, ILWU labor is hired as full-time and staffing is set as a team with specialized functions (i.e., gangs). For instance, a certain number of gangs may be required for a shift.

Scenario 2: Incremental cost approximation. In this scenario, KPMG explored an alternative model construction which implicitly accounts for reductions in peak/day shift man-hours. Total man-hours observed in the OffPeak shift are allocated into two categories: fixed and variable. Fixed man-hours correspond to hours that are incurred regardless of the container volume handled during the OffPeak

¹³ 2005 peak/day shift ILWU man-hours represents Q2 2005 PMA reported man-hours adjusted for yard, gate, and other activities scaled up using calculated 2005 efficiency rates.

program shift. Variable man-hours are a function of the amount of container volume handled during the OffPeak program shift.

Assumptions:

- But-for the enactment of the OffPeak program, container volume for 2015 would be handled during the peak/day shift;
- The cost of peak/day shift hours (both fixed and variable) is covered by the throughput rate negotiated between MTOs and ocean carriers;
- The hourly rate for the variable hours (incurred during the OffPeak program shift) equals the rate differential between OffPeak program and non-OffPeak program shifts (KPMG understands that the labor rate for the OffPeak program is 30 percent higher than the peak/day rate); and
- The man-hour reduction calculated using the existing methodology approximates the variable man-hours for the OffPeak program.

Calculations:

- To determine the number of fixed man-hours for the OffPeak program, we subtracted the approximated variable man-hours (per assumptions above) from the total OffPeak program man-hours (See Figure 7);¹⁴
- Total labor cost for the OffPeak program was estimated as the sum of the fixed man-hour cost (fixed man-hour * OffPeak program hourly rate) and the variable man-hour cost (variable man-hour * OffPeak program hourly rate * 30 percent).

Figure 7: **Hypothetical 2015 fixed and variable OffPeak program man-hours**

A	2015 Estimated OffPeak Program Man-Hour Reduction	914K	
B=A	Hypothetical 2015 Variable OffPeak Program Man-hours	914K	37%
C	2015 Estimated Total OffPeak Program Man-Hours	2,440K	
D=C-B	Hypothetical 2015 Fixed OffPeak Program Man-hours	1,526K	63%

Based on this scenario, holding other OffPeak program costs constant, estimated TMF per TEU for 2015 would be approximately \$93. This results primarily from the fact that the bulk of the OffPeak program man-hours (63 percent) is assumed to be fixed. As described in Scenario 1, this finding is in line with PierPASS' expectation given the operational reality of cargo movement in the Ports of Los Angeles and Long Beach.¹⁵

2.3 Review of TEUs subject to TMF and TMF per TEU

Based on WCMTOA – Rule 7, all laden containers are subject to TMF, except for: (i) empty containers or empty chassis; (ii) import or export cargo entering or leaving any terminal facility during OffPeak program hours; (iii) import cargo or export cargo that transits the Alameda Corridor¹⁶ in a container and is subject

¹⁴ Estimated by SC Analytics' labor cost allocation model, as part of their calculation of the 2015 OffPeak program costs.

¹⁵ KPMG has made no attempt to evaluate the actual distribution of the OffPeak man-hours between fixed and variable.

¹⁶ The Alameda Corridor is a rail project designed to consolidate rail traffic between the Ports of Los Angeles and Long Beach and the rail yards near downtown Los Angeles.

to a fee imposed by the Alameda Corridor Transportation Authority; (iv) Transshipment cargo; and (v) domestic cargo as defined in Rule 3 D and F.

KPMG reviewed the calculation of total applicable TEUs and observed that the 2015 reported results are consistent with the data and methodology reviewed. KPMG did not conduct an independent review of the components of the applicable TEU calculation (i.e., exempt and non-exempt cargo) and took the determinations as presented by SC Analytics.

Furthermore, based on our discussions with PierPASS management, KPMG understands that the estimated TMF resulting from the OffPeak program cost calculation is one of many factors accounted for in the determination of the actual TMF charged. For instance, in 2015 the TMF value assessed equaled \$69.17 per TEU. The estimated TMF derived from the OffPeak program cost calculation for the same period was \$92.

2.4 Distribution of the OffPeak program revenues

Based on discussions with PierPASS management, KPMG understands that the TMF revenue collected throughout the year for cargo handled during the peak/day shift is distributed amongst participating MTOs (i.e., WCMTOA members) based on their respective total loaded TEU volume. Furthermore, KPMG understands that this distribution approach was adopted to promote reallocation of TEU volume to the OffPeak program hours.

KPMG was provided the 2015 TMF revenue distribution model used by PierPASS management. KPMG understands that TEU figures for each MTO is obtained from the PMA. KPMG did not examine the PMA's source data. KPMG observed that MTOs distribution shares are based on their respective TEU shares. 2015 TEU shares for participating MTOs varied from 0.9 percent to 13.1 percent.

3.0 Observations

Potential revisions to the existing approach include, but are not limited to, the following:

1. The process for determining labor cost allocation/exclusion percentages could be modified to increase the reliability of the estimates (e.g., addition of OffPeak program specific job codes for internal tracking of costs by participating MTOs);
2. The estimation of equipment costs could be modified to include an exclusion for variable equipment cost related to the OffPeak program; and
3. The assumptions and approach for estimating peak/day shift cost reductions could be revamped as it relies on a potentially outdated study from 2005.

The existing overall approach represents a reasonable method for estimating the costs associated with the OffPeak program as:

1. It accounts for specific costs associated with the operation of the OffPeak program;
2. It accounts for the reduction in peak/day labor costs resulting from the transfer of TEU volume to the OffPeak program shift;
3. The data sources are identifiable and key calculations are replicable and consistent with the analytical framework described; and
4. According to PierPASS management, results are used primarily as a measure to evaluate the break-even point for compensating MTOs for their cost related to the OffPeak program. Other factors also considered in determining the assessed TMF value include macroeconomic trends and commercial considerations. Historically, assessed TMF has been set at a value lower than estimated value. In 2015, assessed TMF was \$69.17 whereas estimated TMF was \$92.

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