

Comments on the Final Environmental Impact Report (FEIR) of the LAX Landside Access Modernization Program (LAMP)

Traffic Growth and Capacity Issues

1. The FEIR continues to confuse the concept of capacity with the actual activity levels and with forecast activity levels. Using terms such as “practical capacity” and maximum capacity” and “actual capacity” only adds to the confusion.

Activity levels result from the interaction of demand and supply.

Demand is a forecast (as, e.g., by the FAA Terminal Area Forecasts, which acknowledge that these forecasts are regardless of the ability of an airport to accommodate them).

Supply is the result of the complex market processes to which the DEIR and FEIR refer, whereby airlines make decisions that are influenced by many factors, among them the capacity of the airport to handle the traffic safely and with a reasonable level of service. Passengers make decisions regarding travel (when, where, etc.) in response to these supply decisions. Actual activity levels are the result of this interaction between demand and supply.

It is true that capacity is influenced by decisions made in the “market.” For example, larger aircraft, or higher load factors, can increase the capacity of runways and gate positions, and equally, higher occupancy vehicles, buses and people mover systems can increase the capacity of the access system.

In the response to the issue of capacity, the FEIR ignores this off-hand and claims that the improvements in LAMP will not affect the access system capacity. It does that while analyzing traffic at levels such as 86 MAP in 2024 and 95 MAP in 2035, levels that clearly cannot be handled by the access system without LAMP.

2. That any one component of the airport system cannot be a constraint on capacity is utterly false and illogical. This is true regardless of how one defines capacity. The DEIR recognized this and the FEIR refutes it by stating that the capacity of one component does not set the capacity of the whole airport. But if the components of the airport operate in series as they do, then the one with the minimum capacity must constrain the overall capacity. The FEIR recognizes this by stating, “Even if, hypothetically, reducing congestion in the CTA could allow more passengers to access the Airport, the practical capacity of the Airport and actual passenger growth would still be determined by how all of the individual components of the airport system function together.” When the components of the airport function in series, and when the access system can permit additional passenger flow, then the traffic can grow up to the point where the next higher capacity component becomes the constraining factor.

It is true that market conditions affect component capacity differently (e.g., larger aircraft increase the capacity of the runway and the gate system but not the access system; buses and

people movers increase the capacity of the access system but not the other components). But the fundamental relation that the lowest capacity component determines the overall allowable flow cannot be dismissed. Therefore, given that the access system was recognized earlier as a limiting component to the overall capacity, any improvements that increase the access system capacity will permit traffic levels that would not have been possible otherwise. This is true regardless how capacity is defined.

3. The FEIR continues to cite historic trends as an indication of no correlation between capacity and actual activity levels. This is incorrect. Historic trends describe what occurred, and say nothing about what would have occurred had capacity been there to allow it. Historic trends do not mean there is no correlation between capacity and growth. As long as capacity is not reached, traffic will trend based on all the demand and market factors, but once capacity is reached, it has to by definition limit growth. In the case of LAX, growth to 80.9 MAP does not mean capacity was exceeded. 80.9 MAP is not significantly different from 78.9 given the accuracy with which capacities are calculated.

4. The FEIR continues to ignore the market share issue. The FEIR recognizes accessibility as a factor in passenger airport choice, but one that is less important than others. The fact remains that accessibility is a factor and that an improvement of the accessibility will enhance LAX's competitiveness. If, as the FEIR states, passengers "allow extra time" in order to deal with access congestion, then when they do not have to do that, the airport becomes that much more accessible and hence attractive vis-à-vis the alternatives.

Summary

In summary, regardless of how capacity is defined, and notwithstanding all the market factors that affect it, the FEIR cannot summarily ignore the fact that LAMP improvements will increase the capacity of the access system, and the extent to which that system was recognized as a constraining factor. Notwithstanding all the other factors that affect traffic growth, this will allow traffic growth that could not be possible otherwise. Also, the improvements in LAMP will result in improving the accessibility of LAX notwithstanding all the other factors that affect airport choice. This will increase LAX's attractiveness and market share among the region's airports. I do not see how an environmental impact assessment of LAMP can be comprehensive without consideration and analysis of these possible traffic growth impacts.

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Professor of the Graduate School, University of California at Berkeley. Kanafani holds a Ph.D. in Civil Engineering from the University of California at Berkeley. Since joining the faculty at Berkeley in 1971 he has taught and conducted research on transportation systems, transportation engineering, airport planning and design, and air transportation economics. He has served on a number of national and international advisory panels to Government and industry. He was Director of Berkeley's Institute of Transportation Studies from 1982 to 1997, and Chairman of the Department of Civil and Environmental Engineering from 1997 to 2002, and Co-Director of the National Center of Excellence in Aviation Operations Research from 2001 to 2005. Kanafani's important contributions to air transportation include air transportation demand analysis, airport capacity analysis methods, and airline network analysis. His research on airline hubbing and on the relation between aircraft technology and airline network structure laid the ground for much of the work aimed at understanding the implications of airline deregulation in the late 1970's. He was a member of the research team that developed airport capacity analysis methods that are in widespread application in airport planning and design. Professor Kanafani has authored over 170 publications on transportation, including three books on Transportation Demand Analysis, on National Transportation Planning, and on the Economics of Networked Industries. He is a recipient of numerous including election to the U.S. National Academy of Engineering in 2002. He served as Chair of the Air Transport Division of the American Society of Civil Engineers, and as chair of the Transportation Research Board of the National Academies in 2009 and was named a Lifetime Associate of the National Academies in 2012.

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